



FINDINGS OF FACT STAFF REPORT

Date: 8/14/08 OPRD Coastal Land Use Coordinator: Calum Stevenson

OPRD File Number: BA-645-08 County: Coos Applicant: Pam Gardner, USFS

Project Location: Ten Mile Coos Estuary
T23S R13W Sec22 TL 200

Brief Project Description: Project is to remove 67,000 cubic yards of sand from the fore dune to create habitat for the federal and state designated threatened Western snowy plover.

ADMINISTRATIVE RULE STANDARDS AND RELEVANT FACTS

I. GENERAL STANDARDS, OAR 736-020-0010

Project Need – There shall be adequate justification for a project to occur on and alter the ocean shore area.

The sand alteration project for the restoration and maintenance of historic dune habitat for the state and federal listed western snowy plover (WSP) at Ten Mile estuary started in 1996. However, the restoration has been east of the Statutory Vegetation Line (SVL) or natural vegetation line and has not required a permit from Oregon Parks and Recreation Department (OPRD). In order to more efficiently remove the European beach grass as part of the restoration and maintenance, the U.S. Forest Service has decided to remove excess sand by bulldozing it to the beach to allow the natural ocean processes to occur. A portion of the proposed project area is west of the statutory vegetation line and is within OPRD's jurisdiction on the ocean shore.

According to the December 17, 2004 Federal Register (Vol.69, number 242) the Ten Mile estuary is considered habitat essential for the conservation of the Pacific Coast WSP. As stated in the Federal Register the primary elements for WSP reproductive habitat is "sparsely vegetated areas *above daily high tides* (such as sandy beaches, dune systems immediately inland of an active beach face, salt flats, seasonally exposed gravel bars, dredge spoil sites, artificial salt ponds and adjoining levees) that are relatively undisturbed by the presence of humans, pets, vehicles or human-attracted predators. In addition, WSP habitat includes areas for feeding that are sparsely vegetated sandy beach, mud flats, gravel bars or artificial salt ponds subject to *daily tidal inundation*. The Ten Mile estuary provides for both the reproductive and feeding requirements of the WSP with a need, as stated in the Federal Register, for special management of the European beach grass.

The Oregon Fish and Wildlife OAR 635-105-000 (3) defines suitable habitat for the WSP as flat, open areas on sandy coastal beaches, sand spits at coastal river outlets, dune-backed coastal beaches, coastal dredged-material disposal sites, and flats east of coastal fore dunes that become exposed as deflation plain dry ponds. The WSP is listed as a threatened species by the Oregon Threatened and Endangered Species Act and restoration efforts on state owned and managed land is appropriate.

The Ten Mile site is currently an active WSP nesting site and has successfully produced fledglings. Continued restoration is desired in this area to increase the possibility of nesting success.

Since the WSP is a federal and state listed threatened species it has become the responsibility of state agencies that manage potential coastal habitat to assist in the recovery of the species. As stated in OPRD Ocean Shore regulations, OAR 736-020-0020, the "project shall not be a detriment to public recreation use opportunities within the ocean shore area except in those cases where it is determined necessary or legally required to protect sensitive biological resources such as state or federally listed species." As a result of that legal responsibility there is adequate justification for the sand alteration project at Ten Mile.

Protection of Public Rights – Public ownership of or use easement rights on the ocean shore shall be adequately protected.

The removal of sand from the fore dune will not, in itself, create a loss of public ownership or impair the public's easement rights to Ten Mile or the ocean shore. The impact of the project will be as a result of restrictions that have been instituted to assist in the recovery of the threatened WSP. During the WSP nesting period from March 15-September 15 the Ten Mile has had prohibitions on vehicle operation, dogs, and dry sand pedestrian traffic. Wet sand areas are still open to pedestrian traffic and/or low impact recreation. However, as stated in OAR 736-020-0020 the "project shall not be a detriment to public recreation use opportunities within the ocean shore area except in those cases where it is determined necessary or legally required to protect sensitive biological resources such as state or federally listed species." The Ten Mile site is listed by the USFWS as WSP Critical Habitat for endangered species recovery in the 2001 USFWS Pacific Coast Population Draft Recovery Plan, The Federal Registry (Doc 04-26877), and the draft WSP Habitat Conservation Plan.

Public Laws – The applicant shall comply with federal, state, and local laws and regulations affecting the project.

State of Oregon laws and regulations are addressed under this permit review. Various local, state, and federal agencies were sent notices during OPRD's permit application review process. In addition, the USFS completed consultation with various local, state, and federal agencies during preparation of an Environmental Assessment ("EA"). The project has been reviewed by the Coos County Planning Department and is consistent with the local comprehensive plan and zoning ordinance. Coos County affidavit is enclosed in permit application file. The Department of Land Conservation and Development has determined the project complies with Statewide Planning Goals and is consistent with the Coastal Zone Management Act.

Alterations and Project Modifications – There are no reasonable alternatives to the proposed activity or project modifications that would better protect the public rights, reduce or eliminate the detrimental affects on the ocean shore, or avoid long-term cost to the public.

The goal of this project is to restore and improve the open sand habitat for western snowy plover and other plant and animal species adapted to the open sand ecosystem. The methods proposed constitute the most practical alternative to achieve this goal. Alternatives considered by the USFS are described in the USFS Dunes Restoration Project Environmental Assessment and included: 1) no action; 2) manual control of European beach grass; 3) mechanical control of European beach grass; 4) chemical control of European beach grass; 5) integrated control of European beach grass.

Utilizing prescribed burning is not feasible since conditions required for complete burning of European beach grass occur during mid to late summer and would result in disturbance to western snowy plovers and their young. Post-burn monitoring of prescribed burn projects on the Oregon Dunes National Recreation Area indicates annual burning of beach grass may not be practical as it generally takes 2 to 3 years, following a burn, for enough dead thatch to build up and provide conditions suitable for re-burning. In addition, burning alone does not effectively control European beach grass because it vigorously re-sprouts after being burned.

Salting European beach grass with rock salt may adversely affect desirable plant species and salting trials at Lanphere-Christensen Dunes preserve near Arcata, California were reported to be unsuccessful. Saltwater irrigation conducted at the Coos Bay North Spit in 1997 by the Army Corps of Engineers provided only limited, short-term control of European beach grass.

Using only mechanical and manual treatment methods for controlling European beach grass is not as effective as when combined with chemical treatments. In addition, the USFS determined that limiting the project to only mechanical and manual treatments would be cost prohibitive because it is very labor intensive.

The no action alternative is not feasible as it will allow further decline in habitat available for western snowy plover, pink sand verbena and American dune grass. European beach grass will continue to colonize the margins of the remaining patches of open sand if no actions are taken to reverse the current trend and natural dune processes will continue to degrade.

This project will not result in detrimental effects on the ocean shore. The project will result in restoration of natural dune processes and habitat that will benefit several species. The proposed work will be carried out over a period of 10 years and will require continued maintenance of the restored habitat into the future. Some long-term costs may be unavoidable for maintenance of restored habitat. Funding levels, sources, and priorities for this project will be determined by the USFS and may be affected by public or political support or lack thereof. Restoration of functional ecosystems is considered a public benefit.

Public Costs – There are no reasonable special measures which might reduce or eliminate significant public costs. Prior to submission of the application, the applicant shall consider alternatives such as nonstructural solutions, provision for ultimate removal responsibility for structures when no longer needed, reclamation of excavation pits, mitigation of project damages to public interests, or a time limit on project life to allow for changes in public interest.

The USFS has identified protection and restoration of western snowy plover habitat as a primary goal in the agency's Siuslaw Forest Plan. The costs for this project will be justified at the U.S. Forest Service level. Alternatives considered by the USFS are described above and found in the USFS Dunes Restoration Project Environmental Assessment. This project will result in significant benefits to western snowy plover and other

plant and animal species adapted to an open sand ecosystem. Restoration of functional ecosystems is considered a public benefit.

Compliance with LCDC Goals – The proposed project shall be evaluated against the applicable criteria included within Statewide Planning Goals administered by the Department of Land Conservation and Development.

OPRD determines LCDC goal compliance using OAR 736-070-0040(3) (b) (A) Type II procedure requirements. This rule states the Department shall make its own compatibility determination based on information and findings supplied by the applicant confirming the affected local government has determined the Department's land use action is compatible with the local jurisdiction's acknowledged comprehensive plan and land use regulations. OPRD land use actions subject to the Type II Procedure include issuance of Ocean Shore Development Permits. The Coos County Planning Department reviewed the project and has certified the project as consistent with local comprehensive plan and zoning ordinance. This certification meets the Department's obligation to ensure compatibility with the Statewide Planning Goals.

II. SCENIC STANDARDS, OAR 736-020-0015

Projects on the ocean shore shall be designed to minimize damage to the scenic attraction of the ocean shore area.

Natural Features – The project shall retain the scenic attraction of key natural features, for example, beaches, headlands cliffs, sea stacks, streams, tide pools, bedrock formations, fossil beds and ancient forest remains.

The sand alteration project will create a localized scenic disturbance until the dunes stabilize by natural processes. One of the goals of the alteration is to return the Ten Mile estuary to its historic landscape of lower dunes that will be more conducive to the traditional nesting habitat of the WSP and native plants. The scenic values will be retained as the dune naturally stabilizes.

Shoreline Vegetation – The project shall retain or restore existing vegetation on the ocean shore when vital to scenic values.

The vegetation at the Ten Mile project site is non-native European beach grass introduced in the 1930's. Introduction of the European beach grass is a primary cause of loss of WSP habitat and responsible for successional changes in Oregon's coastal dune ecosystem which have severely modified landscape and scenic values. European beach grass has aggressively replaced the native beach grass and other dune plants along virtually all dune-backed beaches on the Oregon coast. European beach grass is not considered vital to scenic values.

View Obstruction – The project shall avoid or minimize obstruction of existing views of the ocean and beaches from adjacent properties.

Project would enhance views of the ocean and beaches from upland areas.

Compatibility with Surroundings – The project shall blend in with the existing shoreline scenery (type of construction, color, etc.).

Not applicable.

III. RECREATION USE STANDARDS, OAR 736-020-0020

Recreation Use – The project shall not be a detriment to public recreation use opportunities within the ocean shore area except in those cases where it is determined necessary to protect sensitive biological resources such as state or federally listed species.

As stated in OAR 736-020-0020 the "project shall not be a detriment to public recreation use opportunities within the ocean shore area except in those cases where it is determined necessary or legally required to protect sensitive biological resources such as state or federally listed species." The site is listed as a USFWS management goal for endangered species recovery in the 2001 USFWS Pacific Coast Population Draft Recovery Plan, The Federal Registry (Doc 04-26877), and the draft WSP Habitat Conservation Plan.

Presently, OPRD closes portions of the dry sand beach within the project area to all human activity between March 15th and September 15th, to protect western snowy plover from disturbance during the nesting season. Sand and vegetation pushed onto the beach will cause temporary obstructions to some recreational uses during mechanical treatments scheduled to occur during the fall and winter. Signs and notices will be posted and trails temporarily closed during chemical treatments, which will occur during the growing season.

The proposed project is expected to increase western snowy plover nesting habitat. If the proposed work is completed it would contribute significantly to the recovery of western snowy plover in Oregon. If the USFWS recovery goals are met, the species can be delisted and restrictions on recreational activity at breeding sites can be reduced.

Recreation Access – The project shall avoid blocking off or obstructing public access routes within the ocean shore area except in those cases where it is determined necessary to protect sensitive biological resources such as state or federally listed species.

The proposed project will not block public access routes. The access at Ten Mile north of the proposed project will remain open to the public and will allow beach access for recreation. Travel north and south along the beach will remain open to pedestrian traffic on the wet sand. Dry sand areas will be restricted due to the protection of sensitive biological resources such as state and federal listed species.

IV. SAFETY STANDARDS, OAR 736-020-0030

Structural Safety – The project shall not be a safety hazard to the public due to inadequate structural foundations, lack of bank stability, or the use of weak materials subject to rapid ocean damage.

Not Applicable

Obstructional Hazards – the project shall minimize obstructions to pedestrians or vehicles going onto or along the ocean shore area.

The project will create a temporary impediment to pedestrian and vehicle traffic when the bulldozers move dune material onto the wet sand area. This condition will exist until the sand is removed by tidal forces. At that time the obstruction to beach traffic will be non-existent. To minimize public use conflicts and reduce the potentially hazardous condition, the project will be performed during the fall/winter months when recreation on the beach is minimal. This will reduce potential heavy equipment and sand obstruction conflicts with the major recreational activity in the Ten Mile estuary.

Neighboring Properties – The project shall be designed to avoid or minimize ocean erosion or safety problems for neighboring properties.

The project is located in an isolated area with the surrounding property owned by the USFS. The project is a substantial distance from any neighboring ownership and will not create safety problems or ocean erosion for others.

Property Protection – Beachfront property protection projects shall be designed to accomplish a reasonable degree of increased safety for the on-shore property to be protected.

Not Applicable.

V. NATURAL AND CULTURAL RESOURCE STANDARDS, OAR 736-020-0030

Projects on the ocean shore shall avoid or minimize damage to the following natural resources, habitat, or ocean shore conditions, and where applicable, shall not violate state standards:

Fish and wildlife resources including rare, threatened or endangered species and fish and wildlife habitats.

The proposed project restores habitat that will significantly benefit state and federal listed species such as western snowy plover and pink sand verbena. Predator species adapted to European beach grass such as skunks, raccoon, and weasel would be adversely affected while those species adapted to open sand and native dune habitat would cumulatively benefit. Proposed mechanical treatments would occur in the fall and winter months after the WSP nesting season to further minimize disturbance to listed wildlife.

No formal review has been completed for compliance with the Magnuson-Stevens Fishery Conservation Management Act with NMFS. Since Coho salmon have recently been re-listed for Ten Mile Creek a review by NMFS would be required to determine impacts.

Estuarine values and navigation interests.

No work is proposed within the Ten Mile estuary or stream channels. No direct discharge of fill into estuaries, wetlands or stream channels will occur. The proposed project should not adversely impact estuarine values or water quality. Physical changes to the Ten Mile estuary may indirectly occur as a result of the proposed project. Removing European beach grass and lowering fore dune height near Ten Mile Creek may allow the creek outlets to more easily move north and south under wind and ocean current influences. The USFS reports such shifts in creek outlet location would likely occur on a year to a decade time scale. Restoration of natural dune processes increases the potential for seasonal formation of a sand bar at the mouth of Ten Mile Creeks but represents a properly functioning dune habitat. These features are consistent with the historic conditions under which Ten Mile Creek Coho salmon stocks developed. Historically during summer periods of low water flow sand accumulates along at the mouth of many coastal streams forming a barrier until fall and winter rains raise stream water levels and streams re-establish an outlet across the beach.

Department of State Lands expressed concern for adjacent wetlands from sand fill created by tidal action. The standard procedure for reducing the impact to wetlands from wind and tidal influences adjacent to plover restoration areas is the use of 50' minimum buffers of dunes and vegetation. Another alternative may be to slope the beach to prevent excessive wave run-up.

Ten Mile Creek does not meet the federal test of navigability therefore the proposed project will not adversely affect navigation interests.

Historic, cultural and archeological sites.

The State Historic Preservation Office reviewed the permit application and stated there have been no previous cultural resource surveys completed near the proposed project area. The project does lie within an area generally perceived to have a high probability for possessing archaeological sites and/or buried human remains. Extreme caution is recommended during future ground disturbing activities and if any cultural materials are discovered all work should stop immediately until a professional archeologist can assess the site.

Natural areas (vegetation or aquatic features).

The project site vegetation is dominated by European beach grass, a non-native plant species introduced in the early 20th century. Introduction of European beach grass is the primary cause of loss of Western snowy plover habitat and responsible for successional changes in the Oregon's coastal dune ecosystem. European beach grass has aggressively replaced the native beach grass along virtually all dune-backed beaches on the Oregon coast. Removal of the European variety of grass may allow for native species such as pink verbena or American beach grass to become re-established.

Air and water quality of the ocean shore area.

No adverse effect on air and water quality of the ocean shore will result from the proposed project. Temporary air quality issues may appear as a result of emissions from heavy equipment, but will not result in violation of state or federal air quality standards.

Areas of geologic interest, fossil beds, ancient forest remnants.

No areas of geologic interest, fossil beds, or ancient forest remnants are known to occur at the proposed project site.

When necessary to protect native plant communities or fish and wildlife habitat on the subject or adjacent properties, only native, non-invasive, plant species shall be used for revegetation.

If the European beach grass is substantially eradicated from the Ten Mile estuary the reintroduction of native beach grass and pink sand verbena would aid in reducing the wind and over-wash impact to the river. Since European beach grass is so pervasive in that area it may be a very long time before native plants will be able to survive without encroachment.

VI. PUBLIC COMMENT

The 30- day public notice period of the proposed project was posted at Ten Mile along the beach and all access points in accordance with ORS 390.650. Individual notification and a copy of the application were mailed to government agencies and individuals on OPRD's ocean shore contact mailing list.

DLCD Coastal Program stated the project would not have an adverse effect and that the proposal will provide additional nesting habitat for the WSP.

Department of State Lands commented: "design project to protect adjacent wetlands from fill of sand, or mitigate lost habitat. Past experience shows that tidal action may fill wetlands."

The Confederated Tribes of the Coos, Lower Umpqua & Siuslaw stated that "if there is an archaeologist monitoring the bulldozing then the CTCLUSI have no objection to the project." A tribal archaeologist may be available to monitor the activity.

Oregon Department of Fish & Wildlife comment was to not cross Ten Mile Creek with equipment.

No official public comments were received and as a result no public hearing was scheduled.

VII. Findings Summary

1. The project site is under USFS management. The USFWS has identified the project site as critical habitat for the western snowy plover, and an important and currently active snowy plover breeding site. The project will restore available nesting habitat.
2. The project will remove non-native vegetation and restore natural open sand dune habitat necessary for western snowy plover. The project will benefit native plant species such as pink sand verbena and American beach grass.
3. Sand and vegetation deposited on the intertidal beach areas will be dispersed by wave action and wind. No net loss of sand from the littoral cell is expected to occur. The introduction of 67,000 cubic yards of natural beach sand will not impact the littoral cell sand budget as that is a very small amount of sand reintroduced into the system as compared to the entire sand budget for the area. Precautions will be needed to ensure that the mouth of Ten Mile River is not impacted. Winter storm events will, however, re-open the mouth if it becomes blocked by sand. The spread of European beach grass is not a significant risk, as this non-native species already exists throughout the state's coastal dunes.
4. The sand alteration project for the restoration and maintenance of historic dune habitat for the state and federal listed western snowy plover (WSP) at Ten Mile estuary started in 1996. However, the restoration has been east of the Statutory Vegetation Line (SVL) or natural vegetation line and has not required a permit from Oregon Parks and Recreation Department (OPRD).
5. Archaeological sites may be in the vicinity of the plover restoration, but tribal and/or agency archaeologist have been consulted and will be on-site during the sand alteration project.
6. The proposed project is anticipated to cumulatively reduce deflation plain wetlands east of the fore dunes as the natural dune process is restored and wind blown sand fills in wetlands. The reduction of wetlands is expected to be limited to the extent of sand dune migration and the rate of reduction would decline over time. DSL and the Army Corps of Engineers (COE) have been consulted and more meetings will occur to determine impacts to wetlands and mitigation, if required. Conditions will be placed in the permit to continue consulting with DSL and COE with OPRD participation. The wetlands are landward of OPRD jurisdiction.
7. No determination has been made by NMFS concerning compliance with the Magnuson-Stevens Fishery Management Conservation Act. Conditions will be placed in the permit to require that NMFS be consulted and written verification to be forwarded to OPRD.
8. The USFS has identified the project as the preferred management alternative in the Environmental Assessment Snowy Plover/Pink Sand Verbena Habitat Restoration. The proposed project is consistent with recovery actions and habitat restoration recommendations identified in the Oregon Conservation Program for The Western Snowy Plover (ODFW, 1994) and the Western Snowy Plover Pacific Coast Population Draft Recovery Plan (USFWS, 2001).
9. Similar habitat restoration projects conducted recently by USFS, OPRD and BLM have been successful and snowy plovers have responded favorably by nesting at these sites located at the Dunes Overlook, Bandon State Natural Area, and New River.

The following checklist summarizes whether the application satisfies the general, scenic, recreation, safety and natural and cultural resource standards as defined in OAR 736-020-0010 through 736-020-0030:

Standard	Yes	No	Standard	Yes	No
Project Need	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Structural Safety	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Protection of Public Rights	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Obstructional Hazards	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Public Laws	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Neighboring Properties	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Alteration and Project Modifications	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Property Protection	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Public Costs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fish and Wildlife Resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Compliance with LCDC Goals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Estuarine Values and Navigation Interests	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Natural Features	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Historic, Cultural and Archeological Sites	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Shoreline Vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Natural Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>
View Obstruction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Air and Water Quality of the ocean shore	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Compatibility with Surroundings	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Areas of Geologic Interest	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Recreation Use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use of Native Plant Species when Necessary	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Recreation Access	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

VIII. STAFF RECOMMENDATION:

Based on an analysis of the facts and in consideration of the standards evaluated under OAR-736-020-0005 through OAR 736-020-0030, I recommend the following action:

- Approval
- Approval with conditions
- Denial

Coastal Land Use Coordinator

Calum Stevenson
 South Coast Land Use Coordinator