COUNTY OF HUMBOLDT
PLANNING AND BUILDING DEPARTMENT
CURRENT PLANNING DIVISION

3015 H Street, Eureka CA 95501
Phone: (707)445-7541 Fax: (707) 268-3792

Hearing Date: September 1, 2022

To: Humboldt County Planning Commission

From: John H. Ford, Director of Planning and Building Department

Subject: **Friends of the Dunes, Coastal Development Permit and Conditional Use Permit**
Record Number PLN-9175-CDP
Assessor's Parcel Number (APN) 400-011-075, 400-011-075, 400-011-077, 506-111-024, 506-111-021, 506-111-025 and 506-111-004

Table of Contents **Page**

Please contact Jordan Mayor, PhD, Senior Ecologist and Contract Planner, at 707-683-4711 or by email at jordan.mayor@icf.com if you have any questions about the scheduled public hearing item.

AGENDA ITEM TRANSMITTAL

Hearing Date	Subject	Contact
September 1, 2022	Coastal Development Permit and Conditional Use Permit	Jordan Mayor

Project Description: The applicant (Humboldt County Nature Center Friends of the Dunes [FOD]), is requesting a modification to the previously issued Coastal Development Permit (CDP) and Conditional Use Permit (CUP) dating from 2007 and as amended to include additional properties acquired by FOD in 2008 and 2009. In 2015, the FOD applied for modification to CDP-06-49MMXM/CUP-06-49MMXM to continue dune restoration and trail work on an additional 3.6 acres known as the "Barr" property acquired by FOD (Assessor's Parcel Number [APN] 400-011-075). The proposed FOD Trail and Habitat Restoration Project (project) would manage public access, remove nonnative invasive plant species to restore sensitive dune mat plant communities, and install a fence along the eastern property line of the former "Barr" property. The amended permits would allow the continued implementation of a Restoration and Management Plan (**Attachment 2**) for restoration activities on FOD properties, including the most recently acquired former Barr parcel.

Work for property improvements other than on-going restoration on the Barr parcel would take place over a 3-year period. Specific activities would include establishment of a trailhead and a "No Parking" sign. Public access would allow pedestrians, dog walking, and horseback riding on designated trails during daylight hours only. Trail improvements include installation of signage to direct public access and distinguish equestrian from pedestrian trails. On these two trails, the applicant is proposing to apply the FOD Public Access Trails Policies, and to incorporate these two trails into the existing FOD trail system on APNs 506-111-024 and 506-111-024, which are also owned and managed by the applicant. An existing "private property" sign and metal gate at the proposed trailhead would be removed and replaced with a new fence designed to allow pedestrian and horse access while blocking access to motorized vehicles. These improvements are intended to minimize impacts on sensitive habitat while allowing continued access by hikers, equestrians, and dog walkers. In addition, nonnative iceplant and invasive annual grasses near the proposed trailhead on Lupin Avenue will be targeted for removal to allow restoration of native dune mat habitat on the former Barr parcel. A CDP/CUP is required for all development within the Coastal Zone.

Project Location: The project is located in Humboldt County, in the Manila area, at the terminus of Stamps Lane and on the north side of Lupin Drive, approximately 1,000 feet west from the intersection of New Navy Base Road and Lupin Drive, on the property known as 220 Stamps Lane and 365 Lupin Drive, and the property known to be in the north half of Section 03 Township 05 North Range 01 West HBM., Humboldt Base & Meridian. The project site is situated south of the FOD property and east of the Manila Community Services District and is part of a larger contiguous coastal dune ecosystem under management by several entities

Present Plan Land Use Designation: APN 400-011-075: Residential Low Density (RL), Density: 1–8 dwelling units per acre; APN 400-011-077: Public Facilities (PF), Density: N/A; APN 506-111-004, 506-111-024: Natural Resources (NR), Density: N/A; and APN 506-111-021, 506-111-025: Natural Resources (NR), Agricultural/General (AG), Density: N/A.

Present Zoning: APN 400-011-075: RS-5-M/A,B: Residential Single Family-Minimum lot size 5,000 sq. ft. (RS-5), Manufactured Home (M)/Archaeological Resource Area Outside Shelter Cove (A), Beach and Dune Areas (B); APN 400-011-077: PF1/B: Public Facility (Urban)(PF1)/Beach and Dune Areas (B); APN 506-111-024: NR/B: Natural Resources (NR)/Beach and Dune Areas (B); APN 506-111-021, 506-111-025: NR/B;RA-2.5/B: Natural Resources (NR)/Beach and Dune Areas (B); Rural Residential Agriculture-Minimum lot size 2.5 acres (RA-2.5). Beach and Dune Areas (B); and APN 506-111-004: NR/A,B,W: Natural Resources (NR)/Archaeological Resource Area Outside Shelter Cove (A), Beach and Dune Areas (B), Coastal Wetlands (W).

Applicant/Owner
Friends of the Dunes, Inc.
P.O. Box 186
Arcata, CA 95518

Environmental Review: Initial Study/Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act Statute (Public Resources Code 21000–21189) and Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387).

State Appeal Status: Project is appealable to the California Coastal Commission

Major Issues: Coastal Access

Friends of the Dunes
Record Number: PLN-1975-CDP
Assessor's Parcel Number: 400-011-075, 400-011-075, 400-011-077, 506-111-024, 506-111-021, 506-111-025 and 506-111-004

Recommended Planning Commission Action

1. Describe the application as a public hearing.
2. Request staff present the project.
3. Open the public hearing and receive testimony from the public.
4. Close the public hearing and adopt the resolution to take the following actions:
   (a) Adopt the Mitigated Negative Declaration (MND) prepared for the Friends of the Dune, Inc., the project pursuant to Section 15074 of the State CEQA Guidelines; and
   (b) Adopt the Mitigation Monitoring and Reporting program pursuant to Section 15097 of the State CEQA Guidelines; and
   (b) Make all required findings for approval of the amended CDP and Conditional Use Permit (CUP);
   (c) Approve the Friends of the Dune, Inc., amended CDP and CUP Permits subject to the recommended conditions.

Executive Summary: The applicant (Humboldt County Nature Center Friends of the Dunes [FOD]), is requesting a modification to the previously issued Coastal Development Permit (CDP) and Conditional Use Permit (CUP) dating from 2007 and as amended to include additional properties acquired by FOD in 2008 and 2009. In 2015, the FOD applied for modification to CDP-06-49MMXM/CUP-06-49MMXM to continue dune restoration and trail work on an additional 3.6 acres known as the "Barr" property acquired by FOD (Assessor's Parcel Number [APN] 400-011-075). The proposed FOD Trail and Habitat Restoration Project (project) would manage public access, remove nonnative invasive plant species to restore sensitive dune mat plant communities, and install a fence along the eastern property line of the former "Barr" property. The amended permits would allow the continued implementation of a Restoration and Management Plan (**Attachment 2**) for restoration activities on FOD properties, including the most recently acquired former Barr parcel.

The former Barr parcel project site abuts other FOD property in a coastal dune community. The property contains a large area of native dune mat habitat with a substantial population of federally endangered Humboldt Bay wallflowers (*Erysimum menziesii*). The site also contains invasive species including iceplant, European beachgrass, yellow bush lupine, and invasive annual grasses, including rattlesnake grass (*Briza maxima*), barren fescue (*Vulpia bromoides*), and ripgut brome (*Bromus diandrus*). Invasive plants compete for habitat space and water resources with native plants and have a negative impact on native dune mat species, especially on the federally endangered Humboldt Bay wallflower and state endangered beach layia (*Layia carnosa*), both of which depend on open, sandy environments for survival. Surrounding uses include open space, recreation, natural resources, residential, and municipal infrastructure.

Public Comments: Thirteen public comment letters have been received in 2022 following the circulation of the MND. All but two of the letters were in support of the project, including a letter from the Department of the interior, and they repeatedly highlight the good track record of FOD-managed dune restoration projects for increasing the diversity of plants and animals. These comments also highlighted the valuable aesthetic benefits that members of the local community experience while visiting the trail network and restored areas, and through educational opportunities on FOD properties.

Two of the letters did not support the project for different reasons. One letter, from Rich Tobin, recommended that the project be conditioned to require a "certified wetland delineation report", rather than implementing *Mitigation Measure BIO-6, Delineate Wetlands*, which relies on the "Restoration Manager or a qualified wetland scientist appointed by the Restoration Manager" to identify and demarcate wetlands in work areas. This letter also requested the project be conditioned to prescribe 250-foot wetland buffers on those "certified" delineated wetlands. The Planning Department has not asked for an official wetland delineation or proposed to prevent activities within wetland buffers

because the proposed activities would be restorative and result in enhancement of habitat values. The commenter also asks that a road sign on Lupin Avenue be placed that states "Fire Lane No Parking Beyond This Point," rather than the proposed "No Parking" sign. This letter additionally expresses opposition to the potential removal of invasive species from within wetland habitat areas. Of note is that while this is described in the Initial Study and Mitigated Negative Declaration (IS/MND), it is not proposed as part of this application and would therefore not be an allowed activity if this permit is approved. Lastly, this comment also raises concern regarding the potential of dune erosion to impact the Manila Community Services District treatment ponds. As described in the IS/MND the existing dunes are dynamic systems however the proposed non-native vegetation removal will not measurably affect erosional rates.

The other letter did not support the project for several reasons including the following: (1) runoff from a steep dune having contributed to flooding on their property; (2) removal of nonnative plants as having increased predation of domestic animals in search of new food sources that were previously present in the nonnative habitat; (3) accelerating mobilization of dunes due to past restoration project, particularly from foredunes, has affected wetlands and threatens residences; (4) the inadvertent removal of pines resulting from nonnative grass removal "which held in moisture;" and (5) that equestrians would be unfairly or uncharacteristically limited on the Barr parcel despite a long history of unregulated access to the beach from this trail.

One additional letter asked for a no parking sign to be installed along Lupin Avenue.

Recommendation: Staff is recommending that the Planning Commission (PC) adopt the MND and approve the CDP and CUP for this project as conditioned. This project is allowing for continued trail use and restoration of the FOD properties while improving and controlling access to the former Barr parcel to the benefit of the local community and special-status plant species. All potential environmental impacts have been mitigated to a less than significant level.

Humboldt County Permitting Process and Findings

2007
In 2007, the Humboldt County Planning Commission (PC) approved CDP-06-49/CUP-06-49 along with Lot Line Adjustment (LLA-06-08)/Special Permit (SP-06-71) for FOD to use an existing residence as the Humboldt County Nature Center office/education center, establish trails, and conduct restoration activities on approximately 30.5 acres of beach and dune habitat. The restoration work included manual removal of yellow bush lupine, European beachgrass, iceplant, and pampas grass that threaten endangered species and rare plant communities. Other related development included a restroom building, covered outdoor area, parking lot improvements, and signage/trail markers. The SP established parking standards based on existing use levels at the Manila Community Center. A Negative Declaration (ND) was prepared and approved by the PC.

2008
In 2008, the PC approved modifications to the approved FOD CDP/CUP (CDP-06-49M/CUP-06-49M) permits to allow restoration and trail work on an additional approximately 34.7 acres of newly acquired property, the relocation of the parking area and a Notice of Merger. An addendum to the ND was prepared as part of this amendment process.

2009
In 2009, the PC approved modification and extension to the previously approved and modified CDP/CUP/SP (CUP-06-49MMX/CUP-06-14MMX/SP-06-71M) to allow restoration and trail work on an additional approximately 57 acres. The modification to the SP allowed the removal of ten eucalyptus trees, two nonnative pine trees, and seven Monterey cypress trees and shrubs.

2015
In 2015, the FOD applied for a modification to the CDP/CUP (CDP-06-49MMXM/CUP-06-49MMXM) to continue dune restoration and trail work on an additional 3.6 acres known as the "Barr" property acquired by FOD. The Barr property abuts the FOD property and Manila Community Services District (MCSD) dune lands, and the trails on the Barr property were proposed to tie into existing MCSD and FOD trails.

2018
The County prepared an ND for the proposed modification. After a noticed public hearing on October 4, 2018, the PC continued the project to an uncertain date with direction to staff to further engage the public during the process.

2019
Per guidance from the PC, on July 16, 2019, County staff held a neighborhood meeting (workshop) to gather comments from the public concerning the potential environmental impacts of the proposal. Public comments expressed some concern over the closure of existing trails, some specific elements of the proposed project (e.g., a proposed staircase, boundary fence), and whether restoration would proceed in conformance with the Manila Long Term Restoration Plan and the requirements of the CDP.

2022
In 2022, ICF Contract Planning staff and the County prepared an MND and circulated a notice that the County intends to adopt an MND (finding of no significant adverse environmental effect) on the project described above.

RESOLUTION OF THE PLANNING COMMISSION
OF THE COUNTY OF HUMBOLDT
Resolution Number 22-
CERTIFING COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
Record Number PLN-9175-CDP
Assessor's Parcel Number: 400-011-075, 400-011-075, 400-011-077, 506-111-024, 506-111-021, 506-111-025 and 506-111-004

WHEREAS, the Humboldt County Nature Center Friends of the Dunes (FOD) submitted an application and evidence in support of approving a Coastal Development Permit (CDP) and Conditional Use Permit (CUP) for the management of public access, removal of nonnative invasive plant species to restore sensitive dune mat plant communities, and installation of a fence along the eastern property line of the former "Barr" property. The amended permits would allow the continued implementation of a Restoration and Management Plan on the Barr parcel and FOD properties;

WHEREAS, the Humboldt County Planning Commission held a duly noticed public hearing on August 18, 2022, and reviewed, considered, and discussed the California Environmental Quality Act (CEQA) document, along with the application for a CDP and CUP and reviewed and considered all evidence and testimony presented at the hearing.

Now, THEREFORE BE IT RESOLVED, that the Planning Commission makes all the following findings:

1. FINDING:

Project Description: The applicant (FOD) is requesting modification to the previously issued CDP and CUP dating from 2007 and as amended to include additional properties acquired by FOD in 2008 and 2009. In 2015, the FOD applied for modification to CDP-06-49MMXM/CUP-06-49MMXM to continue dune restoration and trail work on an additional 3.6 acres known as the "Barr" property acquired by FOD (Assessor's Parcel Number [APN] 400-011-075). The proposed FOD Trail and Habitat Restoration Project (project) would manage public access, remove nonnative invasive plant species to restore sensitive dune mat plant communities, and install a fence along the eastern property line of the former "Barr" property. The amended permits would allow the continued implementation of a Restoration and Management Plan (Attachment 3a) for restoration activities on FOD properties, including the most recently acquired former Barr parcel.

Work on the Barr parcel would take place over a 3-year period. Specific activities would include establishment of a trailhead and a "No Parking" sign. Public access would allow pedestrians, dog walking, and horseback riding on designated trails during daylight hours only. Trail improvements include installation of signage to direct public access and distinguish equestrian from pedestrian trails. On these two trails, the applicant is proposing to apply the FOD Public Access Trails Policies, and to incorporate these two trails into the existing FOD trail system on APNs 506-111-024 and 506-111-024, which are also owned and managed by the applicant. An existing "private property" sign and metal gate at the proposed trailhead would be removed and replaced with a new fence designed to allow pedestrian and horse access while blocking access to motorized vehicles. These improvements are intended to minimize impacts on sensitive habitat while allowing continued access by hikers, equestrians, and dog walkers. In addition, nonnative iceplant and invasive annual grasses near the proposed trailhead on Lupin Avenue will be targeted for removal to allow restoration of native dune mat habitat on the former Barr parcel. A

CDP/CUP is required for all development within the Coastal Zone.

EVIDENCE: a) Project File: PLN-1975-CUP

b) The project description in the Mitigated Negative Declaration (MND) provides a complete description of all activities associated with the project and a summary of the details in the Restoration and Management Plan.

2. FINDING: **Lead Agency:** The County of Humboldt is designated as the lead agency for permitting the continued dune restoration and trail access work (the project) on an additional 3.6 acres known as the "Barr" property acquired by FOD.

a) The County has permit authority for the project within the Coastal Zone and to evaluate the project's environmental effects as included in the MND.

b) For purposes of CEQA, the County of Humboldt was designated as the lead agency per CEQA Guidelines Sections 15050(a) and 15051, for the project because the County is the public agency with the greatest responsibility for supervising or approving the project as a whole.

3. FINDING: **CEQA.** The requirements of the California Environmental Quality Act have been complied with. An Initial Study and Mitigated Negative Declaration (MND) was prepared for the project and circulated for public review. The conclusion of the MND is that there are not any potentially significant impacts that cannot be mitigated.

EVIDENCE: a) The CEQA document includes an analysis of the proposed project. The IS/MND was circulated for public review from June 9, 2022, to July 10, 2022 (SCH# 2022060246).

b) The mitigated negative declaration reflects the County's independent judgment and analysis.

c) The Planning Commission has considered the proposed mitigated negative declaration together with the analysis and all public and agency comments received during the public review process and the whole record.

d) The Initial Study/Mitigated Negative Declaration includes seven (7) mitigation measures that have been incorporated into a Mitigation Monitoring and Reporting Program which is being adopted as part of the project.

4. FINDING The County has fulfilled the obligations under Assembly Bill (AB) 52 (CEQA 21080.3.1) consulting with tribes to determine if there is the potential for tribal cultural resources associate with the site.

EVIDENCE a) A letter offering an opportunity for tribal consultation pursuant to AB 52 was sent to all local tribal officials on July 14, 2021. No requests for consultation were received.

5. FINDING **Areas of No Impact**. Based upon the findings of the MND, and as discussed in Chapter 2 of the MND, Agriculture and Forestry, Energy, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use Planning, Mineral Resources, Population and Housing, Public Services, Transportation,

Utilities and Service Systems, and Wildfire, were determined to not have any environmental impact and were not evaluated in the MND.

EVIDENCE

a) The project site does not include any farmland, forest land, or timberland, or land zoned for these uses thus there could be no impact.

b) No energy-demanding development is planned.

c) The project would not store, transport, or use hazardous materials.

d) The project would not discharge any substances, waste, or pollutants onto the ground.

e) The project would provide habitat restoration and trail work on undeveloped land. No aspect of the project would physically divide an established community.

f) There are no known mineral resources or mining operations in the area and thus there is no impact.

g) There is no housing proposed as part of the project; therefore, there would be no impact on population and housing.

h) The project would not create the need for additional public service or governmental facilities, nor would it result in increased response times thus there is no impact on public services.

i) The project would not block any roads or change traffic volume on area roadways including Lupin Avenue and State Route 255; therefore, the project would not conflict with established measures of effectiveness stated in a plan, ordinance, or policy.

j) The project does not involve construction of new water or wastewater treatment facilities. The project would not create any new stormwater sources or require construction of new stormwater drainage, electric power, telecommunication, or natural gas facilities.

k) The project would not exacerbate the existing hazard ratings as the restoration would remove more flammable nonnative grasses to allow more dispersed native dune mat plants to colonize.

6. FINDING **Environmental Impacts Found to Be Less Than Significant:**
The MND determined that there would be a less-than-significant impact on one or more aspects of following resources: Aesthetics, Air Quality, Geology and Soils, Greenhouse Gas Emissions, Noise, Recreation, and Cumulative Impacts.

EVIDENCE

a) There would be temporary visual impacts (i.e., the presence of one or more pickup trucks) during replacement of the trailhead fence on the three neighboring residences and for others traveling along Lupin Avenue. Construction is anticipated to involve hand tools and to occur for a maximum of 3 days during daylight hours. As a courtesy, work crews will notify the residents of the anticipated workdays. The temporary visual impacts of one or more pickup trucks for a maximum of 3 days would be a less-than-significant impact.

b) During brief restoration activities on the former Barr parcel, including the need for re-treatment of grass removal areas, FOD anticipates approximately 40–50 total vehicle trips generated by volunteer work crews. Vehicle miles traveled would be approximately 11 miles round trip from

Humboldt State University in Arcata to the Humboldt County Nature Center parking lot, where they will then be dropped off at the Lupin Avenue entrance. Therefore, a total of 440 to 550 miles driven by volunteers to the former Barr parcel would be a less-than-significant impact on air quality.

c) The proposed project is not expected to place people at an increased risk as the potential liquefaction is not confined the FOD property and would generally affect the broader region. The former Barr parcel is in an area of back dune comprised in approximately equal proportions of bare open back dune and coastal forest [Figure 2]. Removal of invasive nonnative grasses or iceplant is not anticipated to measurably increase sand erosion rates within multi-decadal time scales given the following:

(1) The low-disturbance hand removal methods where populations of these species occur.

(2) The geomorphological position and slow mobility of the sand dune migration in the area.

(3) The Restoration and Management Plan's (**Attachment 2**) voluntary agreement to preserve the iceplant currently existing within 100 feet of Lupin Avenue or the adjacent private residential property line to the east due to neighbor perceptions of sand mobility. This population will be photo- and GPS-documented at its current extent, after clearing to the 100-foot boundary. Any iceplant growth beyond the documented 100-foot border will be removed to protect surrounding habitat and immediately transported off the property via the Lupin Avenue access point.

Therefore, the project would not affect soil erosion on the former Barr parcel.

d) A cumulative total of 440 to 550 miles driven by volunteers to the former Barr parcel would be a less-than-significant impact on greenhouse gas emissions because this would represent approximately 222 kilograms of carbon dioxide (CO_2) and a typical passenger vehicle emits about 4.6 metric tons (4,600 kilograms) of CO_2 per year.

e) The project would create short-term noise associated with removal of the existing gate and installation of the new entry gate. These would be noises normally associated with small house-improvement type construction for a maximum of 3 days (daylight hours only). Work crews would notify the residents of workdays as a courtesy. Therefore, the temporary noise impacts of construction would be a less-than-significant impact.

f) The project includes managing access to a neighborhood trailhead by replacing a fence with one that more easily permits equestrian traffic. Access to the trailhead would only be restricted during the maximum of 3 days of construction that is anticipated. User-created trails would be consolidated to two existing trails, which would be more clearly demarcated with trail signs. The closure of user-created routes in the areas between the beach access trail and ridge trail are required to balance the needs of the sensitive plant community with the neighborhood hiking and equestrian traffic. The existing trails are actively maintained by the FOD and their consolidation to fewer trails is not anticipated to significantly degrade the habitat or recreation ability on the remaining trails in existence. It is not anticipated that it would substantially increase the use of the trail such that substantial physical deterioration would occur. Therefore, the trail improvements/consolidation and habitat restoration will result in a less-

than-significant impact on recreation use on lands managed by Manila Community Services District, FOD, or Bureau of Land Management.

7. FINDING **Environmental Impacts Mitigated to Less Than Significant:** The MND identified potentially significant impacts on Biological Resources, Cultural Resources, and Tribal Cultural Resources.

EVIDENCE

a) **Biological Resources.** Potentially significant impacts on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service will be mitigated to a less-than-significant level by adopting the Mitigation Monitoring and Reporting Program (MMRP) included in Appendix 1b.

wetland scientist appointed by the Restoration Manager and any wetlands encountered will be flagged. The Restoration Manager will be able to identify wetland traits and vegetation, and restoration technicians, work crews, and volunteers will be trained to identify wetland traits and vegetation to ensure avoidance of wetlands during or on the way to restoration activities. Work crews and volunteers will be overseen by the Restoration Manager or by restoration technicians when working adjacent to an area with wetland vegetation (**MM BIO-1**). Routes to off-trail work sites will avoid wetlands.

b) **Cultural Resources and Tribal Cultural Resources.** No cultural resources are identified on the site; however, in the event that resources are inadvertently found a cultural monitor will be onsite during earth-disturbing activity and inadvertent discovery protocols will be implemented. Based on this the potential impact will be mitigated to a less-than-significant level with the CUL-1 MM detailed in Appendix 1b describing Inadvertent Discovery language.

8. FINDING **CEQA Comments from the Public:** Thirteen comment letters were received as a result of the circulation of the CEQA IS/MND. The County has considered all of the CEQA comments submitted from the public up to this point, including those that were submitted after the comment period established by CEQA. None of the comments change or alter the conclusion of the MND.

EVIDENCE

a) Ten of the comment letters expressed support for the project and commented favorably on the environmental benefits of the proposed project and the ongoing work of the Friends of the Dunes organization.

b) One comment letter was received from Rich Tobin recommended that the project be conditioned to require a "certified wetland delineation report", rather than implementing *Mitigation Measure BIO-6, Delineate Wetlands*, which relies on the "Restoration Manager or a qualified wetland scientist appointed by the Restoration Manager" to identify and demarcate wetlands in work areas. This letter also requested the project be conditioned to prescribe 250-foot wetland buffers on those "certified" delineated wetlands. The Planning Department has not asked for an official wetland delineation or proposed to prevent activities within wetland buffers because the proposed activities would be restorative and result in enhancement of habitat values. The commenter also asks that a road sign on Lupin Avenue be placed that states "Fire Lane No Parking Beyond This Point," rather than the proposed "No Parking" sign. This letter

additionally expresses opposition to the potential removal of invasive species from within wetland habitat areas. Of note is that while this is described in the Initial Study and Mitigated Negative Declaration (IS/MND), it is not proposed as part of this application and would therefore not be an allowed activity if this permit is approved. Lastly, this comment also raises concern regarding the potential of dune erosion to impact the Manila Community Services District treatment ponds. As described in the IS/MND the existing dunes are dynamic systems however the proposed non-native vegetation removal will not measurably affect erosional rates.

c) One comment letter from Jackson Hand objected to the project for several reasons including the following: (1) runoff from a steep dune having contributed to flooding on their property; (2) removal of nonnative plants as having increased predation of domestic animals in search of new food sources that were previously present in the nonnative habitat; (3) accelerating mobilization of dunes due to past restoration project, particularly from foredunes, has affected wetlands and threatens residences; (4) the inadvertent removal of pines resulting from nonnative grass removal "which held in moisture;" and (5) that equestrians would be unfairly or uncharacteristically limited on the Barr parcel despite a long history of unregulated access to the beach from this trail. As described in the IS/MND dunes are dynamic features that do change over time however the proposed project will not measurably result in erosional factors that will contribute to the issues raised by Mr. Hand.

d) One comment was received from Ron Settles asking for mitigation in the form of a no parking sign to be installed at the West end of the fence protecting Manila Community Service District's maintenance yard. As detailed in the IS/MND there is no expected increase in long-term vehicular traffic as a result of the project.

9. FINDING **Mitigation Monitoring or Reporting:** A Mitigation Monitoring and Reporting Program has been prepared which ensures adequate monitoring of the mitigation measures to avoid and mitigate for potential significant environmental effects.

EVIDENCE MMRP attached as Attachment 1b.

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Humboldt County Planning Commission does hereby:

- Adopt the findings set forth in this resolution; and
- Adopts the Mitigated Negative Declaration; and
- Adopts the Mitigation Monitoring and Reporting Program included as Attachment 1b.

Adopted after review and consideration of all the evidence on **August 18, 2022**.

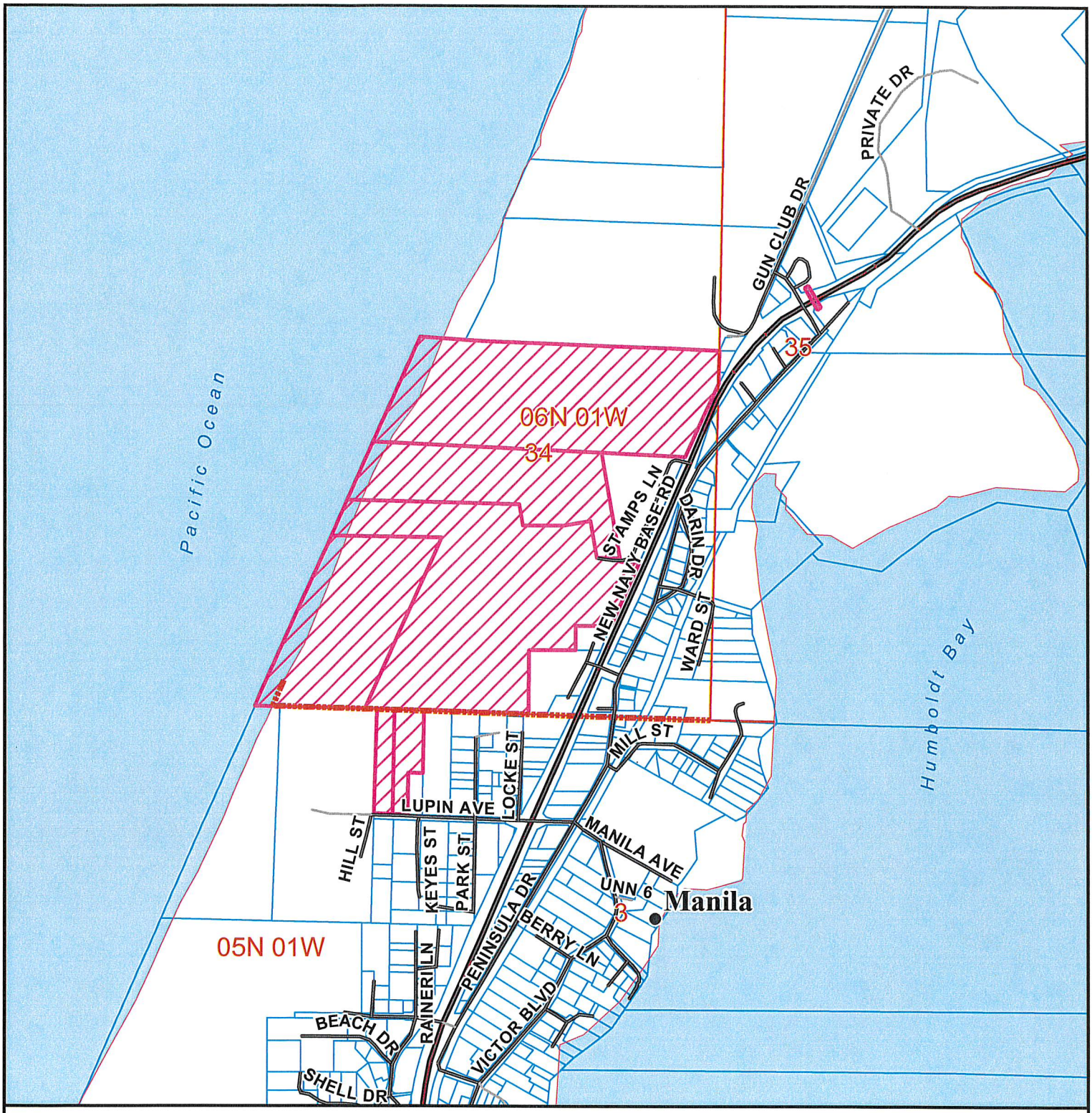
The motion was made by COMMISSIONER _____and second by COMMISSIONER _____ and the following ROLL CALL vote:

AYES:	COMMISSIONERS:
NOES:	COMMISSIONERS:
ABSENT:	COMMISSIONERS:
ABSTAIN:	COMMISSIONERS:
DECISION:	

I, John Ford, Secretary to the Planning Commission of the County of Humboldt, do hereby certify the foregoing to be a true and correct record of the action taken on the above-entitled matter by said Commission at a meeting held on the date noted above.

_____

John Ford, Director
Planning and Building Department



LOCATION MAP

PROPOSED FRIENDS OF THE DUNES COASTAL DEVELOPMENT PERMIT & CONDITIONAL USE PERMIT MODIFICATION MANILA AREA CDP-06-49MMXM/CUP-06-14MMXM APN: 400-011-075 et seq T06N R01W S34 HB&M (Eureka)

Project Area =

N

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

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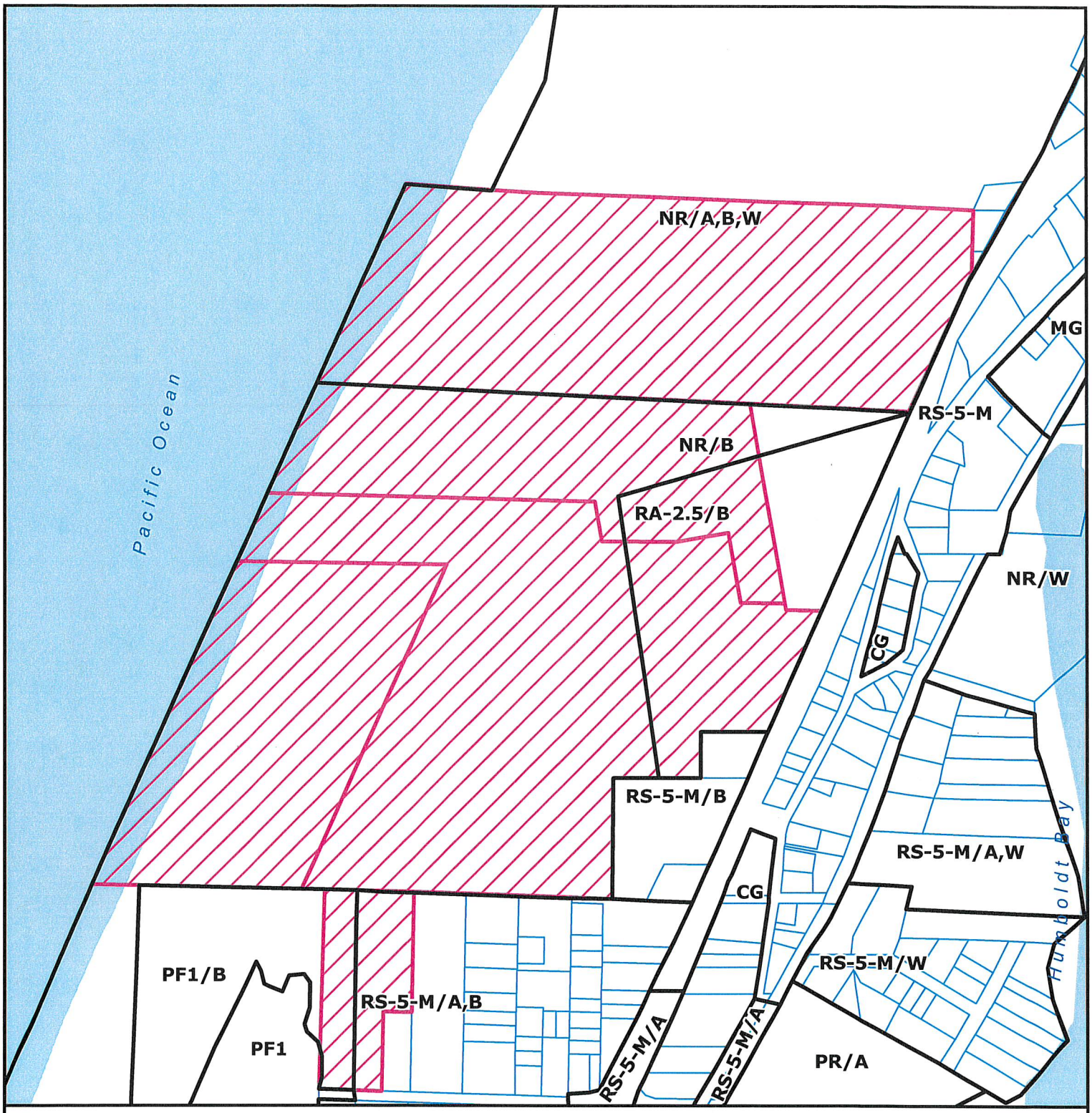


ZONING MAP

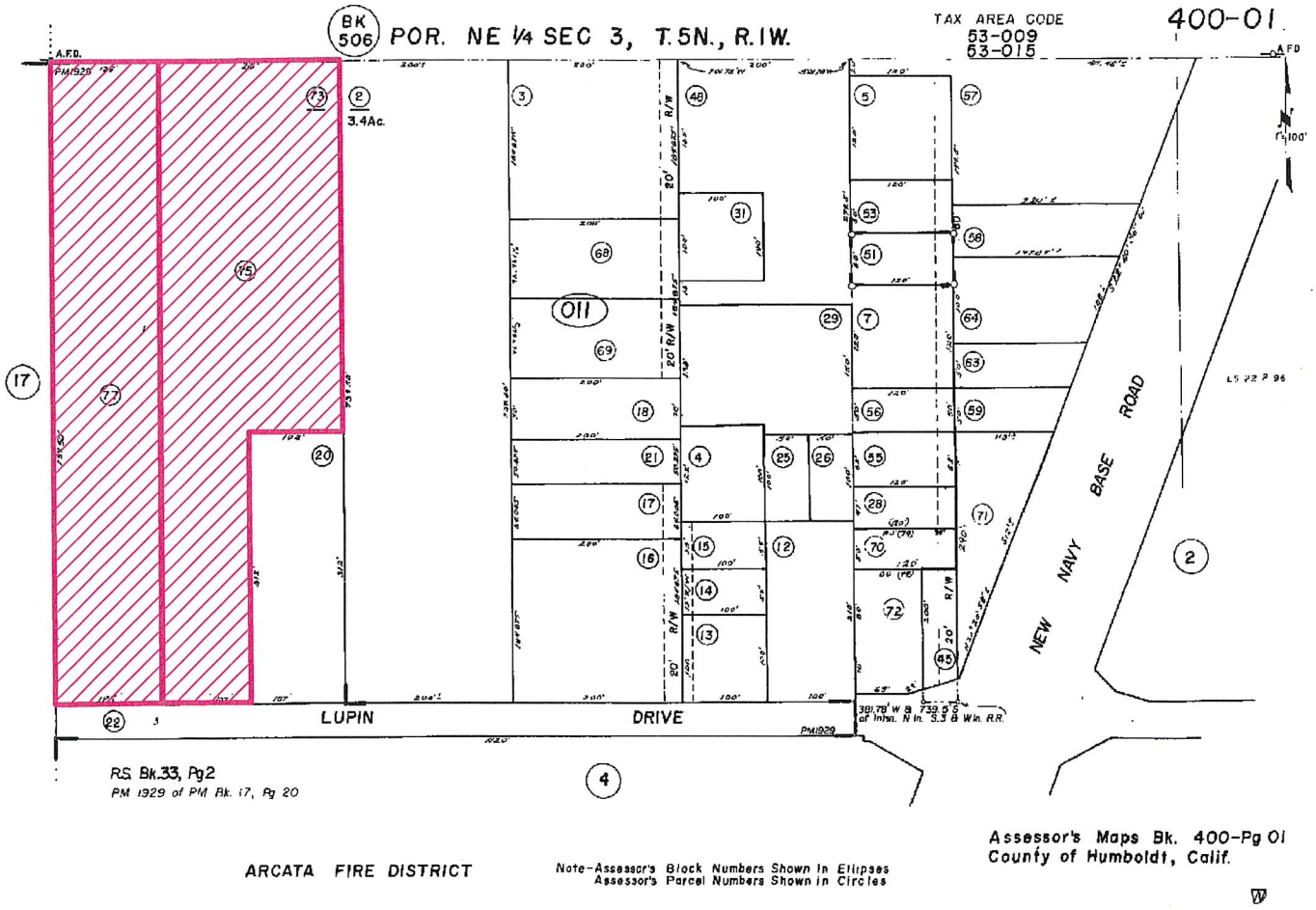
PROPOSED FRIENDS OF THE DUNES COASTAL DEVELOPMENT PERMIT & CONDITIONAL USE PERMIT MODIFICATION
MANILA AREA
CDP-06-49MMXM/CUP-06-14MMXM
APN: 400-011-075 et seq
T06N R01W S34 HB&M (Eureka)

Project Area =

N

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

0 500 Feet



ASSESSOR PARCEL MAP

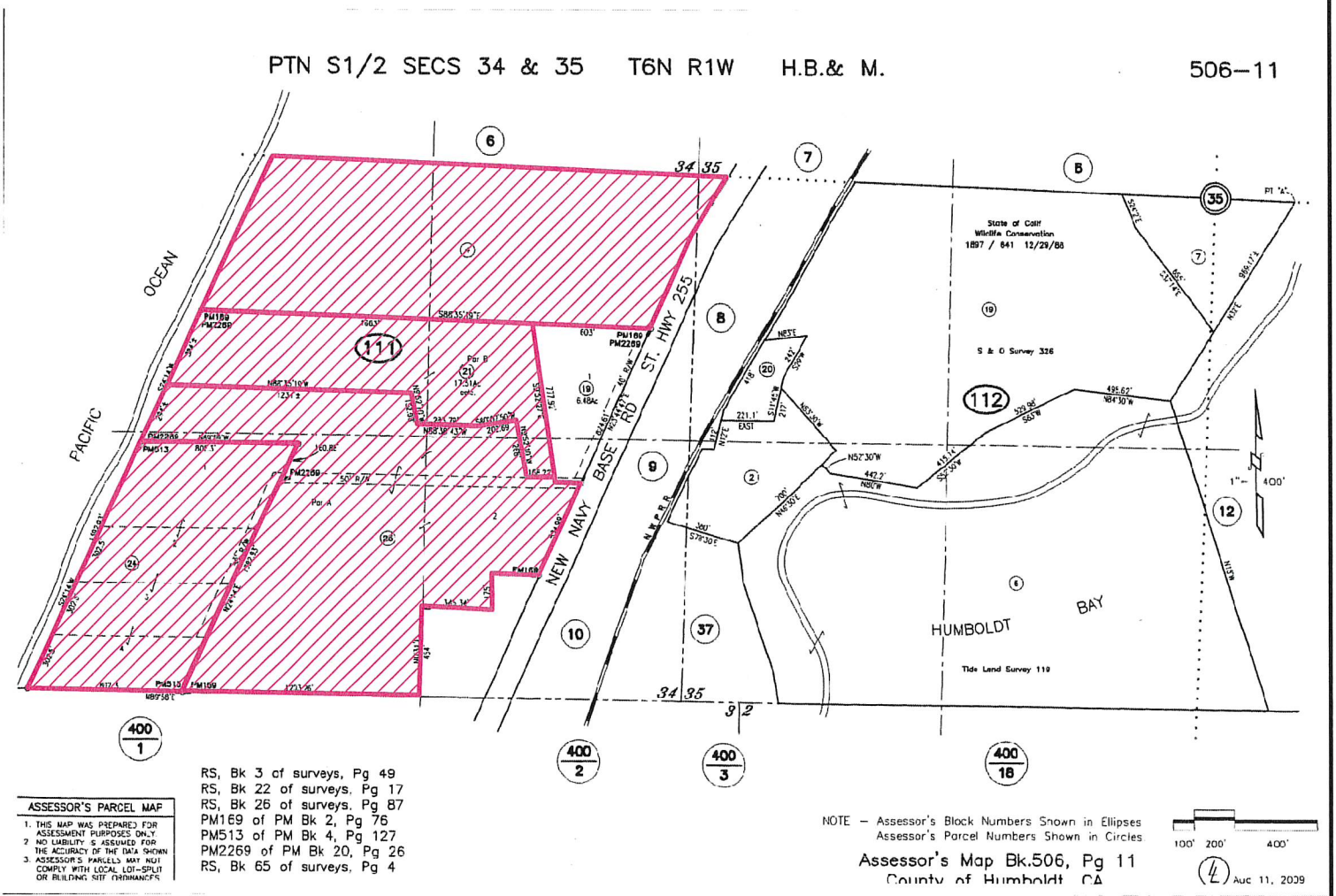
PROPOSED FRIENDS OF THE DUNES COASTAL DEVELOPMENT PERMIT & CONDITIONAL USE PERMIT MODIFICATION MANILA AREA CDP-06-49MMXM/CUP-06-14MMXM APN: 400-011-075 et seq T06N R01W S34 HB&M (Eureka)

Project Area =

N

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

MAP NOT TO SCALE



ASSESSOR PARCEL MAP

PROPOSED FRIENDS OF THE DUNES COASTAL DEVELOPMENT PERMIT & CONDITIONAL USE PERMIT MODIFICATION MANILA AREA CDP-06-49MMXM/CUP-06-14MMXM APN: 400-011-075 et seq T06N R01W S34 HB&M (Eureka)

Project Area =

N

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

MAP NOT TO SCALE

AERIAL MAP

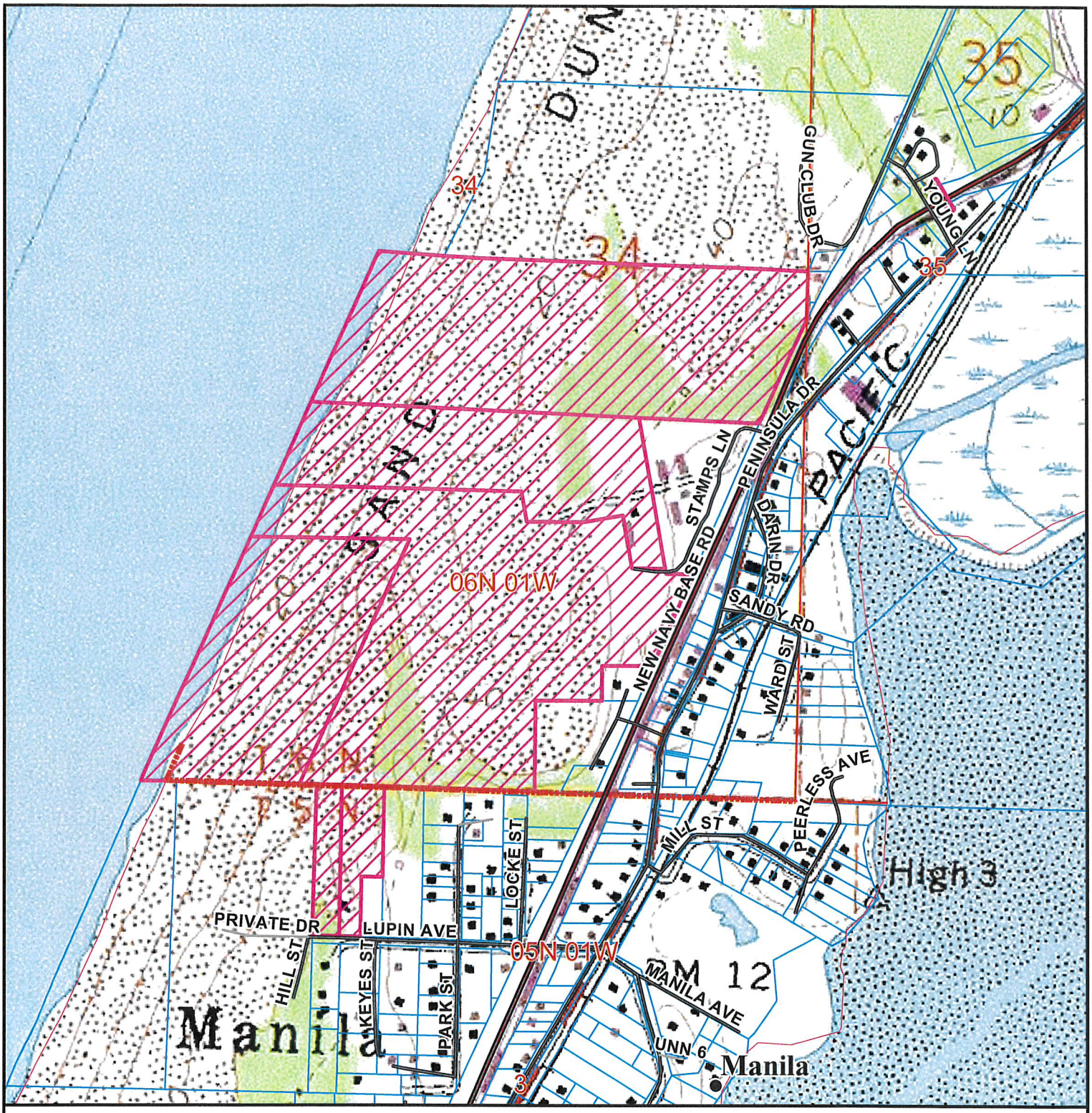
PROPOSED FRIENDS OF THE DUNES COASTAL DEVELOPMENT PERMIT & CONDITIONAL USE PERMIT MODIFICATION MANILA AREA CDP-06-49MMXM/CUP-06-14MMXM APN: 400-011-075 et seq T06N R01W S34 HB&M (Eureka)

Project Area =

N

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

0 500 1,000 Feet



TOPO MAP

PROPOSED FRIENDS OF THE DUNES COASTAL DEVELOPMENT PERMIT & CONDITIONAL USE PERMIT MODIFICATION MANILA AREA
CDP-06-49MMXM/CUP-06-14MMXM
APN: 400-011-075 et seq
T06N R01W S34 HB&M (Eureka)

Project Area =

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

N

0 500 1,000 Feet

ATTACHMENT 2
RESOLUTION OF THE PLANNING COMMISSION
OF THE COUNTY OF HUMBOLDT
Resolution Number: 22-
Record Number PLN-9175-CDP
Assessor's Parcel Number: 400-011-075, 400-011-075, 400-011-077, 506-111-024, 506-111-021, 506-111-025 and 506-111-004

Resolution by the Planning Commission of the County of Humboldt adopting findings to support the approval of the project, and conditionally approve the Friends of the Dunes Coastal Development Permit and Conditional Use Permit request.

WHEREAS, Friends of the Dunes, submitted an application and evidence in support of approving a Coastal Development Permit (CDP) and Conditional Use Permit (CUP) for the management of public access, removal of nonnative invasive plant species to restore sensitive dune mat plant communities, and installation of a fence along the eastern property line of the former "Barr" property. The amended permits would allow the continued implementation of a Restoration and Management Plan on the Barr parcel and FOD properties;

WHEREAS, the County Planning Division has reviewed the submitted application and evidence and has referred the application and evidence to involved reviewing agencies for site inspections, comments and recommendations; and

WHEREAS, the Humboldt County Planning Commission held a duly-noticed public hearing on **September 1, 2022,** and reviewed, considered, and discussed the application for a Coastal Development Permit and Conditional Use Permit and reviewed and considered all evidence and testimony presented at the hearing.

Now, THEREFORE BE IT RESOLVED, that the Planning Commission makes all the following findings:

1. **FINDING:**

Project Description: The applicant (FOD) is requesting modification to the previously issued CDP and CUP dating from 2007 and as amended to include additional properties acquired by FOD in 2008 and 2009. In 2015, the FOD applied for modification to CDP-06-49MMXM/CUP-06-49MMXM to continue dune restoration and trail work on an additional 3.6 acres known as the "Barr" property acquired by FOD (Assessor's Parcel Number [APN] 400-011-075). The proposed FOD Trail and Habitat Restoration Project (project) would manage public access, remove nonnative invasive plant species to restore sensitive dune mat plant communities, and install a fence along the eastern property line of the former "Barr" property. The amended permits would allow the continued implementation of a Restoration and Management Plan (Attachment 3a) for restoration activities on FOD properties, including the most recently acquired former Barr parcel.

Work for improvements on the Barr parcel would take place over a 3-year period and removal of non-native vegetation may continue indefinitely as needed. Specific activities would include establishment of a trailhead and a "No Parking" sign. Public access would allow pedestrians, dog walking, and horseback riding on designated trails during daylight hours only. Trail improvements include installation of signage to direct public access and distinguish equestrian from pedestrian trails. On these two trails, the applicant is proposing to apply the FOD Public Access Trails Policies, and to incorporate these two trails into the existing FOD trail system on APNs 506-111-024 and 506-111-024, which are also owned and managed by the applicant. An existing "private property" sign and metal gate at the

proposed trailhead would be removed and replaced with a new fence designed to allow pedestrian and horse access while blocking access to motorized vehicles. These improvements are intended to minimize impacts on sensitive habitat while allowing continued access by hikers, equestrians, and dog walkers. In addition, nonnative iceplant and invasive annual grasses near the proposed trailhead on Lupin Avenue will be targeted for removal to allow restoration of native dune mat habitat on the former Barr parcel. A CDP/CUP is required for all development within the Coastal Zone.

EVIDENCE: c) Project File: PLN-1975-CUP

d) The project description in the Mitigated Negative Declaration (MND) provides a complete description of all activities associated with the project and a summary of the details in the Restoration and Management Plan.

FINDINGS FOR COASTAL DEVELOPMENT PERMIT: CONFORMANCE WITH THE LOCAL COASTAL PLAN (HBAP)

2. FINDING: The proposed development is in conformance with the land use designation of Humboldt Bay Area Plan (HBAP) designating the sites for APN 400-011-075: RL: Residential Low Density; APN 400-011-077: Public Facility; APN 506-111-024: Natural Resources; APN 506-111-021, 506-111-025: Natural Resources; and APN 506-111-004: Natural Resources. Recreational Facilities and habitat restoration are compatible or allowable uses within all of the subject zone districts and are key goals of the Humboldt bay Area Local Coastal Plan and the California Coastal Act.

a) The project site where trail entranceway is proposed to be replaced and trail signs erected, known as the former Barr parcel, is designated RS-5-M/A,B under the HBAP. Public Recreation and Open Space is a Conditionally Permitted Use in the RS zone. Proposed restoration is allowed within the A, *Archaeological Resource Area*, Combining Zone designation provided they abide by the associated regulations and mitigations including the relocation of any planned structures to avoid or mitigate impacts on archaeological sites. Similarly, proposed restoration is allowed with the B, *Beach and Dune,* Combining Zone designation provided it minimize disturbance.

3. The project is consistent with Sections 312-39.2, *Public Access*; 312-39.5, *Coastal View Areas*; and 312-39.6, *Coastal Dune and Beach Areas* of the HBAP.

EVIDENCE: a) The access trails have substantial evidence of historic public use. FOD policy, as described in the project description, includes trail signs being designed and implemented to minimize visual impacts on the landscape while ensuring management intent is clear to visitors.

b) Closure of user-created trails to protect sensitive habitats and special-status plant and bee species may include temporary signage to inform visitors the route is closed as well as placing brush on user-created routes, which should further discourage visitors from walking in the area. Restoration of user-created routes may additionally include planting native plants and or distributing native plant seeds along user-created routes, which should further discourage visitors from walking in the area. If these initial measures are not successful in deterring visitor use, then temporary symbolic fencing with closure signs may also close access of user-created

routes and notify the public of ongoing restoration efforts to revegetate certain areas.

4. FINDING: The project is consistent with Section 313-16.1.4 of HBAP, requiring the relocate planned structures and roads to avoid or mitigate impacts on archaeological sites and Section 313-16.1.5 of HBAP, requiring additional protection measures for any Native American graves, burial grounds, cemeteries, and ceremonial sites.

EVIDENCE: a) As detailed in the Initial Study (IS) and MND prepared for the proposed CDP and CUP pursuant to Section 15074 of the CEQA Guidelines, the project is conditioned to follow Mitigation Measure (MM) CUL-1, *Inadvertent Discovery Protocol*: If cultural resources are encountered during construction activities, the contractor onsite will cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist and the appropriate THPOs will be contacted to evaluate the discovery and, in consultation with the applicant and the lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety Code Section 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242. If the Coroner determines the remains to be Native American, the Native American Heritage Commission (NAHC) will then be contacted by the coroner to determine appropriate treatment of the remains pursuant to Public Resources Code (PRC) Section 5097.98. Violators will be prosecuted in accordance with PRC Section 5097.99.

5. FINDING The project is consistent with HBAP Section 313-125, *Wetland Buffer Areas*, which purpose is "to ensure that any development permitted in lands adjacent to coastal wetlands will not degrade the wetland and detract from its natural resource value, and will incorporate such features into the development site design without significant impact."

EVIDENCE a) There are two known wetlands mapped within the former Barr parcel that are within the 250-foot setback distance for development. Trail improvements proposed to accommodate public access to the former Barr parcel include: (1) a new entrance fence allowing horse and pedestrian access but excluding motorized vehicles; and (2) an entry sign/kiosk and Dogipot® pet station approximately 100–120 feet from Lupin Avenue alongside the designated trail, (3) one or more directional signs that would include arrows with symbols, the word "Trail," or similar wording, to direct people to designated trails, and (4) the potential installation of a narrow, sunken/cribbed staircase to assist pedestrians up a 20-foot section of non-wetland dune. No permanent trail signs or features will be placed within wetlands. At trail junctions where there is a distinction between horse/pedestrian and pedestrian only trails, symbols would also be included to inform visitors of the designated use(s). Signs would be designed and implemented to minimize visual impacts on the landscape while ensuring management intent is clear to visitors.

b) In accordance with HBAP Sections 125.8, 125.9, and 39.15, the trail sign development can be permitted as long as they are sited and designed to prevent impacts which would significantly degrade wetland habitat areas, and shall be compatible with the continuance of such habitat areas; and the biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms shall be maintained, and where feasible, restored. In addition, areas disturbed during construction, restoration, etc., within 100 feet of the boundary of the wetland shall be restored to original contours and allowed to be restored to naturally occurring vegetation in the immediate area.

c) Correspondence with the North Coast Regional Water Quality Control Board (RWQCB) (Bargsten pers. comm.[2016]), has clarified that invasive species removal would not normally rise to the need for a dredge and fill 401 Water Quality Certificate permit unless it permanently and adversely affects waters and wetlands of the state. Similarly, following a site visit to FOD properties in 2018, it was noted that the RWQCB Restoration Policy recognizes "that there may be short term impacts to waters of the state that may be necessary in order to remedy issues like invasive species that will bring about better functions and conditions in the future and improvement of the entire ecosystem." (Bargsten pers. comm.[2019]).

6. FINDING The project is consistent with the Humboldt County Zoning Regulations and conforms to all applicable development standards and requirements of the ordinance.

EVIDENCE a) The project involves habitat restoration and public access which are allowable and conditionally allowable uses on all of the zones for the property within the restoration plan. APN 400-011-075: RS-5-M/A,B: Residential Single Family-Minimum lot size 5,000 sq. ft. (RS-5), Manufactured Home (M)/Archaeological Resource Area Outside Shelter Cove (A), Beach and Dune Areas (B); APN 400-011-077: PF1/B: Public Facility (Urban)(PF1)/Beach and Dune Areas (B); APN 506-111-024: NR/B: Natural Resources (NR)/Beach and Dune Areas (B); APN 506-111-021, 506-111-025: NR/B;RA-2.5/B: Natural Resources (NR)/Beach and Dune Areas (B); Rural Residential Agriculture-Minimum lot size 2.5 acres (RA-2.5). Beach and Dune Areas (B); and APN 506-111-004: NR/A,B,W: Natural Resources (NR)/Archaeological Resource Area Outside Shelter Cove (A), Beach and Dune Areas (B), Coastal Wetlands (W) which allows restoration and dune recreation as a permitted use when it meets the regulations of the respective Zone or Combining Zone.

b) The project is consistent with the Archaeological Resource Area Regulations because the local Tribes have been consulted and no sensitive archaeological resources will be impacted.

c) The project is consistent with the Beach and Dunes combining zone regulations because public access and habitat restoration are allowable uses within this zone and the project will not detract from the natural resource values or potential for recreational opportunities.

d) The project is consistent with the Coastal Wetland regulations because the project will not degrade wetland areas and the California Department of Fish and Wildlife has been consulted.

7. **FINDING** The proposed trail and access improvements and non-native vegetation removal will not be detrimental to the public health, safety, or welfare or materially injurious to properties or improvements in the vicinity.

EVIDENCE The project has been thoroughly reviewed by all applicable referral agencies who have all recommended approval. The project supports continued public access opportunities and habitat restoration, both of which will be beneficial to the public welfare.

8. **FINDING** The proposed development does not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law.

EVIDENCE The parcel was not included in the housing inventory of Humboldt County's 2019 Housing Element.

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Humboldt County Planning Commission does hereby:

- Adopt the findings set forth in this resolution; and
- Conditionally approves the Coastal Development Permit and Conditional Use Permit for Friends of the Dunes, based upon the Findings and Evidence and subject to the conditions of approval attached hereto as Attachment 1a and incorporated herein by reference; and

Adopted after review and consideration of all the evidence on September 1, 2022

The motion was made by COMMISSIONER _____and second by COMMISSIONER _____ and the following ROLL CALL vote:

AYES: COMMISSIONERS:
NOES: COMMISSIONERS:
ABSENT: COMMISSIONERS:
ABSTAIN: COMMISSIONERS:
DECISION:

I, John Ford, Secretary to the Planning Commission of the County of Humboldt, do hereby certify the foregoing to be a true and correct record of the action taken on the above-entitled matter by said Commission at a meeting held on the date noted above.

_____
John Ford, Director
Planning and Building Department

ATTACHMENT 1A

RECOMMENDED CONDITIONS OF APPROVAL

APPROVAL OF THE CONDITIONAL USE PERMIT AND COASTAL DEVELOPMENT PERMIT IS CONDITIONED ON THE FOLLOWING TERMS AND REQUIREMENTS WHICH MUST BE SATISFIED FOR THE LIFE OF THE PROJECT

A. General Conditions

1. The applicant is responsible for obtaining all necessary County and State permits and licenses and for meeting all requirements set forth by other regulatory agencies.

2. The applicant is required to pay for permit processing on a time-and-materials basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Planning and Building Department will provide a bill to the applicant after the decision. Any and all outstanding planning fees to cover the processing of the application to decision by the Hearing Officer shall be paid to the Humboldt County Planning and Building Department, 3015 H Street, Eureka.

3. The applicant is responsible for completing and implementing all mitigation measures outlined within the Mitigation Monitoring & Reporting Program (MMRP) which shall be completed as required within the MMRP and shall the applicant/developer/responsible party shall provide all reporting as required in the MMRP.

4. No permanent trail signs or features will be placed within wetlands.

5. Areas disturbed during construction, restoration, etc., within 100 feet of the boundary of the wetland shall be restored to original contours and allowed to be restored to naturally occurring in the vegetation in the immediate area.

6. The applicant shall submit a check to the Planning Division payable to the Humboldt County Clerk/Recorder in the amount of $2,598.00. Pursuant to Section 711.4 of the Fish and Game Code, the amount includes the CDFW fee plus the $50 document handling fee to the Clerk. This fee is effective through December 31, 2021, at such time the fee will be adjusted pursuant to Section 713 of the Fish and Game Code. Alternatively, the applicant may contact CDFW by phone at (916) 651-0603 or through the CDFW website at www.wildlife.ca.gov for a determination stating the project will have no effect on fish and wildlife. If CDFW concurs, a form will be provided exempting the project from the $2,598.00 fee payment requirement. In this instance, only a copy of the CDFW form and the $50.00 handling fee is required.

ATTACHMENT 1B

MITIGATION MONITORING AND REPORTING PROGRAM CHECKLIST:

Mitigation Measure BIO-1: Conduct Biological Surveying and Monitoring. Areas subject to disturbance during implementation of the Restoration Plan will be surveyed by the Restoration Manager or a qualified botanist appointed by the Restoration Manager and any endangered plant populations encountered would be flagged (**MM BIO-2**) before the commencement of any restoration work. Any restoration work in occupied areas would be directly overseen by the Restoration Manager to avoid the disturbance or removal of endangered plant species.

a. **Beach layia**: Plants are most sensitive during the flowering period (typically March to July) when flowers could be crushed, preventing seed dispersal. During this season, restoration work will avoid areas with dense beach layia populations, and the treatment method will be limited to hand pulling or manual digging of invasive species in these areas. Any beach layia populations present will be clearly identified and flagged (**MM BIO-2**), and the flagging monitored during work days.
b. **Humboldt Bay wallflower**: Restoration activities will generally avoid areas with individual plants. When wallflowers are present in areas of active restoration, all visible plants will be marked with a pin flag by the Restoration Manager (**MM BIO-2**) to avoid trampling. The treatment method in these areas will be limited to hand pulling or manual digging of invasive species.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During project operations.	Continuous with annual reporting and monitoring summary to be submitted		HCP&BD**		

Mitigation Measure BIO-2: Delineate Work Limits to Protect Sensitive Biological Resources. Before starting restoration projects, sensitive biological resource areas within and adjacent to restoration work areas will be staked and flagged by the Restoration Manager or biological monitor (**MM BIO-1**). Any demarcated areas will be inspected daily throughout work periods to ensure that they are visible for all restoration personnel. Any piles of removed nonnative plants or other work-related materials will be located outside of all the flagged special-status plant areas in areas of clear sand to avoid native dune mat plant species to the extent feasible.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During project operations.	Continuous with annual reporting and monitoring summary to be submitted		HCP&BD**		

Mitigation Measure BIO-3: Provide Worker Environmental Awareness Training. Work crews will be trained to identify and avoid special-status plants. The FOD will provide environmental awareness training before starting restoration activities for all technician or volunteer personnel (including new personnel as they are added to the project). This training will be given by the Restoration Manager, or other qualified botanical staff appointed by the Restoration Manager, to help the trainees understand the following.

- Surrounding common and special-status species and their habitats
- Sensitive natural communities and ESHAs
- Applicable regulatory requirements
- MMs designed to avoid or minimize impacts on sensitive resource areas

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During project operations.	Continuous with annual reporting and monitoring summary to be submitted.		HCP&BD**		

Mitigation Measure BIO-4: Limit Use of Grass Flaming in Sensitive Areas: Grass flaming and duff removal methods will not be utilized in areas known to be occupied by special-status plants based on seasonally appropriate botanical surveys conducted the season proceeding restoration projects (**MM BIO-1**).

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During project operations.	Continuous with annual reporting and monitoring summary to be submitted		HCP&BD**		

Mitigation Measure BIO-5: Yellow Bush Lupine Treatment. Removal of yellow bush lupine in special-status plant areas will take place following seed dispersal for beach layia (after June 30). However, if mature lupine pods are present in these areas, the Restoration Manager could carefully remove them.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken

During project operations.	Continuous with annual reporting and monitoring summary to be submitted		HCP&BD**		

Mitigation Measure BIO-6: Delineate Wetlands. Areas subject to disturbance during implementation of the Restoration Plan will be surveyed by the Restoration Manager or a qualified wetland scientist appointed by the Restoration Manager and any wetlands encountered will be flagged. The Restoration Manager will be able to identify wetland traits and vegetation, and restoration technicians, work crews, and volunteers will be trained to identify wetland traits and vegetation to ensure avoidance of wetlands during or on the way to restoration activities. Work crews and volunteers will be overseen by the Restoration Manager or by restoration technicians when working adjacent to an area with wetland vegetation (**MM BIO-1**). Routes to off-trail work sites will avoid wetlands.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During project operations.	Continuous with annual reporting and monitoring summary to be submitted		HCP&BD**		

Mitigation Measure CUL-1: Inadvertent Discovery Protocol. If cultural resources are encountered during construction activities, the contractor onsite will cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist and the appropriate THPOs will be contacted to evaluate the discovery and, in consultation with the applicant and the lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During project operations.	Continuous with annual reporting and monitoring summary to be submitted		HCP&BD**		

* CALFIRE = California Department of Fire and Forestry
** CDFW = California Department of Fish & Wildlife
*** HCP&BD = Humboldt County Planning and Building Department NCUAQMD = North Coast Unified Air Quality Management District

Attachment 2

Applicant's Evidence in Support of the Required Findings

Attachment 2 includes a listing of all written evidence which has been submitted by the applicant in support of making the required findings. The following materials are on file with the Planning and Building Department:

1. The name, contact address, and phone number(s) of the applicant. (**Application form on file**)

2. If the applicant is not the record title owner of parcel, written consent of the owner for the application with original signature and notary acknowledgement. (**On file**)

3. Site plan – **Located in Restoration Plan**

4. Restoration Plan **(Attached)**

RESTORATION AND MANAGEMENT PLAN

for

Friends of the Dunes

Humboldt Coastal Nature Center

Prepared by:
Friends of the Dunes
220 Stamps Lane
Manila, CA 95521
707-444-1397

Humboldt Coastal Nature Center
FRIENDS OF THE DUNES

October 2021

Table of Contents

INTRODUCTION

This Restoration and Management Plan (plan) will continue the restoration activities at the Humboldt Coastal Nature Center Land Trust (HCNC) that began in 2008. The plan addresses threatened and endangered species habitat, and also identifies monitoring methods and schedules in relation to restoration activities.

This plan is consistent with agreements entered into by Friends of the Dunes (FOD) and various funders of the project (Appendix I). The portions of this plan occurring on the Stamps Family Trust property, where FOD has a restoration easement, must be submitted to a family representative for approval prior to implementation.

For the purpose of this plan, we suggest the following definitions taken from Hesp and Walker (2013) and Pickart and Hesp (2019). The *foredune* is the first ridge above the beach and oriented parallel to the beach. Foredunes can be incipient or established (incipient dunes are transient and both types may be present). The foredune is commonly punctuated by *blowouts* which may elongate into long-walled parabolic dunes. The zone between the beach and the deflation plain is referred to as the "*foredune-blowout-parabolic dune complex*" hereafter referred to as the "foredune complex." *Dune swales* are deflation basins that form behind parabolic dunes or large areas of mobile or "transgressive" dunes. They are seasonally flooded by a rising water table (Pickart and Sawyer 1998). We define the *backdune* as semi-stabilized dunes located east of the foredune complex. These may consist of formerly more mobile transgressive dunes that have been partially stabilized by a combination of native and exotic vegetation.

PROJECT LOCATION AND FOCAL AREA

The entirety of the plan area is located on the Samoa peninsula (North Spit) in the unincorporated town of Manila, Humboldt County, CA (See Exhibit 1). FOD acknowledges that all of the restoration work described in this plan occurs on unceded Ancestral Lands of the Wiyot People, and FOD will work in dialogue with the Blue Lake Rancheria, the Wiyot Tribe, and the Bear River of the Rohnerville Rancheria to ensure that cultural resources are protected while implementing this plan.

This plan describes control of invasive vegetation and the restoration of degraded areas on the HCNC property, which is the Focal Area (see Exhibit 2). Recent invasions of annual grasses have increased the need for restoration activities to address all habitat that is not forested or wetland—approximately 91.5 acres, plus the approximately 1.5 acres of native landscaping on and around the Humboldt Coastal Nature Center. The Restoration Goals section of this plan further defines the priority areas for implementation.

PLAN UPDATES

Minor updates and adjustments to this plan will occur under an adaptive management framework (see Adaptive Management). If there are any future, permanent conservation land acquisitions by FOD that are outside the Focal Area, or any new restoration activities not covered under the adaptive management framework of this plan, these new activities and locations will be incorporated into Restoration and Management Plan amendments.

Note that the Samoa Dunes and Wetlands Conservation Area (aka Dog Ranch) is temporarily held in conservation ownership by FOD as of the adoption date of this plan, and is not included in this plan. This is because FOD is the interim landowner of the Samoa Dunes and Wetlands Conservation Area, and is not seeking to conduct habitat restoration under a Coastal Development Permit on this new conservation property, but rather to transfer the property to its permanent conservation landowners.

Amendments made to this plan must be approved by the FOD Stewardship Committee, FOD's Board of Directors, and the Stamps Family Trust (for work on their 15-acre easement parcel), and submitted to the Humboldt County Planning Department for approval.

Every 7 years, FOD will convene a Technical Advisory Committee consisting of qualified restoration professionals, potentially to include staff of the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, and the Bureau of Land Management, to review progress made under this plan and to make any recommendations for potential plan updates. Friends of the Dunes will also share any significant plan revisions with the Tribal Historic Preservation Officers (THPOs) of the Blue Lake Rancheria, the Wiyot Tribe, and the Bear River of the Rohnerville Rancheria, and will incorporate mitigation measures suggested by the THPOs to protect cultural resources.

SITE HISTORY

The HCNC Land Trust is part of the larger Humboldt Bay coastal dunes system, which includes the north and south spits of Humboldt Bay and is a part of the Wiyot Tribe's ancestral territory. Past Wiyot land uses on the Samoa Peninsula included permanent winter villages along the Bay shore, camps for seasonal gathering and processing of surf fish and shellfish, and ceremonial places tied to the World Renewal dances. The Wiyot practiced horticulture as evidenced by *Boduroush,* commonly known as "Indian Potatoes", which do not normally grow so close to the *shou'r* (ocean), among other geophytes that are found at Ma-le'l where they were planted and tended more than a hundred years ago. They also regularly used fire to keep vegetation open and improve hazel sticks used in basketmaking and the harvest of hazel nuts, among other environmental and cultural benefits. Today, the Wiyot continue to tend the bulbs at the old village site and work with the Friends of the Dunes to restore the dune habitat in recognition and appreciation of their long held connections to the land and their ancestors. Wiyot Tribe ethnobotanist Adam Canter works with tribal youth to reconnect Native people with their traditional food plants, in hopes of ameliorating serious public health problems among Native Americans, such as type 2 diabetes.

Past historic uses have included a chicken ranch and a pig farm.

In 1983 the Stamps property was purchased by Charles and Rachael Stamps, who passed ownership to the Stamps Family Trust until FOD purchased the property in 2007. The Stamps Family Trust retained a 15-acre restoration easement. In 2008, three neighboring properties were also purchased. Funding from the California State Coastal Conservancy, the State of California Wildlife Conservation Board, the U. S. Fish and Wildlife Service's (USFWS) North American Wetlands Conservation Act Program, a Humboldt County Title III

Grant, and community donors funded the initial purchase. In 2014, the approximately 3.6-acre Barr parcel was purchased with funding from the CA Natural Resource Agency, bringing the total to approximately 122 acres, referred to as HCNC lands.

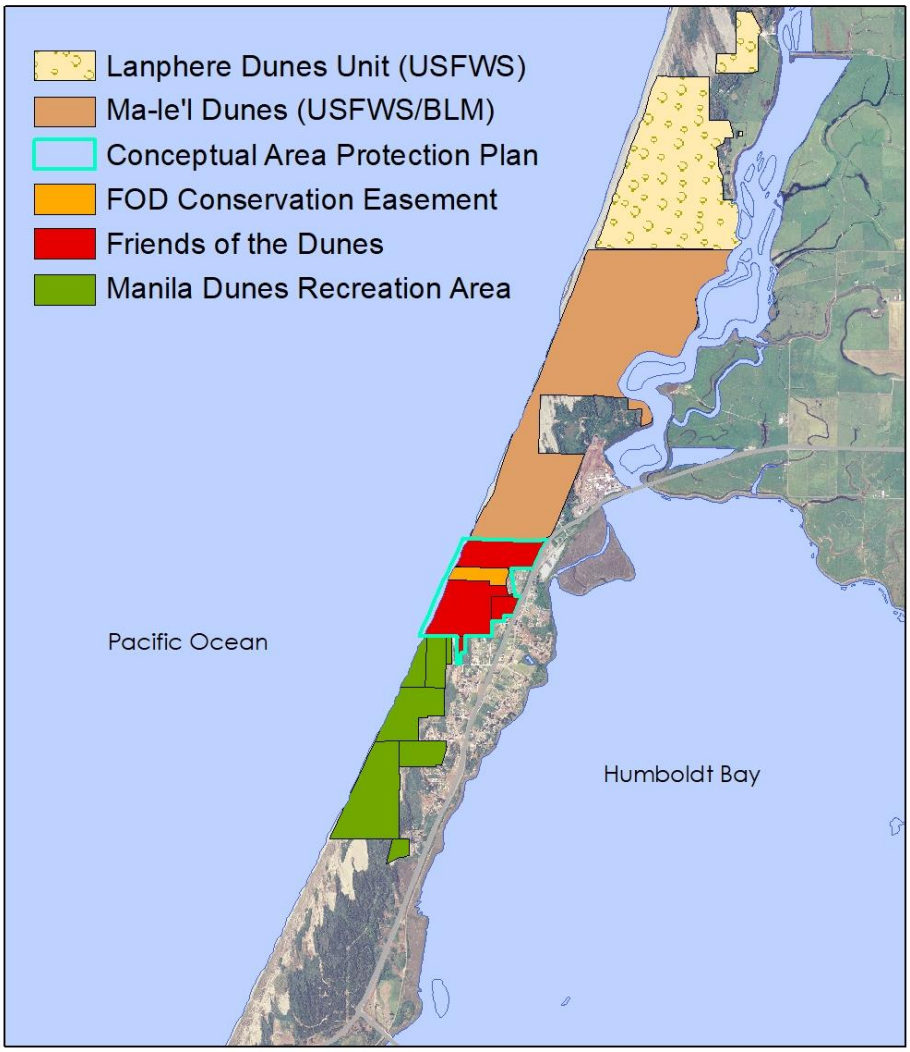
Some HCNC lands have been modified by past earthmoving activities. In the 1960s commercial water lines were constructed across the coastal side of the property, just east of the foredune complex. This right-of-way for the Humboldt Bay Municipal Water District (HBMWD or water district) allows for maintenance of their easement along the buried pipeline, and will continue to be a source of disturbance to the native vegetation and a constraint on restoration of ecological processes in that corridor. Sand mining occurred in the 1970s in the southeastern side of the property, and the disturbed settings still show soil compaction, landscape cuts, graded areas, and an old access road that was constructed during the previous management. Similarly, construction of the Stamps home resulted in the grading and modification of the main sand ridge along the eastern margin of the HCNC lands to create the building site and related parking areas.

The home built by the Stamps in 1985 is a unique bunker style structure with an arch shape that was sunk into a natural dune ridge and utilizes a natural soil roof. A layer of used tires on top of the roof provided stability for the sandy soil cover. The roof was replaced once during the time it was a home, and up to several hundred tires were discarded on the property as a result. The tires have since been removed.

Besides these land use disturbances, both the extended Stamps family and neighbors have been intermittently using these properties to gain access to the dunes and beach for recreation and in the process have created a large number of casual trails. A trails plan for the HCNC Land Trust was approved and implemented in 2010. The public access plan takes into account the information within this plan, especially concerning endangered plant populations and sensitive dune areas. In addition to physical disturbance on the property, there have been deliberate introductions of non-native invasive plant species in an effort to stabilize sand and alter natural geologic processes. Intentionally and unintentionally introduced non-native invasive plants have dispersed onto the property from adjacent areas, have spread significantly, and now dominate much of the property. As a result of this spread of invasive, non-native plants, there has been significant degradation of the native plant communities present throughout the property.

EXHIBIT 1 Project Location

Project Location



MAP DATE: 5/2/2019
UTM Zone 10, NAD 27
BASEMAP: naip_-1_1n_s_ca023_2005_1.sid

0 0.2 0.4 0.8 1.2 1.6 Miles

EXHIBIT 2 Focal Area

Focal Area

Conceptual Area Protection Plan Area

FOD Conservation Easement

MAP DATE: 5/2/19
UTM Zone 10, NAD 27
BASEMAP: naip_1-1_1n_s_ca023_2005_1.sid

0 0.03 0.06 0.12 0.18 0.24 Miles

RESTORATION GOALS

The restoration areas range from low to high levels of invasion by non-native invasive species including: European beachgrass (*Ammophila arenaria*), yellow bush lupine (*Lupinus arboreus*), and iceplant (C*. edulis* and C. *edulis* X C. *chilensis*), as well as a number of species of invasive annual (and two perennial) grasses including ripgut brome (*Bromus diandrus*), rattlesnake grass (*Briza maxima*), fescue grasses (*Festuca spp.)*, yellow hairgrass (*Aira praecox*), and the perennial velvet grass (*Holcus lanatus*) and vernal sweetgrass (*Anthoxanthum odoratum*). These annual and perennial grasses will be referred to collectively as "annual grasses." The previous focal area was approximately 34.5 acres in 2008, before annual grass invasion covered large portions of dunes. In addition to these invasive plants, a few small populations of star mustard (*Coincya monensis)* and one small population of blue gum trees (*Eucalyptus globulus*) were present on the property. Due to increased presence of the various grass species, restoration goals are focused on areas within the property that have high value (see Prioritization of Restoration Areas).

These infestations have reduced native species diversity of the area, diminished habitat for native plant and animal species and altered dune topography and processes (Pickart and Barbour 2007). The ultimate goal of this plan is restoration of the natural diversity of plants, wildlife and natural dune processes, while respecting land use of neighboring properties, community members, and the water district easement. Natural dune processes play a role in allowing natural succession of native plant species, as vegetation patterns are correlated with dune morphology and sand movement (Pickart and Sawyer 1998). Current research is exploring the impact of invasive vegetation on coastal resiliency in the face of climate change and sea level rise. Only minimal maintenance of the restored property should be needed in perpetuity once natural processes are restored, and invasive species populations are removed. Maintenance will include but is not limited to annual monitoring and removal of invasive plant populations.

Restoration of degraded dunes has been well researched at the nearby Lanphere and Ma-le'l Dunes Units of the Humboldt Bay National Wildlife Refuge (Lanphere Dunes Unit and Ma-le'l Dunes North Unit), Manila Dunes Recreation Area, and dunes managed by the Bureau of Land Management (BLM) including Ma-le'l Dunes South, the Eureka Dunes Rare Plant Protection Area, the Samoa Open Riding Area, and the South Spit of Humboldt Bay (Pickart et al. 1998a; Pickart et al. 1998b; Pickart and Sawyer 1998; USFWS 2018; Wheeler pers. comm. 2017). Most of the technical information in this restoration plan is based upon the methods and findings outlined in Pickart (2013) and Pickart and Sawyer (1998).

RESTORATION HISTORY

In 2008, the first phase of renovation of the Stamps' home was initiated. This involved creation of public restrooms, parking lots, offices for FOD staff, an education room and a gift shop in the Humboldt Coastal Nature Center. During construction, the tires on and near the building, as well as additional trash from previous dump sites were removed under a grant from the Integrated Waste Management Board. Future plans include a second story of offices, larger gift shop and education room with a public library. The small population of blue gum trees (*Eucalyptus globulus*) was removed from the property in 2010.

Between 2008 and 2019, over 100 acres were treated or retreated for invasive plant species removal on H CNC Lands. Almost all of the areas east of the waterline trail were treated for yellow bush lupine, while almost all areas west of the waterline trail (excluding the foredune) were treated for iceplant (Walter pers. comm. 2017). Photo-documentation shows increases in dune mat habitat after the removal of yellow bush lupine and iceplant. Iceplant is limited to sparse occurrences in areas it was previously rampant, and lupine recurs with less frequency as the long-lived seed bank is slowly diminished by restoration efforts. Restoration annual reports shared with the Humboldt County Planning Department contain a detailed restoration history.

COMMUNITY OUTREACH

FOD has utilized community volunteers for restoration activities since 1982 at dune properties on the North Spit. The Dune Ecosystem Restoration Team (DERT) is a core volunteer program that was created by FOD in 2002. DERT volunteers meet regularly on weekend dates to provide labor for on-the-ground restoration activities in coastal locations in Humboldt County, including HCNC. In addition, a Drop-in Restoration program allows dedicated individuals to become trained restoration technicians capable of removing invasive species at their convenience once they have participated in training with the Restoration Manager that includes plant identification and proper restoration techniques, and Wiyot cultural awareness and protocols for inadvertent discovery and protection of archaeological resources (Appendix IV).

IMPLEMENTATION PLAN

Restoration activities will begin on the first priority acres of the approximately 91.5 acre restoration focal area and approximately 1.5 acres of the invaded native plant landscaping area around the Humboldt Coastal Nature Center. Manual labor for invasive vegetation control will be provided by community volunteers, California Conservation Corps (CCC) crews, High Rock Conservation Camp (California Department of Forestry and Fire Protection – CAL FIRE) crews, and trained restoration technicians. A Restoration Manager will guide the overall direction of the restoration activities and provide training for the restoration technicians and other work crews. Access to the site will be from the main trailhead at 220 Stamps Lane. If vehicle access is needed, the coastal sites will be accessible from Lupin Avenue along the Humboldt Bay Municipal Water District (HBMWD or water district) water line road near the western edge of the property.

Manual removal methods will follow those outlined in Pickart and Sawyer (1998) and in studies done by the US Fish and Wildlife Service (USFWS 2013). Heavy equipment removal methods are not appropriate beyond the area adjacent to the building at 220 Stamps Lane due to the impact it would have on the topography of the dunes and the presence of federally listed endangered species. All restoration efforts will be carried out in accordance with State, Federal and local environmental regulations (Appendix III) and Protocols for Inadvertent Archaeological Discoveries consistent with State laws and best practices (Appendix IV).

FOD has completed baseline data collection of invasive and endangered plant species distributions for all lands identified in this Restoration Plan, including the most recently acquired former Barr parcel. Any new restoration activities not covered under the adaptive management framework of this plan [see Adaptive Management] or any new locations not in the Conceptual Area Protection Plan will be incorporated into Restoration Plan amendments. Implementation of restoration activities on any newly acquired FOD properties will only begin upon the completion of baseline data collection of invasive and endangered plant species distributions, and a corresponding amendment to this Restoration Plan that incorporates the newly-gathered data.

RESTORATION MANAGER

Friends of the Dunes will maintain—as part of its professional staff, or as provided by a partnering organization, or on a volunteer basis—a Restoration Manager or Acting Restoration Manager to oversee the implementation of the restoration activities prescribed and detailed in this plan. In order to meet the responsibilities and goals of this plan, the Restoration Manager's qualifications will include:

1. The ability to accomplish accurate field identification of native and non-native plant species in Humboldt Bay's coastal dune ecosystems, including the ability to identify rare, threatened, and endangered native plant species, the ability to identify wetland plant species and jurisdictional wetlands, and the ability to identify invasive plant species outlined in the Treatment of Invasive Vegetation section of this plan.
2. Familiarity with the principles of natural resource land management and ecological restoration, including the ability to implement a restoration and management plan.
3. Excellent verbal and written communication, including the ability to speak to, train, and motivate volunteer groups and work crews of various sizes and diverse backgrounds.
4. Familiarity with the Wiyot perspective of land acknowledgement, the Inadvertent Archaeological Discovery Protocol (Appendix IV), confidentiality of archaeological site locations and other sensitive information, and ability to identify potential Wiyot archaeological deposits (e.g., flaked-stone artifacts, fire-affected rock, discarded shellfish dietary remains).

ADAPTIVE MANAGEMENT

Measures will be taken to monitor the outcome of treated areas and if invasive species are not responding to treatments, alternative control methods will be considered. If native vegetation does not re-colonize the newly available habitat after the removal of invasive vegetation then planting of native species will be considered as part of the restoration strategy. Planting of native species such as shore pines in appropriate non-wetland areas to shade out invasive species may also be considered as part of an adaptive management approach, particularly in increasingly invaded back dune areas.

Colonization by rare and endangered species will also be monitored as resources allow, and if these species don't respond positively to restoration actions, assisted dispersal will

be considered to encourage expansion of current populations and possibly introduction of new populations into suitable habitat.

If site conditions change rapidly (e.g. newly discovered populations of invasive species, or rapid spread of established populations, etc.) and funding or other issues require a change in priority of restoration areas, FOD will document the rationale for changes of policy. Prioritization of invasive species will be determined using the WHIPPET method (defined in Prioritization of Restoration Areas) as plant populations change. All changes in priorities must be submitted to and approved by the FOD Stewardship Committee, the FOD Board and the Stamps Family Trust as it pertains to their property. All adaptive management policies will follow appropriate measures to protect all special status species and avoid wetlands, as outlined in this plan.

There are certain treatments that would not be conducted under the adaptive management framework established in this plan, and FOD would not pursue these treatments without an amended Restoration and Management Plan approved by the Humboldt County Planning Department. These include:

1. Use of herbicide treatments to manage non-native invasive plants. Herbicides would not be used under this plan or its adaptive management framework.
2. Use of prescribed fire treatments on standing vegetation on HCNC lands. Prescribed fire for the purposes of treating populations of standing invasive species would not be used as a treatment under this plan or its adaptive management framework. Note that flaming is a different and distinct treatment from prescribed fire and would be a permissible treatment under this plan. Note that using fire to eliminate piles of previously removed and dried non-native species is not a prescribed fire treatment applied to standing vegetation, and would be permissible under this plan.
3. Use of heavy equipment to remove standing invasive species. Heavy equipment removal methods on standing invasive species beyond the area adjacent to the building at 220 Stamps Lane would present potential impacts to the topography of the dunes and on federally listed endangered species, and would not be accomplished under this plan or its adaptive management framework. Note that potentially using a truck authorized by the water district on the waterline road to assist in transporting piles of previously removed non-native species off the property would be permissible under this plan's adaptive management framework.

TREATMENT OF INVASIVE VEGETATION

This plan includes the treatment of approximately 91.5 acres of invaded dune habitats and approximately 1.5 acres of the invaded native plant landscaping area around the Humboldt Coastal Nature Center. Willow-dominated wetlands areas and forested dunes have been excluded from the current treatment area. Following removal of the invasive species, areas will continue to be monitored for new infestations.

PRIORITIZATION OF RESTORATION AREAS

Areas prioritized for removal of invasive vegetation were placed into first and second priority categories under this plan using steps inspired by the WHIPPET method (Skurka

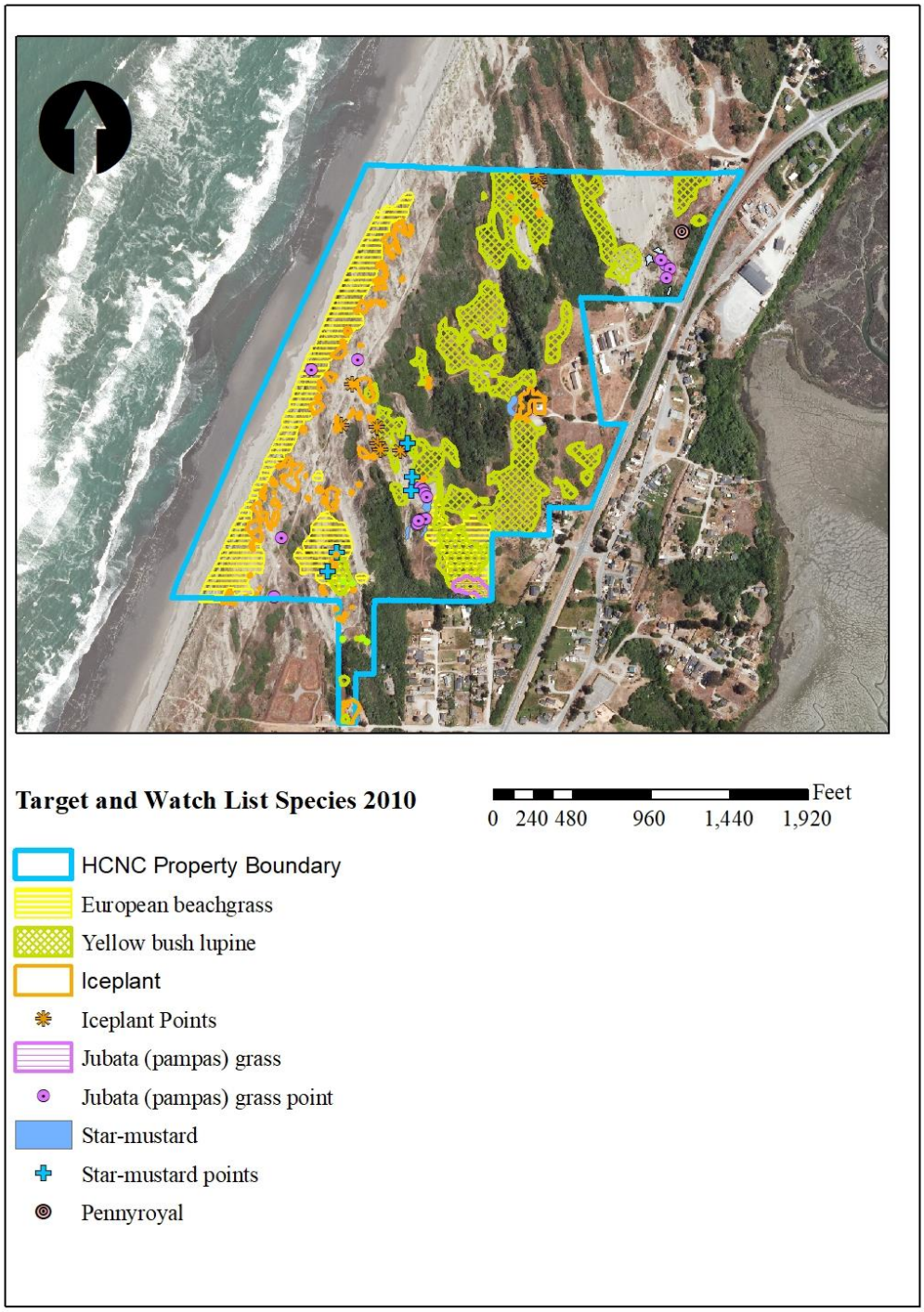
2010). Prioritization is based on the relative impact of an invasive species to the population or natural community in question, invasiveness of the species, and feasibility of eradication. Due to the long-lived seed banks of yellow bush lupine, prioritization to remove them is high to prevent continued seed release. Additionally, annual grass seeds have the ability to spread rapidly between seasons, making them highly invasive. Priority is also given to new or limited occurrences of highly invasive species following the concept of early detection and rapid response, and to areas with valuable populations of special status species including wildlife.

The first priority includes areas in close proximity to endangered species populations and areas in need of rapid response for new/limited occurrences of highly invasive species. The second priority consists of those areas in close proximity to potential endangered species habitat. One area of yellow bush lupine was not prioritized in accordance with the above protocol, as it is part of educational restoration activities near the FOD HCNC building. One area of beachgrass near the south east corner of the FOD property is also not prioritized, based on FOD's sensitivity to the community concerns of neighboring landowners. Also based on FOD's sensitivity to the community concerns of neighboring landowners, one area of iceplant on the former Barr parcel is prioritized only to prevent further spread, as described in the Iceplant section below.

MONITORING

Photo-monitoring plots have been established in former European beachgrass, iceplant, and yellow bush lupine areas, and are photographed every three years. Photo point documentation is digitally recorded using GPS with designated points. Each photo point has a unique alpha-numeric code along with a description of the photo, direction the photo was taken and the date of the photo. This documentation will be recorded through the monitoring reports. Other monitoring is described in specific species sections below, and information about monitoring reports appears in the **Performance Review** section of this plan, located at the end of the plan.

EXHIBIT 3 Invasive Non-Native Vegetation



EUROPEAN BEACHGRASS

European beachgrass (*Ammophila arenaria*) is native to Europe and was widely distributed to stabilize and establish sand dunes for property protection and erosion control (Global Invasive Species Database 2018). It is very competitive, displaces native vegetation communities, and forms dense monospecific stands very different from the sparse native coastal vegetation (Pickart 1997). It is a strong competitor partly because it can rapidly accrete sand, survive burial, resist drought conditions, and produce vigorous rhizomes (Hertling & Lubke 2000; Hilton *et al.* 2005).

Objective

Control all 6.44 acres of European beachgrass on the foredune. Note that there are no patches of European beachgrass on the former Barr parcel, and this parcel does not include foredune areas.

Performance and Success Criteria

Performance criteria for European beachgrass removal will be met if total cover is less than 35% in treated areas after one year. Success criteria will be achieved if total cover of targeted areas is less than 1% after three years of treatment.

Methods

Removal of European beachgrass will be conducted with repeated digs of both above ground stems and buried rhizomes to a depth of approximately 10 to 12 inches. Digging occurs year round, with the majority of work happening during the growing season. This begins when plants emerge from dormancy, which is usually no earlier than February, but may be as late as March, through October. The first dig is the most labor intensive. Subsequent digs will be carried out with decreasing frequencies until resprouts of beachgrass are no longer emerging. Required frequency of digs is dependent upon variations in location, crew availability, and weather.

Shovels and trowels will be used to assist in the removal of the rhizome. As the grass is dug, it will be gathered into piles. Contingent on funding, weather and resources, grass piles will be burned as soon as they are dry, as the piles can become partially buried by sand if left in place too long. Piles will be no larger than 5 x 5 feet, the optimal size for burning. All burning will be conducted in accordance with appropriate regulations, permits, weather conditions and with consideration of air quality impacts to surrounding neighbors.

Removal of beachgrass will occur in a checkerboard pattern by removing patches no larger than 200 feet long (north to south), and leaving untreated alternating patches of approximately the same size intact along the foredune as a measure to reduce erosion potential, consistent with the Humboldt County Beach and Dunes Plan (HCBDP). A strip of beachgrass 2 to 12 feet wide will be left in place on the ocean side of the restored area as another measure to reduce erosion potential consistent with the HCBDP. Once the native vegetation is showing signs of re-colonization within restored areas—anticipated within 1 to 3 years—the remaining strips will be removed, and the checkerboard patches of beachgrass will be treated in the same way. The timeline for European beachgrass removal is contingent on labor and funding sources. Revegetation by native species is expected to

occur naturally in newly restored areas, based on previous restoration on the HCNC property and on results at neighboring dune properties (Manila Dunes Recreation Area, the Lanphere Dunes Unit, Ma-le'l North Dunes Unit, BLM Ma-le'l South Dunes, and the South Spit of Humboldt Bay).

Lower than average native vegetation cover is expected the first few years following beachgrass removal. Previous work has shown that instability (sand movement) of treated areas will not be a significant or long term problem (Pickart and Sawyer 1998). However, removal of beachgrass from a continuous foredune is expected to result in an increased number of blowouts. Blowouts are a natural feature of our high energy coastline, and are the source for future long-walled parabolic dunes that migrate inland. These dunes build volume and broaden the foredune complex (McDonald 2015). Blowouts may occasionally encroach on wetland swales; however, new swales develop in areas of deflation. A recent peer-reviewed study has demonstrated that the net area of wetlands has increased over time in the deflation plain of restored dune areas at Lanphere Dunes (Pickart and Hesp 2019). The HCNC property has less dynamic sand movement overall than Lanphere Dunes; field analysis of the existing deflation plain at the HCNC property compared against historic aerial imagery appears to indicate there is no noticeable encroachment of sand into wetlands on the HCNC property (Pickart pers. comm. 2019). In the dunes of the HCNC and other areas on the Samoa Peninsula, an analysis conducted by GHD in 2014 found that there were no significant observable changes in dune forms over time, although there was an increase in vegetation such as willow tree and wax myrtle stands over time, suggesting a net increase in wetlands subsequent to the commencement of restoration activities (GHD 2014).

YELLOW BUSH LUPINE

Yellow bush lupine (*Lupinus arboreus*) is a short-lived perennial shrub native to central and southern California. It was introduced to northern California's coastal dunes and now occurs as an invasive species in dune habitat (USFWS 2017). Once yellow bush lupine becomes established, it increases nitrogen levels which then facilitate invasion of other species (Pickart *et al.* 1998). This leads to a shift in the vegetation community to a combination of lupine shrubs, weedy grasses, or adventive natives, especially coyote brush (Pickart et al. 1998).

Objective

Control remaining yellow bush lupine individuals occurring within the focal area.

Performance and Success Criteria

Performance criteria will be met if yellow bush lupine cover is less than 3% the same year it is treated. Due to its extensive seed bank, it is expected that yellow bush lupine seedlings will continue to emerge for at least ten years following initial treatment (Pickart 2004). Success will be met when yellow bush lupine cover is less than 1% in treatment areas.

Methods

Yellow bush lupine will be treated manually, with most efforts occurring in the spring prior to its release of seeds. For small plants, approximately 2-3 feet in height, the entire plant

(including the tap root) will be removed by pulling up on the plant from its base. This is the most effective method of removal with 100% fatality. Larger plants will be cut at the base below stem nodes using a hand tool. After the initial cut of the main stalk the remaining stump will be chopped to deter re-sprouting. Cut lupine will be placed in piles, in dune swales when possible. Any lupine cut within 200 feet of Lupin Avenue would be immediately removed from the property rather than left in piles. Dry piles may be burned in accordance with appropriate permits, weather conditions and with consideration of air quality impacts to surrounding neighbors. Yellow bush lupine will continue to be removed annually, in accordance with prioritized areas, until the seed bank is depleted.

Other weed species are often associated with yellow bush lupine due to a nutrient-rich duff layer that typically occurs in these areas. Removal of the duff layer is often necessary to promote natural re-vegetation of native species. Duff removal can be achieved by raking up surface litter using hand tools, placing litter on tarps and removing it from the site. Duff removal is a time consuming and costly management practice that will be implemented when funding allows.

ICEPLANT

Two species of iceplant (*Carpobrotus edulis* and *C. chilensis*) occur that readily hybridize with each other occur on HCNC lands. Iceplant can form large, low-growing mats that displace native species, and over time, increase the organic matter of the soil making it suitable for other nonnative species (Chenot 2014).

Objective

Control all iceplant sprouts and clonal mats (approximately 0.5 acres) within the focal area. Note that the method of control is removal throughout the HCNC property, with the exception of one altered treatment approach on the area of the former Barr parcel noted in methods, below.

Performance and Success Criteria

Performance and success criteria will be achieved if total cover of targeted areas is less than 3% the first year following treatment and less than 1% cover following annual maintenance treatments.

Methods

All iceplant growing in clonal mats or as sparse individuals will be removed manually, with the exception of the approximately 0.15-acre iceplant patch growing on the former Barr parcel within 100 feet of Lupin Avenue or within 100 feet of an adjacent residential property boundary, which will be managed instead to prevent the iceplant's further spread.

For the removal treatment, large mats will be "rolled" as roots are cut on the underside. Less dense areas of iceplant will be pulled up in strands. Areas of removal are picked through meticulously to limit dead plant portions left on the sand. These removal methods are close to being 100% successful after one treatment, but follow-up should take place for

small plant parts that are missed and may begin rooting and growing, and for new plants establishing from seed.

Iceplant should be placed in piles no larger than 10 x 10 feet within the infested area or in dune hollows when possible. Piles should be checked a couple times during the year following removal to pull up and remove strands that have re-growth, especially around edges of piles. Piles may be burned upon completely drying or carried off site to be composted. Treated areas will be allowed to naturally revegetate.

Due to neighborhood concerns regarding the former Barr parcel, the iceplant currently existing within 100 feet of Lupin Ave or the adjacent private residential property line will be photodocumented and GPS-documented, left in place at its current extent, and managed to prevent further spread. Any iceplant growth beyond the documented extent will be removed to protect surrounding habitat. Such iceplant removal in the proximity of 200 feet from Lupin Avenue or neighboring residential property lines would be transported immediately from the property via the Lupin Avenue access point and disposed of off-site rather than left to dry in piles.

JUBATA GRASS

Objective

Prevent new invasions of Jubata Grass (*Cortaderia jubata*) on the HCNC Lands.

Performance and Success Criteria

Performance and success criteria will be met if new Jubata Grass plants are unable to seed.

Methods

All jubata grass will be removed manually. Treatment will involve using shovels, Pulaskis and other hand tools to remove vegetation and dig up root bases. The root base will either be carried off the property or placed atop an invasive vegetation pile. The reproductive portions will be detached and placed in plastic bags, before seeds are released. As native shore pines stabilize dunes, jubata grass may be shaded out, and less numerous with time.

Monitoring

Surveys for jubata grass will be conducted in potential habitat areas. All new occurrences will be recorded using a GPS and reviewed for management.

STAR MUSTARD

Star mustard (*Coincya monensis*) is a medium sized herbaceous plant in the mustard family that is native to Europe and has invaded areas in the eastern USA. The population on and near HCNC is the only known population on the west coast. Eradication efforts commenced shortly after it was first discovered in 1997 and are ongoing in coordination with the USFWS.

Objective
Remove any detected star mustard plants.

Performance and Success Criteria
Performance criteria will be met if all star mustard plants are detected and removed prior to seed dispersal annually. Success criteria will be met when star mustard is extirpated on HCNC lands.

Methods
Thorough monthly surveys of four populations covering approximately 0.5 acres and the surrounding areas should occur year-round. Star mustard is easily pulled out of the sandy substrate by hand. Plants are immediately placed into plastic bags to be discarded off site.

Results from annual surveys conducted by USFWS show there were almost 7,000 plants on HCNC properties in 2003, and as of 2007 the population had been reduced to approximately 40 plants. Since then, occurrences have fluctuated from zero to over 500 individuals a year. Approximately 80 individuals were found in 2017.

Monitoring
New populations will be documented upon discovery. Continued surveying for new and recurring populations should occur annually until eradication has been attained, and then rechecked intermittently. FOD will continue to work cooperatively with the USFWS to remove star mustard from the north spit.

ANNUAL GRASSES
A number of nonnative grass species in addition to European beachgrass have invaded HCNC lands. These include, but are not limited to, ripgut brome (*Bromus diandrus*), rattlesnake grass (*Briza maxima*), fescue grasses (*Festuca spp.)*, yellow hairgrass (*Aira praecox*), and the perennial velvet grass (*Holcus lanatus*) and vernal sweetgrass (*Anthoxanthum odoratum*). Although the latter two of these species are perennial, we refer to them collectively as invasive annual grasses for convenience in differentiating them from European beachgrass. Throughout the North Spit of Humboldt Bay invasive annual grasses overstabilize dunes and outcompete native dune mat species (USFWS 2013). In areas where ripgut brome was removed at the Lanphere Dunes, there was a dramatic increase in native cover and species diversity, including increased numbers of the federally endangered Humboldt Bay wallflower (USFWS 2015).

Invasive annual grasses were mapped on the HCNC property in 1998 and 2009, expanding significantly in distribution during that period (USFWS 2013), and professional, third-party field observations indicate that they have continued to expand since then (Goldsmith pers. comm. 2018). Annual grasses are secondary invaders after Yellow bush lupine alters soils, and the longtime presence of yellow bush lupine on HCNC lands has likely contributed to the expansion of annual grasses. For this reason, restoration of soils through duff removal is the most effective treatment. This suite of species exist in large quantities with some areas being denser than others. Fields to the east and northeast of the property, as well as

along the Highway 255 corridor, contain extensive annual grass populations and seed sources.

Annual grasses have been studied and removed from neighboring dune properties, including a 20 year removal program at Lanphere Dunes. This has shown that through annual removal of invasive grasses before their seed drops, populations were reduced, native dune mat was restored, and populations of endangered plants increased in density (USFWS 2013, USFWS 2015). However, propagule pressure from surrounding populations on private land means that efforts must continue until source populations are controlled.

Objective
Remove annual grasses from dune mat habitat where its cover is medium to very dense, and in areas that support threatened and endangered plant species. In the suite of invasive annual grass species, priority will be given to the removal of ripgut brome (*Bromus diandrus*) and rattlesnake grass (*Briza maxima*).

Performance and Success Criteria
Performance criteria will be met if high priority areas are treated annually and coverage of invasive grasses is reduced.

Methods
Annual grasses will be removed by hand and the vegetation will immediately be placed in plastic garbage bags for disposal off site. Control methods to be considered in the future are the removal of duff (top layer of soil) from areas that have been severely degraded, grass flaming, weed whacking, and using black tarps to smother plants.

Monitoring
Close attention should be paid to new populations, especially in areas with high human activity, high habitat value, or areas that are being actively restored.

NATIVE LANDSCAPING ON GROUNDS OF THE HUMBOLDT COASTAL NATURE CENTER

Since the founding of the Humboldt Coastal Nature Center, there has been a realization that there is an opportunity to use the grounds immediately around the building as a showcase for native plants of the coastal dunes. At the same time, there has been a concurrent realization that this heavily trafficked area on the developed border of the HCNC property serves as a vector for multiple invasive plant species that will require ongoing control. For these reasons, and because these lands immediately around the Nature Center are included in the focal area, the same land ownership, and the Coastal Zone, the practices anticipated and associated with managing this area are being incorporated into the Restoration and Management Plan, even though goals and outcomes are slightly different (i.e., the native landscaping project complements the surrounding natural ecosystem and educational opportunities at the Nature Center rather than attempting a full ecological restoration of

this partially built landscape). There are no threatened or endangered plant species present in the landscaping area of the Humboldt Coastal Nature Center.

Objective
Treat heavily invaded areas of annual grasses, oxalis, and burr clover to prevent spread into adjacent habitat. Remove annual grasses by hand, with a priority focus around native planted areas and walkways where there are the greatest educational opportunities. Stabilize the roof of the Humboldt Coastal Nature Center with native plantings. For all plantings, utilize a native plant palette and native plant seedlings.

Performance and Success Criteria
Performance and success criteria will be met if landscaping areas are treated regularly, coverage of invasive grasses, oxalis, and burr clover is reduced or prevented from further spread into adjacent habitat, and native plant cover increases along walkways and continues to stabilize the roof of the Nature Center.

Methods
Annual grasses and oxalis will be removed by hand and the vegetation will be placed in plastic garbage bags for disposal off site. String trimming will be conducted in heavily invaded areas that do not have low-growing native plants to prevent the spread of highly invasive plants into adjacent habitat. Flaming will be conducted in areas around the edges of parking lots and walkways in the wet season only, to prevent the spread of these highly invasive plants into adjacent habitat. Control methods to be considered in the future are the removal of duff (top layer of soil) from areas that have been severely degraded and using black tarps to smother invasive plants in areas without native plants.

Monitoring
Close attention should be paid to new populations of invasive plants, especially in areas with high human activity, to prevent the spread to adjacent habitat. The roof of the Humboldt Coastal Nature Center should continue to be monitored closely to ensure that it retains cover.

RESOURCE PROTECTION MEASURES

SPECIAL STATUS SPECIES PLANT POPULATIONS

There are four special status plant species that can be found on the Humboldt Coastal Nature Center lands. Pink sand verbena (*Abronia umbellate var. breviflora)* is a perennial herbaceous plant that is threatened by non-native plants, vehicles, and development-related habitat loss. It is listed under the California Native Plant Society (CNPS) as a 1B.1 species. Dark-eyed gilia (*Gilia millefoliata)* is a small, annual flowering species that is threatened by vehicles, development-related habitat loss, grazing and non-native plants, and is listed as a 1B.2 species by CNPS, and a 2B by the state of California. Restoration activities will benefit these species' recovery by directly addressing two of the principal

threats to the recovery of these species: habitat loss and competition with non-native, invasive species.

As of 2019, there are two federally-listed endangered species, beach layia (*Layia carnosa)* and the Humboldt Bay wallflower (*Erysimum menziesii)* present on the HCNC property. Beach layia is an annual herbaceous species rarely growing more than two inches above the ground, while the wallflower is a monocarpic perennial herbaceous plant. Both species are threatened by loss of habitat due to development, vehicles, and invasive non-native plants. The Humboldt Bay wallflower is the most sensitive, also being threatened by deer browsing, sand mining, and foot traffic (CNPS 2017). Reproduction may also be hindered by infestation of a fungus that causes white rust disease in the Humboldt Bay wallflower population (Pickart et al. 2018). Restoration activities will benefit these species' recovery by directly addressing two of the principal threats to the recovery of these species: habitat loss and competition with non-native, invasive species.

Monitoring and mapping of Humboldt Bay wallflower was conducted by FOD in 2008, and most recently by USFWS in 2015 (Pickart et al. 2018). Beach layia was mapped by the USFWS in 1999 and again in 2017.

Objective

Increase native, special status plant species habitat through invasive plant removal, avoid unintended impacts to potential occurrences of endangered and rare plants from restoration activities, and work with partners including the USFWS to record response of endangered plants to restoration activities.

Methods

Special status plant populations will be beneficially impacted by restoration activities through the creation of suitable habitat for these species to populate. Suitable habitat will be created by removing invasive plants. Restoration activities will be accomplished with no adverse impacts to visible pink sand verbena, dark-eyed gilia, Humboldt Bay wallflower and beach layia (i.e. non-seedling, juvenile or reproductive individuals), because controlled activities in and adjacent to mapped special status plant populations will be carried out with guidance from the Restoration Manager, and under supervision of the Restoration Manager or trained restoration technicians, and by trained volunteers. Methods for avoiding impacts are outlined below. Unintended effects to small, unseen individual seedlings could potentially occur during restoration activities.

The probability of a Humboldt Bay wallflower individual surviving to reproduction is correlated with its size. The probability of any new seedling surviving to reproduction is less than 1% (Pickart 2004). Based on this information, any unintended effects to small, non-visible individual Humboldt Bay wallflower seedlings will be negligible in terms of reduced reproductive success in this population. The methods and protocols to avoid impacts to visible Humboldt Bay wallflower individuals are outlined below.

Effects to beach layia will be minimized to negligible levels by avoiding areas with dense layia populations or restricting restoration until the period following seed dispersal,

combined with proper restoration techniques when plants are not flowering or dispersing seed.

Effects to dark-eyed gilia and pink sand verbena will be minimized to negligible levels by the Restoration Manager surveying restoration work sites in advance for occurrences of these species and identifying any occurrences, avoidance of restoration in areas of occurrence when possible, and plant identification training conducted by the Restoration Manager for restoration technicians and restoration volunteers to aid in impact avoidance.

The following methods will be used to avoid and minimize disturbing the endangered, threatened, or rare plant populations identified above:

- Restoration areas will be surveyed in advance by Friends of the Dunes' Restoration Manager, and any special-status plant populations encountered will be clearly identified before the commencement of restoration work.
- Restoration technicians and work crews will be trained to identify and avoid special-status plants using photos or live plants in the field.
- Any digging in occupied areas will be overseen by the Restoration Manager or trained restoration technicians to avoid the disturbance or removal of endangered plant species.
  (a) Layia: Plants are most sensitive during the flowering period (typically March to July) when flowers could be crushed preventing seed dispersal. During this season, restoration work will avoid areas with dense layia populations, and the treatment method will be limited to hand pulling or manual digging of invasive species in these areas. Any layia populations present will be clearly identified for those conducting restoration activities.
  (b) Wallflower: Restoration activities will generally avoid areas with individual plants. When wallflowers are present in areas of active restoration, all visible plants will be marked with a pin flag by the Restoration Manager to avoid trampling. The treatment method in these areas will be limited to hand pulling or manual digging of invasive species.
  (c) Dark-eyed gilia and pink sand verbena: When dark-eyed gilia or pink sand verbena are present in areas of active restoration, they will be clearly identified by the Restoration Manager to prevent the disturbance or removal of these species. Restoration activities will generally avoid areas with individual plants. If treatment occurs in areas with dark-eyed gilia or pink sand verbena, the treatment method in these areas will be limited to hand pulling or manual digging of invasive species.
- Flaming will not be utilized in areas occupied by endangered, threatened, or rare plants.
- Piles of removed plants will be located on open sand.
- Removal of yellow bush lupine in endangered plant areas will take place outside of the beach layia flowering period. However, if mature lupine pods are present in these areas the Restoration Manager or trained restoration technician will carefully remove them.
- Any inadvertently affected wallflower individual will be documented.

The control of invasive vegetation and restoration of dune mat using the methods proposed in this plan has been highly successful in restoring endangered plant habitat at the nearby Lanphere Dunes and Ma-le'l Dunes North Units of the Humboldt Bay National Wildlife

Refuge, the Bureau of Land Management's Ma-le'l Dunes South Area of Critical Environmental Concern, the Manila Dunes Recreation Area, and the HCNC property. Removal of invasive species (particularly *Ammophila*) in beach layia habitat improves the resiliency of the local population by limiting over stabilization, and improves layia habitat (USFWS 2018). Humboldt Bay wallflower has been spreading steadily into unoccupied suitable habitats at the Lanphere Dunes Unit where invasive plants were removed (Pickart et al. 2018). Similarly, FOD staff and long-time volunteers have observed wallflower moving into recently exposed sand near regularly used trails, or within restoration areas (Fortner pers. comm. 2018).

GEOMORPHIC PROCESSES

All restoration activities are designed to improve native species habitat. Sand movement and geomorphic processes (also known as 'morphodynamics') present in restored dunes are anticipated to be consistent with uninvaded local dune systems with native vegetation. Although invasive species removal may result in temporary and localized sand movement, recent restoration work accomplished in the patchwork protocol proposed by this Restoration Plan has not affected dune erosion on the north spit (Pickart 2013). Additional research on restored dunes along the Eureka littoral cell demonstrates that foredunes built by native plants in areas where European beachgrass has been removed are broader and equivalent in height to invaded dunes (McDonald 2015). However, increases in storm surges, high wind and unpredictable weather events as a result of climate change may impact dune areas, and cause higher than expected levels of sand movement in both restored and invaded dunes.

The following methods will be used to avoid and minimize erosion during the process of restoration:

- Work crews and volunteers will be overseen by the Restoration Manager or by trained restoration technicians, with special attention to work occurring on dune slopes.
- Routes taken to off-trail restoration sites will be through stabilized or semi-stabilized dunes whenever possible.
- Revegetation will be considered in areas where sand mobilization occurs.
- Removal of European beachgrass will occur in a checkerboard pattern by removing patches no larger than 200 feet long (north to south), and leaving alternating patches of approximately the same size intact along the foredune as a measure to reduce erosion potential. Once the native vegetation is showing signs of re-colonization—anticipated within 1 to 3 years—the remaining checkerboard patches of beachgrass will be removed.
- When removing European beachgrass, a strip of beachgrass 2 to 12 feet wide will be left in place on the ocean side of the restored area as another measure to reduce erosion potential. Once the native vegetation is showing signs of re-colonization—anticipated within 1 to 3 years—the remaining strips will be removed.

- Due to neighborhood concerns regarding the former Barr parcel, the iceplant currently existing within 100 feet of Lupin Ave or the adjacent private residential property line will be photodocumented and GPS-documented, left in place at its current extent, and managed to prevent further spread. Any iceplant growth beyond the documented extent will be removed to protect surrounding habitat.

WETLANDS

Wetlands are present throughout the property, and require special considerations to protect their function, vegetation, and wildlife. Wetlands will be defined as, if under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation (State Water Resources Control Board 2018). Blowouts associated with restored, naturally-functioning dunes may occasionally encroach on wetland swales; however, new swales develop in areas of deflation. A recent peer-reviewed study has demonstrated that the area of wetlands has increased over time in restored dune habitats at Lanphere Dunes (Pickart and Hesp 2019). While the HCNC property has less dynamic sand movement overall than Lanphere Dunes, field analysis of the existing deflation plain at the HCNC property compared against historic aerial imagery appears to indicate there is no noticeable encroachment of sand into wetlands on the HCNC property (Pickart pers. comm. 2019), perhaps because of the slow pace of restoration necessitated by engaging community volunteers to conduct the restoration work and the longstanding practices of conducting restoration in a checkerboard pattern and leaving a strip of European beachgrass on the seaward side of each foredune restored area until colonization by native plants has occurred. These findings are consistent with an analysis conducted by GHD, which found that there were no significant observable changes in dune forms on the HCNC property or other areas on the Samoa Peninsula over time, although there was an increase in vegetation such as willow tree and wax myrtle stands over time, suggesting a net increase in wetlands subsequent to the commencement of restoration activities (GHD 2014).

The following methods will be used to avoid and minimize impacts to wetlands during restoration activities:

- Restoration activities will occur outside of wetlands on the HCNC property. Wetlands have been excluded from the treatment area.
- The Restoration Manager will be able to identify wetland traits and vegetation, and restoration technicians, work crews, and volunteers will be trained to identify wetland traits and vegetation to ensure avoidance of wetlands during or on the way to restoration activities.
- Work crews and volunteers will be overseen by the Restoration Manager or by restoration technicians when working adjacent to an area with wetland vegetation.
- Routes to off-trail work sites will avoid wetlands.

CULTURAL RESOURCES

Consultations with Wiyot tribal representatives and prior archaeological studies on the Samoa Peninsula reveal there are many cultural sites spanning several thousands of years of human occupation "since time immemorial." Cultural resources management will be integrated into this plan by the following:

- As funding allows, the Executive Director will coordinate with the Wiyot area THPOs to obtain the services of a qualified professional archaeologist with local experience to design a research plan and supervise a complete, systematic survey of the property included in this Restoration Plan. Work shall be performed in accordance with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716), and guidance on formal site recordation per the California Historical Resources Information System (CHRIS) Survey coverage may be completed in blocks of land, based on priorities for restoration activities and on predictive models of archaeological sensitivity.

- The Executive Director and Restoration Manager shall be trained to recognize archaeological sites and how to implement the inadvertent discovery protocol.

- The Restoration Manager shall provide volunteers, as part of the orientation before every restoration event, a Wiyot Land Acknowledgement and the inadvertent discovery protocol.

- For archaeological sites recorded on the property, the Executive Director and Restoration Manager shall coordinate with THPOs and implement avoidance of ground disturbing restoration activities in these areas in order to protect cultural resources.

RESTORATION SCHEDULE

The timeline of completion of restoration activities is dependent upon available funding, contract requirements, FOD staffing, and the amount of volunteer labor. When adequate funding and staffing is available, supervised volunteer restoration workdays will occur on HCNC lands at least once a month and restoration staff members will supplement volunteer work.

PERFORMANCE REVIEW

MONITORING

Endangered species population monitoring was conducted in the spring of 2008 for Humboldt Bay wallflower populations by the FOD Restoration Manager. Endangered species population surveying, monitoring, and mapping was conducted by USFWS staff in the spring of 2015 for Humboldt Bay wallflower populations on the Humboldt Coastal Nature Center property, as well as on other dune conservation lands on the north spit of Humboldt Bay (Pickart et al. 2018). Beach layia was mapped and sampled in 2017 by

USFWS staff and the results are documented in the Beach Layia Species Status Assessment (USFWS 2018). Monitoring of beach layia and Humboldt Bay wallflower will occur as needed to track response to restoration activities. Results from endangered plant species monitoring will be shared with local dune managers (USFWS, BLM, Manila Community Services District) as well as the Dunes Cooperative Management Group.

REPORTS

A report describing the results of any monitoring activities, a description of restoration areas, volunteer hours, funding sources, and adaptive management needs will be completed by FOD and submitted to the FOD Board, the Humboldt County Planning Department, and the Wiyot area THPOs annually.

As part of this plan's reporting schedule, a photo-documentation report will be submitted to the FOD Board and Humboldt County Planning Department every three years, and to the Wiyot area THPOs upon request.

Every 7 years, FOD will convene a Technical Advisory Committee consisting of qualified restoration professionals, potentially to include staff of the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, the Bureau of Land Management, and Wiyot Tribal representatives (from Wiyot, Bear River and/or Blue Lake) to review progress made under this plan and to make any recommendations for potential plan updates. A summary of the Technical Advisory Committee's findings will be included in the monitoring report for the year the committee was convened.

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APPENDIX I

GRANT SOURCES AND FUNDER AGREEMENTS

California Wildlife Conservation Board Grant Agreement for Acquisition of Fee Interest
Grant Agreement Number: WC-6090WG
… the Property shall be held and used for the purposes of wildlife habitat preservation, restoration and management, wildlife-oriented education and research, and for compatible public or private uses, all as may be consistent with wildlife habitat preservation and protection of sensitive biological resources (individually and collectively, the "Purposes of Grant").

California State Coastal Conservancy Grant Agreement No. 06-029
The real property was acquired by the grantee (FOD) pursuant to a grant of funds from the State Coastal Conservancy, an agency of the State of California, for the purpose of public access and outdoor recreation, open space and habitat conservation, and development of a coastal dunes interpretive and visitor center.

Natural Resources Conservation Service – Wildlife Habitat Incentive Program
This plan addressed 5 acres total, split between two (2) treatment units equaling 2.5 acres each.

US Fish & Wildlife Service – Coastal Program
USFWS provided $25,000 in funds primarily from the Coastal Program at Humboldt Bay with approximately $5,000 of the funding provided by the Endangered Species Program. Funds were provided to support the development of a restoration and management plan for the acquired properties and to begin control of invasive species as specified within the Cooperative Agreement. USFWS funds were used in 2008-2009 to control 3.5 acres of invasive species. USFWS is providing an additional $23,000 in funds for Community-Supported Native Plant and Pollinator Habitat Restoration, awarded in 2021 for a three-year period.

State Coastal Conservancy: NFWF – Humboldt Bay Dunes Restoration Project
This grant funded restoration on the FOD Humboldt Coastal Nature Center and adjacent dune preserve properties from 2015 to 2017. Work crews and volunteers utilized manual methods (shovels and hand removal) to remove invasive plants.

APPENDIX II

STAMPS PROPERTY EASEMENT LANGUAGE

Restoration Easement:

"An exclusive easement for ingress and egress to allow grantee (FOD), its successors and assigns, to enter hereinafter described portion of Grantor's remaining land, for the purpose of restoration of coastal dune and forest habitat and removal of non-native plants to enhance natural diversity.

The holder of said easement shall provide a minimum of one week prior written notice to the owner of record of the subject parcel of its intent to enter for restoration activities.

Permitted restoration activities shall be limited to those designated in a Restoration Plan Agreement to be prepared by Grantee and approved by grantor, which agreement shall be recorded and shall be binding on successors and assigns of grantor and grantee."

APPENDIX III

ENVIRONMENTAL COMPLIANCE

Special permits, authorizations, and notifications anticipated to be required for site restoration activities include the following:

- *USFWS Intra-Service Informal Consultation*: The USFWS wrote an Informal Intra-Service Consultation for the project as per Section 7 of the Endangered Species Act. The document was completed in June 2008.

- *Coastal Development Permit, Humboldt County*: A CDP permit application was approved in 2007 for restoration of approximately 30.5 acres and establishing existing trails on 38 acres purchased by FOD and 15 acres with a restoration easement owned by the Stamps Family Trust. An amendment to this application was made in October of 2008 to include an additional 34.7 acres to be restored and trail work on adjacent property purchased by FOD in September of 2008.

- *Burn Permit*: A non-standard burn permit to be submitted to the Arcata Fire Protection District will need yearly renewal. An additional permit must be acquired from the California Department of Fire to be attached to the non-standard burn permit on an annual basis. The North Coast Unified Air Quality Management District must be phoned to determine if it is a burn day for Zone 1 prior to burning and the Arcata Fire Department must be notified prior to burning on a daily basis.

- *Humboldt County Planning Department*: The Humboldt County Beach and Dunes Management Plan, passed by Humboldt County in 1994, prohibits 4-wheel drive vehicles from the dunes and wave slope. If a vehicle is necessary for restoration activities a permit must be obtained from the Humboldt County Planning Department.

- Coordination with the Tribal Historic Preservation Officers (THPOs) of the Wiyot area Tribes, including the Wiyot Tribe, the Bear River Band of the Rohnerville Rancheria, and the Blue Lake Rancheria, regarding *Inadvertent Archaeological Discovery Protocol for Friends of the Dunes Ground Disturbing Projects in the Samoa Peninsula Dunes* (see Appendix IV), restoration plan updates, training, etc.

APPENDIX IV

INADVERTENT ARCHAEOLOGICAL DISCOVERY PROTOCOL

FOR FRIENDS OF THE DUNES GROUND DISTURBING PROJECTS

IN THE SAMOA PENINSULA DUNES

Drafted by
Janet P. Eidsness, M.A.
Blue Lake Rancheria Tribal Historic Preservation Officer
September 3, 2021

Background

Humboldt Bay is the ancestral heartland of the Wiyot Indians, whose native language is affiliated with the Algonquian language family. The Wiyots had occupied the area from Little River on the north to Bear River Ridge on the south, for at least 2000 years by the time the first recorded European maritime explorers entered the Bay in 1806 and the first American towns were established in 1850. There are hundreds of known and undiscovered archaeological sites around Humboldt Bay that evidence Wiyot history and prehistory. Today, citizens of Wiyot ancestry are affiliated with three federally-recognized tribes located in the ancestral homeland: the Wiyot Tribe; the Bear River Band of the Rohnerville Rancheria; and the Blue Lake Rancheria.

Applicable Laws

A number of State and Federal historic preservation laws, regulations and policies address the need to manage potentially significant and/or sensitive (e.g., human remains) archaeological and Native American resources identified during advance project or permit review or discovered inadvertently.

- California Environmental Quality Act (CEQA) and Assembly Bill (AB) 52– Requires analysis by the Lead Agency under CEQA, to determine if a proposed project will cause a significant impact to "historical resources" including archaeological and Native American sites. Project approval may be conditional, for example, avoidance or mitigation (data recovery) of known archaeological resources, monitoring of ground disturbing activities in identified sensitive areas by local Tribal Representatives and/or professional archaeologists, and implementation of protocols for inadvertent archaeological discoveries. Passage of AB 52 in 2014 requires notification to Tribe(s) of projects in their area of traditional and cultural affiliation to identify and protect Tribal Cultural Resources.

- Section 106 of the National Historic Preservation Act (NHPA) – Requires analysis by the Lead Federal Agency and consultation with the California State Historic Preservation Officer (SHPO), Advisory Council on Historic Preservation (ACHP), culturally affiliated Native American Tribes, and others, as appropriate, to "resolve adverse effects" on "historic properties" including archaeological and Native American sites. Section 106 is

the key Federal historic preservation law, and final approval of the undertaking may be conditional as specified in a legally binding Agreement among the parties.

Several laws and their implementing regulations spell out evaluation criteria to determine what constitutes a significant 'site' or a significant 'discovery':

- California Register of Historical Resources criteria (California Code of Regulations, Title 14, Chapter 3, Section 15064.5), for archaeological and Native American resources qualifying for consideration under CEQA;

- Tribal Cultural Resources are: (1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe that are listed, or determined to be eligible for listing, in the national or state register of historical resources, or listed in a local register of historic resources; or (2) resources that the lead agency determines, in its discretion, are tribal cultural resources (Section 21074 of the Public Resources Code); and

- National Register of Historic Places criteria (36 CFR 63), qualifying for consideration under Section 106 review and NEPA;

State laws call for specific procedures and timelines to be followed in cases when human remains are discovered on private or non-Federal public land in California. It includes penalties (felony) for violating the rules for reporting discoveries, or for possessing or receiving Native American remains or grave goods:

- requirements for handling inadvertent discoveries of human remains, including those determined to be Native American with or without associated grave goods, found on private or non-Federal public lands (per Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code (PRC).

- penalties for illegally possessing or obtaining Native American remains or associated grave goods (PRC 5097.99 as amended by SB 447).

Another California law imposes strong civil penalties for maliciously digging, destroying or defacing a California Indian cultural or sacred site:

- *California Native American Historic Resource Protection Act of 2002* (SB 1816, adding Chapter 1.76 to Division 5 of the PRC), imposes civil penalties including imprisonment and fines up to $50,000 per violation, for persons who unlawfully and maliciously excavate upon, remove, destroy, injure, or deface a Native American historic, cultural, or sacred site that is listed or may be listed in the California Register of Historic Resources.

Standard Mitigation Language

The following language may be employed by the Friends of the Dunes (FOD) when cultural resources screening (e.g., comment by Wiyot area Tribal Historic Preservation Officers (THPOs), formal record searches, current cultural resources studies) indicates a particular project, permit, leasehold or franchise area under its jurisdiction does not have known archaeological sites, however, unknown buried artifacts and archaeological deposits may exist and be impacted by the proposed action.

CR-1 Should an archaeological resource be inadvertently discovered during ground-disturbing activities, the THPO appointed by the Blue Lake Rancheria, Bear River Band of Rohnerville Rancheria and the Wiyot Tribe shall be immediately notified and a qualified archaeologist with local experience retained to consult with the FOD, the three THPOs, the Permittee and other applicable regulatory agencies to employ best practices for assessing the significance of the find, developing and implementing a mitigation plan if avoidance is not feasible, and reporting in accordance with these Standard Operating Procedures (SOP) below.

CR-2 Should human remains be inadvertently discovered during ground-disturbing activities, work at the discovery locale shall be halted immediately, the FOD Executive Director and County Coroner contacted, and the FOD's SOP shall be followed, consistent with state law.

Standard Operating Procedures

The following standard operating procedures for addressing inadvertent archaeological discoveries shall apply to all phases and aspects of work carried out under the authority of the FOD that involve ground-disturbing activities within its jurisdiction. In all cases, these SOPs shall apply to employees, officers and agents, including volunteers and contractors whose activities may potentially expose and impact significant or sensitive resources.

The intent is to avoid or minimize direct or indirect impacts to significant archaeological or Native American discoveries that may qualify for inclusion in the California Register of Historical Resources and/or the National Register of Historic Places, or as a Tribal Cultural Resource.

These Protocols are intended to serve as standard guidelines for compliance with CEQA and NHPA Section 106 requirements for handling inadvertent archaeological discoveries.

Responsibility for Retaining Services of As-Needed Professional Archaeologist

If an inadvertent discovery of archeological resources, human remains and/or grave goods occurs, the FOD shall be responsible for retaining as-needed services of a qualified Archaeologist, meaning the individual meets the Secretary of the Interior's Professional Standards for an Archaeological Principal Investigator and/or is listed as Registered Professional Archaeologist (see website at www.rpanet.org). The professional will provide as-needed services to conduct rapid assessments of potentially significant archaeological finds discovered on FOD property and, in coordination with FOD and Wiyot area THPOs, may be asked to provide compile standard site record forms (DPR 523 series) to be filed at the Northwest

Information Center (NWIC) of the California Archaeological Resources Information System (CHRIS).

Designated Points of Contact (POC) for Notification of Discoveries

The FOD and other applicable permitting local, state or federal agencies shall each designate a representative who shall act as its official Point of Contact (POC) and who shall be notified immediately upon the inadvertent discovery of an archaeological find or the inadvertent discovery of human remains and /or grave goods during Project implementation.

The federally-recognized Blue Lake Rancheria, Bear River Band of the Rohnerville Rancheria and Wiyot Tribe each has citizens that recognize Wiyot ancestry. Each Tribe's appointed THPO is designated as the POC (below) and shall be immediately notified by the FOD POC should an archaeological site (with or without human remains) be inadvertently discovered.

Designated Tribal and FOD Points-of-Contact (updated 9/3/21)

Tribe	Address	Telephone	Cultural Staff
Blue Lake Rancheria	428 Chartin Road P.O. Box 428 Blue Lake, CA 95525	(707) 668-5101 x1037 Janet cell (530) 623-0663 Jacob cell (707) 498-4453	Janet Eidsness, THPO Jacob Pounds, Asst. THPO
Bear River Band of the Rohnerville Rancheria	266 Keisner Road Loleta, CA 95551	(707) 733-1900 x233 Fax (707) 733-1972 Cell (707) 502-5233	Edwin Smith, Acting THPO
Wiyot Tribe	1000 Wiyot Drive Loleta, CA 95551	(707) 733-5055 Fax (707) 733-5601 Cell (707) 499-3943	Ted Hernandez, THPO
Friends of the Dunes Coastal Nature Center 220 Stamps Lane Manila (Arcata)	P.O. Box 186 Arcata, CA 95518	Office (707) 444-1397 Fax (707) 444-0447 Cell (707) 382-0525 ,	Mike Cipra, Exec. Director

Interested Tribal Representatives shall be invited to inspect a discovery site and meet with the FOD and other applicable delegated POCs and Consulting Professional Archaeologist, as appropriate, to make a rapid assessment of the potential significance of a find and participate in the development and implementation of a Treatment Plan, as appropriate.

Note: In the event that Native American skeletal remains are discovered, State law specifies that the "Most Likely Descendent (MLD)" appointed by the NAHC has the authority to make

recommendations for the final treatment and disposition of said remains and associated grave goods – see below.

A. SOP for Inadvertent Archaeological Discovery (General)

1. Ground-disturbing activities shall be immediately stopped if potentially significant historic or archaeological materials are discovered. Examples include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, groundstone mortars and pestles), culturally altered ash-stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials, and historic structure remains such as stone-lined building foundations, wells or privy pits. Ground-disturbing project activities may continue in other areas that are outside the discovery locale.

2. An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the Restoration Manageror authorized representative, or party who made the discovery and initiated these SOP.

3. The discovery locale shall be secured (e.g., 24-hour surveillance) as directed by the FOD if, in consultation with the Wiyot area THPOs, it is considered prudent to avoid further disturbances.

4. The party who made the discovery and initiated these SOP, shall be responsible for immediately contacting by telephone the parties listed below to report the find:
   (a) the FOD authorized POC and
   (b) other applicable POC, while remembering that only those "with a need to know" should be informed per confidentiality rules.

5. Upon learning about a discovery, the FOD POC shall be responsible for immediately contacting by telephone the POCs listed below to initiate the consultation process for its treatment and disposition:
   (a) THPOs with Blue Lake Rancheria, Bear River Band and Wiyot Tribe; and
   Other applicable agencies if involved in Project permitting (e.g., Humboldt County Planning Department, Coastal Commission, California Department of Fish & Wildlife, etc.).

6. Ground-disturbing project work at the find locality shall be suspended temporarily while FOD, the three THPOs, consulting archaeologist and other applicable parties consult about appropriate treatment and disposition of the find. Ideally, the discovery locale will be avoided and left in place. If not feasible due to project demands, a Treatment Plan will be developed within three working days of discovery notification. Where the project can be modified to avoid disturbing the find (e.g., through project

redesign), this may be the preferred option. Should Native American remains be encountered, the provisions of State laws shall apply (see below). The Treatment Plan shall reference appropriate laws and include provisions for analyses, reporting, and final disposition of data recovery documentation and any collected artifacts or other archaeological constituents. Ideally, the field phase of the Treatment Plan may be accomplished within five (5) days after its approval, however, circumstances may require longer periods for data recovery.

7. The FOD employees, officers and agents, including contractors, permittees and volunteers shall be obligated to protect significant cultural resource discoveries and may be subject to prosecution if applicable State or Federal laws are violated. In no event shall unauthorized persons collect artifacts.

8. Any and all inadvertent discoveries shall be considered strictly confidential, with information about their location and nature being disclosed only to those with a need to know. The FOD authorized representative shall be responsible for coordinating with any requests by or contacts to the media about a discovery.

9. These SOPs shall be communicated to the field work force (including volunteers, contractors, employees, officers and agents), and such communications may be made and documented at weekly tailgate safety briefings.

10. Ground-disturbing work at a discovery locale may not be resumed until authorized in writing by the FOD upon recommendation of the Wiyot area THPOs.

11. In cases where a known or suspected Native American burial or human remains are uncovered:
    (a) The following contacts shall be notified immediately: Humboldt County Coroner (707-445-7242) and the property owner of the discovery site, and
    (b) The SOP for Inadvertent Discovery of Native American Remains and Grave Goods (B below) shall be followed.

B. SOP for Inadvertent Discovery of Native American Remains and Grave Goods

In the event that known or suspected Native American remains are encountered, the above procedures of SOP paragraph A for Inadvertent Archaeological Discovery (General) shall be followed, as well as:

1. If human remains are encountered, they shall be treated with dignity and respect. Discovery of Native American remains is a very sensitive issue and serious concern of affiliated Native Americans. Information about such a discovery shall be held in confidence by all project personnel on a need-to-know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.

2. Violators of Section 7050.5 of the California Health and Safety Code may be subject to prosecution to the full extent of applicable law (felony offense).

In addition, the provisions of California law (Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the California Public Resources Code) will be followed:

1. The Coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American, the Coroner has 24 hours to notify the Native American Heritage Commission (NAHC) in Sacramento at (916) 653-4082.

2. The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD) of the deceased Native American. (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)

3. Within 48 hours of their notification by the NAHC, the MLD will be granted permission by the property owner of the discovery locale to inspect the discovery site if they so choose.

4. Within 48 hours of their notification by the NAHC, the MLD may recommend to the owner of the property (discovery site) the means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses (if any) recommended by the MLD may be considered and carried out.

5. Whenever the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the property owner rejects the recommendation of the MLD and mediation between the parties by NAHC fails to provide measures acceptable to the property owner, he/she shall cause the re-burial of the human remains and associated grave offerings with appropriate dignity on the property in a location not subject to further subsurface disturbance.

C. SOP for Documenting Inadvertent Archaeological Discoveries

1. The party who made the discovery and initiated these SOP, or other person delegated by the FOD Executive Director, shall make written notes available to the FOD describing: the circumstances, date, time, location and nature of the discovery; date and time each POC was informed about the discovery; and when and how security measures were implemented.

2. The FOD shall prepare or authorize the preparation of a summary report which shall include: the time and nature of the discovery; who and when parties were notified; outcome of consultations with appropriate agencies and Native American representatives; how, when and by whom the approved Treatment Plan was carried out; and final disposition of any collected archaeological specimens.

3. If applicable, the authorized representative shall record how the discovery downtime affected the immediate and near-term contracted work schedule, for purposes of negotiating contract changes where applicable.

4. If applicable, Monitoring Archaeologists and Tribal Representatives shall maintain daily fieldnotes, and upon completion, submit a written report to the FOD and the three Wiyot area THPOs.

5. Treatment Plans and corresponding Data Recovery Reports shall be authored by professionals who meet the Federal criteria for Principal Investigator Archaeologist and reference the *Secretary of the Interior's Standards and Guidelines for Archaeological Documentation* (48 FR 44734-44737).

6. Final disposition of all collected archaeological materials shall be documented in the final Data Recovery Report and its disposition decided in consultation with Tribal representatives. The general policy shall be to NOT collect any artifacts, but to leave objects in place and perhaps cover them with sand.

7. Final Data Recovery Reports along with updated confidential, standard California site record forms (DPR 523 series) shall be filed at the NWIC and the FOD, with report copies provided to the three Wiyot area THPOs.

8. Confidential information concerning the discovery location, treatment and final disposition of Native American remains shall be prepared by the THPOs and forwarded to the Sacred Sites Inventory maintained by the NAHC.

Attachment 3

Initial Study and Mitigated Negative Declaration

Draft Initial Study and Mitigated Negative Declaration for the Friends of the Dunes Trail and Habitat Restoration Project

Humboldt County Planning and Building Department

June 2022

CHAPTER 1. PROJECT INFORMATION

PROJECT TITLE

Friends of the Dunes Trail and Habitat Restoration Project on the former "Barr" Property (APN: 400-011-075)

PROJECT OVERVIEW

A Coastal Development Permit (CDP; CDP-06-49MMX) and Conditional Use Permit/Special Permit (CUP/SP; CUP-06-14MMX/SP-06-71M), as amended in 2008 and 2009, along with a Lot Line Adjustment (LLA-06-08)/Special Permit (SP-06-71), allowed the continued use of an existing residence as the Humboldt Coastal Nature Center (HCNC), the relocation of a parking area, a parcel merger, removal of 19 nonnative trees, and trail establishment and restoration activities on an approximately 93-acre site in the Manila area of Humboldt County. The site is managed by the Friends of the Dunes (FOD). The proposed FOD Trail and Habitat Restoration Project (project) would further amend the existing CDP and CUP/SP to Lupin Drive and Stamps Lane (**Attachment A**) on the 3.6-acre former Barr property that abuts FOD property. This Initial Study (IS)/Mitigated Negative Declaration (MND) assesses the environmental effects of activities that would be authorized through the permit amendments (the "proposed project"). The proposed project would allow trail work and native plant restoration. Specific activities would include establishment of a trailhead and a "No Parking" sign. Public access would allow pedestrians, dog walking, and horseback riding on designated trails during daylight hours only. An existing "private property" sign and metal gate at the proposed trailhead would be removed and replaced with a new fence designed to allow pedestrian and horse access while blocking access to motorized vehicles. These improvements are intended to minimize impacts on sensitive habitat while allowing continued access by hikers, equestrians, and dog walkers.

Lead Agency
Humboldt County Planning and Building Department, Planning Division
3015 H Street
Eureka, CA 95501
(707) 445-7245

Contact Person
Cliff Johnson, Supervising Planner
(707) 445-7245

Project Applicant and Owner
Friends of the Dunes
PO Box 186
Arcata, CA 95518

PROJECT LOCATION

The project is located in the Manila area of Humboldt County, at the terminus of Stamps Lane and at the north side of Lupin Drive, approximately 1,000 feet west of the intersection of New Navy Base Road and Lupin Drive, on the property known as 365 Lupin Drive, and the property known to be in the north half of Section 03 Township 05 North Range 01 West, Humboldt Baseline Meridian. The site is situated south of the FOD property and east of the Manila Community Services District (MCSD) and is part of a larger contiguous coastal dune ecosystem under management by several entities [**Figure 1**].

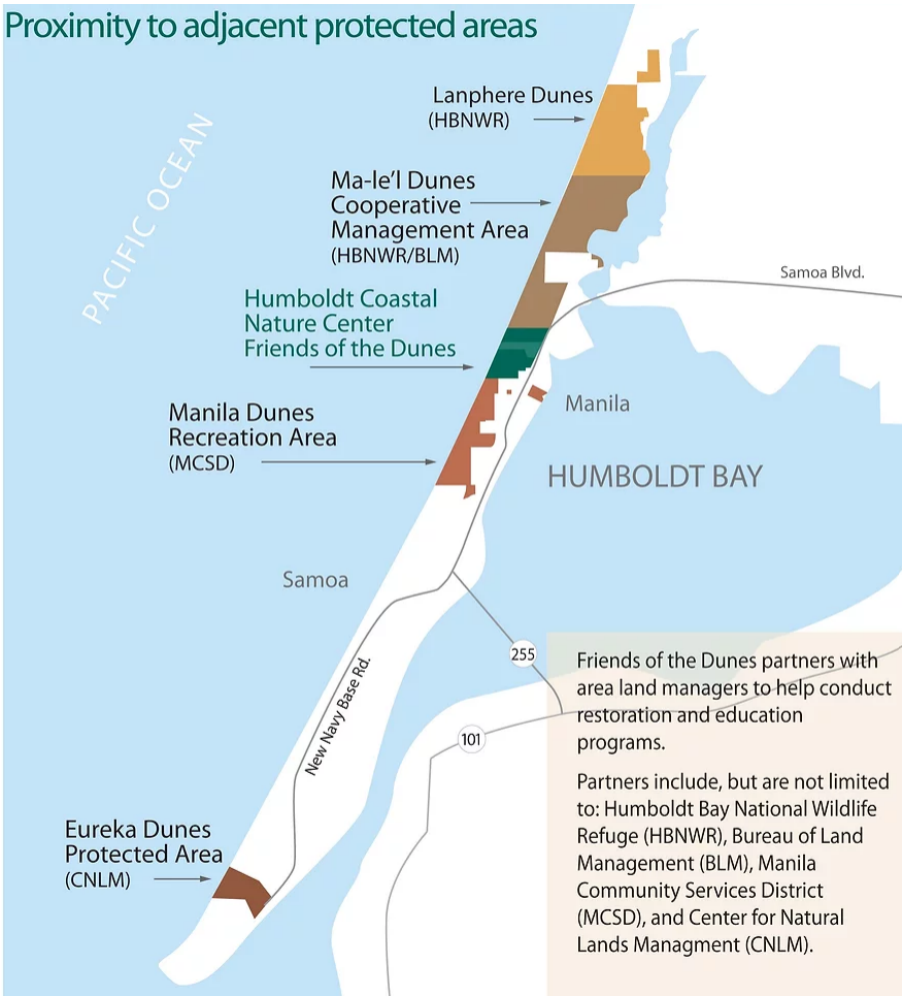


FIGURE 1. PROJECT LOCATION SHOWING THE CONCEPTUAL AREA (IN GREEN) COVERED BY THE FRIENDS OF THE DUNES 2021 RESTORATION MANAGEMENT PLAN

General Plan Land Use Designations

- APN 400-011-075: Residential Low Density (RL), Density: 1–8 dwelling units per acre;
- APN 400-011-077: Public Facilities (PF), Density: N/A;
- APN 506-111-004, 506-111-024: Natural Resources (NR), Density: N/A;
- APN 506-111-021, 506-111-025: Natural Resources (NR), Agricultural/General (AG), Density: N/A.

Zoning Designations

- APN 400-011-075: RS-5-M/A,B: Residential Single Family—Minimum lot size 5,000 square feet (RS-5), Manufactured Home (M)/Archaeological Resource Area Outside Shelter Cove (A), Beach and Dune Areas (B);
- APN 400-011-077: PF1/B: Public Facility (Urban)(PF1)/Beach and Dune Areas (B);
- APN 506-111-024: NR/B: Natural Resources (NR)/Beach and Dune Areas (B);

- APN 506-111-021, 506-111-025: NR/B;RA-2.5/B: Natural Resources (NR)/Beach and Dune Areas (B); Rural Residential Agriculture-Minimum lot size 2.5 acres (RA-2.5). Beach and Dune Areas (B);
- APN 506-111-004: NR/A,B,W: Natural Resources (NR)/Archaeological Resource Area Outside Shelter Cove (A), Beach and Dune Areas (B), Coastal Wetlands (W).

PROJECT BACKGROUND

In 2007, the Humboldt County Planning Commission (PC) approved CDP-06-49/CUP-06-49 along with Lot Line Adjustment (LLA-06-08)/Special Permit (SP-06-71) for FOD to use an existing residence as the HCNC office/education center, establish trails, and conduct restoration activities on approximately 30.5 acres of beach and dune habitat. The restoration work included manual removal of yellow bush lupine (*Lupinus arboreous*), European beachgrass (*Ammophila arenaria*), iceplant (*Carpobrotus edulis*), and pampas grass that threaten endangered species and rare plant communities. Other related development included a restroom building, covered outdoor area, parking lot improvements, and signage/trail markers. A CDP is required for all development within the Coastal Zone. The SP established parking standards based on existing use levels at the Manila Community Center. An IS/Negative Declaration (ND) was prepared and approved by the PC.

In 2008, the PC approved modifications to the approved FOD CDP/CUP (CDP-06-49M/CUP-06-49M) permits to allow restoration and trail work on an additional approximately 34.7 acres of newly acquired property, the relocation of the parking area and a Notice of Merger. An addendum to the ND was prepared as part of this amendment process.

In 2009, the PC approved modification and extension to the previously approved and modified CDP/CUP/SP (CUP-06-49MMX/CUP-06-14MMX/SP-06-71M) to allow restoration and trail work on an additional approximately 57 acres. The modification to the SP allowed the removal of ten eucalyptus trees, two nonnative pine trees, and seven Monterey cypress trees and shrubs.

In 2015, the FOD applied for modification to the CDP/CUP (CDP-06-49MMXM/CUP-06-49MMXM) to continue dune restoration and trail work on an additional 3.6 acres known as the "Barr" property acquired by FOD. The Barr property abuts the FOD property and MCSD dune lands, and the trails on the Barr property were proposed to tie into existing MCSD and FOD trails. The County prepared an IS/ND for the proposed modification. After a noticed public hearing on October 4, 2018, the PC continued the project to an uncertain date with direction to staff to further engage the public during the process. Per guidance from the PC, on July 16, 2019, County staff held a neighborhood meeting (workshop) to gather comments from the public concerning the potential environmental impacts of the proposal. Public comments expressed some concern over the closure of existing trails, some specific elements of the proposed project (e.g., a proposed staircase, boundary fence), and whether restoration would proceed in conformance with the Manila Long Term Restoration Plan and the requirements of the CDP.

An updated Restoration and Management Plan was prepared by FOD in October 2021 (**Attachment A**) for 93 acres of restoration activities on FOD properties. The current Restoration Plan includes baseline data of invasive and endangered plant species distributions for all lands identified in the Restoration Plan, **including the most recently acquired former Barr parcel**. Project implementation would occur in conformance with the most current version of the Restoration Plan. **Many of the recommended avoidance and minimization or mitigation measures in the Restoration Plan were incorporated into this IS/MND.**

This IS/MND addresses public and staff comments on the previous version, as appropriate, and

will be circulated for public review. Once the IS/MND is published, it will be made available for a 30-day public review period.

ENVIRONMENTAL SETTING

The FOD property is in an area with other properties owned or managed by several different entities that have completed or have ongoing dune restoration activities, including the U.S. Fish and Wildlife Service (USFWS), Bureau of Land Management (BLM), MCSD, and private landowners. The Ma'lel and Landphere Dunes managed by BLM and USFWS are considered National Natural Landmarks as of 2021 (NPS 2021). These areas contain both restored and degraded dune mat plant communities as well as sensitive natural plant communities and wetlands. Restoration activities, including removal of nonnative invasive plants and replanting of native vegetation, have taken place in this area over the last 25 years, and these areas now primarily support the native dune mat species (McDonald 2020; USFWS 2013, 2020). Dune mat plant communities, as well as beach pine forest communities, are considered a sensitive natural community by the California Department of Fish and Wildlife (CDFW) (CDFW 2022).

The former Barr parcel project site abuts other FOD property in a coastal dune community [**Figure 2**]. The property contains a large area of native dune mat habitat with a substantial population of federally endangered Humboldt Bay wallflowers (*Erysimum menziesii*). The site also contains invasive species including iceplant, European beachgrass, yellow bush lupine, and invasive annual grasses, including rattlesnake grass (*Briza maxima*), barren fescue (*Vulpia bromoides*), and ripgut brome (*Bromus diandrus*). Other invasive plants that have very small occurrences are star mustard (*Coincya monensis*), jubata grass (*Cordateria jubata*), and Himalayan blackberry (*Rubus armeniacus*) [**Figure 3**]. Invasive plants compete for habitat space and water resources with native plants and have a negative impact on native dune mat species, especially on the Humboldt Bay wallflower and beach layia (*Layia carnosa*), both of which depend on open, sandy environments for survival. Surrounding uses include open space, recreation, natural resources, residential, and municipal infrastructure.

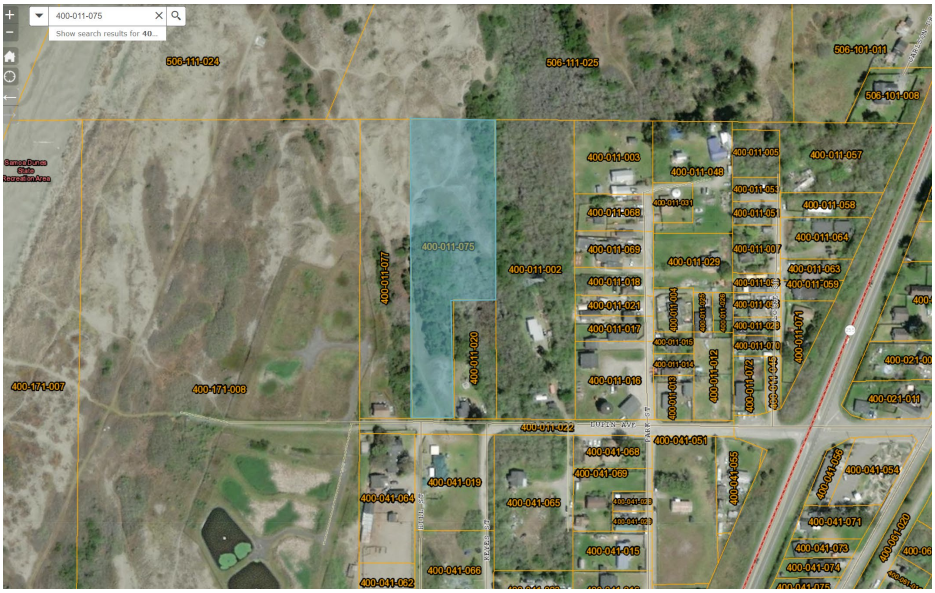


FIGURE 2. LOCATION OF THE FORMER "BARR" PARCEL (APN: 400-011-075). LANDS OWNED AND MANAGED BY THE MANILA COMMUNITY SERVICES DISTRICT ARE TO THE WEST, FRIENDS OF THE DUNES LANDS TO THE NORTH, AND PRIVATE PARCELS TO THE SOUTH AND EAST.

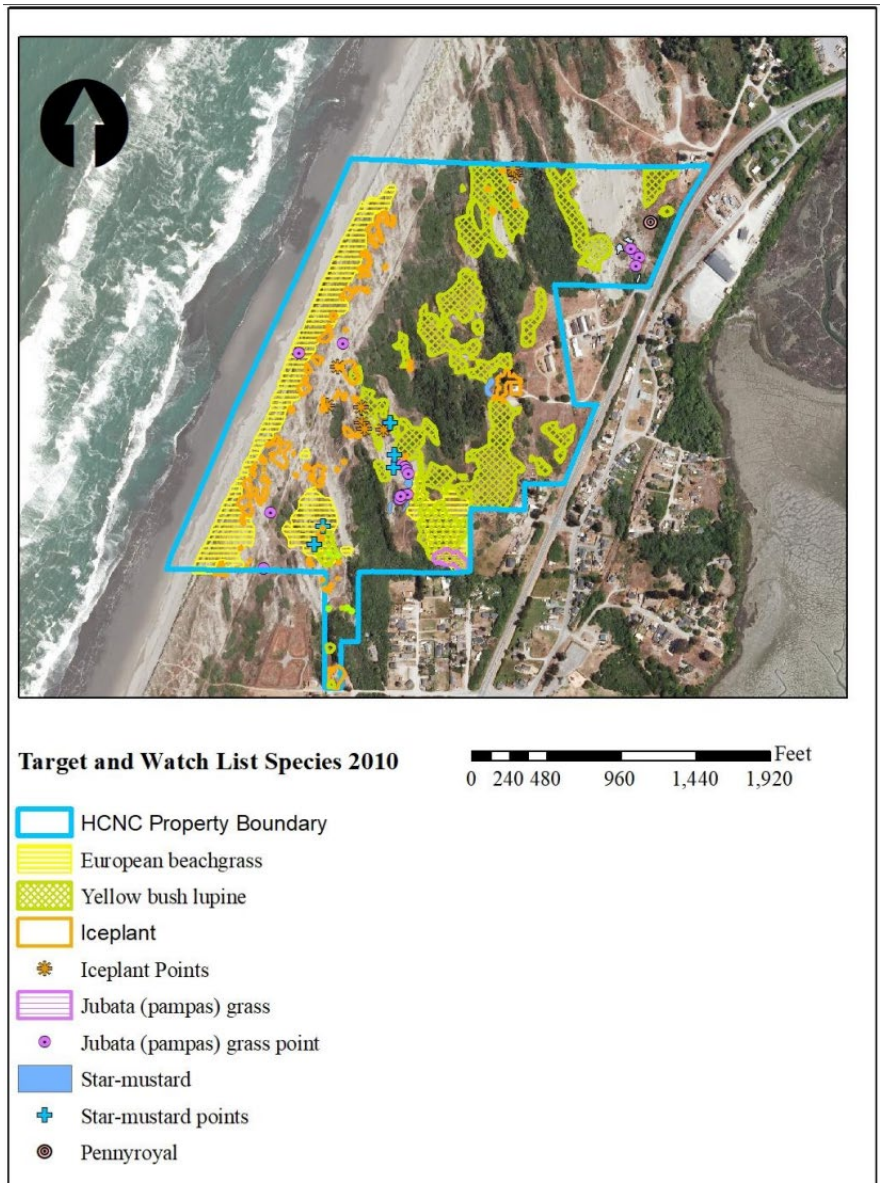


FIGURE 3. INVASIVE NONNATIVE VEGETATION MAPED BY STAFF OF THE HUMBOLDT COUNTY NATURE CENTER IN 2010

The 2019 environmental settings of restored areas on FOD property constitute the baseline physical conditions for determining whether the restoration activities detailed in the HCNC Restoration and Management Plan (**Attachment A**) provide greater diversity than invaded dunes. This includes comparing restored dunes' ability to support native plant and animal species and any measurable responses in dune morphology (slopes, elevations, and profiles) to invasive plant removal.

RESTORATION PLAN

FOD began restoration efforts in 2008 under the guidance of the FOD Board–approved Restoration Plan for the FOD property under the PC-approved CDP-06-49/CUP-06-49/SP-06-71, and subsequent amended modifications. The entirety of the Restoration Plan area is located on the Samoa peninsula (North Spit) in the town of Manila, Humboldt County, California [**Figure 4**]. The Restoration Plan describes control of invasive vegetation and the restoration of degraded areas on FOD managed lands.

FIGURE 4. PROTECTION PLAN AREA FOR THE RESTORATION MANAGEMENT PLAN. THE "BARR" PARCEL JUTS TO THE SOUTH

The overall goal of the Restoration Plan is to restore the natural diversity of plants, wildlife, and natural dune processes, while taking into consideration physical constraints on and off FOD property. In the past, coastal habitats have been significantly compromised by the spread of invasive plant species. Removal of invasive species helps partially restore dune processes, allowing a range of successional plant communities to recover and thrive. Managing for a range of successional communities helps maintain the natural diversity of these habitats for both plant and animal species. Nonnative iceplant and invasive annual grasses near the proposed trailhead on Lupin Avenue will be targeted for removal to allow restoration of native dune mat habitat on the former Barr parcel [**Figure 5**].

Minor updates and adjustments to the Restoration Plan occur under an adaptive management framework, meaning that measures are taken to monitor the outcome of treated areas. If invasive species are not responding to treatments, alternative control methods are considered. When FOD pursues future permanent conservation land acquisitions that are outside the Protection Plan area, or any new restoration activities not covered under the adaptive management framework of the Restoration Plan, these new locations and activities will be incorporated into subsequent Restoration Plan revisions or CDP/CUP amendments.

Amendments made to the Restoration Plan must be approved by the FOD Stewardship Committee, FOD's Board of Directors, and the Stamps Family Trust (for work on their 15-acre easement parcel), and submitted to Humboldt County Planning for approval. Every 7 years subsequent to the most recent Restoration Plan revision (conducted in October 2021), FOD will convene a Technical Advisory Committee consisting of qualified restoration professionals, potentially to include staff of CDFW, USFWS, and BLM, to review progress made under the Restoration Plan and to make any recommendations for potential plan updates. FOD will also

share any significant plan revisions with the Tribal Historic Preservation Officers (THPOs) of the Blue Lake Rancheria, the Wiyot Tribe, and the Bear River Band of the Rohnerville Rancheria, and has incorporated avoidance, minimization, and mitigation measures suggested by the THPOs to protect cultural resources. Project implementation would occur in conformance with the most current (i.e., 2021) version of the Restoration Plan.

The Samoa Dunes and Wetlands Conservation Area (former "Dog Ranch") is temporarily held in conservation ownership by FOD as of the issuance of this IS/MND and is not included in the current Restoration Plan. It is not included in the Restoration Plan because FOD is only serving as the interim landowner of the Samoa Dunes and Wetlands Conservation Area and is not seeking to conduct habitat restoration under a CDP/CUP on this new conservation property, but rather to transfer the property to permanent conservation-based landowners for long-term ownership and management.

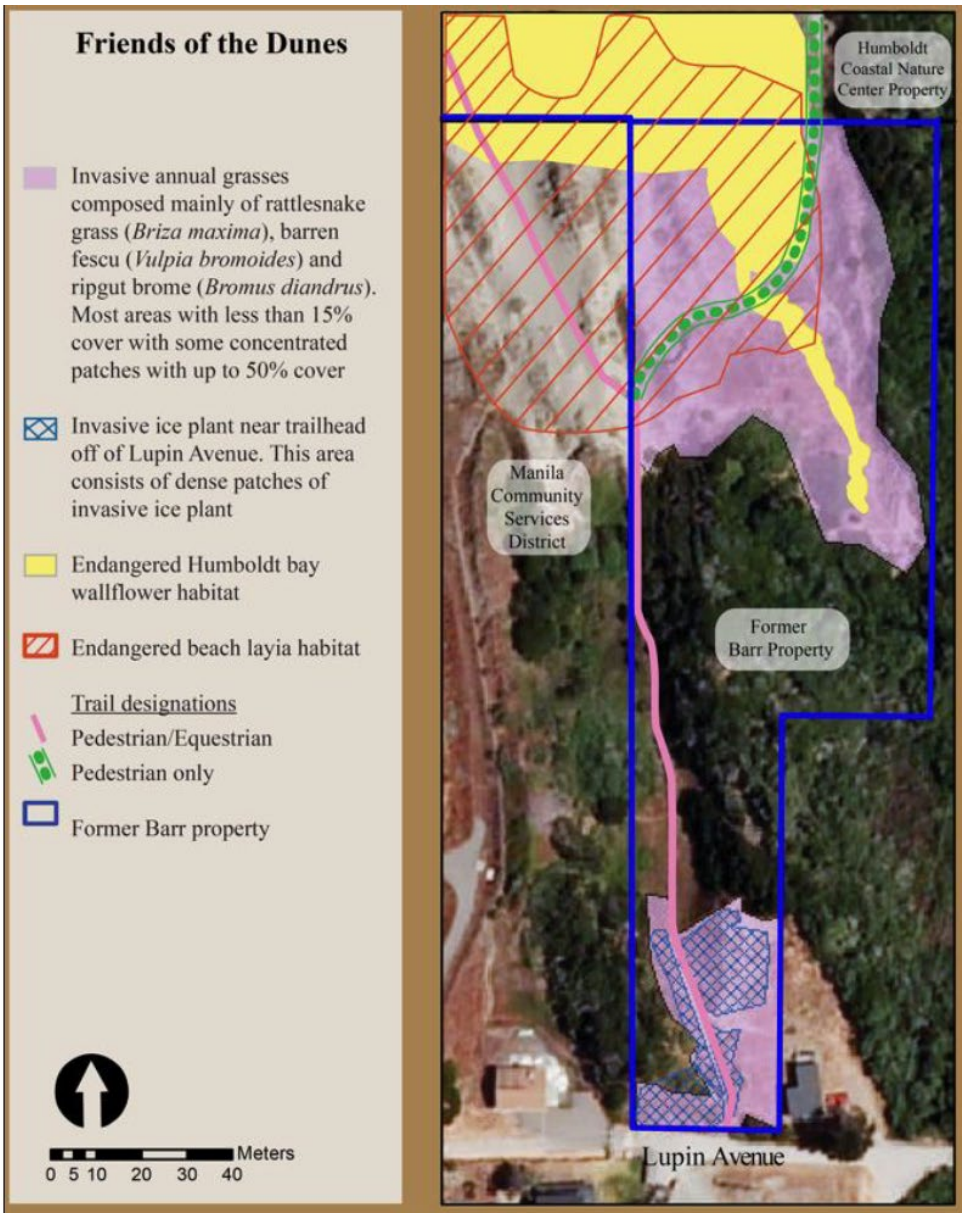


FIGURE 5. ENDANGERED NATIVE AND NONNATIVE INVASIVE PLANT SPECIES OCCURRENCES IN THE PROJECT AREA

Plan Components

The current Restoration Plan includes the treatment of approximately 91.5 acres of invaded

dune habitats and approximately 1.5 acres of invaded native plant landscaping area around the HCNC. Willow-dominated wetlands and forested dunes have been excluded from the current treatment area. Following removal of the invasive species, areas continue to be monitored for new infestations. Prioritization of restoration areas is based on the relative impact of an invasive species on the population or natural community in question, invasiveness of the species, and feasibility of eradication. Additionally, annual grass seeds have the ability to spread rapidly between seasons, making them highly invasive. Priority is also given to new or limited occurrences of highly invasive species following the concept of early detection and rapid response, and to areas with valuable populations of special-status species including wildlife.

Invasive vegetation control is accomplished through hand removal of nonnative invasive plants and is guided by a Restoration Manager, who manages the overall direction of the restoration activities and provides training and oversite for the restoration interns and other work crews. Access to the site is provided from the main HCNC trailhead at 220 Stamps Lane. If vehicle access is needed, the coastal sites is accessible from Lupin Avenue along the Humboldt Bay Municipal Water District water line road near the western edge of the property.

As described in the 2021 Restoration Plan, there are certain treatments that would not be conducted under the adaptive management framework established in the plan, and FOD would not pursue these treatments without an amended Restoration and Management Plan approved by the Humboldt County Planning Department.

- Use of herbicide treatments to manage nonnative invasive plants
- Use of prescribed fire treatments on standing vegetation on FOD lands
- Use of heavy equipment to remove standing invasive species

Including these treatments in an amended plan would require additional environmental analysis of impacts under the California Environmental Quality Act (CEQA). Additional detail regarding plan development and implementation is included in the 2021 Restoration Plan.

Trail Establishment and Management

Multiple users have created unauthorized trail routes that currently exist on the former Barr property [**Figure 6**]. The proposed project would consolidate use to maintain the two most commonly used trails: one offering beach access and one offering dune access. The two trails to be designated are the South Beach Access Trail (to provide equestrian and pedestrian access) and the Ridge Connection trail (to provide pedestrian access). The two trails on the former Barr parcel are approximately 0.3 mile in length. These trails would add to the existing trail systems along a 2-mile stretch of coastland incorporating FOD and the BLM properties to the north and the MCSD property to the west and south [**Figure 7**].

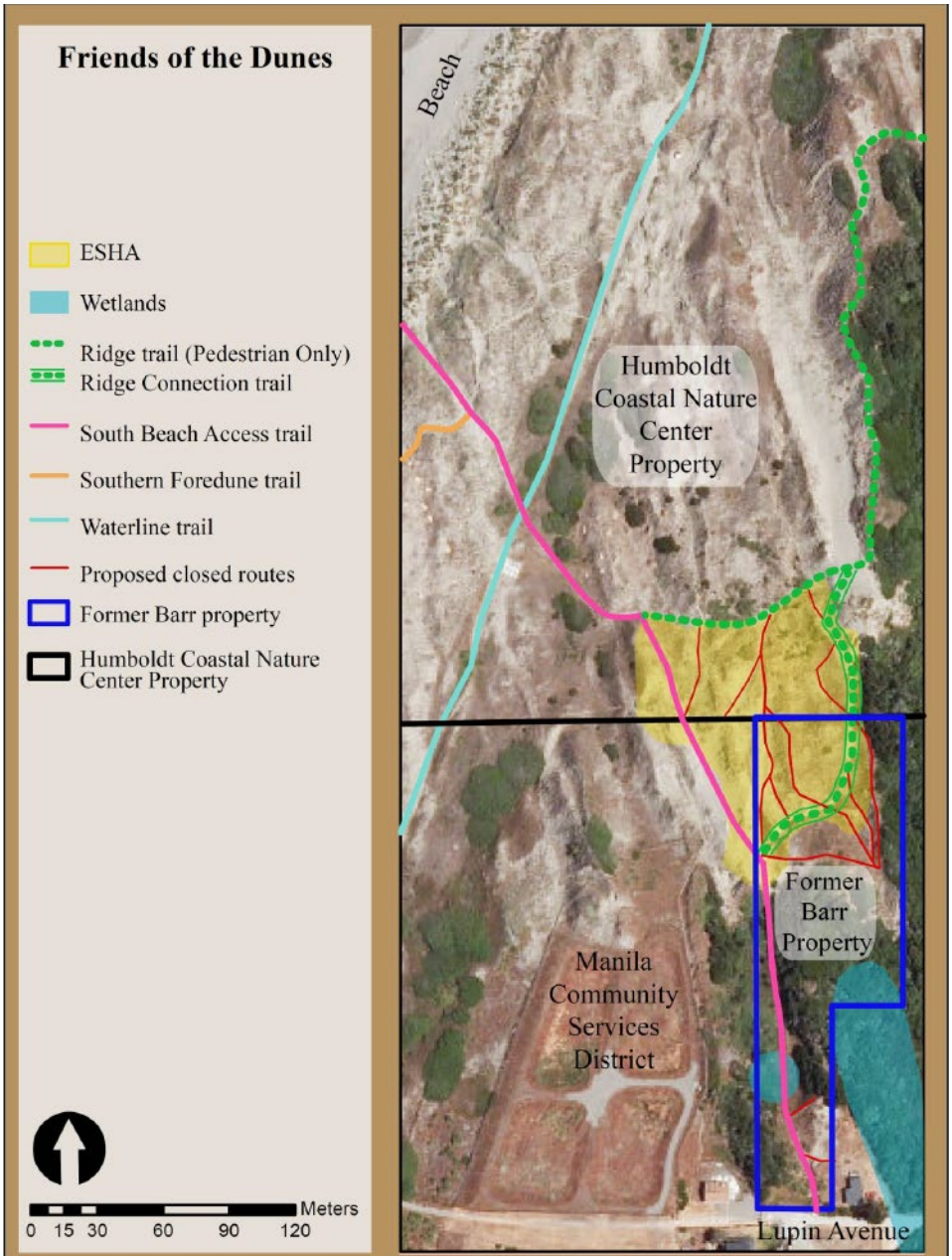


FIGURE 6. PROJECT AREA AND LOCATION OF ENVIRONMENTALLY SENSITIVE HABITAT AREAS

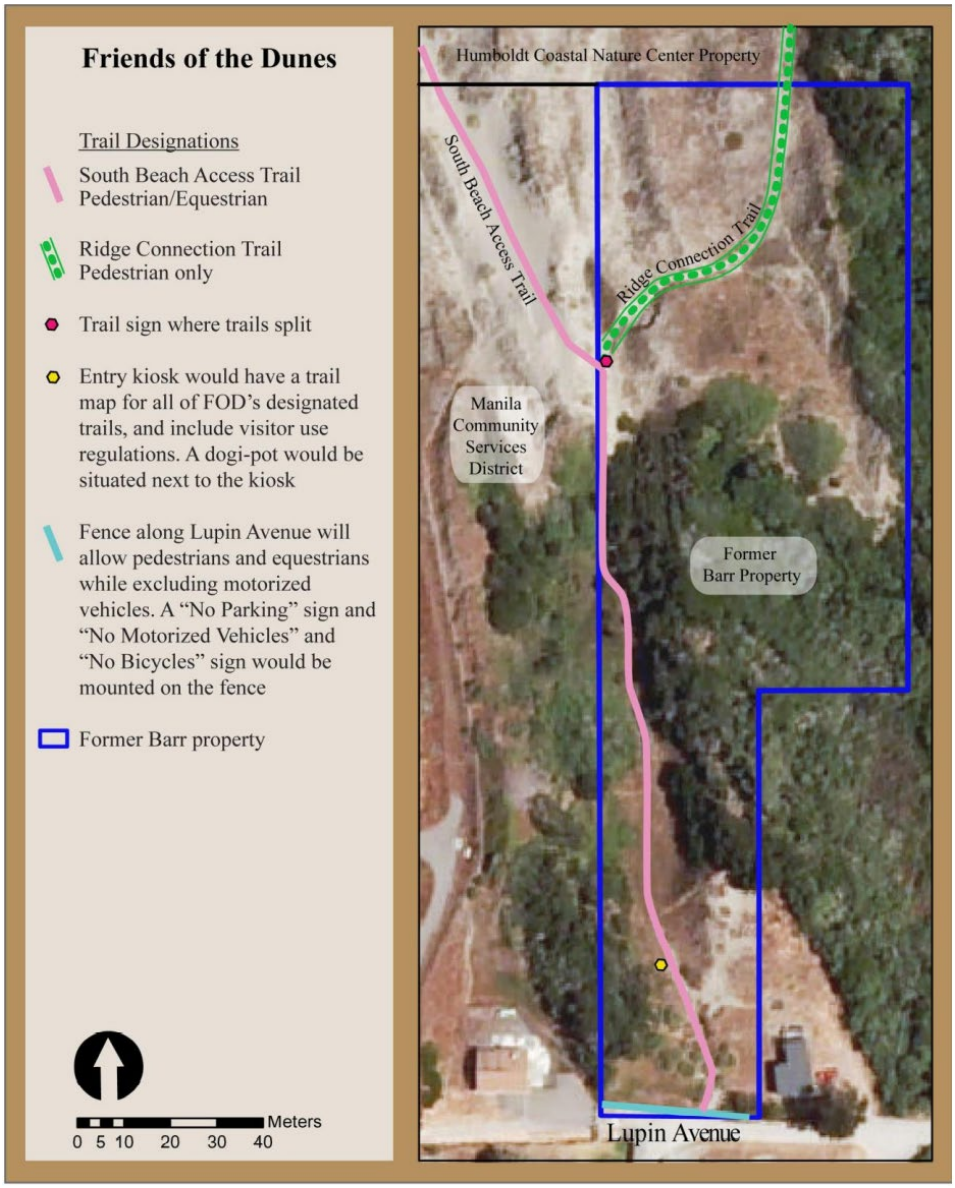
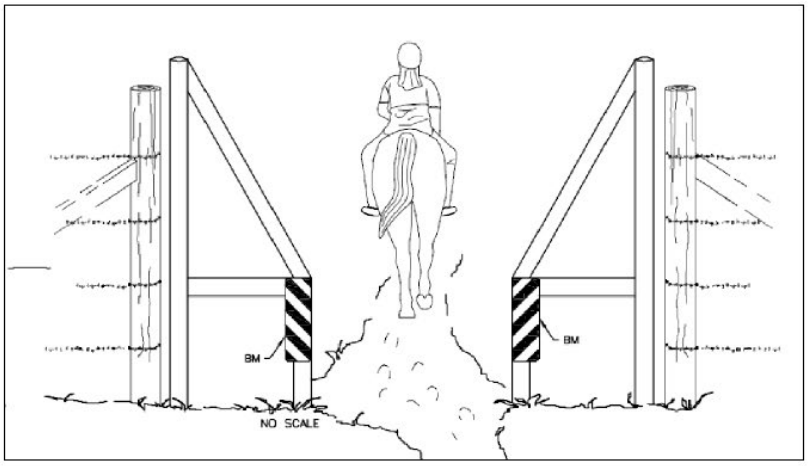


FIGURE 7. FOCAL AREA FOR THE RESTORATION MANAGEMENT PLAN AND TRAIL IMPROVEMENTS ON THE FORMER BARR PROPERTY

Unauthorized user-created trails on the former Barr parcel and the FOD property (APN 506-111-025) are proposed for closure to facilitate: (1) the consolidation of trail use on the designated trail system; and (2) habitat restoration activities for two endangered plants and native dune mat alliance vegetative communities. On these two trails, FOD is proposing to apply the FOD Public Access Trails Policies, and to incorporate the trails into the existing FOD trail system on APNs 506-111-024 and 506-111-025, which are also owned and managed by FOD.

The proposed project would establish a trailhead on the former Barr parcel at 365 Lupin Avenue. No parking would be allowed at the trailhead; a "No Parking" sign would be placed on the Lupin Avenue fence. Public access would allow pedestrians, dog walkers, and horseback riders on designated trails during daylight hours only. The existing "private property sign" and metal gate at the proposed trailhead would be removed and replaced with a new fence designed to allow pedestrian and horse access while blocking access to motorized vehicles. The current metal gate and a conceptual design of the proposed replacement gate are shown in **Figures 8a** and **8b**.

a. Current metal gate, fence and no trespassing sign



b. Conceptual design of the proposed fence along Lupin Avenue would allow for pedestrians and horses while blocking motorized vehicles: the opening would be at least 32" wide to allow for horse passage

FIGURES 8A, 8B. *(A)* CURRENT (UNIMPROVED TRAIL) ENTRANCE FROM 365 LUPIN AVENUE, MANILA, CALIFORNIA. *(B)* CONCEPTUAL DESIGN OF THE PROPOSED FENCE

Trail improvements proposed to accommodate public access to the former Barr parcel include: (1) a new entrance fence allowing horse and pedestrian access but excluding motorized vehicles; and (2) an entry sign/kiosk and Dogipot® pet station approximately 100–120 feet from Lupin Avenue alongside the designated trail (see the entry kiosk in **Figure 7**). Directional signs would include arrows with symbols, the word "Trail," or similar wording, to direct people to designated trails. At trail junctions where there is a distinction between horse/pedestrian and pedestrian only trails, symbols would also be included to inform visitors of the designated use(s). Signs would be designed and implemented to minimize visual impacts on the landscape while ensuring management intent is clear to visitors.

Managed Public Access and Private Property Delineations

There will be no parking at the trailhead; however, parking is available at the nearby MCSD Office parking area at 1901 Park Street and across State Route 255 at the Manila Community Park.

Proposed Beach Access Trail

The proposed South Beach Access trail would consist of a total of 280 meters (0.17 mile) of trail, including 150 meters (0.09 mile) on the former Barr parcel, 75 meters (0.05 mile) on MCSD property, and 55 meters (0.03 mile) on FOD property. This trail would be designated for both pedestrian and equestrian use, with dogs off leash and under voice control to accommodate equestrians with dogs.

The trail would start from the Lupin Avenue trailhead and veer northwest across MCSD property before reconnecting to FOD's existing South Beach Access trail. The trail would begin as a single-track trail and as the trail continues onto MCSD property, and then widen as it passes through an area of open sand for approximately 75 meters. A trail map would be provided at the entrance kiosk near the trailhead off Lupin Avenue, set back from the street approximately 100–120 feet [**Figure 7**], and another directional post would be placed where the trail splits as it continues to the west, while the Ridge Connection trail veers east.

Proposed Ridge Connection Trail

The proposed Ridge Connection trail would be 150 meters (0.09 mile) in length and would be designated for pedestrian use only with dogs on leash. This trail would begin 150 meters north of the Lupin Avenue trailhead where the trail splits from the South Beach Access trail. This trail eventually would connect to FOD's designated pedestrian-only trail on the FOD property. The trail would traverse federally endangered wallflower and beach layia habitat [**Figure 5**], as well as solitary bee nesting habitat. The entirety of this trail would be single track and would be accessible by pedestrian users only. One approximately 20-foot section of the trail would be steep and may or may not eventually include installation and maintenance of a narrow, sunken/cribbed staircase to assist pedestrians [**Figure 9**].

This same section may also include a symbolic rope fence, approximately 2–3 feet above the ground surface, to protect a native bee nesting site and to keep the trail from widening. The CDP amendment would allow installation of these features as needed, in an adaptive management approach that would respond to new bee populations and changing trail conditions.

Example of a cribbed staircase

Example of timber steps

FIGURE 9. *UPPER PHOTO:* EXISTING CONDITIONS OF A STEEP SECTION OF THE RIDGE CONNECTION TRAIL. *LOWER PHOTOS:* EXAMPLES OF STAIRCASES THAT WOULD BE INSTALLED ON A STEEP SECTION OF THE RIDGE CONNECTION TRAIL

Signage would be installed at the start of the Ridge Connection trail where it splits from the South Beach Access trail on the former Barr property to indicate that the trail is not for equestrian use. Additional signage may indicate that dogs must be on leash and include interpretive components to explain the sensitivity of endangered wallflowers and educate users to be mindful of sensitive habitat and the importance of staying on the trail. If needed, additional signage indicating that equestrian use is prohibited would be placed where the Ridge Connection trail connects to the Ridge trail on the FOD property. These trails would then connect the pedestrian or the equestrian to the greater trail system on lands managed by MCSD, FOD, and BLM [**Figure 10**].

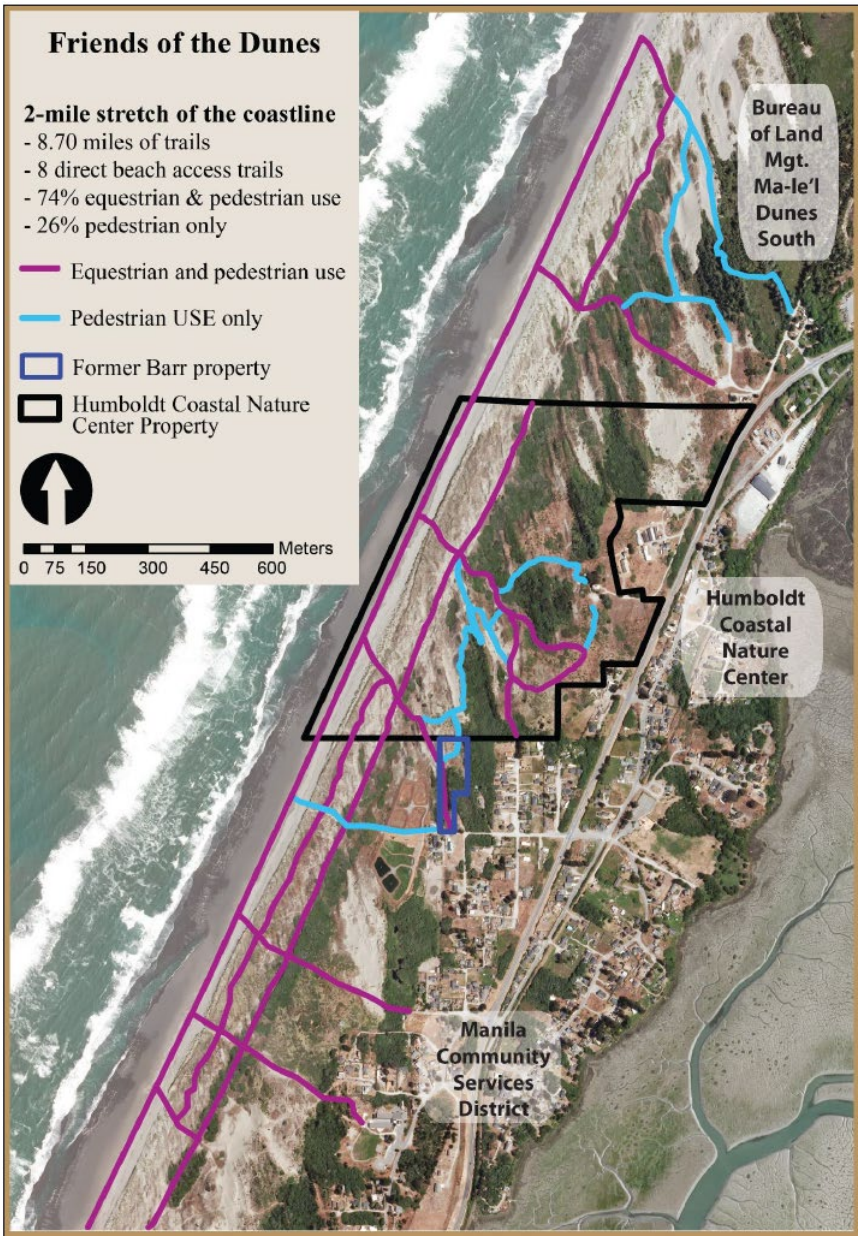


FIGURE 10. EXISTING DESIGNATED TRAIL SYSTEM AND COASTAL ACCESS NORTH AND SOUTH OF THE FORMER BARR PARCEL

Trails Policies for Former Barr Parcel

FOD's public access trails policy would set a framework for trail improvement, maintenance, and operation. In keeping with the Public Access Trails Policy for FOD, the following goals provide the guiding principles associated with the project site.

- Providing trail access that is consistent with FOD's mission to conserve the natural diversity of coastal environments through community-supported education and stewardship programs.

- Providing an enjoyable and safe experience that broadens visitor appreciation of coastal habitats.

- Fostering an appreciation of the different ways visitors enjoy experiencing coastal

environments.

The following outlines the Public Access Trails Policy by user group.

1. **General Trail Use**: All visitor use will be directed to designated trails to minimize degradation of dune environments, facilitate best landscape and resource management practices, and provide for the comfort and safety of visitors.

2. **Pedestrian Use**: Pedestrian-only trails will be established and maintained as narrow, single-use hiking trails, or foot-only trails, developed and managed for resource protection, quiet travel, and the enjoyment of nature.

3. **Dog Walking**: In areas designated for off-leash dog use, the Beach Access trail, dogs must be under voice control, which is defined as: (1) the dog is within view, (2) the dog is within voice range of the owner, (3) the dog must come at the first calling, and (4) the dog cannot approach people in a threatening manner or in any way harass people, wildlife, other dogs, or horses. Owners must pick up and dispose of pet waste in garbage receptacles. These guidelines are meant to promote responsible dog walking that protects the dune environment, while providing enjoyment for all visitors.

4. **Horseback Riding**: Horseback riding will be directed to designated trails only. Multiple use (horse and pedestrian) trails will be designated to minimize resource impacts, maximize safety, facilitate connectivity of multiple-use trails between adjacent properties, provide beach access, and promote visitor enjoyment and education.

5. **Bicycle Use**: Bicycles are not allowed on trails.

6. **Off-Road Motorized Vehicles**: No off-road motorized vehicles are allowed on any trail on FOD property except under emergency health and safety conditions, for property management (including restoration), and as approved by permission from the FOD Executive Director or his or her designated representative and the County of Humboldt. This is consistent with Humboldt County's Beach and Dunes Management Plan.

7. **Off-Trail Use**: Off-trail use is not permitted with the exception of activities pertaining to FOD authorized restoration or monitoring. Off-trail use for all other activities (e.g., research or studies) is authorized only by written permit issued by FOD's Executive Director or his or her designated representative.

FOD reserves the right to refuse access or ask anyone to leave the property who is not abiding by the established policies of the FOD Public Access Trails Policy. FOD also reserves the right to temporarily close access to certain trails, or to temporarily close the property to public use at any time in order to address safety or resource protection concerns. Temporary closures would remain in place until either the safety matter or resource protection concern has been rectified.

Closure of User-Created Routes

FOD proposes to close any user-created routes on the former Barr parcel and in the areas between the Beach Access trail and Ridge trail that are not part of the designated trail system [**Figure 6**]. The closure of these redundant user-created routes would consolidate access to the designated trail system and protect native habitat by reducing habitat fragmentation and direct trampling impacts. A variety of closure methods may be employed to decommission user-created routes. Closure may include temporary signage to inform visitors the route is closed as well as placing brush on user-created routes, which should further discourage visitors from walking in the area. Restoration of user-created routes may additionally include planting native plants and or distributing native plant seeds along user-created routes, which should further discourage visitors from walking in the area. If these initial measures are not successful in

deterring visitor use, then temporary symbolic fencing with closure signs may also close access of user-created routes and notify the public of ongoing restoration efforts to revegetate certain areas.

Restoration Activities

The proposed project involves the removal of invasive nonnative plants and the restoration of native dune habitats and their associated rare plants. The goal is to restore areas to a habitat capable of supporting species indigenous to the coastal dune environment, including endangered plant species, and reduce the risk of spread of invasive plants onto neighboring habitats (and properties), which include a freshwater wetland and intact dune mat vegetative plant communities, vegetation types designated as environmentally sensitive habitat areas (ESHAs) and as rare or threatened habitats required to be considered under CEQA. To restore and enhance habitats on the parcel, FOD proposes to do the following.

1. Manually remove approximately 1.5 acres of invasive, nonnative annual grasses, including rattlesnake grass, barren fescue, and ripgut brome. Annual grasses will be removed by hand and the vegetation will immediately be placed in plastic garbage bags for disposal offsite. Control methods to be considered in the future are the removal of duff (i.e., top layer of soil) from areas that have been severely degraded, grass flaming,[1] weed whacking, and using black tarps to smother plants. Flaming is not currently proposed on the former Barr parcel given the invasive grasses are not yet uniformly dominant and treatment would affect native plants or ground-nesting bees.

2. Manually remove approximately 0.2 acre of iceplant in the approximate locations shown on **Figure 5**. Due to neighborhood concerns regarding sand movement on the former Barr parcel, the iceplant currently existing within 100 feet of Lupin Avenue or the adjacent private residential property line to the east will be photo and global positioning system (GPS)-documented, left in place at its current extent, and managed to prevent further spread onto FOD property. Any iceplant growth beyond the documented extent will be removed to protect surrounding habitat. Iceplant removed within 200 feet of Lupin Avenue or neighboring residential property lines would be transported immediately from the property via the Lupin Avenue access point and disposed of offsite rather than left to dry in piles.

3. Manually remove other invasive plants with isolated occurrences that are too small to quantify including yellow bush lupine, star mustard, and Himalayan blackberry.

4. Restore endangered plant communities, primarily by allowing natural recruitment to occur after nonnative plant removal and trail decommissioning.

5. Conduct additional restoration activities, including planting of native dune plants, as needed. Removal of nonnative invasive vegetation is prioritized based on invasive species' proximity to endangered species populations and other sensitive resources, and by the size and robustness of infestations.

Restoration of Endangered Plants and their Habitat

[1] Flaming is a different and distinct treatment from prescribed fire and would be a permissible treatment under this plan. Prescribed fire for the purposes of treating populations of standing invasive species would not be used as a treatment under the Restoration Plan or its adaptive management framework. Using fire to eliminate piles of previously removed and dried nonnative species is not a prescribed fire treatment applied to standing vegetation and would be permissible under the Restoration Plan.

The project proposes to protect and enhance federally listed plant populations by creating suitable habitat for these species through removal of nonnative invasive plant species. Restoration practices will be consistent with those outlined in the 2021 FOD Restoration Plan, and the following mitigation measures (MMs) would be used to avoid and minimize disturbing endangered plant populations:

Mitigation Measure BIO-1: Conduct Biological Surveying and Monitoring. Areas subject to disturbance during implementation of the Restoration Plan will be surveyed by the Restoration Manager or a qualified botanist appointed by the Restoration Manager and any endangered plant populations encountered would be flagged (**MM BIO-2**) before the commencement of any restoration work. Any restoration work in occupied areas would be directly overseen by the Restoration Manager to avoid the disturbance or removal of endangered plant species.

a. **Beach layia**: Plants are most sensitive during the flowering period (typically March to July) when flowers could be crushed, preventing seed dispersal. During this season, restoration work will avoid areas with dense beach layia populations, and the treatment method will be limited to hand pulling or manual digging of invasive species in these areas. Any beach layia populations present will be clearly identified and flagged (**MM BIO-2**), and the flagging monitored during work days.

b. **Humboldt Bay wallflower**: Restoration activities will generally avoid areas with individual plants. When wallflowers are present in areas of active restoration, all visible plants will be marked with a pin flag by the Restoration Manager (**MM BIO-2**) to avoid trampling. The treatment method in these areas will be limited to hand pulling or manual digging of invasive species.

Mitigation Measure BIO-2: Delineate Work Limits to Protect Sensitive Biological Resources. Before starting restoration projects, sensitive biological resource areas within and adjacent to restoration work areas will be staked and flagged by the Restoration Manager or biological monitor (**MM BIO-1**). Any demarcated areas will be inspected daily throughout work periods to ensure that they are visible for all restoration personnel. Any piles of removed nonnative plants or other work-related materials will be located outside of all the flagged special-status plant areas in areas of clear sand to avoid native dune mat plant species to the extent feasible.

Mitigation Measure BIO-3: Provide Worker Environmental Awareness Training. Work crews will be trained to identify and avoid special-status plants. The FOD will provide environmental awareness training before starting restoration activities for all technician or volunteer personnel (including new personnel as they are added to the project). This training will be given by the Restoration Manager, or other qualified botanical staff appointed by the Restoration Manager, to help the trainees understand the following.

- Surrounding common and special-status species and their habitats
- Sensitive natural communities and ESHAs
- Applicable regulatory requirements
- MMs designed to avoid or minimize impacts on sensitive resource areas

Mitigation Measure BIO-4: Limit Use of Grass Flaming in Sensitive Areas: Grass flaming and duff removal methods will not be utilized in areas known to be occupied by special-status plants based on seasonally appropriate botanical surveys conducted the season proceeding restoration projects (**MM BIO-1**).

Mitigation Measure BIO-5: Yellow Bush Lupine Treatment. Removal of yellow bush lupine in special-status plant areas will take place following seed dispersal for beach layia (after June 30). However, if mature lupine pods are present in these areas, the Restoration Manager could carefully remove them.

Mitigation Measure BIO-6: Delineate Wetlands. Areas subject to disturbance during implementation of the Restoration Plan will be surveyed by the Restoration Manager or a qualified wetland scientist appointed by the Restoration Manager and any wetlands encountered will be flagged. The Restoration Manager will be able to identify wetland traits and vegetation, and restoration technicians, work crews, and volunteers will be trained to identify wetland traits and vegetation to ensure avoidance of wetlands during or on the way to restoration activities. Work crews and volunteers will be overseen by the Restoration Manager or by restoration technicians when working adjacent to an area with wetland vegetation (**MM BIO-1**). Routes to off-trail work sites will avoid wetlands.

Monitoring and Reporting

Photo points would be established to track the restoration of dune mat habitats and impacts of the trail improvements, as well as to document potential sand movement. The project site and any restoration that occurs on it would be included on future annual reports submitted to the FOD Board of Directors and Humboldt Planning and Building Department, as well as the photo-monitoring reports submitted every 2 to 4 years.

Adaptive management practices would be followed as outlined in the FOD Restoration Plan. Recent research has shown that it takes up to 6 years for dunes that have been restored to have natural recruitment of native plant species (Pickart 2013). If native plant cover is not re-established to similar levels found on nearby HCNC lands following the removal of invasive plant species after 6 years, native plantings or seedings would occur in areas where invasive species were removed. A condition of approval has been incorporated requiring the applicant to submit to the Planning and Building Department an annual monitoring and reporting summary describing the results of all monitoring activities, including monitoring methods, an evaluation of restoration areas in terms of performance and success criteria, photodocumentation of restoration areas, and adaptive management needs every year.

CHAPTER 2. ENVIRONMENTAL CHECKLIST

Project Title:	Friends of the Dunes Trail and Habitat Restoration Project on the former "Barr" Property (APN: 400-011-075)
Lead Agency Name and Address:	Humboldt County Planning & Building Department, 3015 H Street, Eureka, CA 95501-4484
Contact Person and Phone Number:	Cliff Johnson, Senior Planner (707) 445-7541
Project Location:	Humboldt County, at 220 Stamps Lane, 365 Lupin Drive, Manila.
Project Sponsor's Name and Address:	Friends of the Dunes, PO Box 186, Arcata, CA 95518
General Plan Designation:	Residential Low Density (RL)
Zoning:	APN 400-011-075: RS-5-M/A,B: Residential Single Family—Minimum lot size 5,000 square feet (RS-5), Manufactured Home (M)/Archaeological Resource Area Outside Shelter Cove (A), Beach and Dune Areas (B)

1. **Description of Project:** The proposed FOD Trail and Habitat Restoration Project (project) would further amend the amended and approved 2009 CDP (CDP-06-49MMX) and CUP/SP (CUP-06-14MMX/SP-06-71M), which allows use of an existing residence as the HCNC office/education center, relocation of a parking area, a notice of parcel merger, removal of 19 nonnative trees, and trail establishment and restoration activities on approximately 93 of the total 122 acres of beach and dune habitat in the Manila area of Humboldt County under management by the FOD. The permit amendment based on this subsequent IS/MND prepared for the project, would allow trail work, restoration, and related activities on the 3.6-acre former Barr property on Lupin Avenue in Manila. These improvements are intended to minimize impacts on sensitive habitat while allowing continued access by hikers, equestrians, and dog walkers.
2. **Surrounding Land Uses and Setting:** The HCNC property is in an area with other properties owned or managed by several different entities that have completed or ongoing dune restoration activities, including USFWS, BLM, MCSD, and private landowners. These areas contain both restored and degraded dune mat plant communities.
3. **Other Public Agencies Whose Approval is Required:**

   Humboldt County Planning and Building Department.
4. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?**

   A letter offering an opportunity for tribal consultation pursuant to AB52 was sent to all local tribal officials on July 14, 2021. No requests for consultation were received.

   Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts on tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code Section 5097.96 and the California Historical Resources Information

System administered by the California Office of Historic Preservation. Please also note that Public Resources Code Section 21082.3(c) contains provisions specific to confidentiality.

See Section XVIII, *Tribal Cultural Resources*, for more information.

EVALUATION OF ENVIRONMENTAL IMPACTS

(1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

(2) All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

(3) Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an environmental impact report (EIR) is required.

(4) "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of MMs has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact." The lead agency must describe the MMs and briefly explain how they reduce the effect to a less-than-significant level (MMs from Section XVII, "Earlier Analyses," may be cross-referenced).

(5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or ND (14 California Code of Regulations Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:

a) Earlier Analysis Used. Identify and state where they are available for review.

b) Impacts Adequately Addressed. Identify which effects from the checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by MMs based on the earlier analysis.

c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the MMs that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

The evaluation of environmental impacts provided in this document is based in part on the impact questions contained in Appendix G of the CEQA Guidelines. These questions, which are included in an impact assessment matrix for each environmental category (e.g., Aesthetics, Air Quality, Biological Resources), are "intended to encourage thoughtful assessment of impacts." Each question is followed by a check-marked box with column headings that are defined below:

- **Potentially Significant Impact**. This column is checked if there is substantial evidence that

a project-related environmental effect may be significant. If there are one or more potentially significant impacts, a project EIR would be prepared.

- **Less than Significant with Mitigation Incorporated**. This column is checked when the project may result in a significant environmental impact, but the incorporation of identified project revisions or MMs would reduce the identified effect(s) to a less-than-significant level.
- **Less-than-Significant Impact**. This column is checked when the project would not result in any significant effects. The project's impact is less than significant for the category without the incorporation of project-specific MMs.
- **No Impact**. This column is checked when the project would not result in any impact in the category or the category does not apply.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is potentially significant except that the Applicant has agreed to project revisions, including MMs, that would reduce the impact to less than significant with mitigation.

❑ Aesthetics	❑ Agricultural and Forestry Resources	❑ Air Quality
☑ Biological Resources	☑ Cultural Resources	❑ Energy
❑ Geology/Soils/Paleontological	❑ Greenhouse Gas Emissions	☐ Hazards/Hazardous Materials
❑ Hydrology/Water Quality	❑ Land Use/Planning	❑ Mineral Resources
❑ Noise	❑ Population/Housing	❑ Public Services
❑ Recreation	❑ Transportation	❑ Tribal Cultural Resources
❑ Utilities/Service Systems	❑ Wildfire	❑ Mandatory Findings of Significance

Detailed descriptions and analyses of impacts from project activities and the basis for their significance determinations are provided for each environmental factor on the following pages, beginning with Section I, *Aesthetics*.

Agency Determination

On the basis of this environmental impact analysis provided by this Initial Study:

❑ I find that the proposed project **could not** have a significant effect on the environment, and a **Negative Declaration** will be prepared.

☑ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **Mitigated Negative Declaration** will be prepared.

❑ I find that the proposed project **may** have a significant effect on the environment, and an **Environmental Impact Report** is required.

Signature

6·8·2022
Date

Cliff Johnson, Supervising Planner
Printed Name

Humboldt County Planning and Building Department

I. Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				X

Affected Environment: The project consists of temporary and potentially recuring habitat restoration work on land (terrestrial) that could alter species composition within small patches of herbaceous vegetation in areas of dune habitat on the former Barr parcel. In addition, a replacement "No Parking" sign, replacement gate, and installation of a new trail map are proposed near 365 Lupin Avenue in the community of Manila.

(a, b, d) No Impact: The proposed project site is not in an area designated Scenic Coastal Area in the Humboldt Bay Area Plan of the Humboldt County Local Coastal Program, nor does it contain any vantage points. The site is outside of a designated scenic highway. There is no lighting or sources of glare proposed as part of the project. No scenic resources would be substantially damaged. Therefore, no impact would occur.

Impact Analysis:

(c) Less-Than-Significant Impact: There would be temporary visual impacts (i.e., the presence of one or more pickup trucks) during replacement of the trailhead fence to the three neighboring residences and for others traveling along Lupin Avenue. Construction is anticipated to involve hand tools and to occur for a maximum of 3 days during daylight hours. As a courtesy, work crews will notify the residents of the anticipated work days. The temporary visual impacts of one or more pickup trucks for a maximum of 3 days would be a less-than-significant impact.

No parking would be allowed at the trailhead and "No Parking" sign would be replaced on the newly constructed Lupin Avenue fence. Public access would allow pedestrians, dog walking, and horseback riding on designated trails during daylight hours only. The existing private property sign and metal gate at the proposed trailhead would be removed and replaced with a new fence designed to allow pedestrian and horse access while blocking access to motorized vehicles. The fence design will be visually unobtrusive and replace an existing fence. There are three houses at distances of 50 feet, 80 feet, and 100 feet within the line of sight of the proposed trailhead fence on Lupin Drive and Hill Street; however, the fence will replace an existing fence with a newer and more aesthetically pleasing fence (**Figure 8**) and therefore have a less-than-significant impact on aesthetics.

The South Beach Access trail would begin at the Lupin Avenue trailhead and head north-by-northwest for approximately 550 feet before veering northwest across MCSD property and reconnecting to FOD's existing South Beach Access trail where it joins the Ridge Connection trail from the northeast (**Figure 5**). A trail map post would be provided on an entrance kiosk near the trailhead

off of Lupin Avenue, set back from the street approximately 100–120 feet, out of sight from the nearest houses to the south or southeast, and another directional trail map post may be placed approximately 550 feet from Lupin Avenue where the Ridge Connection trail joins east; this post would not be visible from the nearest houses to the south and southeast. Directional signs would include arrows with symbols, the word "Trail," or similar wording, to direct people to designated trails. At trail junctions where there is a distinction between horse/pedestrian and pedestrian-only trails, symbols would also be included to inform visitors of the designated use(s). Signs would be designed and implemented in such a way as to minimize visual impacts on the landscape while ensuring management intent is clear to visitors and therefore have a less-than-significant impact. One approximately 20-foot section of the Ridge Connection trail would be steep and may or may not eventually include installation and maintenance of a narrow, sunken/cribbed staircase to assist pedestrians [**Figure 9**]. The design of these stairs is similar to other nature trails in the area and will be installed to minimize visual impacts on the landscape. The impact would be less than significant.

Mitigation: None required.

II. Agriculture and Forestry Resources.

In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Affected Environment: No agricultural resources are located within the project area.

Impact Analysis:

(a, b, c, d, e) No Impact: No farmland of any kind would be converted and the existing and proposed use is non-agricultural. Neither the subject property nor adjacent lands are in a Williamson Act contract. The areas surrounding the subject parcel are engaged primarily in open space and residential uses and the parcel (APN: 400-011-075) is zoned residential. The restoration work would not result in the loss or conversion of forest land or result in other changes in the existing environment which could result in conversion to non-agricultural or non-forest use. Based on the above, there would be no impact on agriculture and forestry resources.

Mitigation: None required.

III. Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				X
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				X

Affected Environment: No heavy equipment use is planned. Occasional grass flaming and duff removal methods could be employed to treat annual invasive grasses in the project area as part of the adaptive implementation of the Restoration Plan, if necessary, due to advancing spread of nonnative grasses. Currently, flaming is not anticipated on the former Barr parcel due to the presence of native dune species and ground nesting bees among the nonnative grasses. Using temporary burn-pile fire to eliminate piles of previously removed and dried nonnative species would not be utilized on the Barr parcel, given its proximity to residential housing as detailed in the Restoration Plan. Rather, removed plant material would be transported offsite immediately following the clearing for stockpiling or burning on FOD property.

Pollutants of Concern:
Criteria pollutants are those contaminants for which ambient air quality standards have been established for the protection of public health and welfare. Criteria pollutants include ozone, carbon monoxide (CO), nitrogen dioxide, sulfur dioxide (SO_2), lead, and particulate matter with diameters of 10 (PM10) and 2.5 (PM2.5) microns or less. These pollutants commonly are used as indicators of ambient air quality conditions.

Criteria pollutants are regulated under the national ambient air quality standards (NAAQS) by the U.S. Environmental Protection Agency and under the California ambient air quality standards (CAAQS) by the California Air Resources Board (CARB 2014). All criteria pollutants can cause human health and environmental effects at certain concentrations. The NAAQS and CAAQS limit criteria pollutant

concentrations to protect human health and prevent environmental and property damage. Epidemiological, controlled human exposure, and toxicology studies evaluate potential health and environmental effects of criteria pollutants; these studies form the scientific basis for new and revised ambient air quality standards.

The primary criteria pollutants of concern that could be generated by the project are CO and particulate matter. Principal characteristics and possible health and environmental effects from exposure to the primary pollutants generated by the project are discussed below.

- **CO**. CO primarily is formed through incomplete combustion of organic fuels. Higher CO values generally are measured during winter, when dispersion is limited by morning surface inversions. Seasonal and diurnal variations in meteorological conditions lead to lower values in summer and in the afternoon. CO is an odorless, colorless gas that affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen that can be carried to the body's organs and tissues. Exposure to CO at high concentrations also can cause fatigue, headaches, confusion, dizziness, and chest pain. There are no ecological or environmental effects of CO at levels at or near ambient (CARB 2022).

- **Particulate Matter**. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulates now generally are divided into the two categories of respirable particles.
    - PM10. These particles have an aerodynamic diameter of 10 microns or less and are about 1/7th the thickness of a human hair. Major sources of PM10 include motor vehicles; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.
    - PM2.5. These fine particles have an aerodynamic diameter of 2.5 microns or less and are roughly about 1/28th the diameter of a human hair. Major sources of PM2.5 include fuel combustion (from motor vehicles, power generation, and industrial facilities), residential fireplaces, and wood stoves.

  Particulate matter also forms when gases emitted from industries and motor vehicles, such as SO_2, nitrogen oxides, and reactive organic gases, undergo chemical reactions in the atmosphere.

  Particulate pollution can be transported over long distances and may adversely affect the human respiratory system, especially for people who are naturally sensitive or susceptible to breathing problems. Numerous studies have linked particulate matter exposure to premature death in people with preexisting heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms. Depending on its composition, both PM10 and PM2.5 also can affect water quality and acidity, deplete soil nutrients, damage sensitive forests and crops, affect ecosystem diversity, and contribute to acid rain.

<u>Sensitive Receptors:</u>
Sensitive land uses are locations where human populations, especially children, seniors, and sick persons, are found and where there is reasonable expectation of continuous human exposure according to the averaging period for the air quality standards (i.e., 24-hour, 8-hour). Typical sensitive receptors are residences, hospitals, schools, and parks. Burn piles, if utilized, would not be placed on the former Barr parcel, given the proximity of adjacent properties on Lupin, Keys, and Park Streets.

Impact Analysis:

(a, b, d) No Impact. The project would not conflict with or obstruct implementation of the applicable air quality plan. The project would not result in a cumulatively considerable net increase of any criteria pollutant for the project region under an applicable NAAQS or CAAQS. The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

(c) Less-than-Significant Impact: Fence installation would be conducted manually with a post-hole digger and hand tools. Invasive iceplant and nonnative grasses on the former Barr parcel would be removed with hand tools and the sand soils would not generate significant amounts of particulate matter. Occasional grass flaming, if utilized on the former Barr parcel, would be temporary and confined to limited areas of dense invasive nonnative grasses. Currently, no such applications are planned for the former Barr parcel because the invasive grasses are not dense enough to warrant such a method. Instead, hand treatment of the invasive grasses and iceplant would be utilized.

The project is not anticipated to generate increased recreational use of the site or other FOD properties because the trails are in existence and no new parking areas are proposed.

During brief restoration activities, including the need for re-treatment of grass removal areas, FOD anticipates approximately 40–50 total vehicle trips generated by volunteer work crews. Vehicle miles traveled would be approximately 11 miles round trip from Humboldt State University in Arcata to the HCNC parking lot, where they will then be dropped off at the Lupin Avenue entrance. Therefore, a total of 440 to 550 miles driven by volunteers to the former Barr parcel would be a less-than-significant impact on air quality.

Mitigation: None required.

IV. Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X

e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Affected Environment:

For the purpose of this MND, special-status species are plants and animals that are legally protected under the federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing. Special-status species are defined as follows.

- Species that are listed or proposed for listing as threatened or endangered under FESA (50 Code of Federal Regulations [CFR] 17.11 [listed animals], 50 CFR 17.12 [listed plants], and various notices in the *Federal Register*).
- Species that are candidates for possible future listing as threatened or endangered under FESA (81 Federal Register 87246–87272, December 2, 2016).
- Species that are listed or proposed for listing by the State of California as threatened or endangered under CESA (14 California Code of Regulations Section 670.5).
- Animals listed as California species of special concern on CDFW's Special Animals List.
- Animals listed as California fully protected species as described by California Fish and Game Code Sections 3511 (birds), 4700 (mammals), and 5050 (reptiles and amphibians).
- Plants listed as rare under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.).
- Plants with a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, and 2B on CDFW's Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2022), and considered threatened or endangered in California by the scientific community.
- Plants designated as CRPR 3 and 4 that may warrant legal consideration if the population is locally significant and meets the criteria under CEQA Guidelines Section 15380(d).

ICF's biological team reviewed the following existing natural resource information to identify special-status species and other sensitive biological resources that could occur in the biological study area (BSA):

- California Natural Diversity Database records search of the 7.5-minute U.S. Geological Survey quadrangle containing the BSA (Eureka) and the six neighboring quadrangles (Tyee City, Arcata North, Arcata South, Cannibal Island, Fields Landing, and McWhinney) (CDFW 2022).
- California Native Plant Society (CNPS) Rare Plant Inventory records search of the 7.5-minute U.S. Geological Survey quadrangle containing the BSA (Eureka) and the six neighboring quadrangles (Tyee City, Arcata North, Arcata South, Cannibal Island, Fields Landing, and McWhinney) (CNPS 2022).

There are four special-status plant species that can be found on FOD lands, all of which are adapted to open dune mat habitats that could occur on the former Barr parcel. They are:

- Pink sand verbena (*Abronia umbellata var. breviflora*)
- Dark-eyed gilia (*Gilia millefoliata*)

- Beach layia
- Humboldt Bay wallflower

Pink sand verbena is a perennial herbaceous plant that is threatened by nonnative plants, vehicles, and development-related habitat loss. It is listed as a CRPR 1B.1 species. Dark-eyed gilia is a small, annual flowering species that is threatened by vehicles, development-related habitat loss, grazing, and nonnative plants, and is listed as a CRPR 1B.2 species. For CEQA purposes, both are considered rare, threatened, or endangered in California. Dark-eyed gilia is known to occur on the former Barr parcel based on recent surveys by Humboldt State University students (Cashen et al. 2020).

As of 2019 mapping efforts, the two federally listed endangered species, beach layia and the Humboldt Bay wallflower, are known from the Barr parcel [**Figure 5**]. Beach layia is an annual herbaceous species rarely growing more than 2 inches above the ground, while the wallflower is a monocarpic perennial herbaceous plant. Both species are threatened by loss of habitat due to development, trampling, and habitat loss by invasive nonnative plants. The Humboldt Bay wallflower is the most sensitive, also being threatened by deer browsing, sand mining, foot traffic, and poor seed persistence in the soil bank (USFWS 2022). Restoration activities would benefit these species' recovery by directly addressing two of the principal threats to the recovery of these species: habitat loss from trampling and competition with nonnative, invasive species. Monitoring and mapping of Humboldt Bay wallflower was conducted by FOD in 2008, by USFWS in 2015, and during a habitat assessment and management plan for three rare plants on the former Barr parcel (Cashen et al. 2020).

The project area contains several types of sensitive natural communities recognized by CDFW (CDFW 2022) as rare or threatened within the state of California and as ESHAs defined in the California Coastal Act and regulated by the California Coastal Commission (CCC). In addition, any plant community that contains a special-status plant, or any wetland, may also be considered an ESHA by CCC staff analysts. These plant communities include the following communities with a state rarity ranking of S3:

- Beach pine forest and woodland (*Pinus contorta* ssp. *contorta* Alliance)
- Coastal dune willow thickets (*Salix hookeriana/Rubus ursinus* Association)
- Dune-mat (*Abronia latifolia/Ambrosia chamissonis* Alliance)

The climate is characterized by cool, wet winters and dry (foggy) summers. Annual average temperatures within the project area range from 47 to 59 degrees Fahrenheit (°F), with the coolest temperatures occurring in December and January, and the warmest in August and September (Western Regional Climate Center 2020). Average annual rainfall in the project vicinity is 38 inches, most of which falls between December and March.

Impact Analysis:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant with Mitigation Incorporated. In the long term, restoration activities would benefit dune-adapted special-status species by directly addressing two of the principal threats to the recovery of these species: habitat loss and competition with nonnative, invasive plant species. Furthermore, the closure of user-created routes on the former Barr parcel and in the areas between the Beach Access trail and Ridge trail that are not part of the designated trail system [**Figure 6**],

would consolidate access to the designated trail system and protect native habitat by reducing habitat fragmentation and direct trampling impacts by hikers and equestrians.

Restoration activities will be accomplished with no adverse impacts on visible pink sand verbena, dark-eyed gilia, Humboldt Bay wallflower, and beach layia (i.e., non-seedling, juvenile or reproductive individuals), because control activities in and adjacent to mapped special-status plant populations would be carried out with guidance from the Restoration Manager, and under supervision of trained restoration technicians or volunteers. Avoidance, minimization, and mitigation measures for avoiding impacts on special-status plant species include the adoption of **MMs BIO-1 through BIO-5**. These MMs will result in a less-than-significant impact on special-status plant populations.

Humboldt Bay wallflower:
Unintended effects on small, unseen individual seedlings could potentially occur during restoration activities because they are beyond detection. However, the probability of a Humboldt Bay wallflower individual surviving to reproduction is correlated with its size and the probability of any new seedling surviving to reproduction is less than 1% (Pickart and Sawyer 1998). Therefore, any unintended effects on small, non-visible individual Humboldt Bay wallflower seedlings would be negligible (i.e., less than 1%) in terms of reduced reproductive success in this population.

Beach layia:
Effects on beach layia will be minimized to negligible levels by avoiding areas with dense beach layia populations or restricting restoration until the period following seed dispersal, combined with proper restoration techniques when plants are not flowering or dispersing seed. Populations will be surveyed, flagged for avoidance, and population responses monitored as part of the **MM BIO-1a**.

Dark-eyed gilia and pink sand verbena:
Effects on dark-eyed gilia and pink sand verbena will be minimized to negligible levels by the Restoration Manager surveying restoration work sites in advance for occurrences of these species and identifying any occurrences (**MM BIO-1**), avoidance of restoration in areas of occurrence, when possible (**MM BIO-2**), and plant identification training conducted by the Restoration Manager for restoration technicians and restoration volunteers to aid in impact avoidance (**MM BIO-3**).

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant with Mitigation Incorporated.

Sensitive Natural Communities
Much of the former Barr parcel that has not yet been invaded by nonnative plants could be considered a sensitive natural community (i.e., dune mat, beach pine, willow thicket) or a wetland ESHA. Both the northern and southern portions of the former Barr parcel are invaded by invasive annual grasses or iceplant [**Figure 5**]. Restoration and maintenance of degraded dune mat habitat would increase the amount of high-quality dune mat ESHA on the parcel and **MMs BIO-2 and BIO-6** would result in a less-than-significant impact on special-status plant habitat by defining sensitive natural communities and wetland habitats through identification, flagging, education, avoidance, and monitoring.

Wetlands
Wetlands are present throughout the FOD property and the former Barr parcel [**Figure 6**], and require special consideration to protect their ecological services. Wetlands will be defined as, if under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to

cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation (SWRCB 2018).

Wetland Restoration
Wetlands will be delineated by the Restoration Manger prior to the staging and stockpiling of any restoration activities or workers passing through wetland areas on or off trail as part of **MM BIO-6**. Restoration of wetlands on FOD property could include removal of invasive plant species from wetland habitats, including the invasive Himalayan blackberry mapped in and adjacent to a wetland on the South Beach Access trail on the former Barr parcel (Cashen et al. 2020), or other existing or future invasive plants discovered while managing FOD lands. Correspondence with the North Coast Regional Water Quality Control Board (RWQCB) (Bargsten pers. comm.[a]), has clarified that invasive species removal would not normally rise to the need for a dredge and fill 401 Water Quality Certificate permit unless it permanently and adversely affects waters and wetlands of the state. Similarly, following a site visit to FOD properties in 2018, it was noted that the RWQCB Restoration Policy recognizes "that there may be short term impacts to waters of the state that may be necessary in order to remedy issues like invasive species that will bring about better functions and conditions in the future and improvement of the entire ecosystem." (Bargsten pers. comm.[b]). As a result, the direct effects of wetland restoration would have a less-than-significant impact on wetlands with mitigation.

c. Have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means?

Less than Significant with Mitigation Incorporated.

As discussed under (b) above, wetlands will be delineated by the Restoration Manger prior to the staging and stockpiling of any restoration activities or workers passing through wetland areas on or off trail as part of **MM BIO-6** and staff will be trained to avoid mapped sensitive habitats (**MM BIO-2 and MM BIO-3**) so that no direct impacts on wetlands would occur.

The coast around Humboldt Bay in the Eureka Littoral Cell supports a vast dune system that stretches nearly continuously for 34 miles (Pickart and Sawyer 1998) and dune restoration around Humboldt Bay has generally been received favorably by the public (Tam 2011). However, a few individuals have expressed concerns that the removal of invasive grasses could be destabilizing and result in a lowering of the foredune, increasing vulnerability to storm-caused erosion (Walters 2011). Qualitative and quantitative observations at the Lanphere Dunes restoration area indicated that immediately following eradication of European beachgrass, foredune elevation decreased, but recovered as native species, including American dune grass (*Elymus mollis*), recolonized the area (Pickart and Sawyer 1998; Pickart 2014). Further, despite public concern that removal of invasive European beachgrass could alter foredune height, it was found that 30 years of restored and invaded foredune areas had no significant difference in height, suggesting that other factors besides restoration control foredune height (McDonald 2020).

Interior dunes tend to have less dynamic sand movement than the large dune lenses seen in the nearby Ma-le'l and Lanphere Dunes north of the project. Field analysis of the existing deflation plain at the FOD property compared against historic aerial imagery appears to indicate there is no noticeable encroachment of sand into wetlands on the FOD property (Pickart pers. comm.). The FOD Restoration Plan posits that this could be a result of the slow pace of restoration necessitated by engaging community volunteers to conduct the restoration work and the longstanding practices of conducting restoration in a checkerboard pattern and leaving a strip of European beachgrass on the seaward side of each foredune restored area until colonization by native plants has occurred (FOD 2021).

Furthermore, at large scales, restoration and vegetation type were not found to drive sand mobility in

the region of the project. A chronological series of historic aerial photographs, in addition to an 1870 U.S. Coast Survey map, were used to document the evolution of the coastal barrier and transgressive dunefield system at the Lanphere-Ma-le'l Dunes between 1870 and 2016 (Pickart and Hesp 2019). The authors mapped distinct dune morphological units (i.e., shorelines, foredunes, blowouts, parabolic dunes, deflation basins, and dunefields) at decadal intervals and compared among three areas with contrasting biological invasion and land management histories. Biological invasions of bush lupine in the north and European beachgrass in the south contributed to stabilization after 1965, but parallel increases of native vegetation in other areas suggest a larger-scale driving force shaping dune morphology and mobilization. In fact, the stability of the dune system reached its maximum extent in 2000, despite erosional effects of the 1998–2000 La Niña event, and multiple invasive plant removal projects in the 1990s. Instead, the authors argue that the absence of relict foredunes in the study area and elsewhere on the North Spit barrier, suggests that the foredune-blowout-parabolic dune complex may build to quite large proportions for some time, and then be destroyed or destabilized to such a degree that the sediments comprising the complex are released to form a new dunefield phase, at large-scale and irregular intervals, often associated with catastrophic events (i.e., climate forcing, the 1963 flood, historic earthquakes) (Pickart and Hesp 2019).

Therefore, there is not a strong argument that significant impacts on wetlands could occur, either directly or indirectly, as a result of the project.

(d, e, f) No Impact: The site contains no known native resident or migratory fish or wildlife corridors or native nursery areas and if corridors were present, the project would not affect them because there would be no tree removal as part of the project. Local policies promote dune restoration and the protection of ESHAs and wetlands. There are no habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans for the project location; thus, the project does not conflict with any such plans.

The project is consistent with the Humboldt Bay National Wildlife Refuge Complex Comprehensive Conservation Plan/Final Environmental Assessment (CCP/EA) that was prepared for the northern dune additions to Humboldt Bay National Wildlife Refuge (USFWS 2009). The proposed project is consistent with Goal 2 of the CCP/EA, which is to "Conserve and restore globally rare dune and dune forest habitats, and support recovery of threatened, endangered and endemic species." The proposed project is also consistent with Goal 3 of the CCP/EA, which is to "Conserve and restore all refuge habitats through prevention and control of invasive plants and animals."

The proposed project is consistent with the Recovery Plan for the Humboldt Bay wallflower and beach layia (USFWS 1998), which calls for additional restoration through removal of European beachgrass. The proposed project is also consistent with the development policies detailed in Section 3.27, *RECREATION*, and Section 3.30, *NATURAL RESOURCES PROTECTION POLICIES AND STANDARDS* of the Humboldt Bay Area Plan of the Humboldt County Local Coastal Program (LCP) (Humboldt County 2014). The Humboldt County LCP was effectively certified by the California Coastal Commission in 1986 and has policies to protect ESHAs including dune habitats. The LCP was amended in 1993 to incorporate the Beach and Dunes Management Plan (Humboldt County 1993). The Humboldt County LCP is found in Appendix E of the Humboldt County General Plan (Humboldt County 2017).

Mitigation:

Mitigation Measure BIO-1: Conduct Biological Survey, Establish Avoidance Measures, and Monitor Populations. Areas subject to disturbance during implementation of the Restoration Plan will be surveyed by the Restoration Manager or a qualified botanist appointed by the Restoration Manager before the commencement of any restoration work. The botanical surveys will occur during seasonally appropriate periods of time in accordance with CDFW-recommended

protocols for surveying and evaluating impacts on special-status plants (CDFW 2018). The botanical surveys will recommend avoidance measures and the FOD plans to monitor populations following restoration activities. Any restoration work in occupied areas will be directly overseen by the Restoration Manager to avoid the disturbance or removal of endangered plant species. Further, the following species-specific measures have incorporated the USFWS comment pertaining to their approval of the CDP application amendment (Tharratt 2017; Watkins 2015).

a. **Beach layia**: Plants are most sensitive during the flowering period (typically March to July) when flowers could be crushed preventing seed dispersal. During this season, restoration work will avoid areas with dense beach layia populations, particularly prior to their going to seed in July, and the treatment method will be limited to hand pulling or manual digging of invasive species after they have gone to seed. Any beach layia population boundaries present will be clearly identified and flagged (**MM BIO-2**), and the flagging monitored during work days.

b. **Humboldt Bay wallflower**: Restoration activities will generally avoid areas with individual plants. When wallflowers are present in areas of active restoration, all visible plants will be marked with an adjacent pin flag by the Restoration Manager to avoid trampling through careful avoidance of the species locations. The treatment method in these areas will be limited to hand pulling or manual digging of invasive species.

c. **Other special-status plants**: The Restoration Manager or a qualified botanist appointed by the Restoration Manager will survey and map any other special-status plant populations during seasonally appropriate periods prior to implementation of any restoration plan.

Mitigation Measure BIO-2: Delineate Work Limits to Avoid Sensitive Biological Resources. Before starting restoration projects, sensitive biological resource areas within and adjacent to restoration work areas will be staked and flagged by the Restoration Manager or biological monitor (**MM BIO-1**) so that any potential impacts on the plant populations or sensitive resources may be avoided. Any demarcated areas will be inspected daily throughout work periods to ensure that they are visible for all restoration personnel. Any piles of removed nonnative plants or other work-related materials will be located outside of all the flagged special-status plant or other sensitive biological resource areas, preferably in areas of clear sand to avoid native dune mat plant species to the extent feasible.

Mitigation Measure BIO-3: Provide Worker Environmental Awareness Training. Work crews will be trained to identify and avoid sensitive biological resource areas. The FOD will provide environmental awareness training before starting restoration activities for all technician or volunteer personnel (including new personnel as they are added to the project). This training will be given by the Restoration Manager, or other qualified botanist appointed by the Restoration Manager, to help the trainees understand the following:

- Surrounding common and special-status species and their habitats
- Sensitive natural communities and ESHAs
- Applicable regulatory requirements
- Specific avoidance measures prescribed by the Restoration Manager or appointed botanist to minimize impacts on sensitive resource areas

Mitigation Measure BIO-4: Limit Use of Grass Flaming in Sensitive Areas: Grass flaming and duff removal methods will not be utilized in areas known to be occupied by special-status plants based on seasonally appropriate botanical surveys conducted the season proceeding restoration projects (**MM BIO-1**).

Mitigation Measure BIO-5: Yellow Bush Lupine Treatment. Removal of yellow bush lupine in special-status plant areas will take place following seed dispersal for beach layia (after June 30). However, if mature lupine pods are present in these areas, the Restoration Manager could carefully remove them.

Mitigation Measure BIO-6: Delineate Wetlands. Areas subject to disturbance during implementation of the Restoration Plan will be surveyed by the Restoration Manager or a qualified wetland scientist appointed by the Restoration Manager and any wetlands encountered will be flagged. The Restoration Manager will be able to identify wetland traits and vegetation, and restoration technicians, work crews, and volunteers will be trained to identify wetland traits and vegetation to ensure avoidance of wetlands during or on the way to restoration activities. Work crews and volunteers will be overseen by the Restoration Manager or by restoration technicians when working adjacent to an area with wetland vegetation (**MM BIO-1**). Routes to off-trail work sites will avoid wetlands.

V. Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Affected Environment:
The California Historical Resources Information System (CHRIS) Northwest Information Center (NWIC) in Rohnert Park maintains the California Office of Historic Preservation cultural resource records for Humboldt County. On June 2, 2015, the NWIC provided record search results for the project area. The records noted that an archaeological study was conducted over the entire former Barr parcel and found no cultural resources (study #866, Benson et al. 1977). THPOs from the Bear River Band of the Rohnerville Rancheria, Blue Lake Rancheria, and Wiyot Tribe were also referred to the project. The Wiyot Tribe stated that since the restoration work would create a minimum of ground disturbance and would not disturb any known cultural resources that the project could be conditioned with only an inadvertent discovery protocol. The Blue Lake Rancheria and Bear River Band of the Rohnerville Rancheria THPOs noted that a field visit was conducted in 2014, recommended approval with no further study, and recommended the project also be conditioned with an inadvertent discovery protocol.

Impact Analysis:

(a, b, c) Less than Significant with Mitigation Incorporated. As described in the Restoration Plan (Attachment A), cultural resources management will be integrated into this plan by the following:

- As funding allows, the Executive Director will coordinate with the Wiyot area THPOs to obtain the services of a qualified professional archaeologist with local experience to design a research plan and supervise a complete, systematic survey of the property included in this Restoration Plan. Work will be performed in accordance with the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 *Federal Register* 44716), and guidance on formal site recordation per the CHRIS survey coverage may be completed in blocks of land, based on priorities for restoration activities and on predictive models of archaeological

sensitivity.

- The Restoration Manager will provide volunteers, as part of the orientation before every restoration event, a Wiyot Land Acknowledgement, and the inadvertent discovery protocol (**MM CUL-1**).

The Wiyot Tribe stated that since the restoration work would create a minimum of ground disturbance and would not disturb any known cultural resources that the project could be conditioned with only an inadvertent discovery protocol. The impact is less than significant with implementation of **MM CUL-1**.

Mitigation:

Mitigation Measure CUL-1: Inadvertent Discovery Protocol. If cultural resources are encountered during construction activities, the contractor onsite will cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist and the appropriate THPOs will be contacted to evaluate the discovery and, in consultation with the applicant and the lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety Code Section 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242. If the Coroner determines the remains to be Native American, the Native American Heritage Commission (NAHC) will then be contacted by the coroner to determine appropriate treatment of the remains pursuant to Public Resources Code (PRC) Section 5097.98. Violators will be prosecuted in accordance with PRC Section 5097.99.

VI. Energy

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				X
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

Affected Environment:
No energy-demanding development is planned.

Impact Analysis:

(a, b) No Impact: Habitat restoration work would be completed by hand using no mechanized equipment. Volunteers and FOD staff trips to restore the parcel or repair, replace, or install fences, trail signs, and a staircase were determined to not be excessive, wasteful, or to conflict with local plans. Therefore, no impacts related to energy resources would occur.

Mitigation: None required.

VII. Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X

Affected Environment:
Humboldt County is a relatively hazardous area in terms of land sliding and soil erosion, and an extremely hazardous area in terms of ground shaking and fault rupture. Humboldt County is located within two of the highest of five seismic risk zones specified by the Uniform Building Code. The subducting Gorda and Juan de Fuca Plates form the Cascadia Subduction Zone, which runs north offshore of Humboldt County, Del Norte County, Oregon, and Washington. Research shows that this system produced a series of great earthquakes (magnitude 8 to 9) over the last 20,000 years at intervals of 300–500 years. The last great earthquake occurred about 300 years ago (Humboldt County 2017).

The coastal topography of the Samoa Peninsula is predominantly flat to gently rolling, with dunes on the landward side of the beach. The Samoa Peninsula is made up of typically well-drained soils (coarse sands) and topographic features that do not require addressing runoff issues.

Impact Analysis:

(a.i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

No Impact: The project site is outside an Alquist-Priolo Earthquake Fault Zone. The subject parcel is in an area mapped on the County's Geologic Hazard Map as having low to moderate instability (Humboldt County 2022). Proposed restoration activities that increase diversity and enhance natural dune processes would not produce substantial erosion. All activities associated with the project would not expose people or structures to potential substantial adverse effects from rupture of a known earthquake fault, strong seismic ground shaking, or seismic-related ground failure. The project is not within an area subject to landslides (Humboldt County 2022); therefore, the project would not expose people or structures to risk of lost, injury, or death involving known earthquake faults.

(a ii, iii) Strong seismic ground shaking? Seismic-related ground failure, including liquefaction? Landslides?

Less-than-Significant Impact: The project site is partially located in the tsunami evacuation zone. In the Manila area, restoration has focused primarily on the foredune and the relatively low dune ridges east of it. To the west, north and south of the site are parabolic dunes that have been partially or wholly stabilized. Local geomorphologists agree that any protection the foredune would provide, especially in the case of a major Cascadia earthquake event, would be minimal. The current potential tsunami inundation mapping from the California Geologic Survey (CGS) suggests the worst-case tsunami scenario would completely overtop the foredunes on the entire North Spit regardless of whether or not restoration is done on the foredune, or interior dunes. According to the CGS, the large parabolic dunes inland from the coastline (for example, the dunes west of the community of Manila) are what provide the community of Manila refuge from direct oceanic tsunamis surges, although most of the peninsula would subsequently be inundated. Inundation of Manila, when and if it occurs during the largest of tsunamis, would most likely occur due to surges transmitted into the Humboldt Bay (eastern) side of the community, not from the side protected by the large coastal dunes. Restoration does not increase the community's vulnerability to tsunamis and continues to be important in helping to restore ecological resiliency to a rare habitat (Cal Poly Humboldt 2022; Hart and Knight 2009). Additionally, the nearby tsunami evacuation site is well marked and visitors would be directed to go there in the case of a large earthquake or tsunami siren.

The subject site is in an area mapped as potential liquefaction (Humboldt County 2022). The proposed project is not expected to place people at an increased additional risk as the potential liquefaction is not confined the FOD property and would generally affect the broader region.

(b) Result in substantial soil erosion or the loss of topsoil?

Less-Than-Significant Impact: The Humboldt County Beach and Dune Management Plan states "restoration activities which remove exotic species could potentially trigger erosional effects, and such effects may in turn impact adjacent habitats and uses." Vegetation restoration activities would address potential erosional impacts in their design and implementation (Humboldt County 1993).

The Samoa dunes complex (Lanphere, Ma-le'l, FOD, MCSD, Samoa) generally consist of a younger system of active or recently stabilized dunes, and an older system of stabilized paleodunes (Pickart and Hesp 2019). Within this dune complex, several alternating and dynamically changing dune ecosystems can be found, including foredunes nearest the ocean and alternating or recurring series of dry sandy ridges, wetlands within deflation basins, and dune forest (Green 1999). Dune systems are naturally dynamic and sculpted by the interaction of sand deposition rates, predominant wind directions, and wind-breaks such as younger dunes and woody vegetation. At large scales, parabolic dune lenses can be seen to overrun forested dunes (Alpert and Kagan 2019). Dune systems offer important advantages and protection in the face of climate change, increased coastal erosion and flooding, and longer-term sea-level rise (Davidson-Arnott 2005; Pickart 2013). Because dunes are dynamic systems, dune migration and maintenance often involve foredune erosion and scarping and blowout formations that help the system maintain resilience in the face of large wave events

that move landward. Occasional storm-related erosion and overwash may occur locally but are generally infrequent events (Martínez and Psuty 2007; Nordstrom et al. 1997; Walker et al. 2013).

The former Barr parcel is in an area of back dune comprised in approximately equal proportions of bare open back dune and coastal forest [**Figure 2**]. Removal of invasive nonnative grasses or iceplant is not anticipated to measurably increase sand erosion rates within multi-decadal time scales given the following:

(1) The low-disturbance hand removal methods where populations of these species occur [**Figure 5**].

(2) The geomorphological position and slow mobility of the sand dune migration in the area.

(3) The Restoration Plan's (Attachment A) voluntary agreement to preserve the iceplant currently existing within 100 feet of Lupin Avenue or the adjacent private residential property line to the east due to neighbor perceptions of sand mobility. This population will be photo- and GPS-documented at its current extent, after clearing to the 100-foot boundary. Any iceplant growth beyond the documented 100-foot border will be removed to protect surrounding habitat and immediately transported off the property via the Lupin Avenue access point.

Therefore, the project would not affect soil erosion on the former Barr parcel.

(c, d, e, f) No Impact: The project is not on geologic units or soils that are unstable or that would become unstable as a result of the project (Humboldt County 2022). The project would not result in the creation of new unstable areas either onsite or offsite due to physical changes in a hill slope affecting mass balance or material strength. The project site is not on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994); therefore, the project will not create substantial risks to life or property**.** There are no septic tanks or alternative wastewater disposal systems proposed as part of the project. There are no known paleontological resources in the area. The project would have no impact on the above-mentioned resources.

Mitigation: None required.

VIII. Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Affected Environment: A greenhouse gas (GHG) is defined as any gas that absorbs infrared radiation in the atmosphere. These gases include, but are not limited to, carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. These GHGs lead to the trapping and buildup of heat in the atmosphere near the earth's surface, commonly known as the *greenhouse effect*. There is overwhelming scientific consensus that human-related emissions of GHGs above natural levels have contributed significantly to global climate change by increasing the concentrations of the gases responsible for the greenhouse effect, which causes atmospheric warming above natural conditions. Because GHG emissions are known to increase atmospheric

concentrations of GHGs, and increased GHG concentrations in the atmosphere exacerbate global warming, a project that adds to the atmospheric load of GHGs adds to the problem.

In 2002 the California legislature declared that global climate change was a matter of increasing concern for the state's public health and environment, and enacted law requiring the California Air Resources Board to control GHG emissions from motor vehicles (Health and Safety Code Section 32018.5 et seq.). In 2006, the California Global Warming Solutions Act (Assembly Bill 32) definitively established the state's climate change policy and set GHG reduction targets (Health and Safety Code Section 38500 et seq.). While methodologies to inventory and quantify local GHG emissions are still being developed, recommendations to reduce GHG emissions will be accomplished from a combination of policies, planning, direct regulations, market approaches, incentives, and voluntary efforts.

Impact Analysis:

(a) Less-than-Significant Impact: The proposed restoration work would generate very minimal GHG emissions because all work would be conducted by hand using hand tools for brief periods a year and not occur every year. The project is not anticipated to generate increased recreational traffic to FOD properties. According to FOD (pers. comm.), many of the FOD volunteer staff that would be conducting the work live in Manila, are students in Arcata, or are located in the Humboldt Bay area. Based on past comparable restoration projects, FOD anticipates approximately 40–50 total vehicle cumulative trips generated by volunteer work crews. Vehicle miles traveled would be approximately 11 miles round-trip from Humboldt State University in Arcata to the HCNC parking lot, where they will then be dropped off at the Lupin Avenue entrance. Therefore, a cumulative total of 440 to 550 miles driven by volunteers to the former Barr parcel would be a less-than-significant impact on GHG emissions because this would represent approximately 222 kilograms of CO_2 and a typical passenger vehicle emits about 4.6 metric tons (4,600 kilograms) of CO_2 per year (EPA 2022).

Mitigation: None required.

IX. Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X

e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f)	Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g)	Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?				X

Affected Environment:
The term *hazardous material* is defined by the State of California, Health and Safety Code, Chapter 6.95, Section 25501(o) as "any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment."

Impact Analysis:

(a, b, c, d, e, g) No Impact: The project would not store, transport, or use hazardous materials. The project site is not included on a list of hazardous material sites (DTSC 2018). The project site is not in an airport land use plan and there are no private airstrips in the vicinity of the project site (Humboldt County 2017, 2022). The project site has a fire hazard severity rating of nil (Humboldt County 2022). Therefore, the proposed project would have no impact related to hazards and hazardous materials.

(f) Less-than-Significant Impact: The project site is partially located in the tsunami evacuation zone. The nearby tsunami evacuation site is well marked and visitors would be directed to go there in the case of a tsunami siren. The proposed project is not expected to exacerbate this existing hazard and would not interfere with emergency response plans.

Mitigation: None required.

X. Hydrology and Water Quality

Would the project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?				X
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner, which would:				X
	(i) result in substantial erosion or siltation on- or off-site;				X
	(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;				X

	(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				X
	(iv) impede or redirect flood flows?				X
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

Affected Environment:
The surface water resources near the project site include the Pacific Ocean to the west and Humboldt Bay to the east. The entire project area is within the Eureka Plain watershed. The watershed encompasses Humboldt Bay and the watersheds that drain into Humboldt Bay—primary among them, Jacoby Creek, Freshwater Creek, Salmon Creek, and Elk River. Wetlands are present throughout the FOD property and the former Barr parcel [**Figure 6**] and require special consideration to protect their ecological services. As discussed in Section IV, *Biological Resources*, recent correspondence with the North Coast RWQCB (Bargsten pers. comm.[a],[b]), has clarified that invasive species removal would not normally rise to the need for a dredge and fill 401 Water Quality Certificate permit unless it permanently and adversely affects waters and wetlands of the state.

Impact Analysis:

(a, b, c, d, e) No Impact: The project would not discharge any substances, waste, or pollutants onto the ground. The project would not utilize any groundwater supplies. The project site is not in a water quality control plan area or sustainable groundwater plan, nor in a groundwater basin. There are no streams or other watercourses on the project site, nor does the project include the addition of impervious surfaces. The project would have no impact on hydrology or water quality. As noted above, the project site is in a tsunami evacuation zone; however, there is no risk of release of pollutants associated with the proposed project.

Mitigation: None required.

XI. Land Use and Planning

Would the project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a)	Physically divide an established community?				X
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

Affected Environment:
The Samoa Peninsula is a sparsely populated, narrow coastal landform known as a spit that forms a barrier between the Pacific Ocean to the west and Humboldt Bay to the east. Connected to the mainland on the northern end, it is accessible from the city of Arcata, which is at the north end of Humboldt Bay. Existing land uses in the project vicinity are undeveloped dune systems to the north, MCSD holding ponds to the west, and residential uses generally concentrated in the unincorporated community of Manila to the south and east, which predominantly have single-family residences with some multifamily developments.

Impact Analysis:

(a and b) No Impact: The project would provide habitat restoration and trail work on undeveloped land. No aspect of the project would physically divide an established community. The land uses would not change and there would be no land use impact.

Mitigation: None required.

XII. Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Affected Environment:
No mineral resource areas of value to the region or residents of the state, or of local importance are present near the project (Division of Mine Reclamation 2016). The closest active quarry (stone) is the Halvorsen Quarry northeast of the city of Eureka.

Impact Analysis:

(a, b) No Impact: The project does not involve extraction of mineral resources. The project site is not adjacent to a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, the proposed project would have no impact on mineral resources.

Mitigation: None required.

XIII. Noise

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or ground borne noise levels?				X
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

Affected Environment: Noise-sensitive land uses generally are defined as locations where people reside or where the presence of unwanted sound could adversely affect use of the land. Noise-sensitive land uses typically include single-family and multifamily residential areas, health care facilities, lodging facilities, and schools. Recreational areas where quiet is an important part of the

environment also can be considered sensitive to noise. There are three residences within 100 feet of Lupin Drive access gate replacement project.

The ambient noise environment in the project area and in the vicinity is characteristic of a rural environment (e.g., minimal local traffic and aircraft overflights, industrial noise sources). Vehicle traffic on local roadways such as New Navy Base Road and Lupin Avenue, all-terrain vehicles on the beach, and aircraft overflight noise are the dominant noise sources in the area. Natural noise sources, such as bird vocalizations, leaves rustling in the wind, and waves breaking at the shoreline, are also audible in the project area.

Impact Analysis:

(a) Less-than-Significant Impact: The project would create short-term noise associated with removal of the existing gate and installation of the new entry gate. These would be noises normally associated with small house-improvement type construction. Construction is anticipated to involve hand tools and to occur for a maximum of 3 days during daylight hours only. Work crews would notify the residents of work days as a courtesy. Therefore, the temporary noise impacts of construction would be a less-than-significant impact.

(b and c) No Impact. No aspect of the proposed project would create excessive groundborne vibration or groundborne noise levels. The project site is out of the vicinity of any private airstrip or airport use plan, and more than 2 miles from any airport. There is no evidence that project activities would generate substantial noise exceeding that which is normal for the area and allowable by Humboldt County Code.

Mitigation: None required.

XIV. Population and Housing

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and/or businesses) or indirectly (e.g., through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Affected Environment: The former Barr parcel site is in Census Tract 13, Census County Division Manila 45414 in Humboldt County, which covers the Manila area on the Samoa Peninsula, has an estimated population of 1,320 (US Census 2022). No federal or state laws relevant to population and housing apply to the project. The project would not involve acquisition of any property or relocation of any existing residents, businesses, or other uses. No housing goals or policies are applicable to the project area or project activities.

Impact Analysis:

(a, b) No Impact: There is no housing proposed as part of the project; therefore, there would be no impact on population and housing.

Mitigation: None required.

XV. Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Fire protection?				X
b) Police protection?				X
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X

Affected Environment: Because the restoration site is in an unincorporated area known as Manila, the city of Arcata would provide most of the fire, police, and school services.

Impact Analysis:

(a, b, c, d, e) No Impact: The project would demarcate existing trails and restore habitat and would support the existing population. There is no evidence that it would generate a need for new public service buildings or additional services. Therefore, the project would have no impact on public services.

Mitigation: None required.

XVI. Recreation

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Affected Environment: The project focuses on developing managed public access through designating two of several existing user-created (informal) routes to establish a pedestrian/equestrian trail that provides access to the beach and connection to other trails, and a narrow, carefully managed pedestrian-only trail through rare and sensitive plant habitat that is being negatively affected by foot traffic. To promote responsible public access on the parcel, FOD proposes to do the following.

(1) Create a trailhead allowing equestrian and pedestrian access at 365 Lupin Avenue in Manila by replacing the existing gate with an equestrian-friendly gate that prevent off-highway vehicle access, with a "No Parking" sign [**Figure 8**].

(2) Establish two designated trails on a trail map post directing hikers and equestrians from the trailhead of the South Beach Access trail (equestrian and pedestrian) and the Ridge

Connection trail (pedestrian only), both of which will connect to existing trails leading to and from HCNC or the beach [**Figures 7 and 10**].

(3) Close unauthorized user-created routes [**Figure 6**] to consolidate use onto the designated trail system and facilitate restoration activities for two endangered plants and native dune mat communities considered a rare or sensitive habitat by CDFW and an ESHA under the California Coastal Act.

(4) Install a crib staircase [**Figure 9**] and symbolic rope fence as needed on the pedestrian-only Ridge Connection trail to reduce erosion and demarcate a clear trail through the dune mat sensitive natural community. If these measures are not sufficient to protect sensitive habitat, the trail will be rerouted to mitigate for impacts at a future date.

Within the vicinity of the project are the Manila Dunes park to the west which cross public lands managed by MCSD and which are also accessed from Lupin Drive. The Manila Community Park and the Manila Bay Community Disc Golf course are east on Lupin Drive until it turns into Manila Drive, approximately 0.25 mile east of the project's access gate.

Impact Analysis:

(a, b) Less-than-Significant Impact: The project includes managing access to a neighborhood trailhead by replacing a fence with one that more easily permits equestrian traffic. Access to the trailhead would only be restricted during the maximum of 3 days of construction that is anticipated. User-created trails would be consolidated to two existing trails, which would be more clearly demarcated with trail signs. The closure of user-created routes in the areas between the Beach Access trail and Ridge trail are required to balance the needs of the sensitive plant community with the neighborhood hiking and equestrian traffic. The existing trails are actively maintained by the FOD and their consolidation to fewer trails is not anticipated to significantly degrade the habitat or recreation ability on the remaining trails in existence. It is not anticipated that it would substantially increase the use of the trail such that substantial physical deterioration would occur. Therefore, the trail improvements/consolidation and habitat restoration will result in a less-than-significant impact on recreation use on lands managed by MCSD, FOD, or BLM.

Mitigation: None required.

XVII. Transportation

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				X
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?				X
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d) Result in inadequate emergency access?				X

Affected Environment: The project trailhead on Lupin Drive is accessed from State Route 255 (Samoa Boulevard) south and west from Arcata. Lupin Drive is not part of the County circulation system. Lupin Road may be partially encroached upon as part of the gate replacement effort that is

estimated to take a maximum of 3 days. The managed access and dune invasive plant removal efforts are not anticipated to increase traffic to the FOD-managed lands, given the majority of visitors access FOD property from the HCNC parking lot on Stamps Road and there is no parking on Lupin Avenue. Instead, it is anticipated that the majority of users of the Lupin Avenue trailhead will be local pedestrians, cyclists, and equestrians.

Impact Analysis:

(a, b, c, d) No Impact: The project would not block any roads or change traffic volume on area roadways including Lupin Avenue and State Route 255; therefore, the project would not conflict with established measures of effectiveness stated in a plan, ordinance, or policy.

CEQA requires analysis of a project's potential growth-inducing impacts (PRC Section 21100, subd. (b)(5); CEQA Guidelines Section 15126.2, subd. (d)). CEQA Guidelines Section 15064.3(b) indicates that vehicle miles traveled is the most appropriate measure for transportation impacts. In December 2018, the Governor's Office of Planning and Research provided an updated Technical Advisory to evaluate transportation impacts in CEQA. In particular, the advisory suggests that a project generating or attracting fewer than 110 one-way trips per day generally may be assumed to cause a less-than-significant transportation impact (OPR 2018).

Given the trail improvements and restoration is not anticipated to generate additional recreation traffic, the only traffic generated would be that used during construction of the replacement gate, installation of trail signs, and volunteer and FOD staff trips to conduct restoration work. All construction and restoration activities, including the need for re-treatment of grass removal areas, would generate approximately 40–50 total vehicle trips by volunteer work crews. Vehicle miles traveled would be approximately 11 miles round-trip from Humboldt State University in Arcata to the HCNC parking lot, where they would then be dropped off at the Lupin Avenue entrance. Therefore, a cumulative total of 440 to 550 miles driven (over next 10 years) by volunteers to the former Barr parcel would be a less-than-significant impact on vehicle miles traveled at a rate less than generating one new one-way trip per day.

The trailhead gate would be designed to accommodate neighborhood access and emergency vehicles, and no additional parking would be provided as a part of the project. There would be no anticipated impacts on emergency access. There is no evidence that the proposed project would affect transportation infrastructure.

Mitigation: None required.

XVIII. Tribal Cultural Resources

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resource Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resource Code section 5020.1(k), or		X		

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		X		

Affected Environment: Under Assembly Bill 52, lead agencies must avoid damaging effects on tribal cultural resources, when feasible, whether consultation occurred or is required. Humboldt County Planning contacted the NAHC, which maintains two databases to assist specialists in identifying cultural resources of concern to California Native Americans (Sacred Lands File and Native American Contacts). A request was sent to the NAHC for a Sacred Lands File search of the project area and a list of Native American representatives who may be able to provide information about resources of concern within or adjacent to the project area.

On June 2, 2015, the NWIC provided record search results for the project area. The records noted that an archaeological study was conducted over the entire former Barr parcel which found no cultural resources (study #866; Benson 1977). The THPOs from the Blue Lake Rancheria, Bear River Band of the Rohnerville Rancheria, and Wiyot Tribe were also referred to the project. Dr. Thomas Torma, Cultural Director of the Wiyot Tribe responded on June 5, 2015. Erika Cooper, THPO for the Bear River Band of Rohnerville Rancheria and Janet Eidsness, THPO for the Blue Lake Rancheria responded on June 16, 2015.

Impact Analysis:

(a i, ii) Less than Significant with Mitigation Incorporated: The three responding tribes noted that since the restoration work would create a minimum of ground disturbance and would not disturb any known cultural resources that the project could be conditioned with only the inadvertent discovery protocol (**MM CUL-1**). Further, as described in Section V, *Cultural Resources*, the Restoration Plan (Attachment A) has integrated respect and concern for cultural resources into their restoration planning by implementing the following:

- As funding allows, the Executive Director will coordinate with the Wiyot area THPOs to obtain the services of a qualified professional archaeologist with local experience to design a research plan and supervise a complete, systematic survey of the property included in this Restoration Plan. Work will be performed in accordance with the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 *Federal Register* 44716), and guidance on formal site recordation per the CHRIS survey coverage may be completed in blocks of land, based on priorities for restoration activities and on predictive models of archaeological sensitivity.
- The Restoration Manager will provide volunteers, as part of the orientation before every restoration event, a Wiyot Land Acknowledgement, and the inadvertent discovery protocol (**MM CUL-1**).
- For any archaeological sites recorded on the property, the Executive Director and Restoration Manager will coordinate with THPOs and avoid ground-disturbing restoration activities in these areas in order to protect cultural resources.

Mitigation:

Mitigation Measure CUL-1: Inadvertent Discovery Protocol. If cultural resources are encountered during construction activities, the contractor onsite will cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist and the appropriate THPOs will be contacted to evaluate the discovery and, in consultation with the applicant and the

lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety Code Section 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242. If the Coroner determines the remains to be Native American, the NAHC will then be contacted by the coroner to determine appropriate treatment of the remains pursuant to PRC Section 5097.98. Violators will be prosecuted in accordance with PRC Section 5097.99.

XIX. Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				X
b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				X
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X

Affected Environment: The MCSD provides wholesale and retail water services to the Manila community. The water services district maintains two separate pipeline systems delivering treated drinking water and untreated raw water (for irrigation purposes) to its customers in the area. The project would not use any water for operations.

Impact Analysis:

(a, b, c, d, e) No Impact: The proposed project is for habitat restoration and demarcation of existing trails. The project does not involve construction of new water or wastewater treatment facilities. The project would not create any new stormwater sources or require construction of new stormwater drainage, electric power, telecommunication, or natural gas facilities. Water required for personal consumption and sanitary purposes would be minimal. Supplies would be portable and brought onsite for the duration of project activities. After the project is complete, no additional water usage would be necessary. The project would not generate wastewater that would require treatment by the central sewer treatment system in the town of Manila.

Mitigation: None required.

XX. Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Affected Environment:
The project site is on the Samoa Peninsula in the unincorporated community of Manila, which is in a Local Responsibility Area for fire suppression. Fire suppression services in the project vicinity are provided by facilities in the Arcata Fire Protection District.

Impact Analysis:

(a, b, c, d) No Impact: The project site has a combined wildfire hazard severity rating of moderate and high (Humboldt County 2022). The project would not exacerbate the existing hazard ratings as the restoration would remove more flammable nonnative grasses to allow more dispersed native dune mat plants to colonize. Ignition sources could include flaming of invasive nonnative plants at some time in the future, were they to become considerably more densely packed. For the foreseeable future, no flaming techniques are anticipated in order to protect native plants and ground-nesting bees that may occur on the former Barr parcel. If flaming were to be employed, the effort would be conducted by the Restoration Manger, trained staff, and with adequate and seasonably appropriate fire protection measures. There would be no impact on wildfire suppression infrastructure and project access gate construction would not hinder any potential emergency response (Section XV, *Public Services*) or impair an adopted emergency response plan or emergency evacuation plan.

Mitigation: None required.

XXI. Mandatory Findings of Significance

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

Impact Analysis:

(a) Less than Significant with Mitigation Incorporated: Long-term goals of the restoration activities would benefit dune-adapted special-status species by directly addressing two of the principal threats to the recovery of these species: habitat loss and competition with nonnative, invasive species. Furthermore, the closure of user-created routes on the former Barr parcel and in the areas between the Beach Access trail and Ridge trail that are not part of the designated trail system [**Figure 6**] would consolidate access to the designated trail system and protect native habitat by reducing habitat fragmentation and potential direct trampling impacts by hikers and equestrians.

Restoration activities would be accomplished with no adverse impacts on visible pink sand verbena, dark-eyed gilia, Humboldt Bay wallflower, and beach layia (i.e., non-seedling, juvenile or reproductive individuals), because controlled activities in and adjacent to mapped special-status plant populations will be carried out with guidance from the Restoration Manager, and under supervision of trained restoration technicians or volunteers. Avoidance, minimization, and mitigation measures for avoiding impacts on special-status plant species include **MMs BIO-1** through **BIO-5**. These MMs will result in a less-than-significant impact on special-status plant populations.

(b) Less-than-Significant Impact: The FOD property is in an area with other properties owned or managed by several different entities that have completed or ongoing dune restoration activities, including USFWS, BLM, MCSD, and private landowners. These areas contain both restored and degraded dune mat plant communities. Restoration activities including removal of nonnative, invasive plants and replanting of native vegetation have taken place in this area over the last 25 years, and these areas now primarily support the native dune mat species (McDonald 2015; USFWS 2013). Dune mat plant communities, as well as beach pine forest communities, are considered a sensitive natural community by CDFW (CDFW 2022).

The Restoration Plan used throughout the FOD-managed properties has evolved and continues to evolve with minor updates formed under an adaptive management framework, meaning that the outcome of treated areas is monitored, and adjustments made to invasive plant removal techniques (Attachment A). If site conditions change rapidly (e.g., newly discovered populations of invasive

species, rapid spread of established populations) and funding or other issues require a change in priority of restoration areas, FOD will document the rationale for changes of policy. Prioritization of invasive species removal is based on the relative impact of an invasive species on the population or natural community in question, invasiveness of the species, and feasibility of eradication as plant populations change. All changes in priorities must be submitted to and approved by the FOD Stewardship Committee, the FOD Board and the Stamps Family Trust as it pertains to their property. All adaptive management policies would follow appropriate measures to protect all special-status species and avoid wetlands, as outlined in the Restoration Plan (Attachment A).

Photo-monitoring plots have been established in former European beachgrass, iceplant, and yellow bush lupine areas, and are photographed every 3 years. Photo point documentation is digitally recorded using GPS with designated points and collated into monitoring reports that can inform methods of removal and re-prioritization of target species. For instance, on the foredune (not project parcel), current methods of beachgrass removal will occur in a checkerboard pattern by removing patches no larger than 200 feet long (north to south), and leaving untreated alternating patches of approximately the same size intact along the foredune, in order to monitor how this method could reduce wind-blown erosion potential, consistent with the Humboldt County Beach and Dunes Plan (Humboldt County 1993).

Based on the project as described in the administrative record, comments from reviewing agencies, a review of the applicable regulations, and discussed herein, the Planning Department finds there is no significant evidence to indicate the project would cause substantial adverse environmental effects, either directly or indirectly.

(c) No Impact: Staff finds no evidence that the project would significantly degrade the quality of the environment, which would cause substantial adverse effects on human beings, nor would it have impacts that are individually limited but cumulatively considerable. The enhanced human access, restored native dune mat ecosystem and resulting native diversity, and better connectivity to the greater trail network are all beneficial outcomes of the project. Based on the project as described in the administrative record, comments from reviewing agencies, a review of the applicable regulations, and discussed herein, the Humboldt County Planning Department finds there is no significant evidence to indicate the project would have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

CHAPTER 3. REFERENCES

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Attachment 4

REFERRAL AGENCY COMMENTS AND RECOMMENDATIONS

The project was referred to the following referral agencies for review and comment. Those agencies that provided written comments are checked off.

Referral Agency	Response	Recommendation	Location
Building Inspection Division	✓	Approval	On file
Division Environmental Health	✓	Approval	On file
Public Works, Land Use Division	✓		
Northwest Information Center	✓	Contact Local Tribes	On file
Blue Lake Rancheria	✓	Conditional Approval	On file and confidential
Wiyot tribe	✓	Conditional Approval	On file and confidential
California Department of Fish & Wildlife			
US Fish and Wildlife Service	✓	Approval	**Attached**
Bear River Band			
California Coastal Commission			
Manila CSD			
Regional Water Quality Control Board	✓	Approval	**Attached**

Lippre, Suzanne

From: Tharratt, Susie <susie_tharratt@fws.gov>
Sent: Wednesday, February 22, 2017 5:26 PM
To: Nielsen, Michelle; Planning Clerk
Cc: Laurel Goldsmith; Kathleen Brubaker
Subject: Fwd: Friends of the Dunes revised project application, Apps #9175
Attachments: 9175_ref_USFWS.pdf; REVISED FOD_CDP_09_14_16.pdf; 10.21.16 revised referral pacekt.pdf; USFWS9175ReferralForm.pdf

Ms. Nielsen,

Thank you for the opportunity to review and comment on the subject's revised Coastal Development Permit Application, submitted by the Friends of the Dunes (FOD) for the proposed Barr Property Train and Habitat Enhancement Project. The revised project proposal was initially received by your office on September 14, 2016 and received via hard copy in our office on October 25, 2016. An additional inquiry was received via email on January 6, 2017, from yourself, to Mr. John Hunter (see below).

Mr. Jim Watkins, of the U.S. Fish and Wildlife Service, provided initial review and comment from this office, in an email dated June 16, 2015, on the original proposal, and provided general support of the project and some comments. In particular, Mr. Watkins recommended, as conservation measures, the use of buffers around listed plants during hand-pulling of non-natives, and conducting hand-pulling after plants have had the opportunity to 'go to seed' in order to 'ensure maximum reproductive success.'

As a point of clarification, the Humboldt Bay wallflower (*Erysimum menziesii* ssp. *eurekense*) is a moncarpic perennial, which flowers and produces fruit (elongate seed capsules) only once during its life, after which it dies; this species forms a basal rosette of leaves that may persist for up to 8 years before flowering. Because this species disperses it seeds over a longer period of time, staged restoration activities may likely proceed before all *E. m.* ssp. *eurekense* have fruited and dehisced. Therefore, in environmentally sensitive habitat area (ESHA) where listed plant species occur and where restoration or trail improvements are to be implemented, careful avoidance of disturbing the wallflower's mature seed capsules is warranted and advised. The FOD, as a best management practice, should train restoration personnel to identify invasive and non-invasive plants on-site and in fruiting form and, as needed provide identification guides or oversight to construction staff who are engaged in permitted activities within the ESHA.

Having reviewed the revised proposal, dated September 12, 2016, and supporting documentation, and based on additional informal calls regarding the project by I and Laurel Goldsmith (botanist) of our office, **we recommend approval**.

If you have questions regarding our recommendation to approve, please feel free to contact me at the telephone number or address provided below.

Thank you.

Susie

North Coast Regional Water Quality Control Board

Joshua Z. Dorris, Planner
Current Planning
Humboldt County Planning & Building Department
jdorris@co.humboldt.ca.us

Subject: Humboldt County Planning Commission Coastal Development Permit referral: Barr Property and Friends of the Dunes Restoration

Dear Mr. Dorris,

The North Coast Regional Water Quality Control Board (Regional Water Board) appreciates the opportunity to comment on the Initial Study Coastal Development Permit for Dune Habitat Restoration Activities at the Humboldt Coastal Nature Center, Manila area. The proposed "Barr" project in the referral package describes public access, trail discontinued use, non-native invasive plant species management and restoration of native dune plant communities and functions. Restoration activities are proposed to be conducted in accordance with the draft final Humboldt Coast Nature Center Restoration Plan (November 2019). We appreciate the supplemental information supplied along with phone consultation with up-to-date project refinements. Additionally, Regional Water Board Staff conducted a site visit of the "Barr" project site and restoration sites on September 30, 2019.

The Regional Water Board issues Water Quality Certifications through the Clean Water Act and Waste Discharge Requirements authorizing dredge and fill activities within waters of the US and State including wetlands. The referral activities described at the Barr Property and the Restoration Plan describe avoidance of wetlands and identify activities in uplands. If waters of the US and State will not be directly dredged or filled for these activities listed and will be avoided during dune restoration actions, then a Water Quality Certification or Waste Discharge Requirements would not be required. See our webpage for further information if necessary: https://www.waterboards.ca.gov/northcoast/water_issues/programs/water_quality_certification/ .

The draft final Humboldt Coast Nature Center Restoration Plan (November 2019) describes restoration activities including management of specific non-native invasive dune plants, and states that the "primary goal of this plan is restoration of the natural diversity of plants, wildlife and natural dune processes". The Regional Water Board supports aquatic ecosystem restoration as outlined in the "Policy in support of restoration in the North Coast Region", Resolution No. R1-2015-0001 found here: https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/161116/161115_Regional_Board_Resolution.pdf . The Restoration Plan states that jurisdictional wetlands (as defined by the State Water Resources Control Board, April 2, 2019) including specific reference to onsite willow-dominated wetlands will be avoided during restoration activities. Identifying jurisdictional wetlands requires specialized training and assessment of soils, hydrology and vegetation. When restoration activities are proposed adjacent to, and avoiding, jurisdictional wetlands they should be clearly identified by qualified personnel for avoidance, as outlined in the Restoration Plan (November 2019) Implementation Plan and Resource Protection Measures sections. The Restoration Plan states no work will be conducted within wetlands, so dredge and fill permitting would not be necessary. After upland dune restoration activities are implemented, wind-driven naturally-functioning dynamic dune process and movement is not an activity that the Regional Water Board regulates nor requires permits for.

The Regional Water Board recognizes the importance of restoration of ecosystem structure, functions and biodiversity. Restoration actions within and adjacent to waters of the state enhance beneficial uses, ensure resilience to the effects of climate change, support rare and endangered species, address legacy disturbance and stressors, support habitat complexity and restore natural ecosystem process. We appreciate the opportunity to comment on the project and are a resource for any questions you may have about wetland restoration or dredge and fill permitting in the future.

Sincerely,

Gil Falcone
Senior Environmental Scientist, M.S.
Supervisor Southern NPS and 401 Water Quality Certification Unit

20200124_GBF_CDPFODBarrComments_final_Ltr

Attachment 5

PUBLIC COMMENTS

July 6, 2022

Humboldt County Building and Planning Department
3015 H Street
Eureka, CA 95501

Subject: Barr Parcel Coastal Development Permit, Friends of the Dunes Trail and Habitat Restoration Project

To Whom It May Concern:

I would like to expressing my strong support for the Trail and Habitat Restoration Project proposed by the Friends of the Dunes, and I urge your approval of the appurtenant Coastal Development Permit.

My career for the past 42 years on the North Coast was devoted about evenly to environmental consulting, including biological investigations and the related permit applications, and from the other side of the counter, resource management and regulatory administration, most recently with the U.S. Fish and Wildlife Service. When I moved here in 1981, I immediately volunteered at the Lanphere Dunes, and I have continued to be involved with the Friends of the Dunes (FOD) since its inception in the 1980's. I consider the FOD to be one of the most professional and effective environmental organizations locally, and a primary contributor in making the North Coast the very rich and diverse community it is, in so many ways. I am truly fortunate to have spent the majority of my life in this wonderful place.

I support the restoration of our unique, native coastal dunes, and I strongly support FOD's current plan for conducting restoration. Having worked with endangered species for more than four decades (and as Rare Plant Chair for the local chapter of CNPS for the past 27 years), I understand the importance of coastal dunes, which like many habitats subject to periodic disturbance, require vigilance and periodic restoration to maintain their rich biological diversity and unique habitat qualities.

I reviewed the County's CEQA document and Mitigated Negative Declaration for the project, and I believe they are thorough, and well-founded. I urge the Planning Commission to adopt the findings and issue the CDP amendment without further delay.

Thank you for the opportunity to comment on this important project.

Sincerely,

David Imper
Eureka, California

Nancy Ihara
231 Dean St.
Arcata (Manila), CA 95521

Humboldt County Planning Commission
Humboldt County Planning and Building Dept.
3015 H St.
Eureka, CA. 95501

Re. Barr Parcel Coastal Development Permit

Dear Commissioners,

Friends of the Dunes has done so much to preserve and restore Humboldt County's unique beach, dune, dune forest and wetland habitats. The Barr Parcel Coastal Development permit it is seeking will allow it to continue with this good work on the Barr parcel property, identifying trails to accomodate pedestrians and horse riders access. FOD worked diligently with folks neighboring this property to assure that the public access to the land works for them.

I live in Manila and regularly walk to the beach on a neighborhood trail nearest to me. While I truly value this access to the beach and ocean it does not compare to neighboring land, such as that owned and care for by Friends of the Dunes. Non-native plants, such

as European beach grass, ice plant, rattlesnake grass and bush lupine dominate the landscape of my trail. Restored landscapes, on the other hand, feature an array of diverse plants (with colorful and diverse flowers when in bloom): beach buckwheat, sand verbena, beach primrose, sea thrift, beach morning glory, seaside daisy, beach sagewort, pearly everlasting, beach peas, beach goldenrod and more. This diversity supports a diversity of insect life, notably the 40 plus species of solitary bees.

The Mitigated Negative Declaration for the Friends of the Dunes Trail and Habitat Restoration Project conducts a thorough impact analysis of the very limited development proposal for the Barr Parcel. I urge the Planning Commission to adopt its findings and issue a Coastal Development Permit amendment consistent with the CEQA document.

Sincerely,
Nancy Ohara

From:	Colleen Clifford
To:	Planning Clerk
Cc:	4alanbongio@gmail.com; hrh707@outlook.com; noah@landwaterconsulting.com; hcpcnewman@yahoo.com; sregon@aol.com; hcpcmccavour@gmail.com; mrbrian707@gmail.com
Subject:	Comment re: Coastal Development Permit Amendment for the Barr Parcel addition to the Humboldt Coastal Nature Center property
Date:	Tuesday, July 12, 2022 12:49:14 PM

Hello,

We are writing in support of the permit amendment for the addition of the Barr Parcel to the Humboldt Coastal Nature Center property. As longtime Manila residents, we have appreciated and been inspired by Friends of the Dunes. They are a community-minded, environmentally-forward, and scientifically-sound group that has continuously done great things for our Peninsula residents, ecosystem, and Humboldt County students. The inclusion of this parcel means more great nature trails and accessible ways for people - local and visiting - to appreciate the unique, local flora and fauna.

Friends of the Dunes has led natural dune restoration and established healthy dune ecosystems time and time again. With quality science-based research and a Mitigated Neg Dec that supports the findings showing minimal impact, the Barr Parcel can be restored to a biodiverse environment.

Please allow the update of Coastal Development Permit for the Barr Parcel addition to the Humboldt Coastal Nature Center property. In Friends of the Dunes, we couldn't ask for more dedicated stewards of this land to care for this parcel.

Thank you,

Colleen Clifford and Ian Davidson
415 Orange Dr
Manila, CA 95521
(707) 834-2870

~~281~~

July 11/22

WE SUPPORT THE APPROVAL OF THEIR PROPOSAL FOR THEIR LAND USE AND ACTIVITIES.

IT IS MY UNDERSTANDING THAT IN THE PAST THE F.O.D. HAVE RENEGED ON MANY PROMISES. WE HAVE BEEN LIED TO BY F.O.D. MEMBERS, BUT I BELIEVE MIKE HAS THE INTEGRITY TO TAKE F.O.D. PAST THE PREVIOUS TENURE AND ACTUALLY KEEP HIS WORD AND BUILD BACK THE CREDIBILITY OF THIS ORGANIZATION

WE HOPE THAT THEIR ENDEVORS SUCCEED

LAURA MOORE &
IAN KUPILIK

TO: HCPC

WE OWN THE PROPERTY TO THE EAST SIDE OF THE BARR PROPERTY AT 345 LUPIN DR.

WE FEEL THAT MIKE SIPRA HAS COMPLETELY MET AND MITIGATED OUR CONCERNCES ABOUT FRIENDS OF THE DUNES PROPOSAL REGARDING THE IS/MND FOR CDP06-MMXM(BARR). OUR NEIGHBOR FEELS LIKE IT IS NOT A "BINDING AGREEMENT" AS IT IS NOT A MITIGATED SOILS PLAN BUT WE ARE TRUSTING THAT (FOD) WONT CHANGE. THIS IN THE FUTURE AS PROMISED TO US EVEN AFTER EXPRESSING THESE CONCERNS TO MIKE, AND HIS ACCNKOWLEDGEMENT OF OUR CONCERNS

WE FEEL LIKE MIKE HAS RESPECTED AND MET OUR CONCERNS WITH RESPECT AND A REAL SOLUTION TO EVERY PART OF OUR DISCUSSIONS WITH H/M.

Richard Tobin
340 Lupin Ave.
Arcata, CA 95521

July 12, 2022

Planning Department,

Attached are my comments regarding the June 10, 2022, Notice Intent to Adopt a Mitigated Negative Declaration for Friends of the Dunes Trail and Habitat restoration Project.

Sincerely,

RC Tobin

FOD's Draft Restoration(DRP) plan frequently states the Restoration Manager will perform wetland delineation.

FOD must correct the DRP to reflect BIO-6.

The IS/MDN also needs to make this correction on page 36.

FOD's DRP states:

1. Wetlands will be defined as if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

2. Willow-dominated wetlands and forested dunes have been excluded from the current treatment area.

Current treatment area!

The sentence must read, " Treatment areas will avoid wetlands."

The Barr property has PSS1C wetlands, and other FOD properties have PSS1C and PSM1C wetlands.

Mitigation Measure BIO-6 reads: Delineate Wetlands. Areas subject to disturbance during the implementation of the Restoration Plan will be surveyed by the Restoration Manager or a qualified wetland scientist appointed by the Restoration Manager, and any wetlands encountered will be flagged.

The County determines the qualifications required to perform a wetland delineation, not the applicant.

The Restoration Manager and qualified wetland scientist must meet the County's qualifications.

Determine the qualifications the Restoration Manager and wetland scientist need to conduct a wetland delineation and make them a Condition of Approval.

A wetland delineation is not a FOD in-house document. FOD's CDP Application must include a certified Wetland Delineation Report like all other applicants.

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1. Wetlands on and adjacent to the Barr property require buffer areas. ¶HBAP 3.30.6.a.

2. The" boundary" of a wetland is defined on page 1, Chapter 5 of the HBAP.

3. "Wetland Buffer Areas" are defined in ¶HBAP3.30 6. a.(2).

4. "Setback" is not defined in Chapter 5 of the HBAP. However, "Setback" is defined in the Zoning Code "as a required specific distance between buildings or structures or structures and lot lines." ¶313-154.

5. The wetland buffer area for the Barr wetlands is 250 feet. ¶HBAP3.6.b.(2).

6. The principal permitted Use Type, Principal Permitted Use, and Conditional Permitted Use of (RS) properties **do not** include resource restoration. ¶313-6.1.

7. Use types not specifically mentioned in Use Type Descriptions must comply with the requirements of the Humboldt County Code. ¶313-165.

8. The County shall request the DF&G to review plans for development within 200 feet of the boundary of a wetland. HBAP ¶3.30.6.g

7. The Barr property is (RS)

The Planning Department must:

a. Prescribe 250-foot buffer areas on all wetlands affecting the Barr Property.

b. Require delineation of the boundary of wetlands affecting the Barr property.

c. Include the wetland boundary delineation report with the documents sent DF&G for review.

d. May not use setback criteria to justify work in Wetland Buffer Areas.

e. Assign a hearing officer to determine whether Resource Restoration may be conducted on the Barr property.

IV. Biological Resources
Page 32 of 56 Wetland Restoration

1. Both of Bargsten's pers.comm referred to removal of invasive species from within wetland habitats. (Dredge and Fill Permits)

2. Cashen et al.'s Capstone Report (Students at Humboldt State) referred to removal of invasive species from within wetland habitat.

X. Hydrology and Water Quality
Page 42 of 56 Affected Environment

1. Bargsten was commenting on removal of invasive species from within wetland habitats. (Dredge and Fill Permits)

2. Cliff Johnson thought these references might have been added to cover all options.

3. According to Cliff, if the CDP is approved as is, FOD will be allowed to remove invasive species from wetland habitats.

3. The Friends of the Dunes Application and their Draft 2021 Restoration Plan do not ask for or discuss removing invasive species from within wetland habitats. In fact, wetland habitats are excluded from current treatment areas, wetland types to be avoided are listed and, specific policies are listed to assure wetland habitats are avoided.

Someone covertly inserted these into the Environmental Checklist.

REMOVE THEM

Section VII Geology and Soils item e
Page 37 of 56

1. Mr. Shannon's email to Mr. Falcone on October 3, 2019, with a Site Visit Narrative of visit to the Barr property. Mr. Jacob and Mr. Falcone are employees of the State Waterboards. Mr. Jacob reported, "If removed (iceplant) could adversely impact the private property."
2. The Barr property is approximately 900 feet away from the shoreline and not directly affected by the ocean.
3. The sand trail on the Barr property runs north south between two 45 foot tree covered dunes.(PSS1C wetlands)
4. The prevailing winds are from the North, frequently exceed 25 MPH and, drive trail sand in a southerly direction.
5. Mr. Jacob was referring to the adverse effect removal of iceplant from the dune on west side of the trail would cause on the private property east of the trail.
6. The base of the Manila Community Services District's waste water disposal ponds sit atop the dune on the West side of the trail.
7. Neither Mr. Jacob nor the county evaluated the significant effect the constant scouring of sand from the base of the dune would cause.

Evaluate how MCSD's ponds would be affected if the base of the supporting dune is eroded. Require Mitigation (GS-1)

Section VII Geology and Soils item (3)
Page 39 of 56

The specific terms of the agreement were to be permanent. We did not agree to, "Within 100 feet of Lupin Avenue **or** the adjacent **private** property". We agreed to within 100 feet of Lupin Avenue **and** the **adjacent** property.

We did not agree to (Attachment A) of the DRAFT 2021 Restoration Plan, and would not have agreed because The Draft Restoration Plan can be changed without any public input.

The terms we agreed to must be made a Geology and Soils Mitigation. (GS-01).

I ask a condition of approval be included that requires a road sign stating, "FIRE LANE NO PARKING BEYOND THIS POINT" be installed on Lupin Avenue at the West end of the fence protecting the Manila Community Services District's maintenance yard. We have enough vehicles coming up the road expecting to park and then walk to the beach. That traffic puts unnecessary stress on Lupin Avenue, an unmaintained gravel road, particularly where it passes through the wetlands

Apps # 9175

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Humboldt Bay National Wildlife Refuge
Lanphere Dunes Unit
6800 Lanphere Road
Arcata, CA 95521
(707) 822-6378

Humboldt County Planning and Building Department
3015 H Street
Eureka, CA 95501
July 5, 2022

To Whom it May Concern:

I have reviewed the Friends of the Dunes Trail and Habitat Restoration Project CEQA document and am writing in support of the project. The Friends of the Dunes have been carrying out restoration on Humboldt County Dunes since the 1980s and have an excellent track record. This restoration is vital to maintaining the biodiversity of our dunes. Extensive research over recent decades has shown that restoration increases diversity of plants and animals, including rare and endangered species. Restoration also benefits invertebrate (including native bees) and vertebrate species. Restored dunes have high aesthetic values that are appreciated by the many members of our communities that visit. The Friends of the Dunes fill a vital role in our community be connecting people with nature. Their children's programs are unmatched and foster an appreciation of ecology and diversity. I urge you to issue the coastal development permit that the Friends have been waiting for.

Sincerely,

Andrea Pickart
Coastal Ecologist

PLN-9175

July 12, 2022

Cliff Johnson
Humboldt County Supervising Planner
Humboldt County Planning and Building Department
3015 H Street
Eureka, CA 95501

Re: Friends of the Dunes (FOD) Barr Parcel – Trail managements, fencing, signage

Dear Cliff,

This year, we have become household members as I've been a long-time supporter of FOD. This weekend on July 9th, my family and I enjoyed a walk along the dunes when we went to see the Sand Sculpture Festival. We walked from the Humboldt Coastal Nature Center out to the beach to view the sand sculptures and I was thoroughly impressed with the habitat restoration I witnessed along the trail out to the beach. We live in Samoa and regularly walk to the beach from our home, and the difference between the two environments was shocking, while only being a few miles away (along the same stretch of beach along the peninsula!).

It was truly striking to see the difference in the native vegetation that the FOD have successfully carried out through their long-term restoration efforts. In Samoa, the main vegetative components of the beach include mainly European beach grass, Iceplant, Sea fig, Jubata grass/Pampas grass, yellow bush lupine, and Bur-clover. All of these listed plants are non-native and invasive plants, the majority of which were planted by CalTrans in an effort to stabilize the dune ecosystem for development.

It was refreshing to see the non-native vegetation absent from the trails along the FOD land that they have so carefully restored. We saw native blooming plants that I was actually unfamiliar with in the dune ecosystem, after I've grown so familiar with non-native invasive species. We saw a very diverse plant habitat, consisting of beach buckwheat, sand verbena, beach primrose, sea thrift, beach morning glory, seaside daisy, beach sagewort, pearly everlasting, beach peas, beach goldenrod and many, many more.

Based on my studies and degree in Natural Resources at Humboldt State University/Cal Poly Humboldt, I've learned that many of these non-natives were planted in an effort to stabilize the dune environment, making it easier to maintain the human built environment including roads, trails, and private property. However, after seeing the array of native plants I'm in disbelief that some believe that non-native invasive species are hailed as the chief defenders of sustaining human development and stabilizing dunes. I believe that these native species are doing a terrific job of doing just that, and the diversity is simply stunning.

I will continue to support the FOD in their restoration work to continue to remove non-native invasive plants from the precious dune environment, which is extremely rare and limited, we are lucky to have this habitat still in-tact in California. I support the FOD in their mission to continue to acquire dune property and work to eradicate non-natives from the Humboldt County dunes and beaches. I hope to one day see the entire Peninsula be restored with native vegetation and the invasive species irradiated to support the native dune ecosystems.

I urge the support of the FOD project (PLN-9175) to be approved so that this important work can continue.

Thank you for your time and consideration in this matter,

Elanah Wolff

Elanah Wolff
784 Vance Ave.
Samoa, CA 95564

Jackson Hand
1972 Locke Street
Manila, CA 95521

July 11, 2022

Re: PLN-CDP-9175

To whom it may concern:

There have been several previous Mitigated Negative Impact Declarations re: Permit Requests to the Planning Department from Friends of the Dunes. Despite findings of no negative significant impacts, the fact is that these permits have allowed serious ill effects, with dire consequences for those of us who live adjacent to the FOD property, for the wildlife that lived in the dunes prior to the 2009 FOD permit being granted and implemented, and for the health of the dunes themselves and their ability to remain an effective barrier to rising ocean levels and potential storm surges or tsunamis.

These include, but are not limited to, the following:

1) The yard I share with my landlady being submerged under water until mid-June one year, and mid-May the following year (drought years, at that), due to runoff from the steep dune above our neighbor's horse paddock, with the water running across the paddock and accumulating in our yard, overwhelming the small drainage ditch which empties into the wetland in the CalTrans right-of-way alongside Rt. 255. My landlady, an avid gardener, permanently lost her garden as a result, and has had to make do with a much smaller plot beneath her kitchen window for the past eight years. FOD personnel insisted the removal of the vegetation, the roots of which held the dune in place, would not affect the amount of runoff. It did - by very, very many orders of magnitude.

2) The destruction of habitat for small mammals, songbirds, and birds of prey, resulting in our, and our neighbors' yards becoming killing fields for the foxes and coyotes who could no longer find food in the dunes. We lost numerous cats, chickens, and geese in the several years following the 2009 removal of the vegetation, the root systems of which provided homes for small mammals, and again for several years after the 2013 removal of that vegetation which had come back. In the first nine years I lived here, we had raccoons in the yard every single night. Sometimes the dogs would tree them, and they would stay in the trees for hours. After the removal of vegetation under the 2009 permit, I did not see a raccoon or jackrabbit (which had been ubiquitous the first nine years I lived here) for nearly ten years. I have still not ever seen an opossum since. Of the small mammals which were always so plentiful, only the skunks remained. I slept in my clothes and shoes for several years so I could run outside with the dogs when they began barking, to chase the fox or coyote away before it could carry off another of our

companion animals, or other domestic animals. I had never seen a coyote in the dunes before the lupine was removed in 2009; for the next several years I saw them in my yard repeatedly.

3) Until FOD began their rapacious removal of non-native plants (and whatever native plants got caught up in the prison crew's destruction of the vegetation), we had three tall, robust lines of dunes between our homes and the ocean. FOD removed the vegetation from the second row of dunes, behind the foredunes, leading to their complete collapse. Where that row of dunes was, there is now a low plain. Where there was a tall dune with a deep ravine between it and the next section of dune, with a trail winding high up along the side of the dune near the crest - with a panoramic view of the ocean - the trail now is flat and even. The foredune now blocks the view of the ocean as one approaches. In the past, if you walked up the trail from the beach, the second dune completely blocked your view of what was then Rachel Stamps' house, now the FOD Nature Center. If you walk up that trail now you have an unobstructed view of the Nature Center. In addition, they have removed all the beachgrass from the front, top, and back of the foredune along there. They have also removed the vegetation from most of the remaining two dunes between the ocean and our homes, leaving us feeling vulnerable to storm surges or tsunamis. In addition, the removal of the grass from the foredune also leaves nothing between the ocean and the Humboldt Bay Municipal Water District line (which delivers drinking water to the entire peninsula) but a short barren dune, a flat barren plain, and a steep downhill slope with some sparse ground cover just beginning to come in to replace the grass which was removed.

Given that this organization has shown itself to not be competent to restore the dunes in a responsible way, appears to value fundraising above all else, and responds to questions about their methods by banishment from beach access enjoyed by generations of people in this neighborhood, as well as with threats and intimidation, I would advocate for restrictions on their permits requiring they respect the rights of their neighbors, as well as putting limitations on their ability to destroy wildlife habitat. It seems to me that this should be a minimum before any new permitting is granted. I also believe that a qualified party with expertise in geology and/or hydrology needs to look at the situation as regards the potential vulnerability of the water line.

The two major concerns I have about the Barr tract both involve issues with which FOD has had a problematic history. It has the only lush, shady section of trail left, which winds through a pine forest. FOD has, in the past, despite asserting that the restoration of the pines in the dunes is a goal of theirs, in fact had a history of inadvertent destruction of several stands of pines by removing the grasses which held in moisture. Old-timers in Manila have always told me that they were told, growing up here, that the dunes were covered with these pines prior to a hundred years or so ago. My understanding is that people who moved out here just cut them down because they viewed them as being in the way, and did not even utilize them as firewood. Then, the non-native lupine and European beachgrass took over, but they did replace the pines inasmuch as they functioned to hold the dunes in place. Correcting the rapaciousness of past residents towards the pines with a rapacious attitude towards the plants that have moved in since does not necessarily reflect the best approach towards reviving the health of the dunes - although, I think, we can all

agree that restoring the pines is the ideal goal. However, FOD's history of destroying shade trees, even if unintentional, does not inspire confidence in their ability to protect and preserve this wonderful section of dunes, and the trail through them.

The second issue with the Barr tract is that it has one of the only remaining bridle paths left through FOD property. Equestrians had traditionally been able to ride from Samoa to what is now Ma Le'el Dunes, but, with FOD's acquisition of the Stamps tract, many of the contiguous trails through there have seen a prohibition on horses. If they take what many view as their irrational hatred of horses and riders to the Barr tract, we will see a resurgence of the bitterness between FOD and equestrians which we saw in the first few years after they closed many of the horse trails through the Stamps tract. The FOD facility caretaker (as well as founding member and longtime board member), used to take a six-pack of craft ales and a metal flask out by the traditional bridle paths and go off the trail to drink and lie in wait for riders to come through, and then jump out in front of them, yelling drunkenly at them and spooking the horses. In addition to being reckless and dangerous, this is the sort of thing that created so much unnecessary animus in the neighborhood. There are folks who have ridden out here all of their lives, and suddenly they were being told they no longer could. Some even told me they had been riding on those trails for so long, they had difficulty getting their horses to not take the trails they had taken all of their lives - the horses would come to the fork in the trail and try to take the trail they and their riders had always taken.

Which also intersects with a major issue with this organization, and that is the question of whether they want to be open to the public, or do they wish to function as a private club? The first few years I lived here, Rachel Stamps was still alive. She always insisted that she wanted her property to be open to the neighbors for beach access, hiking, and riding. Upon her passing, her far-flung heirs (from Modesto to Michigan) had to decide what to do with the land. There were some who wished to keep it open to the neighborhood, in keeping with Rachel's attitude. But others were interested in getting the best price. I actually saw a map of the property subdivided for development (although, of course, the Coastal Commission would have been a significant hurdle). My landlady put them in touch with FOD - a decision she deeply, deeply regrets.

After the purchase went through, FOD invited us over to sign documents promising to stay on the trails and pick up after the dogs. In return, they promised to allow us to continue using our trail to the beach, even though they were not yet officially open to the public. Seeing them as saving us from the possibility of a subdivision next door, we welcomed them with open arms. Nine weeks later, we awoke to the sound of chainsaws and found a prison crew removing all the vegetation from the steep slope above our neighbor's horse paddock, and, by extension, above the property we reside on. We attempted to contact someone at FOD, but the Executive Director told us to call the Restoration Manager, who said "I don't have time to talk to you." Then, the prison crew took all the tons of vegetation they had cut, and piled school bus-sized loads in the narrow passes between the dunes where our trail led to the beach. That evening, I walked out to what had been a thriving ecosystem a few hours earlier. There was a population of a variety of

songbird (a sort of thrush, I believe) which had always nested in the lupines. I will never forget the sight that greeted me as I walked up the dune. There was one scrubby pine tree amidst the destruction, and it was full of hundreds of those newly homeless birds. A red-tailed hawk was perched on the top of it, and a fox was circling the tree. It was an open buffet for predators. And then I saw that they had blocked our trail off.

In the ensuing days, I would catch both the Executive Director and the Restoration Manager on the dune looking over the newly denuded landscape, and the Executive Director did eventually respond to my landlady's emails. Since we were both living here when MAXXAM was clear-cutting steep hillsides in Stafford and Freshwater, and had seen the consequences, we were very concerned about the potential for runoff from heavy rains flooding our yard. They essentially told us that we didn't know what we were talking about, that they knew everything, they were always right and, essentially, to trust them. This was extremely aggravating, as the principle in question was essentially whether or not water flows downhill. As stated earlier, it turned out that water does indeed flow downhill. In the meantime, in the absence of the lupine which was removed, European Beachgrass has taken over that hillside. It may be even more effective in holding the dune in place than the lupine had been. But FOD's stated intention is to remove the beachgrass, as well. This hangs over our heads like a sword of Damocles. This beachgrass removal is allowed under the current permit, which does not seem to offer any protections for those of us downhill who suffer the consequences. We live in constant dread of waking to another crew removing the beachgrass, and leaving us underwater for months at a time yet again.

I also pleaded with the Restoration Manager to reopen our trail. I pointed out that we had, in good faith, signed an agreement to stay on the trails and pick up after the dogs, and they, in turn, had promised to grandfather in our trail. She sneered that we had signed a legal document, whereas they had only made a verbal promise. Which, she pointed out triumphantly, was not enforceable. This closing of our trail would appear to be a violation of the California Coastal Act.

None of what I have seen of the FOD's stewardship of this land, nor any of the conversations I had with the leadership of this organization (before the harassment and intimidation we endured precluded any further attempts at communication) have ever instilled any confidence whatsoever. When the University of California published an exhaustive study of non-native plant species and attempts to eradicate them, with relevant departments at the various campuses looking at a wide variety of ecosystems around the state, I asked the Executive Director if she had seen it. It had been a significant news story, nationally as well as in California. She said no, but she'd check it out. A few weeks later, when I saw her next, I asked if she had looked into it. She said no. Her attitude indicated a complete indifference to expert opinion. And this is her bailiwick. She is a founder of FOD, was Executive Director at the time, and is now a member, and past President, of the Board of Directors. My understanding is that they have a grant which reimburses them for all the hours their volunteers spend removing beachgrass (at a rate just below $19/hour). Since the roots reach so deep, and they only cut them off at ground level, it is a

never-ending endeavor. It would appear to be a make-work project. One for which they constantly receive funding.

When the dunes were beginning to erode at an alarming rate, I expressed my concerns to her. She said they would never, ever, do anything to cause the dunes to move. Just a few weeks later, she sent out a mass email to everyone on her list, boasting that she was "happy to see the dunes moving again." There would seem to be a striking lack of consistency. When I pointed this out, she removed us from her email list. But this is an issue I have some familiarity with. I grew up in North Carolina, and spent a good deal of time on the Outer Banks. These are barrier islands between the Atlantic Ocean and the channel between them and the mainland. When European settlers first arrived, they built fishing villages on the islands. Then, a major Atlantic storm would come along, and the islands, including their villages, would be gone. But there would be a new island, perhaps a hundred yards out. They planted sea oats, a non-native species, to hold the islands in place to allow for settlement. Those islands are now under the jurisdiction of the National Park Service, and removal of the sea oats is a federal offense. It may well be that the non-native plants are the best hope for holding the dunes in place. That was the main takeaway from the UC study about ten years ago (which the then-Executive Director had no interest in). Their overview was that, while there is no one-size-fits-all solution, a go-slow approach to removing non-native plants in a time of major climate disruption was advisable, as the non-natives might just be the most adaptable in a changing climate. FOD advocates a no-holds-barred eradication approach, but that appears to be based on economics rather than best environmental practice.

Regardless of which approach may be best in the long run for the Manila dunes, however, one would hope that those in charge of planning and implementing any restoration could at least keep an open mind. Far from that being the case, though, those who raise questions or concerns about FOD's plans or methods find that they lose their beach access and are subjected to harassment, intimidation, and terroristic threats. When confronted with numerous complaints about the dune "restoration" leaving a landscape resembling desertification at a Planning Commission meeting four years ago, they suddenly asserted that the plan had always been to remove the vegetation and wait eight years to see what happened, rather than removing the non-native species and planting native plants to take their place. No one had ever heard such a claim in the previous eight years. There is a difference between keeping an open mind and making it up as you go.

In that same Planning Commission meeting, several of the Commissioners expressed frustration that FOD had violated the terms of all of their permits, with one telling the FOD representatives present that if they were contractors, "we'd put you upstairs," pointing up and over in the direction of the jail. This organization has always behaved as if their permits allow them to do whatever they wish without consequences, and that their neighbors have no rights which they have any obligation to respect. I fear that granting any extension of their permits will only embolden them further. Especially if it comes without addressing the degradation of the dunes which has already occurred under the existing permits.

It would seem that, at the very least, compliance with existing permits should be required before any further extensions to those permits are issued. It would also seem that causing the flooding of neighboring properties, destruction of wildlife habitat (especially on such a massive scale), and violations of the California Coastal Act should be taken into consideration as negative impacts. FOD has already destroyed every single wetland on the Stamps tract. In public forums, including Planning Commission meetings, when they have been taken to task by members of the public for this, they always insist that they have created new wetlands to replace those they have destroyed. Yet, they can never say where these new wetlands are. That is because the only new wetlands they appear to have created are my neighbor's horse paddock and my yard, which is something they do not wish to admit. I would certainly hate to see the lush, green, grassy trail through the pine forest in the Barr tract as parched and dry as the Stamps tract is now.

I live perhaps three eighths of a mile from the ocean, but that is something I cannot take advantage of. Twenty years ago, it was a blessing to be able to take the dogs I had at that time out the trail from my yard, walk through a vibrant stretch of dunes, teeming with wildlife (there would be so many jackrabbits running across the trail that the dogs did not know which to chase; there were red-tailed hawks and harriers overhead), and be at the beach in seven or eight minutes. Now, my walk to the beach is five or six times as far, the overwhelmingly large part of it on unpaved, potholed roads. In the rainy season, I get splashed with muddy water from the potholes by passing vehicles. When it's dry, I get sprayed with gravel and choke on dust, and have suffered seven times from a scratched cornea as a result of dust in my eyes from passing vehicles, just in the eight years since I lost access to the beach once and for all. We have endured threats, harassment, slander, and character assassination for asking that our rights be respected. At what point do the regulatory authorities step in and exercise their authority? At what point does someone say the destruction of wildlife habitat must end? At what point does someone say that the neighbors of FOD do, in fact, have rights? That we have a right to not have our yards and paddocks flooded by the reckless actions of FOD? That, if we do have our yards flooded by FOD, we do not in turn lose our rights under the California Coastal Act for asserting our right not to be flooded?

Since the 2009 permit was issued, FOD has acted as if they have carte blanche. The Planning Department has appeared to concur. There is a strong feeling in this neighborhood that the Planning Department has acted as if it works for Friends of the Dunes, and not for the citizens of this county. There is a strong feeling that speaking up will only bring grief upon oneself, so people keep their heads down. People are reluctant, and understandably so, to express their opinions publicly.

It did not escape the attention of residents of this neighborhood that the original finding of no adverse effect, and ensuing permit, was signed off on by a planner whose wife, the Restoration Manager for Friends of the Dunes, signed off on the application. It is not a coincidence that the Planning Department lacks credibility in the eyes of many in this neighborhood. That will not change if our neighbors at the top of Lupin Avenue, adjacent to the Barr tract, end up having to

endure hardships comparable to what those of us adjacent to the Stamps tract have had to endure these past thirteen years.

Thank you for your consideration.

Jackson Hand

Apps# 9175

Mr. Cliff Johnson
Supervising Planner, Humboldt County
3015 H Street
Eureka CA 95501

RE: Friends of the Dunes Trail and Habitat Mitigated Negative Declaration, Public Comment

Date: July 11, 2022

Since 1982, Friends of the Dunes (FOD) has been committed to conservation of native coastal dune habitats through public education, restoration and adaptive management through monitoring. For the most-part, these efforts have been supported over these years by community volunteers; volunteers guided by FOD staff trained to implement conservation activities utilizing strategies founded in the most current research. This dedication and community support is a testimony to the organization.

I am writing in support of the FOD Restoration Plan and the organization's integrity to carry out the plan consistent with the mitigated circumstances outlined in the *Draft Initial Study and Mitigated Negative Declaration for the Friends of the Dunes Trail and Habitat Restoration Project*. The information below aims to substantiate this perspective drawing from the various documents associated with this project, my professional background as Botanist/Ecologist, and my experience with FOD since 1986.

Coastal habitats on the west coast (and many other coastlines), have been compromised by development and the establishment of invasive plant species. In regards to the latter, sections of coastal dune habitats in the northern Humboldt Bay area are unique in that native plant communities are intact, supported by natural processes of sand movement. The FOD property, including the former Barr parcel, is immediately adjacent to Ma-le'l Dunes Management Cooperative Area (HBNWR/BLM[1]) and Lanphere Dunes (HBNWR)—the latter landscapes now considered National Natural Landmarks by the National Park Service.

This borderless land conservation and restoration over the years has made all the difference. With the removal of invasive plant species—species that inhibit the ecological processes that support native plant communities and the species that depend on them, recovery has been very well documented. Recovery includes the germination of the native plant seed bank and expansion of a high diversity of native plant species into restored settings forming such plant as the dune mat community. This community is considered a rare environmentally sensitive habitat area (ESHA) and it supports endangered plant species (Humboldt Bay wallflower and beach layia, occurs on the former Barr Parcel) and habitat niches for associated solitary bees upon which species in the dune mat community depend. Recovery of ecological processes incorporates sand movement at different scales including the creation of dune swales and deflation plains—freshwater wetlands—used by the northern red-legged frog and neo-tropical birds accessing freshwater on their flight corridor. Sand movement from the restored foredunes to the restored back dune area also creates topographic variation--dune ridges and troughs, parabolic dunes and sand plains—all of which increase the resiliency of the system to sea-level rise (current

[1] HBNWR- Humboldt Bay National Wildlife Refuge, US. Fish and Wildlife Service. BLM- Bureau of Land Management.

research: Humboldt Coastal Resilience Project documenting a net growth of freshwater wetlands in response to restoration).

The Friends of the Dunes' updated Restoration Plan follows approaches and strategies used by the Humboldt Bay Wildlife Refuge and is consistent with permits previously issued and approved by the Planning Commission in 2007, 2008, 2009. This current permit requests includes in the Biological Resources section of the document (pgs 30, 31) makes it clear that –"In the long term, restoration activities would benefit dune-adapted special-status species..." and "Restoration activities will be accomplished with no adverse impacts" to rare and Endangered plant species "because control...would be carried out with guidance from the Restoration Manager".

The FOD proposal is also consistent with the California Coastal Act relative to coastal dune conservation and public access, specifically—"Development in areas adjacent to environmentally sensitive habitat areas... shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas." The management of public access on the former Barr parcel is to ensure such access does not trample endangered plant species, destroy specific settings where solitary bees construct nests, or fragment the dune mat habitat that is currently present by user-created routes.

The FOD prescribed means to manage public access covers trail designation by user-group and potentially some infrastructural needs to reduce habitat impacts. Segregation of trail by user group (pedestrian and horseback) will preclude horse use in the area with endangered species and solitary bee nest sites and link the respective user groups to trails on FOD property that are likewise distinct from one another. The possible need for a cribbed staircase on a relative steep section of a pedestrian trail will focus use and aim to keep visitors from going off trail and into potentially solitary bee nest sites. Installation of fences/a gate is included as a potential tool to reduce the risk of vehicle access. Given the shifting habitat setting which includes expansion of the listed species occurrences on the parcel, solitary bee nest site locations and changing trail conditions, the inclusion of adaptive management is essential to meet conservation objectives.

I have attempted to document the history of dune conservation by FOD, the organization's public/community support, management consistency and cooperation with adjacent landowners, and documentation of compliance with past permits, existing regulations and Humboldt County planning determinations. Support for issuance of a permit by the Planning Commission to Friends of the Dunes is well documented and very important to the conservation of coastal habitat.

Sincerely,

Lisa D. Hoover

Apps # 9175

Rita Carlson
POB 3753
Eureka, CA 95502-3753

July 7, 2022

Cliff Johnson
Humboldt County Supervising Planner
Humboldt County Planning and Building Department
3015 H Street
Eureka, CA 95501

Re: Friends of the Dunes Trail and Habitat Restoration Project, Barr Parcel

Dear Mr. Johnson:

I urge the County to approve the necessary permits for Friends of the Dunes to continue their excellent work that both enhances public access and public lands stewardship.

I have lived in Manila for more than two decades and am a neighbor of the Friends of the Dunes Nature Center. In fact, the Nature Center is my designated tsunami evacuation destination.

Over the years, I have participated in a number of walks led by Friends of the Dunes volunteers and attended lectures at the Nature Center that covered a range of interests from Wiyot language and culture to Aldoran Laird's Humboldt Bay sea level rise vulnerability assessment. Also, I am a graduate of their coastal naturalist training program.

Because of Friends of the Dunes programming, I have had the good fortune to learn about and appreciate local birds, bats, plants, bugs, bees, medicinal herbs, lichens, ferns, trees, and mushrooms, among other natural phenomena. The programs and walks were conducted by dedicated volunteers from a variety of backgrounds, including HSU biology professors and students as well as laypersons and professionals from other fields who were passionate about their subject.

Nearly every day my dog and I walk to the Nature Center and take the Wildberries Trail to the beach and back It truly is a pleasure to experience the changing landscape that takes place as different plants come into bloom, such as pink beach buckwheat or yellow creamcups.

Before the pandemic, on our walks, my dog and I regularly encountered groups of enthusiastic school children on field trips as well as visitors from out of the area. We even met some folks from France. Every conversation that I have had with out of the area visitors has included the visitor telling me how lucky I am to live so near such a beautiful place.

Again, in closing, I encourage the County to assist Friends of the Dunes in their stewardship of public lands that benefits both the natural community and the human community.

Respectfully,

R Carlson

Rita Carlson

Apps# 9175

Tim Dellas
POB 5127
Eureka, CA 95502-5127

July 7, 2022

Cliff Johnson
Humboldt County Supervising Planner
Humboldt County Planning and Building Department
3015 H Street
Eureka, CA 95501

Re: Friends of the Dunes Trail and Habitat Restoration Project, Barr Parcel

Dear Mr. Johnson,

I have been a neighbor of Friends of the Dunes for many years. I have used their public access to visit the beach and dunes many times; my wife walks our little dog there daily. They are, in my opinion, a public asset.

When one goes out to look at the restoration work they have done, it is pretty breathtaking, especially compared side by side with the areas of European beach grass. In this age of drastically diminishing biodiversity, the contrast between the restored areas and the non-native European beach grass needs to be seen to be appreciated. I am aware that there are claims that removing the beachgrass will result in destabilization of the dunes and resultant erosion by ocean wave action. In my 44 years in Manila, I have observed no such evidence.

To close, I fully support Friends of the Dunes' efforts to expand their area to include the Barr parcel. They have demonstrated themselves as responsible stewards of the property they manage in the interest of habitat restoration and public access. Please approve the Barr parcel coastal development permit, in the interest of habitat restoration and public access.

Sincerely,

Tim Dellas

Ron Settles
346 Lupin Ave.
Arcata, CA 95521

July 10, 2022

Comments regarding the IS/MND for CDP06-49MMXM (Barr)

I ask a mitigation be included that requires a road sign stating, "FIRE LANE NO PARKING BEYOND THIS POINT" be installed on Lupin Avenue at the West end of the fence protecting Manila Community Services District's maintenance yard. We have enough vehicles coming up the road expecting to park and walk to the beach. That traffic puts unnecessary stress on Lupin Avenue, an unmaintained gravel road, particularly where it passes through the wetlands

Sincerely,

the Northcoast Environmental Center

Mailing:
PO Box 4259
Arcata, CA 95518

Physical:
415 I Street
Arcata, CA 95521

(707) 822-6918
nec@yournec.org
www.yournec.org

NEC Staff
Executive Director
Caroline Griffith
Admin. Coordinator
Carlrey Arroyo
Outreach Coordinator
Chelsea Pulliam
Coastal Coordinator
Ivy Munnerlyn
Environmental Policy Advisor
Larry Glass

July11, 2022

Submitted via email to Cliff Johnson at CJohnson@co.humboldt.ca.us

Re: Friends of the Dunes Trail and Habitat Restoration.

Dear Humboldt County Planning Commissioners,

Thank you for the opportunity to comment on the Friends of the Dunes Trail and Habitat Restoration Mitigated Negative Declaration.

The Northcoast Environmental Center (NEC) is a 51-year-old organization that works to promote the understanding of the relations between people and the biosphere and to conserve, protect, and celebrate terrestrial, aquatic and marine ecosystems of northern California and southern Oregon. The NEC strongly supports the efforts of Friends of the Dunes (FOTD) to restore dune ecosystems and make them accessible to the public, and as such, supports FOTD's Coastal Development Permit (CDP) amendment application for Friends of the Dunes Trail and Habitat Restoration.

FOTD is a trustworthy steward of the dunes and has been working with neighbors and the county to create a project that protects coastal resources, provides public access, and addresses neighbor's concerns. Its efforts at invasive plant removal and restoration have shown positive results; FOTD has been monitoring restoration projects since 2008 and photo monitoring reports show native plants returning where invasive species have been removed. FOTD has now updated its Restoration Plan, and it should be allowed to implement this plan across all of its property, including the Barr Parcel.

The goal of Friends of the Dunes' dune restoration is to restore the natural diversity of plants and animals to the dunes and help return, where appropriate, the natural processes that sustain dune ecosystems. This is done by removing invasive plants by hand, not using destructive heavy equipment or harmful herbicides. Removal of invasives is largely done by volunteers, evidence that dune restoration is supported by the community, so much so that people will come and do it for free. By removing invasive plants, openings are created that allow native plants to return from the existing native seedbank. This semi-stable dune system then is allowed to shift slowly, sustaining diversity and allowing sand to enter the system from the beach, ultimately making the whole system more resilient in the face of sea-level rise. A recent multi-year study by US Fish and Wildlife Service, Arizona State University, Friends of the Dunes, the Wiyot Tribe, Humboldt Bay Municipal Water District, Bureau of Land Management, California Department of Fish and Wildlife, National Park Service, and others has highlighted the important role native plants play in dune resiliency and adaptation to changing sea-levels, underscoring the importance of restoration work like what is being conducted by FOTD and proposed in the updated Resoration Plan.

Throughout the lengthy process of updating this Restoration Plan and CDP, FOTD has worked with neighboring property owners and the community at large to come up with a plan that increases responsible public access through trails, enhances habitat through restoration, conforms with the Coastal Act and meets the needs of neighbors. Its conscientiousness and adaptability throughout this process is a testament to FOTD's commitment to environmental stewardship and community involvement and is evident in the updated Restoration Plan, which is a well-researched and well-organized guiding document for conducting restoration activities on their property well into the future, and we urge the Planning Commission to approve it.

The Mitigated Negative Declaration for the Friends of the Dunes Trail and Habitat Restoration Project conducts a thorough impact analysis of the very limited development proposed for the Barr Parcel. We urge the Planning Commission to adopt its findings and issue a Coastal Development Permit amendment consistent with this CEQA document.

Sincerely,

Caroline Griffth, Executive Director

July 12, 2022

Cliff Johnson, Supervising Planner
Humboldt County Planning & Building Department
3015 H Street
Eureka, CA 95501
Submitted via email to planningclerk@humboldt.ca.gov

Re: Support for Friends of the Dunes Trail and Habitat Restoration Project

Dear Mr. Johnson,

I submit these comments on behalf of Humboldt Baykeeper on the Initial Study and Proposed Mitigated Negative Declaration and the proposed amendments to existing Coastal Development Permit CDP-06-49MMX and Conditional Use Permit/Special Permit CUP-06-14MMX/SP-06-71M for the Friends of the Dunes Trail and Habitat Restoration Project on the former "Barr" property in Manila (APN 400-011-075). Humboldt Baykeeper was launched in 2004 with a mission to safeguard coastal resources for the health, enjoyment, and economic strength of the Humboldt Bay community through education, scientific research, and enforcement of laws to fight pollution.

The Friends of the Dunes' goal is to restore the natural diversity of plants and animals to the dunes and where appropriate, help return natural processes that sustain dune ecosystems. Where native dunes are restored, diverse flora and fauna thrive. Restored dunes along the Samoa Peninsula are some of the most celebrated and appreciated native ecosystems in our region, inspiring residents, students, and visitors.

This project proposes hand removal of invasive, non-native plants including annual grasses, iceplant, and yellow bush lupine with the goal of restoring endangered plant communities. Invasive plant removal allows native plants to recolonize new clearings from the seedbank. Friends of the Dunes does not use herbicides or heavy equipment, allowing careful removal of invasive plants while protecting the native flora and fauna.

600 F Street, Suite 3 #810
Arcata, CA 95521
(707) 499-3678
www.humboldtbaykeeper.org

The Humboldt Bay community has been working with Friends of the Dunes to do this habitat restoration work for the last 40 years, often on a volunteer basis. Removal of invasive species leads directly to increased native biodiversity, including many species of wildflowers and more than 40 species of native bees that depend on them.

The Friends of the Dunes' updated Restoration Plan is a well-researched and well-supported guiding document which contains reasonable avoidance measures to protect wetlands and sensitive plant species. It sets meaningful and achievable goals for habitat restoration. Friends of the Dunes has been monitoring restoration projects since 2008. Photo monitoring reports show native plants returning where invasive species have been removed. Friends of the Dunes has updated its Restoration Plan, and should be allowed to implement this plan across all of its property, including the Barr Parcel.

The Mitigated Negative Declaration for the Project conducts a thorough impact analysis of the very limited development proposed for the Barr Parcel. Despite unsupported claims about impacts to wetlands, there is no evidence that removal of invasive species like European beachgrass adversely impacts the seasonal wetlands known as dune hollows. In fact, studies have found that wetlands in the deflation plain behind restored foredunes have expanded since restoration activities took place at Lanphere Dunes, pointing to net increase of coastal freshwater wetlands in restored dune ecosystems.

As a result of community-supported restoration efforts led by Friends of the Dunes over many years, the Humboldt Bay area's coastal dunes are the best preserved, most intact coastal dunes on the U.S. West Coast. There is more work to be done to preserve this unique habitats, and Humboldt Baykeeper strongly values and supports the efforts of Friends of the Dunes and its partners to restore the native biodiversity of our coastal environments.

We strongly urge the County to issue a Coastal Development Permit amendment consistent with the Mitigated Negative Declaration for the Project.

Thank you for your consideration.

Sincerely,

Jennifer Kalt

Jennifer Kalt, Executive Director
jkalt@humboldtbaykeeper.org

Cc: Mike Cipra, Friends of the Dunes

June 22, 2022

Humboldt County Planning Commission
Humboldt County Planning and Building Department
3015 H Street
Eureka, CA 95501

RE: Support for the Friends of the Dunes Trail and Habitat Restoration Project

As long-time advocates of environmental stewardship in the Humboldt Bay region, the Environmental Protection Information Center strongly supports the Friends of the Dunes Trail and Habitat Restoration Project ("project").

The project will benefit dune-adapted special-status species in accordance with community values and local interests. The project's restoration work will increase available habitat for special-status species by closing user-created trails while maintaining a designated trail system for hikers and equestrians. Additionally, the project's plans to remove nonnative, invasive plant species will allow native plants to recolonize the dune system. These efforts will support community access to outdoor spaces and increase native plant diversity. In the long term, the project will make the dune system more resilient to sea-level rise. Friends of the Dunes is supported by community volunteers and maintains relationships with neighbors to address local concerns, including Wiyot-area Tribal Historic Preservation Officers.

Concerns that native dune habitat restoration could negatively impact wetlands and coastal resilience are unsupported by available data. The Draft Initial Study and Mitigated Negative Declaration for the project ("Mitigated Negative Declaration") found the project would not significantly impact wetlands. Additionally, recent research in Humboldt Bay found that removing invasive species, such as European beachgrass, has no significant effect on foredune height. Regardless, there is no European beachgrass on the parcel added to the amended permit and these concerns are irrelevant to the current permit application. Finally, all restoration work will be done manually to avoid the risk posed by heavy equipment and herbicides to sensitive biological resources.

Due to the project's value to our community and the initial study's supportive findings, I urge the Planning Commission to adopt the Mitigated Negative Declaration's findings and issue a Coastal Development Permit amendment.

Thank you for considering our comments.
Sincerely,

Tom Wheeler, Executive Director and Staff Attorney
Environmental Protection Information Center (EPIC)
145 G St, Suite A
Arcata, CA 95521
tom@wildcalifornia.org

2200 Western Avenue
Arcata, CA 95521

June 29, 2022

Humboldt County Planning and Building Department
3015 H Street
Eureka, CA 95501

Dear Planning Department Staff:

I am writing to express my support for issuance of a Coastal Development Permit Amendment for the Barr Parcel addition to the Friends of the Dunes' Humboldt Coastal Nature Center property. Friends of the Dunes have proven themselves to be competent and responsible land stewards with a successful record of dune habitat restoration. I have been volunteering with Friends of the Dunes in various capacities since 2012, including serving for two years on their board of directors.

I have followed Friends of the Dunes efforts over the past several years to obtain their permit amendment for management of the Barr Parcel. I have been impressed while they have made modifications and adaptations to their plans in order to accommodate concerns of various stakeholders, while staying true to Friends of the Dunes mission and goals to be good land stewards, restore native dune habitats, and provide outdoor education and recreational access for the community.

Please support Friends of the Dunes in facilitating approval of their permit amendment so they can implement their carefully developed restoration plan, which will make best use of the Barr Parcel as a community asset.

Thank you.

Sincerely,

Richard Engel
chard_e@yahoo.com

From: Jeff Powers
To: Planning Clerk
Subject: Barr CDP Amendment
Date: Thursday, August 18, 2022 5:48:31 PM

To Humboldt County Planning Commission:
From: Jeff Powers, 2311 Briarwood Circle, Eureka, CA 95503

This is regarding the Planning Commission's hearing tonight, August 18, 2022, regarding the Friends of the Dunes (FOD) Barr CDP Amendment. I have relocated to Eureka this past year and have gotten to know FOD's excellent work during that time.

I have over 30 years of experience as a land management professional with 20 years of work on the Central Coast of California. During that time I was responsible for similar coastal dune restoration projects and given my background and the proposed FOD restoration plan I enthusiastically support the Barr CDP Amendment as proposed. Specifically, hand-pulling of invasive ice plant and bush lupine will have virtually no unwanted impacts and actually provides huge benefits to the suite of native flora and fauna at the dunes.

The Friends of the Dunes' updated Restoration Plan is a very well-researched and organized guiding document for conducting restoration activities on their property for years to come. It contains exceedingly reasonable impact avoidance measures to protect wetlands, sensitive plant species, and cultural resources, while setting substantial goals for habitat restoration.

In addition, the Mitigated Neg Dec for the Trail and Habitat Restoration Project conducts a thorough impact analysis of the very limited development proposed for the Barr Parcel. I strongly urge the Planning Commission to adopt its findings and issue a Coastal Development Permit amendment consistent with this CEQA document.

Thank you for your consideration.

From: Jeff Powers
To: Planning Clerk
Subject: Re: Barr CDP Amendment
Date: Thursday, August 18, 2022 5:55:44 PM

I neglected to include tonight's Humboldt County Planning Commission Agenda, August 18, 2022, for my previous email (which is included below). The Agenda Item I was commenting on was:

H. PUBLIC HEARINGS
1. Friends of the Dunes Trail and Habitat Restoration; Amendment to Permit Record Number PLN-9175-CDP (filed 04/28/2015) Assessor's Parcel Numbers (APN) 400-011-075, 506-111-004, 506-111-021, 506-111-024, 506-111-025

Thank you and please let me know if my comments have been received and included in the Planning Commision minutes for this item. Thank you.

On Thu, Aug 18, 2022 at 5:50 PM Jeff Powers <jeffreygpowers@gmail.com> wrote:

> To Humboldt County Planning Commission:
> From: Jeff Powers, 2311 Briarwood Circle, Eureka, CA 95503
>
> This is regarding the Planning Commission's hearing tonight, August 18, 2022, regarding the Friends of the Dunes (FOD) Barr CDP Amendment. I have relocated to Eureka this past year and have gotten to know FOD's excellent work during that time.
>
> I have over 30 years of experience as a land management professional with 20 years of work on the Central Coast of California. During that time I was responsible for similar coastal dune restoration projects and given my background and the proposed FOD restoration plan I enthusiastically support the Barr CDP Amendment as proposed. Specifically, hand-pulling of invasive ice plant and bush lupine will have virtually no unwanted impacts and actually provides huge benefits to the suite of native flora and fauna at the dunes.
>
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>
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>
> Thank you for your consideration.

From: Rees Hughes
To: Planning Clerk
Subject: Comment - Friends of the Dunes Trail and Habitat Restoration; Amendment to Permit
Date: Thursday, August 18, 2022 10:17:25 PM

Comment - Friends of the Dunes Trail and Habitat Restoration; Amendment to Permit
Record # PLN-9175-CDP
Now continued to the September 1, 2022 Meeting

To the Members of the Planning Commission,

First, I want to acknowledge the often thankless job you have. After sitting through the three and a half hours of the August 18, 2022 meeting waiting for consideration of the item of special interest to me, I came to appreciate your efforts to make reasonable and fair decisions on each item as you moved through the agenda. While most agenda items are not directly relevant to me, I will be grateful that you give the same care to my issue as you gave to this evening's agenda.

Unfortunately, by continuing the Friends of the Dunes Trail and Habitat Restoration to September 1st, I will be out-of-town for the meeting. I will admit to being frustrated by not being able to support this agenda item in person. Here is what I wanted to say this evening:

I have been a regular user of the dunes for more than 36 years. I have watched the thoughtful and consistent efforts of the Friends of the Dunes to restore and manage their holdings since 2007. The efforts to remove invasives, provide public access, and educate the community have been exemplary. In addition, they have strived to be good neighbors. The restoration work on the Friends of the Dunes nearly 120-acre property has attracted countless community members to come for a walk, to volunteer, to show guests, to botanize

For the last four years, the Friends of the Dunes organization has worked hard to update its Restoration Plan which has included a CEQA assessment.

I urge the Commission to approve the request to modify the Coastal Development Permit to integrate the 3.6 acre Barr Parcel into the larger holdings. I particularly applaud the effort to establish a single public trailhead with two maintained trails that connect with the rest of the trail system and the commitment to rehab the social trails in the area.

The updated Restoration and Management Plan has been carefully considered. Based upon the Friends of the Dunes' long and successful history of restoration activities without using herbicides and with considerable volunteer involvement, I feel confident the organization will continue to be committed stewards of the dunes. I hope that you will support the staff recommendations.

May your consent calendar be uncontested and your agenda items be brief.

Sincerely,

Rees Hughes

1660 Brigid Lane
Arcata, CA 95521
(707) 826.0163 (h)
(707) 499-4106 (c)

From: Ryland J Sherman
To: Planning Clerk
Subject: Planning Commission Agenda Number H-1. 8/18/22
Date: Thursday, August 18, 2022 6:34:03 PM

My name is Ryland Sherman.

Agenda Number H-1.

I am writing to give my opinion on the Friends of the Dunes Trail and Habitat Restoration; Amendment to Permit. I am a graduate of Humboldt State that studied Wildlife Management and Conservation. Friends of the Dunes has been a huge part of my education and my professional development. I have been a volunteer and intern at Friends of the Dunes for the past two years. Throughout the time as a student, volunteer and employee I have learned and seen so much while working in our coastal dune ecosystems. The work done at Friends of the Dunes is so beneficial to our community. The regions that Friends of the Dunes has restored and are actively restoring are some of the most beautiful and diverse places I have ever been. Being one who has participated in dune restoration efforts I fully know how hard but meaningful work it can be. That being said, allowing Friends of the Dunes to complete this project will allow the Barr Parcel to be used by the public but in a responsible manner. It will also allow for more habitat for our native species as well as more jobs for people in the community.

Thank you,
Ryland Sherman

From: Mike and Nancy Tout
To: Planning Clerk
Subject: Barr Parcel
Date: Thursday, August 25, 2022 11:18:32 AM

This is in support for the work Friends Of The Dunes does for coastal Dune habitat restoration.
I am urging the planning commission to approve Friends Of The Dunes coastal development permit for the Barr Parcel where they will restore the natural diversity of plants and animals.
Friends Of The Dunes has been restoring our dunes for 40 years now and the results are encouraging with the return of native plants and animals.
As a volunteer for Friends Of The Dunes I have talked to many visitors from all over the United States. These tourists are attracted to our coastline because of the restored nature of the dunes.
Not only is Restoration good for the plants and animals, but it's great for tourism and our local economy.
Again, I strongly encourage the planning commission to approve Friends Of The Dunes amended coastal development permit for the Bar parcel.
Thank you for your time.
Nancy Tout.

Sent from my iPhone