



COUNTY OF MENDOCINO
DEPARTMENT OF PLANNING AND BUILDING SERVICES
860 NORTH BUSH STREET • UKIAH • CALIFORNIA • 95482
120 WEST FIR STREET • FT. BRAGG • CALIFORNIA • 95437

Steve Dunncliff, Director
Telephone 707-463-4281
FAX 707-463-5709
Ft. Bragg Phone 707-964-5379
Ft. Bragg Fax 707-961-2427
pbs@co.mendocino.ca.us
www.co.mendocino.ca.us/planning

MEMORANDUM

DATE: August 13, 2013

TO: Board of Supervisors

FROM: Abbey Stockwell, Planner

SUBJECT: Consideration of Westport Municipal Advisory Council's (WMAC) Appeal of Coastal Development Permit # 12-2012 (California State Parks – Ten Mile Dune Restoration Project).

Project Description

California State Parks proposes to restore ecosystem processes in the Inglenook Fen-Ten Mile Dunes Natural Preserve (Preserve) by removing three disconnected segments of roadway in rare dune habitat, removing two culverts and restoring the stream channel, and treating (without herbicides) approximately 60 acres (24.3 hectares) of European beachgrass and other nonnative weeds. Located west of Highway 1, and stretching southward from the Ten Mile River to just north of Ward Avenue, the project is entirely within the boundaries of the 1,285-acre Preserve in MacKerricher State Park, Mendocino County, California.

State Parks summarizes the proposed work as follows:

- ◆ Remove three segments of abandoned asphalt roadway and underlying rock base totaling 2.7 miles (4.3 km). Some portions of the road will remain intact to protect sensitive resources.
- ◆ Remove two approximately 5-foot diameter (1.5 meter) culverts and associated fill materials to restore the stream bed, bank, and channel to a natural condition and reestablish native plant vegetation.
- ◆ Remove approximately 38 acres (15.4 ha) of previously treated European beachgrass using hand labor and approximately 15 acres (6.07 ha) of previously untreated European beachgrass through a long-term program of hand removal and native plant reestablishment.
- ◆ Remove other non-native plants, including trees and shrubs, through a long-term program that includes reestablishing native dune forest in an approximate 7 acre (2.8 ha) area of back dunes.
- ◆ Reestablish federally and state-listed threatened and endangered species and other native plants into suitable habitat by direct seeding, transplanting, or installation of cuttings.
- ◆ Remove ice plant in select areas to increase habitat for the federally listed Howell's spine flower.

Additional details of the proposed project description and its associated activities are included in the June 11 CDP Staff Report.

Coastal Permit Administrator Action

On June 11, 2013, the Coastal Permit Administrator considered and approved the CDP with modifications to the conditions of approval (See Attachment A). At this hearing, members of the public provided testimony opposing the project for various reasons, including impacts to coastal access, impacts to rare plant communities, and disposal of hazardous material – similar to the issues raised as the basis for the appeal. The Administrator considered the information provided by staff, the applicants, and the concerned public, and on balance found the project was supported by the provisions contained in the LCP.

Existing Setting & Coastal Access

As coastal access is a primary reason for the appeal of the proposed project, it is important to note the current and existing conditions as the basis for evaluating access to this portion of MacKerricher State Park.

The project site lies within the northern portion of MacKerricher State Park (also known as the Inglenook Fen-Ten Mile Dunes Natural Preserve, or Preserve), which extends from Ward Avenue in Cleone north to the mouth of the Ten Mile River. Access to this portion of the State Park may be obtained from a parking area and formal access point at Ward Avenue. In the Preserve, the Haul Road does not provide through access north to south. While the roadway was opened to the public for vehicle travel on the weekends in 1977, the Ten Mile Dunes segment was abandoned in 1983 after a storm washed out a half mile portion of the road immediately north of Ward Avenue.

The north end, near Ten Mile River, is not a formal access point – access to the Haul Road in this location is by walking through private property that lies between Caltrans right-of-way and State Parks land. Visitors do access this northern portion near the Ten Mile Bridge; however, no formal process of establishing prescriptive access has occurred. Access at this northern point is by traveling over loose sand with relatively steep slopes. The northerly segment of the Haul Road is intact (although portions are covered by drifting sand) for ~2.5 miles. The two remaining Haul Road remnants proposed to be removed (and vary from 220 to 720 feet in length) are disconnected and significantly degraded to the point of providing little to no walkable/useable trail surface. It is approximately one mile from the northern most segment of Haul Road to Ward Avenue.

From Ward Avenue south to Pudding Creek in Fort Bragg, a distance of ~3 miles, Haul Road provides residents and visitors with paved multi-user access along the shore. The City of Fort Bragg has in place plans to continue this multi-user access trail from Glass Beach south to near the Noyo Harbor. The northern half of the park, where the project is located, provides public access to one of the few remaining ‘wild’ and undeveloped areas of the County’s coastline. This area provides visitors and residents with a unique opportunity to experience a wilderness coastal environment in close proximity to an urban setting.

The Preserve contains an extensive dune system that covers 1,285 acres. This dune system is a highly functional and rare habitat that supports numerous types of rare and endangered plant and animal species and is therefore considered an Environmentally Sensitive Habitat Area (ESHA).

Additional and more specific details regarding the proposed project and the County's LCP policies are found in the Public Access section of the June 11 Staff Report.

Response to Appeal

Staff's response to the points raised by the appeal follow the order they are listed in the Appellant's letter (Attachment A).

1) Coastal Plan Consistency

The Appellants assert that Finding #1: "*The proposed development is in conformity with the certified Local Coastal Program*" is not supported and that the proposed project violates the following Coastal Element Policies:

3.1-8: *The implementation phase of the LCP shall include performance standards and mitigating measures necessary to reduce adverse impacts on wetlands and wetland buffer areas from permitted developments. Such standards and mitigating measures shall be consistent with those recommended in the California Coastal Commission's Statewide Interpretive Guidelines for Wetland and Other Wet Environmentally Sensitive Habitat Areas, adopted February 4, 1981.*

3.1-15: *Dunes shall be preserved and protected as environmentally sensitive habitats for scientific, educational and passive recreational uses. Vehicle traffic shall be prohibited. Where public access through dunes is permitted, well-defined footpaths or other means of directing use and minimizing adverse impacts shall be developed and used.*

New development on dune parcels shall be located in the least environmental damaging location and shall minimize the removal of natural vegetation and alteration of natural landforms. No new parcels shall be created entirely within sand dune habitat. One housing unit shall be authorized on every legal parcel existing on the date of adoption of this plan, provided that adequate access, water, and sewage disposal capacity exists and that the proposed development is consistent with all other applicable policies of this Coastal Element and meets all applicable health standards.

3.6-27: *No development shall be approved on a site which will conflict with easements acquired by the public at large by court decree. Where evidence of historic public use indicates the potential for the existence of prescriptive rights, but such rights have not been judicially determined, the County shall apply research methods described in the Attorney General's "Manual on Implied Dedication and Prescriptive Rights". Where such research indicates the potential existence of prescriptive rights, an access easement shall be required as a condition of permit approval. Development may be sited on the area of historic public use only if: (1) no development of the parcel would otherwise be possible, or (2) proposed development could not otherwise be sited in a manner which minimizes risks to life and property, or (3) such siting is necessary for consistency with the policies of this plan concerning visual resources, special communities, and archaeological resources. When development must be sited on the area of historic public use an equivalent easement providing access to the same area shall be provided on the site.*

In addition, the Appellants argue that the proposed project is inconsistent with the intent of Policy 4.2-21 and the policies and directives included in the State Parks 1995 MacKerricher park General Plan prepared in response to Policy 4.2-19.

4.2-19: *The Department of Parks and Recreation shall be requested to prepare a General Plan for MacKerricher State Park that provides access to Ten Mile River and Inglenook Fen at designated locations and subject to conditions necessary for preservation of the natural environment of the park. Off-road vehicles shall be excluded.*

4.2-21: *The Georgia-Pacific Corporation haul road, under a special management agreement with the California Department of Parks and Recreation, presently provides weekend and holiday vehicular access to the long stretch of public beaches which extend from Fort Bragg north to Ten Mile River. This private roadway, which travels through the entire length of the MacKerricher State Park, should be acquired by DPR and incorporated into its management plan for the park, if at any time during the life of the Local Coastal Plan the property owner desires to sell, trade or surrender this property.*

The June 11 Staff Report contains analysis that supports Finding #1. The Staff Report also includes discussion on Policies 3.1-15 (pg 16-18) and 4.2-19 (pg 12-13 and Special Condition 4) & 4.2-21 (pg 7-8). Well-defined footpaths are not proposed through the dune system. Instead, State Parks will continue to allow “Passive Recreation” in the Preserve, which includes hiking, horseback riding, fishing, swimming, jogging and similar activities to continue along the shore and through the dunes that do not rely on the development of trails or other site improvements (Coastal Zoning Code Section 20.340.015). State Parks will periodically and temporarily limit access to areas within the Preserve as needed protect sensitive habitats in accordance with its land management and resource protection procedures. The remainder of the park will be open for passive recreation access during these closure periods.

Policy 3.1-8 does not apply to the proposed project and directs the County zoning code (the implementation measures of the LCP) to include performance standards for wetland mitigation.

Policy 3.6-27 does not apply as the proposed development is on *public land* and does not conflict with an easement acquired by the public at large by court decree. The proposed project will not interfere with the public's access to the sea. The existing access points to and along the Preserve will be maintained.

The County does not have any authority regarding the contents of the MacKerricher Park General Plan and that document is not the basis for review.

2) CEQA Environmental Review

The Appellants assert that Finding #4, which states: “The proposed development, if constructed in compliance with the conditions of approval of this coastal development permit and with the mitigation measures incorporated into the project by the certified Mitigated Negative Declaration, in accordance with the California Environmental Quality Act, will not have any significant adverse impacts on the environment;” – is not supported and that the Mitigated Negative Declaration (MND) certified for this project does not adequately mitigate potential impacts to less than significant.

The California Department of Parks and Recreation (State Parks) is the lead agency responsible for project compliance with the California Environmental Quality Act (CEQA). State Parks has prepared an Initial Study and a Mitigated Negative Declaration (MND). In the Final MND, State Parks states:

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

In summary, the MND for the Project found:

No potential for adverse impacts on agricultural resources, mineral resources, population and housing, and recreation associated with the proposed project.

Less than significant impacts in the following areas: aesthetics, air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, transportation/traffic, and utilities and service systems.

Full implementation of the mitigation measures included in the MND will reduce potential project-related impacts on biological resources to a less than significant level.

The Notice of Determination for MND (SCH #: 2012052022) was filed December 20, 2012 and no court challenges to the findings, conclusions, or mitigation measures included in the MND were filed within the 30-day statute of limitations.

The Mitigated Negative Declaration (MND) prepared by State Parks describes design features and mitigation measures incorporated into the project to reduce potential impacts to a level of insignificance as required by CEQA. In addition, the project must comply with policies in the County's Coastal Element and regulations in the County's Coastal Zoning Code that impose specific requirements which in some cases may exceed those necessary to satisfy CEQA.

The CEQA issues raised by the Appellants have been addressed in the MND documentation and satisfy the requirements and standards of the Local Coastal Program. The approved CDP includes Special Condition 1 to emphasize that all mitigation measures specified in the MND are conditions of CDP 12-2012.

3) Archaeological or Paleontological Resource Impacts

The Appellants disagree with Finding #5: "The proposed development will not have any adverse impacts on any known archaeological or paleontological resource;" and assert that the proposed project will have adverse impacts on archeological sites which are not mitigated.

Archaeological and Cultural resources were considered during the MND process (see MND pg 79-83 and including Cultural Mitigation Measures), and in the June 11 Staff Report (pg 18-20) which also includes standard and special conditions of approval regarding protection of archaeological resources. The Mitigation Measures and the issues raised were considered by the County Archaeological Commission (April 10, 2013), which determined that adherence to the mitigation measures and project design related to protection of archaeological resources are adequate.

The Final MND contained responses to comments received, and a response from State Parks addressing the issues raised (See letter addressed to Mr. Thad Van Bueren, November 26,

2012 in Attachment B – Response to Comments). As proposed, the project will not have adverse impacts on archaeological/cultural resources.

4) Coastal Access

The Appellants disagree that Finding #7 is supported and argue that the finding which states that the project is in conformity with public access and recreation policies in Chapter 3 of the CA Coastal Act and the Coastal Element of the General Plan. The Appellants state that the proposed project is inconsistent with specific County policies listed in #1 above. Special Conditions 3-6 are described as inadequate and unenforceable.

Please see the description of the existing coastal access, response that follows #1, and the details and analysis contained in the June 11 Staff Report (Public Access section, pg. 9). Although the isolated remnants of the Haul Road will be removed, the project will maintain existing coastal access along the shore and dunes. A paved or hardened trail through a rare and extremely limited ESHA is not required by the policies contained in the Coastal Act or the LCP – maximum access is provided at MacKerricher State Park specifically and other nearby coastal access points. The restoration of ESHA and removal of damaged and isolated road segments (including creek culverts) within ESHA, protects, enhances, and maintains a significant coastal resource, namely dune habitat. Dune habitat is particularly rare in California; in northern California coastal dunes account for less than 3% of the landscape. In Mendocino County, there is the Ten Mile Dune system and the Manchester Dunes north of Point Arena. Further, the retention of permanent or temporary trail infrastructure, hardened trail or stream crossings, is not supported by resource agencies charged with protecting rare and endangered plants and animal and stream habitat. Staff received the following statement from the California Department of Fish and Wildlife (Richard Macedo, DFW, May 22, 2013 email correspondence):

My Department supports this project. While short term impacts will occur to sensitive species and habitats, these temporary impacts will be overwhelmingly mitigated by the Project's benefits including a) remove habitat altering structures (e.g. haul road and stream crossings), b) remove/control invasive plant species, and c) restore natural function to the species and habitats that will be temporarily impacted. I've issued a lake/streambed alteration agreement (LSAA; draft attached) and am completing an incidental take permit for two state-listed plants that will be temporarily impacted by the project. I've been advised that consideration is being given to installing foot bridges or other devices across Inglenook and Fen Creeks. The attached LSAA does not permit the construction of such devices across these Creeks. Permit concerns aside, I do not support this plan. After the existing culvert crossings are removed, the project will restore the affected stream sections to natural channel function. In the dune-type environment, we expect that stream channels will change position over the years as active dunes interact with post-project unrestricted stream channels. To function properly, installation of foot bridges will require the restriction/stabilization of the affected stream channels to prevent channels from migrating away from the bridge crossings. Construction and maintenance of foot bridges will hamstring the mitigation that my Department supports, that being the return of natural stream function to Inglenook and Fen Creeks.

Additional and related comments are also found on page 14 of June 11 Staff Report. The proposed project is consistent with the County's LCP and the Coastal Act.

5) Resource Protection

The Appellants assert that Finding #8 is unsupported, which states:

- a) The resource as identified will not be significantly degraded by the proposed development.
- b) There is no feasible less environmentally damaging alternative.
- c) All feasible mitigation measures capable of reducing or eliminating project related impacts have been adopted.”

The MND and its supporting documentation use science and expert professional judgment to conclude that the proposed project will not degrade the dune habitat and its associated ESHA. The restoration/rehabilitation project will support the continuance and enhancement of the subject ESHAs. Maintaining the Haul Road and culverts in place, or constructing a new trail in dune habitat or new stream crossings will continue to disrupt and degrade habitat function, including the reduction of habitat, and interruption of ecosystem processes. Therefore removal of the Haul Road is a feasible less environmentally damaging alternative. The following excerpt from the MND explains the environmental benefit of removing the road (MND, pg. 5):

The partially eroded haul road and culvert system will continue to impair fen wetland hydrology if no action is taken. The culverts are located behind relatively wide (past or current European beachgrass-influenced) fore dunes that temporarily protect them from direct storm wave erosion. Partial storm wave erosion of the rusted metal culverts would result in hazardous and esthetically unacceptable conditions, and may result in persistent artificial influence of wetland outlet hydrology. Partial storm wave erosion of the haul road results in formation of a steep cliff-like dune scarp with an asphalt-armored top that impedes establishment of native dune vegetation (root zone restriction, inhibition of colonization). Active removal of the haul road, culverts, and beachgrass would accelerate recovery of the dune and wetland complex within the Preserve, particularly the critical outlets of the fen wetland systems. The proposed project would remove unnatural features to restore native habitats and to preserve “endangered plant and animal species and their supporting ecosystem”.

The mitigation measures proposed have been reviewed by experts in their field and accepted by numerous resource agencies (and have incorporated the mitigation measures into additional required permits), including, but not limited to US Fish & Wildlife Service, CA Dept. of Fish and Wildlife, North Coast Regional Water Quality Control Board, CA State Lands Commission, and Air Quality Management.

6) Coastal Trail Designation

The Appellants argue that the Haul Road is the designated coastal trail certified by the Coastal Commission. The beach route is described as infeasible because it discriminates against users and is dangerous due to winter waves.

See previous responses regarding coastal access. The Land Use Maps shows the coastal trail aligned adjacent to the shore, not necessarily on the Haul Road through the northern half of the park. This alignment is provided with the proposed project. There is no continuous, paved trail and only remnants of the former Haul Road remain in this area. The proposed dune restoration will restore the fore dunes to a more level topography which will improve safety on the beach by

allowing easier access into the back dunes. An example of what the topography would look like exists at the south end of the Preserve where the Haul Road washed out in the 1980s.

7) Removal of Existing Coastal Access

The Appellants claim that the proposed project is inconsistent with the Coastal Act and providing maximum access and disagreement with Special Conditions of approval.

See previous responses regarding coastal access.

8) Haul Road Removal

The Appellants argue that removal of the Haul Road is contrary to Policy 3.1-15 and that the road removal will encourage informal trails resulting in impacts to rare and endangered plant and animal habitat.

See response to #1 and #4 above regarding continued passive recreation and managed access through the dunes. State Parks will monitor its mitigation measures for a number of years after the project as well as continue to focus its management priority on protection of rare and endangered plants and animal habitat within this unit within the park. Federal law has also established measures for protecting endangered species which State Parks must follow.

9) Haul Road Maintenance

The Appellants argue that the proposed project is inconsistent with LCP policies and assert that the intent of the policies requires State Parks to maintain the Haul Road as a continuous multi-user trail. The project is also inconsistent with the park's General Plan.

The Haul Road is maintained in MacKerricher Park – to the south of the Natural Preserve, in the more developed portion of the park. The portion of the Haul Road within the project area has been destroyed by a series of storms during the last two decades. State Parks has also stated plans to further improve the Haul Road in the southern portion of the park. Removing the deteriorated and segmented portions of the Haul Road in the Preserve and in ESHA, is supported by the resource policies of the LCP and Coastal Act. See previous responses and June 11 Staff Report for additional details. Finally, State Parks is responsible for implementing MacKerricher State Park General Plan policies and programs and are not the subject of the coastal development permit review. In State Parks response to public comments on the MND, the following was included regarding MacKerricher General Plan (pg 3 of Summary Response to Comments):

As explained ...on pages 4, 104, and 105 of the IS/MND, the overarching management of the Inglebrook Fen-Ten Mile Dunes Natural Preserve, which contains the entirety of the project, is determined by the unit classification as defined under the Public Resources Code. As explained on page 122 of the IS/MND, a feasibility study conducted in 2000 determined that plans to reconstruct and maintain the haul road, which were described in the MacKerricher State Park General Plan (1995), were infeasible and incompatible with the Preserve classification. Pages 35, 104, and 105 of the IS/MND describe how the project is consistent with the General Plan.

10) Sand Dune Impacts

The Appellants state that the MND and CDP did not analyze how much sand will be mobilized or its impacts to the environment or neighboring land owners.

See discussion in the Land Use section of the June 11 Staff Report (pg 7-9).

11) Hazardous Material Impacts

The Appellants argue that the proposed project poses an undisclosed health threat as no sampling or Phase I hazardous waste study was included in the MND to determine the presence of toxic materials. Hazardous waste can be reasonably anticipated based on comparable studies of the GP mill site where the railroad ties and ballast originated.

The MND addresses prepared by State Parks addressed hazardous materials on pages 95-97. State Parks has told staff that ground penetrating radar was used and found that the majority of railroad tracks and ties were removed when the railroad alignment was converted to a road in 1949.

12) Public Access and Recreation Impact Mitigation

Appellants disagree with Special Conditions 5 & 6 regarding public access and recreation opportunities asserting they cannot be enforced.

Staff finds the conditions to be reasonable requirements to ensure the project is consistent with the County's LCP. State Parks, when accepting the approved permit must sign and agree to follow and implement the conditions of approval. If concerns remain, staff recommends adding a Special Condition #10:

Prior to issuance of the Coastal Development Permit, the applicant shall submit to the Coastal Permit Administrator for review and approval, a plan and/or work schedule to implement the Special Conditions of Approval. Progress reports shall be submitted annually, after project approval and by Dec 31, that describe the steps and milestones achieved to implement the requirements of the Special Conditions.

Staff Recommendation

That the Board of Supervisor's deny the appeal and uphold the Coastal Permit Administrator's approval of Coastal Development Permit CDP 12-2012 subject to the findings contained in Attachment C

Attachments

- A. Appeal Letter
- B. Project Vicinity Map
- C. CDP 12-2012, Coastal Permit Administrator, Findings and Conditions of Approval
- D. State Parks, Final Mitigated Negative Declaration, Response to Comments
- E. CDP 12-2012, Coastal Permit Administrator Staff Report, June 11, 2013

ATTACHMENT A
Appeal Letter

Chuck Eyerly
Secretary

Sally Grigg
Director

Bill Knapp
Treasurer

Thad Van Bueren
Chair

Judith Vidaver
Vice-Chair

Robert Scott
Alternate



Westport Municipal Advisory Council

P. O. Box 307, Westport, CA 95488
www.westportmac.org

June 15, 2013

Supervisor Dan Gjerde
Attn: Tim Mitchell, Clerk of Board
Mendocino County Board of Supervisors
501 Low Gap Road, Room 1010
Ukiah, CA 95482



Dear Supervisor Gjerde:

The Westport Municipal Advisory Council attaches for the action of the Board of Supervisors an appeal of the Coastal Development Permit #12-2012 approved by the Coastal Permit Administrator June 11, 2013. We request as much advance notice of the date this hearing will be scheduled so that notification of concerned constituents can occur.

As you are aware, the WMAC serves at the pleasure of the Board with no compensation. We bring this appeal forward in the interest of a large number of concerned constituents. I am personally paying the filing fee Tim Mitchell specified, and a check for \$910.00 is enclosed. In the appeal the WMAC requests a waiver of the fee. If that waiver is granted during deliberation of this matter, the fee should be refunded directly to me.

Please contact me if you have any questions about this appeal.

Sincerely,

A handwritten signature in cursive script that reads "Thad M. Van Bueren".

Thad M. Van Bueren
Chairman

Enclosure

Basis for Appeal

Mendocino County CDP#12-2012 (MacKerricher Dune Rehabilitation Project)

This appeal is filed pursuant to Mendocino County Code 20.544.015. The foundational issues for the appeal reference the Project Findings and Conditions listed in the Staff Report for this permit, as well as revisions to those conditions stipulated in the approval of the permit at the CPA hearing June 11, 2013.

1. Staff Finding #1 states "the proposed development is in conformity with the certified Local Coastal Program (LCP)." That finding is not supported. The development violates Policies 3.1-8, 3.1-15, and 3.6-27, the intent of Policy 4.2-21, and the policies and directives in the MacKerricher Park General Plan prepared by the California Department of Parks and Recreation (CDPR) in 1995 in response to LCP Policy 4.2-19. These matters are taken up in more detail below.
2. Staff Finding #4 suggests the project "will not have any significant adverse impacts on the environment" if mitigation measures in the Mitigated Negative Declaration (MND) prepared by CDPR and the conditions of the permit are followed. That finding is not supported and we contend the analysis in the MND provides inadequate disclosure. Impacts to archaeological sites, Environmentally Sensitive Habitat Areas (ESHAs), wetlands, neighboring property owners, recreation, and public health have not been reduced below the level of significant adverse impacts. These matters were raised by the public during circulation of the draft MND, but not addressed.
3. We disagree with Staff Finding #5 that the project will have no adverse impacts on archaeological resources. The project will facilitate massive deflation of the foredunes and realignment of two watersheds with the direct result that several archaeological sites in that vicinity will be adversely impacted, if not destroyed outright. No mitigation is proposed to reduce those adverse impacts. Impacted sites must be presumed to qualify as historical resources for purposes of CEQA because no formal evaluation took place or was concurred in by the California State Historic Preservation Officer as required pursuant to California Public Resources Code 5024.
4. Staff Finding #7 incorrectly finds the project "is in conformity with public access and public recreation policies in Chapter 3 of the California Coastal Act and the Coastal Element of the General Plan." This finding is particularly egregious with respect to Coastal Act Sections 30210 and 30211; and Coastal Element Policies 3.1-8, 3.1-15, and 3.6-27, and the intent of Policy 4.2-21. Special Conditions 3 through 6 provide inadequate and unenforceable actions to compensate for the intentional destruction of this designated coastal trail as discussed in Issues 6-9 and 12.
5. Staff Finding #8 draws unsupported conclusions about resource protection from CDPR's MND. Finding 8(a) states resources will "not be significantly degraded," contrary to WMAC's conclusion summarized in Issue 3 and explored further in Issues 4 and 10. Finding 8(b) is flawed because CDPR studied no alternatives when it was reasonable and necessary (under CEQA) to do so. WMAC also disagrees with Finding 8(c) that "all feasible mitigation measures capable of reducing or eliminating project related impacts have been adopted." WMAC will offer suggestions for a reduced project and additional conditions of approval that will more adequately mitigate or avoid adverse impacts.
6. The approved permit inappropriately allows destruction of 2.7 miles of existing coastal trail shown on County Land Use Maps 10 and 12 along the haul road. That alignment was certified by the Coastal Commission in 1983. The haul road is the designated coastal trail through MacKerricher Park, not a wet beach route listed in the MND. The beach route is not a viable alternative because it discriminates against many users who still enjoy the haul road and is dangerous in winter due to sleeper waves. In contrast, the coastal trail on the haul road provides access for bicycling, disabled users, strollers, pedestrians, and even horse riding. No comparable alternative trail is required as compensatory mitigation for extinguishing this existing access as required by Mendocino's Coastal Element Policy 3.6-27. Destruction of this historical access is also inconsistent with Coastal Act Section 30211 that requires non-interference with historical prescriptive access rights.

7. The permitted destruction of this existing coastal access is also inconsistent with Coastal Act Section 30210 which assigns high priority to maximizing public access. Instead, it reduces access in a discriminatory manner that will ensure bicyclists and disabled persons can no longer enjoy the northern portion of the park. Special Conditions discussed in Issue 12 do not result in the construction of continuous alternative trail. They only encourage discussion and evaluation that may never produce a comparable replacement trail.
8. Removal of the haul road is contrary to County Coastal Element Policy 3.1-15 which requires that public access to the dunes shall be on well-defined paths that direct use to minimize impacts to the natural environment. By destroying the existing designated multi-use coastal trail along the haul road, access will spread potential impacts across a broad area through the propagation of many social trails. Those social trails can be expected to increase impacts to habitats of the endangered Western Snowy Plover and endangered plant species, rather than protecting them.
9. County Coastal Element Policy 4.2-21 directs CDPR to acquire the haul road for use as coastal access and incorporate policies regarding it in a management plan for MacKerricher State Park required in Policy 4.2-19. CDPR acquired the road in 1992 and prepared a general plan for the park in 1995. This project violates the intent of Policy 4.2-21 which was designed to acquire the road for public recreational access, not so it could destroy this coastal trail to restore ecosystem processes. The project also violates the park's General Plan policies and directives which direct that it be maintained and reconnected to once again create a continuous multi-use path through the park.
10. The project will intentionally destabilize the fore dunes in the northern park, with massive wind and water erosion acknowledged as a predictable outcome. Yet neither the MND and County staff report for the project analyze the volume of sand that will be mobilized or its impacts on the environment and neighboring land owners. Engineer David Paoli estimates nearly a million cubic yards of sand will migrate east, burying wetlands, ESHAs, and neighboring lands. Inadequate impact analysis, protective measures, and compensatory mitigation are identified to address habitat destruction and impacts to endangered and threatened species in violation of County Coastal Element Policy 3.1-8 and Coastal Act Sections 30240 and 30607.1. Monitoring requirements are inadequate and no dedicated compensation fund or bond is established as a condition of permit approval. Thus, the impacts of this induced sand migration on the properties of neighbors are inadequate.
11. The haul road was built in 1949 over a railroad grade built in use since 1916. Railroad grades are well known repositories of hazardous petrochemical waste, creosoted rail road ties, arsenic from herbicides, and asbestos from brake linings that likely persist in the and ballast and woody material under the paved road. The project will remove the asphalt road surface which currently acts to sequester contaminants, as well as the hazardous underlying ballast and timbers. Yet no sampling or Phase I hazardous waste study was included in the MND supporting the project to determine the presence of toxic materials or plan for the special handling and disposal that they will require. Treated wood waste is known to contain hazardous chemicals at elevated levels that are subject to California's Hazardous Waste Control Law. Hazardous waste can be reasonably anticipated based on comparable studies of the GP mill site where the former railroad originated (e.g., Cal/EPA docket HWCA P1-00/01-005; DTSC remediation; etc.). There is no evidence Form 6a was filed with Cal EPA in connection with removal of this old railroad grade. This poses an undisclosed health threat relative Standard Condition 6(c) that must be addressed with testing and remediation requirements.
12. Special Conditions 5 and 6 will not reduce impacts to public access and recreation because they define unenforceable processes rather than concrete actions. There is no assurance either condition will ever result in the construction of a continuous multi-use trail comparable to the one CDPR proposes to destroy. Special Condition 5 urges only planning for two discontinuous trail segments located far from the sea, with no provisions to actually build it. Special Condition 6 asks for evaluation of alternate pedestrian stream crossing methods with no requirement to implement a solution. It ignores the needs of other users like bicyclists and disabled individuals.

The WMAC recognizes the BOS may take a variety of actions when considering this appeal. When deliberating on this matter, we urge the BOS to consider our allegations that the project approved by the CPA as CDP#12-2012 on June 11, 2013 fails to reduce many adverse impacts and poses serious health threats that have not been investigated or properly considered when planning for the disposal of large volumes of asphalt, ballast, and contaminated soil. We believe by permitting this activity the County is exposing itself to damage claims from workers, offset landowners, and government agencies if the presence of these hazardous materials is not identified prior to aerial exposure. The project also extinguishes an existing prescriptive coastal access without requiring construction of a comparable and non-discriminatory replacement route consistent with many provisions of the Coastal Act and LCP.

The WMAC recognizes the value of ecosystem rehabilitation, but favors an approach that balances that objective with other needs and requirements such as public access and minimizing impacts to ESHAs, wetlands, and neighbors. For this reason we urge deliberation of a reduced project alternative, as well as Special Conditions that will more effectively reduce or eliminate adverse impacts associated with the current project. That approach is entirely consistent with the guiding principles governing the use of State Natural Preserves like the one in the northern portion of MacKerricher State Park as embodied in California Public Resources Code Sections 5019.65 and 5019.71.

It is worth revisiting those principles because they are cited as the rationale for this project. Yet the project is at odds with that guidance. PRC Section 5019.65(a) explicitly states "resource manipulation shall be restricted to the minimum required to negate the deleterious influence of man. Improvements undertaken shall be for the purpose of making the areas available, on a day use basis, for public enjoyment and education in a manner consistent with the preservation of their natural features."

Removal of the haul road will result in massive, not minor, restructuring of the dune environment and is inconsistent with the mandate to provide for public access.

ATTACHMENT B
Project Vicinity Map

ATTACHMENT C
CDP 12-2012 Approved Findings and Conditions

(Coastal Permit Administrator's June 11, 2013 modifications are shown in strike-thru/underline format.)

PROJECT FINDINGS AND CONDITIONS

Pursuant to the provisions of Chapter 20.532 and Chapter 20.536 of the Mendocino County Code, the Coastal Permit Administrator approves the proposed project, and adopts the following findings and conditions.

FINDINGS:

1. The proposed development is in conformity with the certified Local Coastal Program; and
2. The proposed development will be provided with adequate utilities, access roads, drainage and other necessary facilities; and
3. The proposed development is consistent with the purpose and intent of the applicable zoning district, as well as all other provisions of Division II, and preserves the integrity of the zoning district; and
4. The proposed development, if constructed in compliance with the conditions of approval of this coastal development permit and with the mitigation measures incorporated into the project by the certified Mitigated Negative Declaration, in accordance with the California Environmental Quality Act, will not have any significant adverse impacts on the environment; and
5. The proposed development will not have any adverse impacts on any known archaeological or paleontological resource; and
6. Other public services, including but not limited to, solid waste and public roadway capacity have been considered and are adequate to serve the proposed development.
7. The proposed development is in conformity with the public access and public recreation policies of Chapter 3 of the California Coastal Act and Coastal Element of the General Plan.
8. Resource Protection Impact Findings:
 - a. The resource as identified will not be significantly degraded by the proposed development.
 - b. There is no feasible less environmentally damaging alternative.
 - c. All feasible mitigation measures capable of reducing or eliminating project related impacts have been adopted.

STANDARD CONDITIONS:

1. This action shall become final on the 11th day following the decision unless an appeal is filed pursuant to Section 20.544.015 of the Mendocino County Code. The permit shall become effective after the ten working day appeal period to the Coastal Commission has expired and no appeal has been filed with the Coastal Commission. The permit shall expire and become null and void at the expiration of two years after the effective date except where construction and use of the property in reliance on such permit has been initiated prior to its expiration.
2. The use and occupancy of the premises shall be established and maintained in conformance with the provisions of Division II of Title 20 of the Mendocino County Code.
3. The application, along with supplemental exhibits and related material, shall be considered elements of this permit, and that compliance therewith is mandatory, unless an amendment has been approved by the Coastal Permit Administrator.
4. This permit shall be subject to the securing of all necessary permits for the proposed development from County, State and Federal agencies having jurisdiction.
5. The applicant shall secure all required building permits for the proposed project as required by the Building Inspection Division of the Department of Planning and Building Services.
6. This permit shall be subject to revocation or modification upon a finding of any one or more of the following:
 - a. The permit was obtained or extended by fraud.
 - b. One or more of the conditions upon which the permit was granted have been violated.
 - c. The use for which the permit was granted is conducted so as to be detrimental to the public health, welfare or safety, or to be a nuisance.
7. A final judgment of a court of competent jurisdiction has declared one or more conditions to be void or ineffective, or has enjoined or otherwise prohibited the enforcement or operation of one or more such conditions.
8. This permit is issued without a legal determination having been made upon the number, size or shape of parcels encompassed within the permit described boundaries. Should, at any time, a legal determination be made that the number, size or shape of parcels within the permit described boundaries are different than that which is legally required by this permit, this permit shall become null and void.
9. If any archaeological sites or artifacts are discovered during site excavation or construction activities, the applicant shall cease and desist from all further excavation and disturbances within one hundred (100) feet of the discovery, and make notification of the discovery to the Director of the Department of Planning and Building Services. The Director will coordinate further actions for the protection of the archaeological resources in accordance with Section 22.12.090 of the Mendocino County Code.

SPECIAL CONDITIONS:

1. The proposed project shall comply with all measures from the Final Mitigated Negative Declaration for the Inglenook Ten Mile Dunes Natural Preserve Dune Rehabilitation Project, 2012. A copy of this staff report shall be supplied to all contractors and a copy shall be maintained on the job site.
2. Non-native trees shall not be removed in the eastern fringes of the proposed project area, adjacent to Inglenook, until the proposed plantings of the native trees' canopy exceeds the elevation of tallest dunes that are upwind (mainly west) of the trees. Native trees shall also be planted on State Parks property in strategic areas to provide greater protection to existing residential developments. State Parks shall develop and distribute an educational handout or flyer for adjacent landowners on how to protect their land through native tree/vegetation plantings or protection measures for existing vegetation, including the identification of nurseries that supply native trees or other appropriate plantings.
3. Sand removed and stock piled during project activities shall not be stored in a manner that would accelerate sand migration eastward to the residential properties.
4. ~~Prior to September 30, 2014, Applicant shall implement~~ accessibility improvements to the parking lot and trail to the beach at Ward Avenue ~~shall be implemented by the end of the proposed project completion date,~~ including but not limited to: adequate handicap parking (which must be assessed on a regular basis, based on visitor demand), signage, beach-ready wheelchair(s), and appropriate access to the sandy beach. The location and materials of the storage structure (6'x6' shed), parking, and trail improvements (if necessary) shall be submitted to Planning for review and approval.
5. State Parks shall explore the feasibility of obtaining a public access easement to provide formal vertical access from Highway 1 to the Preserve as well as a means to provide non-motorized boating access. Feasibility of acquiring an access easement shall be based on landowner willingness. If willing landowner(s) are identified, a dedicated access easement shall be developed, approved by the County and Coastal Commission, and recorded. Feasibility of establishing boating access may be limited due to the presence of federally listed species.
6. State Parks shall be required to remove sand on the northern segment of the Haul Road, in the rock-ballast retainment area, if necessary, in order to maintain access to the beach, and install signage to direct visitors to the beach.
7. ~~Prior to issuance of the coastal development permit,~~ State Parks shall ~~dedicate a 15-ft accessway~~ work with CalTrans to help promote development of a Class I/ II bike path along Highway 1, from Ten Mile River to Ward Avenue. Furthermore, to the extent that a future access easement dedication may help to facilitate development of the Class I/II bike path along Highway 1, State Parks shall dedicate sufficient area from the edge of right of way on its properties directly adjacent to Highway 1 from Ten Mile River to Ward Avenue ~~and work with CalTrans to complete a bike and pedestrian route.~~
8. State Parks shall continue to monitor ~~evaluate~~ the stream crossing conditions during winter high flow events for pedestrian access. State Parks shall evaluate alternative stream crossings methods to maintain public access during winter high flow events. Three years after culvert removal, if conditions are found to be impassable for a significant amount of time during winter months, alternative access shall be pursued.

9. The disposal site identified in the MND as closest to Ten Mile shall be the preferred site for disposal. Use of the Big River Quarry shall be restricted to only on an as-needed basis in order to reduce impacts to coastal visitors. If the Big River Quarry is found to be needed for disposal, a plan shall be developed to ensure that the disposed materials are not contaminated with pampas grass seed and other non-native found at the quarry site. This plan shall be submitted to Planning for review and approval prior to disposal at Big River Quarry.
10. State Parks shall submit to Planning any modification and/or finalization of the mitigation monitoring plan and long-term strategy during the life of the project. It is expected that State Parks will continue to responsibly manage its Preserve long after the proposed project is complete to ensure that invasive species are reduced and eliminated and the ecological function is maintained.
11. Grading standards from Ch. 20.492 of the MCCZC shall be followed.
 - a. Grading shall not significantly disrupt natural drainage patterns and shall not significantly increase volumes of surface runoff unless adequate measures are taken to provide for the increase in surface runoff.
 - b. Development shall be planned to fit the topography, soils, geology, hydrology, and other conditions existing on the site so that grading is kept to an absolute minimum.
 - c. Essential grading shall complement the natural land forms. At the intersection of a manufactured cut or fill slope and a natural slope, a gradual transition or rounding of contours shall be provided.
 - d. The permanently exposed faces of earth cuts and fills shall be stabilized and revegetated, or otherwise protected from erosion.
 - e. Adjoining property shall be protected from excavation and filling operations and potential soil erosion.
 - f. The area of soil to be disturbed at any one time and the duration of its exposure shall be limited. Erosion and sediment control measures shall be installed as soon as possible following the disturbance of the soils. Construction equipment shall be limited to the actual area to be disturbed according to the approved development plans.

ATTACHEMENT D
Final MND Response to Comments

MacKerricher State Park Dune Rehabilitation Project

Summary Responses to Comments

The Mendocino District received 41 comment letters during the public comment period for the Ten Mile Dune Rehabilitation Project at MacKerricher State Park. Eight letters were from agencies, four were from organizations, and twenty-nine were from individuals. Comments pertinent to the Initial Study/Mitigated Negative Declaration differed based on the stated expertise of individuals or the focus of particular agencies.

Positive comments in support of the project generally fell into four main categories: 1) benefits to sensitive species and natural ecosystems, 2) project plans based on best available science, 3) that short-term impacts would be mitigated to a less than significant level, and 4) consistency with Natural Preserve classification. Comments in opposition to the project fell into five main categories: 1) inconsistency with the MacKerricher State Park General Plan, Mendocino County Local Coastal Plan and California Coastal Act, 2) potential loss of recreational opportunity, 3) potential impacts to sensitive species and habitats, 4) potential impacts to neighboring properties from sand movement, and 5) potential impacts to cultural sites. All comments proclaiming the beneficial effects of the project on sensitive species and habitats were from the regulatory agency having jurisdiction over the species or science-based organizations.

Response to comment letters from agency with jurisdictional authority over coastal access and individuals with subject specific scientific expertise in geology and archaeology have been prepared separately, and are contained within this Final MND. All other responses to comments are summarized below under specific categories.

1. Biological Resources

Twenty-one comment letters mentioned one or more of the biological resources (e.g., listed plant species, western snowy plover, wetlands); seven said the project would have beneficial results and fourteen raised concerns regarding project impacts. None of the letters that raised concerns regarding potential impacts to biological resources were based on or cited scientific evidence. The letters that recognized the proposed project's beneficial effects included those from the agency with jurisdictional authority over listed species, California Department of Fish and Game, and the environmental organizations that are most concerned with plant and animal protections, Audubon Society, Sierra Club, and the California Native Plant Society.

Federal and State Listed Plants

Comments concerning significant impacts to listed plants incorrectly assumed finite populations in an unchanging environment. However, coastal dune ecosystems, including their associated plant populations, are dynamic and constantly changing. As explained on page 64 of the IS/MND and in Appendix E.2, the listed plants are adapted to and have evolved under changing environmental conditions. Population numbers, especially those of annual or short-lived perennial dune species, can fluctuate dramatically from year to year,

as weather patterns and sand movement affect seed dispersal patterns, seed production, and seedling survival. This is the existing condition of the Ten Mile Dunes. As shown in Appendices A.3 and A.4, the area mapped as occupied by Howell's spineflower within the Natural Preserve in 2001 was 0.41 acres; in 2011 the mapped spineflower area totaled 8.9 acres. Regarding Howell's Spineflower (*Chorizanthe howellii*), one of the comment letters included unsubstantiated recommendations that the environmental document "state what percentage of seed typically germinates into mature plants", and include "Data to illustrate how many annual generations of plant lifecycle it will take for the post-project population levels to reach their pre-project population level". Again, this recommendation incorrectly assumes finite, unchanging populations from year to year. Another letter incorrectly stated that project "activities will destroy 11% of the endangered spineflower population" (the proportion of area occupied by spineflower in 2011 that occurs within the haul road corridor). As stated in the document on pages 90-91, scientific studies on sea level rise and documented evidence of past storm surge events show that the long-term viability of the nominal "11%" of the spineflower population in the road alignment is very low (with or without project implementation) because it is located immediately behind an active foredune and shoreline that is actively transgressing landward in a location that in the long-term, is unable to provide stable dune habitat for spineflower. Through this project, State Parks proposes to remove unnatural elements where the listed plants cannot grow, which is on the haul road or within European beachgrass clumps, and to mitigate at a ratio of 8 to 1 to compensate for any potential loss of those plant populations that were mapped in 2011. In addition, this project proposes permanent monitoring and restoration efforts that will extend well beyond the typical 5 year required monitoring period (Appendix E.2), and includes consultation and coordination with the California Department of Fish and Game and the US Fish and Wildlife Service.

Western Snowy Plover

Comments concerning potential impacts to the western snowy plover were not as specific, primarily stating that impacts would occur during project implementation. Pages 23 and 24 of the IS/MND describe detailed project requirements under BIO-7d that are specifically intended to prevent impacts to plovers during project implementation. As described and illustrated on pages 5, 36, 55-56, and 69 of the IS/MND, the removal of the haul road and European beachgrass will open up additional nesting and foraging habitat for plovers. Unnatural barriers will be removed that now prevent plovers from retreating to safe areas during high tides or when disturbed by humans and dogs.

Wetlands

Comments that raised concerns regarding potential impacts to wetlands, including the Inglenook Fen, incorrectly assumed that the dune and wetland complex of the Natural Preserve is a fixed, unchanging environment and that the wetlands are dependent upon this current fixed environment. As discussed on pages 4, 5, 35, 60, 73, and 90 of the IS/MND, the culverts currently constrict the

outlets of the creeks, causing incised, relatively deep channels. Sand movement resulting from the removal of the haul road, culverts, and European beachgrass will not eliminate wetlands in the Natural Preserve, rather some wetland features will be buried, while others will emerge through natural processes. Removal will allow the channel outlets to meander naturally, with wetland vegetation forming where suitable based on hydrology and substrate. This is not an impact that should be mitigated, rather an objective of the project to restore natural processes. Also as explained on pages 98-102 in the IS/MND, Inglenook Fen is a natural feature that formed approximately 6,000 years ago; removal of the culverts, which are modern features, will not impact the fen.

2. Consistency with MacKerricher State Park General Plan, Mendocino County Local Coastal Plan, and California Coastal Act

Eight letters raised concerns regarding consistency of the project with the MacKerricher State Park General Plan, Mendocino County Local Coastal Plan, or the California Coastal Act in regards to recreational interests. Two letters claim that the project is consistent, primarily based on the Natural Preserve classification of the unit in which the project is proposed. As explained in detail in the response letter to Coastal Commission staff (included in the final MND), and on pages 4, 104, and 105 of the IS/MND, the overarching management of the Inglenook Fen-Ten Mile Dunes Natural Preserve, which contains the entirety of the project, is determined by the unit classification as defined under the Public Resources Code. As explained on page 122 of the IS/MND, a feasibility study conducted in 2000 determined that plans to reconstruct and maintain the haul road, which were described in the MacKerricher State Park General Plan (1995), were infeasible and incompatible with the Preserve classification. Pages 35, 104, and 105 of the IS/MND describe how the project is consistent with the General Plan. No sections of the Coastal Act or Mendocino Local Coastal Plan were found to be inconsistent with the proposed project, including sections that address coastal access. Rather, numerous sections of the Coastal Act support the project's emphasis on restoration and protection of Environmentally Sensitive Habitat Areas. Starting on page 36 of the IS/MND, additional information and specific citations of sections of the Local Coastal Plan have been added to further demonstrate project consistency. Although page 115 of the IS/MND describes how coastal access to the beach is being retained, in response to the letter from the Coastal Conservancy, a revised project overview map has been prepared and replaces Appendix A.1 for inclusion in the Final MND. The revised map more clearly shows how the east-west alignment of the haul road will be retained at the northern end of the Preserve to connect to a trail leading to the beach. No changes are proposed to the existing coastal access that leads to the beach at the southern end of the Preserve, north of Ward Avenue.

3. Recreational Use of the Haul Road

Sixteen letters commented on the recreational use of the haul road, while three letters commented that the haul road was not important for recreation and instead was an impact to sensitive resources. Many of the letters favoring the

retention of remnant sections and/or reconstruction of the haul road referred to it as providing important access for bicyclists, people in wheelchairs, and people with strollers. No letters stated that the authors or others have used the haul road for these purposes in recent decades. As described in text and photos on pages 6-9, 79, and 115 of the IS/MND, the haul road no longer serves as a contiguous trail, since nearly one mile is completely washed out and much of the remaining approximate two mile sections are either dangerously eroded or partially covered with sand. To address current recreational use on the haul road within the Natural Preserve, CSP staff compiled data from site surveys and anecdotal information from staff and volunteers that frequent the Preserve. As shown in the added Appendix E.6, between March and August, 2012, only about 3% of the visitor use observed within the Natural Preserve occurred on the haul road. Surveys were conducted at weekly intervals as part of a plover survey program; visitor use and location was one of the required elements for survey documentation. Park staff and volunteers that have regularly conducted activities within the foredunes for nearly a decade, attest that people with strollers and bicyclists do not use the haul road in the Natural Preserve. The maps included in Appendix E.6 (MacKerricher State Park Dune Rehabilitation Haul Road Condition) show the current haul road condition and the 2003 documented topography of the foredunes in the vicinity of the road.

4. Sand Movement and Potential Impacts to Neighboring Properties

Seventeen letters raised concerns regarding the potential for increased sand movement and threat to neighboring properties as a result of project implementation. The concerns focused on three major incorrect assumptions: 1) the remaining sections of haul road prevent sand movement from the beach to inland areas; 2) sand movement within a dune system is “erosion” and the dunes should be stabilized; and 3) the project will result in a significant change in sand movement, which would not occur if the project was not implemented. As explained throughout the IS/MND on pages 13, 50, 84-87, and Appendix E.4, sand movement is an integral function of a natural dune system. Grain size, wind speed, vegetation, and dune height are factors that affect the rate of sand movement. In general, once the haul road is removed, the small nearshore dunes would collect more sand and continue to grow, most likely around small clumps of vegetation, until some threshold size is reached. The movement of sand from the nearshore foredunes to farther inland areas is inhibited by the large expanses of dune and wetland vegetation that occur between the foredunes and the separated transverse dunes to the east. While wind-transport of sand is a natural process in a dune environment, sand becomes deposited and its movement halted on the eastern fringes of dunes where conifers are established. The past removal of wooded areas backing the eastern edge of the Ten Mile Dunes, by adjacent landowners, has provided an uninterrupted path for wind-carried sand and the landward expansion of the dunes in the Preserve (Barry & Schlinger 1977). The project includes measures to maintain and plant native trees on the eastern fringe of the dunes to reestablish a native dune forest that will interrupt the path of wind carried sand. As stated on pages 13-14:

“European beachgrass, Monterey pine, broom, and eucalyptus growing in the 7 acre area will still be removed, but as a secondary priority and slowly over time once the native trees are well established” (emphasis added). Page 90 of the IS/MND explains that sea level rise will continue to influence the inland movement of the dune system, which will affect the Natural Preserve and neighboring properties, regardless of any activities associated with the Dune Rehabilitation Project.

A more detailed discussion of dune movement process within the Natural Preserve is contained in Dr. Peter Baye’s response to the letter from the retired College of the Redwoods geology professor.

5. Potential Impacts to Cultural Sites

Ten letters commented that the project would impact cultural resources, either archaeological sites or the haul road. Only two of these commenters were professional archaeologists. As described on pages 74-83 in the Cultural Resources section of the IS/MND, and in the detailed responses prepared by Dionne Gruver for the letter to Thad Van Bueren, the project is designed and contains specific requirements to avoid direct impacts to cultural sites. The existing unnatural features of haul road and European beachgrass have altered natural sand movement, and in some areas, caused archaeological sites to be exposed. The project as proposed will not increase impacts to cultural sites, but will in areas reduce impacts that are occurring as a result of the unnatural features. For example, deflation plains caused by the road berm have exposed archaeological sites immediately inland of the berm; removal of the road may result in the reburial of these sites as mobilized sand from the foredune moves inland. Removal of the road will discourage easy access to some of the archaeological sites, and reduce the potential for theft of sensitive artifacts. As determined through formal evaluation and consultation with the State Historic Preservation Officer, the haul road is not a significant historic resource as its condition has deteriorated substantially.

6. Other Comments

Other comments not included in the discussion above for which explanations are given below, or additional text is added to the final MND include:

- 1) City of Fort Bragg’s project – The description of the Fort Bragg Trail and Restoration Project, which includes the development of over 3.25 miles of new multiple use trails adjoining and south of MacKerricher State Park has been added to **Section 2.11 Related Projects**.
- 2) Suggested preparation of an EIR – Page 42 of the IS/MND describes the level of environmental documents required under CEQA. Based on extensive survey work and careful project design planning, specific project treatment measures and mitigations were developed so that project work will not cause

a substantial adverse change to the significance of the resources (CEQA Sec. 21084.1.) and as such, an EIR is not warranted.

CEQA Guidelines (Section 15065 (b) (1): Where, prior to commencement of public review of an environmental document, a project proponent agrees to mitigation measures or project modification that would avoid any significant effect on the environment specified by subdivision (a) or would mitigate the significant effect to a point where clearly no significant effect on the environment would occur, a lead agency need not prepare an environment impact report solely because, without mitigation the environmental effects at issue would have been significant.

- 3) Concern regarding the hauling and disposal of road material – Page 7 of the IS/MND describes hauling to, and disposal of the road material at the Big River quarry site, approximately 20 miles to the south of the project. Pages 92-94 describe the calculated emissions associated with the road removal and material disposal based on hauling to the Big River quarry site for a maximum of 21 days. However, since preparation of the IS/MND, a second disposal site has been identified that is approximately 5 miles from the project area, and located on private property within the Ten Mile watershed. The alternative disposal site consists of ranch and timber roads that are in need of surface rocking. Disposal at the alternative site would also prevent the need to haul on Highway 1, as a paved, existing private road connects to the project area beneath the Highway 1 bridge. Use of this alternative disposal site will further reduce emissions and temporary impacts to recreational use along the Big River haul road. A Non-industrial timber management plan (1-94NTMP-002 MEN) is in place to address the environmental requirements associated with rocking the roads on the adjacent private property. Description of the alternative disposal site has been added to the final MND.
- 4) One comment raised concerns that a disposal site had not been identified for vegetative material. Appendix E.1 and page 10 of the IS/MND describe how vegetative material and sand will be temporarily stockpiled, then reused within the project area. No vegetative material will be removed from the project area.
- 5) Comments from the Mendocino County Air Quality Control District focused on the need to address potentially occurring natural asbestos, a water source for dust abatement, and access to the project site for review. Pages 31 and 36 of the IS/MND acknowledge the need for consultation and permitting through the Air Quality Control District to address these concerns. Consultation has been initiated and an offer to the District for a site review prior to and during project implementation has already been extended; there will be no restrictions on access for permitting agencies throughout the duration of the project.



DEPARTMENT OF PARKS AND RECREATION
Mendocino District
12301 North Highway 1 – Box 1
Mendocino, CA 95460

Major General Anthony L. Jackson, USMC (Ret), Director

November 26, 2012

Thad M. Van Bueren
P.O. Box 326
Westport, CA 95488

RE: Initial Study/Draft Mitigated Negative Declaration
Inglenook Fen – Ten Mile Dunes Natural Preserve,
MacKerricher State Park Dune Rehabilitation Project

Dear Mr. Van Bueren:

Thank you for your comments during the public review period for the Initial Study/Draft Mitigated Negative Declaration (MND), MacKerricher State Park Dune Rehabilitation Project. To date, State Parks has received comments from you as a professional archaeologist (dated August 14, 2012) that raise concerns regarding potential environmental impacts, and separate comments forwarded from you as an individual or as Chairperson of the Westport Community Advisory Council (dated September 16, 2012, August 5, 2012, August 10, 2012, August 27, 2012) that advocate for the development of a bicycle trail through the Natural Preserve.

Your comments concerning the cultural resources in the project area are addressed below in responses 1-6 to answer questions and concerns pertaining to archaeology. Your comments concerning natural resources and trail development are addressed below in responses 7 and 8.

1. *In your letter you suggest that the “IS/MND focuses solely on avoidance of direct impacts to the exclusion of other predictable long term consequences that will result from project implementation including erosion, deflation, and inundation.”*

Your determination that long-term impacts not identified in the IS/MND would occur, including erosion, deflation, and inundation, is incorrect. The California State Parks professional staff (staff) consulted on this project is familiar with dune system ecology, have conducted three dune restoration projects that involved the removal of European beach grass and understands the ecological processes once this invasive species is removed. This understanding of dune ecology, and each of the archaeological resources recorded in the Area of Potential Effects (APE) in the Inglenook Fen – Ten Mile Dunes Natural Preserve with their current conditions leads to the opposite conclusion, that the project has the potential to reduce erosion, deflation, and inundation currently caused by unnatural features that influence dune processes. Currently, these significant conditions are pervasive at most of the cultural sites situated in the haul road corridor or in locations where beachgrass is well established.

Results of archaeological testing in 2011 by University of Davis (UCD) establish that construction of the Ten Mile River Railroad and truck road conversion not only resulted in direct impacts to the archaeological resources located within this travel corridor, but more wide spread indirect impacts as well. Apparent at most, if not all of the sites located in the western portion of the Preserve where the road is still present, is substantial site deflation and erosion that continues to adversely impact these resources. The haul road impedes

natural processes by restricting sand movement on the west and north sides of the grade. The road acts as a barrier and creates “deflation plains” along the landward side of the road that has resulted in wind-scoured areas level with the water table. Unfortunately, archaeological sites situated in these deflation plains have been adversely impacted with exacerbated deflation, erosion, and water inundation due to lack of sand which normally buffers these deposits. Subsurface testing at some of these sites in 2011 indicates the archaeological deposits are severely deflated and that the deposits have an average depth of a few centimeters. Additionally, the deposits appear to have been redistributed as a thin veneer across the plain and lack data potential. Consequently, these sites or components of these sites no longer retain integrity and are not eligible for inclusion into the National Register of Historic Places (NRHP). Removal of the haul road will substantially diminish and/or halt development of these deflation plains by allowing the sand to move eastward and allowing native dune vegetation to become reestablished.

Scientific studies conducted by California State Parks in the Ten Mile Dunes beginning in the 1970s, and consultation with experts on dune ecology, including Dr. Peter Baye and Harold Wollenberg, provide insight into how the introduction and establishment of European beachgrass has adversely affected not only the natural resources but archaeological resources as well. Pages 5 and 55 of the Initial Study/Draft Mitigated Negative Declaration (IS/MND) describe how the invasive nature of beachgrass has changed the dune topography by a cycle of sand buildup and shoot growth, and has impacted dune vegetation by outcompeting native plants. In the Ten Mile Dunes, European beachgrass has altered the natural dune processes such that sand accretion around clumps of beachgrass has increased dune height, while “wind tunnels” between the abnormally tall and abrupt dune mounds have caused dune surface erosion and deflation plains. As wind is funneled between beachgrass clumps, it not only removes the sand and older prairie soils where the archaeological sites are situated, it also deflates, erodes, and redistributes the archaeological deposits. These impacts have been documented extensively in the site records associated with these resources throughout the dunes where the beachgrass is well established.

Archaeological sites located in these areas infested with beachgrass have not only suffered significant impacts by exacerbated wind action which exposes, deflates, and erodes these sites, the erosional wind channels create natural paths of travel that have attracted pedestrians, equestrians, and occasional off-highway vehicles. This traffic has accelerated site deflation and erosion, and in some instances the paths have cut through deposits to depths up to 1.5 meters.

Page 90 of the IS/MND describes inundation in the dunes and cites studies pertaining to evidence of recent inundation and of changes expected as a result of sea level rise. Mapping from 2003 and more recent studies in the Ten Mile Dunes, demonstrates that all of the archaeological sites west of the haul road have been inundated at least prior to 2003. These comprehensive field studies also indicate that sites east of the haul road but west of the driftwood line have also been inundated at least prior to 2003. Sites positioned on the east side of the haul road are becoming more exposed as the deflation plains (slacks) become more pronounced and hence, will be increasingly effected by inundation under current conditions. The removal of the haul road will allow sand to move and accumulate into the exaggerated slacks, thus covering some of the exposed sites and decreasing the likelihood of site inundation. In the southwestern areas of the Preserve, where natural dune processes occur because the haul road and beachgrass no longer exist, the foredunes rise gradually from the beach, undulate slightly and are well vegetated with low-lying native plants. Where the haul road and beach grass are absent, waves are dispersed over a broader vegetated surface, rather than channeled and concentrated into deflation plains by unnatural elements.

In summary, this project has the capacity to stabilize archaeological deposits by reducing existing conditions that currently exacerbate site erosion and deflation by hindering natural dune processes. It is anticipated that this work will conserve the integrity of some sites identified as significant by improving dune ecology and restoring those natural dune processes that have been impeded for almost 100 years.

2. *You commented that many of these archaeological sites in the dunes have survived for centuries, if not millennia despite the natural forces that constantly alter the dunes.*

This project will restore the dune ecology back to more natural conditions (Chapter 2, Section 4, Project Objectives) prior to development in the dunes during the 20th Century that included construction of the haul road and introduction of European beachgrass. Although natural forces cannot be mitigated (sand will move and sea level will rise over time), human induced impacts that have and continue to adversely impact these unique archaeological resources at an accelerated rate can be lessened.

Most of the archaeological sites situated in the Preserve demonstrate in their records (through successive updates) increasing levels of human induced damage since the 1940s. Damages consisting of severe erosion, deflation, and inundation, though associated with natural forces, have been exacerbated by unnatural obstructions that create abnormally high dunes, deflation plains and wind channels that result in more severe environmental conditions that have destroyed archaeological deposits in the dunes. Removal of segments of the haul road and plots of European beachgrass will slow down these accelerated environmental conditions and perhaps aid in the survival of these sites for another millennia.

3. *You comment that this project will intentionally and aggressively restructure the habitats, landforms, and hydrology of the western dunes to the detriment of archaeological site preservation mandated by law and the park's General Plan.*

State Parks staff are mandated by federal (National Historic Preservation Act and implementing regulations [36 CFR Part 800]) and state laws (California Environmental Act [CEQA]; Public Resources Code 5024 and process of meeting mandate 5024.5) State Park policies (Department Operations Manual [DOM] 0400 currently under revision) and the specific State Park General Plans to implement projects that are protective of all resources, including archaeological sites. State Parks staff and University of California, Davis Anthropology Department Staff have conducted extensive archival research, intensive pedestrian surveys, and subsurface investigations for this project in 2011 and 2012. These comprehensive studies focused on the entire Preserve. The work of both groups was synthesized and used to evaluate whether the proposed rehabilitation activities would impact resources and if such impacts would cause a substantial adverse change to the significance to the archaeological sites (CEQA Sec. 21094.1). Additionally, State Parks consulted with experts on dune ecology to make informed decisions related to project implementation and potential impacts to the cultural resources, both direct and cumulative from rehabilitation efforts.

State Parks staff redesigned the project and developed treatment measures based on the data generated from these investigations to insure that potential impacts to all the archaeological resources in the Area of Potential Effects (APE) are maintained at a less than significant level. Some of these project revisions include: portions of the haul road will not be removed where archaeological sites are located to avoid impacting subsurface deposits that may be present immediately beneath the feature; plots of European beachgrass will remain in the vicinity of archaeological resources to avoid direct disturbance associated with hand removal; channel banks where culverts are removed will be armored

with willow sprigs and vegetation mats to control erosion; and an aggressive and extended archaeological site adaptive management monitoring program will be implemented at the onset of rehabilitation efforts to document and assess changes in the condition of these resources over time and to evaluate appropriate steps if conditions of the resources decline.

4. *You indicate that State Parks failed to use due diligence in assessing project impacts that may cause a substantial adverse change in the significance of historical resources in your statement: "to adequately address significant effects of this project on historical and unique archaeological resources it is necessary to first evaluate whether or not the cultural resources in the project vicinity qualify as unique archaeological sites or historical resources and then analyze all of the adverse changes that will be caused by the project."*

CA-MEN-2946H, the former Union Lumber Company Haul Road was evaluated State Parks under PRC 5024.5 and was determined not eligible for listing on either the California Register of Historical Resources or the National Register of Historic Places. Preliminary eligibility determinations were conducted for all other cultural resources documented in the project area. These evaluations were based on archival research including Native American consultation, pedestrian surveys, and subsurface testing at eight sites; however, concurrence of the State Historic Preservation Officer (SHPO) regarding these eligibility determinations has not been pursued to date because, it was determined by State Park staff that this project would not cause significant impacts to the archaeological resources.

The present unavailability of amalgamated evaluative information does not preclude long-term management of unevaluated cultural resources. The mission of State Parks and the nature of land use activities allow California State Parks to thoughtfully steward those properties that are recommended as significant, while protecting unevaluated sites from damage until such time that additional evaluative information can be collected.

CEQA Guidelines (Title 14, Chapter 3) 15064.5(a)(2) states "a resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant."

All sites located in the Area of Potential Effects were treated as "unique archaeological sites" (section 21083.2) or "historical resources" even though many have compromised integrity and do not contain scientific value due to a lack of data potential resulting from both natural forces and those induced by humans. Assuming eligibility, potential substantial adverse environmental effects that might result from project implementation were identified and examined as they relate to each site. Because the original project scope demonstrated the project could cause damage to unique archaeological resources, Park staff changed the project description and developed specific project treatments to preserve resources in place in an undisturbed state and avoid adverse impacts to the archaeological resources.

5. *You state that appropriate environmental documents that summarize evaluation results provide a complete analysis of all potentially significant foreseeable impacts, and proposed mitigations in a manner consistent with CEQA and Public Resources Code 5024 were not prepared for this project.*

DPR Cultural Resource staff prepared the required documentation you reference; however, these documents contain sensitive information; staff redacted the attached copy for public viewing. When available at the North West Information Center, a professional archaeologist may request these un-redacted documents at cost.

6. *You state there is a potential for significant environmental consequences that remain unanalyzed and unmitigated and that preparation of an EIR is required unless the scale of the project is radically reduced.*

As referenced- above, State Parks staff and contractors have conducted extensive archival and field studies to determine the APE, identify historic properties within the APE, and assess the effect(s) that the project could have on any historic properties in the APE. Based on this work, the project was redesigned and project treatment measures developed so that project work will not cause a substantial adverse change to the significance of the resources (CEQA Sec. 21084.1.) and as such, an EIR is not warranted.

CEQA Guidelines (Section 15065 (b) (1): Where, prior to commencement of public review of an environmental document, a project proponent agrees to mitigation measures or project modification that would avoid any significant effect on the environment specified by subdivision (a) or would mitigate the significant effect to a point where clearly no significant effect on the environment would occur, a lead agency need not prepare an environment impact report solely because, without mitigation the environmental effects at issue would have been significant.

7. *You comment that the project will reduce habitat for endangered plants and destroy” 11% of the endangered Howell’s spineflower population, and that “project-induced intrusion of salt water” will reduce critical habitat for endangered plants and animals.*

As your opening statements attest, you are a professional archeologist and historian. However, you do not provide reference of expertise in botany, dune ecology, or geomorphology. The environmental document for the MacKerricher Dune Rehabilitation Project was prepared by a team of professional coastal ecologists, and included State Archaeologists, Historians, Engineering Geologists, and Environmental Scientists. Rather than “destroy” populations of endangered species and their critical habitats, the project will greatly benefit these species by increasing critical natural habitat that will lead to the recovery of endangered populations. As explained in detail throughout the IS/MND, the primary objective of the project is “to restore natural processes in a 1285-acre dune ecosystem of statewide significance within a Natural Preserve”, including “to restore ecosystem processes that are crucial to the viability of endangered species and their habitats”. Pages 4-6 of the IS/MND provide detailed description of how the haul road and European beachgrass have impacted the endangered species, and how removal of these unnatural elements will greatly benefit the species through ecosystem-level restoration. As part of the environmental review process, existing populations of endangered species were documented and mapped in 2011. Your comment mistakenly assumes that the small population of Howell’s spineflower that was mapped along the northern section of haul road is a finite population. As a dune annual, the spineflower population fluctuates by orders of magnitude among years, and their distribution changes even without intervention. The project, with mitigation, is expected (reasonably, with expert opinion guiding long-term management that is not occurring otherwise, but for the project) to result in a net long-term gain in both distribution and population size of spineflower in more sustainable and more potentially persistent stable locations. The long-term viability of the nominal “11%” of the spineflower population in the road alignment is very low because it is located immediately behind an active foredune and shoreline that is actively transgressing landward, driven by sea level rise in a location that is doomed in the long-term to provide stable dune habitat for spineflower. In addition to the plants, there is well documented evidence to show that the haul road and European beachgrass directly impact habitat of

the western snowy plover, and that removal of these unnatural elements will expand nesting and foraging opportunities (IS/MND pages, 5, 6, 50, 55, 68-69). We also worked closely with professional biologists from the regulatory agencies that have jurisdiction over the protection of endangered species (CA Department of Fish and Game and US Fish and Wildlife Service) to ensure beneficial results from the proposed project, as is required under state and federal regulations. The Mitigation, Monitoring, and Restoration Plan in Appendix E.2 further details measures to ensure that the endangered plant populations, including Howell's spineflower, will increase following project implementation.

8. *As the Chairperson for the Westport Municipal Advisory Council, and as a private individual, you have actively lobbied other agency representatives, local political leaders, and State Park upper managers for the development of a bicycle trail through the Inglebrook Fen-Ten Mile Dunes Natural Preserve. For example, in an e-mail message dated August 27, 2012 to State Park Superintendent Loren Rex (and cc'd to District Superintendent Liz Burko, County Supervisor Kendall Smith, County Supervisor Elect Dan Gjerde, and Assemblymember Wesley Chesbro's Field Representative, Ruth Valenzuela), you stated (in part): "My suggestion is that concerns about that aspect of the project might be greatly reduced if State Parks made a commitment to plan an alternate bike/ped/wheelchair route through the northern park. I also believe an environmentally sensitive path is entirely feasible from both a cost and environmental standpoint. That view is based on mapping of critical habitats shown in the IS/MND and my own confidential knowledge of cultural resources." In a letter to Jesse Robertson, CalTrans District 1, and Janet Orth, Mendocino Council of Governments, you again lobbied for development of a Class 1 bicycle trail through the Natural Preserve and included a map showing a proposed location just inland from the existing haul road.*

The alternative bicycle trail that you propose, as described above and shown on your map, would cause significant direct, indirect, long-term, cumulative, and irreparable impacts to Environmentally Sensitive Habitat Areas as defined under the Coastal Act, including populations of threatened and endangered species, wetlands, coastal dunes, and extensive archaeological sites. A team of highly respected ecologists, archaeologists, historians, engineering geologists, and environmental scientists surveyed the Ten Mile Dunes extensively and mapped the sensitive resource areas. Not all of these areas have been disclosed to the public, so not all were available to you when you prepared the map. We are not aware of any additional cultural surveys you may have conducted, and/or if you have engaged the services of professional biological and physical scientists to identify a non-impacting bicycle trail route through the dunes. Based on our in-depth knowledge of the Ten Mile Dunes, any bicycle trail route through the dunes would cause significant impacts, even if sensitive sites could be directly avoided during construction. In addition, a multi-use trail would greatly increase visitor use to the dunes, and in turn increase the potential for exposure and vandalism of archaeological resources.

As explained in the IS/MND on pages 7, 115, 122, the haul road through the dunes is deteriorating and does not function as a continuous coastal trail. Plans during the mid-1990's by the Department of Parks and Recreation, which appeared at the time to be consistent with the General Plan, included a proposal to rebuild a continuous hardened surface trail through the dunes to connect washed out sections of the haul road. As explained on page 122 of the IS/MND, a feasibility study was conducted in 2000, which clearly concluded that a hardened trail through the dunes was incompatible with the Natural Preserve designation, and not feasible to construct due to significant environmental concerns. One of the main issues raised during the feasibility analysis was that construction of a hardened trail through the Natural Preserve would not be permitted through the coastal development process (if one was to be proposed), as no segments could avoid causing seriously detrimental effects to the Environmentally Sensitive Habitat

Areas of coastal dunes, wetlands, and endangered species habitat. In addition, no trail could be built to connect the washed out sections of haul road without impacting archaeological sites.

California State Parks appreciates your interest in the Dune Rehabilitation Project at the Inglebrook Fen-Ten Mile Dunes Natural Preserve at MacKerricher State Park. Although trail development in the Preserve is not a feasible option, we would be glad to talk with you about trail enhancement to the south, outside of the Natural Preserve, that could avoid significant impacts to sensitive resources, and could better serve the needs of bicyclists, pedestrians, and visitors that are mobility impaired.

Sincerely,



Dionne Gruver
Associate State Archaeologist
California State Parks



Renée Pasquinelli
Sr. Environmental Scientist
California State Parks

cc:

Liz Burko, California Department of Parks & Recreation
Jan Wooley, California Department of Parks & Recreation
Dionne Gruver, California Department of Parks & Recreation
Abbey Stockwell, Mendocino County Department of Planning and Building Services



DEPARTMENT OF PARKS AND RECREATION
Mendocino District
12301 North Highway 1 – Box 1
Mendocino, CA 95460

Major General Anthony L. Jackson, USMC (Ret), Director

November 26, 2012

Ms. Peggy Shannon
P.O. Box
Bodega Bay, CA 94922

RE: Initial Study/Draft Mitigated Negative Declaration
Inglenook Fen – Ten Mile Dunes Natural Preserve,
MacKerricher State Park Dune Rehabilitation Project

Dear Ms. Shannon:

Thank you for your comments during the public review period for the Initial Study/Draft Mitigated Negative Declaration (MND), MacKerricher State Park Dune Rehabilitation Project. Your comments concerning the cultural resources in the project area are appreciated and it is hoped that the following responses will help to answer some of your questions and concerns regarding the project.

1. In your letter you requested copies of the *Specific Project Requirements, Documented Archaeological Site Avoidance Plan* and the PRC §5024.5 review prepared for this rehabilitation project.

These documents are included with this response letter; I hope you find them helpful. You will see that DPR archaeological staff conducted extensive archival research and field studies coordinated with the University of California, Davis (UCD) to make informed decisions about the project and potential impacts to the resources. During 2011 field studies, staff and UCD surveyed the entire Inglenook Fen – Ten Mile Dunes Natural Preserve and tested eight previously recorded archaeological sites to determine if the sites retained integrity. These sites are located in the project area where the most intensive ground disturbing activities associated with project work will be conducted. Based on the findings of these investigations, the project was redesigned and project treatment measures and/or mitigations developed to insure that impacts during and subsequent to project implementation are maintained at a less than significant level.

2. Your comments also referenced a study you conducted throughout MacKerricher State Park that assessed the cultural resources present in the park. You were wondering why this study (*MacKerricher State Park Archaeological Site Assessment, Coastal Erosion Monitoring and Stabilization Project 2003*) was not mentioned in the MND. Additionally, you did not understand how it was possible to conduct adequate impact analysis without referring to this work.

This report was not referenced in the MND because during the literature search in support of this project, your report was not found. This literature search was extensive and included a review of files at the Departments of Parks and Recreation's Northern Service Center (NSC); a search of the DPR Unit Data File (UDF); DPR Central Records; records on file with the Northwest Information Center (NWIC); and most importantly, the files retained by the Mendocino District where you worked and where you conducted the study. This report was

not filed in any of these locations. The NWIC provided DPR 523 Forms for the archaeological sites located in the project area. Many of these records contained updated records from your 2000-2003 study with DeGeorgey. Though your report was not obtainable for site impact analysis, we used the updated site records to relocate the archeological resources and site boundaries, make condition assessments of those resources, and determine impacts based on the existing conditions.

If this report is available in your home library, please provide copies to the NWIC; DPR Archaeology, History, and Museums at DPR Headquarters and to the Mendocino District office for their cultural resource files. It is important that you circulate this report since this investigation was so intensive and as you mentioned, resulted in changes to our understanding of these sites.

3. Your letter also states that you are *“concerned about the effects of windblown sand on archaeological resources, both burying and exposing resources, a condition that would result from beach grass removal. To address these issues, I installed a dune movement monitoring system that allows one to very simply and reliably document dune movement over time. I also installed metal datums to assist in site relocation.”*

As is discussed throughout the Initial Study/Draft MND, including pages 4, 5, 50, 58, 64, 84, and 85, dune movement is integral to the dynamic nature of the dune ecosystem. Native vegetation is highly adapted to this changing environment, and readily recolonizes areas where European beachgrass is removed. Sand has blown over the top of archaeological sites and has been scoured from the same sites due to the ever-changing conditions of the dunes for decades, long before European beachgrass was introduced to the Natural Preserve. Pages 5 and 55 of the Initial Study/Draft Mitigated Negative Declaration (IS/MND) describe how the invasive nature of beachgrass has changed the dune topography by a cycle of sand buildup and shoot growth, and has impacted dune vegetation by outcompeting native plants. In the Ten Mile Dunes, European beachgrass has altered the natural dune processes such that sand accretion around clumps of beachgrass has increased dune height, while “wind tunnels” between the abnormally tall and abrupt dune mounds have caused dune surface erosion and deflation plains. As wind is funneled between beachgrass clumps, it not only removes the sand and older prairie soils where the archaeological sites are situated, it also deflates, erodes, and redistributes the archaeological deposits. These impacts have been documented extensively in the site records associated with these resources throughout the dunes where the beachgrass is well established.

We were unable to locate markers within the Natural Preserve that you may have used to track dune movement. However, a November 4, 2003 report by Hans Barnaal, written under contract to California State Parks, discussed datums that were installed south of the Preserve, particularly at Laguna Point.

Thank you again for your comments.



Dionne Gruver
Associate State Archaeologist
California State Parks – Northern Service Center



DEPARTMENT OF PARKS AND RECREATION
Mendocino District
12301 North Highway 1 – Box 1
Mendocino, CA 95460

Major General Anthony L. Jackson, USMC (Ret), Director

November 26, 2012

Tamara L. Gedik
Coastal Program Analyst
California Coastal Commission
North Coast District Office
710 E Street, Suite 200
Eureka, CA 95501-1865

Re: Comments on circulated Initial Study/Mitigated Negative Declaration – MacKerricher State Park Dune Rehabilitation Project, Inglenook Fen-Ten Mile Dunes Natural Preserve

Dear Ms. Gedik:

Thank you for reviewing the Initial Study and Mitigated Negative Declaration (IS/MND) and related documents for the MacKerricher Dune Rehabilitation Project and for attending the agency scoping meeting on March 14, 2011. Please accept this letter as response from the California Department of Parks and Recreation to your comment letter dated August 31, 2012 on this project.

You are correct in that the reference to a June 2005 MacKerricher State Park General Plan on page 35 of the IS/MND was a typographical error. The General Plan was approved in 1995 and an updated document has not been prepared. We will correct this error in the final MND.

Your letter states that “our primary concerns with the project as proposed relate to direct, unmitigated impacts to public access”. Nothing proposed within the project will cause permanent impacts to existing public access, and no permanent public access closures are proposed for any area of the Inglenook Fen-Ten Mile Dunes Natural Preserve, which contains the entirety of the project. Short term impacts resulting from temporary closures for public safety during immediate road deconstruction activities have been addressed on pages 14 and 114-116 of the IS/MND.

The project proposes to remove remaining deteriorated sections of a former logging road that runs through a Natural Preserve. As explained throughout the IS/MND (pages 4-10, 51, 57, 60, 71-73, 87, 101-102), the road directly impacts natural processes that are critical for ecosystem functions that support sensitive native species and habitats. The road does not serve as a contiguous pedestrian, bicyclist, all accessibility trail, or as a trail used by people with strollers. Some of the statements in your letter, which appear to be based on misinformation include: *“The paved portions provide access to bicyclists and people with strollers. The current proposal to remove the road base and surface of the Haul Road in those areas described in the MND, and the removal of culverts at Inglenook and Fen Creeks interferes with the current intensity of use of the project area by recreationists, and will effectively reduce public access to this area once completed”*. As is shown in the attached report, between March and August, 2012, only about 3% of the visitor use within the Natural Preserve occurred on the haul road. Surveys were conducted at weekly intervals as part of a plover survey program; visitor use and location was one of the required elements for survey documentation. Park staff and volunteers that

have regularly conducted activities within the foredunes for nearly a decade, state that people with strollers and bicyclists do not use the haul road in the Natural Preserve (see attached report). Approximately 1 mile of road is completely washed out and much of the remaining approximate 2 mile sections are either dangerously eroded or partially covered with sand. The attached map (MacKerricher State Park Dune Rehabilitation Haul Road Condition) shows the current haul road condition through the dunes and the 2003 documented topography of the foredunes in the vicinity of the road.

No segment of the California Coastal Trail will be eliminated under the MacKerricher Dune Rehabilitation Project. The California Coastal Trail exists along the beach from Ward Avenue northward to the Ten Mile River, then parallels or follows the southeast-northwest alignment of the haul road to the Ten Mile Bridge. The easternmost half of this alignment section (approximately 225 yards) leading to the bridge is under private ownership and is not part of the proposed project. The proposal for the northwestern segment of the alignment is to remove the asphalt veneer (to allow some recovery by native plant species), but retain the underlying rock ballast, thus retaining a trail surface that will lead to an existing beach trail. The final MND will contain a more detailed description of the treatment proposed for this northernmost segment of the haul road and how coastal access will be provided to the beach. The attached revised project overview map will be included in the final MND.

The Mendocino County certified Local Coastal Plan (LCP) was adopted in 1980 and has not since been updated. The LCP and public access policies of the Coastal Act are cited in your letter as the “standard of review for any development subject to coastal development permit requirements”. Although your letter additionally offers comments regarding mitigations for biological resources, no sections of the Coastal Act or LCP are cited regarding the protection of Environmentally Sensitive Habitat Areas. LUP 4.2-19, contained within the Local Coastal Plan (LCP) is cited as directing the Department of Parks and Recreation (DPR) to “*prepare a General Plan for MacKerricher State Park that provides access to Ten Mile River and Inglenook Fen at designated locations and subject to conditions necessary for preservation of the natural environment of the park.*” However, as you note, the General Plan was not submitted to the County for adoption to the Recreation Element, and as such, has not been reviewed or certified by the Coastal Commission. The 1980 adopted LUP Policy 4.2-21 is also cited as recommending that the Georgia-Pacific Corporation haul road (then still under private ownership) be acquired by DPR and incorporated into its management plan for the park. The haul road has since been acquired and incorporated into the MacKerricher State Park General Plan. No sections of the LCP state that the haul road shall be maintained for public access in the Ten Mile dunes.

As part of the EIR process that included adoption of the MacKerricher General Plan by the State Park Commission, the property containing the beach, dunes, and wetlands between Ward Avenue and the Ten Mile River and all elements contained within, was classified as the Inglenook Fen-Ten Mile Dunes Natural Preserve. As stated in the IS/MND (page 4), the “*foundation for State Parks*” management approach for all units is based on the unit classification statutes as defined in the Public Resources Code (PRC § 5019.50 - 5019.80). PRC Section 5019.71 specifies the purpose of Natural Preserves. As such, and as explained in the IS/MND (pages 4 and 104), the overarching management focus of the Inglenook Fen-Ten Mile Dunes Natural Preserve and the purpose of the proposed project are based on State legal mandates defined under the Public Resources Code. Located only within the Preserve boundaries, the primary objective of the project is “*to restore natural processes in a 1285-acre dune ecosystem of statewide significance within a Natural Preserve*” (page 6 of the IS/MND). The full text of PRC Section 5019.71 reads:

Natural preserves consist of distinct nonmarine areas of outstanding natural or scientific significance established within the boundaries of other state park system units. The

purpose of natural preserves shall be to preserve such features as rare or endangered plant and animal species and their supporting ecosystems, representative examples of plant or animal communities existing in California prior to the impact of civilization, geological features illustrative of geological processes, significant fossil occurrences or geological features of cultural or economic interest, or topographic features illustrative of representative or unique biogeographical patterns. Areas set aside as natural preserves shall be of sufficient size to allow, where possible, the natural dynamics of ecological interaction to continue without interference, and to provide, in all cases, a practicable management unit. Habitat manipulation shall be permitted only in those areas found by scientific analysis to require manipulation to preserve the species or associations that constitute the basis for the establishment of the natural preserve.

We find no section of the Coastal Act (PRC § 30000 – 37042) to state or imply that coastal access policies are to override or have precedence over PRC Section 5019.17. We also find no sections of the Coastal Act or the Mendocino LCP that would indicate that the proposed MacKerricher Dune Rehabilitation project would be in conflict with State coastal regulations. Rather, numerous sections of the Coastal Act and the Mendocino County LCP direct the protection of Environmentally Sensitive Habitat Areas, which include dunes, wetlands, and endangered species habitats, and allow for public access where compatible with the protection of sensitive natural resources. Where coastal access is addressed, the intent appears to be to facilitate public access from the nearest public road to the shoreline. However, it does not appear that the intent of coastal policies is to facilitate the development and maintenance of trails and roadways that traverse through sensitive habitats parallel to the beach.

As explained in the Draft IS/MND (pages 7, 115, 122), the haul road through the dunes is deteriorating and does not function as a continuous coastal trail. Plans during the mid-1990's by the Department of Parks and Recreation, which appeared at the time to be consistent with the General Plan, included a proposal to rebuild a continuous hardened surface trail through the dunes to connect washed out sections of the haul road. In response to outcry by the environmental community and regulatory agencies, a feasibility study was conducted in 2000, which clearly concluded that a hardened trail through the dunes was incompatible with the Natural Preserve designation, and not feasible to construct due to significant environmental concerns (Draft IS/MND page 122). We also find no sections of the Coastal Act or Mendocino County LCP that would permit development of hardened trail sections through the Inglenook Fen-Ten Mile Dunes Natural Preserve to create a contiguous trail (if one was to be proposed), as no segments could avoid causing seriously detrimental effects to the Environmentally Sensitive Habitat Areas of coastal dunes, wetlands, and endangered species habitat. In addition, no trail could be built to connect the washed out sections of haul road without impacting archaeological sites.

Listed below are selected sections of the Coastal Act and the Mendocino County LCP and LUP that support the MacKerricher Dune Rehabilitation Project's consistency with coastal regulations (emphasis added).

Public Resources Code

Division 20

California Coastal Act

Section 30001.

The Legislature hereby finds and declares:

(a) That the California coastal zone is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced ecosystem.

(b) That the permanent protection of the state's natural and scenic resources is a paramount concern to present and future residents of the state and nation.

(c) That to promote the public safety, health, and welfare, and to protect public and

private property, wildlife, marine fisheries, and other ocean resources, and the natural environment, it is necessary to protect the ecological balance of the coastal zone and prevent its deterioration and destruction.

(d) That existing developed uses, and future developments that are carefully planned and developed consistent with the policies of this division, are essential to the economic and social well-being of the people of this state and especially to working persons employed within the coastal zone.

Section 30001.5 Legislative findings and declarations; goals

The Legislature further finds and declares that the basic goals of the state for the coastal zone are to:

(a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.

(c) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.

Section 30210.

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211.

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212.

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where
(1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,

Section 30214 Implementation of public access policies; legislative intent

(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:

(1) Topographic and geologic site characteristics.

(2) The capacity of the site to sustain use and at what level of intensity.

(3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.

Section 30240 Environmentally sensitive habitat areas; adjacent developments

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation 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.

Section 30231 Biological productivity; water quality

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Mendocino County Coastal Element – Chapter 3 Land Use Plan: Resources and Development Issues and Policies

3.1-15 Dunes shall be preserved and protected as Environmentally sensitive habitats for scientific, educational and passive recreational uses. Vehicle traffic shall be prohibited. Where public access through dunes is permitted, well-defined footpaths or other means of directing use and minimizing adverse impacts shall be developed and used. New development on dune parcels shall be located in the least environmental damaging location and shall minimize the removal of natural vegetation and alteration of natural landforms.

3.1-18 Public access to sensitive wildlife habitats such as rookeries or haulout areas shall be regulated, to insure that public access will not significantly adversely affect the sensitive resources being protected.

Development within buffer areas recommended by the California Department of Fish and Game to protect rare or endangered wildlife species and their nesting or breeding areas shall meet guidelines and management practices established by the Department of Fish and Game, and must be consistent with other applicable policies of this plan.

3.1-25 The Mendocino Coast is an area containing many types of marine resources of statewide significance. Marine resources shall be maintained, enhanced and, where feasible, restored; areas and species of special biologic or economic significance shall be given special protection; and the biologic productivity of coastal waters shall be sustained.

3.1-2 Development proposals in environmentally sensitive habitat areas such as wetlands, riparian zones on streams or sensitive plant or wildlife habitats (all exclusive of buffer zones) including, but not limited to those shown on the Land Use Maps, shall be subject to special review to determine the current extent of the sensitive resource. Where representatives of the County Planning Department, the California Department of Fish and Game, the California Coastal Commission, and the applicant are uncertain about the extent of sensitive habitat on any parcel such disagreements shall be investigated by an on-site inspection by the landowner and/or agents, County Planning Department staff member, a representative of the California Department of Fish and Game, a representative of the California Coastal Commission. The on-site inspection shall be coordinated by the County Planning Department and will take place within 3 weeks, weather and site conditions permitting, of the receipt of a written request from the landowner/agent for clarification of sensitive habitat areas. If all of the members of this group agree that the boundaries of the resource in question should be adjusted following the site inspection, such development should be approved only if specific findings are

made which are based upon substantial evidence that the resource as identified will not be significantly degraded by the proposed development. If such findings cannot be made, the development shall be denied. Criteria used for determining the extent of wetlands and other wet environmentally sensitive habitat areas are found in Appendix 8 and shall be used when determining the extent of wetlands.

Mendocino County Coastal Element – Chapter 4 Land Use Plan: Descriptions and Policies for Thirteen Planning Areas

Seaside Creek to Pudding Creek Trail

“Because of the sometimes hazardous conditions occasioned by tidal action and stream conditions at the mouth of Ten Mile River, the coastal trail in this area shall be segmented, rather than indicated as a continuous trail system. One segment shall extend from Seaside Creek Beach south to the northern bank of Ten Mile River. Another segment shall extend from the south side of Ten Mile River along the shoreline of MacKerricher State Park to Pudding Creek.”

Your comment letter also quotes sections of the MacKerricher State Park General Plan and states that the proposed removal of the northern haul road is inconsistent with policies of the General Plan. Page 3 of the letter quotes the declaration of purpose for MacKerricher State Park as follows:

“The purpose of MacKerricher State Park is to make available to the people for their inspiration, enlightenment, and enjoyment, in an essentially natural condition, the outstanding scenic features and natural values, including the coastline embracing offshore environs; the stretches of sandy and rocky beach; the headland bluffs; the Ten Mile Dunes; the marine terraces; the wetland habitats including Lake Cleone and the unique Inglenook Fen; the geology and plant and animal life; the significant archaeological and historical resources; and the scientific values therein. (Emphasis added)”

Page 3 also quotes page 213 of the General Plan as stating: *“The environmentally-preferred alternative would have been the natural and cultural resource protection priority alternative (2). However, that alternative did not fully meet the goal of providing for the public use identified in project’s statement of purpose. Therefore, the project proposed in the general plan is a combination of the natural and cultural resource protection priority and public use priority alternatives.”*

As explained earlier in our response, through the General Plan process, the area containing the proposed project was classified as a Natural Preserve. Removal of the haul road as proposed in the Dune Rehabilitation Project does not conflict with the statements quoted above from the MacKerricher General Plan, is based on sound scientific principles, and is entirely consistent with the Natural Preserve classification. Public access to the Ten Mile Dunes, the stretches of sandy beach, and the Inglenook Fen will not change, and will not be limited as a result of the project. As evidenced from the attached use report, and based on our 20+ years of local park experience, the haul road section that runs through the foredunes of the Natural Preserve no longer functions as a contiguous trail and receives very little public use, as most visitors walk along the beach.

Page 54 of the MacKerricher General Plan reads:

“Natural preserve designation provides guidance and acts as a control upon the department by assuring that future plans will respect the degree of resource sensitivity identified within the preserve. This designation is also an aid in setting priority for field staff who will develop and implement the various resource management plans proposed

in a general plan. Those resource management plans relating to the natural preserve will receive consideration for higher priority based on the relatively greater significance of the resources. Natural preserve status also aids the department when dealing with possible threats to park resources from outside the park. It is a testament that there is support throughout the department for the special protection needed for resources within the preserve.

The many sensitive resources within the natural preserve at MacKerricher State Park will require a variety of management strategies. Different areas will experience different levels of public use, ranging from extremely low and controlled use in the fen to a relatively higher level at Ten Mile Beach. Public access in the foredunes will need careful regulation, as these dunes are the most likely to be disrupted by uncontrolled equestrian or pedestrian use. They are also the least protected from wind blast and wave action and encompass important nesting areas for western snowy plovers.

Most other parts of the dunes can be less controlled and remain undesignated for public use, as there is only a low level of foot traffic. There will be few formal designated access points and pathways. However, it is recognized that some especially fragile resource areas may require barriers to protect threatened features.”

Designation of this area as a natural preserve simply supports the already existing authority of the District Superintendent to apply needed management measures, such as occasional fencing of an area, regardless of the preserve status.

Your letter also questions the safety of public access during storm events if the stream crossings are removed as proposed in the project description. As discussed on-site during the March 14, 2011 agency meeting, if the stream crossings were to be retained, not only would this be inconsistent with the purpose of the Natural Preserve, there would be no feasible or safe way to maintain fixed access to the crossings. The foredunes and the outlets of Fen and Inglenook Creeks are dynamic systems subject to unpredictable wave action and hydrologic processes. The photo on page 9 of the Draft IS/MD and the discussion on page 117, illustrate how the eroded remaining sections of haul road in the Natural Preserve create an unsafe barrier to public access between the beach and dunes. Throughout most of the year, Fen and Inglenook Creeks are easily crossed along the beach, as the terrestrial flow generally sinks into the sand at the lowest reaches of the streams. Only during high flow and storm events, at a time when fewer visitors are on the beach, would through access between Ward Avenue and the Ten Mile River be a challenge. Still, even during times when the creek outlets are difficult to cross on foot, visitors would be able to walk along the beach over one mile northward from Ward Avenue to Fen Creek, and nearly 1.5 miles southward from the Ten Mile River to Inglenook Creek.

Ample recreational opportunities exist within the vicinity of MacKerricher State Park and the City of Fort Bragg for multiple-use public access along the coast. The nearly three miles of haul road within the area classified as “State Park” (PRC 5019.53), south of the Natural Preserve (outside of the proposed project area), receive much greater use and primarily traverse the more stable coastal bluffs. As is appropriate, the Department of Parks and Recreation has future plans to repair and improve sections of the haul road that lie outside of the Natural Preserve. The Department has also purchased two beach wheelchairs to be used by people that are mobility impaired who want to access the beach from Ward Avenue northward. The City of Fort Bragg is in the process of implementing plans for a multiple-use public access trail along the coastal bluffs of the former Mill Site, south of Pudding Creek. Once the City’s project is completed, the public will have access to more than five miles of contiguous coastal trail between Ward Avenue and the Noyo River.

In reference to a quote from the June 1977 Inglenook Fen Study your letter asks that we “*please clarify how exposing Fen Creek to stream flow as proposed will maintain the integrity of the established fen/fencarr system*”. The Hydrology and Water Quality section of the IS/MND explains (pages 97-103) that Inglenook Fen is a natural feature that formed thousands of years ago when the sand dunes formed a barrier to the movement of surface and ground water from Fen Creek. As stated on pages 101-102 in the IS/MND: “*The proposed project would remove remnant road sections and two culverts which currently act as barriers to natural dune formation and dune hydrology. These changes would not substantially increase the rate or amount of surface runoff or increase the potential for offsite flooding. Rather, beneficial changes in the lower hydrology of Fen and Inglenook Creeks will occur from the removal of the culverts and road berm that currently constrict the channels. Inglenook Fen has been a natural feature for 4,000 to 6,000 years (Barry, W.J. and Schlinger, E. I. 1977) long before the construction of the road; removal of the road and culverts will not impact the fen. The overall goal of the project is to return the dune system to a more natural state, which is likely to improve drainage within the Preserve in the long-term. Therefore, the project would have no impact.*”

We appreciate your acknowledgement of our proposed project efforts to improve habitat for sensitive biological resources and mitigate for impacts that may occur during project activities. In regards to the mitigation measures, Appendix E.2 spells out specific immediate and long-term objectives to mitigate for short-term project impacts to listed plants. The document also explains that the main goal and approach to the plan (pages 1-5 of Appendix E.2) is to develop a long-term strategy for on-going monitoring and adaptive management of natural ecosystems within the Preserve. As stated on page 1: “*The specific goals, actions, and methods in this plan represent an initial phase of a longer term ecological monitoring and adaptive management plan to be designed for the Preserve.*” The Mitigation, Monitoring, and Restoration Plan was written by highly qualified and respected ecological consultants, Peter Warner, Dr. Peter Baye, and Teresa Sholars, and under consultation with USFWS and DFG botanical experts. We will continue to work closely with the regulatory agency ecologists to finalize the long-term restoration plan, and will continue to implement approved habitat restoration activities, including weed removal, as a recognized priority within the Natural Preserve.

By removing a deteriorating road that severely impacts ecosystem processes in a Natural Preserve, the proposed MacKerricher Dune Rehabilitation Project offers a rare opportunity for the public to see and experience a functioning natural coastal dune system that supports significant habitat for endangered species. If you have additional questions regarding the project, please do not hesitate to contact me (rpasquinelli@parks.ca.gov, or 707-937-5721). Again, I would be glad to meet with you and other Coastal Commission staff for another site visit at your convenience.

Sincerely,



Renee Pasquinelli
Senior Environmental Scientist

cc:

Linda Locklin, Statewide Coastal Access Program Manager, CA Coastal Commission
Robert S. Merrill, North Coast District Manager, California Coastal Commission
Abbey Stockwell, Mendocino County Planning and Building Services, Fort Bragg
Karyn Gear, North Coast Program Manager, State Coastal Conservancy

Attachments:

State Parks Internal Report: "Visitor Use of the old Haul Road within the Inglenook Fen-Ten
Mile Dunes Natural Preserve"

MacKerricher State Park Dune Rehabilitation Haul Road Condition

Revised MacKerricher State Park Dune Rehabilitation Overview Map

Attachment E
CDP 12-2012, Coastal Permit Administrator Staff Report, June 11, 2013

**STAFF REPORT FOR COASTAL DEVELOPMENT
STANDARD PERMIT**

**CDP# 12-2012 (DPR Ten Mile)
June 11, 2013
CPA-1**

OWNER: California Department of Parks and Recreation
12301 N. Hwy 1, Box 1
Mendocino, CA 95460

APPLICANT: Renee Pasquinelli
Senior Environmental Scientist
12301 N. Hwy 1, Box 1
Mendocino, CA 95460

REQUEST: Coastal development permit for a dune restoration project that involves: (1) the removal of asphalt and gravel base in three segments of the former Georgia Pacific Haul Road, totaling 2.7 miles, (2) stream channel restoration associated with the removal two road culvert creek crossings, and (3) the treatment of European beachgrass and other nonnative weeds within the project area.

LOCATION: In the coastal zone, on the west side of Highway 1, located in MacKerricher State Park, north of Ward Ave, in the community of Cleone, to Ten Mile River.

APPEALABLE AREA: Yes – West of 1st public road and within ESHA

PERMIT TYPE: Standard Coastal Development Permit

TOTAL ACREAGE: 1,285 acres (total)

GENERAL PLAN: OS; RR-10; RL-160

ZONING: OS [FP]; RR:L-10 [FP][PD]; RL:L-160

EXISTING USES: MacKerricher State Park: Inglenook Fen-Ten Mile Dunes Natural Preserve

ASSESSORS PARCEL NUMBERS: 015-130-43; 015-130-44; 015-130-45; 015-130-53; 069-010-01; 069-010-02; 069-010-03; 06-9010-04; 069-010-05; 069-010-07; 069-010-08; 069-010-09; 069-010-10; 069-010-35; 069-040-01; 069-040-02; 069-040-03; 069-040-04; 069-040-05; 069-040-06; 069-040-07; 069-040-08; 069-040-09; 069-040-10; 069-051-01; 069-051-14; 069-052-01; 069-090-01; 069-090-02; 069-090-03; 069-090-04; 069-090-05; 069-090-06; 069-090-07; 069-090-08; 069-090-09; 069-090-10; 069-090-13; 069-101-01; 069-101-02

ADJACENT ZONING: North: RR:L-10 [PD]
East: RL; RR:L-2, RR:L-10
South: RR:L-40

West: Pacific Ocean

SUPERVISORIAL DISTRICT: 4th

CA COASTAL RECORDS PROJECT: [Image 2009 02684](#) - [Image 2009 02716](#)

ENVIRONMENTAL REVIEW: The California Department of Parks and Recreation (State Parks) is the lead agency responsible for project compliance with the California Environmental Quality Act (CEQA). State Parks has prepared an Initial Study and a Mitigated Negative Declaration (MND). In summary, the MND for the Project found:

No potential for adverse impacts on agricultural resources, mineral resources, population and housing, and recreation associated with the proposed project.

Less than significant impacts in the following areas: aesthetics, air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, transportation/traffic, and utilities and service systems.

Full implementation of the mitigation measures included in the MND will reduce potential project-related impacts on biological resources to a less than significant level.

The Notice of Determination for MND was filed December 20, 2012 and no court challenges to the MND were filed within the 30-day statute of limitations.

Special Condition 1 is recommended with this coastal development permit to emphasize that all mitigation measures specified in the MND are conditions of CDP 12-2012.

LOCAL COASTAL PROGRAM CONSISTENCY RECOMMENDATION: The Mitigated Negative Declaration (MND) prepared by the State Parks describes design features and mitigation measures incorporated into the project to reduce potential impacts to a level of insignificance as required by CEQA. In addition, the project must also comply with policies in the County's Coastal Element and regulations in the County's Coastal Zoning Code that impose specific requirements which in some cases may exceed those necessary to satisfy CEQA.

The following combines the review of the CEQA analysis completed under the adopted MND with a discussion of requirements found in the County's Local Coastal Plan (LCP). Special conditions are recommended where necessary to achieve compliance with the County's LCP. The following sections also address any comments received from agencies in response to the County's referrals. With the addition of the recommended conditions, the project is consistent with the applicable goals and policies of the Local Coastal Program as described below.

OTHER RELATED APPLICATIONS: CDP 18-2012 CalTrans: Request to install a soldier pier drilled retaining wall at Seaside Creek (watershed just north of Ten Mile) and relocate roadway slightly east of its existing location. That project proposes to mitigate its wetland impacts by restoring impacted streams within Ten Mile Dune Rehabilitation project.

PROJECT DESCRIPTION: California State Parks proposes to restore ecosystem processes in the Inglebrook Fen-Ten Mile Dunes Natural Preserve (Preserve) by removing three disconnected segments of

roadway in rare dune habitat, removing two culverts and restoring the stream channel, and treating (without herbicides) approximately 60 acres (24.3 hectares) of European beachgrass and other nonnative weeds. Located west of Highway 1, and stretching southward from the Ten Mile River to just north of Ward Avenue, the project is entirely within the boundaries of the 1,285-acre Preserve in MacKerricher State Park, Mendocino County, California.

State Parks summarizes the proposed work as follows:

- ◆ Remove three segments of abandoned asphalt roadway and underlying rock base totaling 2.7 miles (4.3 km). Some portions of the road will remain intact to protect sensitive resources.
- ◆ Remove two approximately 5-foot diameter (1.5 meter) culverts and associated fill materials to restore the stream bed, bank, and channel to a natural condition and reestablish native plant vegetation.
- ◆ Remove approximately 38 acres (15.4 ha) of previously treated European beachgrass using hand labor and approximately 15 acres (6.07 ha) of previously untreated European beachgrass through a long-term program of hand removal and native plant reestablishment.
- ◆ Remove other non-native plants, including trees and shrubs through a long-term program that includes reestablishing native dune forest in an approximate 7 acre (2.8 ha) area of back dunes.
- ◆ Reestablish federally and state-listed threatened and endangered species and other native plants into suitable habitat by direct seeding, transplanting, or installation of cuttings.
- ◆ Remove iceplant in select areas to increase habitat for the federally listed Howell's spineflower.

The following represents additional details of the proposed work excerpted (and in some places summarized by staff) from the MND (pgs 6-10).

1. Road Removal

The proposed road removal is divided into three segments, or portions. Portion 1, the southernmost remnant beginning 0.81 miles (1.3 km) north of the Preserve's southern boundary near Ward Avenue; Portion 2, beginning 0.59 miles (0.95 km) south of Fen Creek; and Portion 3, beginning 0.41 miles (0.66 km) south of Fen Creek and continuing largely intact to the Preserve boundary to the northeast. Two culverts will be removed along Portion 3 at Fen Creek and Inglenook Creek. In general, the project proposes to remove the entire length of the haul road including remnant asphalt surface and underlying road base within the Preserve's dune system, except where removal would harm sensitive resources.

Portion 1 stretches about 720 feet (220 m) in length above the coastal strand. It is disconnected from the existing haul road to the north and south. The portion sits atop foredunes, and annual high winter tides further undercut the portion. Segments of the remaining asphalt are unstable and perched above an actively changing beach/coastal strand. Asphalt segments that have broken off lean against the coastal side of the elevated road berm and are carried to sea by high waves during storm events. Access to Portion 1 would require that project equipment and vehicles travel across wet sand below the high tide line to approach from the coastal side. State Parks staff will conduct daily project area surveys for sensitive species prior to allowing vehicle access on the beach.

Portion 2 is a 262-foot (80 m) segment above the coastal strand approximately 200 feet (61 m) NNE (up the coast) from Portion 1. This portion is also isolated from other road portions without access by the existing haul road. Portion 2 sits atop foredunes and annual high winter tides further undercut it. Large segments of asphalt are leaning against the coastal side of the remnant road berm. Access to Portion 2 will require project equipment and vehicles to travel across wet sand

below the high tide line to approach from the coastal side. Similar to requirements for Portion 1, State Parks staff will conduct daily project area surveys for sensitive species prior to allowing vehicle access on the beach.

Portion 3 is the largest portion of road to be removed. A little under 2.5 miles (4 km), it extends from approximately 755 feet (230 m) NNE (up the coast) from Portion 2 to the northern end of the haul road at the Preserve boundary. The haul road then continues on adjacent private property, where it will not be treated as part of this project. The road in Portion 3 angles slightly back from the coastal strand, and crosses Fen Creek and Inglenook Creek. This portion can be accessed from the existing haul road in its entirety and is mostly intact with the road base still in place. In numerous places, windblown sand has covered the road to a depth of several feet. Treatment of Portion 3 will include sand removal from the road surface to facilitate vehicle and equipment access as well as asphalt and road base removal using heavy equipment, except in those areas identified to avoid sensitive resources. The stockpiled sand, with associated plant materials and native seed, will be moved back to replace the former road.

2. Creek Restoration

Fen Creek is currently channeled to flow beneath the Haul Road through a culvert. Where Inglenook Creek passes under the road, concrete riprap is visible below the western side of the road. Inglenook Creek may be passing through an unseen culvert below the riprap or simply seeping through the structure and partially blocked culvert. Channel restoration for both creeks would include excavating the fill material and pulling out culvert structures to return the channel to a more natural state, and allowing natural processes to establish the channel configurations. Native vegetation will become reestablished where suitable through natural regeneration, or through a combination of natural regeneration augmented with the installation of cuttings and/or direct seeding. All non-ballast materials and structures will be transported offsite for disposal [at a permitted facility] and reused or recycled if possible.

3. Invasive Species Treatment

For the proposed project, European beachgrass throughout the Preserve will be removed with hand labor. Primary treatment areas include 15 acres of European beachgrass that have not previously been treated and 38 acres of European beachgrass that will be retreated to gain optimal control. Since 2007, the original cover of 95 acres of European beachgrass has been reduced by approximately 60%; the retreatment areas are contained within the remaining 40%. A secondary treatment area consists of 7 acres (2.8 ha) of European beachgrass growing within an eastern area of the Preserve. Removal of beachgrass in this secondary area will be undertaken through a long-term program that first includes the reestablishment of native trees (pines) to regenerate former areas of dune forest.

4. Construction Activity and Access

State Parks estimates that the total volume of materials to be removed is approximately 25,000 cubic yards (19,114 cubic meters). Materials removed during the project may be temporarily stockpiled within the project area on areas selected to avoid sensitive resources. Materials such as concrete, asphalt, road base and metal culverts would be recycled or reused if possible. The remainder may be hauled approximately 20 miles (32 km) south to the old quarry site on State Parks property at Big River to be used for future park projects, or to a second disposal site has

been identified that is approximately 5 miles from the project area, and located on private property within the Ten Mile watershed. The alternative disposal site consists of ranch and timber roads that are in need of surface rock. A Non-industrial timber management plan (1-94NTMP-002 MEN) is in place to address the environmental requirements associated with rock the roads.

At the southern end of the Preserve, and for nearly one mile north of the Ward Avenue access, the Haul Road has been completely washed out and no longer exists as a roadway. Heavy equipment necessary for the removal of the road cannot negotiate the existing footpath from the bluffs to the beach. The narrow path is also a popular access point for recreationists. Vehicle traffic on the beach or through the adjacent dune system in this area would cause negative impacts to federally listed plant and wildlife species. South of Fen Creek the road becomes severely eroded and is broken into two disconnected portions. However, the road is intact in the northern portion of the Preserve, although some segments are covered in loose sand. Vehicle access is available to the project site from a gated road located near the Ten Mile River Bridge. Due to the lack of access at the southern end near Ward Ave, all vehicle and equipment access to the work site would be from the north near the Ten Mile River Bridge, making use of the existing roadway to drive equipment as far south as possible. Where the roadway ends, a temporary ramp made of natural rock material may be used to move vehicles from the road berm edge to wet sand on the beach below in order to reach stranded remnants of the old haul road at the southern end of the Preserve. Road removal work will begin at the southern portion of the Preserve, with vehicles returning to the road where it is still intact to haul out materials as the project progresses northward.

If equipment operates 5 days per week, State Parks estimates that removal of the road and the hauling of materials from the stockpile area to disposal sites will take approximately 45 working days, or 9 weeks. Delivery of a portion of those materials to the Big River quarry site would take approximately 21 working days, or 4 weeks.

MUNICIPAL ADVISORY COUNCIL REVIEW & PUBLIC INPUT

The Westport Municipal Advisory Council (WMAC) commented on the proposed project and submitted letters to the County dated July 9, 2012, and February 1, 2013. Both letters raise concerns about the proposed project. The following is a summarization of the comments received:

1. Intentional removal of a coastal access trail would preclude access for bicycles and disabled individuals.
2. Use of herbicides [staff note: this has been removed from the project]
3. Adjacent property owners are concerned that the road and European beachgrass removal will increase sand migration that will adversely impact adjacent properties. Native species should be established prior to any disturbance that may cause sand migration.
4. The MND does not reduce the environmental impacts of the project below a significant level. Therefore, an EIR should be required.
5. Alternative project designs should be considered.

Several of the above issues are addressed in the following sections titled: Land Use, Public Access, and Natural Resources. The certified by the state in December 2012, no challenges to the findings and conclusions of the CEQA document were filed. State Parks' Final MND addressed the concerns raised, provides a clear record of the decision-making process, and concludes that all project impacts are reduced to a less than significant level.

Community Concerns

Staff received several comment letters from members of the concerned public, staff was cc'ed on a number of comments letters that were sent to State Parks during the comment period of the MND. The comments and concerns raised regarding the MND were addressed by State Parks in the Final MND, response to comments. The comments received regarding the Coastal Development Permit raised the same topics and concerns as for the MND and those mentioned above in the WMAC section.

KEY ISSUES

The proposed project raises issues regarding coastal access, environmentally sensitive habitat areas, archeological resources, and grading which are detailed in this staff report. The proposed project is consistent with policies regarding visual resources, hazards, and transportation, therefore little discussion is provided on these topics.

1. Land Use

The Inglenook Fen-Ten Mile Dunes Natural Preserve (Preserve; 1,285 acres) is located in the northern portion of MacKerricher State Park (2,250 acres total). The Preserve is bordered by the Ten Mile River and estuary to the north, with Highway 1 and rural residential properties forming the eastern boundary. The more developed recreational areas of MacKerricher State Park as well as the community of Cleone are to the south.

The parcels are classified on the Coastal Plan Map as Open Space. The parcel is similarly zoned; OS. The Open Space zoning designation is intended to be "applied to lands within the Coastal Zone which are not suited for development or are more valuable in their undeveloped natural state and to public park lands." Setbacks, building heights, and lot coverage do not apply to the proposed project. The proposed project complies with the intent of the Land Use classification.

The County's Coastal Element lists Ten Mile Beach Dunes, and Inglenook Fen as "Natural Areas." Sand Lake and Inglenook Fen, Inglenook Creek Marsh, Ten Mile River area listed as "Coastal wetlands of Special Biological Importance¹" within the Coastal Element. No special designations were found for the old Haul Road in the Coastal Element.

Between the highway and ocean the extensive dune system covers 1,285 acres. This dune system is a highly functional and rare habitat that supports numerous types of rare and endangered plant and animal species and is therefore considered an Environmentally Sensitive Habitat Area (ESHA). Dune habitat is particularly rare in California; in northern California coastal dunes account to less than 3% of the landscape. In Mendocino County, there is the Ten Mile Dune system and the Manchester Dunes north of Point Arena.

¹ The 1985 Coastal Elements notes that this designation is made by Dept. of Fish and Game

Ecological function has been impaired by the development of the Haul Road through the foredunes (i.e., the dunes just beyond the beach). Beach shoreline retreat at the Preserve is not perfectly parallel with this road. Differential retreat and growth of the beach has eroded the Haul Road extensively at the south end, but partly buried it with dune sand at the north end. Based on calculations using the most recent data available, approximately 67% of the entire existing road remnant surface is covered to some extent by sand. In the northern portion, up to 29% of the Haul Road is completely covered by sand. The degraded road culverts at the stream crossings continue to stabilize the adjoining roadway and maintain the artificial stream morphology within the drainage of the Inglenook Fen.

European beachgrass, an introduced and non-native plant species, has invaded much of the dune system, altering dune formation and creating steep primary foredunes, and crowding out native plant and animal species within the Preserve. Inglenook Creek and Fen Creek, where the two culverts are proposed to be removed, support plant and animal communities that are not typically found in a dune system. The Mendocino County Coastal Element (1985) contains the following policies:

***Policy 4.2-20:** The Land Use Maps indicate that several parcels owned by the Bureau of Land Management are located in the area between Ten Mile River and Sandhill Lake and Inglenook Fen. These lands should be transferred to the California Department of Parks and Recreation. These lands should be incorporated into the existing holding of the adjoining MacKerricher State Park. The area shall be managed as a natural habitat area in conjunction with passive recreational uses and dunes stabilization program.*

***Policy 4.2-21:** The Georgia-Pacific Corporation haul road, under a special management agreement with the California Department of Parks and Recreation, presently provides weekend and holiday vehicular access to the long stretch of public beaches which extend from Fort Bragg north to Ten Mile River. This private roadway, which travels through the entire length of the MacKerricher State Park, should be acquired by DPR and incorporated into its management plan for the park, if at any time during the life of the Local Coastal Plan the property owner desires to sell, trade or surrender this property.*

According to the MND, the Haul Road was originally developed as a timber hauling railroad in 1916. The railroad was converted to a road way in 1949. While State Parks acquired the Preserve portion of MacKerricher SP in 1977 (southern portions of the SP were acquired in the 1950s), Georgia –Pacific continued to own the Haul Road. The roadway was open to the public for vehicle travel on the weekends in 1977 until it was abandoned in the 1983 after a storm washed out a significant portion of the road. State Parks acquired the Haul Road in 1994. The Preserve has been open to the public for passive recreation.

East of the dunes lies a rural residential neighborhood in the area known as Inglenook. Concerns have been raised regarding increased sand migration as a result of the proposed project. Dunes are known dynamic systems that are inherently unstable; the morphology of this system is discussed within the MND and in the responses to comments on the MND. The Ten Mile dune system is characterized in the MND as follows (p.85):

The sand movement and depositional pattern of the dune system is naturally broken into discrete series of transverse mobile dune complexes and intervening deflation plains (dune slacks; wetland and meadow-like flats) with stabilized vegetation. There are currently no major continuous belts of mobile dunes extending from the active foredunes to the more mobile interior dunes; the entire foredune complex terminates with a landward edge in either stabilized, vegetated dune slacks, or low-relief stabilized dune grassland and scrub.

The interior mobile dune complexes are characterized by wide, unvegetated, gently sloping windward faces located upwind of stabilized dune slacks or low vegetated dunes. The interior mobile dune complexes are remnants of larger, past, more continuous mobile dune sheets that have differentiated into mobile dunes and stabilized slacks. The landward mobile dunes are internally recycling older deposits, while the foredunes only slowly encroaching the vegetated, stabilized slacks and dunes landward.

Visual observation of sands from the foredunes versus the interior dune complex show a clear discontinuity between the freshly deposited beach-foredune sand that lacks iron oxide weathering/staining (wave-washed grayish-white sand), and the internally reworked and older interior/landward transverse dunes that have faint iron oxide weathering evident (warmer tan-colored sand). Also there are coarse sand lag surfaces in the seaward dune slacks at the NW that are not present in the interior dunes” (Dr. Peter Baye, e-mail communication, June 22, 2012).

The argument that the Haul Road removal would trigger increased dune migration over private property, relative to the existing conditions, is found to be unsupported for several reasons cited by experts in this field (paraphrased from P. Baye, Nov. 29, 2012 Memorandum):

1. The proposed project does not create the potential to destabilize or significantly accelerate a massive mobile dune’s migration. The volume of sand in the foredunes, and the flux of sand from beach to foredune, is dwarfed by the accumulated mass of mobile sand in the interior landward dunes – particularly of the northern lobe.
2. There is a significant discontinuity and very long dune travel distance (relative to maximum rates of mobile dune travel) between the Haul Road/foredune area, the existing wide stabilized dune wetlands and wetland-dune transition zones, and the landward large mobile dunes. If the foredunes migrate landward, they reach vegetated stabilized wetlands. In other words, there is no pathway for sand to be transported from the foredunes to the mobile dunes without interference from the stabilized, wetland and vegetated areas.
3. Most importantly, there is no evidence of significantly increased foredune mobilization or landward migration rates in the southern area (near Ward Ave) where the Haul Road was previously washed away. In fact, in this area, the foredunes are no more landward than the sections with the Haul Road in place, and the vegetated stabilized areas landward of the foredunes increase the resistance to sand migration.

The proposed project includes measures to maintain and plant native trees on the eastern edge of the dunes to reestablish a native dune forest that is intended to halt sand migration further landward. This would occur in the seven-acre area proposed for secondary treatment of European beachgrass as well as removal of additional non-native tree species. Tree removal and secondary beachgrass treatment (hand pulling) in this area would occur slowly over time once native trees become established. The MND describes this portion of the project as follows (p.13):

While wind-transport of sand is a natural process in a dune environment, sand becomes deposited and its movement halted on the eastern fringes of dunes where conifers are established. This type of dune is called a precipitation ridge, and is a typical feature of mobile dunes that migrate into forests. The removal of wooded areas backing the eastern edge of the Ten Mile Dunes has

provided an uninterrupted path for wind-carried sand and the landward expansion of the dunes in the Preserve (Barry & Schlenger 1977).

Thus, the management objective for the 7 acre secondary treatment area is to facilitate re-initiation of native pine forest succession in dunes at the landward margins of the dunes in selected areas, where appropriate.

This would entail partial stabilization of dune scrub landward of the proposed dune forest succession zone. Once the forest canopy reaches elevations exceeding the dunes upwind, the forest canopy would interact with any future mobile dunes by precipitating a steep, slow-moving dune slipface from northwestern winds moving across the dunes, thus allowing sand to deposit on the sheltered dune slipface. This dune would migrate only very slowly landward compared with unvegetated, convex mobile dunes.

Trees provide a dune migration buffer for the residences neighboring the eastern edge of the sand dunes. Native tree establishment will be further encouraged in this area by protecting those that do occur and potentially transplanting seedlings of native trees where appropriate.

Special Condition 2 is recommended to require that non-native trees shall not be removed in the eastern fringes of the proposed project area until the proposed planting of the native trees' canopy exceeds the elevation of tallest dunes that are upwind (mainly west) of the trees. Native trees shall also be planted on State Parks property in strategic areas to provide greater protection to existing residential developments. Further, State Parks shall be required to develop and distribute an educational handout or flyer for adjacent landowners on how to protect their land through native tree/vegetation plantings or protection measures for existing vegetation, including the identification of nurseries that supply native trees or other appropriate plantings). In addition, sand removed and stock piled during project activities shall not be stored in a manner that would accelerate sand migration eastward to the residential properties.

2. Public Access

The project site lies within the northern portion of MacKerricher State Park, which extends from Ward Avenue in Cleone, north to the mouth of the Ten Mile River. Access to this portion of the State Park may be obtained from a parking area and formal access point at Ward Avenue. The project site may also be accessed by an informal trail from Highway 1 at Ten Mile River. Extensive beach erosion has disrupted continuous roadway access along the shore that once existed between these points. There is no other developed access between Highway 1 and the shore in the northern part of MacKerricher State Park. The four-mile (6.4 km) expanse of sandy beach that lies between these points is designated by the County LCP as part of the California Coastal Trail, which runs along the western edge of the Preserve. This trail offers the public a chance to explore this rare and unique landscape in a wild coastal setting within MacKerricher State Park in relative solitude. This northern portion of the State Park provides an alternative, more "natural" coastal experience than the southern portion of the park where the Haul Road segment south of Ward Avenue to the Pudding Creek Trestle is developed with bluff top boardwalks, campground facilities, and beach access.

The County Land Use maps (Land Use Maps 10 & 11) delineates the general alignment of the California Coastal Trail parallel to and adjacent with the ocean but not necessarily along on the Haul Road. The following Coastal Act access policies apply to the project.

Section 30210: *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Section 30211: *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Section 30212.5: *Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.*

The Mendocino County Coastal Element contains policies regarding access and includes the description of areas appropriate for access. Chapter 4.2 of the Coastal Element: Rockport to Little Valley Planning Area, names the following relevant access points (*emphases added*):

Seaside Creek to Pudding Creek Trail

Location: *Extending along shoreline from Seaside Creek-Ten Mile River south to Pudding Creek.*

Potential Development: *Hiking and equestrian trail following beach for 8 miles. Usable from Seaside Creek in summer and from Ten Mile Bridge and Pudding Creek year round. Alternative coastal trail for non-vehicular use.*

Because of the sometimes hazardous conditions occasioned by tidal action and stream conditions at the mouth of Ten Mile River, the coastal trail in this area shall be segmented, rather than indicated as a continuous trail system. One segment shall extend from Seaside Creek Beach south to the northern bank of Ten Mile River. Another segment shall extend from the south side of Ten Mile River along the shoreline of MacKerricher State Park to Pudding Creek.

Ten Mile River

Location: *Four sites for boating access have been evaluated:*

- *North bridgehead, Old Highway 1 bridge;*
- *County Road 428 at north bank;*
- *Offer of dedication of floating easement along 1 mile of north bank by Wallihan;*
- *State property on south bank adjoining west side of Highway 1 bridge.*

Existing Development: *Public access to Ten Mile River currently is available only on weekends holidays and some winter months via Fort Bragg to Georgia-Pacific haul road. No boating access is currently available on the Ten Mile River.*

Potential Development: *The southwest bank access point can be opened by the Department of Parks and Recreation on public lands.*

The proposed project is consistent with these policies. It will restore the land to a more level, hummocky topography, allowing easier access (foredunes slope will be reduced) from the beach into the dune swales and back dune areas. The Coastal Trail will continue to be available to hikers and equestrians along its shoreline alignment, as shown on the County's certified Land Use maps. California Coastwalk, a state

non-profit organization established with the goal of helping to ensure coastal access via the California Coastal Trail, and the Mendocino Land Trust, a local non-profit promoting public access, both describe the general alignment of the trail along the sandy beach, on the west edge of the Preserve. While this alignment by these organizations is not certified according to the CA Coastal Commission, it is recognized by these trail and coastal access advocacy groups based on their familiarity with trail development and public access issues within the project site. They envision the Coastal Trail segment in the northern part of the park as highly variable in terrain and access. The proposed project will not affect public use of the Haul Road to access coastal resources, south of Ward Avenue. State Parks is developing a plan to retain and improve this southern segment of the Haul Road to connect with the City of Fort Bragg's planned bluff top trail project through the old G-P Mill site. Together, the two planned projects will result in more than seven miles of paved coastal trail, which will provide the public with equally spectacular coastal views and access. Coastal access and recreation opportunities are abundant in throughout this area, however dune habitat is extremely limited and rare.

While the project removes an existing roadway which may be viewed as a trail, this roadway is disconnected, deteriorated/washed away or buried, and diminishes the ecological function of a unique Environmentally Sensitive Habitat Area. The Coastal Act recognizes the need to provide varied types and levels of access, while providing for recreation, and protecting important coastal resources. The benefits of restoring ecological function through removal of an unnatural feature and recent development (relatively speaking to the formation of the dune habitat) outweigh and overcome arguments for diminished coastal access. The opportunity is present to restore full ecological function to a rare habitat which is unique to the Mendocino Coast and the State of California. The policies contained in the LCP do not require the Haul Road to be maintained for access. The argument to maintain the Haul Road for access does not seem to be justified given the value of dune restoration and resource protection and enhancement, when compared to the value of the existing the Haul Road which is deteriorated, segmented, disconnected from the access ways into the Preserve, and due to the dynamic nature and rare species of the dune environment reconstruction and maintenance of existing are not feasible alternatives.

At the north and south access ways into the Preserve, access points will remain unchanged (except as conditioned below). Access to the Preserve from the north end is informal, one would walk from the Highway and down steep, loose sand dunes, where a path meets up with the Haul Road on private property, and then transverses onto State Parks. At the southern end, at Ward Ave, there is an existing parking area and access to the beach is down a ramp installed for equestrians or through a tunnel that outlets into a small creek that must be crossed to access the beach. Either access point requires careful attention to foot placement.

Ward Avenue Access: In order to access the Haul Rd within the Preserve from Ward Ave, one must walk north along the beach 0.8 mile, past where the Haul Road washed away in 1982/1983 and the dunes have restored, and hike up a steep sandy slope to get on the Haul Road. Alternatively, one could hike into the foredune/ backdunes area and find the southern end of the Haul Road. Accessibility can be improved at the Ward Avenue. Policies supporting these improvements are as follows:

***Policy 3.6-16:** Access to the beach and to blufftop viewpoints shall be provided for handicapped persons where parking areas can be close enough to beach or viewing level to be reachable by wheelchair ramp. The wheelchair symbol shall be displayed on road signs designating these access points where the means of access is not obvious from the main road.*

***Policy 4.3-3:** The northerly portion of Ward Avenue which extends from Highway 1 at Cleone to the beach access tunnel and parking area shall be indicated on the Land Use Maps as an existing*

Shoreline access route. The Department of Parks and Recreation should include this parking and tunnel access area within their park management plan and the parking area and beach access should be maintained as part of the MacKerricher State Beach. The park management plan should specifically address parking and signing of this access point and make specific recommendations which will mitigate for the adverse impacts of increased visitor use within Cleone Acres Subdivision.

Special Condition 3 is recommended to require ADA accessibility improvements to the parking lot and trail to the beach at Ward Ave, including but not limited to: adequate handicap parking (which must be assessed on a regular basis, based on visitor demand), signage, beach-ready wheelchair(s), and appropriate access to the sandy beach. The location and materials of the beach ready wheelchair storage structure (6'x6' shed), parking, and trail improvements shall be submitted to Planning for review.

Ten Mile River Access: As described above, the north end access area of the Preserve is not a formal access point. There is, however, a pull out and parking area adjacent to the southeast end of the Ten Mile Bridge. This area was improved by requirement of the coastal permit to replace the bridge. Residents and visitors do find their way from the parking area, over private property to the Preserve, beach, and Haul Road. The Coastal Element contains the following relevant policies:

***Policy 3.6-15:** The Department of Fish and Game, Department of Parks and Recreation and appropriate county departments and agencies should be requested to monitor public access to sensitive coastal resource areas such as wetlands, dunes, riparian areas, tide pools, rocky intertidal areas, and other wildlife habitats, whether or not these areas are designated as access points on the Land Use Maps. DFG should, in consultation with the operating agency at each access point, prepare regulations governing use which shall be prominently posted. DFG should determine whether use of specific access points should be controlled to avoid degradation and allow resource recovery by limiting the number of users, by requiring supervision of users, or by closing the access point seasonally or periodically. (Policies regulating scientific access at Inglenook Fen and Havens Neck are listed in Chapter 4.)*

***Policy 3.6-22:** In carrying out the coastal access policies of this Coastal Element, the county or other appropriate designated management agency shall consider and encourage the utilization of innovative access management techniques including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.*

***Policy 4.2-17:** Department of Parks and Recreation should develop access, including boating, from the south bank, in conjunction with the present weekend holiday Georgia Pacific haul road access program on public lands. At such time as any coastal development permit is sought for land adjacent to the river, if this boating access has not been established, as a condition of permit approval, an offer to dedicate river access shall be required for the area adjacent to the public lands consistent with Policy 3.6-5. If boating access is subsequently established on the public lands, this offer shall be extinguished.*

***Policy 4.2-19:** The Department of Parks and Recreation shall be requested to prepare a General Plan for MacKerricher State Park that provides access to Ten Mile River and Inglenook Fen at designated locations and subject to conditions necessary for preservation of the natural environment of the park. Off-road vehicles shall be excluded.*

A parking area shall be signed and improved by DPR utilizing the existing widened Caltrans right-of-way located on the west side of Highway 1 several hundred feet south of the Ten Mile River bridge. A trail system shall be developed by DPR, in conjunction with Caltrans and private property owners, to connect this parking area via an existing trail entrance which is located at the southwest corner of the bridge. A fenced trail and a marked, at-grade crossing of the Georgia-Pacific haul road shall connect with the DPR lands on the south bank of Ten Mile River.

Limited access for scientific study of the Inglenook Fen and Sand Hill Lake area shall be provided immediately adjacent to Highway 1 in the vicinity of the Grange Hall upon property to be acquired by the Department of Parks and Recreation.

Near the Ten Mile Bridge at the northern extent of the project site, the Haul Road will not be removed on the piece of land that is private property between road right of way and State Parks, leaving a paved access point (private) to the south side of Ten Mile estuary. The remainder of the old Haul Road on private property will still connect to the northern end of the Preserve. Along the southeast-northeast alignment of the Preserve Boundary until the road veers southward, the asphalt layer will be removed and the rock ballast under the asphalt retained. Although creating a formal access trail at this northern end is beyond the scope of the proposed project and potential impacts to federal and state listed species were not evaluated in the CEQA process, staff inquired into the potential of formalizing access at this location. Staff's inquiry to federal and state resource agencies was met with serious concern for potential impacts from increased visitor access, also reinforced was the need to review and analyze as its own project the formalizing of the trail from the highway to the Preserve, rather than add it as a requirement to the proposed project after CEQA was completed. Staff agrees with this recommendation, however, the proposed project provides the opportunity to begin the process to improve and formalize access in this area, which should be pursued. The private property between CalTrans right of way and the Preserve is currently owned by the Conservation Fund, suggesting that a public access easement dedicated to State Parks may be possible to obtain. Other solutions to formalize access in this area may also be possible, such as obtaining access easement on the existing haul road/private access where it connects with Highway 1. The recordation of an easement to establish this access will depend on approval of private property owners. The assessment and construction of a trail will need to be conducted as its own project, subject to its own CDP.

Staff recommends **Special Condition 4** which would require State Parks to explore the feasibility of obtaining a public access easement to provide formal vertical access from Highway 1 to the Preserve as well as a means to provide non-motorized boating access. Staff recognizes that the feasibility of establishing boating access may be limited due to the presence of federally listed species. This condition includes requirements to remove sand on the trail, in the rock-ballast retainment area, if necessary, for maintaining access, and install signage to direct visitors to the beach. In addition, State Parks shall work with the Inglenook Grange Hall in order to develop limited access for scientific study of the Inglenook Fen.

Community concern expressed desire to have improved bicycle access from Ten Mile through to Fort Bragg. Although the existing Haul Road in the Preserve does not connect to Ward Ave, and bicycle access is limited on the existing Haul Road, the north portion of the road is relatively intact (although ~29% has been covered in sand) for ~2.5 miles. CalTrans recently completed the *Pacific Coast Bike Route/California Coastal Trail Engineered Feasibility Study*, February 2013, which identified the bike corridor to be along the Highway from Ten Mile Bridge to Ward Ave, where the trail would connect to the Haul Road south to Fort Bragg. Portions of the Preserve are adjacent to the Highway, providing the opportunity to provide improved bicycle access.

Special Condition 5 is recommended to require that State Parks dedicate access on the properties adjacent to Highway 1 and work with CalTrans to complete a bike and pedestrian route from Ten Mile River to Ward Ave.

Culvert Removal and Stream Crossings: The MND notes that the Inglenook Fen has been a natural feature for 4,000 to 6,000 years, long before the construction of the road; removal of the road and culverts will not impact the fen. The overall goal of the project is to return the dune system to a more natural state, which is likely to improve drainage within the Preserve in the long-term. Currently, these culverts are partially blocked by debris from upstream flows and driftwood from tidal influences.

Stream flow has been channeled through these culverts at least since 1949 when the rail bed was converted to a truck road. Once the culverts are removed and the stream beds have been restored to a more natural state stream flow would be redirected as each creek reestablishes its natural course. These changes would not substantially increase the rate or amount of surface runoff or increase the potential for offsite flooding. Rather, beneficial changes in the lower hydrology of Fen and Inglenook Creeks will occur from the removal of the culverts and road berm that currently constrict the channels. In turn, this will allow water to spread out and reduce depth at crossing during winter flows. This would result in benefits to plant and animal communities and decrease the danger of flooding while still allowing access to through the Preserve. Both Fen Creek and Inglenook Creek are located approximately 1.4 miles from their respective access points, providing a respectable hike to each creek outlet. Through-hikers will be able to find a location to cross the creeks, the peak flow depth in the sandy outlets is typically found to be less than a few inches.

California Dept. of Fish and Wildlife was consulted during the CEQA and CDP review process. Staff discussed with DFW public access and stream crossings during winter flows. In response, staff received the following statement from the California Department of Fish and Wildlife, which concurs with the MND:

In the dune-type environment, we expect that stream channels will change position over the years as active dunes interact with post-project unrestricted stream channels. To function properly, installation of foot bridges will require the restriction/stabilization of the affected stream channels to prevent channels from migrating away from the bridge crossings. Construction and maintenance of foot bridges will hamstring the mitigation that my Department supports, that being the return of natural stream function to Inglenook and Fen Creeks. With the exception of large storm events and the short-term resulting increases in higher stream flows, hikers can select routes closer to beach areas when crossing these streams. During all but a few days of high storm-induced stream flows, hikers can cross these streams without going beyond ankle-high depth. The existing culvert crossings result in an artificially constricted channel with unnaturally deep channels at and immediately downstream of the crossings. Post-project channel geometry will be one that is generally wider and shallower, although the best locations for crossing these channels by foot will likely remain at areas closer to the beach.

Staff agrees with this position and supports the project as proposed. Coastal access and recreation opportunities in this portion of the park are supported and provided for with the proposed project. An alternative to a footbridge might be a log crossing. Due to site conditions and dune environment, events that may make the stream outlet crossing hazardous to fjord would be few or rare events. **Special Condition 6** is recommended to require State Parks to evaluate the stream crossing conditions during winter high flow events for pedestrian access. Three years after culvert removal, if conditions are found to

be impassable for a significant amount of time during winter month, alternative access should be pursued as a new project. (See **Attachment A** regarding photos and additional information on the Inglenook and Fen Creek).

Visitor Use and Public Safety: State Parks has found that the majority of visitors wish to be near or see the ocean, most visitors are not interested in remaining exclusively on the Haul Road. Survey data and anecdotal observations support the assertion that most visitor use takes place on the beach or in the open dunes, and only a small percentage of visitors make use of the Haul Road as a trail or as a reason for their visit. The Project will help to level the beach grade from waters edge to foredunes and thus eventually replace the over steepened dunes and cliffs that formed along the existing narrow beach by removing the stabilizing effect of the remnant road and invasive European beachgrass have on dune formation. During high tides and storm events, waves will quickly reach the base of the over steepened dunes and thus force visitors to walk, and equestrians to ride, into the back dunes in order to avoid hazardous surf. Removal of the remnant road and eradication of the beachgrass would return the dune processes to a more natural state. The result would be a wider sandy beach, with a more gradual slope leading to low, undulating foredunes that will offer easier hiking and riding conditions and is not as hazardous during high water events.

Additional visitor use statistics can be found in Appendix E.6 of the Final MND. According to these studies, visitor activity within the Natural Preserve is significantly less than in the more developed areas of MacKerricher State Park. Spring and summer visitation to the Preserve, including along the Haul Road, was recorded during bird surveys between March and August 2012. A total of 310 visitors were counted during this period, with an estimated 68% using the beach, 3% on the remnant sections of Haul Road, and 29% in the back dunes, east of the Haul Road (MND, Appendix E.6). Peak visitor season on the coast is typically June through September.

A comparative estimate was also prepared that reviewed visitation to the northern portion of the park with visitation to the southern portion. This estimate for 2012 found that of the total visitors, less than 10% were found within the Preserve, and these visitors were found on the beach. Overall annual visitor statistics were not available for 2012 at the time of this writing, however, in 2011 total visitation to the entire park is estimated to be 309,217, in 2010 709,607 visitors, and over one million visitors in 2009-2006. This illustrates that the beach access and road removal is appropriate and to ability to maintain the level of visitor use will endure after project completion.

It is estimated that to maintain the existing Haul Road, just to remove sand (not including the additional surveys, permitting, environmental assessment & monitoring of the work, or any repaving, etc.) would cost approximately \$25,000/year. This estimate also does not take into account changes from sea level rise. Maintenance or reconstruction of the existing roadway is not in keeping with the intent of the Preserve designation, nor is it consistent with policies contained within the LCP and Coastal Act mandate which declare that protection of coastal resources and habitats are of paramount concern.

Construction Activity: Prior to actual project implementation, preparatory actions would be taken in all park areas in which visitor access or recreation may be constrained or restricted due to project activities. Project information and area closure notices would be issued by the Mendocino District State Parks Superintendent and published in local newspapers, as well as posted on the State Parks' website. During work activities, appropriate signs and notices would be provided at main access areas to alert park visitors to potential vehicle traffic or temporary road and area closures. Educational or safety-related information would be posted, and staging areas and travel corridors would be flagged and signed to insure visitor safety. These actions would also be applied to any use of the M1 road to the Big River quarry.

Special Condition 7 restricts the use of the Big River Quarry for disposal to only an as-needed basis in order to reduce impacts to coastal visitors. Additional concerns regarding disposal at Big River Quarry are expressed in other sections of this staff report, including grading and transportation. Measures to address the additional concerns will be added to this condition.

The proposed project will not diminish, or adversely impact coastal access and recreation; rather an Environmentally Sensitive Habitat Area will be restored. The proposed project is consistent with the policies of the Coastal Act and Mendocino County's LCP.

3. Natural Resources

The environmental setting has been described in the MND and in this staff report, characterizing the dune ecosystem, which is defined in County Local Coastal Program as Environmentally Sensitive Habitat Areas and supports: wetlands and riparian areas, a rare coastal dune ecosystem, the only remaining coastal fen in California, eight rare natural communities, and eight special plant species as the important elements.

Home to many species of wildlife and an important stop-over for migratory birds, the Preserve provides USFWS-designated critical wintering and nesting habitat for the western snowy plover. The Preserve also supports two populations of federally endangered plant species. The Inglenook Fen, which occurs between the southernmost and middle dune lobes, is an area of great biological significance. It is the southernmost in a series of fens extending from Alaska south to this area. It is the only known remaining coastal fen in California, containing a unique assemblage of plants and insects representing a relict biotic community from the Pleistocene. Many species growing here are rare or endemic.

The County of Mendocino Coastal Element defines Dunes and Environmentally Sensitive Habitat Area (ESHA) as follows:

***Dunes.** Sand formed in hills or ridges by the wind and sometimes stabilized by vegetation. Dunes are distinct ecosystems made up of various community types, ranging from open unvegetated sand hills to stabilized dune forests, that frequently contain rare, endangered, protected, or unusual plant and animal species. This highly specialized habitat can be extremely unstable, sensitive to the continuous interplay of surf, sand, and wind.*

Any areas in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

The Coastal Element also provides the following pertinent policy:

***Policy 3.1-15:** Dunes shall be preserved and protected as Environmentally sensitive habitats for scientific, educational and passive recreational uses. Vehicle traffic shall be prohibited. Where public access through dunes is permitted, well-defined footpaths or other means of directing use and minimizing adverse impacts shall be developed and used*

The Coastal Act includes the following policies for protection of land and marine habitats:

Section 30230: *Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231: *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Coastal strand and dunes are prominent, naturally dynamic habitats within the Preserve, with the native species, including those listed as endangered, being adapted to the movement of sand and water. The Preserve supports a coastal dune ecosystem that includes extensive areas of wetlands and dune habitat with well-preserved relatively natural dynamic features, and some areas with significantly impaired ecological structure and dynamics. One of the most altered zones of the dunes is the foredune (frontal or seaward dune zone), which has been affected by:

- past construction of a linear haul road and road bed along the naturally dynamic foredune zone;
- past construction of two culverts under the haul road draining wetlands (fens) at artificially stabilized locations, forming artificially incised (downcut) channels, controlling the outlets of extensive wetlands within the Preserve, and modifying their dynamics;
- extensive establishment of European beachgrass that strongly modifies both the foredune structure and hydrology of the wetland outlets

European beachgrass, a nonnative, invasive plant, has displaced native dune plants and rendered large areas of the dunes unsuitable for many native plant and animal species. European beachgrass alters natural dune processes by forming dense, tall vegetation capable of trapping windblown sand within a relatively narrow zone landward of the beach, and regenerating rapidly after burial by sand. This process results in foredunes of high vegetation density, steepness and elevation immediately behind the beach, compared with broad, mounded semi-open foredune zones formed by native prostrate dune vegetation. European beachgrass also modifies sand deposition patterns around the outlets (mouths seaward of culverts) of the wetlands, affecting the hydrology of the wetlands. Segments of the elevated road berm and European beachgrass occur parallel to the beach, displacing nesting habitat for western snowy plovers (listed as Federally Threatened) and creating an access barrier for fledglings to forage.

Policy 3.1-27: *Clearance of trash and accumulated debris from coastal streams and the improvement of these streams for water supply, recreational use and fishery restoration are projects which are vital to the economic and biologic health of the Mendocino Coast and shall be encouraged whenever possible.*

The partially eroded haul road and culvert system will continue to impair fen wetland hydrology if no action is taken. The culverts are located behind relatively wide (past or current European beachgrass-influenced) foredunes that temporarily protect them from direct storm wave erosion. Partial storm wave erosion of the rusted metal culverts would result in hazardous and esthetically unacceptable conditions,

and may result in persistent artificial influence of wetland outlet hydrology. Partial storm wave erosion of the haul road results in formation of a steep cliff-like dune scarp with an asphalt-armored top that impedes establishment of native dune vegetation (root zone restriction, inhibition of colonization). Active removal of the haul road, culverts, and beachgrass would accelerate recovery of the dune and wetland complex within the Preserve, particularly the critical outlets of the fen wetland systems. The proposed project would remove unnatural, and relatively new development features to restore native habitats and to preserve “endangered plant and animal species and their supporting ecosystem”

Asphalt and road base are not representative of natural features of the dune ecosystem and landscape, nor do they facilitate or contribute to the restoration or sustenance of natural environmental processes in the dune ecosystem. While the asphalt surface does not support any plant life, project activities related to its removal are likely to have impacts on adjacent land cover types and individual plant and animal species. These impacts are discussed in the MND in sections on the individual vegetation types and plant and animal species (see pgs 52 -72). Project impacts that are considered potentially significant have been addressed for the purposes of avoidance of, or ecological compensation for those impacts in an appended Project Mitigation, Monitoring, and Restoration Plan (Attachment B). Impacts and mitigation measures for specific plants and animals are also included in Attachment B. These measures are essential to address the full scope of Project-related effects. Nevertheless, the primary goal of removing asphalt and road base, along with other artifacts of human industry in the dune ecosystem, is to restore environmental and physical processes in the Project site in order to rehabilitate habitat for native plants and animals. Adaptive management and a long-term strategy for on-going monitoring and management of the present resources is the intended goal and approach of the mitigation monitoring plan. **Special Condition 8** is recommended to require State Parks to submit to Planning any modification and/or finalization of the mitigation monitoring plan and long-term strategy. It is expected that State Parks will continue to responsibly manage its Preserve long after the proposed project is complete to ensure that invasive species are reduced and eliminated and the ecological function is maintained. Special Condition 1 incorporates all of the mitigation measures as a requirement of this permit.

The proposed project to restore an environmentally sensitive habitat area can not meet the buffer requirements which are typically required by Chapter 20.496 of the MCCZC to protect ESHA from degradation resulting from future development. No future development is proposed at this time, and the proposed work is intended to restore ecological function, therefore buffers are not appropriate for the purposes of the subject project. Regarding permitted development that is allowed within dunes, MCCZC Sec. 20.496.040 includes scientific, educational and passive recreational uses. Restoration activities are permitted through MCCZC Sec. 20.496.025 - Wetlands and Estuaries. The supplement resource findings are included in the Findings section of this report. The MND and its supporting documentation have demonstrated that the proposed project will not degrade the dune habitat and its associated ESHA and the restoration/rehabilitation project will support the continuance and enhancement of the subject ESHAs.

4. Archaeological/Cultural Resources

In 1916, the Union Lumber Company constructed the Ten Mile River Railroad to transport timber from the Ten Mile River watershed to their mill in Fort Bragg. The railroad alignment traveled north from the mill in Fort Bragg, crossing Pudding and Virgin Creeks and continued north along the coastal terrace to Laguna Point. From Laguna Point the grade dropped in elevation to almost level with the beach along the edge of Ten Mile Dunes. At Ten Mile River, the railroad alignment turned east and then south, paralleling the river into the watershed.

In order for the railroad alignment to maintain elevation along the coast, the Union Lumber Company constructed a berm for the tracks. Construction of the berm at Mill Creek resulted in the formation of Lake Cleone. From 1917 to 1949, the Union Lumber Company transported over 95 percent of their timber harvest to the mill using the Ten Mile Railroad. In 1949, the Union Lumber Company converted the railroad grade to a truck hauling road. This conversion included the removal of rails and ties along the alignment. Several layers of gravel and road base rock were imported from a quarry up the north fork of Ten Mile River. The gravel was used to cap over the grade footprint to construct the road. Eventually, the haul road was paved (chip-sealed). Within MacKerricher SP, the Union Lumber Company continued to use the haul road to transport timber. In the summer of 1977, the Georgia Pacific Corporation (merged operations with Union Lumber Company in 1969) opened the haul road to the public on the weekends. Vehicle use of the road continued until 1983, when a violent storm washed out a half-mile portion of the road along the beach in the Ten Mile Dunes vicinity. It was determined through consultation with the State Historic Preservation Officer that the Haul Road is not eligible for listing on the National Register of Historic Places due to loss of integrity in addition to not meeting any of the four required criteria for listing.

Since being abandoned in 1983, degradation of the haul road has continued and as a result, is no longer viable as a travel corridor in the Preserve. However, the Haul Road south of Ward Avenue is an important recreational venue for the park and is used by visitors for a myriad of recreational activities including biking, hiking, and access to the beach.

During the public comment period of the CEQA MND, a local archaeologist questioned impacts of the proposed project to the archeological resources, these concerns were addressed in the response to comments and Final MND. Fourteen archaeological sites have been documented in and adjacent to the project area, and copious others have been recorded in other areas throughout the park. Most of these sites are related to Native American utilization of the area, both prehistorically and historically (Mendocino Indian Reservation era). Project work associated with these restoration efforts has the potential to impact many of these culturally sensitive areas since most are located within the haul road corridor or in other areas where restoration activities are planned. State Parks further states that removal of the road will allow the natural dune system to re-establish and would prevent the increased exposure of cultural sites (Final MND, Response to Comments, Nov. 26, 2012 letter to Mr. Thad Van Bueren):

Results of archaeological testing in 2011 by University of Davis (UCD) establish that construction of the Ten Mile River Railroad and truck road conversion not only resulted in direct impacts to the archaeological resources located within this travel corridor, but more wide spread indirect impacts as well. Apparent at most, if not all of the sites located in the western portion of the Preserve where the road is still present, is substantial site deflation and erosion that continues to adversely impact these resources. The haul road impedes natural processes by restricting sand movement on the west and north sides of the grade. The road acts as a barrier and creates “deflation plains” along the landward side of the road that has resulted in wind-scoured areas level with the water table. Unfortunately, archaeological sites situated in these deflation plains have been adversely impacted with exacerbated deflation, erosion, and water inundation due to lack of sand which normally buffers these deposits. Subsurface testing at some of these sites in 2011 indicates the archaeological deposits are severely deflated and that the deposits have an average depth of a few centimeters. Additionally, the deposits appear to have been redistributed as a thin veneer across the plain and lack data potential. Consequently, these sites or components of these sites no longer retain integrity and are not eligible for inclusion into the National Register of Historic Places (NRHP). Removal of the haul road will substantially diminish and/or halt

development of these deflation plains by allowing the sand to move eastward and allowing native dune vegetation to become reestablished.

The application was reviewed by the Mendocino County Archaeological Commission on April 10, 2013, which determined that adherence to the mitigation measures and project designs related to protecting resources are adequate. The Arch. Commission specifically contends that sites CA MEN 427 and CA Men 2015 will be monitored during and after the project. The Final MND includes numerous measures to ensure protection and reduction of potential impacts to a less than significant level. Special Condition 1 captures the mitigations as a requirement of this permit. Standard Condition Number 8 is recommended, advising the applicant of the requirements of the County's Archaeological Ordinance (Chapter 22.12 of the Mendocino County Code) in the event that archaeological or cultural materials are unearthed during site preparation or construction activities.

5. Grading, Erosion and Runoff

State Parks estimates that the total volume of materials to be removed is approximately 25,000 cubic yards (19,114 cubic meters). Materials removed during the project may be temporarily stockpiled within the project area on areas selected to avoid sensitive resources. Materials such as concrete, asphalt, road base and metal culverts would be recycled or reused if possible. The remainder may be hauled approximately 20 miles (32 km) south to the old quarry site on State Parks property at Big River to be used for future park projects, or to a second disposal site has been identified that is approximately 5 miles from the project area, and located on private property within the Ten Mile watershed. The alternative disposal site consists of ranch and timber roads that are in need of surface rocking. A Non-industrial timber management plan (1-94NTMP-002 MEN) is in place to address the environmental requirements associated with rocking the roads on the adjacent private property. Special Condition 7 recommends preference to disposal at the Ten Mile site.

Regarding grading, Chapter 20.492. of the MCCZC states in pertinent part:

Grading Standards.

(A) Grading shall not significantly disrupt natural drainage patterns and shall not significantly increase volumes of surface runoff unless adequate measures are taken to provide for the increase in surface runoff.

(B) Development shall be planned to fit the topography, soils, geology, hydrology, and other conditions existing on the site so that grading is kept to an absolute minimum.

(C) Essential grading shall complement the natural land forms. At the intersection of a manufactured cut or fill slope and a natural slope, a gradual transition or rounding of contours shall be provided.

(E) The permanently exposed faces of earth cuts and fills shall be stabilized and revegetated, or otherwise protected from erosion.

(F) Adjoining property shall be protected from excavation and filling operations and potential soil erosion.

(G) The area of soil to be disturbed at any one time and the duration of its exposure shall be limited. Erosion and sediment control measures shall be installed as soon as possible following

the disturbance of the soils. Construction equipment shall be limited to the actual area to be disturbed according to the approved development plans.

Drainage patterns would likely change within the dune system due to the changes in dune topography, but it is unusual to encounter flowing water over the dunes due to the porous nature of the sand. Where culverts are removed at Fen Creek and Inglenook, the creeks would continue to remain true to their upland channels and downstream lagoon outlets to the ocean, but like any dynamic system, the creeks could alter course in the future due to flooding or natural obstructions. The extent of construction activities is restricted due to the number of sensitive resources. **Special Condition 9** is added to include provisions from MCCZC Sec 20.492.

Approximately 6000 cubic yards (4587 cubic meters) of sand would be removed and temporarily stockpiled in approved locations adjacent to the road berm. Equipment will operate on the existing roadway to remove asphalt and road base. As asphalt and road base are removed by sections, the stockpiled sand, with associated plant materials and native seed, will be moved back to replace the former road. Special Condition 2 includes provisions regarding the stockpiling of sand.

Regarding erosion control, Section 20.492.015 of the MCCZC states in pertinent part:

(A) The erosion rate shall not exceed the natural or existing level before development.

(B) Existing vegetation shall be maintained on the construction site to the maximum extent feasible. Trees shall be protected from damage by proper grading techniques.

(C) Areas of disturbed soil shall be reseeded and covered with vegetation as soon as possible after disturbance, but no less than one hundred (100) percent coverage in ninety (90) days after seeding; mulches may be used to cover ground areas temporarily.

The MND includes Best management Practices to prevent and avoid erosion and sedimentation from project activities. Special Condition 1 captures these measures as requirements of this permit.

6. Transportation/Circulation

The project would not result in a new encroachment within any existing public roadway nor would it affect traffic circulation in the vicinity of the project area. No impacts to transportation/circulation are expected. The project will temporarily increase traffic volumes on local and regional roadways during construction activities.

State Parks characterized construction related traffic this way (MND pg 120):

Most of the vehicle traffic and construction activities associated with the project would occur within the boundaries of MacKerricher SP. Traffic associated with the project would be concentrated at the northern end of the park and in the Preserve. Most visitor use at MacKerricher State Park takes place at the central and southern areas of the park and would therefore not be affected by project activities.

None of the activities proposed as part of this project would have the potential to cause traffic delays on a public road. Highway 1 would be the primary access road leading to the project site. Vehicles would access the project area by using the gated road on the east side of Highway 1 that

runs beneath the Ten Mile River Bridge. This road is located on private property and is accessed from a logging road that runs east along the southern bank of the Ten Mile River. The logging road is used by private timber operators and residents of the Ten Mile River valley with no indication that the highway intersection has safety or congestion issues.

State Parks estimates that the project would require up to 15 crew transport (passenger or light-duty trucks) vehicles and 17 to 23 light-duty trucks, tractors, and haulers to complete the work.

The crew vehicles would likely make one to two trips daily to and from the project site. Delivery of the construction equipment would require one trip per vehicle to and from the site. Most construction vehicles would remain onsite or parked at the project staging areas when not in use.

State Parks estimates that it would take up to 45 days with equipment working 5 days per week for dump trucks to haul all materials from the stockpile area to disposal sites. The time required to haul materials to the Big River site would be approximately 21 days. The addition of an estimated 15 crew vehicles making an estimated 1 to 2 round-trips daily and 6 highway approved dump trucks making up to 7 trips to and from the site daily would not constitute a substantial increase in traffic volume for Highway 1 or result in additional congestion.

The alternative Ten Mile Disposal site is five miles east of the project site, along the logging road. The alternative disposal site consists of ranch and timber roads that are in need of surface rocking. A Non-industrial timber management plan (1-94NTMP-002 MEN) is in place to address the environmental requirements associated with rocking these roads including storage and stock piling of materials. The above estimate was included in the MND before the Ten Mile site was selected. It is expected that with the preference for the Ten Mile site, impacts to the highway will be significantly reduced.

7. Hazards

Designation of Preserve status within the State Park system required that public vehicle access and vehicle use on the road be prohibited. On those few portions of the haul road that remain intact, vehicle access by park rangers, staff or emergency medical services is currently allowed in the event of an emergency. However, due to relatively low visitor use of the Preserve compared to other areas of MacKerricher SP, very few incidents occur that require emergency response. After removal of the road, access by ATV or other rescue equipment would be possible along the packed, wet sand on the beach.

The project would not create any increase in public service requirements. Demand for services would be equivalent to current calls for beach rescues and other infrequent incidents associated with improper and unauthorized activities. Restoration work and alterations associated with this project would not significantly increase visitation or the demand for public services, and therefore would not necessitate the construction of new facilities.

The proposed project does not present any hazard issues relative to fire or slope failure. There are no known faults, landslides or other geologic hazards in close proximity to the proposed development.

8. Visual Resources

The proposed project will not adversely impact visual resources or public views and will be visually compatible with the surrounding development.

9. Groundwater Resources

No adverse impacts to groundwater resources are anticipated.

10. Zoning Requirements

The project complies with the zoning requirements for the Open Space District set forth in 20.372, et.seq., and with all other zoning requirements of Division II of Title 20 of the Mendocino County Code.

PROJECT FINDINGS AND CONDITIONS

Pursuant to the provisions of Chapter 20.532 and Chapter 20.536 of the Mendocino County Code, the Coastal Permit Administrator approves the proposed project, and adopts the following findings and conditions.

FINDINGS:

1. The proposed development is in conformity with the certified Local Coastal Program; and
2. The proposed development will be provided with adequate utilities, access roads, drainage and other necessary facilities; and
3. The proposed development is consistent with the purpose and intent of the applicable zoning district, as well as all other provisions of Division II, and preserves the integrity of the zoning district; and
4. The proposed development, if constructed in compliance with the conditions of approval of this coastal development permit and with the mitigation measures incorporated into the project by the certified Mitigated Negative Declaration, in accordance with the California Environmental Quality Act, will not have any significant adverse impacts on the environment; and
5. The proposed development will not have any adverse impacts on any known archaeological or paleontological resource; and
6. Other public services, including but not limited to, solid waste and public roadway capacity have been considered and are adequate to serve the proposed development.
7. The proposed development is in conformity with the public access and public recreation policies of Chapter 3 of the California Coastal Act and Coastal Element of the General Plan.
8. Resource Protection Impact Findings:
 - (a) The resource as identified will not be significantly degraded by the proposed development.
 - (b) There is no feasible less environmentally damaging alternative.
 - (c) All feasible mitigation measures capable of reducing or eliminating project related impacts have been adopted.

STANDARD CONDITIONS:

1. This action shall become final on the 11th day following the decision unless an appeal is filed pursuant to Section 20.544.015 of the Mendocino County Code. The permit shall become effective after the ten working day appeal period to the Coastal Commission has expired and no appeal has been filed with the Coastal Commission. The permit shall expire and become null and void at the expiration of two years after the effective date except where construction and use of the property in reliance on such permit has been initiated prior to its expiration.
2. The use and occupancy of the premises shall be established and maintained in conformance with the provisions of Division II of Title 20 of the Mendocino County Code.
3. The application, along with supplemental exhibits and related material, shall be considered elements of this permit, and that compliance therewith is mandatory, unless an amendment has been approved by the Coastal Permit Administrator.
4. This permit shall be subject to the securing of all necessary permits for the proposed development from County, State and Federal agencies having jurisdiction.
5. The applicant shall secure all required building permits for the proposed project as required by the Building Inspection Division of the Department of Planning and Building Services.
6. This permit shall be subject to revocation or modification upon a finding of any one or more of the following:
 - a. The permit was obtained or extended by fraud.
 - b. One or more of the conditions upon which the permit was granted have been violated.
 - c. The use for which the permit was granted is conducted so as to be detrimental to the public health, welfare or safety, or to be a nuisance.
 - d. A final judgment of a court of competent jurisdiction has declared one or more conditions to be void or ineffective, or has enjoined or otherwise prohibited the enforcement or operation of one or more such conditions.
7. This permit is issued without a legal determination having been made upon the number, size or shape of parcels encompassed within the permit described boundaries. Should, at any time, a legal determination be made that the number, size or shape of parcels within the permit described boundaries are different than that which is legally required by this permit, this permit shall become null and void.

8. If any archaeological sites or artifacts are discovered during site excavation or construction activities, the applicant shall cease and desist from all further excavation and disturbances within one hundred (100) feet of the discovery, and make notification of the discovery to the Director of the Department of Planning and Building Services. The Director will coordinate further actions for the protection of the archaeological resources in accordance with Section 22.12.090 of the Mendocino County Code.

SPECIAL CONDITIONS:

1. The proposed project shall comply with all measures from the Final Mitigated Negative Declaration for the Inglenook Ten-Mile Dunes Natural Preserve Dune Rehabilitation Project, 2012. A copy of this staff report shall be supplied to all contractors and a copy shall be maintained on the job site.
2. Non-native trees shall not be removed in the eastern fringes of the proposed project area, adjacent to Inglenook, until the proposed plantings of the native trees' canopy exceeds the elevation of tallest dunes that are upwind (mainly west) of the trees. Native trees shall also be planted on State Parks property in strategic areas to provide greater protection to existing residential developments. State Parks shall develop and distribute an educational handout or flyer for adjacent landowners on how to protect their land through native tree/vegetation plantings or protection measures for existing vegetation, including the identification of nurseries that supply native trees or other appropriate plantings.

Sand removed and stock piled during project activities shall not be stored in a manner that would accelerate sand migration eastward to the residential properties.

3. Accessibility improvements to the parking lot and trail to the beach at Ward Avenue shall be implemented by the end of the proposed project completion date, including but not limited to: adequate handicap parking (which must be assessed on a regular basis, based on visitor demand), signage, beach-ready wheelchair(s), and appropriate access to the sandy beach. The location and materials of the storage structure (6'x6' shed), parking, and trail improvements (if necessary) shall be submitted to Planning for review and approval.
4. State Parks shall explore the feasibility of obtaining a public access easement to provide formal vertical access from Highway 1 to the Preserve as well as a means to provide non-motorized boating access. Feasibility of acquiring an access easement shall be based on landowner willingness. If willing landowner(s) are identified, a dedicated access easement shall be developed, approved by the County and Coastal Commission, and recorded. Feasibility of establishing boating access may be limited due to the presence of federally listed species.

State Parks shall be required to remove sand on the northern segment of the Haul Road, in the rock-ballast retainment area, if necessary, in order to maintain access to the beach, and install signage to direct visitors to the beach.

5. Prior to issuance of the coastal development permit, State Parks shall dedicate a 15-ft accessway from the edge of right of way on its properties directly adjacent to Highway 1

from Ten Mile River to Ward Ave and work with CalTrans to complete a bike and pedestrian route.

6. State Parks shall evaluate the stream crossing conditions during winter high flow events for pedestrian access. Three years after culvert removal, if conditions are found to be impassable for a significant amount of time during winter months, alternative access shall be pursued.
7. The disposal site indentified in the MND as closest to Ten Mile shall be the preferred site for disposal. Use of the Big River Quarry shall be restricted to only on an as-needed basis in order to reduce impacts to coastal visitors. If the Big River Quarry is found to be needed for disposal, a plan shall be developed to ensure that the disposed materials are not contaminated with pampas grass seed and other non-native found at the quarry site. This plan shall be submitted to Planning for review and approval prior to disposal at Big River Quarry.
8. State Parks shall submit to Planning any modification and/or finalization of the mitigation monitoring plan and long-term strategy during the life of the project. It is expected that State Parks will continue to responsibly mange its Preserve long after the proposed project is complete to ensure that invasive species are reduced and eliminated and the ecological function is maintained.
9. Grading standards from Ch. 20.492 of the MCCZC shall be followed.
 - a. Grading shall not significantly disrupt natural drainage patterns and shall not significantly increase volumes of surface runoff unless adequate measures are taken to provide for the increase in surface runoff.
 - b. Development shall be planned to fit the topography, soils, geology, hydrology, and other conditions existing on the site so that grading is kept to an absolute minimum.
 - c. Essential grading shall complement the natural land forms. At the intersection of a manufactured cut or fill slope and a natural slope, a gradual transition or rounding of contours shall be provided.
 - d. The permanently exposed faces of earth cuts and fills shall be stabilized and revegetated, or otherwise protected from erosion.
 - e. Adjoining property shall be protected from excavation and filling operations and potential soil erosion.
 - f. The area of soil to be disturbed at any one time and the duration of its exposure shall be limited. Erosion and sediment control measures shall be installed as soon as possible following the disturbance of the soils. Construction equipment shall be limited to the actual area to be disturbed according to the approved development plans.

**STAFF REPORT FOR COASTAL DEVELOPMENT
STANDARD PERMIT**

**CDP# 12-2012 (DPR Ten Mile)
June 11, 2013
CPA-27**

Staff Report Prepared By:

Date		Abbey Stockwell Planner II
Attachments:	Exhibit A	Location Map
	Exhibit B	Aerial Image
	Exhibit C	Topographic Map
	Exhibit D	Zoning Map
	Exhibit E	Project Map

Attachment A Inglenook / Fen Creek
Attachment B Mitigation Monitoring & Reporting Plan

Appeal Period: Ten calendar days for the Mendocino County Board of Supervisors, followed by ten working days for the California Coastal Commission following the Commission's receipt of the Notice of Final Action from the County.

Appeal Fee: \$945 (For an appeal to the Mendocino County Board of Supervisors.)

SUMMARY OF REFERRAL AGENCY COMMENTS:

Planning – Ukiah	No comment.
Department of Transportation	No impact to county roads
Environmental Health – Fort Bragg	Clearance granted
Building Inspection – Fort Bragg	No comment.
Arch. Commission	Report accepted, cultural mitigation measure shall be followed
Assessor	No response.
Department of Fish & Wildlife	Project support, additional comment in Public Access section.
Caltrans	No response.
Native Plant Society	No response.
Coastal Commission	Comments sent on MND
Army Corps of Engr	No response.
Trails Advisory Council	No response.
Air Quality Mgt District	Permit required
WMAC	Comments in WMAC section
RWQCB	No response.
Fort Bragg City Planning	Comments sent on MND
Fort Bragg Fire District	No comment.
US FWS	Concern regarding formalizing the Ten Mile access without adequate impact analysis

References:

Pickart, A. and Sawyer, J.O. 1998. Ecology And Restoration of Northern California Coastal Dunes.
California Native Plant Society.

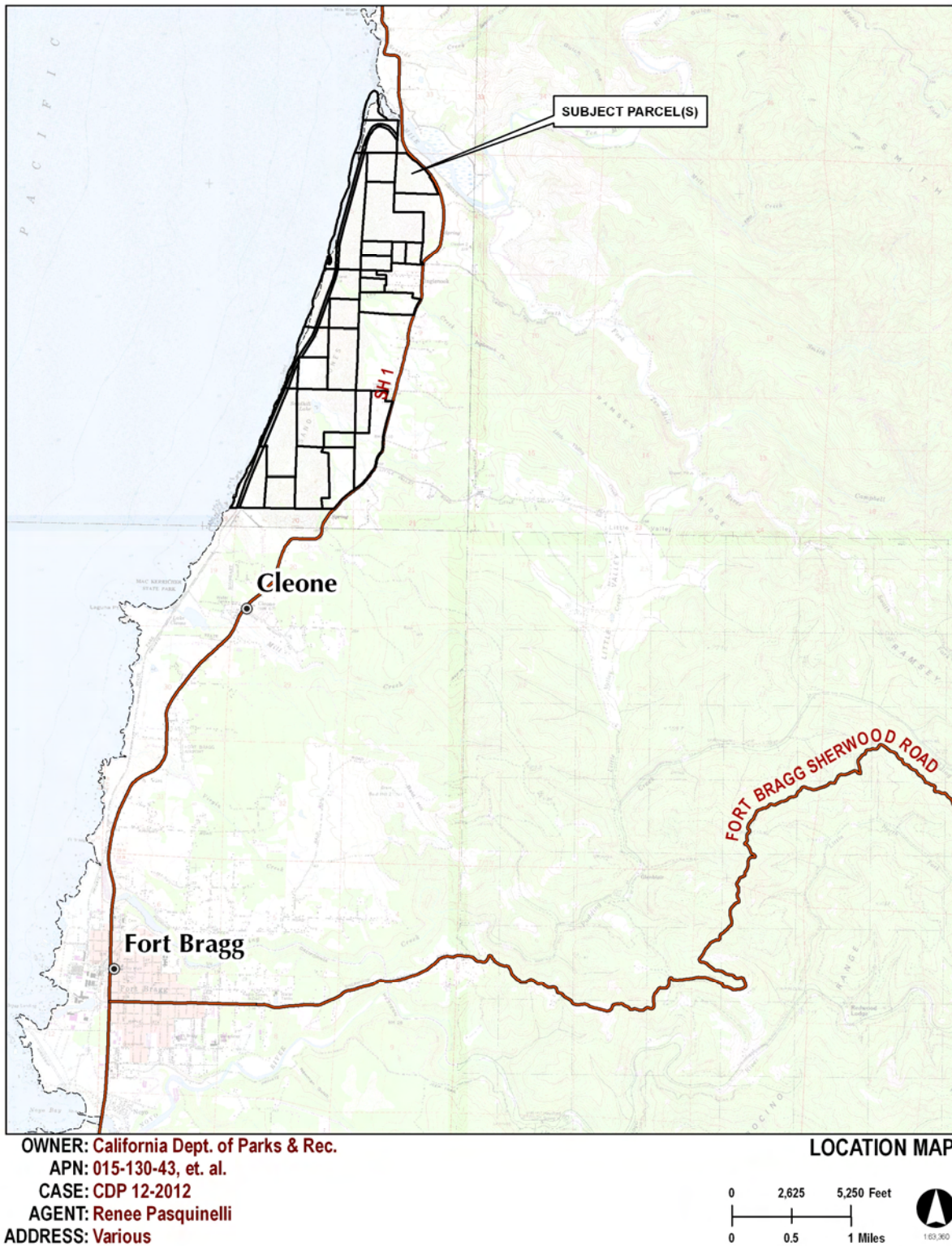


Exhibit A

**STAFF REPORT FOR COASTAL DEVELOPMENT
STANDARD PERMIT**

CDP# 12-2012 (DPR Ten Mile)

June 11, 2013

CPA-29



OWNER: California Dept. of Parks & Rec.

APN: 015-130-43, et. al.

CASE: CDP 12-2012

AGENT: Renee Pasquinelli

ADDRESS: Various

2010 NAIP AERIAL ORTHOPHOTO

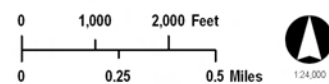


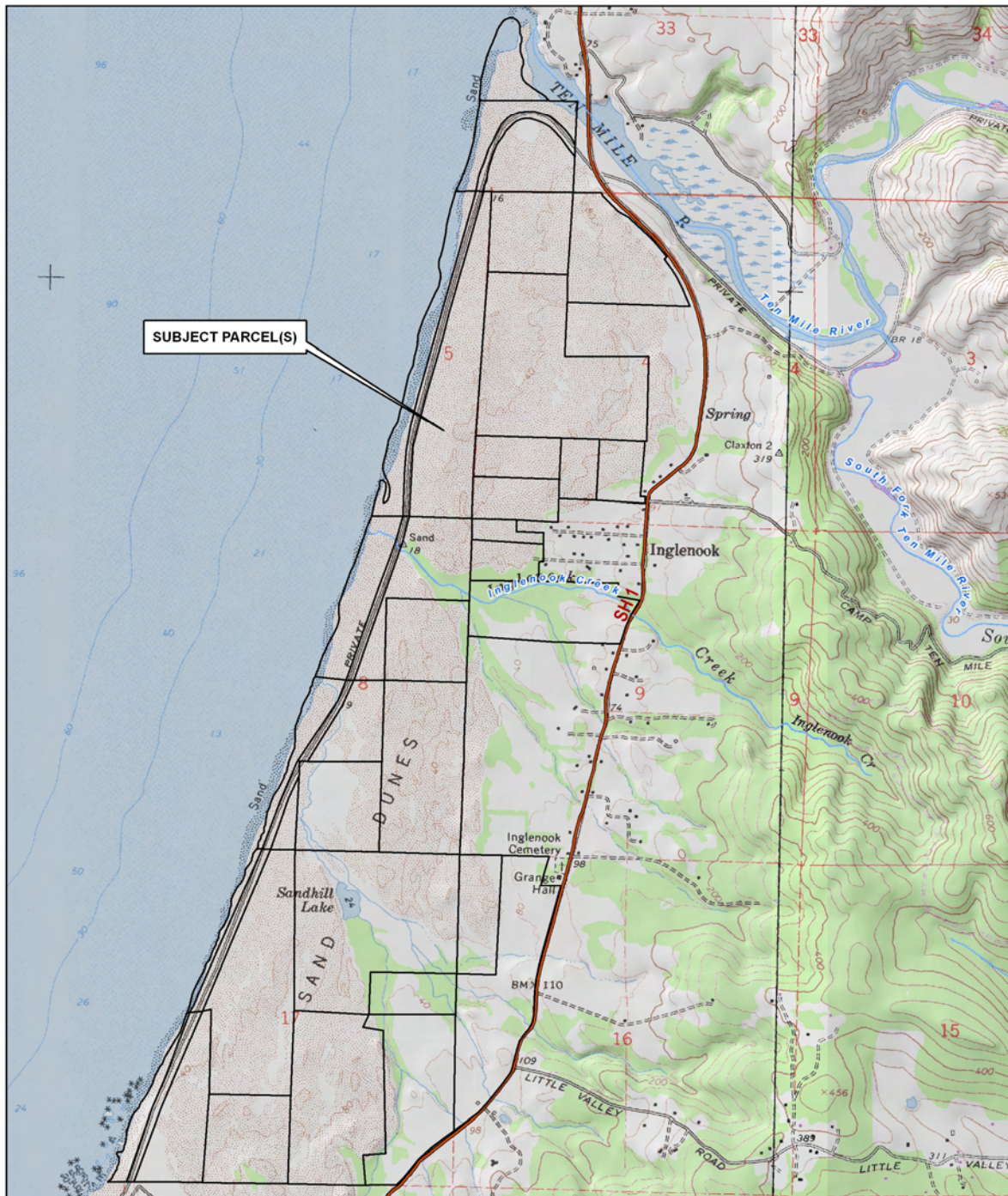
Exhibit B

**STAFF REPORT FOR COASTAL DEVELOPMENT
STANDARD PERMIT**

CDP# 12-2012 (DPR Ten Mile)

June 11, 2013

CPA-30



OWNER: California Dept. of Parks & Rec.
APN: 015-130-43, et. al.
CASE: CDP 12-2012
AGENT: Renee Pasquinelli
ADDRESS: Various

TOPOGRAPHIC MAP
CONTOUR INTERVAL IS 40 FEET

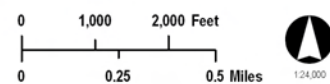


Exhibit C

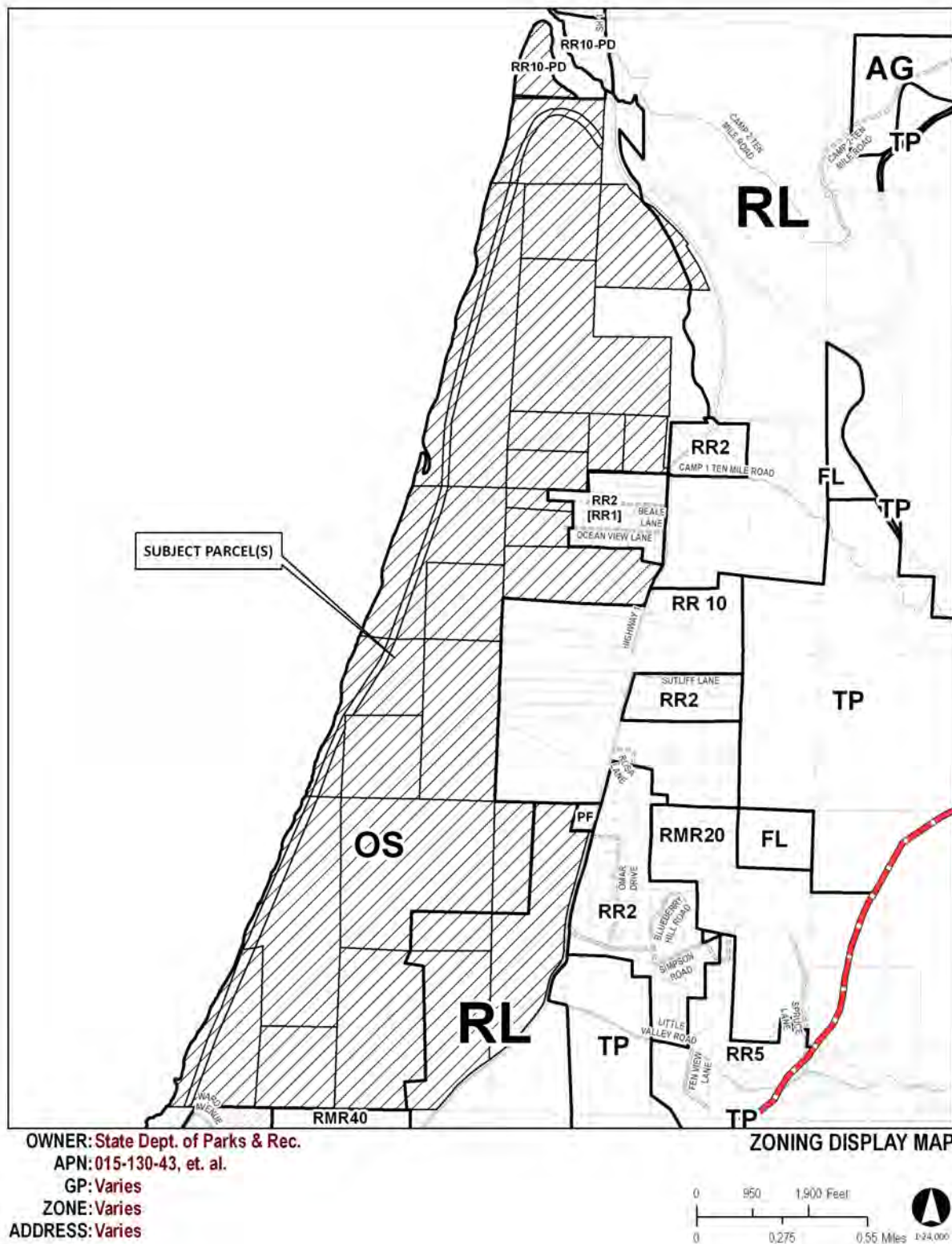


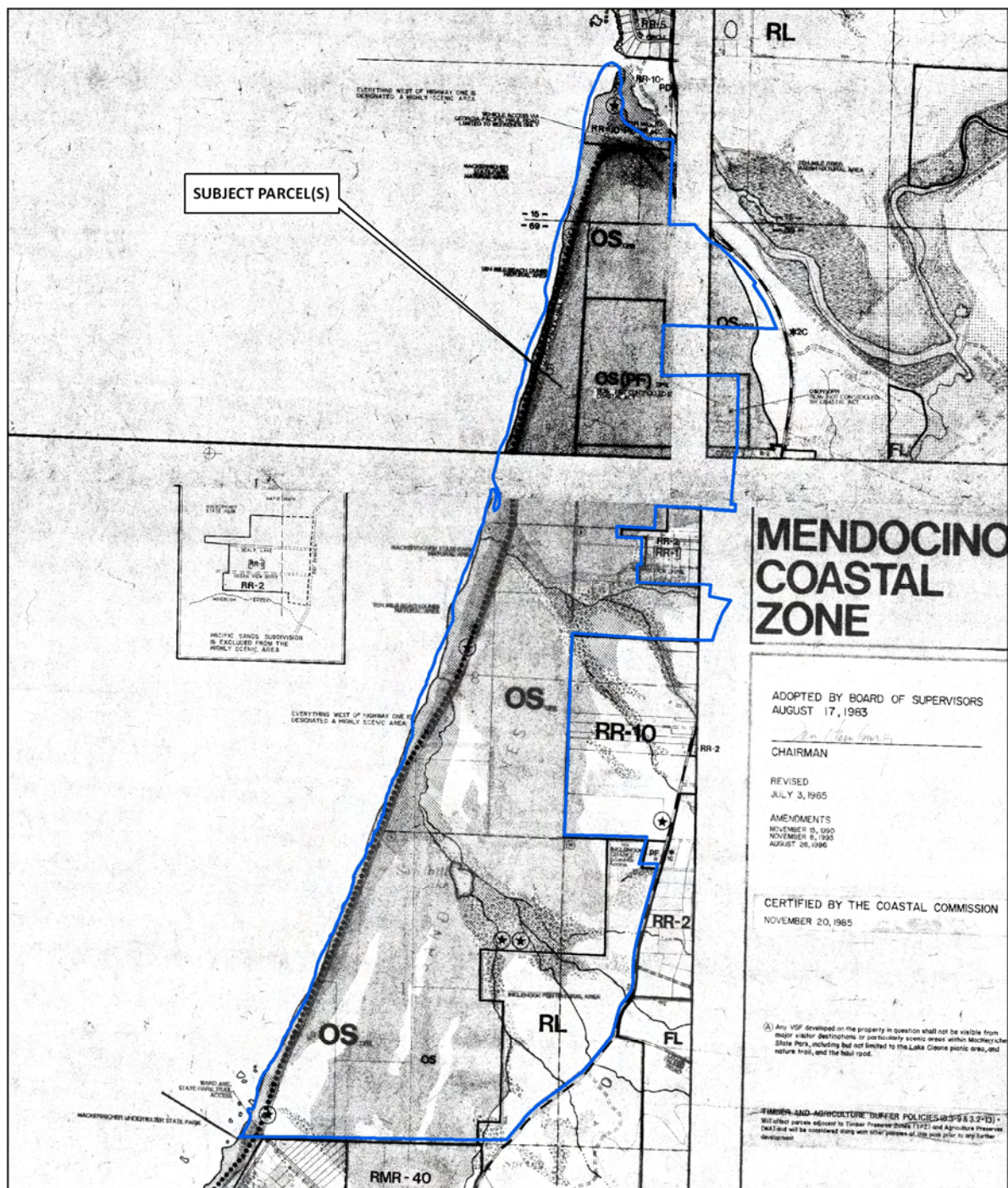
Exhibit D

**STAFF REPORT FOR COASTAL DEVELOPMENT
STANDARD PERMIT**

CDP# 12-2012 (DPR Ten Mile)

June 11, 2013

CPA-32



OWNER: California Dept. of Parks & Rec.

APN: 015-130-43, et. al.

GP: Various

ZONE: Various

ADDRESS: Various

LCP MAPS 9 (Ten Mile River), 10 (Newport) & 12 (Cleone)

NO SCALE



Exhibit E

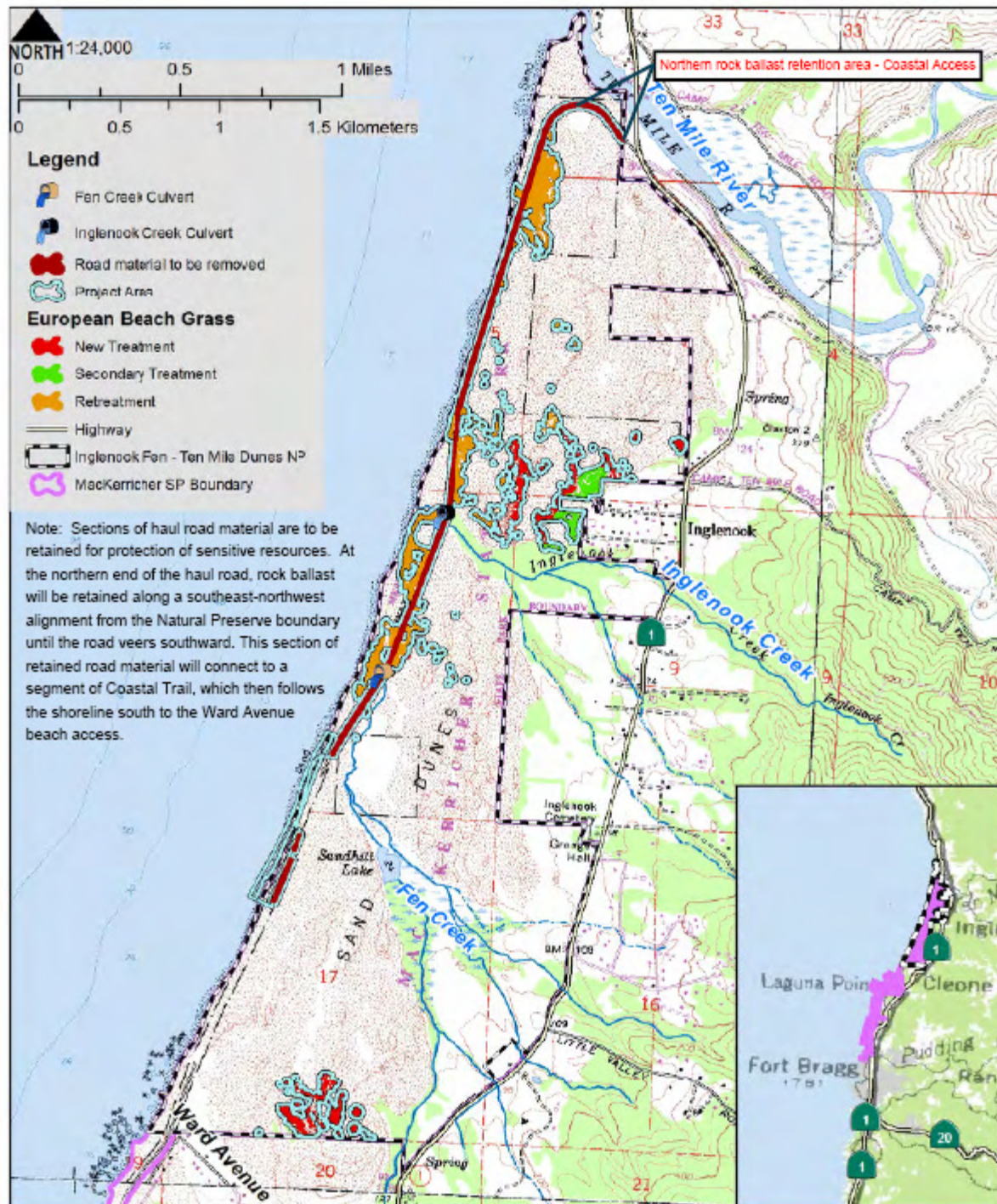


Exhibit F

Attachment A

SEASONAL CONDITIONS AT FEN CREEK AND INGLENOOK CREEK BEACH CROSSINGS

Alison Cebula, California State Parks District Environmental Staff

April, 2013

This series of photos demonstrates the seasonal nature of creek crossings and conditions at Fen Creek and Inglenook Creek within the Natural Preserve. Conditions vary from year to year depending on the amount of rainfall received (typically highest during winter months).

The distance from the Ward Avenue access ramp along the beach to Fen Creek is approximately 1.46 miles. The distance from the Ten Mile River along the beach to Inglenook Creek is approximately 1.43 miles.

Fen Creek at high flow in March 2012



This photo was taken after a period of heavy rain. When the creek flows across the beach, park staff crosses the creek by using one of the following methods:

- upstream at driftwood logs
- by removing footwear and walking across creek at location in photo
- by crossing the mouth during low tides.

Fen Creek in June 2012



Fen Creek flow has diminished and seeps into sand near tideline. Crossing is easily navigated in these conditions.

Fen Creek in September 2012



Typical summer conditions at Fen Creek beach include a wide sandy beach. The creek has receded far upstream and only reaches the surface at isolated pools. .

Mouth of Inglenook Creek at high flow in March 2012



See additional photo of upstream area below.

Upstream Inglenook Creek at high flow in March 2012



In recent years Inglenook Creek has flow north and spread out across the back beach area against the dunes to the north. Park staff crosses the creek using the following methods:

- walk or jump across where it narrows
- by walking over driftwood logs deposited during tidal events
- by removing footwear and wading across
- by crossing the mouth at low tide

Inglennook Creek in June 2012



Creek flow has diminished. The water is shallow enough to cross where the creek has spread out and become “braided”. Small islands of sand make it possible to cross without wading through water.

Inglenn Creek in September 2012



Typical conditions in summer show a wide sandy beach. Inglenn Creek continues to flow from upstream but at such a low flow rate that the water seeps into the sand before it reaches the beach. Subterranean flow likely continues but visitor access is unimpeded.

Access points to Ten Mile Beach within the Natural Preserve

As stated in the MND, this project will not alter or affect any access to the beach or dunes within the Natural Preserve. Currently the main access points used by local residents and visitors are located on the south end of the Preserve at Ward Avenue, and on the north end of the Preserve at the Ten Mile River. The Ward Avenue access consists of a ramp which connects a segment of the Haul Road trail with the beach. Beyond this point visitors must traverse open sand or dunes for approximately 0.81 miles to reach the first isolated segment of the remnant haul road, and 1.3 miles before they reach a section of the remnant haul road that is currently viable or free of sand for any useful distance. The northern access near the Ten Mile River Bridge consists of a narrow and rutted footpath established by visitors across private property that drops across a sand dune onto the old Haul Road below the bridge. This route is approximately 607 feet long, or 0.12 miles. A second access option is to climb a steep sand dune to the dune field above and to cross over the dunes to the old Haul Road at several possible points. This route is approximately 732 feet long, or 0.14 miles. Opponents to the Project have indicated that the haul road within the Preserve has value as an ADA accessible trail, but it is not clear how visitors with mobility issues would currently be accessing any remnants of the road within the Preserve at this time without first negotiating significant distances in soft sand or through vegetation.

**Photos of Main Access Points to Ten Mile Beach and Ten Mile Dunes
Ward Avenue – Southern Access Point**

A gravel ramp leads to Ten Mile beach from the remnant haul road north of the Ward Avenue parking area.



**STAFF REPORT FOR COASTAL DEVELOPMENT
STANDARD PERMIT**

CDP# 12-2012 (DPR Ten Mile)

June 11, 2013

CPA-43

Visitors wishing to access the beach or dunes traverse the sandy beach or unofficial trails through bluff and dune habitat to the east. The distance to the first road remnant to be removed is over 0.75 miles to the north. The old haul road between this access point and the first remnant has been washed away



Ten Mile River Bridge – Northern Access Point

Unofficial access point on southwest side of Ten Mile River bridge. Rutted trail through brush is barely visible at middle right of photo. The distance to the haul road below the bridge is 0.12 miles using this route.



Unofficial access trail up steep sand dune to dune field above.



**STAFF REPORT FOR COASTAL DEVELOPMENT
STANDARD PERMIT**

CDP# 12-2012 (DPR Ten Mile)

June 11, 2013

CPA-46

Dune field that must be crossed when accessing the Preserve using unofficial access trail at steep dune (see previous photo). The remnant haul road is just visible at the upper right of photo adjacent to the Ten Mile River. The distance to the haul road is 0.14 miles using this route.



Dune access leading from Ten Mile River bridge area to remnant haul road.



**From the MacKerricher State Park Dune Rehabilitation Project Mitigated Negative Declaration-
Chapter XV Recreation:**

The qualities that make this area a haven for wildlife and a hotspot for rare plant communities also attract visitors who seek open space, solitude and a natural landscape relatively untouched by development. Beach combing, bird watching, photography, jogging, horseback riding and picnicking are popular recreational uses of the Preserve, but it is not uncommon for visitors to have the beach or the dunes to themselves, especially in winter.

The Inglenook Fen-Ten Mile Dunes Natural Preserve has two frequently used entry points: at the north end near the Ten Mile River Bridge; and the south end off Ward Avenue, a county road. Both locations accommodate multiple vehicles. The north access point off Highway 1 traverses a California Department of Transportation (Caltrans) right of way and private property before entering the Preserve about 300 yards (275 m) west of the bridge. Although this access has existed for many years and is used mainly by local coast residents it is not a designated trail or official State Park access. Caltrans recently installed interpretive panels, native plants, benches, new parking spaces and “coastal view” signage on the south end of the new Ten Mile River Bridge.

With only these two highly visible entry points for this 4 mile (6.4 km) long area of the Preserve, much of the use occurs near these locations. Whether visitors enter at Ward Avenue or near the Ten Mile River Bridge, the beach is the destination area for most visitors in the Preserve. At Ward Avenue, visitors can follow the old haul road a short distance north on the headlands before it ends at a major washout where a gravel ramp now leads to the beach below. At the Ten Mile area, several noticeable trails lead from the remnant track of the old road along the edge of the Ten Mile River or through the dunes to the ocean. One of these trails is the designated route to the beach for equestrian use. The portion of the Coastal Trail that runs through the Preserve travels over the wet, packed sand along the shoreline. Equestrians are directed to ride on wet sand to protect sensitive plant and animal species. Due to the dynamic nature of the shore environment, conditions along the beach and dunes are constantly changing. Visitors sometimes need to negotiate around waves and across creek outlets along the beach during high tides, storm events and seasonal flooding of creeks.

Outside of the Preserve, the old haul road spans most of the southern portion of MacKerricher State Park, and is part of the Coastal Trail. With the exception of a short detour at Lake Cleone due to a washout, visitors can walk or bicycle the old haul road route from Glass Beach across the Pudding Creek Trestle and continue north for over 3 miles (4.8 km) to Ward Avenue, where the Preserve boundary begins. Shortly beyond this point the remnant road has been completely washed out, severely eroded or covered by sand due to constant wave action, storm events and shifting sand. The remnant road north of Fen Creek sits further back in the dunes and has been spared the force of the waves but is weathered and covered in multiple areas by sand as much as 3 feet (0.91 m) deep. For this reason, the portion of the Coastal Trail that crosses the Preserve is designated along the shoreline

**STAFF REPORT FOR COASTAL DEVELOPMENT
STANDARD PERMIT**

**CDP# 12-2012 (DPR Ten Mile)
June 11, 2013
CPA-49**

Attachment B – Mitigation Monitoring and Reporting Plan

**Dune Rehabilitation
MacKerricher State Park
Conditions and Mitigation Monitoring and Reporting Plan
December 2012**

This form must be completed and returned to the Project Environmental Coordinator upon project completion along with DPR form 510: "CEQA Project Completion Verification"

Condition/Mitigation Measure	Timing	Responsible for Implementing Mitigations and Conditions	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
BIOLOGICAL RESOURCES						
Biological Mitigations						
For all special status plant species: 1) all plants occurring within the project area that can be avoided will be flagged prior to project implementation, and 2) all areas within 50 ft (15 m) of the road will be searched for weeds, specifically iceplant, and will be removed for a 5 year period.	Prior to, during, and post project implementation	DPR Environmental Scientist	DPR Sr. Environmental Scientist			
No later than August 31, 2017, at least 4 times the number of pink sand-verbena (<i>Abronia umbellata</i> ssp. <i>breviflora</i>) plants lost or damaged as a result of Project implementation will be introduced through direct seeding and established in suitable habitat in the Preserve.	Prior to, during, and post project implementation	DPR Environmental Scientist	DPR Sr. Environmental Scientist			
Cover of non-native plants within 10 meters of pink sand-verbena plants or patches (as specified above in Location/Area) shall be maintained at less than 1% absolute cover. By August 31, 2014, biannually thereafter.	Prior to, during, and post project implementation	DPR Environmental Scientist	DPR Sr. Environmental Scientist			
The habitat area of <i>Chorizanthe howellii</i> (Howell's spineflower) defined by a density of least 1 plant per square meter, shall be maintained at no less than 50% of the mean habitat areas mapped in years 2001, 2011, and 2012, as of June 30, 2014.	Prior to, during, and post project implementation	DPR Environmental Scientist	DPR Sr. Environmental Scientist			
By June 30, 2017, Howell's spineflower will be established in novel habitat (defined as a mean density of at least 1 plant/m ² in areas not occupied in 2012) covering an area at least 4 times the amount of habitat lost as a direct result of Project-related impacts (estimated at 1.0 acres, as mapped in 2011).	Prior to, during, and post project implementation	DPR Environmental Scientist	DPR Sr. Environmental Scientist			
As of June 30, 2017, existing Howell's spineflower habitat (defined as a mean density of at least 1 plant/ m ²) shall be extended, Preservewide, to incorporate adjacent, new habitat into an area totaling at least twice the habitat area projected to sustain direct Project impacts during its implementation (estimated at 1.0 acres, as mapped in 2011).	Prior to, during, and post project implementation	DPR Environmental Scientist	DPR Sr. Environmental Scientist			
No later than June 30, 2017, the mean density of Howell's spineflower plants, measured on plots that collectively incorporate at least 2.5 acres of established spineflower habitat, shall be at least twice the density estimated on those plots immediately prior to the start of the management action.	Prior to, during, and post project implementation	DPR Environmental Scientist	DPR Sr. Environmental Scientist			

Condition/Mitigation Measure	Timing	Responsible for Implementing Mitigations and Conditions	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
As of June 30, 2014, the occupied habitat area of Menzies' wallflower (<i>Erysimum menziesii</i>) within the road removal corridor shall be maintained at 100% of the occupied area as mapped in 2011.	Prior to, during, and post project implementation	DPR Environmental Scientist	DPR Sr. Environmental Scientist			
By June 30, 2017, Menzies's wallflower will be established in novel habitat (defined as a mean density of at least 1 plant/m2 in areas not occupied in 2012) to cover an area at least 2 times the area of wallflower habitat affected as a result of Project related activities (estimated at 0.23 acres, as mapped in 2011).	Prior to, during, and post project implementation	DPR Environmental Scientist	DPR Sr. Environmental Scientist			
No later than June 30, 2017, existing habitat for Menzies's wallflower (defined as a mean density of at least 1 plant/ m2) shall be extended into adjacent, currently unoccupied habitat that will cover an area at least 4 times the wallflower habitat area expected to sustain Project-related impacts (estimated at 0.23 acres, as mapped in 2011).	Prior to, during, and post project implementation	DPR Environmental Scientist	DPR Sr. Environmental Scientist			
No later than June 30, 2017, the mean density of Menzies's wallflower plants, measured on plots that collectively incorporate at least 0.5 acres of established wallflower habitat, shall be at least twice the density estimated on those plots immediately prior to the start of the management action.	Prior to, during, and post project implementation	DPR Environmental Scientist	DPR Sr. Environmental Scientist			
No later than August 31, 2017, at least 4 times the number of Wolf's evening-primrose (<i>Oenothera wolfii</i>) plants lost or damaged as a result of Project activities will be introduced through direct seeding and established within suitable habitat in the Preserve.	Prior to, during, and post project implementation	DPR Environmental Scientist	DPR Sr. Environmental Scientist			
Cover of non-native plants within 10 meters of Wolf's evening-primrose plants or patches (as specified above in Location/Area) shall be maintained at less than 1% absolute cover.	Prior to, during, and post project implementation	DPR Environmental Scientist	DPR Sr. Environmental Scientist			
Biological Conditions						
A CSP-approved biological monitor will conduct a visual survey of project areas immediately before ground-disturbing project activities are to begin, relocating any globose dune beetle or Ten Mile shoulderband snail found into adjacent, suitable habitat.	Prior to and during project implementation	DPR Environmental Staff	DPR Environmental Scientist			
Sand storage areas will be visually surveyed for globose dune beetle and Ten Mile shoulderband snail by a CSP-approved biological monitor before sand is placed in the area. Any individuals found will be relocated into adjacent, suitable, undisturbed habitat areas.	Prior to and during project implementation	DPR Environmental Staff	DPR Environmental Scientist			

Condition/Mitigation Measure	Timing	Responsible for Implementing Mitigations and Conditions	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
Project personnel will be instructed by a CSP-approved biological monitor regarding the identification and life history of Ten Mile shoulderband snail, and instruction on the appropriate protocol to follow in the event that an individual resembling this species is found in the areas where project work is being conducted.	Prior to and during project implementation	DPR Environmental Staff, Contractor	DPR Environmental Scientist			
Project personnel will be instructed by a CSP-approved biological monitor regarding the life history and habitat requirements of amphibians and reptiles, and instruction in the appropriate protocol to follow in the event that an amphibian or reptile is found on site.	Prior to and during project implementation	DPR Environmental Staff, Contractor	DPR Environmental Scientist			
A CSP-approved biological monitor will be on site during all activities to ensure there are no impacts to amphibians or reptiles. Immediately prior to the start of work each morning a CSP-approved biological monitor will conduct a visual inspection of the project zone where activities will take place. If reptiles or amphibians are found, start of work at that project location will be delayed until the individuals are captured and relocated upstream or into suitable protected habitat by CSP-approved personnel.	Prior to and during project implementation	DPR Environmental Staff	DPR Environmental Scientist			
Streams and riparian zones will not be used as equipment staging or refueling areas. Equipment will be stored, serviced, and fueled away from streams and riparian areas. Heavy equipment will be cleaned (e.g., power washed, steamed) off-site prior to being used below the ordinary high water mark.	During project implementation	Contractor	DPR Environmental Scientist			
At Fen Creek and Inglenook Creek, stream flow will be diverted following specifications detailed in the Water Diversion Plan submitted with the Streambed Alteration Agreement for the project. Where flow is sufficient to be intercepted, a small diversion dam will be built upstream and stream flow piped around the worksite and discharged into the stream below the worksite. If the stream is flowing at a slow rate and cannot be captured and diverted, filter structures will be installed downstream to filter turbid discharge from the work site.	During project implementation	Contractor	DPR Environmental Scientist			
Erosion control measures will include slash packing and willow sprigging with native vegetation where appropriate for road crossings and culvert removal areas at Fen Creek and Inglenook Creek.	During project implementation	Contractor and DPR Environmental Staff	DPR Environmental Scientist			
Under the direction of USFWS-permitted personnel, qualified staff will conduct pre-project surveys for Tidewater goby presence in Fen Creek and Inglenook Creek, at and downstream from the project area, within 30 days prior to project activity. The USFWS Recovery Plan for tidewater goby identifies July 1 to October 31 as the season of highest abundance for the species in general.	Prior to and during project implementation	DPR Environmental Staff	DPR Environmental Scientist			

Condition/Mitigation Measure	Timing	Responsible for Implementing Mitigations and Conditions	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
As a precaution, avoidance measures recommended by the USFWS will be implemented to prevent potential impacts to tidewater goby and habitat. In the event that tidewater goby is detected in either Fen Creek or Inglenook Creek, Technical Assistance will be requested from USFWS.	Prior to and during project implementation	DPR Environmental Staff	DPR Environmental Scientist			
Additional project requirements will be incorporated with permit conditions in compliance with California Endangered Species Act (CESA), California Fish and Game Code §3503, 3503.5 and 3511, as well as the United States Endangered Species Act of 1973 and Migratory Bird Treaty Act of 1918 unless exceptions are authorized through permitting and/or technical assistance from the DFG, USFWS, or other appropriate authority.	Prior to, during, and post project implementation	DPR Environmental Staff	DPR Environmental Scientist			
Prior to project activities a CSP-approved biological monitor will survey project areas and surrounding suitable habitats for nesting birds. If breeding is discovered, avoidance measures as detailed below will be implemented to minimize disturbance.	Prior to and during project implementation	DPR Environmental Staff	DPR Environmental Scientist			
All crews working on the project shall be required to follow all State Park regulations. Regulations pertaining to protection of shorebirds, including those prohibiting dogs in the Natural Preserve, shall be strictly enforced. All trash that could potentially encourage ravens shall be removed from the site at the end of each work day.	During project implementation	DPR Environmental Staff, Contractor	DPR Environmental Scientist			
Any aerial photography conducted in conjunction with the project shall be at an altitude that will not flush shorebirds.	Prior to, during, and post project implementation	Contractor	DPR Environmental Scientist			
If possible, noise-generating project activities will not occur during the raptor and migratory bird breeding season (February 1 – September 15).	During project implementation	Contractor	DPR Environmental Scientist			
If project-related activities must be scheduled during the breeding season, then focused surveys for nesting migratory bird and raptor species will be conducted by a CSP-approved biologist before project activities occur in these months to identify active nests.	During project implementation	DPR Environmental Staff	DPR Environmental Scientist			
Surveys for active raptor nests will be conducted within a 500-foot (152 m) radius of the project area 10 days prior to the beginning of project work at each site. If nesting raptors are found, no project activities will occur within a 500-foot (152 m) radius of the nest until the young have fledged and the young will no longer be impacted by project activities (as determined by a CSP-approved biologist) and there is no evidence of a second attempt at nesting.	Prior to and during project implementation	DPR Environmental Staff	DPR Environmental Scientist			

Condition/Mitigation Measure	Timing	Responsible for Implementing Mitigations and Conditions	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
Surveys for active migratory bird nests will be conducted within a 100-foot (30.5 m) radius of the project area 10 days prior to the beginning of project work at each work site. If active nests are located, then no project activities will occur within a 100-foot (30.5 m) radius of the nest location until the young have fledged and the young will no longer be impacted by project activities (as determined by a CSP-approved biologist).	Prior to and during project implementation	DPR Environmental Staff	DPR Environmental Scientist			
Surveys for burrowing owls and active owl burrows will be conducted within a 164 ft. (50 m) radius of the project area prior to the beginning of project activities	Prior to project implementation	DPR Environmental Staff	DPR Environmental Scientist			
No disturbance will occur within 164 ft. (50 m) of occupied burrowing owl burrows during the nonbreeding season of September 1 through January 31	During project implementation	DPR Environmental Staff and Contractor	DPR Environmental Scientist			
For the western snowy plover, when practicable, project activities will occur during the non-breeding season, from September 15 - March 15.	During project implementation	DPR Environmental Staff and Contractor	DPR Environmental Scientist			
Each day, prior to the start of project work, all areas within 1000 feet (300 meters) of project activities will be surveyed for the presence of snowy plovers. The first survey will be conducted the day before the start of the project. Surveys will follow the general survey methods described in the Mendocino District's Recovery Permit.	Prior to and during project implementation	DPR Environmental Staff	DPR Environmental Scientist			
If plovers are not seen in the survey area, the project facilitators will be given direction to proceed, with the condition that a plover surveyor be present to monitor the project while it is ongoing.	During project implementation	DPR Environmental Staff and Contractor	DPR Environmental Scientist			
If plovers are seen within 660 feet (200 meters) of the project area, activities in that area will be cancelled until the next day, and another survey will be conducted.	During project implementation	DPR Environmental Staff and Contractor	DPR Environmental Scientist			
If birds are seen on the second survey, but no nest is found, the project will proceed with a plover surveyor in attendance for monitoring. Plover surveyors will be responsible for directing project facilitators to stop or modify activities if plovers exhibit disturbance behavior that is related to the project activity.	During project implementation	DPR Environmental Staff and Contractor	DPR Environmental Scientist			
If at any time a nest is located within 330 feet (100 meters) of the project, project work in that area will be canceled until the end of the breeding season, or until further monitoring activities document that the nest is no longer active.	During project implementation	DPR Environmental Staff and Contractor	DPR Environmental Scientist			

Condition/Mitigation Measure	Timing	Responsible for Implementing Mitigations and Conditions	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
Vehicle use will be minimized to the extent practicable. Vehicles will operate on the haul road instead of the beach whenever practicable. A corridor will be delineated and clearly marked by a qualified monitor to provide vehicle access from the haul road to the beach; only approved corridors will be used for this purpose. Vehicles operating on the beach will be accompanied by a qualified monitor, and remain on wetted sand whenever possible.	During project implementation	DPR Environmental Staff and Contractor	DPR Environmental Scientist			
Project work, including operation of vehicles, will occur no earlier than ½ hour after sunrise and conclude at least ½ hour before sunset.	During project implementation	DPR Environmental Staff and Contractor	DPR Environmental Scientist			
Coastal strand habitat will not be used as equipment staging or refueling areas. Equipment will be stored, serviced, and fueled away from coastal strand and dune areas. Heavy equipment will be cleaned (e.g., power washed, steamed) off-site prior to being used below the ordinary high water mark.	During project implementation	Contractor	DPR Environmental Scientist			
CSP may consult with USFWS and request technical assistance for site-specific avoidance or mitigation measures. Any such changes will be amended into the Mitigated Negative Declaration if necessary. Additional project requirements will be incorporated with permit conditions in compliance with California Endangered Species Act (CESA), and California Fish and Game Code §4500, and the United States Endangered Species Act of 1973.	Prior to, during, and post project implementation	DPR Environmental Staff	DPR Environmental Scientist			
In the event a marine mammal hauls out onto the coastal strand, project activities will be minimized to the extent practicable within 820 feet (250 meters).	During project implementation	DPR Environmental Staff and Contractor	DPR Environmental Scientist			
Travel along the wet sands below the tide-line will cease within 330 feet (100 meters) of the marine mammal until it has returned to the ocean.	During project implementation	DPR Environmental Staff and Contractor	DPR Environmental Scientist			
Project activity will be minimized to the extent practicable until the marine mammal has departed the area.	During project implementation	DPR Environmental Staff and Contractor	DPR Environmental Scientist			
Cultural Resources						
A CSP-qualified Archaeologist will consult with the contractor and project manager to identify all cultural resources that must be protected.	Prior to project implementation	DPR Archaeologist, DPR Environmental Staff, Contractor	Project Manager (DPR Sr. Environmental Scientist)			
A CSP-qualified Archaeologist will flag and/or fence all cultural resources with a buffer of 25 meters for avoidance during project activities. The fencing will be removed after the project has been completed.	Prior to project implementation	DPR Archaeologist	Project Manager (DPR Sr. Environmental Scientist)			
Prior to any earthmoving activities, a CSP-qualified Archaeologist will approve all subsurface work, including the operation of heavy equipment within 82 feet (25 meters) of the identified sensitive resource area.	Prior to project implementation	DPR Archaeologist, Contractor	Project Manager (DPR Sr. Environmental Scientist)			

Condition/Mitigation Measure	Timing	Responsible for Implementing Mitigations and Conditions	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
A CSP-qualified Archaeologist will train project personnel in cultural resource identification and protection procedures.	Prior to project implementation	DPR Archaeologist, DPR Environmental Staff, Contractor	Project Manager (DPR Sr. Environmental Scientist)			
Any locations where ground disturbing activities are proposed for the removal of invasive plant species or for planting of native plants will require additional archaeological review. This will include archival research and possible field investigations to identify previously undocumented archaeological resources in specified treatment areas.	Prior to project implementation	DPR Archaeologist, DPR Environmental Staff	Project Manager (DPR Sr. Environmental Scientist)			
A CSP-qualified Archaeologist familiar with the project will provide the project manager a site-specific avoidance plan with associated maps developed for this project. These documents will illustrate the extent of permissible project work at each culturally sensitive area and will be based on the extent of the archaeological constituents, the location of the resource in relation to the area of direct impact, and the level of proposed ground disruptions at each location. Due to the sensitivity of the archaeological resources and associated confidentiality issues, the avoidance plan and maps will not be provided in this public document; but rather, to the project manager and other appropriate project personnel when completed.	Prior to project implementation	DPR Archaeologist, DPR Environmental Staff, Contractor	Project Manager (DPR Sr. Environmental Scientist)			
A CSP-qualified Archaeologist familiar with the project will review and authorize all vehicle and equipment staging and material storage sites except those staging/storage locations situated on the currently paved surface of the Haul Road or those locations outside of the park.	Prior to project implementation	DPR Archaeologist, DPR Environmental Staff, Contractor	Project Manager (DPR Sr. Environmental Scientist)			
All excess sand generated from clearing of the haul road can be disposed of in the Preserve; however, disposal locations will not be allowed within the boundaries (with a 25 meter buffer) of archaeological sites. Additionally, prior to disposal of the excess sand, locations selected for this activity will need clearance from a CSP-qualified Archaeologist.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
Foot traffic through archaeological sites is prohibited unless approved by a CSP-qualified Archaeologist. Additionally, this equipment will be restricted to the hardened footprint of the former haul road. If circumstances dictate the need to deviate from the road footprint, these areas will require prior clearance from the CSP-approved Archaeologist reviewing the project.	During project implementation	DPR Archaeologist, DPR Environmental Staff, Contractor	Project Manager (DPR Sr. Environmental Scientist)			
Vehicle access and equipment staging will not be allowed in known archaeological site locations.	During project implementation	Contractor, DPR Environmental Staff	Project Manager (DPR Sr. Environmental Scientist)			
No plant eradication activities will be allowed within the boundary of archaeological deposits. This will include a 25 meter buffer around the site.	During project implementation	DPR Environmental Scientist	Project Manager (DPR Sr. Environmental Scientist)			

Condition/Mitigation Measure	Timing	Responsible for Implementing Mitigations and Conditions	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
Plant revegetation efforts within the boundary of archaeological sites, including a 25 meter buffer will be limited to seed broadcasting only.	During project implementation	DPR Environmental Scientist	Project Manager (DPR Sr. Environmental Scientist)			
All introduced materials (ballast, road base, asphalt, etc.) associated with the removal of the haul road will be disposed of outside of the Preserve and the greater MacKerricher State Park.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
A CSP qualified Archaeologist will monitor all ground disturbing phases of this project at his/her discretion (refer to Specific Project Requirements related to monitoring).	During project implementation	DPR Archaeologist	Project Manager (DPR Sr. Environmental Scientist)			
The project manager will notify the CSP Northern Service Center or District Cultural Resource Section a minimum of three weeks prior to the start of ground-disturbing work to schedule archaeological monitoring, unless other arrangements are made in advance.	Prior to project implementation	DPR Environmental Scientist	Project Manager (DPR Sr. Environmental Scientist)			
If previously undocumented archaeological resources are encountered during removal of the haul road material (asphalt, road base, and ballast), all work will cease at this location. Work can resume 25 meters past the find (point of discovery). If during resumed removal of the haul road evidence suggest the archaeological deposit is still present, than the same protocol described above will be implemented. This will be continued until evidence of the site is no longer present. This find will be appropriately documented, photographed, and mapped.	During project implementation	DPR Archaeologist and Contractor	Project Manager (DPR Sr. Environmental Scientist)			
A CSP-qualified Archaeologist will record historic fabric or features discovered during the project (a photograph and/or drawing showing any new material must be prepared or recovered and archived).	During project implementation	DPR Archaeologist	Project Manager (DPR Sr. Environmental Scientist)			

Condition/Mitigation Measure	Timing	Responsible for Implementing Mitigations and Conditions	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
<p>If a CSP-qualified Archaeological Monitor discovers previously undocumented cultural resources during project activities, work within 82 feet (25 meters) of the find will be temporarily halted until the Archaeologist designs and implements appropriate treatments in accordance with the Secretary of the Interior’s Standards and Guidelines for archaeological resource protection.</p> <p>i. The project manager working with the Archaeologist will modify the project to ensure that project activities will avoid cultural resources upon review and approval of a CSP-qualified Archaeologist.</p> <p>ii. If ground disturbing activities uncover intact cultural features (including but not limited to dark soil containing shellfish, bone, flaked stone, groundstone, or deposits of historic ash), when a CSP-qualified Archaeologist is not on-site, the project manager will contact the CSP State Representative immediately and will temporarily halt or divert work within the immediate vicinity of the find until a CSP-qualified Archaeologist evaluates the find and determines the appropriate treatment and disposition of the cultural resource.</p>	During project implementation	DPR Archaeologist	Project Manager (DPR Sr. Environmental Scientist)			
GEOLOGY AND SOILS						
<p>Best Management Practices (see pertinent sections of Appendix E.1 - Best Management Practices) will be used in all project areas to control sand/soil movement and surface water runoff during excavation and removal of the road remnants and culverts. If excavation and removal of remnant road materials take place during winter months, temporary erosion control measures will be used to protect and “winterize” any soils stockpiled offsite.</p>	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
GREENHOUSE GAS AND AIR QUALITY						
<p>CSP and its contractor(s) will maintain all construction equipment in good mechanical condition, according to manufacturer’s specifications. Construction equipment exhaust emissions will not exceed Bay Area Air Quality Management District (BAAQMD) Regulation IV – Rule 400 – Visible Emissions limitations (Cal EPA 2007b).</p>	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
<p>All off-road and portable diesel-powered equipment, including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, will be fueled with California Air Resources Control Board (CARB)-certified motor vehicle diesel fuel.</p>	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			

Condition/Mitigation Measure	Timing	Responsible for Implementing Mitigations and Conditions	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
Idling time for all diesel-powered equipment will be limited to five minutes, except as necessary to maintain a continuous workflow or for safety considerations.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
The use of diesel construction equipment meeting the CARB's 1996 or newer certification standard for off-road heavy-duty diesel engines will be maximized to the extent feasible	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
Electric and/or gasoline-powered equipment, or equipment using alternative fuels, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel, will be substituted for diesel-powered equipment, when available.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
Ground-disturbing activities will be suspended when sustained winds exceed 25 miles per hour (40 kilometers per hour), instantaneous gusts exceed 35 miles per hour (56 kilometers per hour), or dust from project activities might obscure driver visibility on public roads.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
As necessary, disturbed areas of the site will be covered (tarped) or watered depending on the conditions, using water trucks and/or sprinkler systems, to prevent airborne dust from leaving the site.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
If available, reclaimed (non-potable) water will be used.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
Any dirt stockpiles will be covered (tarped) or watered daily, as necessary to prevent dispersion of windblown dust	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
All trucks hauling dirt, sand, soil, or other loose materials on public roads will be covered or will maintain at least two feet (0.6 meters) of freeboard (minimum vertical distance between top of load and top of trailer), in accordance with California Vehicle Code Section 23114.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
Project requirements will also be implemented during holidays, weekend periods, or times when work is temporarily suspended, as necessary to control site conditions generating fugitive dust. Contact information for the project manager as well as the Mendocino County Air Quality District will be made available to the public to ensure compliance with applicable regulations.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
HAZARDS AND HAZARDOUS MATERIALS						
All equipment will be inspected for leaks immediately prior to the start of the project, and regularly inspected thereafter until equipment is removed from park premises.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
No maintenance or fueling activities will be allowed within 200 feet (61 m) of any body of water.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			

Condition/Mitigation Measure	Timing	Responsible for Implementing Mitigations and Conditions	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
Fuel transfer will be done over an impervious surface. Portable containment equipment will be used during fueling.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
A Spill Prevention, Control, and Countermeasure Plan (SPCC Plan) will be prepared prior to the start of the project and an appropriate spill kit maintained onsite throughout the duration of the project. The SPCC Plan will include a map delineating project staging or storage areas and areas where refueling, lubrication, and maintenance of equipment may occur. In the event of a spill or release of any chemical on or adjacent to the project site, the contractor or equipment operator will immediately notify appropriate CSP staff and implement the Mendocino District Hazardous Spill Response Procedures. Appropriate agencies will be notified in the event of significant spillage.	Prior to and During Project Implementation	DPR Environmental Staff, Contractor	Project Manager (DPR Sr. Environmental Scientist)			
Other than emergency repairs, all equipment cleaning and repair will occur outside of the Natural Preserve at designated authorized sites. All contaminated liquids and materials and other hazardous compounds will be disposed of at a designated authorized site.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
When not in use, hazardous materials will be stored in a locked storage area. Materials will be transported to the work site in spill proof containers and will be secured in the vehicle so as to prevent spillage.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
CSP will include, in any contract documents or in internal work plan documents, health and safety specifications regarding management of potential hazardous incidents. The specifications will include methods for safe handling, collection, and proper disposal of any contaminated soil and refuse uncovered during the excavation procedures; discuss the proper personal protection during project activities; the use of an exclusion zone if necessary to prevent exposure to the public; and the proper disposal procedures for any hazardous substances encountered.	Prior to and During Project Implementation	DPR Environmental Staff, Contractor	Project Manager (DPR Sr. Environmental Scientist)			
Project information and area closure notices will be issued by the Mendocino District State Parks superintendent and published in local newspapers as well as posted on the CSP website.	Prior to and During Project Implementation	DPR Environmental Staff, DPR Superintendent	Project Manager (DPR Sr. Environmental Scientist)			
A fire safety plan will be in place prior to the start of any project activities, including identified fire suppression equipment and completion of any required employee training.	Prior to and During Project Implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers will be required for all heavy equipment.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			

Condition/Mitigation Measure	Timing	Responsible for Implementing Mitigations and Conditions	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
Project work crews will be required to park vehicles away from flammable material, such as dry grass and brush. At the end of each workday, heavy equipment will be parked at a designated staging area located on asphalt or bare sand to reduce the chance of fire.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
Implementation of the SPCC Plan during all phases of the project will insure the proper use, storage, and disposal of any flammable materials used during the project.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
CSP staff will be required to have a CSP two-way communications radio on site, which will allow direct contact with the Northern Communications dispatch center, to facilitate the rapid dispatch of control crews and equipment in case of a fire. Fire suppression equipment will also be available within the park.	During project implementation	DPR Environmental Staff, Contractor	Project Manager (DPR Sr. Environmental Scientist)			
HYDROLOGY AND WATER QUALITY						
Any additional requirements identified through the permitting processes will be incorporated into the project design and specifications, and implemented as part of the project scope to avoid potential natural resource impacts.	Prior to and during project implementation	DPR Environmental Staff, Contractor	Project Manager (DPR Sr. Environmental Scientist)			
State Parks will adopt best management practices (refer to GEO-1) and use materials, methods, and techniques to implement erosion and sedimentation control and to otherwise stabilize slopes and barren soil surfaces, as described in Appendix E.1 - Best Management Practices.	During project implementation	DPR Environmental Staff, Contractor	Project Manager (DPR Sr. Environmental Scientist)			
Integration of Standard Project Requirement HAZ-1 will prevent impacts to water quality from possible pollutants (fuels, vehicle fluids) released from vehicles, and heavy equipment during the project.	During project implementation	DPR Environmental Staff, Contractor	Project Manager (DPR Sr. Environmental Scientist)			
LAND USE AND PLANNING PROJECT REQUIREMENTS						
Conditions and requirements identified through the Coastal Development Permit process will be incorporated into the project design and specifications, and implemented as part of the project scope to avoid potential natural resource impacts.	Prior to and during project implementation	DPR Environmental Staff, Contractor	Project Manager (DPR Sr. Environmental Scientist)			
NOISE						
Project activities will be limited to daylight hours, Monday - Friday. If work during weekends or holidays is required, no work will occur on those days before 7:30 am or after 8 p.m.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			
Internal combustion engines used for any purpose at the job site will be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for project activities will utilize the best available noise control techniques (e.g., engine enclosures, acoustically-attenuating shields or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			

Condition/Mitigation Measure	Timing	Responsible for Implementing Mitigations and Conditions	Responsible for Insuring Implementation	Required for Task to be Complete	Date Completed	Status / Comments
Stationary noise sources and staging areas will be located as far from sensitive receptors as possible.	During project implementation	Contractor	Project Manager (DPR Sr. Environmental Scientist)			