

Coastal Commission

Meeting held in Caspar on September 12, 2012

Public Comments presented by Thad M. Van Bueren (thadvanbueren@directv.net)

Re: Balancing resource preservation and coastal access at MacKerricher State Park  
(Mendocino County CDP#12-2012)

Thank you for meeting on the Mendocino coast 40 years after passage of the visionary Coastal Act. I'm Thad Van Bueren, and I support your commitment to protecting coastal resources and promoting coastal access. My archaeological expertise has informed development of many coastal trails built in this County over the past 15 years. I also led a volunteer effort to acquire and develop public access at the Westport Headlands. That work gives me an appreciation for the challenges of balancing resource protection, public access, and private property rights.

Finding that middle ground is rarely easy. A good example is a local project that has recently raised a lot of controversy. You will visit on your Thursday September 13<sup>th</sup> field trip the proposed natural habitat restoration area at the north end of MacKerricher State Park. Restoration is a worthy goal, but not at the expense of other resources, coastal access, and neighbors. For example, the project proposes destruction of 2.7 miles of an existing coastal bike and hike trail that should be maintained according to the park's General Plan. Other significant environmental impacts include destruction of endangered plants and severe erosion that will send sand onto neighboring lands and destroy non-renewable historical resources. Public comments copied to the Commission have urged State Parks to reduce the scale of the rehabilitation to avoid unnecessary impacts and strike a better balance.

As progress is made connecting the pieces of a coastal trail, destroying coastal access makes little sense. I understand why it has not been maintained and don't fault State Parks for that. In my view, we are all in this together. We must seize opportunities to work in partnership if a continuous coastal trail is to become a reality. As a retired Caltrans environmental planner, I believe transportation funding can play a significant role in achieving that vision. Caltrans is now studying the Pacific Coast Bike Route in Mendocino County. A route through MacKerricher State Park would be safer and more scenic than riding the highway shoulder. I believe it can be built in a way that minimizes environmental impacts, while serving a transportation function. I urge the Commission and its many public and agency partners to seize that opportunity.

(Compiled comments on Mendocino CDP#12-2012 and the draft Initial Study/Mitigated Negative Declaration issued July 30, 2012 are attached.)



## Westport Municipal Advisory Council

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

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July 9, 2012

Abbey Stockwell, Project Coordinator  
Department of Planning and Building Services  
120 West Fir Street  
Fort Bragg, CA 95437

Re: CDP #12-2012 (California Department of Parks & Recreation)

Dear Abbey:

The Westport Municipal Advisory Council held a public hearing on the cited permit application at its regular monthly meeting July 3, 2012. Comments were provided by eight people. Although there was some support for natural ecosystem restoration, significant concerns were expressed about the proposed project. Some of the comments were informed by examination of a draft combined Initial Study and Mitigated Negative Declaration and the approved General Plan for MacKerricher State Park. The WMAC unanimously approved a motion to convey the following summary of concerns:

1. Destruction of Coastal Trail: The proposed project will deliberately deconstruct 2.7 miles of the old haul road. This will preclude access for bicyclists and disabled individuals to an existing coastal trail that is mandated by the Mendocino County Local Coastal Program to provide maximum non-vehicular coastal access from Pudding Creek to the Ten Mile River. The General Plan for MacKerricher Park approved in 1995 specifically mandates on page 153: a) haul road maintenance; b) improving the surface for use of pedestrians and bicyclists; c) repair of areas with erosion problems; and d) providing a dune boardwalk north of Ward Avenue where the haul road has been washed away. The proposed project completely ignores and is inconsistent with those mandates and management directives and provides no mitigation for significantly impairing/destroying that required coastal access for bicyclists and disabled persons.

2. Herbicide Use: Concern exists about the use of herbicides to destroy introduced plants. The type of herbicides is not specified in the permit application, but the public is concerned that such chemicals may impact human and ecosystem health. Other methods of removal should be considered. The environmental consequences of different approaches to controlling invasive species should be thoroughly evaluated, giving priority to the method that causes the least harm.

3. Sand Migration: Adjacent property owners are concerned that the removal of European Beach Grass and portions of the haul road will further destabilize the dunes and cause significant sand migration that will adversely affect neighboring private landowners. Prior efforts to manually remove the beach grass have resulted in significant encroachment of dunes onto properties to the south and east, as well as degradation of the haul road through increased erosion or burial that impairs coastal access. Inadequate consideration is given to reliable methods for controlling sand movement and mitigating impacts to neighbors.

4. Adjacent Landowner Notification: One adjacent landowner who attended the WMAC said she was not notified of this pending permit. All adjacent landowners should be notified, consistent with CEQA policies and case law. Their concerns should be heard and factored into the resolution of the significant impacts this project can be expected to cause.

5. Unintended Consequences: Destabilizing the dunes is a risky proposal with many long term and cumulative consequences for surrounding lands, ecosystems, and cultural resources. Those consequences have not been adequately considered. Historic maps including the 1874 Coast Survey, 1916 Army Corps of Engineers Cape Vizcaino 15 minute quadrangle, and 1966 USGS Inglenook 7.5 minute quadrangle should be compared to the modern distribution of dunes and reliable methods should be proposed to ensure sand migration is controlled and significant impacts are addressed. Native species should be reestablished well prior to any action that will destabilize the dunes to ensure sand migration is controlled. Use of native shore pines appears ill-advised due to the spread of pine canker. Sand migration will predictably result in significant impacts such as the deflation of archaeological resources, further erosion/burial of the haul road that impairs use of that coastal access, congestion of hydrologic systems, and movement of the dunes east and south onto neighboring private lands.

The foregoing concerns imply the proposed draft IS/MND is inadequate as means to evaluate and mitigate the significant environmental consequences of this project under CEQA and its implementing regulations and guidance. An EIR should be required with a more robust effort to consider public input and address inconsistencies with the park's General Plan and LCP policies. The park is managed for many purposes according to an approved General Plan, and public coastal access should not be deliberately destroyed without mitigating that loss with a replacement structure such as a boardwalk that from Ward Avenue to the Ten Mile bridge that is accessible to pedestrians, bicyclists, and disabled persons.

We ask that you keep us informed of any revised submittal and notify us in advance of any public hearings on this project so that the citizens within our jurisdiction may continue to provide input as the decision process unfolds. Please contact Chairman Thad Van Bueren at 964-7272 if you have questions about the comments raised by the WMAC.

Sincerely,



Chuck Eyerly, Secretary  
Westport MAC

Cc: Renee Pasquinelli, California Department of Parks & Recreation  
Kendall Smith, Fourth District Supervisor  
Dan Gjerde, Fourth District Supervisor Elect

August 10, 2012

Ms. Renee Pasquinelli  
Senior Environmental Scientist  
California State Parks  
Mendocino District  
12301 North Highway 1 – Box 1  
Mendocino, CA 95460

**Subject: Draft Mitigated Negative Declaration for MacKerricher State Park Dune Rehabilitation Project**

Dear Ms. Pasquinelli:

As you know, the City of Fort Bragg has spent many years pursuing the Fort Bragg Coastal Trail project on a 130-acre parkland property adjacent to MacKerricher State Park. Once complete, our community will have a seamless corridor of accessible parkland from Noyo River to Ten Mile River. City staff has worked closely with State Parks in planning our project and together we prepared an Environmental Impact Report which addressed both the Fort Bragg Coastal Trail and proposed improvements to State Park's Glass Beach headlands property. The City values its ongoing partnership with State Parks and we are keenly interested in projects affecting coastal access in MacKerricher State Park. We appreciate this opportunity to comment on the Draft Initial Study – Mitigated Negative Declaration for the Inglenook Fen-Ten Mile Dunes Natural Preserve MacKerricher State Park Dune Rehabilitation Project.

The City offers the following general and specific comments on the draft Initial Study/Mitigated Negative Declaration (IS/MND):

1. The IS/MND is challenging to read and interpret as information about specific impacts, associated mitigations and monitoring measures is scattered throughout the voluminous document. It would be helpful to incorporate summary information from the attached Appendices and specific mitigation measures into the text of the IS/MND.
2. In Section 2.8 "Visitation to MacKerricher State Park", it would be useful to data regarding visitation to the Ten Mile Dunes area and the segment of the Haul Road which will be removed. An electronic counter could be placed at the northern terminus of the Haul Road near the Ten Mile Bridge to determine the level of visitor use of this feature. Absent such information, it is not possible to determine the level of impact that removal of the Haul Road might have on public access to the reserve and coastal access and, consequently, it is difficult to evaluate the sufficiency of mitigation measures. This section also contains a conclusive statement that "The Coastal Trail...runs along the shoreline at the beach and would not be permanently affected by the project." While the project may not physically

affect the Coastal Trail/beach, removal of the Haul Road surface along Ten Mile River may adversely affect visitor access to the shoreline and the Coastal Trail.

3. Section 2.11 “Related Projects” should mention the Fort Bragg Coastal Trail and Restoration Project.

#### 4. **Biological Resources**

- IS/MND Page 63. The discussion of Howell’s Spineflower (*Chorizanthe howellii*) does not clearly identify the impact of the removal of the Haul Road on this species, though it is clear from the map in Appendix A.3 and the narrative in Appendix A.4, that there are significant populations of the endangered spineflower adjacent to the Haul Road. The discussion of impacts on page 8 of Appendix E-2 references the potential loss of plants during construction activities but does not address the loss of suitable habitat associated with the removal of the Haul Road. While an 8:1 mitigation ratio is proposed on page 21, proposed mitigation measures do not address the loss of stabilized soil which is necessary for the plant’s propagation and growth. Similarly, while an objective of successful establishment of the spineflower in “novel habitat” at a 4:1 ratio is referenced on p. 27, it is not clear that there is sufficient “novel habitat” to accomplish that objective.
- IS/MND, Page 64. The discussion of Menzies’ Wallflower (*Erysimum menziesii* ssp. *Menziesii*) has similar issues to those noted above regarding Howell’s Spineflower. The IS/MND notes that this population is also located in stabilized soils along the Haul Road, but offers no mitigation measures to address the loss of habitat due to removal of the Haul Road.
- The Special Status Plants map indicates that most of the special status plants are found only in stabilized soils along the Haul Road. The IS/MND should include a discussion of the ability of these plants to survive in a destabilized dune environment and identify other areas of stabilized soils. One possible consideration would be to remove the asphalt surface of the trail but retain the rock and gravel base as a way of retaining the stabilized soils along the Haul Road.

#### 5. **Cultural Resources**

- S/MND Page 80-83. As noted on page 81, the project area has a very high degree of archaeological sensitivity. The narrative does not justify the finding of “Less than Significant Impact.” Numerous mitigation measures are proposed that may lessen potential construction-related impacts, however there are no proposed mitigations to address impacts to archaeological sites associated with dune migration and shoreline recession once the Haul Road is removed. State Parks should consider leaving the base rock of the Haul Road in place as a protective cap for cultural resource deposits lying underneath and inland of the road. The MND includes a mitigation measure that requires the completion of a site specific avoidance plan (CULT-2 a). It would make sense to prepare the cultural resource study and avoidance plan prior to completion of the MND in order to ensure that cultural resource impacts are adequately addressed and to ensure that mitigation measures for other impacts do not themselves have impacts on cultural resource areas.

#### 6. **Geology and Soils**

- The report prepared by the Department of Conservation (Appendix E-4) concludes that the project would result in additional sand migration to the east resulting in additional transverse dune formation/height and impacts on drainage and vegetation patterns

throughout the dunes. This warrants a more detailed analysis in the MND with regard to impacts on rare plants, wetlands and adjacent residences.

**7. Recreation**

- IS/MND, Page 115. The discussion of impacts to Recreation should provide more detail about how the removal of the Haul Road would impact coastal recreational activities. The Haul Road is used by coastal residents and visitors to access this beautiful stretch of coastline. If the Haul Road is removed, visitors will likely traverse the sand dunes and stabilize dune faces with resulting impacts. One possible mitigation is for State Parks to dedicate an easement along the eastern edge of MacKerricher State Park to a land trust or Caltrans for the installation of a bicycle/pedestrian path.

Thank you for your consideration of these comments. If you have any questions, please don't hesitate to contact me at 707-961-1807.

Sincerely,

Marie Jones  
Community Development Director

cc. City Council  
City Manager  
Abby Stockwell, Mendocino County Planning and Building Services  
Rick Macedo, California Department of Fish and Game



## Westport Municipal Advisory Council

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

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August 10, 2012

Renee Pasquinelli, Senior Environmental Scientist  
Mendocino District, California Department of Parks & Recreation  
12301 North Highway 1 – Box 1  
Mendocino, CA 95460

Re: Comments on revised draft IS/MND for Mackerricher State Park Dune Rehabilitation Project (Mendocino County CDP #12-2012)

Dear Renee:

The WMAC held two public hearings on the cited permit application July 3 and August 7, 2012. Our initial letter to the County is available at [http://www.westportmac.org/documents/CDP#12-2012-WMAC\\_Comments\\_\(7-9-2012\).pdf](http://www.westportmac.org/documents/CDP#12-2012-WMAC_Comments_(7-9-2012).pdf). The second hearing focused on the revised draft Initial Study and Mitigated Negative Declaration released by California Department of Parks & Recreation (DPR) on August 1, 2012. While there is public support for natural ecosystem restoration and preservation of sensitive species, widespread concerns were expressed that the project as presently designed will cause significant impacts that are not analyzed or mitigated. As a result, the preparation of an EIR appears mandatory unless the project is substantively revised. The WMAC approved a motion to convey the following concerns:

1. Destruction of Coastal Trail: Rather than letting natural forces remove the haul road as directed in the adopted General Plan (GP) for the park on page 79, the proposed project will purposefully destroy a long-neglected coastal trail specifically designated for improvement and repair for use by pedestrians and bicyclists (GP page 153). Removal of the haul road will significantly impact existing recreational and non-motorized transportation access by pedestrians, bicycles, wheelchairs. No mitigation is proposed to compensate for that loss of access, nor is it reconciled with other existing policies and directives of the General Plan which specify as a fundamental goal for the dunes to “develop recreational access consistent with natural processes” (page 77). Contrary to an unpublicized internal feasibility study, the public does not accept that a trail for pedestrians, bicycles, and wheelchairs through the Coastal Dunes Resource Management Zone is impractical. Low-cost permeable trail tread materials are readily available and could provide a sensitive solution that addresses directives of the General Plan on pages 78-79 by following a route that minimizes resource conflicts and mitigates impacts.

2. Sand Migration: Adjacent property owners are concerned that the removal of European beach grass and portions of the haul road will mobilize sand migration that will adversely affect neighboring private landowners. The IS/MND recognizes sand will migrate, but no mitigation is proposed. Degradation of the haul road north of Ward Avenue and prior efforts of beach grass removal have resulted in documented encroachment of dunes onto adjacent properties east of the park, as well as degradation of the haul road through increased erosion and/or burial that has impaired coastal access. These impacts are not assessed, and no mitigation is proposed to

compensate neighboring landowners for the loss of use and diminishment in land value that will predictably result from destabilizing the foredunes.

While European beach grass has heightened the foredunes, historic photographs verify the haul road was built on the original surface of the unmodified dunes. The haul road also provides critical habitat for the endangered Howell's spineflower and protects cultural resources that will suffer significant impacts from deflation if nearby sections of the road are removed and erosion is purposefully accelerated. Although destruction of 11% of the entire spineflower population in the preserve by this project is considered acceptable and will be mitigated, damage to non-renewable cultural resources is a significant impact that has not been addressed.

The foregoing concerns imply the proposed revised draft IS/MND is inadequate as means to evaluate and mitigate several significant short term and cumulative long term environmental consequences of this project. An EIR should be prepared to consider public input and address inconsistencies with the park's General Plan and Mendocino County's approved Local Coastal Plan. Adjacent property owners should be specifically notified of the pending environmental review and permit approval processes to ensure their views are taken into consideration.

Input received by the WMAC suggests a more modest approach to habitat manipulation is preferred to the radical plan currently proposed. That would be more consistent with Public Resources Code 5019.71, which states that such activities should occur "only (emphasis added) in those areas found by scientific analysis to require manipulation to preserve species or associations that constitute the basis for the establishment of the natural preserve." Those goals can be met with dune grass and culvert removals, as well as replanting. Leaving the haul road will retain critical habitat and preserve both public access and cultural resources.

The public feels attention should be given to balancing all of the Park's General Plan goals and directives, not selectively implementing some goals to the detriment of public access, neighboring land owners, and cultural resources. We suggest focusing solely on critical habitat preservation, leaving the removal of neglected remnants of the haul road until a plan is developed to construct a context-sensitive recreational and non-motorized replacement trail. Contact WMAC Chairman Thad Van Bueren at 964-7272 with questions about these comments.

Sincerely,



Chuck Eyerly, Secretary

Cc: Abbey Stockwell, Mendocino County Planning & Building Services Department  
Kendall Smith, Fourth District Supervisor  
Dan Gjerde, Fourth District Supervisor Elect  
Liz Burko, DPR District Superintendent  
Janelle Beland, DPR Acting Interim Director  
Bob Merrill, California Coastal Commission  
State Senator Noreen Evans  
State Legislator Wesley Chesbro

Date: August 11, 2012

To: Renee Pasquinelli, Senior Environmental Scientist  
California State Parks  
Mendocino District  
12301 North Highway 1 – Box 1  
Mendocino, CA 95460  
Fax: (707) 937-2953; Email: [rpasquinelli@parks.ca.gov](mailto:rpasquinelli@parks.ca.gov)

RE: INITIAL STUDY /MITIGATED NEGATIVE DECLARATION, INGLENOOK FEN – TEN MILE DUNES  
NATURAL PRESERVE, MACKERRICHER STATE PARK DUNE REHABILITATION PROJECT, July 30, 2012  
State of California California State Parks

Ms Pasquinelli,

As a concerned citizen of the Northern California coast I would like to submit the following concerns in relation to the above documents:

- 1) Having had substantial exposure to the process of, and preparation for approval of Environmental Impact Statements in my thirty-two year career as a geophysicist and geologist, I find it extremely concerning and inappropriate that the applicant and the Lead agency in charge of review and approval of the above documented MND for the INGLENOOK FEN – TEN MILE DUNES NATURAL PRESERVE is the same governmental agency. This is both inappropriate and possibly illegal as it shows a complete potential for bias and circumvention of the intent of process necessary to protect the public interest. This is akin to a non-governmental company being given approval over its own submission of either an MND or an EIS. Omissions of data and/or submission of questionable or favorable data would thus be allowed to be approved by mere will of the company submitting the document for review, without public concerns being given appropriate treatment or review. I therefore propose that this submission must be reviewed by another private environmental consultancy or governmental agency, which could in an unbiased way address the environmental and public concerns, such as the California Coastal Commission or some similar agency with California State approval for such review. Due to this conflict of interest, I do not see how the above referenced MND can be approved by the very same agency that is submitting the application without cause for serious concern or exposure to potential litigation.
- 2) As to the omission or potential bias reference in 1) above it is concerning that the findings of the ground penetrating radar are not provided as there are most certainly railroad ties and trestles under the existing roadbed as has been demonstrated in those areas where the haul road has been excavated by previous storm events and by anecdotal evidence [http://www.mendorailhistory.org/1\\_towns/fort\\_bragg/ten\\_mile.htm](http://www.mendorailhistory.org/1_towns/fort_bragg/ten_mile.htm) that, “ tires on the trucks of vehicles were penetrated by iron spikes remaining in railroad ties” prior to the chip sealing of the road surface. Railroad ties of the vintage of the rail line in question almost certainly contained creosote and thus arsenic. Also the chip seal and ballast placed over the rail line may be sequestering environmentally harmful materials such as asbestos from brake-linings, oil diesel, lubricants, or other environmentally harmful materials used (such as banned herbicides for weed control) or hauled/spilled by the unregulated railroad during its thirty-three year use as the main supply line to the Ten Miles watershed logging camps, and the following period of time by haul trucks prior to the chip-sealing of the road surface. Since no drilling or sampling

under the road surface has occurred (assuming such information would be presented) or adjacent to the road surface, speculation to the environmental possibilities cannot be mitigated, and the potential exists to expose not only workers but also nearby residents and California State Parks employees to possible exposure to airborne contaminants. The plan as presented further proposes the hauling and subsequent dumping of this excavated material to holding areas, potentially endangering residents along the routes and at the final destinations to exposure as well as the environments at these final locations. As the plan suggests that this material could be repurposed at numerous locations it seems that a full review of this potential issue must be investigated prior to the commencement of work. This is a serious concern which had not been addressed by this MND or the application; research shows that examples of this form of contamination have occurred around the globe.

- 3) As demonstrated in the report and shown on the included maps, there are two environmentally protected plant species that reside in large part only in close proximity to the haul road. It is possible that these plant species exist in this environment as a direct result of the protection and groundwater support provided by the ballast of this road surface, or the protection afforded by the ballast from natural forces (wind, burial, and erosion). On bluff outcrops and trails to the south near the southern boundary of the project area there appears to be a strong correlation between bedrock fracturing, rubble (shell mounds), or foot-trail collection of moisture and the presence of these endangered plants. Further to the north, where Haul road erosion has occurred, ballast remains now buried beneath sand and is also providing habitat for these endangered species.



Review of the material available in this MND fails to address any potential relationship between the occurrence of these plants or the possible damage which would occur to the largest known concentration of these endangered plants due to the destruction of the environment provided

by the haul road ballast and as such the removal of the haul roads effect on that habitat. Reference is made to the presence of non-natural road surface (asphalt, chip-seal), but removal of the associated road ballast, as suggested in 2) two above would be consistent with the destruction of habitat. As cited in CAL. PRC. CODE § 5019.71 "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". Since no scientific study of the actual subsurface environment necessary to support these endangered species is cited, and as results from the attempted growing of these endangered species is not reported, nor has it occurred in non-monitored environments, a significant threat to the existence of the species could occur as a result of the actions proposed in this MND plan. It would seem that a serious scientific study of this observation should be conducted prior to the removal of what could be the best habitat for these species, thus explaining the areal limit of these species in the area to be effected by this MND, and should be reported as part of any future document.

- 4) Review of the original survey documents( from the railroad survey circ. 1917) and currently available digital elevation modeling ( NASA based products) shows that there has been an accretion approaching +/- 300 feet toward the shore line over much of the length of the rail line since it was originally surveyed in the project area. Due to the fact that logging at this time was in its infancy and minimal upstream erosion had occurred, it would seem to be an excellent starting point for reviewing the effects of both sand accumulation and invasive plant encroachment on the project area's topography, since the invasive plants would not yet have arrived in the area. Over most of the area the Haul road actually lies landward of the current lateral dunes created by the encroachment of non-native plants and over 350' from the mean



sea level line. Using elevation data for the Haul road and mean sea level as a reference it becomes easy to calculate what beach front slopes would be in the absence of the lateral dunes. Most of the slopes would be less than 5 degrees over 350' perpendicular to the shore, relatively flat by comparison to the areas to the south where endangered plants and birds have been mapped and or observed. It is therefore questioned why this road, which would act as a barrier to erosion of State Parks land and potential damage to landward properties should be removed, if removal of the invasive grass species alone has the desired effect on topography. It would appear to be a direct conflict with CAL. PRC. CODE § 5019.71 if removal of the haul road led to not only the destruction of the previously mentioned endangered species habitat but also the erosion of potential beach front habitat for endangered animal species.

- 5) The plan as submitted is broken into different parts, yet no timeline has been provided to show the expected completion date for each phase, the start date of the subsequent phase or the time period separating various phases for observation of results, leaving the casual observer to believe that this operation will be conducted with no review of the success or damage which may be occurring to the environment as a result of each individual part of the proposed operations.

While I am extremely supportive of the efforts of the California State Parks Department to preserve our natural heritage, it is also imperative that California State Parks Department should be held to the same or a higher standard that we would require of any private entity.

Eric Freeman  
P.O. Box 2390  
Mendocino, CA 95460

August 14, 2012

Renee Pasquinelli, Senior Environmental Scientist  
Mendocino District, California State Parks  
12301 North Highway 1 – Box 1  
Mendocino, CA 95460

Re: Comments on Mackerricher State Park Dune Rehabilitation Project (Mendocino County CDP #12-2012)

Dear Renee:

As a professional archaeologist and historian with two decades of experience conducting research along the Mendocino coast, I strongly support the concept of natural preserves because they are designated to conserve natural and cultural resources. However, I am opposed to elective natural habitat restoration when it will have significant unmitigated impacts and when it conflicts with other adopted land use policies and laws.

I feel the proposed project's revised draft IS/MND dated July 30, 2012 does not support the conclusion that the proposed MacKerricher Dune Rehabilitation Project will result in "less than significant impacts." Instead, several significant unmitigated impacts of this discretionary project can be reliably predicted. An Environmental Impact Report thus should be mandatory pursuant to the California Environmental Quality Act and its implementing regulations unless the design of the project is substantially altered.

The proposed project consists of removal of about 2.7 miles of a historic road, two culverts and their associated fill prisms spanning Inglenook and Fen creeks, manual removal of invasive plants, and various mitigation measures. The IS/MND acknowledges that these activities will destroy 11% of the endangered Howell's spineflower population, mobilize significant sand migration, facilitate saltwater intrusion, and cause erosion and deflation of the western portion of the coastal dune resource management zone (RMZ). This radical manipulation of the environment has significant cumulative impacts that have not been adequately considered.

The project overview map creates a false impression that impacts of this project will be restricted to geographically discrete areas. In reality, the impact area is much more expansive because the project will induce ocean inundation, scouring, and deflation of the fore dunes. Appendix A.8 foreshadows this larger impact zone. The document fails to analyze how this elective, project-induced restructuring of the park's coastal dune RMZ will reduce critical habitat for endangered and listed plants and permanently damage fragile and nonrenewable cultural resources.

The document mentions over a dozen archaeological sites are present in the vicinity. Yet 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. Foreseeable impacts of erosion, deflation, and inundation that will be purposefully induced and accelerated by this proposed project are completely ignored. While natural forces constantly alter the dunes, many of the sites have survived centuries, if not millennia. This elective 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.

Section 15065.4(b) of the CEQA Guidelines states “a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” An adverse change is one that will “materially impair” the qualities of a historical resource that convey its historical significance. To address the significant effects of this project on historical and unique archaeological resources, it is necessary to first evaluate whether or not the 14 properties 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. That includes landscape alterations induced or accelerated as a direct result of implementing this project.

Although the locations of archaeological sites must be protected from public disclosure, the environmental document for this proposed project must summarize the results of evaluations, provide a complete analysis of all potentially significant foreseeable impacts (not just direct short term ones), and propose mitigation in a manner consistent with CEQA and Public Resource Code 5024. The environmental document must specify how all unavoidable impacts will be mitigated. This document does not address those issues. Project-induced erosion and deflation of dune deposits has the potential to significantly impact archaeological sites through direct destruction or deflation of the vertical stratigraphy that is often essential for conveying their significance under Criterion 4 of the California Register of Historical Resources.

In a similar manner, reductions in the critical habitat of endangered and listed plants and animals should be analyzed in relation to project-induced intrusion of salt water. The heightened fore dunes and haul road presently buffer that intrusion. If endangered and listed plants and animals will be adversely affected by increased salt water intrusion caused by the project, that loss of critical habitat also should be analyzed.

In summary, there is a potential for significant environmental consequences that remain unanalyzed and unmitigated. Preparation of an EIR is thus required unless the scale of the project is radically reduced. I feel strongly that it is inappropriate to prioritize preservation of renewable natural resources to the detriment of nonrenewable cultural resources. As an professional archaeologist, I would like to request the confidential cultural resource analysis that will be used to support approval of the undertaking. You may contact me at thadvanbueren@directv.net or (707) 964-7272 if you have questions. Thanks for giving my comments careful consideration.

Sincerely,



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

cc: Milford Wayne Donaldson, State Historic Preservation Officer  
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

August 20, 2012

Renee Pasquinelli  
California State Parks  
c/o Russian Gulch State Park  
12301 North Highway 1, Box 1  
Mendocino, CA 95460

Dear Ms. Pasquinelli:

I believe the Ten Mile Dune Restoration project should be halted because the Mitigated Negative Declaration prepared by State Parks is inadequate. This massive project proposes removal of a long existing dune barrier (the nearly 100 year old haul road), removal of two culverts on Class I streams, destruction of endangered plants and unknown impacts on the sensitive habitat. I have reviewed two geologic reports (Bedrossian and Wollenburg) on the dunes and both of them indicate that sand movement will accelerate because of the removal of the haul road. The project lacks adequate mitigation for sand movement.

The Sand Grain Analysis Report in the MND states that "Removal of the road and culverts, in conjunction with the removal of non-native vegetation on the windward side of the road, will eliminate the barriers to natural sand movement within the Ten Mile Dunes. Natural coastal dune formation processes are likely to be re-established, [...] As a result of these natural processes, more sand is likely to blow inland (nearshore) over the short-term (defined as 50 years) especially in the northern lobe. The addition of sand will change the configuration of the dunes as they migrate to the east (i.e., additional transverse dunes could develop and/or grow in height farther inland), the nature of the vegetation, and the drainage patterns throughout the dunes."

In the "Geology and Soils" section, p. 86 "Less than significant impact" is check next to the question, "Would the project b) Result in substantial soil erosion or the loss of topsoil?" The discussion on the following page states "Removal of the asphalt and road base would expose the soil beneath, which consists of unconsolidated sand particles. It is expected that the native sands would be dispersed by the prevailing NW winds and blow inland (nearshore) over the short-term (50 years), forming a series of longitudinal-shaped foredunes perpendicular to the coastline. 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. These processes are consistent with the goal of the project, i.e., to return the dune system to a more natural state and restore the dynamic processes within the Preserve."

The discussion states that "the movement of sand from the nearshore foredunes to farther inland areas is inhibited by the large expanses of dune and wetland vegetation" yet the geology report in the appendix states that "The addition of sand will change the configuration of the dunes as they migrate to the east, the nature of the vegetation, and the drainage patterns throughout the dunes." The geology report states that the removal of the road is likely to cause more sand to blow inland and that this addition of sand will change the nature of the vegetation while the discussion in the

MND states that sand movement is inhibited by the large expanses of dune and wetland vegetation.

These statements are absolutely contradictory. How can State Parks claim that there is no impact when their own document can't agree if there is an impact? Geologists say an impact is likely but State Parks changes this statement in their discussion by dismissing their own appendix document. Furthermore, the discussion states that "the small nearshore dunes would collect more sand and continue to grow, [...] until some threshold size is reached." But what happens after this threshold is reached? What is the threshold? What will the sand do after the threshold is reached? These are questions that illustrate a potentially significant effect throughout the dune system. They are effects that are not stated, nor are they mitigated.

State Parks has also failed to recognize the information put forth in their own publication, "Inglenook Fen, A Study and Plan." Page 86-87 shows the outline of the Ten Mile Dune as it evolved from 1920 to 1972. The 1920 line practically cuts the present day sand dune system in half. There are numerous references in the document about the destabilization of the dunes from off road vehicles and how the dunes have moved over pasturelands. Yet State Parks does not recognize the unnatural state these dunes have been in and how more manmade intrusion could cause further destabilization. The effects of this project could be extremely significant and once the road is gone, there will be no putting it back.

In addition to the increased sand movement caused by this project, access to the area, particularly during periods of high water will be negatively and permanently altered. When the culverts are removed, the streams will not be passable. Maintaining access to this portion of the coast is mandated in the State Parks Plan. State Parks' own general plan maps the trail through the Ten Mile Dunes. The trail is also designated as the "California Coastal Trail" (see [http://californiacoastaltrail.info/hikers/hikers\\_main.php?DisplayAction=DisplaySection&CountyId=4&SectionId=345](http://californiacoastaltrail.info/hikers/hikers_main.php?DisplayAction=DisplaySection&CountyId=4&SectionId=345)). This map of the Coastal Trail has the haul road as the California Coastal Trail from near the Ten Mile River southward to north of Inglenook Creek. The MND proposes to abolish the trail access where it exists through the dunes yet there is no mitigation for this.

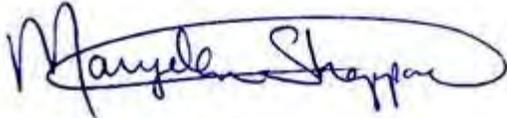
State Parks has no regard for the public input. Ms. Renne Pasquinelli stated at an informational meeting held 08/06/2012, that Parks didn't have to have the meeting but they did it anyway. There has been no public input regarding this project. SP has been very protective of this undertaking and has been unwilling to share information until forced to do so by the public. For years SP used herbicides to control European Beach grass with no notice to the public or adjoining land owners.

Implementation has begun prior to approval: SP hired a contractor to remove the road before the MND was complete. Now they are moving ahead with collecting seeds of federally endangered plants! This sends a message to the public that Parks is going to move ahead with the project no matter what. What if those seeds didn't need to be collected? What will be the environmental impact of collecting the seeds if the project doesn't happen, or, if the project gets put on hold? What's the point of even commenting on the MND if the work is progressing without proper review?

As Assemblymember Jared Huffman, (D-San Rafael), pointed out in a letter written July 20, 2012, "...I've repeatedly expressed my concern about the lack of transparency and the fortress mentality at State Parks." The Ten Mile Dune Restoration Project is an excellent example of those flaws.

The Mitigated Negative Declaration prepared by State Parks does not sufficiently address all the potential negative impacts of this project. The impacts of this operation will be permanent and impossible to reverse. Please stop the Ten Mile Dune Restoration Project.

Sincerely,



Maryellen Sheppard

cc: Loren Rex, Superintendent, California State Parks [lrex@parks.ca.gov](mailto:lrex@parks.ca.gov)  
Senior Environmental Scientist, California State Parks [rpasquinelli@parks.ca.gov](mailto:rpasquinelli@parks.ca.gov)  
Bob Merrill, District Manager, California Coastal Commission [bmerrill@coastal.ca.gov](mailto:bmerrill@coastal.ca.gov)  
Martha McClure, North Coast Representative, California Coastal Commission,  
[mmcclureccc@co.del-norte.ca.us](mailto:mmcclureccc@co.del-norte.ca.us)

Wesley Chesbro, Assemblymember, State Capitol, PO Box 942849, Sacramento CA 94249-001  
fax (916) 319-2101

Abbie Stockwell  
Mendocino County Planning Dept  
120 West Street  
Fort Bragg, CA 95437

Jared Huffman  
3501 Civic Center Drive  
Suite 412  
San Rafael, CA 94903

Noreen Evans  
Ukiah Office  
200 N. School  
Ukiah, CA 95482

Mendocino County Board of Supervisors, 501 Low Gap Road, Room 1010, Ukiah, CA 95482

- Carre Brown, 1st District Supervisor (email)
- John McCowen, 2nd District Supervisor (email)
- John Pinches, 3rd District Supervisor (email)
- Kendall Smith, 4th District Supervisor (District covering Inglenook) (email)
- Dan Hamburg, 5th District Supervisor (email)
- Dan Gjerde, 4<sup>th</sup> District – January 2013. (email)

EVALUATION OF "INITIAL STUDY, MITIGATED NEGATIVE DECLARATION, INGLENOK FEN-TEN MILE  
DUNES NATURAL PRESERVE, MACKERRICHER STATE PARK, DUNE REHABILITATION PROJECT, JULY  
30,2012"

BY: DAVID E. PAOLI, P.E.

27000 N HIGHWAY 1

FORT BRAGG, CA 95437

August 26, 2012

#### BACKGROUND OF DAVID E. PAOLI, P.E.

Born in 1941 in Fort Bragg. Educated in Fort Bragg Schools. Received grade of "D" in typing in 8<sup>th</sup> grade. Vowed to marry a good typist. Graduated from Humboldt State College, major in Civil Engineering, 1965. Married an Award-Winning typist in 1967 who had grown up in Inglenook. I became a California Registered Civil Engineer in 1968. Have actively practiced Civil Engineering and related fields ever since in California, Oregon and Washington State. First surveyed ¾ mile of boundary between State Parks and private land at Inglenook in 1978. Established Paoli Engineering and Surveying in Fort Bragg in 1980. Since establishment, have worked on 2180 projects, many of which involved issues of geology, wetlands, rare plants, soils, erosion, Best Management Practices, boundary and legal issues. Have been resident of Inglenook off-and-on since 1980 and continuously since 2003. Walk approximately 2 miles every day on the Inglenook Fen-Ten Mile River Dunes area. My Award-Winning typist died in 2008 so this EVALUATION is written by me and typed by me, still an amateur after all these years.

## AVOWED PURPOSE OF PROPOSED PROJECT

To improve and increase habitat for endangered species, primarily the Snowy Plover, Howell's Spineflower and Menzies' Wallflower. These habitat improvements will be accomplished by the removal of 2.7 miles of Haul Road and the removal of the final 60 acres of European Beach Grass on State Parks property. Any negative impacts will be mitigated by specific actions identified in the REPORT.

## MY POSITION

The Snowy Plover (Plover), Howell's Spineflower (Spineflower) and Menzies' Wallflower (Wallflower) are all found in the same general area. However, we are taught in the Parks report (THE REPORT) that the Plover, in order to nest, needs an area free from plant intrusion. The Parks plan is to remove habitat presently occupied by the two plants and reshape that area for use by the Plover. Parks will make up the plant's loss of area by seeding and transplanting on existing bare dunes and areas presently choked with European Beach Grass (Beachgrass).

My analysis which follows assumes that the removal of the Beachgrass and Haul Road will indeed increase the area available for the Plover to nest, if it chooses to do so. However, the removal of these two items will remove an important buffer that has existed for decades and the result will be a sharp decrease in the habitat available to these plants, damage to large areas of existing wetlands and a sharp increase in the rate of sand movement across the Park and on to private land. The Parks Report does not adequately analyze the effects of their proposal. I believe that based on my evidence plus numerous other deficiencies that are being addressed by other persons commenting on THE REPORT, an Environmental Impact Report should be prepared.

## MY METHODOLOGY

Earlier in August, using my survey grade Total Station equipment, I surveyed cross sections at right angles to the Haul Road at five locations, shown on Exhibit A. This is an average of one section every half mile, which is not adequate but the best I could do with limited time and resources. I believe that Parks overflowed the entire project using the very latest technology and could have developed cross sections at a reasonable spacing, but that information was apparently never developed for use. My purpose in developing the sections was to estimate the areas and quantities of sand that might be affected by the removal of the Dunegrass and the Haul Road. These quantities are key elements in analyzing the Environmental Impact of the project. The quantities do not show up in THE REPORT, which may mean that they have never been calculated, which I believe demonstrates a serious shortcoming of the work presently done.

Section A, the most southerly section, is in the gap between the washed out section to the south and the still continuous Haul Road to the north. The ocean storms have removed the Haul Road from this

area so I considered it representative of what the Haul Road area to the north would be like after removal of dune grass, pavement and base rock, and ocean storms have done their work over several winters. In short, it would be representative of what Parks is trying to achieve.

Section B is at the 5-foot diameter culvert where Fen Creek crosses under the Haul Road. Section C is about 700 feet south of Inglenook Creek, while Section D is about 1000 feet north of the Inglenook Creek culvert and Section E is about 1000 feet south of the turn on the north end of the Haul Road. This spacing gave me two sections for the north dune, two sections for the middle dune and one section as a base line. Exhibit B shows these five sections. Please note that the horizontal scale and the vertical scale are not the same; the full size drawing has a horizontal scale of 1 inch equals 50 feet and a vertical scale of 1 inch equals 10 feet. This is sometimes done to increase the accuracy of measurements that are plotted by hand, such as these measurements. It is seldom done using electronic plotting and calculating, but it still yields accurate results.

From Section A I deduced the average slope of beach east of the High Tide Line was 1.5 feet per hundred feet, or 1.5%. Per the legend, the solid lines on each section represent the existing ground lines, while the dashed lines represent the approximate future ground line after the removal of the Haul Road and the passage of time necessary to obliterate the Haul Road. These sections and the calculations based upon them are the basis for the subsequent sections of this report.

## SNOWY PLOVER HABITAT

I am not a biologist and do not claim to be an expert on any of these rare plants or animals. But I can read and I can measure, and so I conclude that the Plover needs a habitat in proximity to their food source, which here is found in the wet sand adjacent to the ocean. They also need a relatively flat beach and very few plants present for predators to hide behind. Based on these criteria and measuring from the High Tide Line to the existing toe of slope, I calculate that the Plover presently has up to 26 acres of suitable nesting habitat adjacent to the north dune, no usable habitat adjacent to the middle dune, and up to 27 acres of usable habitat adjacent to the south dune. After implementation of the Parks plan there might be an additional 56 acres of habitat on the north dune, 36 acres on the middle dune and no additional habitat on the south dune. These numbers presume that the new area formed by the reshaping will be kept free from plants by a continuing maintenance program. I don't think this was covered in THE REPORT, but it should have been.

So I have made a calculation of how much habitat might be available for the Plover, presently and in the future. But it does not quantify how many birds might nest on the additional land, because I do not find any mention in the report of how many nest now or even if there is a minimum acreage necessary to induce nesting or what the average is in some similar habitat. In looking over available data I did find a 1990 report done for State Parks that included the statement that no Plovers had been seen nesting on this beach for 10 years. So if none had been nesting since 1980, this makes 32 years without a viable production. I have observed that the areas roped off for the plover's nesting use has decreased from 3

areas over the last few years down to 1 this year. This seems to indicate the policy makers believe the possibility of a viable nesting area is in decline and indeed there might not be a viable area here.

Based on elementary mathematics, if (26 +27) acres = 0 chicks, adding (56+36)acres might still yield 0 chicks. Maybe the issue is not the acreage available. Does anyone have any information about how many Plovers used to nest on this beach, or if they ever did nest here? It seems to me that information of that sort should be vital in any management plan. But the information is not in THE REPORT. Have we studied the possibility that Ravens have multiplied and their sharp eyes and beaks wiped out whatever eggs nesting Plovers were trying to hatch, or the skunks and raccoons I see on the beach are responsible, or any other idea of what happened? Maybe the answer is to hire a group of Rangers to keep these animals off the beach. They are much more numerous up here than dogs or people, and much hungrier. To concentrate on one hypothesis such as more area equals more Plover without any factual basis is NOT GOOD SCIENCE and to spend large amounts of time and money ON A HUNCH is not a prudent use of public resources. An EIR is needed.

#### HOWELL'S SPINEFLOWER AND MENZIES' WALLFLOWER

The fact is most of the 56 acres and 36 acres of dunes that would be significantly reshaped by the Removal Concept is presently habitat to these plants. Based on my observations, the Wallflower has a widespread distribution, but the Spineflower does particularly well in proximity to the Haul Road and the east side of the Haul Road, especially in the Middle Dune area. A widespread erosion of their habitat from the base of dunes to the east side of the Haul Road might remove a significant percentage of their present growing area, perhaps as high as 1/3 of the Spineflower area. I speculate on the number because I did not find an estimate in THE REPORT, so what else can I do? That number should be in THE REPORT.

So let us assume that the Haul Road is gone and the plants just move inland without any net loss in their numbers. Not a problem? My calculations indicate that if the dunes are reshaped as shown on Exhibit B, approximately 698,000 cubic yards of sand will move from its present position on the north dune and 288,000 cubic yards of sand on the middle dune. Most of this sand will move to the east and fill in the low-lying wetland areas immediately east of the Haul Road. If this wetland area is 500 feet wide and 10,000 feet long it will be buried to a depth of 5 feet. Of course this burial will not all happen at once, because the sand will continue to move to the east. Now these numbers are incredibly high and can't be true, but Parks has not included any estimate of the quantity of sand their proposal will move, so until they do, we are stuck with my figures.

What do we know about the reaction of these endangered plants to being covered by several feet of sand? We really don't know anything. An EIR is in order.

So let's assume the sand just disappears and does not fill in the wetlands. The foredune and Haul Road just go away, then everything is swell. Right? Well no. Exhibit C, Titled "Impacts of Sea Level Rise on the California Coast", done in 2009 for the State of California, shows current area at risk from a flooding

event that could occur on the average every 27 years. This takes in a very large area, up to 1500 feet inland based on scale, which could mean a wave of possibly 25 feet high. An event this large would cover the Haul Road and flood the wetland areas with salt water. There is no indication in THE REPORT that these endangered plants tolerate salt water, so I assume they do not. The Haul Road and perhaps much of the foredune will be topped, but what will happen when a smaller flooding occurs, which will happen more frequently? My Exhibit B indicates that with the removal of the Haul Road and foredunes a flooding event of just 6 feet above Mean High Tide will flood the existing wetland area inland from the Haul Road. So this removal will endanger habitat more frequently than presently occurs. An EIR is in order.

## WETLANDS

My calculations reported above indicate that many feet of sand will drift into the wetlands close to the Haul Road. This will include the traditional wetland areas along Fen Creek and Inglenook Creek. THE REPORT simply does not deal with these issues.

## EROSION

My May, 2012 report titled "Report on the Destabilization of the Ten Mile Sand Dunes" describes, in words and pictures, the damage that is presently occurring from the removal of Beachgrass that Parks started 10 years ago. They started this process without CEQA review and have continued it ever since. This May report is included as an attachment to this present document. I contend that they have been in violation of CEQA for the time that they did their first removal and that any EIR or CEQA document go back and consider the impact from that beginning. Sections of the present THE REPORT clearly state that removal of Beachgrass and Haul Road will cause sand movement. The 2000 report that Parks commissioned, titled "Draft Feasibility Study for the Northern Segment of the MacKerricher Coastal Trail Project" states that "The lack of vegetation in the hind dunes permits unrestricted sand movement over large areas" and "Any management plan developed for European beachgrass shall consider adjacent property owners and their concerns with dune mobilization and encroachment." The sand on the dunes grows plants and is by several definitions a soil. The willful and premeditated erosion of soil that had been stable is a crime in California and subject to huge fines. The erosion of soil on to neighboring properties is something that a civil engineer tries to avoid through Best Management Practices and all levels of government have strict policies against. An EIR is in order.

# Amy Wynn Coastal Development Permits

Land Use Planning  
703 North Main Street  
Fort Bragg CA 95437  
ph: 707-964-2537  
fx: 707-964-2622  
www.AmyWynnCDP.com

August 31, 2012

TO: Renée Pasquinelli, Senior Environmental Scientist  
Mendocino District, California State Parks  
c/o Russian Gulch State Park  
12301 North Highway 1, Box 1  
Mendocino CA 95460

RE: Comments on Revised Draft IS/MND for MacKerricher State Park Dune Rehabilitation Project  
Mendocino County CDP #12-2012

Dear Renée,

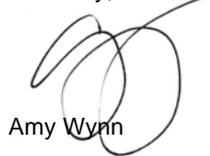
Thank you for revising the original Draft MND for the MacKerricher State Park Dune Rehabilitation project. I appreciate that you have eliminated the proposal to use herbicides for removing the invasive European Beach Grass.

As you know, The Revised Draft MND is a massive document. I have focused my review specifically on the statement in the Draft MND that State Parks has begun implementation of the project prior the adoption of the MND. In particular State Parks has begun the collection of the seeds of federally and state endangered and threatened species, the Howell's spineflower and Meznies's wallflower (Mitigation, Monitoring, and Restoration Plan for Vegetation and Rare Plants, Page 37, Proposed Schedule). Does State Parks have an agreement with the CA Department of Fish & Game and the US Fish & Wildlife Service to take the seeds of these federally and state listed species prior to approval of the project? Please provide evidence of approval for the take of these seeds so that I may better understand this process.

This section of the MND raises some questions for me, which I request be addressed prior to any permitting of this project. Please see further expansion of my comments and questions below.

Thank you for your response to these questions and concerns.

Sincerely,



Amy Wynn

Encl: n/a

CC: Loren Rex, Superintendent CA State Parks; Rick Macedo, Senior Environmental Scientist, DFG; John Hunter, Biologist, USFWS; Abbey Stockwell, Planner, County of Mendocino; Bob Merrill, North Coast Program Manager, CA Coastal Commission; Marie Jones, Community Development Director, City of Fort Bragg; Ruth Valenzuela, Senior Field Representative, Welsey Chesbro's office; Kendall Smith, County of Mendocino 4<sup>th</sup> District Supervisor; Dan Gjerde, County of Mendocino 4<sup>th</sup> District Supervisor elect. All cc copies distributed by email.

**COMMENTS REGARDING APPENDIX E.2:  
MITIGATION, MONITORING, AND RESTORATION PLAN FOR VEGETATION AND  
RARE PLANTS**

**1. PROJECT IMPLEMENTATION PRIOR TO APPROVAL OF MND & PRIOR TO ISSUANCE  
OF PERMITS**

The element of this MMP that has me most in a quandary is that implementation of the spineflower and wallflower mitigation has already begun, before the project has been approved. Spineflower and wallflower seed collection began in July 2012. Collection of seeds of species that are both federally and state listed has the potential to significantly negatively impact this year's seed bank. Analysis of this potential impact has not been provided, nor do I see that this action has been approved. This action should not begin without approval of the MND, the Coastal Development Permit and any related permits from USFWS and DFG. Specifically, please address in the responses if and when federal and state permits were acquired, or by what means State Parks has the authority to collect seeds of federally and state endangered and threatened species. Please address the procedure that has been implemented for this project regarding taking viable seed as that action relates to both the Federal Endangered Species Act and the California Endangered Species Act as well as the County's Local Coastal Program.

Approval of a complex project such as this can take years, especially for controversial projects that are appealable not only to the County Board of Supervisors but also to the California Coastal Commission. If this project is never approved, federally and state endangered plants will have been impacted for no reason. What happens if the seeds that were taken never needed to be collected? What is the environmental impact of collecting viable seeds if the project doesn't happen, or if the project review becomes prolonged or even put on hold? Development of guidelines for propagule (seed) treatments is slated for November 2012, which is four months *after* propagules have been collected. How can you develop a protective protocol for a potentially impactful action after-the-fact?

As clearly stated in the Proposed Schedule, the mitigation methods will be developed *after* the MND comment period ends. It is difficult to meaningfully address a project that does not present specific mitigation methods during the CEQA public comment period. What is the beneficial effect of commenting on a proposed project if the work has already commenced? Are there other project measures that have begun?

***“Specific methods and techniques for promoting seed germination, preparing seedbeds, and dispersing and incorporating seeds into substrates, and for other methods pertinent to propagule collections and introductions into planting sites, have not been fully developed. We will compile information on this topic over the next several months, and specific methods for each species, or for suites of species, will be appended to this plan.”***

MMP, Pg 36, Para 3

**“Proposed Schedule**

***“A complete schedule for the implementation of this plan has not been completed. Preparatory activities, including propagule collections and pre-Project monitoring, have started as of July 1, 2012. Upon completion of this plan, we will assemble a provisional schedule in coordination with CSP.***

**“Provisionally identified milestones and due dates are as follows:**

- *Baseline inventory and monitoring in Project area completed: Aug. 31, 2012*
- *In-project monitoring for project requirements: as of Project start*
- *Completion of Years 1 and 2 mitigation plan implementation budget: Oct. 1, 2012*
- *Mitigation site selections: October 1, 2012*
- *Development of customized protocols for the monitoring of mitigation measure objectives: initial versions by November 1, 2012*
- *Completion of standardized photographic monitoring protocols: Nov. 1, 2012*
- *Establishment of monitoring areas, sites, and plots for compensation and enhancement mitigation measures: November 1, 2012*
- *Initiation of mitigation site preparatory treatments: no later than November 1, 2012*
- **Development of guidelines for propagule treatments, seedbed preparations, and dispersal methods and techniques: November 15, 2012**
- **Introduction of Chorizanthe and Erysimum seeds into compensation sites: Dec. 1 or upon a minimum of 5 inches of precipitation recorded in Fort Bragg after October 1, 2012, whichever is later.”**

MMP, Pg 37, Para 3

*"The following constitutes an **incomplete, and provisionally prioritized**, list of geographical areas, habitat types, and other vegetation types to consider in the selection of sites for **compensation and enhancement measures** specified for *Chorizanthe* and *Erysimum* (\* asterisks denote sites of high to moderate priority for site selection purposes)....*

*"The selection of compensation and enhancement mitigation sites will be completed by October 1, 2012. ...A map will be prepared to display the array of mitigation sites selected and provisional locations of nested plots."*

MMP Pg 34-35

### **1.a Recommended Action:**

To address these concerns, I recommend that the County of Mendocino take action to address this activity, such as requiring that:

1. Seed collection shall halt until permits have been obtained from all Stakeholder Agencies, including but not limited to County of Mendocino, DFG and USFWS.
2. Seeds that have already been collected shall be stored in such a manner to minimize seed mortality.
3. Prior to planting of the stored seeds, empirical evidence shall be presented for the approval by the relevant agencies that clearly demonstrates that planting seeds will have at minimum a 50% rate of survival within the first year.

## **2. PRESUMED OBSTRUCTION OF ECOLOGICAL PROCESS AND FUNCTION**

State Parks is proposing a major set of mitigations for development (removal of the Haul Road) that is clearly stated as being a "presumed obstruction of ecological process and function." State Parks has begun mitigations for a project that has yet to be approved for impacts based on the removal of a "presumed obstruction."

*"While we may not be able quantify the sum of ecological processes and functions, we can use components of ecosystems to communicate how well those ecosystems are functioning. At least, **we can convince ourselves, with some arrogance as well as with humility, that designing studies and implementing actions intended to relieve ecosystems of presumed obstructions of ecological process and function will abet our understanding as well as facilitating ecological recovery, insofar as we might presume to know what either means or requires.**"*

MMP, Pg 4, Para 4

### **2.a Recommended Action**

To address this concern, I recommend that the County of Mendocino take the following action:

1. Prior to approval of this project, the applicant shall provide empirical data that proves a nexus exists between the presence of the existing infrastructure that is being proposed for removal and its presumed obstruction of ecological process and function of the spineflower and wallflower species and their habitats.
2. Prior to approval of this project, empirical data shall determine if the presence of the existing infrastructure proposed for removal is aiding the survival of the spineflower and wallflower species.
3. If the data proves a nexus exists between the existing infrastructure that is proposed for removal and impacts to federally and state listed species, including snowy plover, empirical analysis shall determine if all of the existing infrastructure must be removed to further the protection of these species or if only portions of the existing infrastructure must be removed.

### **3. HOLISTIC APPROACH DOES NOT PRECLUDE QUANTITATIVE ANALYSIS**

I thoroughly appreciate the declared holistic approach to maintaining the unique environmental and biotic assets of the Dunes Preserve. Progressive and innovative approaches by biologists used on private projects are often stifled during agency review when their proposed mitigations break the regulatory mold in an attempt to attain a truly sustainable and successful resolution. Adaptive Management is nothing new, it is the norm; all of the County-approved projects that have potential impacts to resources utilize Adaptive Management. Citing a holistic approach, however, does not preclude the value of quantitative, scientific analysis. A holistic approach incorporates quantitative analysis.

Within the spineflower and wallflower's lifecycles, please state what percentage of seed typically germinates into mature plants: 100%, 50%, 25%? Will State Parks distribute some of the seed that has been collected to like sites immediately? How will State Parks ensure that the collected seed will propagate when seeded on the dunes? What is the mitigation method if the collected seeds begin to die? Will State Parks have left enough un-impacted, viable seed on site to at the very least maintain the existing levels of spineflower and wallflower and their habitats? Please state whether State Parks will continue to collect seed before the approval of this project.

*"We are not so interested in mitigation measures formulated to satisfy regulatory quotas or to achieve strictly numerically based objectives as we are in providing for the rehabilitation and maintenance of the entirety of the Preserve's ecology. We aim to work with existing environmental conditions rather than force rigid or contrived solutions into places and habitats where they won't work."*

MMP Pg 3, Para 2

#### **3.a Recommended Conditions of Approval:**

To address these concerns, I recommend that the County of Mendocino require Conditions of Approval such as:

1. Prior to Issuance of the Coastal Development Permit, the applicant shall provide a quantitative set of guidelines for propagule treatments, seedbed preparations, and dispersal methods and techniques. These guidelines shall specify and provide:
  - a. The percentage of seed that typically germinates into mature plants, when left undisturbed in its existing habitat.
  - b. The percentage of seed that typically germinates into mature plants when the seed is collected, stored and artificially dispersed.
  - c. The percentage of seed that will remain in its existing habitat.
  - d. 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.

### **4. EXPRESSED UNCERTAINTY FOR SUCCESS OF MITIGATION METHODS**

The amount of uncertainty specifically expressed in the Project's MMP leaves one to believe that the proposed mitigation for the impacts to the spineflower and wallflower and their habitats may be unsuccessful. It is essential for State Parks provide more certainty prior to moving forward with this project. This is particularly significant, given that State Parks is tasked with the legal authority by CEQA to approve the effectiveness of the MND. Please specify what is meant by the statement that "most seeds will likely survive project activities?" Does that mean the spineflower and wallflower seeds that will remain on site are sturdy enough to withstand the impact of the heavy equipment that will perform the removal of the Haul Road?

*"The specific nature of impacts to Chorizanthe howellii as a result of Project implantation is uncertain, since annual plants survive from one growing season to the next as seeds – these propagules will likely survive the short-term disturbance effects of the Project. Promoting the environmental conditions conducive for seed germination is decidedly more important than mitigating negative impacts on individual plants. This topic is elaborated below.*

*...  
"Project implementation will occur primarily during the dormant season for this annual plant -- August through onset of the rainy season. Plants extant within the Project area will essentially be dead from the outset of more intensive and destructive work activities -- only seeds survive year to year, and most seeds are "ripe" and parent plants dead by mid-summer. In light of its annual life cycle, consideration of losses of individual plants is immaterial, as most spineflower seeds will likely survive Project activities; seed production and survival for future germination are the essence of the annual plant life cycle. Thus, impacts on potential seed germination opportunities (sites and environmental conditions) within the Project area are more important in considering appropriate compensation. As stated above for*

*Abronia, sustaining and enhancing, where possible, the environmental conditions necessary for long-term species' survival is more critical than are efforts merely to replace individual plants. As provided under "Mitigation and Restoration Objectives" below, **mitigation efforts will include attempts to maintain and enhance the northern Preserve spineflower population in or near to the proposed Project area. Long-term conservation measures for this species will be addressed in the forthcoming ecological monitoring and management program for the Preserve.***

MMP, Pg 7-9

With so much clearly stated uncertainty regarding the ultimate success of these proposed mitigations, it would be prudent to perform and document mitigations on a test plot prior to any major project implementation. Given the stated holistic approach to maintaining the unique environmental and biotic assets of the Dunes preserve, direct impacts to the existing extent of the spineflower and wallflower habitats should not occur until this (these) test plot(s) are empirically proven to be successful.

#### **4.a Recommended Action**

To address these concerns, I recommend that the County of Mendocino require the following Conditions of Approval:

1. Prior to Issuance of the CDP, test plots shall be approved by the County of Mendocino, with assistance from DFG & USFWS.
2. Prior to Issuance of the CDP, the Mitigation and Monitoring Plan, addressing the long-term conservation measures for the spineflower and wallflower, shall be approved by the County of Mendocino, with assistance from DFG and USFWS.
3. Prior to Commencement of Development Activities (use of mechanized equipment on dunes, removal of Haul Road and culverts), measures shall be implemented to ensure that viable seed remaining on site will not be impacted by development activities.
4. Monitoring shall occur for a minimum of 5 years, with quarterly reporting to the County of Mendocino for the first year and annual reporting to the County, DFG & USFWS for the remaining years.
5. If Adaptive Management determines that the mitigation methods need to be revised, the monitoring timeline shall begin anew.