Ocean Shore Management Plan

Oregon Parks and Recreation Department

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Executive Summary

Introduction
Oregon's beaches are a popular place for recreation, and are home to unique plant and animal species and their habitats. The beaches have a long history of human use, and are still some of the most scenic places in America. They neighbor growing communities, burgeoning tourism developments and undeveloped, protected public lands. Public use of Oregon's beaches is growing, while open-sand habitats continue to shrink, due to development, and the spread of invasive plants such as European beachgrass.

Purpose
Oregon Parks and Recreation Department has key management responsibility for Oregon's beaches, set in statute and rule. This Ocean Shore Management Plan is the first comprehensive review of those responsibilities, their related issues and the effects of management decisions past, present and future. The purpose of the plan is to guide future decision-making by the department and Commission.

Scope
The plan encompasses the following:

- Defines the goals and objectives for managing the ocean shores;
- Defines a vision for the future of Oregon's ocean shores
- Makes recommendations for achieving that vision

This plan was written with a companion plan entitled the Habitat Conservation Plan for the Western Snowy Plover (HCP). The HCP provides overriding direction for plover recovery in special places called "snowy Plover Management Areas" along the coast.

Ocean Shore Management Goals

1. Strike a balance between recreation and protecting resources
According to law, Oregon Parks and Recreation Department must manage the natural, scenic and cultural resources of Oregon's beaches, yet must simultaneously offer recreational sites and experiences on the same beaches. This inherent contradiction calls for a balancing act between two equally important objectives. Simply speaking, balancing those two principles defines Oregon Parks and Recreation Department's mission for all its properties, not just the ocean shores. This plan makes specific recommendations for achieving that balance overall, by factoring in regional needs, protecting important resources from human-caused impacts, plans for judicious growth, and analysis of beach use patterns.

2. Provide for the public's enjoyment and understanding of the beaches
Enjoyment of the beaches is predicated on safe, knowledgeable and conflict-free experiences. Oregon Parks and Recreation Department's role is to ensure that can happen. Recommendations arising from this principle encompass interpretation, obtaining permits, beach safety education and beach access.

3. Collaborate with both local communities and beachgoers at large
Oregon Parks and Recreation Department's management of the beaches depends on synthesizing the myriad of issues, users and jurisdictions that have a stake in the beaches. This includes local community issues, the local and state economy, federal and other state governmental authorities and plans, environmental issues and more. Ocean Shore Management Plan recommendations spell out ways to achieve consensus or mitigate differences among competing interests.

A Vision for the Future of the Ocean Shore
Broadly speaking, Oregon Parks and Recreation Department sees the future Ocean Shore as a place where:

- Pristine beach environments are protected from degradation;
- Critically needed habitats are restored and maintained;
- Managers can respond nimbly to changes in conditions;
- Most remote areas can retain their sense of remoteness;
- Important historic and prehistoric resources are protected as much as is feasible;
- A full range of recreation opportunities exist in each coastal region;
- Different recreational activities can occur without conflict;
- The number of public beach accesses does not drop, but may increase where appropriate to resource protection;
- Adequate, appropriate access exists for recreation, emergencies, evacuation and for people with special needs or limitations;
- Beach use is harmonious with neighboring uses and vice versa, especially related to noise, scenery and annoying or potentially dangerous activities;
- Interpretive opportunities are available coast-wide;
- Permits for special use or alteration of the beach balance human needs with resource protection, and are consistent with state rules;
- The process of obtaining permits is easy to use and understandable;
- A cohesive partnership of agencies works together to manage the resources and public use of the beaches; and
- The public's safety is adequately provided for.

Balancing the Demands:
Natural, Cultural and Scenic Resource Management
Oregon Parks and Recreation Department's management of natural, cultural and scenic resources usually occurs one of three ways: directly by projects on park lands; indirectly by issuing permits for projects on other Ocean Shore lands, and by working with other agencies and jurisdictions to protect important beach resources.

The plan summarizes beach resources, relates their importance to the ecological health, cultural history and scenic enjoyment of the beach and makes recommendations.

Natural Resources: Habitat degradation and human disturbance are two large challenges facing wildlife and plant species on the Ocean Shore. Other constraints include insufficient food (prey), increasing numbers of predators, and adverse weather and water.

Natural Resource Management Recommendations Summary:

1. Implement the Habitat Conservation Plan for Western Snowy Plover. This plan sets the stage for assisting the snowy plover that depend on the open sandy habitat.

2. Increase public awareness about how to avoid disturbance of shorebirds, marine mammals and seabirds, in general. This can include interpretive programs, docents, outreach to schools and special events, trails, and viewing platforms.

3. Work with Oregon Department of Fish and Wildlife and the U.S. Fish and Wildlife Service in completing a shorebird management plan for the Ocean Shore.

4. Work with research groups, resource agencies and volunteers to protect plant species known to occur in the open sand habitats, especially on Oregon Parks and Recreation Department lands.

5. Continue to pursue the Oregon Plan for Salmon and Watersheds, for related coastal watercourses on Oregon Parks and Recreation Department lands.

6. Continue to remove invasive species, such as Scots broom, European beachgrass gorse and other invasive species on Oregon Parks and Recreation Department lands.

7. Set up habitat improvement projects for protected species found on the Ocean Shore, with federal and state agencies.

8. Complete research, public education and management projects for coastal estuaries, with federal and state agencies.

9. Post health advisories for beaches regarding water quality as is consistent with guidance from the Oregon Health Services Division.

10. Work with the Oregon Department of Fish and Wildlife and other agencies to update the Rocky Shores Management Strategy. Update the coastal atlas with accurate Rocky Shores information.

11. Work with the Ocean Policy Advisory Council to identify a marine reserves program.

12. Participate in the development of a coastal birding trail.

13. Conserve private lands needed for natural resource protection through cooperative solutions with willing landowners.

Cultural Resources: The main threats to prehistoric and historic resources are erosion and development. Precisely locating all the resources is also a problem.

Cultural Resource Management Recommendations Summary:

1. Complete the coastal portion of the Oregon Parks and Recreation Department archeological and historic surveys and identify priority sites that need cultural resource management plans.

2. Avoid, minimize or mitigate impacts on significant sites owned by Oregon Parks and Recreation Department.

3. Conserve private lands needed for the protection of highly significant cultural resources through cooperative solutions with willing landowners.

Scenic Resources and Settings: Increasing beachside development threatens the scenic quality and sense of remoteness of the beach.

Scenic Resource Management Recommendations Summary:

1. Limit development in sensitive Oregon Parks and Recreation Department areas, including Ecola State Park and any snowy plover management areas in state parks.

2. Encourage homeowners who are losing scenic views due to sand accretion to ask local governments for a dune management plan.

3. Work with local governments to create and use development standards to protect the scenic value of beachside properties.

4. Conserve private lands that are needed for protection from development through cooperative solutions with willing landowners.

5. Open key views through state lands along the coast by removing and pruning vegetation, especially in Curry County.

Balancing the Demands: Recreational Use

The Ocean Shore Management Plan draws on studies and interviews that quantify the demand for, interest in and satisfaction with recreation at the beach. The studies also examine the nature of conflicts there, including type, location and potential future problems.

Recommendations call for separate areas for conflicting uses, to make sure that a range of activities can occur in each coastal region. Recommendations are balanced as much as possible with resource protection goals. Generally, any proposed limitations or changes to current practices are local and/or seasonal. Most of the recommended changes come from the Habitat Conservation Plan, which spells out possible restrictions in snowy plover management areas.

Recreation Management Recommendations Summary:

1. Build new campground facilities at the locations listed in the "Recreational Use and Management" Chapter.

2. Provide hike-in camps for long distance hikers of the Coast Trail.

3. Continue to allow camping on the beach where currently allowed, except where restricted in the HCP.

4. Continue street legal driving on the beach where it is now officially allowed, with the following exceptions:
    a. Restrictions proposed by the Habitat Conservation Plan in snowy plover management areas.
    b. Restrict driving seasonally on the beach from the Garrison Lake outlet area to the mouth of the Elk River.
    c. Restrict driving north of Myers Creek and at China Creek.
    d. Those with permits to drive on the beach.

5. Continue off highway vehicle riding areas that are now officially open to that activity on the beach on federal lands. Enforce the restriction of off highway vehicle riding on beaches that are open only to street legal driving except for those with permits to drive on the beach.

6. Continue existing horseback riding, dory fishing, surf sports, and other general beach activities such as picnicking and relaxing, except where they may be restricted by the Habitat Conservation Plan.

7. Work with the National Coast Trail Association and the Oregon Trails Council on building needed connections of the Coast Trail and making some sections available to horseback riding and mountain biking.

8. Enforce the current restrictions on fireworks where safety and fire danger threats have become serious. Improve interagency cooperation on enforcement during the peak fireworks season.

9. Restrict driftwood fires in areas of high fire danger, in cooperation with local and state firefighting agencies.

10. Keep dog and leash rules as is, except for Habitat Conservation Plan snowy plover management areas. Educate dog owners on training and controlling their dogs.

11. Encourage the Marine Board to restrict jet ski use in areas of conflict with surfing and dory launching.

12. Add staff to the Ocean Shore Recreation Area, especially the beaches.

13. Contract for law enforcement where needed to supplement department staff and other state and local peace officers.

14. Conduct yearly “refresher training” about Ocean Shore regulations for all pertinent agencies.

15. Get tough on drivers who are driving on closed beaches, speeding or driving recklessly. Enforce the "no ATV" restriction on street legal beaches.

16. Issue permits to drive on closed beaches for official purposes and where appropriate for persons with special needs or disabilities.

17. Place signs at beach accesses about driving and other beach use rules. Design signs for maximum understanding and minimum visual intrusion.

18. Change the driving rule to state that driving on the beach is not permitted unless specifically signed as allowed. Currently, the rule allows driving everywhere unless specifically disallowed.

19. Consider revoking ATV permits for repeat violators.

20. Educate ATV users on new beach rules.

21. Acquire lands needed for recreation use from willing landowners.

22. Incorporate rules compliance messages into interpretive messages.

23. Complete an interpretive plan for the Ocean Shore.

24. Use docents in critical areas to communicate rules, stewardship and safety goals to visitors.

Beach Access

Beach access points exist primarily for the following:

- Recreational use (vehicular or not);
- Emergencies, evacuations or both;
- To collect resources, such as driftwood;
- To complete construction or alterations on or adjacent to the beach.

Oregon Parks and Recreation Department supports vehicle access in each coastal region and non-vehicular access points. The idea is to assure that enough publicly owned access sites are available, and are appropriately located for recreational and emergency use and to avoid unnecessary impact on resources. Along with access that exists now, recommendations look at strategic, sensible new locations for persons with disabilities or limitations. The plan also examines the effects of public access via dead end streets and private property, including crowding, and other use patterns.

The plan looks at gaps of over three miles between existing public access sites to determine the effect of creating access within these gaps. New accesses were not recommended for most gaps, because of inevitable increase in the use of the beach, loss of a sense of remoteness and degradation of habitats. The few places recommended for new access include Delaura Beach, Sunset Beach, north of Neskowin, a trail connection to Sacchi Beach in Coos County, and Agate Beach, Sisters Rock, Cape Sebastian and Crissey Field in Curry County.

Enough emergency access points along the coast already exist. The critical issue is their ongoing maintenance for easy access, especially for emergency vehicles. Oregon Parks and Recreation Department supports maintaining emergency accesses on state park lands and the creation of a beach safety grant program, which could be used to fund local emergency access rehabilitation.

Access to the beach for those with disabilities and general limitations is a key priority. Beach access points were analyzed using criteria for three types of access: visual access, motorized access to the beach and non-motorized access to the beach and water.

The plan proposes at least one new non-motorized access to the water in each of the three regions for persons with disabilities. Existing motorized accesses that could provide support for persons with disabilities should be upgraded. The plan also proposes offering a permit to qualified persons with disabilities to drive off highway vehicles on beaches currently open to driving, within parameters to be defined by rule.

Beach Safety

Beach safety goals are to:

- Educate the public about how to be safe on the beach;
- Improve coordination among the many agencies involved in some aspect of beach safety, and;
- Ensure that emergency accesses are regularly and adequately maintained.

This plan recounts the known safety hazards, their locations, and the challenges that public agencies face in communicating with the public and coordinating beach safety efforts. Management recommendations center on expanded public information, stronger enforcement, better emergency response coordination, access maintenance, driftwood management and potential grant funding.

Working with the Neighbors

The Ocean Shore is a neighbor to dozens of residential and commercial communities and public lands. The plan identifies ways to ensure that good relations with the neighbors continue. This includes reviewing those issues brought up by the neighbors themselves, and by agency staff who work with them regularly. These typically include situations that pose either a threat or an annoyance to the neighbors, such as fireworks and parties, and fire danger from beach fires and fireworks. The plan recommends different kinds of coordination and enforcement work at certain locations to relieve these problems. Solutions include increased enforcement of existing rules, potential rule changes in dangerous areas and directing certain uses away from residential and hotel areas.

Obtaining Permits: Clarifying the Programs

The regulatory responsibilities for the Ocean Shore are many, and each has its own rules, processes, staff and supporting administration. These responsibilities are generally referred to as the “beach permitting programs”, but specifically include permits for:

- Holding events on the beach;
- Collecting natural products;
- Installing cables and other infrastructure construction,

- Driving on the beach where not otherwise allowed,
- Scientific research and collection, and
- Altering the beach to protect private structures or to provide physical access to the beach.

Permit Management Recommendations Summary:

1. Update permit data to determine concentrations of permit locations and implications.

2. Study the effects of shoreline hardening and determine ways to avoid problems in areas susceptible to hardening.

3. Where cost effective, experiment with beach nourishment projects in areas where beach erosion is a critical problem.

4. Research the effects of removing natural products such as algae and driftwood. Determine if some areas should be protected from removal, or targeted for planned removal.

5. Discontinue commercial permits to remove sand, rock and gravel. Continue to allow removal where needed for emergency access or to prevent flooding.

6. Continue to allow the removal of "souvenir" items from the beach for personal use, such as shells, rocks, small pieces of driftwood, etc., except those items protected by law. Recreational gold mining will be defined in rule and will be only be allowed without the use of power equipment.

7. Clarify the Miscellaneous Use Permit process and what it covers.

8. Improve the permit process for community fireworks displays.

9. Allow the use of chainsaws and other related power equipment on the beach by permit only.

10. Clarify for whom and for what purposes special beach access and scientific research and collection permits are needed.

11. Change statute and rule, as needed, to support the proposed changes for driving on the Ocean Shore.

12. Provide a long-term permit for ranching activities through management agreements with the landowners.

In addition, the department has been asked to consider taking on a wider role in protecting scenic values and reviewing proposals for alterations that could negatively affect the Ocean Shore. To address this request, the department will work in cooperation with other agencies and stakeholders to undertake a comprehensive review of the natural processes, legislation and laws that pertain to structures along the Ocean Shore. The review will include a discussion forum with affected agencies and stakeholders and recommendations for future actions.

Introduction
Chapter One

Why Plan for the Ocean Shore?

Oregon's ocean shore is a tremendously popular destination for recreation and has been designated for recreational use and resource management by state law. The shore offers outstanding natural resources, scenic views and settings, history and recreational opportunities. It is family-friendly and offers virtually something for everyone.

The Oregon Parks and Recreation Department has not previously completed comprehensive planning for its Ocean Shore jurisdiction. The Oregon Parks and Recreation Department Director and Commission have decided that this is a crucial time for comprehensive Ocean Shore planning, given increasing recreational use demands on the beaches, growing adjacent upland development and the challenge of providing a secure future for key resources such as the western snowy plover and prehistoric archeological sites.

The Oregon Parks and Recreation Commission authorized the department to "*Create a long range plan for ocean recreational beach use and management that balances recreation needs with natural and cultural resource protection and adjoining land uses*" in its *Target 2014* directive. The director has further authorized the department to pursue an accompanying federal habitat planning opportunity that can "assure an appropriate balance between providing for the recovery of the federally and state protected western snowy plover, with other resources and with recreational and other Ocean Shore use needs".

Two Parallel Plans

Two parallel plans have been drafted for management of Oregon's Ocean Shore. The Ocean Shore Management Plan (state plan) and the Habitat Conservation Plan for the Western Snowy Plover (federal plan) have been completed with mutually supportive goals and recommendations. This document outlines and summarizes the analysis and provides the recommendations for the Ocean Shore Management Plan, and only refers, in general, to the Habitat Conservation Plan recommendations. Specific recommendations for western snowy plover recovery are only covered in the Habitat Conservation Plan.

Purpose of the Plans

The department will use the two plans as a reference and guide for making future decisions about the "best management" of the Ocean Shore, in conjunction with the department's mandates in law and rule. The Ocean Shore Management Plan will provide a broad framework of focus areas and recommendations regarding all aspects of the department's management responsibilities for the Ocean Shore, and will be consistent with Habitat Conservation Plan. The Habitat Conservation Plan will provide the department with an outline and implementation strategy for assisting with the recovery of the snowy plover. The Habitat Conservation Plan and related federal permitting is intended to provide assurances from the U.S. Fish and Wildlife Service about future recreational use of the beaches while providing for the recovery effort. These assurances will, in turn, support Ocean Shore Management Plan recommendations.

Any changes recommended by the plans for administrative procedures, policy, rule or law would need to be implemented following the completion and approval of the plans.

Ocean Shore Jurisdiction and Authority

The scopes of both plans are based on Oregon Parks and Recreation Department's geographic jurisdiction along the ocean shore. A description of that jurisdiction is set out in statute and rule. In general, that jurisdiction extends from the extreme low tideline to the vegetation line, either actual vegetation or statutory vegetation line, whichever is further inland. In some areas, Oregon Parks and Recreation Department owns the land within this jurisdiction, primarily where state parks occur adjacent to the ocean. See Figures 1 and 2 below.

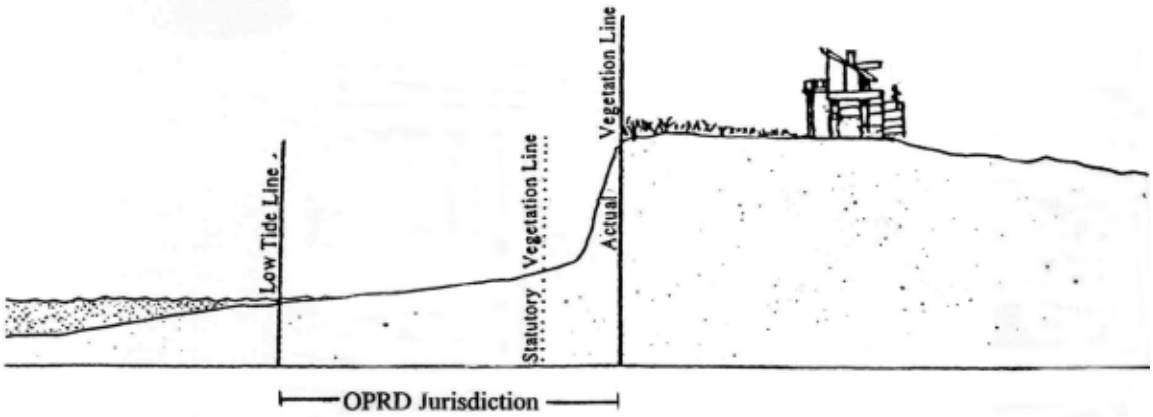

Figure 1. Oregon Parks and Recreation Department permit jurisdiction when actual vegetation line is further landward than the Statutory Vegetation Line.

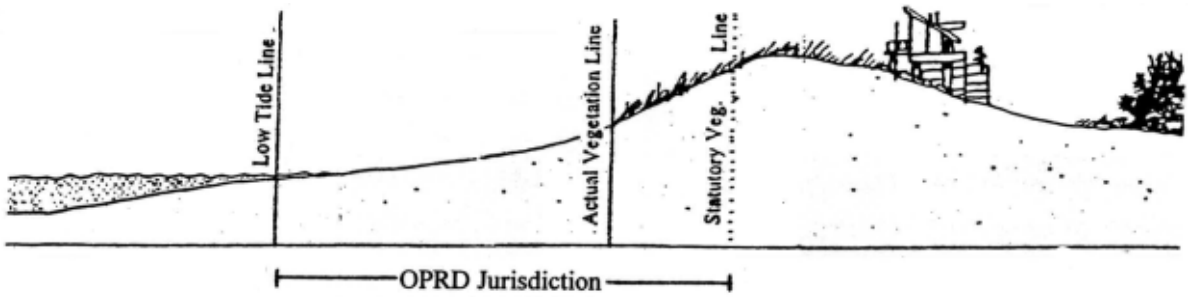

Figure 2. Oregon Parks and Recreation Department jurisdiction when Statutory Vegetation Line is further landward than the actual vegetation line.

In 1967, the Oregon Legislature enacted the "Beach Bill" to protect Oregonians' right to the free and uninterrupted use of the ocean shore from the Columbia River to the Oregon-California border – approximately 360 miles (codified at ORS 390.610 – 390.770). This legislation established a public recreational easement on beaches seaward of the vegetation line, regardless of the underlying ownership, and recognized:

(1) the public has acquired recreational rights to the Ocean Shore by custom (over the years the public has made frequent and uninterrupted use of the Ocean Shore),

(2) the public interest to protect and preserve the public rights and easements as a permanent part of Oregon's recreational resources, and

(3) the public interest to do whatever is necessary to preserve and protect scenic and recreational use of the Ocean Shore.

The Ocean Shore is defined as *"… the land lying between extreme low tide of the Pacific Ocean and that statutory vegetation line … or the line of established upland shore vegetation, whichever is further inland."* ORS 390-605(2). The line of established vegetation does not include seasonal occurrences or isolated patches of vegetation lying seaward of the established upland vegetation line.

Oregon's Ocean Shore has been used over the years for many purposes. Before construction of Highway 101, which runs the entire length of the coast, the Ocean Shore was used as a public highway. The Oregon Legislature, in 1913, designated the wet sand portions of the Ocean Shore (extreme low tide to high tide) as a public highway.

With passage of the Beach Bill in 1967, the Oregon Legislature reaffirmed a 1965 bill that had changed the Ocean Shore from that of a highway to a recreation area, and declared that the Ocean Shore shall be administered as state recreation areas. (ORS390.610(3)). The Oregon legislature further declared that the ownership of the shore of the Pacific Ocean between ordinary high tide and extreme low tide excepting those portions disposed of by the State prior to July 5, 1947, are vested in the State of Oregon and shall also be declared a State Recreation Area. The Ocean Shore is in essence the state's largest "day use recreational area" or a series of day use areas.

In addition to applicable Ocean Shore regulations, Ocean Shore areas adjacent to state parks are considered part of the park and subject to the rules and regulations established for the state park system in general or the state park in particular.

The right of public access is not a constitutional right, therefore the right of public access is subject to regulation by the state legislature through legislation, or by Oregon Parks and Recreation Department pursuant to statutory authority.

The Oregon Parks and Recreation Department's management jurisdiction overlaps with other land ownerships including private, federal, city, county and other state agency lands. In these areas of overlap, the jurisdictional responsibilities of the underlying owner also apply unless the state jurisdiction supersedes. In areas of Oregon Parks and Recreation Department ownership, the jurisdictions of some other agencies apply to the department, such as local governmental land use ordinances and federal management directives for federally protected resources. This plan will seek to assure that overlapping jurisdictions are considered and addressed.

Any recommendations included in this plan will be based on the general definition of Oregon Parks and Recreation Department's jurisdiction, illustrated above. There may be a few areas where the location of the jurisdiction's upland boundary is in question due to unusual local conditions. In those areas where the boundary is in dispute, Oregon Parks and Recreation Department will need to resolve the dispute before implementing recommended actions within the disputed area.

Oregon Parks and Recreation Department's management duties for the Ocean Shore are also mandated in rule and law. The department is charged with the protection and preservation of the recreational, scenic, natural and other resource values found on Oregon's Ocean Shore; the management of the Ocean Shore State Recreation Area, and within adjacent state parks. Oregon Parks and Recreation Department is also

responsible for administering permitting for a variety of activities including shoreline protection, beach structures, the placement of pipelines, cables and conduit under the beach, and natural product removal, as well as scientific research and collecting permitting, and beach salvage and beach driving permits. In addition, Oregon Parks and Recreation Department administers permits under a separate program for special activities or events on the beach and to allow motorized vehicles on beaches that are otherwise closed to driving. Finally, Oregon Parks and Recreation Department provides dozens of beach access facilities along the coast. Issues, goals and recommendations regarding these various management duties are covered in this document.

Plan Scope

The Ocean Shore Management Plan addresses all of Oregon Parks and Recreation Department's regulatory, resource and recreation management duties and responsibilities. Geographically, the plan will include the area defined by the department's mandated Ocean Shore jurisdiction, as described above, including the beach, and portions of adjacent state parks. The plan addresses all beaches that include some permanent dry sand areas that are not precluded from public access by topographic barriers. A list and corresponding map of the beaches included in the plan can be found at the end of this chapter.

The plan will focus its recommendations on lands owned by Oregon Parks and Recreation Department, and will provide advisory recommendations to other jurisdictions with ownership or management responsibilities related to the Ocean Shore. The Oregon Parks and Recreation Commission has directed the department to address the following list of topics in the plan:

(1) General natural, cultural/historic and scenic resource management,
(2) Recreational use: Recreational facility and land needs, management and public information,
(3) Providing adequate and appropriate public access to the beach,
(4) Compatibility between beach activities and upland land uses,
(5) The department's Ocean Shore-related permitting programs, and
(6) Reference to the Habitat Conservation Plan for Western Snowy Plovers.

In addition to the topics listed above, the department has looked at the coastal economic impacts to be expected from this plan, but has not conducted a detailed study. Recommendations in this plan should not result in negative impacts on the local economy. On the contrary, improvement of the scenic, recreational and natural resources at the beach will more likely have a positive effect on the local economy in the long term.

There are a few additional topics that have been addressed in the plan because they influence, support or complement management of the Ocean Shore. Examples include the Territorial Sea Plan, local comprehensive plans, Oregon Department of Transportation highway planning, state parks master plans, management of estuaries, the Oregon Salmon Plan, Tillamook County's Vision for Bayocean Spit, Coos Bay North Spit and Dunes National Recreation Area Management Plans and the Beltz Farm golf course proposal. Issues from such plans that are outside of Oregon Parks and Recreation Department's jurisdictional authority may be mentioned in this plan, but resolution of such issues may need to be achieved by the agencies that have authority.

The Ocean Shore Management Plan is intended to be applicable for up to twenty years but can be updated sooner at the request of the Oregon Parks and Recreation Department Director or Commission. Ideally, the plan would be reviewed on a six-year cycle.

Public Involvement and the Plan Approval Process

A series of public meetings were conducted at key towns on the coast and in the Willamette Valley, throughout the planning process. In addition, a steering committee, which acted in an advisory capacity to the department, met periodically throughout the planning process. This committee consisted of representatives of local governments, state and federal agencies, resource and recreation advocacy groups, American Indian tribes and three members at large. Comments were collected from both the steering committee and public meetings and were considered for each succeeding step in the process. The release of the draft plan documents included a written comment period. Finally, a department stakeholders group met periodically to review and comment on plan products and to provide management insight into the issues and recommendations. The involvement of so many interested parties has greatly contributed to the quality and completeness of the plan, and is greatly appreciated by Oregon Parks and Recreation Department.

General information, newsletters, summaries of comments, issues, and draft and final documents were posted on the Oregon Parks and Recreation Department web site, www.prd.state.or.us . A contact list of about 2500 persons and organizations was compiled. Notice of meetings and updates on the web site were provided to individuals on the list. In addition, notices of public meetings were advertised in major coastal and valley newspapers. The plan was available for review by local governments and relevant state agencies that were briefed on plan proposals.

Final approval of the Ocean Shore Management Plan is provided by the Oregon Parks and Recreation Department Director and the Oregon Parks and Recreation Commission. The Commission provides comments and final decisions in a hearing setting, based on formal recommendations from the Director.

BEACH NAMES

NORTH COAST REGION

- N1 Columbia to Necanicum River
- N2 Necanicum River to Tillamook Head

**Tillamook Head*

- N3 Indian Beach
- N4 Ecola Beach
- N5 Chapman Pt. To Humbug Pt.
- N6 Humbug Pt. To Hug Pt.
- N7 Hug Pt. To Arch Cape
- N8 Arch Cape to Cape Falcon

**Cape Falcon*

- N9 Short Sands Beach

**Neahkanie Mt.*

- N10 Neahkanie Mt. to Nehalem River
- N11 Nehalem River to Tillamook Bay
- N 12 Tillamook Bay to Cape Meares

**Cape Meares*

**Cape Meares to Maxwell Pt.*

- N13 Maxwell Pt. To Netarts River
- N14 Netarts River to Cape Lookout

**Cape Lookout*

- N15 North Sand Lake
- N16 Sand Lake to Cape Kiwanda

*Cape Kiwanda

- N17 Cape Kiwanda to Nestucca River
- N18 Nestucca River to Cascade Head

**Cascade Head*

CENTRAL COAST REGION

- C1 Roads End to Siletz River
- C2 Siletz River to Boiler Bay

**Boiler Bay to Cape Foulweather*

**Cape Foulweather to Otter Rk*

- C3 Otter Rk to Schooner Pt.

**Yaquina Head*

- C4 Yaquina Head to Yaquina River
- C5 South Beach
- C6 Grant Crk to Seal Rock
- C7Seal Rock to Alsea River
- C8 Alsea River to Starr Crk

**Starr Crk to Cape Perpetua*

**Cape Perpetua to Bob Crk.*

- C9 Bob Crk to Rocky Knoll
- C10 Rocky Knoll to Heceta Head

**Heceta Head*

**Heceta Head to Lilly Lake Pt*

- C11 Lily Lake Pt. to Sutton Creek
- C12 Sutton Creek to Siuslaw River
- C13 Siuslaw River to Silt Coos River
- C14 Silt Coos River to Takenitch Creek
- C15 Takenitch Creek to Three Mile Creek
- C16 Three Mile Creek to Umpqua River

SOUTH COAST REGION

- S1 Umpqua River to Ten Mile Creek
- S2 Ten Mile Creek to Coos Bay
- S3 Bastendorf Beach

**Yoakum Pt. To Cape Arago*

**Cape Arago to Sacchi Beach*

- S4 Sacchi Beach
- S5 Agate Beach to Five Mile Pt.
- S6 Five Mile Pt. To Coquille River
- S7 Coquille River to New River
- S8 New River to Blacklock Pt.

**Blacklock Pt.*

- S9 Sixes River Mouth

**Cape Blanco*

- S10 Cape Blanco to Elk River
- S11 Elk River to Pt. Orford Heads

**Port Orford Heads*

- S12 Battle Rock to Humbug Mt.

**Humbug Mt.*

- S13 Arizona Beach

**Sisters Rock to Devils Backbone*

- C14 Devils Backbone to Nesika Beach South

**Nesika Beach South to Hubbard Mound*

**Hubbard Mound to Otter Pt.*

- S15 Otter Pt. To Rogue River
- S16 Rogue River to Cape Sebastian

**Cape Sebastian*

- S17 Cape Sebastian to Crook Pt.

**Crook Pt. To Whaleshead Beach*

- S18 Whaleshead Beach

**Whaleshead Beach to Lone Ranch Beach*

- S19 Lone Ranch Beach

**Lone Ranch Beach to Harris Beach*

- S20 Harris Beach

**Harris Beach to Chetco River*

- S21 Harbor Beach

**Harbor Beach to McVay Rock Beach*

- S22 McVay Rock Beach
- S23 Winchuck & Crissey Field Beaches

Rocky areas denoted in *italics*.
The other Ocean Shore segments are generally sandy beaches. The codes are used to help locate the beaches on the coastwise map and to identify the locations for recommendations in the Recommended Actions chapter.

Oregon's Coastal Beaches

Coastal Sandy Beach

County Boundaries

Note: Coastal areas not shown as beaches are rocky intertidal, headlands, or coastal benches.


Heceta Head Lighthouse
State Scenic Viewpoint
Oregon Coast Trail
C11 C12
Darlingtonia
State Natural Site
Mapleton
36
To Eugene
126
Florence
Siuslaw River
Lane
C13
Woahink Lake
Jessie M. Honeyman Memorial
State Park
101
Oregon Dunes National Recreation Area
Siltcoos Lake
C14
C15
Tahkenitch Lake
C16
Bolon Island Tideways
State Scenic Corridor
Douglas
Winchester Bay
Umpqua Lighthouse
State Park
Reedsport
Umpqua
State Scenic Corridor
38
Umpqua River
To Eugene
S1
Clear Lake
Eel Lake
William M. Tugman
State Park
N. Tenmile Lake
Tenmile Lake
Elkton
S2
101
Conde B. McCullough
State Recreation Site
Golden and Silver Falls
State Natural Area
138
To Roseburg
North Bend
Sunset Bay
State Park
S3
Coos Bay
Coos River
Shore Acres
State Park
Cape Arago
State Park
S4 S5
Seven Devils
State Recreation Site
S6
Coos
Coquille
Bullards Beach
State Park
North Fork
Coquille River Lighthouse
Coquille River
42
Face Rock
State Scenic Viewpoint
Bandon
Coquille River
Myrtle Point
Bandon
State Natural Site
S7
Hoffman Memorial
State Wayside
To Roseburg
Middle Fork
Remote
S8
Coquille
Myrtle Grove
State Natural Site
Floras Lake
101
Powers
S9
South Fork
Cape Blanco
State Park
Sixes
Sixes River
S10 S11
Coast Mountain Range
Paradise Point
State Recreation Site
Port Orford
Port Orford Heads
State Park
Humbug Mountain
State Park
Summit
Elevation 1,756 feet
Elk River
S12
Rogue River
S13
Klamath Mountains
S14
Geisel Monument
State Heritage Site
Illinois River
Rogue River
S15
Otter Point
State Recreation Site
Gold Beach
S16
Curry
Josephine
Cape Sebastian
State Scenic Corridor
S17
Pistol River
State Scenic Viewpoint
Chetco River
S18
Samuel H. Boardman
State Scenic Corridor
Alfred A. Loeb
State Park
Cape Ferrelo
S19
101
Harris Beach
State Park
Brookings
S20
McVay Rock
State Recreation Site
S21
S22
Winchuck
State Wayside
Winchuck River
S23
OREGON
CALIFORNIA
To Crescent City

Ocean Shore Management Goals: Chapter Two

The Ocean Shore Management Plan's analysis and recommendations are based on the following Regional Approach, Planning Assumptions, Desired Future Condition and Goals and Guidelines. The Goals and Guidelines come out of the mission and mandates of the agency, and outline Oregon Parks and Recreation Department's broad management intentions for the Ocean Shore.

Taking a Regional Approach

Oregon Parks and Recreation Department has taken a regional approach in its Ocean Shore planning analysis and recommendations. The department recognizes the Oregon coast as consisting of three distinct regions, which correspond roughly with natural and county boundaries, and travel destinations. For planning purposes the North Coast roughly corresponds with Clatsop and Tillamook Counties (Columbia River to Cascade Head), the Central Coast with Lincoln and Lane Counties (Cascade Head to the Umpqua River) and the South Coast with Douglas, Coos and Curry Counties (Umpqua River to California border).

Each of the coastal regions has distinct differences in the types and distribution of natural, cultural/historic and scenic resources, and each already has a good distribution of recreational opportunities.

Planning Assumptions

The plan is based on the following assumptions:

(1) Oregon's Ocean Shore is large enough to allow space for a full range of recreational activities in each region, while also protecting important resources.
(2) Many types of recreation activities can be very compatible with high quality and sensitive habitats, if recreation is occurring in low amounts, and with adequate supervision and management.
(3) Some areas are already committed to high levels of recreational use or and intense activities.
(4) Some areas can be enhanced to provide better habitat without encroaching on committed recreational areas.
(5) The protection of scenic values can be achieved through a variety of methods including local jurisdictional zoning and development standards, scenic easements and agreements with private landowners, and public acquisition.
(6) The protection of cultural/historic resources is important and their protection can be compatible with appropriate natural resource management and recreational use.

Working Toward a Desired Future Condition

The best planning is done with a future target in mind that is reasonably well defined and toward which some measure of progress can be made. This target is referred to as the "desired future condition". Because of the department's mandate to protect valuable resources while providing recreational use for the public, the desired future condition must address the desired future for recreation and resources (natural, cultural and scenic).

The desired future condition, for the Ocean Shore and adjacent areas to be addressed in this plan, is based on achieving:

- The protection, restoration, and enhancement of characteristic regional beach and dune habitat types, of sustainable size and distribution, that are of high quality composition, structure and function;
- The provision of a full range of desired recreational experiences (activities, access and settings), on a regional basis;
- The protection of key undeveloped adjacent areas that are important to protecting views from the beach; and
- The protection of cultural/historic resources, as is feasible.

Planning Goals and Guidelines

Goal One: Strike a balance between resource protection and recreational use.

Many participants in the planning process have debated whether Oregon Parks and Recreation Department is primarily a resource management agency or primarily a provider of recreation, and how the agency chooses between these roles in making its management decisions. The department actually has a dual mission and role, and must implement that role as a land manager, a recreation provider and as the administrator of its Ocean Shore regulation programs. Striking the proper balance between resource protection and recreational use is the challenge set forth in Oregon Parks and Recreation Department's mission statement. The appropriate balance is determined by recognizing important resource areas and protecting them from inappropriate uses.

> *Oregon Parks and Recreation Department Mission: Provide and protect outstanding natural, scenic, cultural, historic and recreational sites for the enjoyment and education of present and future generations.*

Guidelines for striking the balance

1. Protect areas with significant natural resources, including open sand and low profile dune habitats, interdunal wetland habitats and associated upland habitats and their representative native plant and animal communities Place an emphasis on managing to protect and enhance "sensitive species". In these areas, provide for recreational uses and levels that are compatible with the resources' sensitivities. Manage any current recreational uses, as needed, to protect key resources.

2. Target key low to moderate quality natural resource areas for enhancement, to support sensitive species and maintain habitat diversity. Manage recreational uses to be compatible with enhanced habitats.

3. Provide for a range of recreational activities, intensity levels and settings. Support the current level of recreational demand and, where appropriate to resource constraints, provide for increased use as long as it will not result in crowding. Look toward achieving "no net loss" in the range of recreational activities, on a regional basis. (These objectives apply outside of Habitat Conservation Plan management areas only.)

4. Achieve "no net loss" in the number of public accesses to the beach. Provide additional access locations where appropriate to resource constraints and the desired level of use.

5. Identify settings and scenic features that need protection and methods for protecting them. Protect remote settings and important visual features. Provide a range of settings for recreational activities, from remote to intensive.

6. Determine whether activities associated with different kinds of beach and ocean shore permitting are causing cumulative resource impacts, and whether changes are needed to address those impacts. Conduct cumulative impact studies on a littoral cell basis. Identify areas, if any, where the provision of miscellaneous use, driving, collecting and research permits, or ocean shore alteration permits, is resulting in significant impacts on key resources or public enjoyment and safety.

7. The Habitat Conservation Plan, and related site management plans, will provide the recommended approach for supporting the recovery of the western snowy plover.

8. Use an adaptive management approach based on on-going monitoring and assessment of the effectiveness of recommended management actions, about achieving the desired future condition.

9. Identify potential impacts from proposed management actions and plan to avoid or mitigate them. Review the larger environmental context of the Ocean Shore including littoral cell sand dynamics, existing and desired natural and cultural resource conditions, climate and climate change potential, major events such a tsunamis, earthquakes and upland flooding.

Goal Two: Provide for the public's enjoyment, understanding and well being

The department must strive to provide a safe, enjoyable, experience for Ocean Shore visitors and neighbors. One of Oregon Parks and Recreation Department's primary roles is to provide for public access to the beach and to manage public use so that it is safe and enjoyable with a minimum of visitor conflicts and concerns. At the same time, the department is interested in increasing the public's sense of commitment to resource stewardship and related appropriate use of the beach.

Guidelines for providing for the public's enjoyment, understanding and well-being

1. Provide interpretive opportunities at key Ocean Shore sites where the importance of the natural and cultural resources, and appropriate human actions can be demonstrated. Provide interpretation based on significant, well-developed, resource-based themes. Provide a variety of media/presentation options that fit the purpose and use of each interpretive site. Work with interest groups and tribal representatives in identifying interpretive themes and how they will be presented.

2. Determine how best to minimize confusion over what is required and how to comply with Ocean Shore and Miscellaneous Use permitting regulations.

3. Focus efforts for visitor management on areas with serious problems. Identify areas where there are serious periodic or on-going conflicts between recreational uses or groups, or between recreational uses and upland uses. Consider management options that can lessen or prevent the conflicts that are particular to the focus areas. Foster the growing sense of public stewardship toward reducing destructive behavior and increasing stewardship project participation. Provide adequate supervision as needed.

4. Identify key safety management issues and locations and consider management options that can lessen or prevent unsafe conditions or situations. Identify hazards, hazardous areas and conditions that create or cause hazards. Recommend management and user actions that can avoid known hazards. Determine how best to provide for emergency response when hazards are encountered.

5. Provide options for persons with disabilities to access the beach and water. Provide for a full range of potential disabilities or limitations. Obtain comments on potential actions from representatives of the disabled community. Provide a range of access options on a regional basis. Strive to provide the highest degree of access that is feasible.

6. Identify the necessary actions that Oregon Parks and Recreation Department will implement, and outline those actions that the department recommends for other providers to implement.

Goal Three: Collaborate within the local community and larger area

The department must work within the local and regional economic, cultural and environmental context. Although Oregon Parks and Recreation Department only has the authority to make management decisions within its jurisdiction, the department's decisions need to be compatible with the surrounding neighborhoods, local, federal and other state governmental entities, local economy and environment.

Guidelines for collaboration and compatibility

1. Consider options for lessening or avoiding impacts on neighboring uses. Understand what the adjacent land uses are based on current zoning and public land ownership. Identify areas where special consideration of Ocean Shore uses must be made to ensure compatibility with upland uses.

2. Outline how the plan's recommended actions can comply with other plans, rules and mandates. Understand how other plans, rules and mandates apply to Oregon Parks and Recreation Department's Ocean Shore jurisdiction, or affect that jurisdiction, and outline how the recommended actions comply.

3. Enhance the local economy of coastal communities. Obtain a baseline understanding of the local coastal economic situation concerning Ocean Shore use, and determine how proposed management actions can enhance or improve the local economy.

4. Identify traditional coastal activities and strive to provide opportunities for these activities as long as they continue to occur, on a regional basis.

5. Continue to work with local governments and groups, and other agencies to implement the Ocean Shore Management Plan recommendations. Provide encouragement and incentives. Review implementation of the plan periodically with partners and other interested parties. Set combined priorities and benchmarks on a six year cycle.

Balancing the Demands:
Natural Resource Management
Chapter Three

The Oregon coast is one of many recreational playgrounds for Oregonians and visitors to the state. The wide sandy beaches are readily available for walking, running and picnicking, as well as providing access to ocean resources for such activities as fishing, wind surfing, and surfing. However, the natural resources and scenic beauty that draw people to the beach are often affected by increasing visitation.

This section takes a cursory look at some of the species and systems that may be impacted by recreation and activities permitted by the department (e.g., riprap, non-traditional activities, driving on the beach). Due to the complexity and enormity of the area, analysis that is more detailed could not be completed within the period allotted for the preparation of this plan. However, the plan sets the stage for completing additional studies and management analyses, which are listed in the management recommendations.

Desired Habitat Condition

The Ocean Shore has seen tremendous changes over the years due to human intervention. There are also places, especially along the south coast where much of the land is in public ownership and has not been developed. What is the desired "natural" condition for the Ocean Shore? Looking to the future, this plan has asked whether we can protect all natural resources found there? Do wildlife and plant species protection, recreation, and other beach activities need to be mutually exclusive of each other to both protect resources and provide for use?

The plan concludes that the desired habitat condition is open sand habitats in key locations long the Ocean Shore that can be managed in a way that will be sustainable for native wildlife and plant species. Selected key habitats would also be places with low levels of human use. These areas would have a low fore dune profile, native vegetation, and dunal wetland and upland habitats, and have little or no invasive species. Some modification of the existing habitat will be required to reach this desired condition, primarily the removal of invasive species such as European beachgrass (*Ammophila arenaria)*.

The department will focus it's habitat management actions on lands it owns and will work with other public land owners to encourage the completion of actions on their properties, as needed.

The Habitat Conservation Plan for the Western Snowy Plover, being prepared in conjunction with this plan, has identified 16 plover management areas. These plover management areas total approximately 48 miles of sandy beach. Of the 16 plover management areas, 5 are currently occupied by snowy plover. The goal is to restore the remaining 11 unoccupied plover management areas, over a 25-year period, in order for snowy plover to begin occupying those sites. In these unoccupied plover management areas, some areas of habitat would be restored and predators would be managed, and certain recreation use curtailed (dogs-on-leash, no driving) during the nesting season. These plover management areas are also important habitat areas for other shorebirds and should provide them with some refuge. For more detail on what is being proposed for these areas, see the Habitat Conservation Plan.

Natural Resource Management

Natural Resource Challenges and Issues

Habitat degradation and human disturbance are two of the biggest threats facing wildlife and plant species on the Ocean Shore. Habitat degradation is due to alteration of the habitat (through development or the spread of invasive species) and climate change. Human disturbances include recreation use and human development requiring shoreline protection structures, such as seawalls and riprap. Recreation use and wildlife and plant protection are not necessarily mutually exclusive, as some low levels of recreation use should not adversely affect a given species. However, as the population of Oregon grows and more people come to the beach to recreate, conflicts between people and plants and wildlife will increase.

The protection of sensitive plants and wildlife is important, including protecting all shorebirds from human disturbance during critical times of the year, and ensuring that some beaches provide a "wilderness setting" that is managed with limited access and high levels of resource protection.

Human disturbance is not the only constraint however. Environmental constraints faced by plants and wildlife include lack of prey, adverse weather conditions and/or predation. Each of these constraints results in ecological consequences that may cause a decline in the species' population. These constraints, plus human impacts, may result in a decline in the bird and mammal populations along the Oregon coast.

While there is much known about coastal ecosystems, there is still much to learn.

Recommended Natural Resource Management Actions

The following goals are recommended for management of the Ocean Shore to achieve the desired natural condition for the Ocean Shore. These recommendations should be evaluated every six years to ensure that the goals are being met and if not, what changes to the management actions are needed in order to reach the desired future condition.

Goal One: Establish an ecologically functioning habitat management network that helps support native plant and animal communities and migratory species.

a. Implement the provisions of the Habitat Conservation Plan, upon acceptance by the USFWS. In the interim, continue to manage for snowy plovers on department property, and restrict recreational activities on the dry sand during the nesting season in areas where plovers are actively nesting. Management activities will include, as necessary, habitat restoration and maintenance, predator management, breeding population monitoring, public outreach and education, and law enforcement.

b. Work with Oregon Department of Fish and Wildlife and US Fish and Wildlife Service, as requested and where appropriate, in the preparation of an interagency management plan for critical habitat areas of the Steller sea lion, including rock and reef haul out and rookery areas, feeding areas, and interaction with other ocean users, including commercial and recreational fishing, aircraft over flight, and human trespass.

c. Where appropriate, seek or provide funding for inventory and monitoring work on coastal plant and wildlife species, especially those of highest concern.

d. Develop invasive species management plans for coastal state park properties. Continue European beachgrass, gorse, and Scots broom control projects at coastal state park properties.

e. Identify important habitats on private lands for conservation through cooperative solutions with willing landowners.

Goal Two: Establish an integrated approach to species management on lands owned or managed by Oregon Parks and Recreation Department.

a. For all coastal state parks, develop natural resource management plans that will describe needed resource protection and restoration efforts for fish, wildlife, and plant species.

b. Prepare species management plans that will identify the measures Oregon Parks and Recreation Department will undertake to conserve listed and sensitive species. Oregon Parks and Recreation Department will work cooperatively with other state and federal regulatory and resource agencies in the management of these species.

c. Oregon Parks and Recreation Department is a member of the North Pacific Coast Shorebird Working Group. This group is responsible for identifying management actions necessary to address impacts to shorebirds. Work with Oregon Department of Fish and Wildlife and US Fish and Wildlife Service, as requested and where appropriate, on the development of a shorebird management plan for the Ocean Shore, consistent with the U.S. Shorebird Conservation Plan and any regional shorebird plans. Oregon Parks and Recreation Department will assist with any studies to determine impacts to shorebirds from human disturbance, including recreation.

d. Use a variety of strategies to identify and protect shorebird habitat and otherwise reduce the likelihood of impacts to shorebirds or their habitats. Removal and control of European beachgrass in dune areas has been recognized as a goal for shorebird protection. Driving on the beach is an activity that causes birds to flush. Identify areas where this is of particular concern and prohibit driving during peak spring and fall migration periods. Unleashed dogs on the beach often chase birds that are feeding or resting. Enforce those beaches where regulating dog use. Provide docents at key locations to help educate dog owners.

e. Work with the Audubon Society of Portland, where appropriate, on the awareness, conservation, monitoring, and research of Important Bird Areas.

f. Work with those federal and state agencies responsible for marine mammals, as requested and appropriate, to assist in the conservation of the species.

g. Consider placing driftwood in places where more driftwood is needed for habitat improvement and/or to control erosion, and where placement will not cause a safety concern for the beach user.

h. Continue to pursue the Oregon Plan for Salmon and Watersheds efforts on fish-bearing streams on state park lands adjacent to the ocean shore.

i. Work with the US Fish and Wildlife Service and USDA Wildlife Services in the management of predators on seabird colonies in Oregon.

Goal Three: Establish educational opportunities and outreach programs, in cooperation with other land and resource management agencies that focus on sustaining the natural resources of the Ocean Shore.

a. Develop a coast wide department shorebird awareness program in cooperation with the Oregon Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, and other interested parties such as the American Bird Conservancy and the Oregon Audubon Society. This program would include interpretative programs about the life history of shorebirds and their contribution to the ecology of the beach, as well as interpretative signs/exhibits/brochures. An emphasis of the program would be to inform the public about shorebird needs and the need for reduction of disturbance by humans and pets. The US Fish and Wildlife Service already has a similar program.

b. Participate in and foster shorebird festivals during spring (or fall) migration to promote shorebird awareness and appreciation.

c. Work with the Oregon Department of Fish and Wildlife and US Fish and Wildlife Service in involving the public (volunteers) in enhancing shorebird habitat in areas with good viewing opportunities.

d. Provide notification about water quality at coastal beaches to be consistent with guidance from the Health Services Division.

e. Work with communities and community groups on beach nourishment projects, where applicable.

f. Participate in the development of a Coastal Birding Trail (auto route) identifying locations where birds may be observed along the coast.

g. Continue to pursue the Oregon Plan for Salmon and Watersheds efforts on fish-bearing streams on state park lands adjacent to the ocean shore.

h. Continue to work with the National Marine Fisheries Service and the Oregon Department of Fish and Wildlife on marine mammal strandings and efforts to protect seal pups. Prepare a "fact" sheet for distribution to the public on who to contact if they discover a stranded or dead marine mammal on the Ocean Shore. Include this information in interpretive programs.

i. Use docents to help educate visitors about proper behavior around tide pools and marine mammal haul outs.

Management of Other Coastal Habitats

The sandy beaches of Oregon are one component of a complex coastal ecological system. Coastal estuaries and rocky shores/headlands are the other two components. These areas are not officially part of the "sandy beach" as defined for this plan; however, they are part of a larger, more complex ecosystem and thus cannot be ignored. The following is a brief description of the department's recommendations for estuaries and rocky shore areas.

Management of Estuaries

Estuaries are water bodies where fresh water from rivers flows into and mixes with salt water from the ocean. These systems are among some of the most productive natural systems on earth, providing habitat and food

for many species, and a vital national economy (commercial and recreational fishing, and tourism). People have been drawn to these areas throughout history, putting great stress on these valuable ecosystems. The greatest challenge faced by Oregonians is balancing the human and ecological needs of estuaries.

Estuarine Issues and Concerns

Many of these estuaries are, or may, serve as breeding grounds for the snowy plover, along with the adjacent sandy beaches. They are also the access points for anadromous fish migrating to the ocean and returning to their native streams to spawn; haul out areas for marine mammals, and important feeding grounds for shorebirds.

Recommended Estuarine Management Actions

Goal One: Work with agency partners for more effective results in estuarine areas.

a. Work with the Department of State Lands and local counties and cities to protect the natural values of the smaller estuaries where they enter the ocean.

b. Work with other government agencies and private groups to survey estuaries for invasive species, such as spartina.

c. Work with the National Oceanic and Atmospheric Administration (NOAA) and the Oregon Department of Fish and Wildlife to inform beach users about the importance of protecting marine mammal haul out areas, in estuaries.

d. Develop interpretive programs for state parks adjacent to estuaries (e.g., Cape Lookout State Park) that describe the ecological importance of estuarine areas.

Management of Rocky Shores and Off Shore Areas

Rocky shores are a major characteristic of the beautiful Oregon coast. Tide pools, cliffs, rocks, and submerged reefs support a rich and diverse ecosystem along the shore. Rocky shores attract thousands of visitors annually who come to glimpse marine wildlife and experience an exotic and powerful environment. Oregon's rocky shores are a source of high ecologic, economic, and social resource value to local communities, and the state.

In December 1994, the Oregon Department of Fish and Wildlife prepared an "Oregon Rocky Shores Natural Resource Inventory". This inventory focused on natural resources, human use, and potential human influence on sensitive shoreline habitats. Based on the data generated from this inventory, the Rocky Shore Management Strategy, a component of the Territorial Sea Plan, was prepared. This strategy provides the rocky shores policy framework, methods for carrying out the rocky shore strategy, existing rocky shore management, the context of management, site analysis and categories, and site designations.

Careful, comprehensive management of rocky shores is a critical element of Oregon's Coastal Management Program. The Rocky Shore Management Strategy is to be carried out by Oregon Parks and Recreation Department through site management of state parks and the ocean shore, and park education programs. To date, Oregon Parks and Recreation Department has not developed site management plans for any of the rocky shores under its jurisdiction. However, Oregon Parks and Recreation Department does have an extensive rocky shores interpretive program.

Offshore and near shore areas are coming under increasing focus by resource management agencies and the fisheries industry as fish stocks and general habitat conditions decline along many of the nation's coastal areas. The idea of

establishing some type of Marine Reserves in these areas has been discussed in Oregon and will be taken up again by the Ocean Policy Advisory Council, in the future. In many places intertidal rocky shores and near shore/off shore habitats are connected and influence the habitat condition overall.

General Rocky Shore Issues and Concerns

Many of the same people who come to the beach to recreate, also enjoy the rocky shores, near shore and off shore areas. However, increased use of these areas can result in increased human disturbance that may upset the fragile ecosystems. If a significant decrease occurs for a particular species, that species too could become listed as threatened or endangered under the federal or state endangered species act requiring increased management to protect the species. Management actions to protect species could result in more restrictions on human activities on the rocky shores, near shore and off shore areas.

Recommended Management Actions for Rocky Shores and Near Shore/Off Shore Areas

a. Assist Oregon Department of Fish and Wildlife, where applicable, in the development of their Near Shore Conservation Plan.

b. Address issues that affect rocky shores through a partnership with other state and federal agencies.

c. Expand Oregon Parks and Recreation Department's interpretive programs informing the public about the importance of these habitats and how they can enjoy these areas without disturbing the wildlife that rely on them.

d. Survey state and federal implementation measures and programs for rocky shore sites. Assess outstanding or unresolved management and implementation needs of the Rocky Shores Management Strategies and the Oregon Parks and Recreation Department, in particular, in light of current information.

e. Work with state and federal agency resource managers and university researchers to analyze the status of information to support updates of the 1994 "Rocky Shore Natural Resource Inventory". Summarize the status of knowledge about rocky shores resources and uses needed to support improved management.

f. Review the Coastal Atlas website information presented, or available for, each rocky shore area and note information gaps, overlaps, and inaccuracies. Work with Department of Land Conservation and Development to enter new or updated information into Coastal Atlas.

g. Prepare site management plans for designated rocky shores sites under Oregon Parks and Recreation Department jurisdiction.

h. Work with the revamped Ocean Policy Advisory Council toward the identification of a marine reserves program, and define Oregon Parks and Recreation Department's role in implementing such a program, if any.

Balancing the Demands:
Cultural Resource Management
Chapter Four

Oregon is extremely fortunate to have coastal public lands that contain a representative sample of many of the major prehistoric and historic resource types. Because of the dynamic nature of the ocean, river and creeks associated with the beaches, dunes, cliffs and headlands along Oregon's coast, evidence of past human use is often subject to erosion and flooding. This natural threat, together with impacts from development and current human use are quickly erasing traces of the older cultures along the coast. Since many sites on private lands have already been destroyed by development, the sites on public lands represent the primary source of information about the prehistory and early history of the Oregon Coast.

One of the tasks for the Ocean Shore Management Plan is to understand where important historic and prehistoric resources are so that they can be studied, inventoried and managed appropriately. This plan compiled confidential mapping of known sites from past surveys, as well as "likely areas" based on typical site criteria. The mapping has been studied in making recommendations about future beach use in this plan. Focus areas and management recommendations for protecting these resources are discussed later in this chapter.

For planning purposes, "cultural resources" are meant to be historic or prehistoric features, sites or artifacts; or activities traditionally done by American Indians as protected by state and federal law.

Cultural Resource Issues and Concerns

Several members of the public have expressed concern that this planning effort includes consideration of how best to manage and protect the historic and prehistoric resources on the Ocean Shore. This concern is shared by Oregon Parks and Recreation Department and the State Historic Preservation Office. Concerns have included obtaining a comprehensive inventory, and setting up a department policy and management protocol for addressing resource areas. The department, and others, have conducted dozens of surveys at many locations on the coast over the years, and is currently undertaking a statewide survey of its lands, including the coastal properties. These surveys will provide an excellent starting point but cannot, by themselves, provide a conclusive and complete inventory to guide future actions for the Ocean Shore. Having a reliable protocol and consultation procedure is the most important approach to good management of these important resources.

Protecting cultural resources is of particular interest to the American Indian tribes historically and culturally affiliated with the coast. Representatives of these tribes have worked with the department on this plan, as well as on site specific projects.

Cultural Resource Focus Areas

Focus areas have, or are likely to have, significant prehistoric cultural resources, such as prehistoric middens, (old dump sites of discarded shellfish shells and other garbage) areas of scattered rock artifacts, seasonal campsites, and more permanent village sites and burials.
These areas are generally:

- Places of level ground close to good fishing or shell fish collecting areas, and
- Places associated with access to fresh water.

Because of the richness of the Oregon coast in these kinds of places, pre-settlement focus areas are very numerous and occur on or along almost every beach. Given the abundance of sites, any real focus would need to be based on the relative significance of some sites over others. Research materials such as the Native American Archaeological Sites of the Oregon Coast National Register provide a combination of scholarly research and fieldwork to support this decision-making. In this regard village and burial sites are generally considered to be more significant than other sites, however all sites need to be protected by law and cannot be disturbed without going through due process.

There are a number of known sites on Oregon Parks and Recreation Department land that are suffering from current and past impacts either from human use or erosion. Proposed management actions for these sites are being recommended in the department's statewide archeological survey of department lands.

Focus areas can also be identified for historic sites (areas inhabited since Euro-American settlement), such as old wharves, jetties, resources associated with the reservation period, old home and farm sites, and shipwreck sites, especially where they occur on the Ocean Shore or within adjacent state parks. Also, entire cultural landscapes exist because of the changes in lifeways from early American Indian practices to Euro-American activities. Examples include Fort Stevens State Park and its beaches that include both pre and post settlement landscape features.

Cultural Resource Management Recommendations

Ideally, Oregon Parks and Recreation Department's goal is to identify and protect all significant archeological and above ground, pre-historic and historic resources within the department's jurisdiction, including the Ocean Shore and associated Oregon Parks and Recreation Department parks. However, due to the extremely dynamic nature of the Ocean Shore setting, that may not be feasible in all places. In those places where it is not feasible to protect the sites, they will be inventoried, monitored and, where appropriate, interpreted. In some places, where impacts are unavoidable, the department's long-term goal is to fully document the site and archive the associated cultural material and records. The department supports this plan covering the full range of American Indian practices, sites and artifacts, as well as the process of consultation regarding potential impacts on prehistoric cultural resources and Indian practices, and the interpretation of them.

1. Complete the department's statewide archeological and historic survey of department lands, including those on the coast.

2. Based on those surveys and assessments identify priority places for the completion of additional survey work, condition assessments, and management plans.

3. Obtain needed funding and permitting to proceed with the priority projects.

4. Avoid, to the best extent possible, significant archaeological sites when planning and undertaking park projects, and minimize adverse effects through avoidance or mitigation if avoidance is not possible.

5. Use a State Historic Preservation Office protocol when undertaking any ground disturbing activities that will affect or may have the potential to effect archaeological resources or in considering changing old structures and site features.

6. Conserve important cultural resources on private lands through cooperative solutions with willing landowners.

7. Conduct any needed consultation with affected tribes regarding potential impacts to cultural resources.

Note:

This chapter focuses on historic and prehistoric events and remaining artifacts in the landscape. Other "cultural" activities such as traditional beach uses, and arts events are covered in the recreation and permitting chapters. Traditional uses such as driving on the beach and dory fishing have been addressed as both recreational activities that need to be accommodated on a regional basis and as activities that need to be supported and enforced in rule and through permitting. Arts events are addressed under the permitting chapter, indirectly, as one of the many activities that may need to obtain a Miscellaneous Use Permit to occur on the beach.

Balancing the Demands:
Scenic Resource Management
Chapter Five

Settings and scenic areas enhance the recreational experience of the coast and fall within the management responsibilities of the department for its lands and for the Ocean Shore. A recreational setting is the backdrop in which people recreate, including the scenery and the human experience of being there. Some people seek out "crowded", urban beach settings as a desirable destination, while others are seeking solitude and solace in a more natural, quiet setting. The Oregon Ocean Shore offers the full range of settings. The department's goal is to continue to provide for the range of settings, on a regional basis, so that recreationists can find the kinds of settings they desire.

Ocean Shore recreational settings are heavily influenced by adjacent land uses, including the number and type of accesses, development and the amount of intervening screening vegetation or topography. A primary reason the beach is so popular for most people is it's natural setting of sand and water adjacent to more developed settings with human comforts and easy access. One of the most popular settings for beach activities, according to surveys, is "roaded natural", which has natural scenery, roads and recreational facilities such as developed campgrounds.

However, recreationists cannot always find the mix of specific recreational characteristics that they desire. Sometimes the most preferred settings are not available at a reasonable cost or distance, and the visitor chooses a less-preferred setting. It is very likely that many visitors consistently choose a more developed setting than they desire because of the amenities or conveniences associated with them (such as toilets, showers and paved roads). Although surveys suggest the demand for pristine, primitive settings is increasing, these places, especially those with very rugged access, are still receiving low levels of use. This implies that most people are unwilling to accept a primitive experience to access a more pristine setting. This is even true for beaches open to motorized vehicles if the access is long and rugged.

On the other hand, pristine ocean shore settings are a finite resource, meaning they are next to impossible for people to "create". Coastal area development is constantly growing and infringing on increasingly natural areas, reducing the number of undeveloped settings we now have. The result is an increasing amount of the more populated and developed settings and a declining amount of the natural, less visited settings. To continue to offer places where people can find solitude in a natural coastal setting a portion of these places need to be protected from development and increased visitation by acquisition, scenic easements or other means. There are many stretches of beach on the Oregon coast that provide this type of setting today, that, if protected, could continue to do so long into the future.

Protecting natural resources for their own sake can have a direct effect on protecting pristine, primitive settings for recreation. This includes certain natural features that are important to scenic values such as fossil forests, rock formations and areas of driftwood. Protecting historic resources such as lighthouses can also have a positive effect on coastal scenery as viewed from the beach.

The department is committed to working with local governments and landowners in key visual areas along the coast to find scenic protection solutions that preferably do not preclude private development or provide some incentive for development that is appropriate to the setting or view.

The Habitat Conservation Plan will identify areas where protective measures for snowy plover recovery will be implemented that will benefit both the snowy plover and primitive (low use, rustic) settings.

Regional Settings

Each of the coastal planning regions has a unique mix of settings, development and use pressures that can affect the protection of primitive settings. The following section discusses existing conditions, issues, focus areas and management recommendations regarding Ocean Shore settings and adjacent lands, on a region-by-region basis.

The North Coast

Existing North Coast Settings

The North Coast tends to have more urban settings than the other planning regions. These settings are associated with development in and around the coastal communities of Seaside, Cannon Beach and Tolovanna, Manzanita, Rockaway and Pacific City. In some of these communities, motel complexes and large organized events greatly contribute to the concentration of use on adjacent beaches on peak weekend days. In contrast, the North Coast's several small, quaint communities offer unique low key, less developed urban settings for enjoying the beach and "getting away" from the more intense inland urban life. These communities include Oceanside, Netarts, Gearhart, Neskowin and Tierra del Mar. There are also a couple of very small rural residential communities with small-scale urbanized settings within a large natural landscape, such as Cape Meares and Arch Cape. Together these communities add up to about 20 linear miles of urban settings along the beach.

There are also two small, but very popular state park beaches, in this region, that become urban settings on peak days purely because of the high level of use and crowding. These park beaches include Indian Beach at Ecola State Park and Short Sands Beach at Oswald West State Park.

The interspersed forested, rocky headlands, long undeveloped spits, extensive dunal area along the Clatsop Plain and adjacent undeveloped beaches balance out the urban settings on the North Coast and provide a more pristine backdrop for the Ocean Shore in this region.

For the most part, however, North Coast beaches have few opportunities for finding low use settings close to accesses on peak days. Seclusion is available, but only after a long walk from an access along a spit or if visited during the off season. During the high use summer season, especially on weekends and holidays, there are very few beaches on the North Coast where seclusion can be found. Those that can be found are secluded because of limited public access to them.

North Coast Scenic Issues

There are five key issues regarding Ocean Shore recreational settings in this region.

1. Concern that urban settings on peak days and the very crowded Indian and Short Sands beaches will become even more crowded in the future, resulting in visitor conflicts and potential displacement of visitors to other areas.

2. Concern that the spits may be vulnerable to development, (either recreational or residential), and the few existing areas of seclusion on the North Coast will be reduced.

3. Concern among residents of the subdivisions at the north end of Gearhart that accreted sand has blocked views of the ocean from their homes. From the public perspective, (as seen from the beach), this intervening dunal area screens views of the extensive residential area from the beach, and provides a sense of a less developed beach setting.

4. Concern that more undeveloped adjacent lands will be developed, further extending the urban setting. Most of these locations are not easily seen from the beach, but would contribute more local visitation to the beach.

5. Concern that traditional viewpoints are losing their views to encroaching vegetation.

North Coast Scenic Focus Areas

1. Short Sands and Indian Beaches.
2. The spits.
3. Crowded city beaches including Seaside and Cannon Beach.
4. The dunal area between the residences of north Gearhart communities and the water.
5. Potential development areas including the Sunset Beach, Humbug Point, Cape Beach, Cape Meares, Oceanside and Netarts areas.

North Coast Scenic Resource Management Recommendations

1. Except for commitments related to the Lewis and Clark commemoration, Oregon Parks and Recreation Department will limit parking and bus access to Short Sands and Indian Beaches to the current level of use.

2. Residents in the north Gearhart area have the option of working with their local government to initiate a sand management project in their area that would "lower" the dunes between beachside homes and the beach, and re-establish traditional views. This jurisdiction is currently east of the beach zone line and is not an Oregon Parks and Recreation Department permitting responsibility unless dune grading would extend into the department's jurisdiction to the west.

3. Oregon Parks and Recreation Department, and Clatsop and Tillamook Counties own key parcels along the North Coast that act as buffers, or relief, from the developed settings. The Humbug Point area is one area on the North Coast, where additional private land conservation would make sense concerning protecting settings along the beach. Also, this area might be investigated to see whether expanding Arcadia Beach State Recreation Site to the east would be feasible.

4. The department may identify important "scenic features" that should be protected from development or other impacts for their scenic value.

5. The department will work with Oregon Department of Transportation and Department of Forestry to identify areas along Highway 101 and at viewpoints that need vegetation management to restore desired views.

The Central Coast

Existing Central Coast Settings

This planning region has fewer large communities along the beach than the North Coast but more extensive rural subdivisions. The beaches at Lincoln City and Newport offer intensive urban settings for enjoying the beach, while Florence and Waldport offer less intense, more residential urban settings. All of these communities (except Waldport) have large motel complexes along the beach or above it, bringing even more concentrated beach use. Large rural and urban subdivisions, with access mostly via individual properties and some street ends, include Gleneden, Roads End, Seal Rock, Bayshore, Lincoln Beach and Driftwood Shores. All told, the urban and suburban settings in this region add up to about 25 linear miles.

The beaches in this region are interspersed among a number of rocky intertidal areas, terraces and cliffs, and a few headlands and points. Additional urban and rural subdivisions are located in the rocky areas, adding to the total number of urbanized miles in this region. In contrast, at the south end of the region, the Dunes National Recreation Area provides approximately 23 miles of continuous undeveloped, natural beach settings. Much of this land also falls into the "primitive" recreational setting category with beaches more than a mile from a beach access parking lot.

This region has more opportunities for access to secluded, primitive and pristine beaches than the North Coast, but fewer than the South Coast.

Central Coast Scenic Issues

Issues for this region's recreational settings are similar to several concerns discussed for the North Coast.

1. Concern about expanding urbanization and its affect on beach settings. There are large areas of potential development in the upland areas of Lincoln City and its suburbs, Depoe Bay, Newport, Waldport, Yachats and Florence. However, most of the beachside property zoned for development has already been developed.

2. Concern over development of private or county lands on the Umpqua Spit impacting beach settings in future years. The other major spits in the region are generally precluded from development. The Siuslaw River spit is owned by the USDA Forest Service Dunes National Recreation Area, and the Siletz River spit is too erosive and is precluded from additional development by zoning restrictions.

3. Concern about traditional viewpoints losing views to encroaching vegetation.

Central Coast Scenic Focus Areas

1. Rural residential areas south of Newport and north of Waldport.
2. West of 804 Trail in north Yachats and through Yachats, where the trail runs along the beach.
3. South end of Neptune State Scenic Viewpoint.
4. Land between Rock Creek area and USDA Forest Service lands, and Carl Washburne State Park.
5. Land between Carl Washburne State Park and Heceta Head Lighthouse State Scenic Viewpoint.
6. Umpqua River spit.

Central Coast Scenic Resource Management Recommendations

1. With the exception of the Umpqua spit, Oregon Parks and Recreation Department should consider pursuing opportunity acquisitions, easements or trades for the Focus Areas listed above, to attempt to

limit development in these areas. The USDA Forest Service, Dunes National Recreation Area or Douglas County should consider acquisition, easements or trades on the Umpqua River spit.

2. The department may identify important "scenic features" that should be protected from development or other impacts to their scenic values.

3. The department will work with Oregon Department of Transportation and Deptartment of Forestry to identify areas along Highway 101 and at viewpoints that need vegetation management to restore desired views.

The South Coast

Existing South Coast Settings

The South Coast region has far fewer, and smaller communities along the Ocean Shore. Bandon, Coos Bay, North Bend, Gold Beach, Brookings and Harbor have a substantial impact on the use of adjacent beaches. The community of Port Orford has a lighter urban influence on its beaches due to its small population and smaller area of ocean frontage. Some rural subdivisions that contribute a lesser urban influence on South Coast beaches include the Bastendorf Beach/Yoakum Point area, the Ophir area, Nesika Beach, south Harbor and the McVay Rock area. These areas total no more than about 16 linear miles of urbanized lands along the ocean shore. There is also another 3-4 miles of Ocean Shore that adjoin very dispersed, large parcel rural residential development, that do not raise the setting to an urban level, but probably keep it closer to a "roaded natural or modified" setting. These areas include the Seven Devils/Five Mile Point area of Coos County, and the Devil's Backbone to Otter Point area.

The north end of the region has about 15 linear miles of beach in the Dunes National Recreation Area, with very light recreational development at access points. Almost none of the facilities can be seen from the beach. There is another 6 miles of undeveloped beach along the Coos Bay North Spit that is mostly publicly owned. Very few structures are visible from the beach on the spit. Most of these areas are lightly used, except close to Winchester Bay. Federal agencies may consider adding public access to these lands. If so, the department urges them to consider the potential loss of remote settings due to additional access.

The region also has many miles of forested rocky headlands including Cape Arago, Cape Blanco, Port Orford Heads to Humbug Mountain and Otter Point, Cape Sebastian, Crook Point and Sam Boardman State Scenic Corridor. The rocky headland areas of the South Coast are among the most scenic places in the country, often featured in car commercials and Oregon tourism promotions.

South Coast Scenic Issues

1. Concern about the potential construction of a few, very large "showpiece" homes above very scenic locations. One or two of these buildings has been constructed in the last few years, with moderate impacts on the setting.

2. Concern about expanded development of residential areas in some locations.

3. Crissey Field site will be developed by the department in the next few years as a travel information center and beach access. Some feel it needs to be very low key and encourage only low level visitation. Others support the visitor center approach, but would like the facilities to be screened from view from the beach.

4. Concern about traditional viewpoints losing views due to encroaching vegetation

South Coast Scenic Focus Areas

1. Potential large tract residential construction at scenic coastal areas.
2. Oregon Department of Transportation right of way south of Otter Point State Recreation Site.
3. The Borax development proposal across the highway from Lone Ranch beach access.
4. Sam Boardman and Cape Sebastian area.

Scenic Recommendations:

1. Oregon Parks and Recreation Department urges Curry and Coos Counties to continue to carefully consider the potential visual impact of rural homes in important scenic areas. If necessary, they might identify what the key scenic areas are and implement placement, screening, square footage and color development standards. In critical locations, Oregon Parks and Recreation Department may consider acquiring parcels to address this problem.

2. For the proposed Borax development in Brookings, Oregon Parks and Recreation Department urges the city of Brookings to implement setbacks from the highway and other visual standards to protect views from the beach.

3. Oregon Parks and Recreation Department will pursue acquiring the Oregon Department of Transportation right of way land that is located south of Otter Point State Recreation Site and flanks the county road there to retain the "country road" setting.

4. Development at the Crissey Field site will be done according to the approved master plan, and will include visitor center and beach access use.

5. The department will encourage the Dunes National Recreation Area to consider the potential loss of remote settings due to proposed new accesses.

6. The department will complete and implement a vegetation management plan for Sam Boardman and Cape Sebastian State Scenic Areas with the objective of restoring many traditional views of the ocean.

7. The department may identify important "scenic features" that should be protected from development and other impacts to their scenic values.

Balancing the Demands: Recreational Use and Management Chapter Six

Recreational Activities

The plan has examined a wide array of recreational activities, through surveys, trends analysis and observations. The result has been a general overview of the levels, types and distribution of recreation activities on the beaches, without a discussion about the particular demands and opportunities for certain key activities. A summary of that information can be found in the Appendix under "Recreation on the Ocean Shore".

This chapter takes a closer look at certain key recreational activities occurring in each of the planning regions and includes an examination of activity demands, current locations, setting needs, conflict problems and management recommendations for addressing current and future use. Management recommendations include identifying where to provide new or relocated opportunities for specific recreational activities.

Camping

Camping Demand and Setting

As discussed in earlier chapters, the ocean beach is a destination for a number of recreational activities, drawing visitors seeking a range of settings for their recreational experience. This is particularly relevant for camping at the coast. The Ocean Shore is one of the most popular destinations for camping in Oregon. To accommodate this need, Oregon Parks and Recreation Department provides fourteen campgrounds with easy access to the ocean beach. Most ocean shore state park campgrounds are full on summer weekends, and as a result have to turn many "drop in" campers away. Some of the coastal state park campgrounds also fill on most summer weekdays. Other campground providers on the coast, both public and private offering a similar "close to the beach" camping experience, see similar high levels of use.

Current coastal camping opportunities range from private high amenity, urban setting sites to remote, primitive camping on the beach itself. In between are the typical and most numerous campgrounds with developed sites, paved roads, toilets, showers, and marked trails to the beach. Such campgrounds are within natural settings that include trees, grass and streams. All of the state park campgrounds on the coast provide moderate amenities within a natural setting. Campers prefer campgrounds that are as close to the beach as possible, and preferably provide a view from some campsites.

There is a need to consider whether more peak camping can be provided on the coast in appropriate locations and settings. Another strategy is to offer incentives to encourage campers to camp during the week and the shoulder seasons of spring and fall. The development of yurts and camper cabins can encourage campers to stay in the parks in the winter months.

There continues to be demand for camping right on the beach, or right next to the beach, in undesignated, primitive areas, that are usually away from developed facilities of any kind. This type of camping can be "hike

in" or "backpacking style" or is accessible by four-wheel drive vehicles. Low levels of beach and beachside backpacking camping currently occur at scattered locations on the coast. Many traditional beach camping locations have been closed over the years due to a lack of supervision and sanitation, and because of conflicts with upland residential uses. Currently, most beach camping occurs on beaches that are open to driving or that can be reached by boat. Some unauthorized beach camping is occurring in locations that are closed to camping, such as on beaches adjacent to or within state parks.

Even though camping right on the beach is occurring in low numbers it is a unique recreational experience that Oregon Parks and Recreation Department would like to provide opportunities for, in cooperation with other providers. A particular need is designated primitive camping for long distance hikers who are using the Coast Trail. Camps need to be designated at intervals that correspond with the typical distance hiked in one day. Oregon Parks and Recreation Department will identify sites for Coast Trail camping through its Trails and Field Operations programs.

Another type of camping, horse camping, involves campers trucking their horses to a developed horse campground near the beach, and riding from the campground on designated trails to the beach. Horse campgrounds are usually located far enough from the beach to provide the distance needed for a day ride to the beach and back. Horseback riders are generally not riding onto the beach with camping equipment on pack horses and setting up camp on the beach. Although horse camping in designated campgrounds is occurring in relatively low numbers compared with RV or tent camping, it is a growing activity. One new horse campground near the beach is already being planned for by Oregon Parks and Recreation Department, at Fort Stevens State Park.

Current Camping Locations and Settings

North Coast: Oregon Parks and Recreation Department provides three standard tent/RV campgrounds, (at Fort Stevens, Cape Lookout and Nehalem Bay State Parks.) one horse camp (at Nehalem Bay State Park) and one "hike in" campground (at Oswald West State Park). Devils Lake State Park provides camping on the east side of the highway. A horse camp is proposed at Fort Stevens State Park. Nehalem Bay, Fort Stevens and Cape Lookout State Parks also provide yurt or camper cabin camping opportunities with hiking access to the beach.

In addition, the USDA Forest Service provides camping at Sand Lake Recreation Area for both motorized campers and for traditional tent/RV camping. Tillamook County provides camping near the beach at Whalen Island, and very close to the beach at Barview Jetty. Private campgrounds are provided north of Pacific City and at Happy Camp in Netarts. "Hike in" camping right on the beach has been closed in most areas. While there are still a few quiet beaches that are legally open to camping, most have poor conditions for camping and have low use levels. Some unauthorized "boat in" camping currently occurs at the end of the spit at Bob Straub State Park.

Central Coast: Between Cascade Head and the Umpqua River, Oregon Parks and Recreation Department provides four tent/RV campgrounds with hiking to the beach (at Beverly Beach, Jessie Honeyman, and South Beach State Parks and Beachside State Recreation Site) and one more campground on the east side of Highway 101 (at Carl Washburne State Park). Several of these camps offer yurts or camper cabins. Beachside State Recreation Site offers campsites directly adjacent to, and with views of, the beach. Honeyman State Park offers direct off highway vehicle access to the Dunes National Recreation Area from one of its camp loops. None of these parks provide for "hike in" camping or horse camping.

There are about ten USDA Forest Service and Dunes National Recreation Area campgrounds in this area, including Tillicum Beach, which is located directly adjacent to the beach. One of these campgrounds, at Baker Beach, accommodates equestrian use. Most of the USDA Forest Service campgrounds are small to moderate in size, with no more than 90 sites at the largest camp. These campgrounds are located in very natural settings, without showers or paved roads. A few offer direct off highway vehicle access to riding areas in the Dunes National Recreation Area. The USDA Forest Service also provides two smaller campgrounds on the east side of Highway 101. There are no county campgrounds on the Central Coast with hiking access to the beach, and only two private camps adjacent to the beach. Both are located in urban settings.

South Coast: Oregon Parks and Recreation Department provides six tent/RV campgrounds with hiking access to the beach south of the Umpqua River (at Umpqua Lighthouse, Bullards Beach, Cape Blanco, Harris Beach, Sunset Bay and Humbug Mountain State Parks) and one horse camp (at Cape Blanco State Park). The agency also provides two more tent/RV camps on the east side of Highway 101 (at Alfred Loeb and William Tugman State Parks). Several of these camps also offer yurts or camper cabins. Some backpackers hike in to Blacklock Point in Floras Lake State Natural Area, camping there illegally.

The Dunes National Recreation Area provides tent/RV camping at four campgrounds with hiking or motorized trail access to the beach. Dispersed camping is allowed on much of the Dunes National Recreation Area in this region, and is accessed primarily by off highway vehicle enthusiasts. Coos and Curry Counties each provide one campground near the beach with hiking trails to the beach. The private sector provides three campgrounds with hiking access to the beach, two of which are directly adjacent to the beach.

Camping Conflicts

Existing campgrounds have few user conflicts or resource protection concerns. Resource impacts related to camping are mostly indirect and involve the attraction of predators and scavengers that can impact ground nesting birds in the area, but also include impacts on campground vegetation. Also, campgrounds that are located within a mile of a sensitive habitat area may produce some indirect impacts on habitat from hikers walking in restricted areas. Regarding user conflicts, campers have learned over time, which camps are predominantly used by off highway vehicle riders, equestrians and by non-riders, and choose accordingly. Also, horse camps and off highway vehicle camps are located some distance from other campgrounds. Despite the distance, off highway vehicle sounds can travel a mile or more, especially without topographic barriers, and are generally negatively received by campers in other areas. Distance does help to avoid conflicts with equestrian campgrounds, abating odor problems or direct conflicts with other campers.

Some designated campgrounds have indirect affects on snowy plover areas, through human occupation and associated predators. This issue is addressed in the Habitat Conservation Plan. However, the Habitat Conservation Plan does not restrict existing designated campground use. Undesignated camping may result in conflicts with snowy plovers, especially if camping occurs within the boundaries of a snowy plover management area. The Habitat Conservation Plan will restrict camping within the boundaries of the snowy plover management area, at least seasonally. Any proposed campgrounds will need to be located at an appropriate distance, to avoid conflicts with the Habitat Conservation Plan.

Some unauthorized “hike in” camping is occurring on or near beaches, adjacent to state park lands, in areas currently closed to camping. However, some of these locations may be good places to allow managed, primitive, “near beach” designated camping, such as campsites needed for Coast Trail users.

Potential Campground Location Criteria
There are a number of requirements, or site characteristics, that should be considered in determining future campground locations at the Ocean Shore, in order to avoid impacts on natural or cultural resources.

Requirements and constraints:

1. The ideal campground location should be within ½ mile hike to the beach. However, if the site is intended for off highway vehicle use, the campground could be as much as 2 miles from a beach that is open to driving.

2. The location should avoid encouraging campers to enter a snowy plover management area or other sensitive resource area. Proposed designated campgrounds should not be sited near sensitive natural or cultural resources. A minimum distance of one mile from sensitive habitat areas, such as snowy plover management areas, is desirable.

3. Sufficient developable acreage is needed to provide for the type of camping that is intended. Potential campground sites range from half an acre for designated, primitive, backpack camping to 100 acres or more for a larger state park style campground.

4. Topography, soil conditions and distance from highways and utilities need to be considered in determining the feasibility of developing access to a site.

5. All potential campground locations need to reasonably accommodate basic support facilities such as drinking water and sanitation. More developed campgrounds need to provide electricity and hot showers.

6. The location should fill a gap in campground distribution, for the type of camping to be provided, and should not appreciably change the use level on the nearby beach from desired levels. New campgrounds that are not intended for off highway vehicle use should not be located near current off highway vehicle areas. Horse camps should be located a reasonable distance from other camps and day use areas. Coast Trail campsites should be spaced according to the distance traveled in a day's hike. Primitive campgrounds should be located to allow park staff access for supervision and maintenance, but should generally be at some distance from other park facilities, residential areas, communities and neighbors to provide a more remote setting.

7. Proposed campgrounds requiring land acquisition should rely on the identification of willing sellers. New campgrounds need to be supported and approved by local governments in the land use process.

8. Hike in camping should not occur in day use areas.

Camping Opportunities: Focus Areas
Oregon Parks and Recreation staff has completed a generalized analysis of the three coastal regions and have made preliminary recommendations for providing new camping opportunities of different types. The analysis has identified a growing demand for destination beach-related camping that continues to surpass peak supply, especially for moderate amenity camps in natural settings. However, finding acceptable sites in any of the regions is extremely difficult given the broad resource protection and topographic constraints of the area, and the extent of areas already committed to development. The proposed sites mentioned below for Oregon Parks and Recreation Department implementation are either already a part of approved master plans

or would need a master plan. They would also require local governmental approval. Proposed sites located within federal lands are recommended to be considered by the appropriate federal agency. Other sites might be considered for development by county governments or private providers. In some cases, land trades may be required to support management by the most appropriate provider.

North Coast:

1. New horse camp at Fort Stevens. This is in an approved master plan.

Central Coast:

1. New hike in camping expansion at Beverly Beach State Park. Needs to be included in a master plan update. Will require acquisition.
2. Camp expansion at South Beach State Park. This is in an approved master plan.
3. New hike in camp at Washburne State Park. Needs to be included in a master plan update.
4. New hike in camp at Heceta Head State Scenic Viewpoint. Needs to be included in a master plan update.
5. New campground at north jetty, Siuslaw River. Needs Army Corps of Engineers approval as an Oregon Parks and Recreation Department project.
6. New horse camp at Siuslaw River south spit, Dunes National Recreation Area. Needs Dunes National Recreation Area support.
7. New tent/primitive camping at Three Mile Creek/Sparrow Creek Road, in Douglas County, to be located a minimum of one mile from the beach. May require acquisition, and Dunes National Recreation Area and county support.

South Coast:

1. New designated camping on multiple ownerships north of Dunes National Recreation Area in Douglas County. Under consideration in 2004 for county approval. This is in an approved master plan.
2. Expand camping at Bullards Beach State Park. This is in an approved master plan.
3. Cape Blanco tent/RV camp expansion. This is in an approved master plan.
4. New designated hike in camp at Cape Sebastian. This is in an approved master plan.

Camping Opportunity Recommendations

a. Continue to allow camping on the beach via the Three Mile Creek/Sparrow Creek Road access, except within Habitat Conservation Plan snowy plover management areas. Do not improve the road to the beach within one mile of the beach to keep vehicular use levels low.

b. Support the provision of the expanded and new campgrounds listed above. Local governments could pursue Oregon Parks and Recreation Department grant funds for implementation of some of the sites.

c. Complete needed Oregon Parks and Recreation Department master plans or updates for proposals that are not in an approved master plan.

d. Identify feasible locations for needed campsites for Coast Trail hikers.

Driving On the Beach: Off Highway Vehicles

Demand to Drive Off Highway Vehicles On the Beach
This activity group is growing rapidly as shown by licensing records and by recent recreation surveys. However, most of the riding occurs just inland from the beach and is not directly addressed in this plan. Demand to drive off highway vehicles on the beach, at Sand Lake Recreation Area, is growing, resulting in heavy use on peak days. However, in the southern portion of the Dunes National Recreation Area, where beach riding areas can only be reached by driving a couple of miles along rough sand roads, use in these areas remains relatively low compared to Sand Lake Recreation Area usage.

Current Beach Riding Locations and Settings
Currently, driving off highway vehicles on the beach itself is only allowed on certain beaches within the Sand Lake National Recreation Area, and in the Dunes National Recreation Area from near Ten Mile Creek to the Horsfall Beach access and from South Jetty Road in Florence to near the Siltcoos River. These locations provide an opportunity to ride off highway vehicles on the beach in each of the three coastal regions. Illegal riding occurs on many other beaches in low numbers. The USDA Forest Service and Bureau of Land Management, and Coos and Douglas Counties provide the current off highway vehicle access sites to the beach. Oregon Parks and Recreation Department provides indirect access from a portion of the Honeyman State Park campground, via Dunes National Recreation Area land.

The off highway vehicle riding at Sand Lake Recreation Area (both beach and inland), and inland riding areas in the Dunes National Recreation Area just south of Winchester Bay, are very heavily used and result in near urban settings on peak days. On non-peak days, these areas are little used especially in the non-summer season. Portions of the Dunes National Recreation Area beaches that are open to off highway vehicles are little used due to difficult access. The challenging, long distance riding required to access these remote sites is part of the experience popular with some riders.

Off Highway Vehicle Beach Riding Conflicts
There are some areas where off highway vehicle riding conflicts with resource protection and non-motorized use, especially if riders are driving illegally on beaches that are closed to off highway vehicle use. In some areas, non-riders complain about off highway vehicles intruding on their quiet setting.

Conflicts often occur among riders during peak use, when some riders drive too fast or recklessly. Accidents and injuries are fairly common on peak summer weekends, leading one county to question whether the cost of providing the emergency services to riders is worth the revenue riders bring to the local economy.

Satisfying the Need for More Off Highway Vehicle Riding Areas
Opening more beaches to driving is unlikely due to potential user conflicts with other beach users who look for a quieter setting, and because of potential impacts on natural resources.

There is one inland site, near the beach, just north of the Dunes National Recreation Area border and south of the Umpqua River, where off highway vehicle riding has occurred for years without officially being designated for such use. In 2003-04, Oregon Parks and Recreation Department and Douglas County, in cooperation with the other landowners, completed a planning process to determine what portion of this area should be dedicated to off highway vehicle use. Much of the undesignated off highway vehicle riding area is proposed to be moved to the south, and a designated staging and instruction area, and camping facilities developed. This

area was found to be appropriate for riding because it was located well away from non-riding areas and was adjacent to the riding area within the Dunes National Recreation Area. All of this riding occurs off the beach.

Off Highway Vehicle Opportunities: Focus Areas

1. New designated inland riding, in Douglas County just north of the Dunes National Recreation Area, is supported by the department and Douglas County.

2. Proposed new access sites in other areas of the Dunes National Recreation Area.

Off Highway Vehicle Opportunity Recommendations

a. Support continued beach-riding opportunities for off highway vehicles, where it is currently allowed (at Sand Lake Recreation Area, and the two locations in the Dunes National Recreation Area). Provide stronger boundary signs and more supervision on peak days and during the snowy plover nesting season.

b. Support provision of the designated riding area and related facilities in Douglas County to be managed by Douglas County.

c. Offer an opportunity for persons with disabilities to obtain a permit to drive an off highway vehicle on beaches that are open to street legal driving.

Driving on the Beach: Street Legal

Many miles of ocean beach are currently open to street legal driving. Legally, these beaches are not open to vehicles that cannot be licensed to drive on the state's highways. Most street legal driving is simply done for the enjoyment of driving in the unique beach environment. Some use the beach as a by-pass from busy Highway 101. However, beach driving is also done to access a place on the beach for clamming, crabbing or fishing from the beach, surfing, windsurfing or camping.

Demand for Street Legal Beach Driving

Recreational use surveys have not attempted to measure the amount of street legal driving occurring on Oregon's beaches. However, providers and users alike have observed that popular driving beaches are heavily used, especially during extreme low tides for clamming purposes, during fishing seasons and where access onto the beach is well maintained and easy to negotiate.

Various surveys have found that driving for pleasure remains one of the top recreational activities nationwide, and the country in general is driving more per capita. In Oregon, sightseeing/driving for pleasure is one of the top five outdoor recreation participation activities for both Oregon residents and out of state visitors. This together with a growing population indicates that driving on the beach is likely to also be increasing.

Current Locations and Settings for Street Legal Beach Driving

There are a number of beaches where street legal driving is currently allowed.

<u>North Coast</u>:

1. The Clatsop Plains beach from the Columbia River nearly to the Necanicum River, except for summer afternoons and evenings north of Peter Iredale access.
2. Manzanita beach, mornings during the off season.

3. Sand Lake north, except for near the mouth of Sand Lake and except for areas adjacent to the Boy Scout Camp to the north.
4. Sand Lake south and Tierra del Mar, weekdays during the day in the off season except for holidays.
5. North Cape Kiwanda to Tierra del Mar.
6. Pacific City and Bob Straub beaches, except for a small section, just north of Pacific Avenue *and south 1300 feet from the dory ramp*.

Central Coast:

1. Lincoln City, 15th Street access and parking.
2. Siuslaw River to South Jetty Road, daylight hours in the off season except for holidays.
3. South Jetty Road to near Siltcoos River.
4. About one mile south of Tahkenitch Creek to Umpqua River.

South Coast:

1. Coos Bay North Spit, except for seasonal snowy plover restrictions.
2. Whiskey Run and Bullards Beach area.
3. China Creek area in south Bandon, except for seasonal snowy plover restrictions.
4. North Sixes River area.
5. Cape Blanco to Port Orford Heads.
6. Port Orford Heads to Rocky Point area
7. Arizona Beach
8. Nesika Beach
9. Otter Point to Rogue River
10. Rogue River to Myers Creek Rocks

Street Legal Beach Driving Conflicts

Street legal driving can conflict with shorebirds and marine mammals, as well as with snowy plover management areas. Also, in some locations conflicts occur between non-vehicular recreationists and motorized use on the beach. Habitat Conservation Plan management areas are proposed for a couple of locations that are currently open to street legal driving and such use could be curtailed seasonally.

The greatest number of conflicts with non-vehicular recreationists and area residents occurs in the Pacific City area. Common complaints include speeding and reckless driving as well as crowding on the beach where parking is allowed. There is confusion about, or disregard for, the "boat launch only" regulation at the dory access. Similar complaints are heard about driving on the Clatsop Plain beach.

Accommodating Street Legal Beach Driving

Opening more beaches to driving is unlikely, except by permit for persons with disabilities. The reality is that driving will be curtailed in a couple of snowy plover management area and some areas with extremely poor access or no access points, or that are very limited in length, and have received little use in recent years.

Street Legal Driving Opportunities: Focus Areas

The following are potential opportunities to curtail street legal driving to accommodate resource protection, reduce user conflicts with non-vehicular recreationists and where street legal driving has occurred in very low numbers due to access limitations.

North Coast

1. Any Habitat Conservation Plan snowy plover management area restrictions.

Central Coast

1. Any Habitat Conservation Plan snowy plover management area restrictions.

South Coast

1. Any Habitat Conservation Plan snowy plover management area restrictions.
2. Arizona Beach, if it becomes publicly owned.
3. Cape Sebastian to Myers Creek Rocks.
4. Beach from Garrison Lake outlet north to Elk River, except for fall fishing access.
5. China Creek.

Street Legal Driving Opportunity Recommendations

a. Support changes outlined in an approved Habitat Conservation Plan, or related management plan, or that are requested by adjacent local governments.
b. Pursue the curtailments listed above.
c. Support street legal driving in remaining locations where it is legally allowed.
d. Manage to discourage illegal off highway vehicle riding on street legal beaches without a permit.

Dory Fishing

A number of beaches are open to dory boat launching and recovery. Dory fishing is a traditional activity that is done both recreationally and occasionally commercially. Dory boat launching is limited in most locations to very few boats at infrequent times. The biggest concentration of this activity occurs at Pacific City where there is parking allowed by rule on the beach for dory use. This plan does not intend to pursue any curtailment in dory boat launching, except where the use occurs in Habitat Conservation Plan snowy plover management areas. Dory boating at Pacific City does, at times, conflict with surfing, but dories require driving on the beach for their activity to occur.

Horseback Riding on the Beach

Equestrians are a well organized recreational community in Oregon. Many riders are members of the two Oregon equestrian advocacy groups. These equestrian groups have worked hard to provide notice to planning staff of the access sites they are interested in seeing continue. This plan does not propose to close any beaches to horseback riding that are currently open, except for limits proposed in the Habitat Conservation Plan for snowy plover recovery. Oregon Parks and Recreation Department would support opening beaches to horses where cities ask the department to do so, within constraints such as safety and resource protection. The department will work with equestrians and the National Coast Trail Association to improve portions of the Coast Trail for equestrian use.

Surfing and Wind Surfing

Surfing and wind surfing are “location based” activities since they cannot occur without the kinds of wave and wind action necessary for their sports. Surfing tends to occur near jetties, points and headlands that create wave conditions that are right for this sport. Prime surfing sites include Pacific City and Short Sands Beach, but there are numerous sites along the entire coast. Organized events associated with either sport can draw large numbers of people resulting in traffic and parking issues and some conflicts with other uses.

This plan supports the continued use of sites for these activities, except for restrictions in Habitat Conservation Plan snowy plover management areas, and will work with other providers and group organizers to provide for needed parking at access sites as is feasible at each location. Oregon Parks and Recreation Department will also work with the Oregon Health Services Division, as needed, to notify swimmers and surf sport recreationists of any hazards that may occur, in the water due to poor water quality.

Clamming, Crabbing, Surf Fishing and Jetty Fishing

Determining whether and where this type of resource collection can occur is the responsibility of the Oregon Department of Fish and Wildlife. Oregon Parks and Recreation Department supports these activities wherever they are allowed. Many recreationists pursuing these activities access their sites by driving on the beach. In some places, the Habitat Conservation Plan may curtail beach driving and will make accessing some sites more difficult, but should not preclude the activities themselves, as they occur in the wet sand or on rocky areas.

Hiking and Mountain Biking on the Beach and the Coast Trail

Many Ocean Shore beaches are part of the Oregon Coast Trail route. In some locations, topographic or ownership barriers force the trail off of the beach. This plan supports making feasible upland connections for the discontinuous beaches as outlined in the Coast Trail Plan. The Ocean Shore Management Plan outlines a potential trail connection between Cape Arago and Whiskey Run Creek to be pursued.

Hiking the Oregon Coast Trail takes hikers through a variety of jurisdictions with a variety of rules, which can be very confusing. Each year several miles of dry sand beach are restricted to hiking during the snowy plover nesting season. The number of miles of dry sand restrictions is expected to increase as plovers nest in designated Habitat Conservation Plan snowy plover management areas. An objective of the department is providing better public information to visitors on the trail, especially where jurisdictions or rules change.

Also, those few hikers that take long distance, multiple-day hikes often find that camping facilities are not available at intervals that correspond to daily hiking distances. The camping proposals in this chapter help support expanding the options for Coast Trail hikers to find campsites while protecting snowy plover management areas from camping related impacts. More small camping areas are needed for hikers.

Consistent with the National Coast Trail Associations (NCTA) tradition of working in cooperation with all public and private partners toward the mutually shared goal of protecting and enhancing the Oregon Coast Trail, the department will take all of the recommendations of the NCTA's "Missing Links, Priorities and Solutions" report under advisement in the implementation of the Ocean Shores Management Plan. Specifically, Oregon Parks and Recreation Department will continue to strive to accomplish the long-range vision of a continuous recreational trail for hikers along the entire Oregon coast from the Columbia River to the California border. Further, the department will consider the potential of accommodating bicycle and equestrian use of the Oregon Coast Trail where feasible and consistent with other management objectives.

Fireworks

Fireworks are a traditional activity on the Ocean Shore that is currently not allowed by state rule without a permit. Recreational studies have shown that illegal fireworks on the beach occur infrequently, but can become very concentrated in some areas and at certain times of the year, and can contribute to fire threats to

driftwood on the beach and upland vegetation and property. Shooting fireworks on the beach can also conflict with the management restrictions in Habitat Conservation Plan management areas.

The department will work with local governments and fire prevention agencies to identify areas where preventing fireworks on the beach must be enforced, and to determine how to provide the enforcement needed during peak use.

Driftwood Bonfires

Making driftwood bonfires is also a traditional activity on the Ocean Shore and is currently allowed by state and local rule. In some locations, however, summer bonfires pose a threat to creating larger fires in driftwood piles and to adjacent private property and forestland. Once fires start in driftwood piles they can be very difficult to get to and to put out due to limited access.

Oregon Parks and Recreation Department currently has an agreement, with Oregon Department of Forestry and local structural fire jurisdictions, to compensate them for responses to fires on the beach. In many cases, the costs are greater than the compensation available through the current agreement. Some locations near high value private property require prompt and effective responses to driftwood fires despite the cost

Oregon Parks and Recreation Department supports beach bonfires in areas and at times when it is safe. The department also supports temporarily banning small beach bonfires in areas of high fire danger such as adjacent to cities on the North Coast, during high fire danger periods. The department will work with local and state fire districts to identify areas and times when bonfires need to be temporarily restricted. Oregon Parks and Recreation Department will review its agreement with the Oregon Department of Forestry to determine whether increased compensation should be provided for firefighting. The department will also work with other agencies to develop signage and special management strategies for individual areas that are of high risk.

Relaxing, Walking on the Beach, Swimming and Picnicking

These passive activities can occur on any beach on the Oregon coast that can be reached. They are not considered to conflict with any other uses or with resource protection, as long as recreationists heed the warning signs at resource management areas such as snowy plover management areas and pinniped haul out sites, etc..

Exercising Dogs on the Beach

Some visitors take their dogs to the beach specifically to exercise them, but most are just bringing them as a companion or member of the family. In most cases, dogs are not a problem, but some owners who let their dogs run without adequate control can cause conflicts with other visitors, other dogs and with wildlife. The more dog owners restrain their dogs from chasing wildlife and running up to other visitors the less need there will be for restrictions. However, the trend has been for more problems with dogs occurring on Oregon beaches. Unless this trend reverses noticeably, beaches that allow unrestricted dogs may dwindle.
Some coastal cities have asked Oregon Parks and Recreation Department to restrict dogs on their beaches or to limit them to leash only access. Currently, on beaches adjacent to state parks dogs are only allowed on leash.

Oregon Parks and Recreation Department supports restrictions that are outlined in the Habitat Conservation Plan for snowy plovers, and restrictions that are requested by adjacent cities. The department supports public

education on dog owner etiquette and the enforcement of "leash only" laws where they occur. Additional measures may be necessary, if wildlife studies show that there are significant impacts on shorebirds or other wildlife.

Flying Kites and Riding Bikes or Sand Racers on the Beach

These uses are not a problem except in areas of extreme crowding and in management areas for snowy plovers. This plan supports the continuation of these uses with some supervision during events, and within the restrictions in the Habitat Conservation Plan. However, the department will support curtailment of these uses if requested by adjacent local governments.

Jet Skis

Jet skis are reported to be in conflict with surfing, dory launching and quiet neighborhoods in some areas. The department encourages the Marine Board to look at these areas and consider restricting jet skis to control these problems.

Gold Mining

Some people are interested in recreational gold mining on the beach. The department will clarify in rule that gold mining is allowed on the beach as long as there is no use of power equipment and no more equipment or collected material is taken than can be carried on foot by one person. No permit will be required for this activity.

Recreation Management

Managing public use is one of the most important and challenging responsibilities for Oregon Parks and Recreation Department on the Ocean Shore. This chapter focuses on supervision and enforcement, and providing public information about rules and regulations, all of which is needed for effective results and satisfied visitors.

Supervision and Enforcement

Supervision and enforcement applies to recreational activities, civil law, and compliance with permit conditions issued for special activities on the beach. Although Oregon Parks and Recreation Department staff does not currently undertake all of the supervision and enforcement themselves, the department is responsible for seeing that adequate and appropriate supervision is being provided where it is needed. To achieve this the department relies on recreation management partners such as the USDA Forest Service, Bureau of Land Management, county sheriffs, state troopers and city police. In some cases, Oregon Parks and Recreation Department contracts with retired or trainee law enforcement personnel to assist with supervision and enforcement during the high use summer months in areas where more supervision is needed.

The issues regarding this topic, that have come up during plan preparation and the public involvement process have included:

- **Commonly heard specific violation complaints:**
    1. Dogs off leash
    2. Car clouts in parking lots

3. Some theft on the beach
4. Speeding motor vehicles on the beach
5. Reckless driving
6. Off highway vehicle's in areas that are closed to them
7. Motor vehicles in areas closed to motor vehicles
8. Illegal fireworks usage
9. Shooting fireworks on the beach without a permit
10. Leaving beach fires burning or lighting them too close to driftwood piles
11. Events occurring without permits
12. Occasional murders or suicides
13. Misbehavior by some visitors in recent years

- **Supervision and enforcement staffing:**
    1. Asking for the return of Oregon Parks and Recreation Department dedicated "beach rangers" who regularly patrolled certain beaches

    2. Local peace officers often have a problem covering the large areas assigned to them and may not be able to spend enough time on key beaches to deter violations.

    3. Insufficient staff on the ground at the beach.

- **Overlapping jurisdictions regulations:**
    1. Confusion about the jurisdiction area and what rules apply to a certain beach.

- **Clarifying the rules:**
    1. Requests to clarify many of the rules related to beach recreation and permitting, for enforcement officers and for the general public, and whether beaches adjacent to state parks should have the same rules as the adjoining beaches, or not.

    2. Also, some rule changes are recommended regarding motor vehicles on the beach, especially in areas where there is either a high potential for conflicts between user groups, or a high risk to natural or cultural resources especially in snowy plover management areas.

- **Motorized vehicles on the beach:**
    1. There are some beaches currently open to driving, either for off highway vehicles or street legal vehicles, where the level of vehicular use is high enough to require more supervision and enforcement, and there are actual and perceived conflicts with non-vehicular visitors.

    2. There are other beaches currently closed to off highway vehicles or to all motorized vehicles, where motorized use is occurring in violation.

    3. There is a good bit of public confusion about whether beaches open to street legal motorized vehicles with four wheels are also open to non-street legal vehicles and two wheeled motorized vehicles. Currently the rule states that all Oregon Ocean Shore beaches are open to motorized vehicles unless otherwise posted. Often the "posting" is either missing, hard to

see or incomplete in describing whether it refers to all motorized vehicles or just street legal vehicles.

4. There is some concern as to whether anyone should be allowed to drive on beaches that are closed to the general public, except for supervision, emergency and research purposes.

5. There is a great deal of concern, on the part of current motorized recreationists on the beach, that more and more of the beaches will be closed to driving. Oregon Parks and Recreation Department is committed to seeing that there are both off highway vehicle and street legal driving opportunities remaining in each of the three coastal regions, but may have to look at some curtailment of street legal driving in areas designated snowy plover management areas or where serious conflicts are commonly occurring.

Management Objectives for Enforcement and Supervision

There are a variety of actions that are recommended to improve the effectiveness of supervision and enforcement on the Ocean Shore, including staffing, partnerships, improved training and making changes in the regulations themselves to provide more clarity for enforcement decision making purposes and for public understanding.

Objective One: Provide adequate staffing for enforcement and supervision, by using Oregon Parks and Recreation Department staff and partners.

a. Oregon Parks and Recreation Department will apply its "maintenance/management" analysis approach to determine what the optimal number of beach staff would be, and compare it with current staffing levels for all of the cooperating agencies. Each Oregon Parks and Recreation Department Area Manager would be responsible for determining the most feasible and effective level and mix of staffing, and how to pay for it and to negotiate partnership agreements with local law enforcement agencies and state police. Where necessary, the department will pay for additional law enforcement services. The department will also prepare a request for legislative approval of appropriate additional department staff.

b. Focus enforcement <u>on problem areas</u>.

Objective Two: Work toward a seamless interagency enforcement coordination.

a. Because of Oregon Parks and Recreation Department's responsibility for seeing adequate supervision and enforcement on the Ocean Shore, the department will work on a Management Unit basis to assess whether there is a need to implement either cross jurisdictional authorities for patrolling staff among all cooperating agencies, or implement patrol teams that can represent the full spectrum of jurisdictions for that area.

b. Organize and provide annual interagency refresher and update training sessions in each area, for patrol staff for all agencies that provide enforcement on the beaches. Key Oregon Parks and Recreation Department beach staff might be made responsible for keeping up with current regulations for each jurisdiction and arrange and provide the training sessions, with some help from Oregon Parks and Recreation Department headquarters trainers and/or safety personnel.

Objective Three: Resolve confusion about where driving is allowed and how it will be enforced.
Recommended actions:

a. Coast wide, Oregon Parks and Recreation Department staff should begin to issue violation notices to violators of driving regulations, as long as a high speed vehicular chase is not required and if the driver is cooperative. In other situations, issuing violations should be left to local, state or federal law enforcement officers.

b. Enforce off highway vehicle restrictions on street legal only beaches and beaches closed to driving, except for those with permits.

c. Issue permits to drive on closed beaches in street legal vehicles or off highway vehicles, for construction or research. Issue a special "flag" to be used by individuals who are granted a permit by Oregon Parks and Recreation Department to drive a vehicle on the beach. This would notify law enforcement officials as to whether the use is permitted. These changes may require changes in statute and rule. Allow permits for persons with disabilities or limitations to drive off highway vehicles on beaches open to street legal driving.

d. Allow street legal vehicles and off highway vehicles on closed beaches for agency supervision, enforcement, emergencies, or for other agency related work, without having to obtain a permit. (OPRD & other agencies)

e. Enforce Habitat Conservation Plan driving restrictions.

f. Provide adequate signage at Oregon Parks and Recreation Department owned access sites as to whether the beach is open to driving, and whether only street legal driving is allowed. Oregon Parks and Recreation Department owns no accesses that provide direct access to a beach where off highway vehicles are allowed.

g. Oregon Parks and Recreation Department will work with other beach managing agencies to ensure that adequate signage is installed and maintained on the beaches where the allowed driving use changes from driving to non-driving, or specifically to allow off highway vehicles. For off highway vehicle beaches, off highway vehicle grant funding can be sought to pay for some of the needed signage. Grant funding may also be available for enforcing Habitat Conservation Plan restrictions.

h. Consider revoking off highway vehicle permits of repeat violators driving on closed beaches. This may require a rule change.

Objective Four: Improve the enforcement of fireworks regulations on the beach.

a. Coordinate with local and state peace officers to implement intensive supervision and enforcement of fireworks violations on beaches along coastal cities where there has been widespread illegal use where fire and safety threats have become severe, especially where local governments want to enforce curtailment of fireworks.

Objective Five: Improve bonfire management where needed in cooperation with local governments and fire prevention agencies.

Public Information to Support Visitor Management

The most feasible approach to managing the public on the Ocean Shore is to provide them with easy to understand and find information about what the rules and regulations are, where they apply and why it is important that visitors comply. Since the beach is a dynamic environment, providing good information, on site, can be challenging and often requires regular monitoring and maintenance, as well as thoughtful design and placement.

Some of the key issues related to public information include:

- **Public information on the rules:**
  Recreationists have asked for easier to find notices of rules and regulations for the beach, especially where jurisdiction boundaries result in rule differences, or where rules for the beach can vary from rules for a state park along the beach.

- **Requests for updates on rules and regulations across jurisdictions for enforcement staff and peace officers**
  Specific rules and regulations for each section of beach in an area may not be well known by either the local peace officers or the Oregon Parks and Recreation Department or other agency staff. Many of the staff are seasonals, or new hires, and may not have been fully trained on the nuances of jurisdictional limits and regulations differences. Or sometimes, changes in the rules of one jurisdiction are not communicated effectively to the other partners assisting with supervision on the corresponding beach.

- **Request to clarify Oregon Parks and Recreation Department permit requirements and process**
  There are a number of activities that require either an Ocean Shore Alterations Permit, a Miscellaneous Use Permit, or a special permit to drive on beaches closed to driving. Commonly permit violations include constructing beach access structures, minor riprap installation, large family events, collection of large amounts of driftwood, salvaging items lost at sea, and driving on closed beaches.
  a. Staff reports that, currently, decisions about when a miscellaneous use permit is required are largely discretionary and very unclear to the public.

  b. There is confusion on the part of the public undertaking the activities, and by other enforcement agencies, about what kind of permit is needed, who issues them, what they cover and how long they are in effect.

  c. Probably, the most common misunderstanding is about permits related to collecting firewood. The public has often asked why they see people collecting firewood in large amounts and driving on closed beaches to get to the wood and take it out, when they thought that those activities were not allowed. The situation usually involves people accessing private lands via the beach to collect wood there. They are supposed to have permission from the landowner. They need a permit from the department to drive on closed beaches to reach the wood. Oregon Parks and Recreation Department issues the permit to drive, not to collect the wood, except for approved wood collection on department owned lands.

Recommended Public Information Objectives

This work involves strategies for providing signage and other forms of information to the public regarding rules and regulations. Providing basic information to the public at the beach is important for both encouraging compliance and for use, if necessary, in issuing violation notices. Sign design is very important as it

determines, to a large extent, how effective the signs are. The Oregon Parks and Recreation Department sign committee completed a supplement to the Oregon Parks and Recreation Department Sign Manual in 2002, outlining how rules signs should be designed and installed at beach access sites.

The beach access sign clusters can go a long way toward improving the public's understanding of what they can and cannot do, as they walk from the parking lot onto the beach. However, where the rules change from one place to another, more prominent and better-maintained signs are needed along the beach. These signs should be focused only on the changes that occur from one stretch of beach to another, and should be large enough to be seen from near the water. Because of the dynamic nature of the beach, they will need to be placed into the fore dune on the beach side, and will need to be fairly large and substantial to be seen and to endure the weather. Typical changes along the beach are mostly related to driving on the beach, camping, dog leash requirements, use of alcohol and snowy plover regulations. Grant funding is available for some of this kind of signage.

Objective One: Provide updated, uniform signage at beach accesses and where different rules apply.

a. Oregon Parks and Recreation Department will move forward on updating its beach access signs to reflect the 2002 standards. Oregon Parks and Recreation Department will also review the 2002 manual, in reference to the Ocean Shore Management Plan and Habitat Conservation Plan, and make any needed additional updates to the manual. Signs will be placed and designed appropriately to be seen and understood and not be visually intrusive.

b. Oregon Parks and Recreation Department will coordinate with other beach access providers to encourage them to use the same cluster sign approach or a similar design. The Oregon Parks and Recreation Department cluster sign is designed to allow for the addition of certain site-specific regulations, which could include regulations by other access owners.

c. Oregon Parks and Recreation Department will coordinate with other beach providers to oversee the installation of needed signs on the beach, as seen from the beach.

d. The Oregon Parks and Recreation Department field operations management for each Management Unit should determine where signs are needed and how to install and maintain them. The Oregon Parks and Recreation Department Sign Committee and design sections will work on what the signs should look like, what they are made of, assist in determining how they can be installed and what they would cost.

Objective Two: Consolidate rules for the beach.

a. Oregon Parks and Recreation Department needs to consider how rules for the beach adjacent to state parks can be made more consistent with those for the larger beach. Or if there are good reasons for differences, the signs mentioned above are needed to make those differences clear.

Objective Three: Provide educational opportunities for the off highway vehicle community about where off highway vehicles are allowed on the beach, and limits on obtaining permits for riding on closed beaches.

a. Provide an informational brochure and mail it to off highway vehicle permit holders, including any rule or enforcement changes that are implemented, such as those recommended in this plan.

b. Provide a beach rule section on the Oregon Parks and Recreation Department off highway vehicle program website and a special brochure.

c. Provide beach off highway vehicle use brochures at off highway vehicle rental shops on the coast.

Objective Four: Incorporate rules messages into interpretive messages.

Objective Five: Complete an interpretive plan for the Ocean Shore Recreation Area.

Objective Six: Use volunteers to deliver on site messages to visitors about use rules and safety and stewardship objectives.

Beach Access
Chapter Seven

This plan has examined three types of beach access:

1. recreational and other general public access,
2. emergency access, and
3. special access provisions for persons with disabilities or limitations.

Each of these types of access is addressed below regarding access gaps, opportunities to fill the gaps and recommendations for providing additional access.

Recreational Access

Gap Analysis

Each of the three coastal regions was evaluated to identify gaps in the desired number and location of public accesses to the Ocean Shore. Although the state holds a legislated easement on the beaches themselves, it has no such easement on adjacent lands. Providing access via adjacent lands must be negotiated on a case-by- case basis. Access sites can be owned by Oregon Parks and Recreation Department or other state, federal or local agencies. Some sites that provide limited or conditional public access are owned by private individuals, groups or organizations or are street ends or rights of way. Although this plan does not inventory street ends and local accesses, the department supports their continued use by the public wherever conditions are safe and manageable. In some places, more supervision, public facilities and trail improvements may be needed. The department can evaluate the needs and potential solutions for sites like this on a case-by-case basis, upon request.

Selecting feasible new access sites is based on looking at where the demand is, where the existing and potential sites are and determining whether a public access site at the opportunity location could fit with the resources and neighborhoods found there. The following section describes:

- how an Ocean Shore access gap is defined for planning purposes,
- the types of situations gaps are generally found in,
- the identified regional access gaps, and
- feasible options for filling each of the identified gaps .

The analysis shows that there are several places where more access should be provided, and there are some large gaps that may be better left as is to protect the low-key settings and high quality habitat.

Recreational Access Distribution Assumption

For initial analysis purposes, access gap analysis was based on the assumption that a public access site is “an all weather public parking lot located within ¼ mile of the sandy beach or rocky intertidal area, that can be accessed via all weather, two wheel drive roads, is actively managed by some public agency; and is to be provided about every three miles along the Oregon coast”.

The Oregon Parks and Recreation Commission asked the department to identify potential public access at intervals of no less than three miles. However, providing access roughly every three miles did not mean that access would be required at every spit end that fell within a three-mile gap. Several of the spits have parking

lots two to twelve miles from the spit ends, but no public road access to the end of the spit. Technically, this could be considered a gap given the distance involved. However, it was determined that it is not the intent of the plan to consider constructing roads to the ends of the spits to ensure parking access at the spit ends. Most of these areas have public access on the other side of the river from the spit end and these accesses were included in the spacing along the coast.

In some areas the three mile spacing goal may be at odds with the objective of protecting secluded settings and relatively undisturbed wildlife habitats. The "Ocean Shore Recreational Use Study" confirmed what most recreation providers have observed, that most visitors walk no more than a mile from an access site. In large part, the lack of a public parking access at the spit ends results in desirable low use settings and better habitat due to little disturbance.

Types of Recreational Access Gaps

Gaps are generally found in three situations, suburban/urban areas, undeveloped public lands and rocky areas. Some of the gaps are found in largely suburban to urban areas, where access is strictly by street ends and visitors must park on nearby streets, or where general public access is precluded by private community gates. These areas have already been largely developed and offer few opportunities for the construction of a public parking lot without some demolition. Also, in most of these areas the neighborhoods are opposed to the construction of a public access facility that would bring more of the general public and tourists into their area.

Other identified gaps occur in the large, publicly owned dunal areas where paved roads to parking lots at the beach have not been developed. In some areas, parking lots are as far as two miles from the beach, and provide access to the beach exclusively via long sandy foot trails or four wheel drive sand roads. In areas where the use is primarily four wheel drive, this long distance access works well for drivers, but effectively precludes easy access by non-vehicular recreationists. However, bringing additional beachside parking lots into these areas could create some serious user conflicts between visitors looking for a vehicular setting and those who are looking for a non-vehicular setting. Also, if areas like this were open to vehicular recreation from beachside parking lots, the level of vehicular use on the beach would increase dramatically, and destroy the low use, peak day settings that are currently found in many of these areas.

In some areas, the three mile distribution is precluded by inaccessible terrain such as steep, extensive headlands, or high cliffs and terraces with poor and often dangerous access to the ocean shore.

Recreation Access Gaps and Recommendations on the North Coast

The North Coast has several access gaps, but only a few that would be feasible to fill, as they would result in adverse and undesirable changes in the recreational settings and related habitat values.

<u>The Spits</u>: Although spits are exempt from the gap analysis, based on the gap definition, the access situation at each spit is explained here to provide some background information.

The spits at Necanicum, Bayocean, Netarts, south Sand Lake and Nestucca have public parking lots that are located 2-4 miles from the spit ends, except for the Necanicum spit which has nearby access via street ends, but no public access parking lot. Additional access to these spits would result in impacts to their secluded settings and high quality habitat, and would be required to contend with other constraints such as shore lands zoning, wetlands, flood prone areas, and for some spits, lack of public ownership.

Clatsop Plain**:** Along the Clatsop Plain there is a 5 mile gap between the Peter Iredale access and the county's Sunset Beach access, partly due to the 3 mile long Camp Rilea beach frontage and 1.5 mile undeveloped, county land frontage. No official public access is allowed across these lands. Because this beach is open to street legal driving, the 5 mile gap does not really present a hardship for getting to all sections of the beach for motorized recreationists, but does for non-motorized access.

There is an opportunity to create a new public access site at the south end of the Clatsop County property, located at the west end of Delaura Beach Road. However, because of the very steep high fore dune there it is not likely that a motorized access could be constructed. A somewhat challenging non-motorized access could be created out of the existing informal staging area and path down the face of the fore dune. Providing a new public access at this location would generally satisfy the "three mile" goal. The distance to the Peter Iredale access, to the north, would be about 2 miles, and the distance to the Sunset Beach access would be about 3 miles. However, providing non-vehicular access to the most heavily used vehicular beach on the Oregon coast could present visitor use conflicts and may not be attractive to visitors who want to walk on the beach.

Recommendation: The Delaura Beach site should be pursued and may serve in a minor capacity as beach access and a larger capacity for expanded upland recreational use. If pursued, this site could be managed by Clatsop County, or if approved by the county, by Oregon Parks and Recreation Department.

New State Recreation Site at Sunset Beach: The proposed new public access to be located just south of Camp Rilea by the department, would provide minor non-vehicular access to the beach within the Peter Iredale to Sunset Beach gap. However, it will be within half a mile of the county's Sunset Beach access and would do little to fill the gap. Since it will favor non-vehicular access, it will provide a good alternative to the highly vehicular access at the county's Sunset Beach access.

Recommendation: This site is already under way by the department.

Hug Point through Neahkanie Mountain: There is a 6 mile gap between the accesses at Hug Point and Neahkanie-Manzanita State Recreation Site. Cape Beach, located between Arch Cape and Cape Falcon, falls within this gap, and has no public access, but is bordered by low density residential development. Residents of the Cape Beach area would likely oppose a public access in their neighborhood. The remainder of the gap is caused by topographic constraints at Cape Falcon and Neahkanie Mountain. Short Sands Beach is located within a cove at Neahkanie Mountain but is reached by hiking about half a mile from a public parking lot on Highway 101.

Recommendation: Providing additional access within this gap is not feasible.

Cape Lookout day use access to Sand Lake Recreation Area access: There is a 5 mile plus gap between the day use parking lot at Cape Lookout State Park, on the north side of the Cape, and the access at Sand Lake Recreation Area.

Recommendation: Additional access is precluded by private ownership, very steep topography and a preference to protect the remote setting at the beach at Camp Meriweather.

Nestucca River to Cascade Head : The coast between the Nestucca River and Cascade Head, including the beach at Neskowin, has an access gap of over 4 miles, with a public access site located only at the south end of the beach in Neskowin. Additional access is blocked on this beach by residential development in the south

and private and county-owned lands in the north. Some of the lands at the north end also have challenging topography. North of Neskowin, providing more access would lessen seclusion, and would likely conflict with the private Camp Winema. Also, private lands would need to be purchased at this location and topographic challenges would make beachside parking difficult to achieve. Existing residents along the northern portion of the beach would likely oppose additional public access near the north end. Parking would likely need to be placed about ¼ to ½ mile from the beach.

Recommendation: Providing a new large scale access here would likely be detrimental to the setting on the north end of the beach. However, a small -scale access for no more than 25 parking spaces might be desirable.

Recreational Access Gaps and Recommendations on the Central Coast

The Central Coast has several large public access gaps that are the result of inaccessible terrain and purposefully limited access across public land. All but one of the gaps are located in the Dunes National Recreation Area which intends to manage the beaches in these locations as low use settings, both for motorized recreation and in some areas, for non-motorized recreation. Several snowy plover management areas are located in these areas where habitat benefits from such a low recreational use level.

The Spits: Although the spits are exempt from the gap analysis, based on the definition of a gap, the access information at each spit is explained here to provide some background information.

Siletz River spit stretches 3.5 miles north from the Gleneden access with no other public access. The spit is developed except for the northern tip where sea lions haul out.

Siuslaw River spit has several parking lots for beach access that are managed by the Dunes National Recreation Area.

The 5 mile long Umpqua River spit has access only at the north end via Sparrow Creek Road. This is arguably the most remote and inaccessible stretch of beach on the Oregon coast. Although the Siletz and Umpqua spits are worlds apart in terms of level of use, both would see the erosion of resource values and low use settings if additional access were provided.

The other river spits in the region, Yaquina and Alsea, are very short and already have access via neighborhoods and public accesses.

Cascade Head and the beach to the Roads End access: The coast between the Neskowin public access (near Cascade Head and the Roads End beach access in Lincoln City) includes an access gap of over 6 miles. Cascade Head's difficult terrain precludes most of this area from access, and the Roads End access is over a mile from Cascade Head. The small beach at the mouth of the Salmon River occurs within that gap, and is precluded from access by a lack of public roads and bridges in this area. The Young Women's Christian Association (YWCA) runs a youth camp on the south shore of the Salmon River. Providing public access in the camp area, where topography would allow it, would conflict with and not be supported by the private camp. To the south of the camp there are other private lands that have challenging topography, while the north end of Roads End beach is lined with moderate density residential subdivisions.

Recommendation: Providing additional public access in this gap may not be feasible.

Siuslaw South Jetty Road to Siltcoos River: South Jetty Road approaches the beach about 2.5 miles south of the jetty and turns north along the beach to provide five beach access sites. South of where the road turns north, there are no more public access facilities until the Siltcoos River area, an access gap of about 5 miles. Most of this portion of the beach is open to driving, including off highway vehicles. Four wheel drive sand roads provide access in this area from distant parking lots. The lack of all weather roads to the beach is the cause of the access gap in this area. Providing all weather roads and beachside parking would offer new opportunities for both vehicular and non-vehicular access to the beach in this area, but would greatly change the setting. It could also set the stage for user conflicts in the desired setting between non-motorized and motorized users. With the emphasis on motorized recreation in this area, the 5 mile gap appears to be satisfactory and supports the kind of setting that is desired without conflicts with non-motorized use.

Recommendation: This area is located within the Dunes National Recreation Area and any changes in access would need to be implemented by that agency.

Siltcoos River to Sparrow Creek Road: Between the parking lots in the Siltcoos River mouth area and the county road end access via Sparrow Creek Road, there is an access gap of about 8.5 miles. Most of this stretch of beach is closed to all public driving, except for the lower 2.5 miles just north of Sparrow Creek Road. In the non-vehicular area recreationists must hike between .5 and 1.0 miles from campgrounds or trailheads on Highway 101. This area is, as a result, very secluded and has high habitat values. Providing additional access at the beach in this area would greatly change the setting there, as well as the habitat values.

On the southern 2.5 miles of beach, the setting is still quite secluded due to the challenging access via four wheel drive. This is an area where only those who know the terrain and how to handle changing conditions venture. Use concentrates at a moderate level on peak weekends within half a mile of the end of Sparrow Creek Road. This is an area that recreationists drive to for camping on the beach, reportedly to enjoy the low key setting and get away from the crowds. Providing additional public access in this area would preclude that kind of experience.

Recommendation: This area is located within the Dunes National Recreation Area and any changes in access would need to be implemented by the USDA Forest Service.

Recreational Access Gaps and Recommendations on the South Coast

The Spits: Although the spits are exempt from the gap analysis, based on the definition of a gap, the access information at each spit is explained here to provide some background information.

The Coos River North Spit, over 5 miles long, is accessed by four wheel drive vehicles via a sand road along the back side of the fore dune and through several sand or dike roads that cross the spit. There are no public parking lots on the beach south of the accesses at Horsfall Beach, which are managed by the Dunes National Recreation Area. Portions of this beach have seasonal restrictions of motorized recreation, to support the recovery of snowy plover in the area.

The Coquille River spit is only about 2 miles long, and is located mostly within Bullards Beach State Park. This spit does have a public parking lot at the spit end.

The spit at New River is almost 8 miles long and fluctuates in length from year to year. This spit has no direct public access sites. Access is precluded mostly by the river itself and a lack of road access to the base of the

spit. The Boice Cope county beach access is located about ½ mile from the base of the spit. Since driving in this area is prohibited, this spit is very remote and has a very high value for the recovery of snowy plover.

The Elk River spit, located south of Cape Blanco, is about 1 ½ mile long. The nearest public access facility is about 2 miles south of the base of the spit, at Paradise Point State Recreation Site. Private lands with no public access border this area.

The Pistol River spit actually switches the location of it mouth, alternating from a northerly to a southerly route periodically depending on the location of sand build up at the mouth each year. Either way, the spit is about 1.5 mile long. A public parking lot is located south of the highway bridge.

Umpqua River to Horsfall Beach access: Within the first 3 miles of beach south of the Umpqua River, the county provides one public access site on Army Corp of Engineering land and the Dunes National Recreation Area provides two more to the south. South of the southerly Dunes National Recreation Area site, however, there is a public access gap of about 12 miles. The northern 6 miles of this gap are closed to beach driving and can only be accessed via long hikes or riding along interior sand roads. This area is very remote, as is the Umpqua Spit to the north, and is valuable for it wildlife habitat, specifically for the recovery of the snowy plover. Providing additional access into this area would reduce those habitat values as well as the low use recreational setting.

Recommendation: This area is located within the Dunes National Recreation Area and any changes in access would need to be implemented by the USDA Forest Service.

The Sacchi Beach area: Although Sacchi Beach is within 3 miles of the Seven Devils access to the south, at certain tides Sacchi, and the Three Mile Creek beach to the south, are disconnected from the beach via Seven Devils. Ideally there would be public access to Sacchi Beach at the Five Mile Creek access and to the south at the Three Mile Creek access. Currently, there is no public road access to either of these sites and there are a number of private residences along the beach.

Recommendation: Due to private land ownership, development and topographic constraints, the only feasible access proposal is to connect a trail to the beach from the Coast Trail.

Five Mile Point to Coquille River: Just south of Five Mile Point is a county road end with an unofficial access that is referred to as the Whiskey Run access. This site is not actively managed or maintained by the county. There is no other public access site until 4 miles south at the Bullards Beach State Park access site. Most of this portion of beach is legally open to vehicular use. At Whiskey Run, the use is primarily vehicular. Providing an improved parking lot at Whiskey Run could result in more use by non-vehicular users and related user conflicts.

The area adjacent to this gap is undeveloped state park land and undeveloped private resort land. Constructing additional access to the beach is not planned for the resort in its current phase or in its proposed third phase. However, the third phase does include facility development on lands just south of the Whiskey Run access. There could be some additional non-vehicular visitation by resort guests. The resort currently offers beach access only by long sand trails, with little impact on use levels on the beach.

Development within the state park to improve access to the north would encounter a variety of sensitive habitats and be extremely costly, making it essentially infeasible to achieve. Through the adjacent private lands, there are similar resource constraints and costs, and some places have topographic barriers.

Recommendation: Filling this access gap is likely not feasible except for some improvements to the existing Whiskey Run access site.

China Creek access to Boice Cope/Floras Lake: There is no official public access site south of the China Creek access at Bandon State Park until the Boice Cope county park access at Floras Lake. This is a gap of almost 12 miles, but includes about 8 miles of New River spit that is not officially considered a gap. Adjacent state park, federal, county and private lands are all undeveloped. However, there is a gated road and parking area at the end of Lower Four Mile Road. This access is on the east bank of New River, with the beach across the river. Visitors access the spit by wading across New River and enter snowy plover sites nearby.

Recommendation: This is not an ideal location for access. Ultimately access decisions here will need to be consistent with the Habitat Conservation Plan recommendations. Other sites to the south toward Floras Lake have conflicts with the river itself and with existing and potential snowy plover occurrences. It is unlikely that additional access would be feasible in this area.

Boice Cope to Cape Blanco including the Sixes River Mouth: Between the Boice Cope access at Floras Lake and the Cape Blanco access on the south side of the cape, there is an access gap of about 6.5 miles. Within this gap are two hiking trails that strike the beach at Blacklock Point and at the Sixes River mouth. The Blacklock Point hike is over a mile from the airport parking site, and the Sixes River mouth hike is about 1/2 mile from the day use parking lot on the Sixes River below the Hughes House. The topography would allow the construction of roads to each of these locations. However, natural resource constraints, including snowy plover management areas, would deter this kind of additional development. The low use settings in these locations would also be greatly affected by easy access.

Recommendation: Providing additional access in this gap would not be advised.

Cape Blanco access to Paradise Point: This stretch of coastline has a 4½ mile gap, which include 1½ miles of Elk River spit. The base of the spit is about 2 miles from Paradise Point, while the spit end is about 1 mile from the Cape Blanco access. The determination of whether all or a portion of this beach constitutes a gap depends on how access to the spit is considered.

Regardless, the Elk River spit is important as a snowy plover management area and any additional access in this area would negatively affect the quality of this habitat. The entire beach is open to street legal driving, and most visitors approach by vehicle, although many are riding off highway vehicles illegally on this beach. Visitors on foot can make the walk from the Cape Blanco access to the mouth of the Elk River fairly easily, and are then blocked from further passage by the river and adjacent cliff. Additional access north of the river mouth should not be necessary. From the south, additional access is not advised due to the desire to avoid an increase in beach access in the snowy plover area, except to provide seasonal street legal vehicular access via Paradise Point for the fall fishing season or by permit. The Elk River snowy plover management area may require seasonal curtailment of beach driving on the spit itself.

Recommendation: Oregon Parks and Recreation Department will be developing a new, non-vehicular public beach access site at the south end of Agate Beach, at the Garrison Lake outlet that is one mile south of

Paradise Point. Although there is no gap there, the site will provide additional access near Port Orford Heads and the town of Port Orford.

Brush Creek to Ophir: From the Brush Creek access at Humbug Mountain State Park there is no official developed public access site until the Ophir highway rest area, about 11 miles to the south. Within this gap there is one developed private campground access at Arizona Beach and an undeveloped access at the newly acquired state site at Sisters Rock. Providing access roughly every 3 miles in this area would require the construction of a beach access facility just south of Humbug Mountain. However, this beach is located below a 100 foot tall cliff. Although some local residents access this beach by parking along the highway and climbing down the cliff, this would not be the kind of access that can be sanctioned for the general public. Steep topography also precludes access along other portions of this gap except at the privately owned Arizona Beach, located at the mouth of Myrtle and Mussel Creeks. This site is open to those who pay the fee to camp here. In the future, if the use of this site were threatened to be closed to public use by a new landowner, it would be a priority acquisition for public use and improved general public access.

At Sisters Rock, Oregon Parks and Recreation Department is looking at how to develop a public parking lot and safe access to the beach. Previously, this was privately owned and, at times, the old mining road from the highway to the beach was open to the general public. This is a popular surfing site and the local residents would like to see it reopened. Sight distances on the highway make safe highway access difficult, however. If this site can provide additional access it would help to fill the gap in this area.

The rest of the gap, south of Devil's Backbone, includes the mouth of Euchre Creek and the beach in front of Ophir. A portion of this area is subject to flooding and includes large areas of wetlands, making the construction of additional public access difficult and undesirable. The mouth of Euchre Creek is also identified as a snowy plover management area.

Recommendation: Sister Rock and Arizona Beach become the most likely sites for providing additional access.

Hunter Creek to the Pistol River: There is a gap of about 6 miles between the local beach access parking lot north of Hunter Creek and the access at Pistol River State Natural Area. Steep topography precludes additional parking lots near the beach through most of this gap. However, a wide area along Highway 101 acts as an unofficial parking lot near Myers Creek. This area is within the highway right of way. In addition, Oregon Parks and Recreation Department owns land adjacent to the beach at Cape Sebastian State Natural Area and will be developing a trailhead parking lot on the highway there, which will allow hiking access to the beach about ½ mile from the highway.

Recommendation: The highway pull off area could be designated as an official access and managed as such by Oregon Parks and Recreation Department at Myers Creek. The larger gap to the north of Myers Creek is infeasible to fill beyond the new trailhead at Cape Sebastian State Natural Area.

Pistol River to Whaleshead Beach: Between the Oregon Parks and Recreation Department accesses at Pistol River State Natural Area and Whaleshead Beach there is a gap of about 10 miles. Extremely challenging topography precludes additional access within this gap. Most of this area has scattered, isolated, small beaches many of which disappear except at low tide. Some of these beaches are accessed via dangerous descents by foot from highway pull-offs.

Recommendation: Providing additional public beach access is not feasible for this gap. However, the Oregon Coast Trail passes along the high cliffs through most of this area, providing visual access to the water and to some of the isolated beaches and coves.

Crissey Field: Oregon Parks and Recreation Department owns the beach that is south of the Winchuck River and north of the California state line, and will be developing a public access to this beach. Currently, residents park along the highway and walk to the beach through the site. The Curry County State Park Master Plan provides for the development of a public parking lot on this property.

Recommendation: Although this development is not needed from a gap analysis perspective, it does provide an access right at the border that is in demand locally. Access will be designed and installed to avoid impacts on important natural resources there.

Street Ends and Local Access: The department supports the continued use of public street ends and rights of way for public access to the beach all along the coast. In areas where this use results in parking congestion and sanitation issues in the neighborhood, the department will work with the local jurisdiction to determine how to resolve these issues while continuing beach access. The department does not support public access across private lands without landowner approval.

Emergency Access Gaps

The plan also assessed whether every beach has an acceptable number and locations for emergency access. These are accesses that can be used for emergency purposes by public service personnel, by vehicle or other motorized equipment, or just on foot, and may include accesses that are not open to the general public. In some very cramped locations, these accesses may only be passable by a small off highway vehicles or power wheelbarrow. Although many of the emergency accesses are gated and require keys to get through, or need extensive maintenance or upgrading, there are reportedly a sufficient number and locations for providing access to all of the beaches for emergencies, within topographic constraints. In those areas where topography precludes upland access other emergency access methods are used such as helicopters and water approaches. For that reason this plan has not identified any emergency access gaps, per se, but rather discusses the need to maintain accesses .

Accessibility for Those with Disabilities or Limitations

Visitors of all ability levels want to access the beach and even be able to reach the water, preferably under their own power. Due to the very dynamic nature of the beach, providing access can be a very challenging prospect. However, Oregon Parks and Recreation Department is committed to finding solutions for improving and expanding access to the beaches for those with disabilities or limitations.

This chapter discusses the barriers that currently keep disabled visitors from the beach, who needs to be accommodated and where, potential methods and successful models for accommodation, specific issues and concerns regarding accessibility and the beaches, and focus areas and management recommendations for providing improved and expanded access in the future.

Barriers to Accessibility to the Beach

The strongest barrier to beach access for the disabled or limited visitor is a physical barrier, soft sand. Sand provides extremely unstable footing for those who can walk, and can be very tiring due to the extra energy

needed to negotiate it. Sand is also impossible for narrow wheeled vehicles to negotiate such as conventional wheel chairs, or strollers.

Other barriers include high winds, driving rain and the changing location of the "rack line" where wet and dry sand meet. Some impediments for those with sight or hearing limitations include vehicles on the beach which may not be aware that the visitor cannot see or hear them approaching. There is also the danger of not knowing how close the waves are, or losing track of the established pathway.

All of these barriers can exist for a trip from a public access site, over a fore dune, across the dry sand to the wet sand and to the waves. Even more challenging is providing some level of access along stretches of beach, especially in remote areas.

Who Needs to be Accommodated and Where?

Public agencies are required to provide access to public sites for those with formally recognized disabilities, including those with hearing, sight, mobility and mental disabilities, according to state and federal law. In general, access must be provided unless a site would need to be changed so drastically that important site characteristics or attractions would be excessively altered or lost. In cases where the highest level of access could not be provided without excessive alterations, more limited or more challenging levels of access are allowed.

In addition, there are other visitors to the beach with no officially recognized disabilities but have either temporary or lesser limitations that may curtail their easy access to the beach. This can include those with small children, persons with temporary injuries, and elderly and generally weak persons. In fact, this is, by far, the larger number of visitors who are having trouble with getting to the beach. The numbers of those with official disabilities or limitations will increase dramatically as the "baby boom" generation ages. Oregon Parks and Recreation Department is interested in finding access solutions that can work for all of these visitors.

Understanding the limits of the law is important in determining where access must and can be provided without undue impacts on the sites. Providing the highest level of accessibility to every mile of beach would require extensive improvements that would change the undeveloped setting found at most beaches on the Oregon coast. Also, providing access at locations with extreme topographic challenges would require similarly damaging changes. The answer may lie in selecting an array of sites in each coastal region that can provide direct access to the water, without requiring extensive permanent construction. Other more remote sites can also be considered for providing access by vehicle where beaches are open to driving, or by permit to drive on beaches closed to driving. Consideration should be given to separating non-vehicular disabled access sites from vehicular access sites, to avoid safety problems. Areas with an already established high level of public access might best be considered for providing access to the water without motorized vehicles, to change the setting as little as possible, and to take advantage of already existing supervision and support services. Following these general guidelines for site selection should result in a well distributed and varied set of options for disabled and limited access coast-wide.

Potential Methods and Models

Aside from motorized vehicular access onto and along the beaches, Oregon currently has no special facilities for providing access across the beach to the waves for those with disabilities. However, the Bureau of Land Management has constructed an artificial rocky intertidal area at the south base of Yaquina Head that was designed for providing access to those in wheelchairs directly to tide pools. This project is very interesting and involved the conversion of a mining site into an intertidal area that would have the habitat elements needed for

tide pool organisms to colonize it. The project included paved pathways to and around various tide pools, with some "fords" at certain tide levels. Over time, the project has helped public agencies to understand what works and doesn't work in regard to taking those with disabilities to the water in a tidal area. The most challenging difficulties are:

1. Keeping access slopes and distances to a minimum.
2. Keeping access ways from flooding too much at high tide if designed with low slopes.
3. Keeping the pathways clear of soft sand.
4. Keeping the path "noticeable" for those with sight impairments.
5. Providing enough space for the many other visitors who will also find the special access easy to use, especially for children and the elderly.

Other models have primarily focused on providing a view of the beach or the ability to move along the edge of the beach. These types of projects have been constructed in several other coastal states and include a paved path along the fore dune in southwestern Washington. Seaside has a similar pathway, although it was not originally constructed for use by those with disabilities. Other projects are primarily viewpoints of one type of construction or another. None of these projects facilitates access to the soft sand and water, however.

National Seashores sites in other parts of the country offer special wheelchairs that can operate on the loose sand, for use by the public. They can be checked out from Seashore visitor centers.

Given the dynamic nature of the beach it may be most feasible and cost effective to consider placing temporary pathways from already established beach access sites to the water. There are various "rollable" or "segmented" surfaces available from manufacturers. All of these products require almost daily maintenance to ensure that they are lying true and level, and to keep the sand from accumulating on them. At selected high priority sites, higher levels of daily maintenance might be provided, especially during the summer season. Other easily accessible sites with little winter beach erosion might have such pathways available year round. Offering special "beach-going" wheelchairs could also be considered. Also, given the current public interest in allowing vehicular access to the beaches by persons with disabilities, the department will pursue the authority to offer a limited duration permit to do so, under parameters that will be defined in rule. This would allow persons with disabilities a chance to drive an off highway vehicle on beaches that are open to street legal driving.

Since there is so little experience in providing any of these kinds of access, Oregon Parks and Recreation Department will need to target a few sites for experimenting with two or three approaches or products.

Issues and Concerns

Several members of the public and the department expressed concern that there is insufficient access to the beach, for persons with disabilities or limitations, especially to the water without using a motorized vehicle. Others stated the extreme challenges regarding trying to provide non-motorized access to the water. There were also concerns about who would pay for the needed improvements and who would maintain them in the long term. Some voiced concerns about Oregon Parks and Recreation Department potentially issuing permits to allow driving on those with disabilities or limitations. They felt that the settings at beaches that are not open to driving by the general public should not be changed by the sight and sound of vehicles driven by those with disabilities or others. There were also concerns about how much access would be required and what would happen if access were not provided. Several elderly persons were concerned that existing beach access parking lots with views of the beach from the car not be closed or moved away from the view location.

Focus Areas

Oregon Parks and Recreation Department has concluded that there are three types of focus areas for providing beach access for the disabled; non-motorized water access sites, motorized access sites and beaches, and viewpoints above the beach. Criteria for selecting sites for each of these focus areas is described below, followed by suggested sites in each coastal region. Many viewpoint and motorized access sites already exist.

Criteria for non-motorized access to the water:

1. Visitors can park very close to the fore dune or beach edge in an already established public access facility, or at a facility where disabled parking could be provided.
2. Access sites have, or could be fitted with, facilities that provide for use by the disabled such as restrooms, parking spaces, and picnic and campsites, if available.
3. The parking site should have a low profile fore dune between it and the beach.
4. Preferably, the distance to the water at high tide would not be far, but would leave some relatively flat dry sand below the fore dune on the seaward side.
5. The beach profile is relatively flat, preferably year-round.
6. The wave action is generally gentle, outside of storms.
7. The site is located at or near a high use area where more "on site" supervision is available or feasible.
8. The site is not located on a beach that is open to motorized use by the general public.

North Coast sites:

- City of Seaside street end
- Tolovana
- City of Manzanita street end
- Rockaway Beach State Recreation Site
- Barview Jetty County Park
- Oceanside State Recreation Site

Central Coast sites:

- Roads End State Recreation Site
- D River State Recreation Site
- Beachside State Recreation Site
- Heceta Head Lighthouse State Scenic Viewpoint
- Dunes National Recreation Area south jetty access, Florence

South Coast sites:

- Bastendorf Beach county access
- Sunset Bay State Park
- Bullards Beach State Park lighthouse access
- Coquille River south jetty access
- Rogue River north jetty access
- Rogue River south jetty access
- Sam Boardman State Scenic Corridor, Lone Ranch site

Criteria for motorized access to and along the beach:

1. Site and beach are currently open to motorized use.

2. Access sites have, or could be fitted with, facilities that provide for use by the disabled such as restrooms, parking spaces, and picnic and campsites, if available.

3. Provide a permit for persons with disabilities to drive off highway vehicles on beaches that are open to street legal driving, to be outlined in rule.

North Coast sites:

- Sunset Beach access
- Del Rey access
- Gearhart access
- Sand Lake, north shore site
- Cape Kiwanda south, county site

Central Coast sites:

- Dunes NRA south jetty road access, Florence
- Three Mile Creek/Sparrow Park Road access, Douglas County

South Coast sites:

- Horsfall Beach vehicular access
- Whiskey Run access
- Cape Blanco State Park
- Paradise Point State Recreation Site
- Rogue River north jetty access
- Rogue River south jetty access

Criteria for providing beach viewpoints:

1. Site should provide parking opportunity with view of the water from the vehicle.
2. Site should have, or could be fitted with, facilities that provide for use by the disabled such as restrooms, parking spaces, and picnic and campsites, if available.
3. Provides a close up view of the beach.

North Coast sites:

- Fort Stevens State Park, Peter Iredale viewpoint parking lot.
- Seaside public access site (may already have restroom)
- City of Cannon Beach
- City of Manzanita
- Rockaway Beach State Recreation Site
- Barview Jetty County Park
- Cape Meares County access
- Oceanside State Recreation Site
- Cape Kiwanda State Natural Area, south

Central Coast sites:

- Roads End State Recreation Site
- D River State Recreation Site
- Moolack Beach Oregon Department of Transportation, pull off
- Driftwood Beach State Recreation Site
- Beachside State Park
- Heceta Head Lighthouse State Scenic Viewpoint
- Dunes National Recreation Area south jetty access, Florence

South Coast sites:

- Ziolkouski county access
- Bastendorf Beach county access
- Sunset Beach State Park
- Bullards Beach State Park, lighthouse access
- Coquille River south jetty access
- Face Rock State Scenic Viewpoint
- Paradise Point State Recreation Site
- Battle Rock way finding site
- Ophir rest area
- Rogue River north jetty access
- Rogue River south jetty access
- Hunter Creek county access
- Myers Creek pull off and Pistol River State Park sites
- Sam Boardman State Scenic Corridor, Whaleshead site
- Sam Boardman State Scenic Corridor, Lone Ranch site
- Harris Beach State Park
- Sport Haven access, Harbor

Management Recommendations

Oregon Parks and Recreation Department is dedicated to supporting beach access for those with disabilities or limitations and will protect the current view and motorized access sites listed above that are already in Oregon Parks and Recreation Department ownership and management. The department will also select one site in each region for installing an access way to the water, in the next six years. Oregon Parks and Recreation Department's Planning, Design and Engineering, and Recreation Program sections, together with its coastal Field Operations staff will complete further study of the best methods and products for providing access to the water at each of the three selected sites. Oregon Parks and Recreation Department encourages other providers or jurisdictions with sites listed above to do the same. Complete at least one access to the water in each region and provide disabled support facilities at listed view and motorized access sites under a phased schedule.

The department will also pursue changes in statute and rule, as needed, to authorize permits to persons with disabilities or limitations to drive an off highway vehicle on beaches that are open to street legal driving.

Beach Safety
Chapter Eight

Oregon Parks and Recreation Department is charged with the responsibility for managing the public's use of the ocean beaches, including seeing that the public has a safe and enjoyable experience. This chapter looks at the known safety hazards on the beach and where they occur. It then discusses known beach safety issues and concerns, identifies focus areas for applying improved management actions, and outlines general management strategies for the Beach Safety program and Field Operations.

Background

For decades, Oregon Parks and Recreation Department has sought to provide information to beach visitors about beach hazards and how to avoid them, and has worked with other jurisdictions to provide enforcement, supervision and emergency response services for the beach. Increasing efforts to improve the safety of beach visitors is an agency goal. Oregon Parks and Recreation Department's field management is responsible for this work, with help from the department's Public Services, Interpretive, Risk Management and Planning and Engineering programs. Other agencies also support this effort, including local and state police forces, federal land managers, Department of Land Conservation and Development's Coastal Program, the National Oceanic and Atmospheric Administration, Department of Environmental Quality and the state's Risk Management Division.

Since 1990, 30 people have died due to sneaker waves, falls, rolling logs, and swimming and surfing-related drownings. In 1999, in response to a series of fatal accidents on the beach, the department beefed up its Beach Safety program by hiring a full time coordinator to focus on public information and work with field managers to help improve field enforcement, supervision and emergency response. Funding was provided to develop a public information campaign about beach hazards and how to avoid them.

Hazards on the Ocean Shore

Beachgoers may be confronted by a variety of hazards at the Ocean Shore. Most are related to the extreme and often fatally underestimated power of ocean waves acting either directly on visitors, or indirectly through wave action on beach objects and the beach itself. Typical hazards follow:

- **Sneaker waves**: Large, unexpected waves that may wash onto shore much farther than other waves.

- **Steep, unstable beaches and beach terraces**: This type of topography can occur at the water's edge or can be left behind from earlier higher tides. Steep beaches can make footing treacherous, especially when combined with direct wave action on the visitor and the sand around their feet. Unstable beachside cliffs and dunes can collapse when climbed on or dug into or they may collapse on their own onto unsuspecting visitors who happen to be in the wrong place at the wrong time. In some cases, organic debris such as ancient logs can decay under the beach or within a beachside cliff, creating a treacherous cavity that can collapse if stepped on or dug into. Other hazards involve visitors trying to climb cliffs to escape rising tides or to take a shortcut. Cliff climbing can loosen debris that may tumble down onto others, or may cause a nasty fall.

- **Tides:** Many beach visitors come from inland places and may have little or no understanding of tides. This can be a problem if visitors venture onto rocky areas that are exposed during low tide, and then are cut off from retreat when the tide returns. Or, visitors may walk around a rocky point to the next beach during low tide, and not be able to safely return after the tide has turned. Camping on the beach can also be affected by rising tides if tents, vehicles or bedrolls are placed below the high tide line.

- **Rolling logs**: Waves have an extremely powerful hydraulic effect on beach objects, even objects that appear to be much too heavy to be moved by the water. One of the most common causes of beach fatalities is driftwood logs that have been rolled over by the waves. Often visitors are resting or climbing on the logs when this occurs and are trapped underneath. It takes very little water to cause a buoyant log to roll over, and the log is often too heavy to be moved by others once a wave leaves it behind. Areas with large accumulations of driftwood can be especially dangerous in high wave situations.

- **Rip currents, cold water, underwater drop-offs, etc**: These various conditions contribute to the drowning of swimmers, surfers and young children who wade in the water.

- **Soft sand**: This is primarily a hazard of driving on the beach, and can cause vehicles to be trapped in the sand on remote beaches where help may be a 10 mile walk away. It is not unusual for vehicles to "bog down" in the sand and become stuck, and then to be inundated by the rising tide. Even experienced beach drivers with four-wheel drive vehicles designed for beach driving can get stuck and need to be hauled out by another vehicle.

- **Storms:** Storms exaggerate all the hazards mentioned above. Storms can be attractive nuisances due to visitors' excitement at seeing larger waves. Visitors can be tempted onto beaches that are generally safe in calm conditions, but become unsafe during storms.

- **Tsunamis and earthquakes:** Although these events are rare, they are extremely powerful and far reaching in their effects. Offshore earthquakes can bring tsunamis onto shore without much warning. Near shore quakes can liquefy wet sand causing objects and people to be trapped in the resulting quicksand.

Hazard Focus Areas

Any of the above hazards could occur at almost any beach on the Oregon coast. The wide flat beaches of the north coast generally lack the beachside cliff hazards of the central and south coast; however, beach profiles can change dramatically from season to season and year to year.

Since all these hazards are dynamic, any beach can have hazardous conditions at some time. However, the appropriate focus areas for intensive beach safety awareness are those beaches with high levels of visitor use, especially during peak recreation times, such as summer weekends. High use areas that have known hazards such as enticing rocky outcroppings or terraces, are especially important. Target areas should also be those with official public access of some type, and where there is a lot of residential access. Some of the most dangerous beaches are in small coves among rocky headlands and terraces. These beaches usually have no developed or official public access and are approached mainly by experienced local residents at their own risk. Discouraging access to beaches like this through public lands is important for safety.

Winter beaches are generally more hazardous than summer beaches due to increased erosion of the beaches in the winter. Beaches with low to moderate use in the winter that have experienced excessive erosion should also be targeted. Examples are Neskowin and Cannon Beach. Those beaches with extremely dangerous "attractive nuisances" deserve special attention, too. Examples of attractive nuisances are those beaches that have access to surf fishing sites on rocky points or jetties. Also, certain beaches with a lot of driftwood can be evaluated for safety hazard consideration.

Concerns

The concerns below have been identified by the Oregon Parks and Recreation Department and other beach management staff:

Public Information

The better informed the public is about hazards, how to avoid them, and how to respond to an emergency if it occurs, the less likely a tragedy will result.

Oregon Parks and Recreation Department's beach safety education campaign employs traditional marketing and education methods to raise awareness including:

- warning signs on the beach
- printed material and other collateral: tide tables, brochures, children's activity books, promo items
- paid advertising, especially broadcast media, (TV commercials, slides at movie theaters, outdoor billboards near the coast)
- unpaid media (feature stories, interviews, letters)
- special school programs with families of beach accident victims
- campground programs that feature Oregon Parks and Recreation Department's mascot for beach safety
- original 15-minute video distributed widely and without charge
- community outreach (speeches, interviews, programs at day care centers, safety fairs, scouting events and children's events)

Beach warning signs on the Ocean Shore are inconsistent and may not fully address the safety aspects. Sign design and placement can drastically affect whether the sign will be read. Many of the current signs lack impact due to their wordiness, unappealing design and lack of interpretive interest. Effective sign placement in many places is somewhat compromised by topographic conditions or natural or cultural resource constraints.

Beach safety posters and brochures, usually distributed at adjacent or nearby campgrounds and visitor centers, may need to be provided more prominently and consistently.

Oregon Parks and Recreation Department partners with several television stations for a cost-shared television campaign that runs during spring and fall, when storm watching is at its peak, and to coincide with spring and fall school breaks. The beach safety character Cap'n Beware appears at coastal parades and celebrations along with informational materials on beach safety. The Junior Ranger Program also provides beach safety information where it is offered in coastal state parks. However, staffing limitations and competing priorities limit the level of public outreach that occurs.

Beach safety messages have been combined with interpretive information in exhibits in a few coastal locations. Oregon Parks and Recreation Department's popular tide pool interpretive sessions, conducted by rocky shore naturalists, have a strong beach safety education component.

Supervision and Enforcement

Oregon Parks and Recreation Department is interested in assuring that there is adequate and appropriate supervision and enforcement provided for beach use. Misbehaving visitors can endanger themselves or others. Examples include reckless or speeding drivers on beaches open to driving, vehicles driving on beaches closed to vehicles, or visitors climbing on cliffs or points that are closed to the public. Other typical violations include the use of fireworks and leaving bonfires burning in driftwood. The department conducts it's own patrols and often hires retired and trainee troopers. Beach supervision is also provided by local police, state troopers and federal agency staff patrols.

Coordination

Oregon Parks and Recreation Department works with other jurisdictions to provide supervision, enforcement, emergency response and public information, and good coordination among the partners is crucial to having a consistent, effective safety program. There are some areas where that coordination can be improved with more regular and organized communication regarding updates and record keeping about rules, regulations, jurisdictional responsibilities, violations, accidents, emergency response and evacuation procedures, and public information.

Emergency Response

Professional emergency response is needed for accidents such as drownings, or for incidents such as breached jetties and fore dunes, ship groundings, oil spills or beached whales. It is also needed for larger scale events such as a tsunami or earthquake. Emergency response concerns include:

- Coordination and communication difficulties among responders about who should be contacted, who should respond and how, which agency is to provide certain kinds of expertise or equipment, etc..
- Agreed-upon and understood procedures and plans
- Sufficient training
- Accesses that are maintained or unusable
- Accesses that are gated and cannot be opened quickly

Note: The plan's access gap analysis shows that every beach that is physically accessible has existing emergency access sites, most of which are vehicular. The problem is not so much a lack of access for emergency purposes, but a lack of proper—and regular—maintenance for the accesses that do exist. These accesses are owned by Oregon Parks and Recreation Department, counties, cities and federal agencies, and none has been able to keep all their accesses as passable as they would like, mostly due to funding shortages.

Driftwood Hazard Abatement

Those areas that are identified as being hazardous due to the amount of driftwood that can be inundated by wave action and cause roll overs, or can become the source of fire hazards from beach fires, need to be evaluated for potential actions.

Funding: Many of the above concerns result from insufficient funding for staffing, training, equipment, access maintenance and planning.

Recommended Management Objectives

1. Public Information: Provide improved and expanded public information coast wide, including better site signage and more marketing material that is more widely distributed. Increase the number of campground programs regarding beach safety in the summer. Integrate safety messages into beach interpretive themes further. Continue the media campaigns and expand school and local event outreach. Investigate the possibility of a grant program as part of regionalized public outreach.

2. Supervision and Enforcement: Investigate the feasibility of providing a minimum number of Oregon Parks and Recreation Department beach rangers to be positioned at key beaches on peak days. Encourage other jurisdictions to assist by providing staff for supervision and enforcement. Set up partnership agreements where needed. Obtain extra help from retired state troopers in problem areas. Investigate the possibility of multi-jurisdictional enforcement authority and training for enforcement personnel.

3. Coordination and Emergency Response: Develop interagency, coast-wide, or regional standards for emergency coordination, including notification and record keeping protocol for responses to incidents Complete evacuation plans for beachside state parks.

4. Beach Safety Grant Program Development: Pursue the feasibility of offering an incentive program through a new Oregon Parks and Recreation Department beach safety related grant funding program.

5. Water Safety Council: The department has formed the Water Safety Council to advise on safety issues, solutions and priorities. They will initially focus on education and coordination issues.

6. Beach Accident Data: The department will collect beach accident related data, review it and identify locations and issues for priority action.

7. Driftwood Hazard Abatement: The department will work with local governments and safety providers to determine where there are areas of accumulated driftwood that needs to be removed. Those areas where wood can be removed without causing undue erosion or other environmental problems may be targeted for a coordinated wood removal effort.

Working with the Neighbors
Chapter Nine

The Ocean Shore is a neighbor to dozens of communities and public lands owned by other agencies. During the Issue Scoping portion of the planning effort the department heard of a wide variety of issues that are important to the neighbors about the beaches near them. This chapter summarizes the issues heard and offers recommendations for addressing them.

Issues

Neighbors from residential areas had a number of issues about the beach, including concerns about:

- Fire threats to their property from fireworks and bonfires on the beach;
- Loss of ocean views due to accumulating sand on the fore dune;
- Noisy gatherings and the use of power equipment on the beach;
- Lack of management for street end accesses;
- Litter on the beach where the neighbors walk;
- Excessive night lighting on the beach.

There is also a need for the department to work closely with local governments and other agencies on the coast regarding recreation enforcement, scenic resource protection and other resource management needs.

Recommendations

1. Coordinate with local and state peace officers to enforce existing fireworks restrictions in places where safety and fire threat issues have become severe.

2. Support temporary restrictions on beach bonfires in areas of high fire danger such as places with concentrations of driftwood near residential areas. Work with local fire districts to determine where new restrictions are needed.

3. Direct concerned neighbors with ocean view problems to local jurisdictions to complete a dune management plan. If the plan involves alterations within the Ocean Shore, the department will participate in the completion of the plan.

4. Provide basic supervision of permitted gatherings on the beach to ensure that they are not excessively noisy, and that they are meeting within the constraints of their permit;

5. Except for designated “driftwood removal” areas, impose a moratorium on the use of power equipment to remove driftwood.

6. Work with local governments regarding street end accesses that require more management than the local government can provide. Seek solutions that continue to allow the access while providing adequate supervision, parking and facilities.

7. Coordinate with local governments and volunteers to address litter pickup after large events and holidays, especially for beaches adjacent to residential or urban areas where people congregate.

8. Work with local governments regarding night lighting ordinances for the beach. Direct neighbors with problems with night lighting to local governments.

9. Work with local governments on development setbacks and other standards to help new development to fit into the coastal setting in a visually pleasing manner.

Obtaining Permits: Clarifying the Programs Chapter Ten

Oregon Parks and Recreation Department administers permitting programs that are intended to protect private property and facilitate human needs and activities on the Ocean Shore, while considering and mitigating potential effects on the beach environment, setting and recreational use. The permitting program has evolved over the last 30 years to be quite varied and encompassing. Changes have led to a complexity of rules, forms, locations for obtaining permits and related public confusion. Oregon Parks and Recreation Department's intent in this plan is to provide an overview of the various permit types and related concerns and issues, and identify solutions. More detailed information on the Permitting Programs is provided in Appendix D: Permitting Programs.

Overview of the Program

In addition to the broad authorities of the state for the Ocean Shore that have been described in the "Introduction" chapter, there are special authorities for administering permits and managing the beaches. The "Beach Bill" (Or Laws 1967, ch. 601 §7) authorized the state to *"… police, protect, and maintain the beach and to regulate its use"*. To that end, the Oregon Parks and Recreation Department is charged with the protection and preservation of the recreational, scenic, natural and other resource values found on Oregon's Ocean Shore. Any improvement or alteration to the Ocean Shore seaward from the line of vegetation requires a permit (ORS 390.640). Oregon Parks and Recreation Department administers a permitting program for activities on the Ocean Shore including the construction of shoreline protective structures, beach access ways, dune grading and various removal and fill activities, the routing of pipelines and cables beneath the Ocean Shore and natural product removal. In addition, the department also regulates vehicle use on beaches closed to driving, beach salvage, scientific research and collection, and other non-traditional events conducted on the Ocean Shore, such as weddings and commercial filming.

Following passage of the Beach Bill in 1967, a survey of the coastline was made, and a series of coordinate points connected by lines were established to approximate the actual vegetation line. This line, now referred to as the Statutory Vegetation Line, was delineated to define the upland boundary of the Ocean Shore, and Oregon Parks and Recreation Department's jurisdiction for ocean shore permits. The coordinate points were adopted into Oregon Statute in 1969.

In November of 1999, a new bill was passed by the Legislature that combined Oregon Parks and Recreation Department's Ocean Shore permit jurisdiction with that of another agency with permitting responsibilities on the Ocean Shore, the Oregon Department of State Lands. The bill, Senate Bill 11, resulted in the streamlining of Ocean Shore permits, by eliminating the dual permit requirements and overlapping jurisdictions of Oregon Parks and Recreation Department and Oregon Department of State Lands

Under Senate Bill 11, the upland boundary of the Ocean Shore *"now extends to the Statutory Vegetation Line or the line of established upland shore vegetation, whichever is farther inland".* In cases where the Statutory Vegetation Line (SVL) is located out on the sandy beach or seaward of an eroding bluff, the upland ocean shore boundary is determined by locating the line of established upland shore vegetation above the beach. A permit is required for structures or alterations extending seaward of this line. In cases where land and

vegetation have accreted out over the Statutory Vegetation Line, the upland boundary of the ocean shore continues to be the Statutory Vegetation Line, even when that line is landward of the actual line of vegetation. (See Figures 10-1 and 10-2.)

Projects such as excavation on upper bluff areas above the beach, or construction of stairways on a slope leading down to the ocean may require a permit, even though the project does not occur on the actual sandy beach. Oregon Parks and Recreation Department is available to assist property owners in determining the Ocean Shore boundary and determining whether a permit will be required for a specific project. Before undertaking any project along the shoreline, one should contact Oregon Parks and Recreation Department to find out this information.

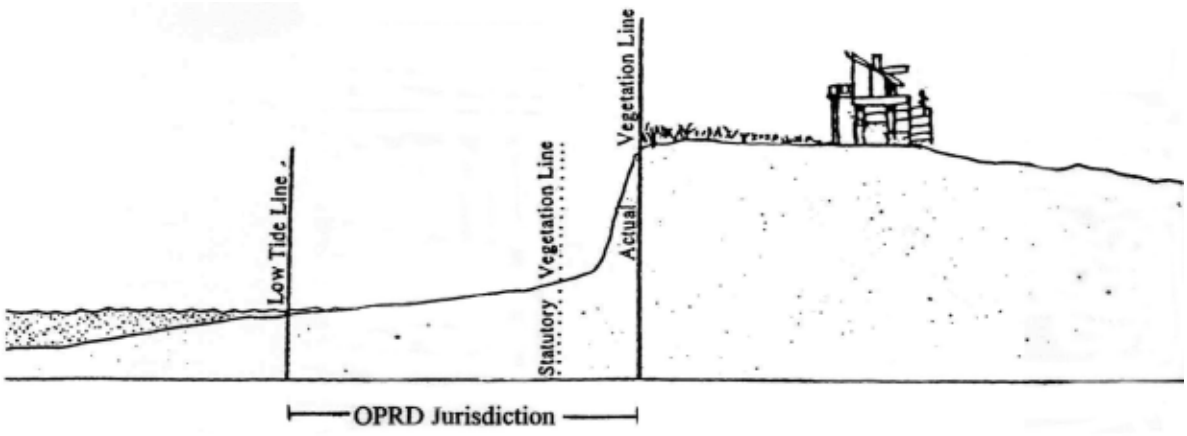

Figure 10-1. Oregon Parks and Recreation Department permit jurisdiction when actual vegetation line is further landward than the Statutory Vegetation Line.

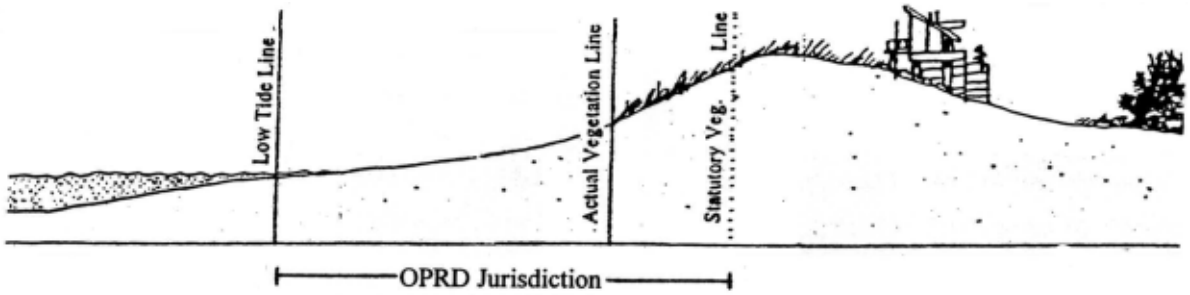

Figure 10-2. Oregon Parks and Recreation Department jurisdiction when Statutory Vegetation Line is further landward than the actual vegetation line.

Also, the department has been asked to consider taking on a wider role in protecting scenic values and reviewing proposals for alterations that could negatively affect the Ocean Shore. To address this request, the department will work in cooperation with other agencies and stakeholders to undertake a comprehensive review of the natural processes, legislation and laws that pertain to structures along the Ocean Shore. The review will include a discussion forum with affected agencies and stakeholders and recommendations for future actions.

Ocean Shore Permitting

The department's Ocean Shore program is involved in the review of a number of different types of permits including:

1. Shoreline Alterations, Sand Alteration, Access ways & Pipeline, Cable or Conduit Permits
2. Natural Product Removal and Marine Algae Collection Permits
3. Miscellaneous Use Permits
4. Drive on Beach Permit
5. Beach Salvage Permit
6. Scientific Collection and Research Permit

Alterations, Access ways and Pipelines Issues

The majority of Ocean Shore Alteration Permits issued by Oregon Parks and Recreation Department are for the construction of shoreline protective structures (SPS) to control bluff and dune erosion in order to protect upland development. The most common type of SPS is riprap revetment, which consists of large boulders placed over backing material against an eroding ocean embankment. Other types of SPS include solid seawalls, of both wood and concrete, and a variety of lesser-used structures using gabion baskets, geo-fabrics, compacted soil, or other materials. The purpose of all these structures is to stop shoreline retreat caused by wave erosion or geologic instability. This results is a hardened and static shoreline that no longer retreats when impacted by storm waves or other forces. Some of the impacts caused by these structures include: 1) visual and scenic degradation, 2) encroachment onto the beach, 3) potential for increased scouring of the fronting beach when impacted by wave forces 4) potential for "end effect" and increased erosion on adjoining properties, 5) the "locking up" of potential sand supply to beaches, and 6) passive erosion of beaches due to sea level rise. (As sea level rises, the shoreline can no longer retreat, therefore the beach becomes progressively narrower.)

In reviewing SPS permit applications, Oregon Parks and Recreation Department is in the difficult position of responding to the immediate needs of an upland property owner to protect their residence or other development, while at the same time being responsible for protecting the scenic and recreational values of the Ocean Shore. While each individual riprap revetment may have only a slight incremental effect on the beach, the private property owner is often faced with an immediate, potentially catastrophic threat to their property. If a property is eligible under Statewide Planning Goal 18 for an SPS (property must have been developed by January 1, 1977) and there is a critical need for the project, Oregon Parks and Recreation Department typically approves the permit. Although there is some public sentiment that is strongly against SPS projects, Oregon Parks and Recreation Department, and the State of Oregon, have not taken the position of refusing to allow protection of threatened buildings or infrastructure when the property is eligible for protection. Significant stretches of shoreline have been armored, particularly in the Siletz littoral cell (north Lincoln County), and at Neskowin, Rockaway Beach, and Cannon Beach. Other developed areas of the coast have not needed SPS armoring, but may at some point in the future. State and federal public lands will likely remain undeveloped, and will not be affected by SPS proliferation.

Concern has been expressed regarding both the visual and environmental intrusion and threat resulting from the extensive riprap placed along the Ocean Shore. Additionally, the cumulative effects each new shoreline protective structure has within the littoral cell is also a concern. While the individual effects of one riprap project is often quite small, the effects of a long stretch of beach being armored can be quite severe. This makes it difficult to deny the individual permit, especially when it is in an area that already has significant armoring. As a management goal, Oregon Parks and Recreation Department should act to

preserve the natural beach and shoreline dynamics for areas that have not yet been impacted by riprap and other SPS construction. This would require Oregon Parks and Recreation Department to delineate the areas where conservation is appropriate, and develop regulations prohibiting or restricting new SPS construction.

Under Goal 18, properties developed after January 1, 1977 are ineligible for shoreline protective structures. There is a lack of certainty about what constitutes "development" for purposes of this statewide planning goal, and there is reported inconsistency about how the term is applied by various local jurisdictions. There is no coast-wide inventory of properties that are either "developed before 1977" or where the local government has been granted an exception to Goal 18. Identifying all developed or exception areas is not a task that Oregon Parks and Recreation Department can accomplish without the assistance of coastal cities and counties. Goal 18 only addresses the eligibility for SPS, not whether it will be permitted under Oregon Parks and Recreation Department's permit process. Identifying the segments of shoreline where SPS development would be prohibited under Goal 18 would, however, be an important first step in efforts to develop new policies for shorelines not yet impacted by SPS proliferation.

Alterations, Access way and Pipelines Recommendations

1. Continue to maintain and update the GIS database of Shoreline Protective Structures (SPS), to be used as a management tool for various purposes, including quantifying the length, type, and location of SPS, for evaluation of individual permit decisions, and for future management decisions and policy making.

2. Evaluate the segments of coast affected by SPS construction, and identify other developed areas (eligible under Goal 18) that have not yet needed shoreline armoring, to see if special policies may be appropriate to preserve the maximum scenic and recreational qualities of the Ocean Shore and its natural dynamics in these areas. Develop special rules/policies that recognize the need to limit shoreline hardening to preserve a natural, recreational beach for future generations. Provide incentives to landowners to not install rip-rap. Retain a portion of the permit fees for a fund that can partially support beach nourishment projects associated with rip rapped areas.

3. Work with the Army Corps of Engineers to determine whether there are any potential areas for beach nourishment. Beverly Beach has been identified as a beach for a potential beach nourishment pilot project.

4. Continue to work with local governments and other affected state and federal agencies in the review and permitting of dune management plans, upgrades to municipal wastewater disposal systems, and the management and development of other necessary public infrastructure, in a way that ensures preservation and protection of Ocean Shore resources.

5. Continue to use, where necessary, the expertise of the Oregon Department of Geology and Mineral Industries coastal field staff, when evaluating projects on the Ocean Shore.

6. Revise the Oregon Parks and Recreation Department regulatory program web page to clarify what application form should be used for specific types of projects.

Natural Product Removal and Marine Algae Harvest Issues

Driftwood: Driftwood collection on the beach is another controversial issue. Some feel that there should be strict limits on the amount of driftwood that can be taken for personal use, others want all commercial or large scale driftwood collection prohibited outright, while others would like to see more areas open to driftwood collection. There is also confusion about whether a permit is required for collecting driftwood.

Oregon Parks and Recreation Department has a permit system to allow individuals to drive on the beach to collect driftwood that is under a certain size. The drive-on-beach permit is only to allow the individuals to drive on those beaches closed to driving so they may collect driftwood. No Ocean Shore or Miscellaneous Use Permit is required at this time for personal use driftwood collection. Requiring a permit for personal-use collection of driftwood could potentially put a limit on how much could be taken. However, it would be difficult and impractical to enforce. Commercial driftwood collection or drift log removal would require a natural product removal permit. Drift log removal includes wood in larger pieces than can be loaded by hand. For practical purposes, this has been determined by in-house policy to be any piece longer than 8 feet or larger than two people could lift into a vehicle. The department has advised permittees that private property owners may have legal rights to the driftwood on their Ocean Shore property, and that separate approval from the landowner may be required for them to legally collect driftwood from that property.

Collecting driftwood for firewood is allowed as a traditional use on the Ocean Shore. Where vehicle access on the beach is allowed, one can load firewood directly into their vehicle. On other beach segments, one has to hand carry cut firewood back to the beach access location, unless the person obtains a specific permit for vehicle use on a beach normally restricted to vehicles. These permits are issued at the park manager's discretion, and are limited to relatively few beach segments. Chainsaw use is prohibited within state park beaches, unless permission is granted by the park manager.

During the permit review, a project can be evaluated to determine if there is a legitimate need to remove driftwood (such as public safety) or whether the removal would have an unacceptable affect on beach erosion processes, or on Ocean Shore resource values. (See existing management goal in OAR 736-026-0005(1).) Current Oregon Parks and Recreation Department policies on driftwood removal are in conflict with ORS Chapter 164.

Concern has been expressed about the need for a permit that would protect firewood collectors who are hauling driftwood via the highway from violations imposed by state patrol. ORS 164.813 requires permission from the landowner, for removal and transport of "special forest products", including firewood, from their property. Oregon Parks and Recreation Department could not issue the permit, unless the firewood was specifically being removed from State Park land. The best method for addressing this issue is to notify people of the requirement when they inquire about firewood removal or when obtaining vehicle permits for firewood removal.

Oregon Parks and Recreation Department could make the collection of firewood "easier" in several ways –

1) Issue vehicle permits for collecting firewood in more vehicle-restricted Ocean Shore areas
2) Issue vehicle permits year-round (in some areas vehicle permits are only issued during the off season), or
3) Allow chainsaw use on state park beaches.

All of these options would potentially increase conflicts with other recreation uses, and could also cause a detriment to wildlife habitat, erosion processes and scenic resources, by increasing the amount of driftwood removal. Issuing more permits for vehicle use in closed areas will expose beachgoers to more vehicle traffic they are not expecting to encounter.

Driftwood accumulations provide habitat for shorebirds, insects and other invertebrates that the birds feed on, and provide some protection from wave attack against ocean bluffs. Experience has shown driftwood accumulations help build fore dunes that protect bluffs and upland property from wave erosion.

The department's 1995 "Management Guidelines Committee Final Recommendations" state that it is important to consider what is in the public interest in either allowing or restricting the removal of driftwood from the beach. Issues include potential environmental impacts related either to letting driftwood accumulate or eliminating it. Little research has been done to date on what the environmental effects of any level of driftwood might be. There are also issues related to power saw and chainsaw noise heard at neighboring properties.

Marine Algae: The department recognizes the need to provide for the sustainability of marine algae species in the harvest permitting process. More study is needed to determine what sites, species, amounts and techniques are appropriate for harvesting. Permit parameters that can adequately sustain the viability of each species are needed.

Natural Product Removal and Marine Algae Harvest Recommendations

1. For purposes of driftwood collection, define driftwood by maximum size allowed and that it can only be removed by hand with no mechanical assistance**.** Determine what maximum size is appropriate. The current size limit may be too large.

2. On department-owned lands, base disapproval of natural product removal permits for driftwood firewood and logs on safety issues, habitat needs, erosion considerations and visual values. Allow the use of chainsaws and power saws on the Ocean Shore State Recreation Area, for driftwood removal by permit only. Oregon Parks and Recreation Department already has the authority to do this. Use the Beach Salvage Policy to regulate any requests to salvage large wooden beams or other processed logs from the Ocean Shore State Recreation Area.

3. Seek academic partners to undertake research into the effect of different amounts of driftwood on the Ocean Shore environment.. Encourage scientific study of the environmental impacts of different amounts of driftwood on a variety of beaches. Research could include looking at historic amounts and locations, versus current conditions and determining whether resulting changes in habitat, safety issues, rates and locations of erosion, visual value and level of public safety are acceptable or in need of alteration. Department field managers, in consultation with the department's Natural Resource section, will determine where driftwood has accumulated to the degree that it should be removed or lessened.

4. Continue to allow commercial algae collection (by permit only) while evaluating the results of recent research on the sustainability of harvest of various algal species. Revise the permitting parameters to better address threats and affects from harvest and to educate harvesters on appropriate

harvesting techniques. Disallow collection on a commercial scale of those species that cannot sustain commercial levels of collection. Work closely with the experts in the field (e.g., Oregon Department of Fish and Wildlife, Oregon State University, and the Oregon Institute of Marine Biology, OSU) in determining the appropriateness of commercial algae collection.

5. Consider eliminating the availability of Ocean Shore permits for commercial sand and rock removal. The standards that apply to these permits would make approval of any commercial extraction proposal unlikely. The removal of natural products for commercial purposes would be prohibited. Continue to allow removal for local maintenance of existing beach accesses or Oregon Department of Transportation Highway 101 projects, and to provide emergency access.

6. Continue to allow low levels of collecting natural materials such as shells and rocks, for souvenirs or personal use, except for protected items, such as archaeological artifacts, eggs, animals, and plants.

7. Combine the marine algae collection permit application with the natural product removal permit application.

8. Gold mining: Revise the rule to allow non-mechanized gold mining without a permit. Non-mechanized gold mining is gold mining done only with hand powered tools and using only what one person can carry. No permits will be issued for mechanized recreational or for commercial gold mining on the beach.

Miscellaneous Use Permitting Issues

Miscellaneous Use Permits are issued for non-traditional activities. A non-traditional activity is defined as *"…any organized activity, gathering or use conducted in whole or in part within the boundaries of a state park, ocean shore or other recreational area, which is not a recreational use permitted by the posted park regulations or other provisions of OAR Chapter 736, Divisions 10, 15, and 20".* OAR 736-016-0005(2). There is not a defined number of people or certain type of equipment that "triggers" a Miscellaneous Use Permit, other than commercial filming.

The Permitting Matrix in Appendix D identifies some of the activities that have been permitted and the beach location where these types of activities have occurred. This matrix does not identify, however, the number of permits issued for a particular type of activity for a given beach segment.

Between 1997 and 2002, over 150 Miscellaneous Use Permits have been issued, with over half of those permits being issued for activities in Clatsop and Tillamook counties. Some of these activities are a one-time, one-day event, while other permits are issued for several months or even up to a year in duration. The numbers of Miscellaneous Use Permits have steadily increased, with over 80 permits issued in 2004 alone.

Requests for Miscellaneous Use Permits are expected to increase as the number of persons visiting the beach increases. Permits are issued for small events involving several people to large events involving many people. Large events such as the Hood to Coast Relay Race and large volleyball tournaments, held in Seaside, are drawing record numbers of public spectators (50,000+) to the beach, causing overwhelming law enforcement problems for local officials. In some areas, the demand has become so great that the local

government has requested restrictions on certain events. Weddings on the beach are very popular. From 1997 and 2002, over 40 weddings have been performed on the Ocean Shore, with the majority occurring on the north coast around the Seaside and Cannon Beach areas. This number has increased with approximately 30 permits issued for weddings in 2004 alone.

There has been confusion among the public about how decisions are made regarding whether a Miscellaneous Use Permit is needed and which Oregon Parks and Recreation Department offices issues the permits.

Miscellaneous Use Permit Recommendations

1. Oregon Parks and Recreation Department should prepare a special form to be used in issuing approval for public fireworks displays, along with a Miscellaneous Use Permit. The form will need to be approved by the Attorney General's office and Risk Management before distribution and use. The form and related guidelines should be used for all Ocean Shore State Recreation Area beaches including those adjacent to state parks. The appropriate Area Managers should be responsible for approving or denying such requests. Oregon Parks and Recreation Department staff reviewing requests for fireworks display approval should consider local fire danger conditions. If the fire danger rating is high, or extreme, no approvals in that area should be issued. The applicant should provide proof of a valid public fireworks display permit from the Office of the State Fire Marshal. Reviewers should be aware of any local fireworks restrictions and apply them, and consider upland landowner concerns before issuing the permit. A joint agency brochure should be prepared and distributed to cities outlining the necessary permits and approvals required for public firework displays.

2. Oregon Parks and Recreation Department needs to re-evaluate its Miscellaneous Use Rule language and revise it to provide more clarity on when a permit is needed, so that permit issuance can be applied more consistently coast-wide. Specific criteria may need to be included in the rule language regarding a variety of issues, such as size of gathering, location, types of support improvements, length of stay, etc..

3. Once the administrative rule for Miscellaneous Use Permits is clarified, revise the permit application, permit form, and department policies and procedures. Establish a database for tracking the permits so the department can readily determine where, when, and why a permit has been issued. Designated staff from the coastal management units should be responsible for providing the permit application to interested individuals, reviewing applications, conducting the resource analysis, and issuing approvals or denials. Staff should be trained on how to interpret the rule and apply it, and how to determine potential impacts to the coastal resources. The same staff should be responsible for informing Ocean Shore enforcement trainers about the rule, where to apply, what is needed to apply and what is not allowed. Insurance and fee requirements should not be waived. The permit should be issued for a specific date, and be restricted to the smallest area possible.

Drive On Beach Permitting Issues

Oregon Parks and Recreation Department has authority to issue permits to allow individuals to drive on sections of beach that are normally closed to vehicular traffic. However, Oregon Parks and Recreation

Department is currently not authorized to issue special permits for non-street legal vehicles to drive on beaches that are open to street legal vehicles, although there is some disagreement on what constitutes a "street legal vehicle". There have been instances when Oregon Parks and Recreation Department has issued permits for this use, or have allowed the use to occur without enforcing the law.

Permits are issued for operation of vehicles only during the daylight hours, and are issued to a specific person, vehicle, use, and Ocean Shore area.

Drive-On-Beach Permits have been issued for collection of driftwood and for rock removal, plover related activities (monitoring, predator management, and law enforcement), beach cleanups, activities related to the New Carissa incident in 1999, commercial filming – generally car commercials, handicap access, construction activities generally related to riprap repair, and weddings. This is not an inclusive list of activities. Most Drive-On-Beach Permits are issued for the removal of rock and for driftwood collection. Likewise, many of the Drive-On-Beach permits have been issued for plover management activities, such as breeding population monitoring, predator management, and law enforcement.

The Permit Matrix in Appendix D identifies those sections of beach for which a Drive-On-Beach Permits have been issued. At one time or another, individuals have had the opportunity to drive on the entire ocean shore at some time between 1997 and 2002.

The department faces challenges in determining when a drive-on-beach permit is necessary and appropriate. Should anyone be allowed to drive in closed areas? Other questions involve the types of vehicles that should be allowed, and where should vehicle access be permitted.

Some individuals have expressed the opinion that where the use of vehicles by the general public is otherwise prohibited, the only appropriate vehicle use is for supervision, emergencies, construction or research projects. Concerns over vehicle use include issues related to pedestrian safety and potential natural resource damage from motorized vehicles, including damage to clam beds and impacts on snowy plover and other shorebirds. There are also conflicting opinions about what constitutes a "street legal" vehicle that may be operated on beaches open to general vehicular use. The department has seen increasing demand for Drive-On-Beach Permits to accommodate persons with disabilities or limitations. With an aging population and continued growing demand for such permits, the department has heard concerns regarding impacts to the natural setting and public safety issues.

There is a need to clarify the definition of "street legal". Increasingly, individuals are requesting Drive-On-Beach Permits to operate what are commonly considered off highway vehicles. On beaches open to street legal vehicle use, these off highway vehicles are prohibited by the Oregon Vehicle Code except for certain beaches at Sand Lake and the Dunes National Recreation Area. Some beaches that are open to street legal vehicles are only physically accessible by off highway vehicles. Individuals have proposed modifications to their off highway vehicles to quality them as street legal, however, existing statutes do not provide clear guidance for determining if a vehicle is street legal. Department staff has assumed that a vehicle must be licensed as a street legal vehicle to quality.

There is concern about whether issuing driving permits to closed beaches for driftwood or firewood collection is contributing to the elimination of driftwood on many beaches. The amount of driftwood on the beaches has declined considerably since the Beach Bill was enacted. The opposing concern is that some private landowners have no other way to access the wood on their land other than along the beach.

Drive On Beach Permit Recommendations

1. Work with Attorney General's office to provide a clear definition of "street legal". Work with off highway vehicle groups on the education of off highway vehicle riders regarding where they can legally ride on the beaches.

2. Revise statute and rule, as needed, to allow those with disabilities or limitations permits to drive an off highway vehicle on beaches that are open to street legal driving, within constraints to be defined, and subject to manager discretion. Constraints may include but not be limited to consideration of safety, habitat and disturbance of beach activities or upland residents.

3. Revise the Drive-On-Beach Permit application, permit form, and policies and procedures. Establish a database for tracking the permits so the department can readily determine where, when, and why a permit has been issued. Educate Oregon Parks and Recreation Department staff on the regulations and policies for Drive-On-Beach Permits. Designated staff for the coastal management units should be responsible for providing the permit application to interested individuals, reviewing applications, and issuing approvals or denials. Staff should be trained on how to interpret the rule and apply it. The same staff should be responsible for informing Ocean Shore enforcement trainers about the rule, where to apply, what is needed to apply and what is not allowed. Base disapproval of Drive-On-Beach Permits, for the purpose of driftwood collection, on safety considerations, habitat needs, erosion considerations and visual values.

4. Pursue changing the rule language to say "Motor vehicle use is prohibited unless otherwise posted or with a permit."

5. Pursue changing the rule language to say "Persons using motor vehicles on those portions of the Ocean Shore State Recreation Area that are closed to motor vehicle traffic must have a valid Oregon Parks and Recreation Department permit in their possession."

6. Repeal rule language citing specific offices for obtaining permits as those locations have changed and will continue to change from time to time. This type of information should more appropriately be provided in public information brochures.

7. Pursue rule language changes that would allow designated Oregon Parks and Recreation Department and supervision and enforcement staff to drive on closed beaches without a permit, while acting in their official capacity.

8. Require permits for the use of motor vehicles (street legal or ATV/OHV) on closed beaches for construction, research, restoration, and monitoring purposes.

Beach Salvage Permitting Issues

A permit is required for a person to remove or convert to his own use or possession any salvage from the Ocean Shore. Salvageable objects include "… any object, thing or material, exclusive of drift logs, which is not in its natural state, and is not a natural product of the ocean shore". OAR 736-027-0010(1). The exception to this rule is for those items such as glass floats, length of rope or cable less than 100-feet, and other minor objects normally collected while beachcombing. Beach salvage permits are rarely requested.

The most common use for beach salvage permits is for the recovery of grounded vessels, where authorization of vehicles and heavy equipment on the Ocean Shore is necessary.

There is confusion about whether saw logs are considered driftwood. (See driftwood recommendations above.)

Scientific Research and Collection Permitting Issues

A permit is required for any person wishing to conduct scientific research or collection of natural resources for scientific purposes on the Ocean Shore. This is a relatively new permit and not many people are aware of the need to obtain permission for conducting scientific research and collection on Oregon Parks and Recreation Department owned or managed properties, including the ocean shore.

Scientific Research and Collection Recommendations

Increase public awareness of the necessity for permits. Send notices to Oregon Higher Education Institutions.

Other General Permitting

In addtion to those regulatory permits the department directly addresses as part of the Ocean Shore program, there are several other permit issues that are related to the Ocean Shore.

Off-Highway Vehicle Permitting Issues

Oregon Parks and Recreation Department is the agency responsible for issuing off highway vehicle permits (ORS 390.570-590). Anyone riding an off highway vehicle on public lands must display a permit.

The greatest challenge is educating the public as to where off highway vehicle use is allowed on the Ocean Shore. Many people believe that if the Ocean Shore is open to vehicles then that includes off highway vehicles. However, off highway vehicle use on the Ocean Shore is only allowed, without a valid drive-on-beach permit from the Oregon Parks and Recreation Department, in certain sections of the Oregon Dunes National Recreation Area and the Sand Lake Recreation Area.

Off Highway Vehicle Permit Recommendations

1. Develop an education program to inform the public where off highway vehicle use is allowed.

2. Modify Oregon Parks and Recreation Department's web page on the off highway vehicle program to specifically indicate where off highway vehicle use is allowed on the Ocean Shore.

3. Oregon Parks and Recreation Department should consider rule language that allows for the revocation of an off highway vehicle permit for illegal use of an off highway vehicle on the Ocean Shore.

Long Term Permitting for Ranching Activities

Ranchers who own grazing lands between the beach zone line and high tide (vegetated areas) need to conduct typical ranching activities including driving vehicles, fencing, and vegetation and water management. These ranchers are interested in obtaining a long-term permit from the department, allowing

ranching activities seaward of the beach zone line, without the need for frequent revisions or permit renewals.

Ranching Activities Recommendation

Work with local ranches on the issuance of a long-term permit to allow, where appropriate, ranching activities. The issuance of the permit will be based on the development of a management plan for the dry sand lands within the beach zone line.

Appendix A: Natural Resource Management

Environmental Overview

Oregon Coast Climate and Weather

The Oregon coast is very dynamic, high-wave energy coast. Oregon's beaches and immediate coastal areas are characterized by wet winters and relatively dry summers, with mild temperatures throughout the year. Occasional strong winds strike the Oregon coast, usually in advance of winter storms. Wind speeds can exceed hurricane force, and in rare cases have caused significant damage to structures or vegetation. In spring and summer, the winds off the Oregon coast are generally from the north as a result of the strong North Pacific high-pressure system, while winter winds are from the southwest. The direction of these winds influences sand movement. Climate has a significant influence on the Ocean Shore and the wildlife and plant species that inhabit it. Offshore winds greatly influence the composition of the plant communities found along the Ocean Shore, as few seedlings can tolerate sand burial.

Coastal Habitats

The Oregon coast offers diverse habitat communities ranging from sandy beaches and dunes, estuaries, tidal flats, headlands, inlets, offshore rocks, and bays. Coastal dunes and beach habitat are interspersed along the coast and occur in all coastal Oregon counties. Oregon beaches make up more than one-half of Oregon's coastline. The beaches vary in dimensions, configuration, and sand grain size and color.

Ocean Shore Beaches

Oregon's beaches are one of its greatest resources. The 362-mile Oregon coast is segmented into 22 separate sections of varying length called littoral cells. These littoral cells are separated by rock headlands. Each littoral cell is different from the other and has its own sand budget with sand sources (e.g., bluff erosion), sinks (e.g., bays and offshore), and temporary storage areas (e.g., beaches and dunes). If losses exceed new supply, beaches tend to narrow and become more susceptible to erosion. A "sand budget", is the amount of sand on the beach.

Sand is the most dominant characteristic of a beach. But where does the sand found on the Oregon beaches come from? There are generally three main sources: sediment loads carried downstream by rivers and streams, sea cliff erosion, and sand derived from other regions during past times of lower sea level. Offshore ocean currents take sediments from rivers and streams and distribute it onshore. Headlands and stream mouths block this flow so that sand is deposited and moved onshore by wave action.

The sand budget for a beach varies from season to season and from year to year, dependent upon such things as El Niño and La Niña events. During a normal winter, coastal erosion generally results in a decrease in the amount of sand on the beach, while during the summer there is an increase in sand.

Oregon's beaches vary widely in size and shape. Some beaches are relatively flat and wide (Clatsop Plains), while others are quite narrow and steep (Floras Lake).

There are a number of natural processes (or hazards) that affect the dynamics of a particular beach's morphology, determining such things as whether the beach will be eroded more quickly than others or whether there will be lots of sand or very little sand.

Natural Chronic Hazards

Within each littoral cell, many sandy beaches are backed by sedimentary sea cliffs that are susceptible to erosion. Severe winter storms affect these beaches and sea cliffs yearly. These winter storms produce large waves, near shore currents, high winds, runoff, rain, strong tides, and elevated sea levels caused by episodic El Niño events resulting in beach, dune, and bluff erosion, landslides, slumps, gradual weathering of sea cliffs, and lowland flooding. As a result the beach morphology is constantly changing. These chronic hazards can act cumulatively.

With an increase in the population of coastal areas and the values of coastal property, more and more residential and commercial structures are being built as close to the ocean's edge as possible with little or no regard for the ocean's natural forces. These structures become vulnerable to natural hazards from resulting beach and sea cliff erosion. To protect these structures, the owners seek shoreline protection permits from Oregon Parks and Recreation Department to install structures such as riprap revetments, seawalls, and bulkheads. There is some concern, however, that these shoreline protection measures are only making the situation worse, resulting in the loss of sand from the beach (and thus a narrowing of the beaches) and increased erosion to adjacent non-structured property. Most of these shoreline protection structures have occurred on the north and central coast where much of the coastline is in private ownership, compared to the southern and south-central coast that is largely in public ownership (e.g., USDA Forest Service, Army Corps of Engineer, State of Oregon, and Bureau of Land Management).

Shoreline "chronic" natural hazards include (1) beach and dune erosion, (2) sea cliff recession, and (3) coastal flooding and storm-surge. Within some littoral cells sand build-up is a problem (the beach at Pacific City) while in other littoral cells, beaches are eroding (Beverly Beach) such that the amount of sand present is limiting the amount of beach available for activities such as recreation. In fact, within the same littoral cell there can be sand erosion at the south end of the littoral cell, and sand accretion at the north end.

Beach and Dune Erosion/Accretion

Beach erosion and accretion are exacerbated by El Niño and La Niña events, and when there is little or no sand supply from eroding sea cliffs or sediment from streams. The amount of erosion that occurs along Oregon's coast is dependent upon the water level achieved by tide and wave run-up, and occurs primarily during the stormy winter months. However, erosion may begin as early as October and continue into the spring. High waves, coupled with high water levels, remove beach sand accumulated during the summer months. Spring tides may bring water levels up to fore dunes and sea cliffs, eroding property.

Sand accretion generally occurs during the summer months when winds from the north-northwest deposit sand primarily in the southern section of a littoral cell.

Sea Cliff Recession

Sea cliff erosion is due to heavy and prolonged winter rains that saturate the porous sandy unconsolidated sediments resulting in landslides, slumps, and sloughing. Other factors include storm waves, especially at rip embayments, that remove sediments from the base of the cliffs and undercut the cliffs; and excavation and alteration of drainage patterns due to development. If the sea cliffs are protected with shoreline structures such as riprap revetments, the structures essentially lock-up new sources of sand to the beach, and if the beaches in the littoral cell receive sand primarily through sea-cliff erosion, then no new sand will be replacing the sand lost during winter storms.

Coastal Flooding-Storm Surge
Flooding occurs as the result of heavy rainfall, steep topography, extensive floodplains, and low permeability. The counties of Clatsop, Coos, Curry, Lincoln, and Tillamook have nearly every type of flood hazard found in the Northwest, according to the Federal Emergency Management Agency (FEMA).

Many of these natural hazards are further exacerbated by El Niño and La Niña weather events.

El Niño and La Niña Events
During an El Niño event

- Winter storms are more frequent, with large waves approaching the coast from a more southerly angle.
- Sea level is raised even more than during normal years as the El Niño wave passes by the coast over a several month period.
- Rip currents are enhanced and often move along the beach from south to north.
- Sand transport from south to north increases markedly under the influence of the more southerly swells.
- Another consequence of these more southerly swells is that tidal inlets and river mouths move to the north.
- Less sand moves south and onshore in the summer.
- Sand often moves into bays as well, further constricting tidal exchange.
- Erosion at the north side of the bay entrance increases.
- A greater amount of sand is transported to the northern end of the cell, or lost offshore.

El Niños occur every 4-5 years with strong and very strong events occurring about every 8-9 years. The most significant factors are elevated mean water levels causing much higher tides than predicted, and the more southerly paths of the storm system. Elevated mean water levels are the result of warm, less dense water. Additionally, the northward current is stronger than in non El Niño years, and mean water levels may rise by as much as 60 to 70 cm.

During an El Niño event, increased sea levels and storm wave run-up elevate tide levels, resulting in some degree of erosion along the entire coast of Oregon. During these events, the northward shift of sand results in erosional "hot spots" occurring to the immediate north of headlands and along the north shores of tidal inlets that are not restricted by jetties or other manmade structures(e.g., Netarts spit). Inlets and jetties act as miniature headlands, resulting in the occurrence of some erosion to the north of jetties.

Several examples of "hot spots" from the 1997-1998 El Niño storms were Cape Lookout State Park, Port Orford – Garrison Lake, and the beach in front of the City of Neskowin. In the case of Cape Lookout State

Park, the reduced volumes of sand on the beach made it more susceptible to continued attack by waves. The beach was eroded further by a La Niña event the following year (1998-1999). Another "hot spot" is the community of Nesokowin, which is located immediately north of Cascade Head. The beach did not recover the summer between the 1997-1998 El Niño event and the 1998-1999 La Niña storms, further eroding the beach and threatening many homes. As a result of these weather processes a number of revetments were constructed to protect property. Oregon Parks and Recreation Department issued 22 emergency and 41 regular riprap permits to individuals whose homes were in danger of being destroyed by ocean waves. One could argue that the effects of the El Nino and particularly the La Nina storms are still influencing the number, location, and types of permit applications that are submitted, as many of the beaches that were affected during the 98/99 period have still not recovered and have been more prone to erosion related problems each subsequent winter.

Those communities that lie at the northern end of a littoral cell face the opposite problem. Communities such as Pacific City and Manzanita have received excessive amounts of sand, resulting in the burial of homes. The successive El Niño and La Niña events, however, saw a significant cutting back of the fore dunes.

Another event, La Niñas also can result in erosion, especially immediately following an El Niño event. During a La Niña, strong storms cross directly over the Oregon coast. High waves and storm surges reach to the fore dunes and sea cliffs. Since long-shore movement of sand within the littoral cell is less important, erosion tends to occur anywhere along the length of the littoral cell.

Beach erosion during a La Niña, tends to be more when the La Niña immediately follows a El Niño the previous year, such as what happened in 1998-1999. Those beaches that did not have sufficient time to recover – i.e., to regain sand were further eroded. Those beaches that remained sufficiently wide suffered little erosion. These wider beaches provide buffer protection for the fore dunes and sea cliffs.

Climatologists are predicting a 25 year period dominated by La Niña events, which means that the Oregon coast is entering a period with more extreme storms and likely greater impacts from coastal erosion. This may result in the need for additional shoreline protection structures, primarily on the north and central coast of Oregon.

Buried Forests

Evidence of buried forests can be found along many areas of the Oregon coast. These forests grew approximately two to six thousand years ago, when the sea levels were lower. An abrupt increase in sand supply, possibly combined with tectonic movement caused these forests to be rapidly buried and preserved by beach over wash and then dune deposits. The forests were buried and protected from decomposition for several thousands of years. Many of these forests have been exposed due to continuing beach erosion.

Threats:

Installation of riprap revetments usually includes the excavation of a toe trench. In certain locations, the toe trench may have to be excavated into the old forest soils beneath the beach level. Usually this consists of peaty soils, and woody debris, but there's a chance that a buried tree or stump could be excavated. The standing stumps and trees that may be exposed periodically are features worth protecting. Oregon Parks and Recreation Department regulations (OAR 736-020-0030) require the department to consider, when deciding whether to issue an Ocean Shore Permit, ancient forests, fossil beds, and areas of "geologic interest".

Agates

Not all beaches are composed primarily of sand. Agates can be found in the gravel beds that are exposed during winter when beach sands are transported offshore by winter surf conditions. The Central Oregon coast tends to have the highest concentration of agates, as erosion of coastal bluffs and landslides often contain gravel and pieces of agate. After the Capes landslide in 1997, there were blood agates all over the beach at the site. The culture of agate collecting is prevalent, and there are full parking lots at Seal Rock and Lost Creek during the winter months, primarily agate collectors.

Threats:

The collection of agates for personal use is not regulated by Oregon Parks and Recreation Department, and in fact is listed in ORS 390.725 as being exempt from the Ocean Shore Permit requirements**.** However, there is no way to determine whether the collection that is occurring is personal or commercial use.

Water Quality on the Ocean Shore

Anyone venturing to the beach expects the beaches to be clean, even pristine. That is not always the case. In 2000, Congress passed the BEACH (Beaches Environmental Assessment and Coastal Health) Act. This act mandated all coastal states to adopt near shore ocean water quality standards, and to develop and implement a near shore water quality monitoring program. Funds to accomplish this task were provided by the Environmental Protection Agency to the Oregon Departments of Human Services (DHS). DHS administers the program and the Oregon Department of Environmental Quality (DEQ) is responsible for the water quality testing. Based on preliminary tests conducted in 2002 and input from the public, the state chose 52 Oregon beaches (see Table A.1) for testing, organizing them into a tier system. Tier-one beaches are tested weekly; tier-two beaches twice a month and tier-three beaches monthly. If high levels of bacteria are discovered, officials retest the site. If the numbers persist, warnings are posted and beaches may be closed. Peak testing occurs from May through September.

Beach advisories are posted on the Oregon Department of Human Services' website (http://www.ohd.hr.state.or.us/beach/update.cfm). The advisories state whether the public should avoid contact with the water at certain beaches due to recent test results. The web page identifies the beaches in question and the contaminant of concern. DHS issues a press release when test results indicate a problem at a particular beach. The beach is posted with an advisory notice. Oregon Parks and Recreation Department is responsible for posting 47 of the 52 beaches.

In addition to the beach advisories, the Human Service's website also includes additional information on the beach monitoring program, sampling results, and the list of beaches.

Table A.1: Beach Testing Sites

Tier	Name	City
1	Cannon Beach	Cannon Beach
1	Oswald West State Park	Manzanita
1	Seaside Beach	Seaside
2	Agate Beach State Wayside	Newport
2	Bastendorf Beach	Coos Bay
2	Beverly Beach State Park, 6.5 mi. N of Newport	Newport
2	Cape Kiwanda State Park	Pacific City
2	"D" River State Wayside	Lincoln City
2	Fogarty Creek State Park	Depoe Bay
2	Harris Beach State Park	Brookings
2	Mill Beach	Brookings
2	Nelscott Beach	Lincoln City
2	Nye Beach	Newport
2	Oceanside Beach State Wayside	Oceanside
2	Ona Beach State Park	Newport
2	Otter Rock Beach, Devils Punchbowl State Park	Newport
2	Roads End Beach State Wayside	Lincoln City
2	Rockaway Beach	Rockaway
2	Siletz Bay Beach	Taft
2	South Beach State Park	Newport
2	Sporthaven Beach	Brookings
2	Sunset Bay State Park	Coos Bay
2	Gold Beach, S Jetty	Gold Beach
2	Yaquina Bay State Park Beach	Newport
2	Bandon Ocean State Wayside	Bandon
2	Beachside State Park	Waldport
2	Gleneden Beach State Wayside	Lincoln City
2	Umpqua Lighthouse State Park ocean beach	Reedsport
3	Barview County Park	Garibaldi

Tier	Name	City
3	Battle Rock Wayside	Port Orford
3	Bullards Beach State Park	Bandon
3	Cape Lookout State Park	Tillamook
3	Fort Stevens State Park	Astoria
3	Governor Patterson Memorial State Park	Waldport
3	Heceta Beach	Florence
3	Hug Point State Park	Arch Cape
3	Manhattan Beach State Wayside	Rockaway
3	Manzanita Beach	Manzanita
3	Meyers Beach	Gold Beach
3	Moolack Beach N of Newport	Newport
3	Nehalem Bay State Park	Manzanita
3	Neskowin Beach State Wayside	Neskowin
3	Oregon Dunes Nat'l Rec Area, S. Jetty	Florence
3	Tolovana Beach State Wayside	Cannon Beach
3	Twin Rocks, S of Rockaway	Twin Rocks
3	Robert W. Straub State Park	Pacific City
3	Yachats Ocean Road State Wayside	Yachats
3	Indian Beach at Ecola Park	Cannon Beach
3	Whiskey Run south of Coos Bay	Coos Bay
3	Hunter Creek S. of Gold Beach	Gold Beach
3	Euchre Creek Beach	Ophir
3	Hubbard Creek Beach at Humbug Mtn State Park	Port Orford

Threats:

People can become sick on Oregon's beaches from ingesting bacteria contaminated water. Enterococci is a microorganism that has been shown to have a greater correlation in marine waters with swimming-associated illnesses than other bacterial organisms, is the primary bacteria of concern. Enterococci is a microorganism found in human and animal waste.

Sources of Enterococci include overflow from storm water runoff and sewage treatment facilities, faulty septic systems, animal waste, and boating waste. The bacteria contamination is greatest where streams and outflows mix with ocean waters on the beach.

Coastal Plants and Animals

The Ocean Shore is habitat for a variety of plants and animals. As the beach and sand dunes become more stabilized and more used by humans this habitat is threatened. A number of plants and animals depend upon the sandy beaches and dunes for nesting, roosting, resting, and foraging (see Table A.2). With a decrease in habitat for plants and animals that depend upon it, these plants and animals may also become threatened.

Threatened and Endangered Species

Several of the species that use the sandy beach, near shore areas, or adjacent uplands have seen a significant decline in their numbers over the years, and have been designated by the state and/or federal governments as threatened or endangered pursuant to both state and federal Endangered Species Act (ESA). In total, thirteen threatened or endangered species, species of concern or candidate species are known to potentially occur on or near the Ocean Shore (see Table A.3). Federal protection is afforded to those species listed as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA). Limited protection is afforded to threatened and endangered species under the State's Endangered Species Act. The Oregon Department of Agriculture (ODA) manages the plant species while the Oregon Department of Fish and Wildlife (ODFW) manages the animal species. The state's Endangered Species Act applies only to state managed, owned, or leased lands, or for which the state agency has a recorded easement.

Table A.3 Threatened or Endangered Species along or near the Ocean Shore

Scientific Name	Common Name	Federal Status	State Status
Pelecanus occidentalis	Brown pelican	E	E
Brachyramphus marmoratus marmoratus	Marbled murrelet	T	T
Haliaeetus leucocephalus	Bald eagle	T	T
Falco peregrinus anatum	Peregrine falcon	Delisted	E
Charadrius alexandrinus nivosus (coastal population)	Western snowy plover	T	T
Eumetopias jubatus	Steller sea lion	T	SV
Abronia umbellate Lam. Spp. breviflora	Pink sandverbena	SC	E
Phacelia argentea	Silvery phacelia	SC	T
Lilium occidentale	Western Lily	E	E
Giliam millefoliata	Manyleaf Gilia	SC	---
Lasthenia macrantha var. prisca	Large-flowered goldfields	SC	C
Oenothera wolfii	Wolf's evening primrose	---	T

Of these species, the sandy beach is primary habitat for the pink sand verbena, silvery phacelia, manyleaf gilia, and the western snowy plover.

Threatened/Endangered/Species of Concern: Wildlife

Brown Pelican

The brown pelican is listed as "endangered" under the federal and state Endangered Species Acts. The brown pelican can be found along the entire Oregon coast, from the Columbia River to the California border. Brown pelicans breed in California, then migrate along the Pacific coast as far north as Vancouver

Island. The brown pelican is a common spring, summer, and fall visitor along the Oregon coast, however this species has wintered in the Charleston and Coos Bay area. A large number of pelicans have been congregating at the mouth of the Columbia River for the past several years and there is the possibility of breeding occurring on East Sand Island. Critical habitat has not been designated for the brown pelican.


USFWS photo by Gary Stotz

Threats:
Threats to brown pelicans include reproductive failure and lack of food. Before the banning of DDT, pollution was the primary cause for the near total reproductive failure for the brown pelican. A secondary cause of reproductive failure is the human disturbance during critical times in the breeding cycle. Today, the primary cause is food availability and abundance.

Although they are opportunistic feeders, brown pelicans primarily feed on northern anchovy.

Strategy:
The brown pelican rarely occurs on the Ocean Shore. Therefore, Oregon Parks and Recreation Department assistance with the management of this species is limited. However, in recent years, six dead brown pelicans were found on the Oregon coast with their bills cut-off. The U.S. Fish and Wildlife Service investigated the incident. If similar incidents occur in the future, Oregon Parks and Recreation Department will work with the US Fish and Wildlife Service in their investigative efforts, as needed. Brown pelicans are often seen frequenting the rocky shoreline.

Marbled Murrelet
The Washington, Oregon, and California population of the marbled murrelet was federally listed as threatened in 1992, and is also listed as threatened under Oregon's Endangered Species Act. This bird can be found along the entire Oregon coast from the Columbia River to the California border.

The marbled murrelet is a small robin-sized diving seabird feeding primarily on fish and invertebrates in near-shore marine waters. The murrelet spends the majority of its time on the ocean, roosting and feeding, but comes inland up to 80 kilometers (50 miles) to nest in forest stands with old growth forest characteristics. The listed population nests in tree stands varying in size from several acres to thousands of acres. However, larger, un-fragmented stands of old growth appear to be the highest quality habitat for marbled murrelet nesting. Nesting stands are dominated by *Psuedotsuga menziesii* (Douglas fir) in Oregon. At sea, marbled murrelets can be found during breeding season at Boiler Bay, Yaquina Head, and Cape Perpetua. The breeding season for the marbled murrelet is late March through late September.

Threats:
The loss and modification of nesting habitat in old growth and mature forests is the primary threat to marbled murrelets resulting in a decline in reproductive success. The loss and modification of nesting habitat is due to commercial timber harvests, human-induced fires, land conversions, and to a lesser degree, natural causes such as wild fires and windstorms. Other stresses include predation, fishing net mortality, oil spills, and other marine pollution (US Fish and Wildlife Service 1995).

Strategy:
Oregon Parks and Recreation Department will prepare a species management plan for the marbled murrelet that will address management actions for conservation of the species for activities that may affect marbled murrelets within state park boundaries.

Bald Eagle


U.S. Fish and Wildlife Service

The bald eagle can be found along the entire coast, from the Columbia River to the California border. The bald eagle has been listed as threatened under both the state and federal Endangered Species Acts. The federal government is considering delisting this species due to a remarkable comeback.

Many bald eagles nest along the Oregon coast. Nests are often reused year after year, and with additions made annually, the nests can become enormous. Bald eagle nests have been found within or in close proximity to a number of coastal parks, including Fort Stevens State Park. The bald eagle, which breeds in all seven coastal counties, nests from through mid-August.

Winter foraging areas are usually located near open water on rivers, lakes, reservoirs, and bays where fish and waterfowl are abundant, or in areas with little or no water (i.e., rangelands, barren land, suburban areas, etc.) where other prey species (e.g., rabbit, rodents, scavenged deer, and other carrion) are abundant. Waterfowl are the most common avian prey, but shorebirds and land birds are also eaten. On the coast, a variety of mammals are also taken as prey, although mammals are less important than fish and birds.

Threats: Population declines are attributed to reproductive failure associated with eggshell thinning correlated with widespread use of organochloride compounds, habitat loss, shooting, secondary lead poisoning, exposure to lethal poisons from vertebrate pest control programs, electrocutions, and other environmental contaminants. Other threats include human disturbance associated with urban and recreational development and associated human activities (i.e., hiking, camping, boating, and off highway vehicle use). Other activities that can and have negatively affected bald eagles include logging, mining, recreation, overgrazing (particularly in riparian habitats), road construction, wetland filling, and industrial development. These activities are particularly damaging when they occur in shoreline habitats. Use of fireworks is another activity that can affect nesting bald eagles.

Strategy:
Use of fireworks on the Ocean Shore is illegal except with a permit issued by Oregon Parks and Recreation Department. Permits are generally issued to local communities for July 4th. No permits will be issued for firework activities within 1,000 feet of a known bald eagle nest.

Oregon Parks and Recreation Department will prepare a species management plan for the bald eagle that will address management actions for conservation of the species for activities that may affect bald eagles within state park boundaries.

Peregrine Falcon

In North America, peregrine falcons can be found breeding from the Arctic Coast south to Baja. The federal government delisted these birds in 1999, and the state of Oregon is considering delisting this species in the near future. Peregrines use cliff ledges within close proximity to water for nest sites in what are called aeries. Their diet is made up mostly of other birds (including snowy plovers) as well as rodents and fish, which they strike and capture with their sharp talons. A pair of peregrine falcons can be seen at Cape Meares NWR from the newly constructed viewing decks. There is also a nesting peregrine in the New River area. Breeding season is mid-March through mid-August.

Threats:

Peregrine falcon populations declined to below historic levels during the 1940's, '50's and '60's. This decline has been attributed to reproductive failure associated with eggshell thinning correlated with widespread use of organochloride compounds. Other pollutants, disturbance from human activities, loss of nesting and foraging habitats, shooting, collisions with transmission lines and their supporting structures have also contributed to the reduction of peregrine falcon numbers.

Like the bald eagle, the peregrine falcon is threatened by human disturbance associated with development or recreation activities. On the Ocean Shore, the use of fireworks may affect nesting peregrine falcons, although the impacts are believed to be minimal due to the location of nests.

Strategy:

Oregon Parks and Recreation Department will prepare a species management plan for the peregrine falcon that will address management actions for conservation of the species for activities that may affect peregrine falcons within state park boundaries.

Western Snowy Plover

Of all the bird species described in this plan, only the western snowy plover nests on the sandy beach, making it vulnerable to a variety of potential impacts, including human use of the beach. When a species already is in decline, it is less capable of withstanding a combination of limiting factors including human disturbance, urban development, avian and mammalian predators, disease, habitat loss (i.e. shoreline stabilization, resource extraction, driftwood removal, and introduced beachgrass and other nonnative vegetation.) A draft recovery plan is in the process of finalization.

The western snowy plover *(Charadrius alexandrinus nivosus)* is a small shorebird. The Oregon coastal population is at the northern end of the subspecies' range and consists of approximately 140 birds spread between eight breeding sites. Current Oregon breeding sites are Baker/ Sutton Beaches, north and south spits of the mouth of the Siltcoos River, beachgrass removal sites at Dunes Overlook, north and south spits of Tahkenitch Creek, north and south spits of Tenmile Creek, Coos Bay North Spit, Bandon State Natural Area, and the New River spit. Surveys conducted in earlier years indicate that before 1978 the Oregon snowy plover population was once larger and more widely distributed than it is currently.

Along the Oregon coast snowy plover nesting habitat is characterized by wide, open sandy beaches, river mouths, or dredge spoils, often with scattered driftwood or vegetation. Driftwood, wrack, and native dune plants often harbor snowy plover food sources, and provide cover for chicks hiding from predators. Driftwood and plants can also provide protection from wind. In 2004, there were a total of 117 plover nests. Of these, eggs hatched from 72 nests resulting in 107 fledged snowy plover. This has been one of the most productive years in some time.

Threats:
The primary threats to the snowy plover include loss of habitat for nesting and foraging, predation, climate, and reproductive failure. Sources for habitat loss include the introduction of European beachgrass, which has stabilized sand dunes, which in turn has resulted in the width of the sandy beach diminishing. Development of adjacent properties may also result in the loss of habitat, through installation of riprap revetments and seawalls, which affect beach erosional processes.

Reproductive failure is the indirect result of European beachgrass, which provides cover for many predatory species, such as the non-native red fox, and the skunk, raccoon, and feral cats. Human recreational activity on the beach may also result in an increase in reproductive failure. Birds will flush from their nest if approached too closely by humans or their pets. The more time that is spent off the nest, the more susceptive the eggs are to predation, or excessive heating or cooling of the egg. Natural occurrences such as windstorms may bury eggs resulting in loss of those eggs. Predation can result in death to eggs, chicks, and adults. Driftwood collection and removal can result in the loss of this protective cover for snowy plovers and their chicks. However, too much driftwood can provide places of predators to hide.

Strategy:
The department is seeking an incidental take permit and is preparing a habitat conservation plan for the western snowy plover that will address how the agency intends to minimize, and mitigate for impacts to the species resulting from activities that the department manages, primarily recreation. This habitat conservation plan is just one piece of a larger effort to assist in conservation and recovery of the species.

Steller Sea Lions
The Steller sea lion (*Eumetopias jubatus*) is found in the Pacific Ocean from Japan to southern California. Stellers tend to remain offshore or haul out in unpopulated areas. Stellers roar rather than bark and are much larger and lighter in color than California sea lions. Stellers are not often seen in bays or rivers, and their pups are born on offshore islands during the months of June and July. The main haul out areas in Oregon are Rogue Reef, Three Arch Rocks, and Shell Island. Steller sea lions are listed as a threatened species in Oregon under the federal Endangered Species Act, and the Oregon Fish and Wildlife Commission has designated the species as “sensitive vulnerable”.

Threats:
Concern that population decline in Alaska could occur in Oregon is the reason for the designation as a sensitive vulnerable species by Oregon. The cause of the decline in the Alaskan population is not fully understood, but possibly includes epidemic disease, predation, reproductive rate decline, entanglement in fishing nets, and loss of their primary prey, the walleye pollock, to the North Pacific trawl fishery. The latter is considered the most probable cause. They are also disturbed by human presence in some places with easy access.

Strategy:
The likelihood of any Oregon Parks and Recreation Department Ocean Shore managed activities having an impact on Steller sea lions is low. The haul out areas for this species are under the jurisdiction of the U.S. Fish and Wildlife Service (Refuge system), and the Oregon Department of Fish and Wildlife and the National Marine Fisheries Service/NOAA Fisheries has management responsibility for the species. With respect to non-park property on the Ocean Shore, Oregon Parks and Recreation Department will work with ODFW and/or NOAA Fisheries on any recreation or permitting issues that may result in adverse effects to the species.

Threatened/Endangered/Species of Concern: Plants

There are six plant species that are listed as endangered (western lily, pink sand verbena), threatened (wolf's evening primrose and silvery phacelia) or species of concern or candidate species (manyleaf gilia and large flowered goldfields).

Pink Sand verbena

Pink sand verbena *(Abronia umbellata ssp)* is an annual perennial native herb found in disturbed sandy areas and coastal dunes below 100 meters. Pink sand verbena is a state listed "endangered" species, and is considered a species of concern by the U.S. Fish and Wildlife Service. This species has historically occupied beaches from Vancouver Island, British Columbia to northern California. Only a few populations are known to exist in Oregon and California. Pink sand verbena blooms from May into autumn.

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Threats: The primary threats to pink sand verbena are competition from European beachgrass and habitat disturbance from motor vehicles. With the decline of pink sand verbena, there has been a corresponding decrease in other plant and wildlife species. This species is frequently found in association with yellow sand verbena (*Abronia latifolia*).

Strategy:

The USDA Forest Service, Siuslaw National Forest and the Bureau of Land Management Coos Bay District have undertaken projects to transplant and seed pink sand verbena at several beaches and dune habitats along the coast since 1997. Habitat restoration activities at Bandon State Natural Area will result in more sandy beach area for nesting snowy plover. Oregon Parks and Recreation Department recently received a grant from the U.S. Fish and Wildlife Service to seed the area recently restored at Bandon State Natural Area. Oregon Parks and Recreation Department will prepare a species management plan for this species that will include re-introduction elsewhere on Oregon Parks and Recreation Department property.

Western Lily

The Western lily (*Lilium occidentale*) is both federal and state listed as endangered. The western lily grows up to five feet tall, and has as many as ten nodding crimson red flowers per stem. This species blooms from late June through July. This extremely rare lily grows only on the periphery of bogs near the sea, on poorly drained, highly organic soils of sphagnum origin. In Oregon, it is known only in Coos and Curry Counties. In 1998, the U.S. Fish and Wildlife Service prepared a recovery plan for the western lily, with the recovery objective of down listing the species to threatened status.

Threats:
The primary threats to this species include habitat loss, secondary succession, loss of genetic diversity due to inbreeding, grazing by wildlife and livestock, cranberry farm development, plant collectors, and highway construction. Habitat loss is due to clearing and drainage of land for livestock grazing and development.

The western lily is susceptible to competitive exclusion by shrubs and trees. Fire prevention has allowed ecological succession to occur in western lily habitat, changing the plant communities present.

The western lily occurs in early to mid-successional and occasionally late successional low nutrient bogs or coastal shrub on poorly drained, highly organic soils of sphagnum origin. Although the western lily occurs in close proximity to snowy plover habitat, it is not a dune species and should not be affected by activities on the Ocean Shore except, or unless, located near a trail leading out to the Ocean Shore.

Strategy:
The department has been working with the USDA Forest Service, Bureau of Land Management, the Berry Botanical Garden, and the Oregon Department of Agriculture on conservation of the species. The department has a management plan in place for the western lily, which will be updated in 2005. Oregon Parks and Recreation Department is working with The Nature Conservancy and the US Fish and Wildlife Service on a habitat modification project at Harris Beach State Park, Floras Lake State Natural Area, Bastendorf Bog, and Sunset Bay and Shore Acres State Parks.

Silvery Phacelia
Silvery phacelia *(Phacelia aregentea*) is the only *Phacelia* species growing in open sand or dunes. Silvery phacelia is a local endemic, occurring in coastal dunes in Coos and Curry Counties, Oregon. It reproduces by seed and rhizomes; and is not nearly as capable of spreading as other dune plants, but can colonize open sand. Silvery phacelia is listed as a threatened species under the state Endangered Species Act and is a federal species of concern. Limited distribution in a few specific habitat type areas provides little margin for survival. When impacted, their populations decline quickly and are unable to rebound from changes in habitat or other threats. Silvery phacelia flowers from late May to early August.

Threats:
Threats to this species include habitat loss and secondary succession (natural and artificial causes). Habitat loss is due to vehicle use in the areas occupied by the species. Dune stabilization through the use of European beachgrass is also known to have reduced habitat. Secondary succession is due to forest succession. Other sources of stress include recreation, and development.

Strategy:
Oregon Parks and Recreation Department will prepare a species management plan for silvery phacelia that will address management actions for conservation of the species for activities that may affect silvery phacelia within state park boundaries.

Wolf's Evening Primrose

The Wolf's evening primrose (*Oenothera wolfii*) is state listed as threatened under the Oregon's Endangered Species Act. Wolf's evening primrose is a perennial, or sometimes a biennial plant, growing erectly from 20 to 60 inches tall. The species is found mainly in sandy soil on bluffs above the ocean beach, and is known only from a few sites in Curry County, Oregon. Wolf's evening primrose blooms from June to October.

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Threats:

The primary threats to Wolf's evening primrose include hybridization with the introduced species *Oenothera glazioviana*, and habitat loss due to coastal development, roadside maintenance activities, and competition with exotic species. European beachgrass removal will benefit this species, but should occur in the late fall and winter, after *Oenothera wolfii* has set seed.

Strategy:

This species is located at several state park sites. Oregon Parks and Recreation Department will prepare a species management plan for the Wolf's evening primrose that will address management actions for conservation of the species for activities that may affect Wolf's evening primrose within state park boundaries.

Large-flowered Goldfields

Large-flowered goldfields (*Lasthenia* macrantha), a rare daisy-like flower, grows in a few isolated populations in Curry County, Oregon, on seaward slopes, rocky cliffs, and sandy areas above the beach. This species is rare throughout its range and its numbers seem to vary with the year. This species flowers in June and July.

Threats:

Threats to this species include habitat development, grazing, heavy human trampling and encroachment of woody or exotic vegetation. Although this variety is not found directly on the beach, it may occur on trails to the beach. Potential indirect impacts can be avoided by increasing awareness of known populations of this plant.

Strategy:

This species is present at several state park sites. Oregon Parks and Recreation Department will prepare a species management plan for large-flowered goldfields that will address management actions for conservation of the species for activities that may affect large-flowered goldfields within state park boundaries.

Manyleaf Gilia

Manyleaf gilia (*Gilia millefoliata*) is a federal species of concern, which historically occurred along the Pacific coast from the San Francisco Bay area to the central Oregon coast. There currently are three

known populations along the Oregon coast, from Floras Lake to the California state line. This species is found on semi-stabilized sand dunes within 200 yards of the ocean.

Threats:
Manyleaf gilia is threatened by development, heavy highway vehicle use, and competition from exotic plants, such as European beachgrass. Like other dune species listed here, this species will benefit from beachgrass removal associated with snowy plover habitat management.

Strategy:
This species is not known to be present on any state park sites. If this species is subsequently discovered at any coastal state park in Curry County, the Oregon Parks and Recreation Department will prepare a species conservation management plan.

Other Coastal/Dune Species

Not all the species that associate with coastal beaches or dunes are threatened, endangered, or species of concern. There are over 150 species that are associated with coastal dunes and beaches: 116 bird species, 26 mammal species, one amphibian, five reptiles, and two marine mammals (See Table A.2).

Table A2: Animal Species Associated with Coastal Dunes and Beaches

Birds associated with beach habitat	Mammals associated with beach habitat	Marine Mammals associated with beach habitat
Brown Pelican	Raccoon	Harbor Seal
Turkey Vulture	Mink	Northern Elephant Seal
Bald Eagle	Northern River Otter	
Merlin	Feral Pig	
Gyrfalcon		
Peregrine Falcon		
Black-bellied Plover		
American Golden-Plover		
Pacific Golden-Plover		
Snowy Plover		
Semipalmated Plover		
Killdeer		
Black Oystercatcher		
Wandering Tattler		
Marbled Godwit		
Ruddy Turnstone		
Black Turnstone		
Red Knot		
Sanderling		
Semipalmated Sandpiper		
Western Sandpiper		
Least Sandpiper		
Baird's Sandpiper		

Birds associated with beach habitat	Mammals associated with beach habitat	Marine Mammals associated with beach habitat
Dunlin		
Buff-breasted Sandpiper		
Franklin's Gull		
Bonaparte's Gull		
Heermann's Gull		
Mew Gull		
Ring-billed Gull		
California Gull		
Herring Gull		
Thayer's Gull		
Western Gull		
Glaucous-winged Gull		
Glaucous Gull		
Caspian Tern		
Elegant Tern		
Arctic Tern		
Band-tailed Pigeon		
Snowy Owl		
American Crow		
Northwestern Crow		
Common Raven		
Horned Lark		

Birds

There are at least 116 birds that are associated with coastal beaches and dunes. Shorebirds and seabirds are abundant along Oregon's coast. These birds face many natural and man-made threats.

Shorebirds

A wide variety of shorebirds can be spotted on the Oregon coast, especially during spring, summer, and fall migration where shorebirds rest and replenish at stopover locations. Most shorebirds are neotropical migrants traveling upwards of 30,000 km round-trip (18,600 miles). These birds often fly nonstop between major feeding locations along the Pacific Flyway, a north-south flyway corridor, and may be found on any of Oregon's beaches at one time or another during the year. They are often seen feeding along the wrack line or roosting near the fore dune. Some shorebirds, such as sanderlings and dunlin, over-winter on the Oregon coast. Approximately 40 of the 50 shorebirds found in the United States occur regularly along the Northern Pacific Coast.

Despite the large variety of shorebirds to be found on the Pacific Northern Coast, the majority of shorebirds found along the Oregon coast are sanderlings. These small birds are often mistaken for snowy plovers. In a survey conducted in 1993 at the Oregon Dunes National Recreation Area, during a five month period from June 30th to November 13th, over 449,978 observations of sanderlings were noted. Other significant species observed include western sandpiper (16,576 observations), dunlins (9,790 observations), black-bellied plover (3,363 observations), semipalmated plover (2,263 observations), western snowy plover (403

observations), ruddy turnstone (251 observations), wimbrel (243 observations), surfbirds (82 observations), black turnstones (79 observations), wanderling tattlers (46 observations) baird's sandpiper (46 observations), red-necked phalarope (43 observations), dowitcher (21 observations), marbled godwit (20 observations), and golden plover (15 observations). Of the seven beaches surveyed, the four with the most shorebird use included Coos-Horsfall, Horsfall-Tenmile, Umpqua-Threemile, and Siltcoos-Siuslaw.

The Columbia River estuary and Coos Bay are important wintering sites for shorebirds. Sites recognized as regionally significant for shorebirds include Clatsop/Sunset Beach and the Oregon Dunes National Recreation Area and the beaches between Coquille Point and Cape Blanco. These areas support a large number of shorebirds, particularly during migration. With the exception of a few shorebirds, most do not nest in Oregon rather they migrate north to Alaska and Canada to breed. The few shorebirds that do nest in Oregon include the snowy plover and the killdeer. Portions of the beaches at Sutton/Baker Beach, within the Dunes National Recreation Area, and the beaches between Coquille Point and Cape Blanco are snowy plover habitat areas. Any protection afforded the snowy plover in this regionally significant area should provide protection for other shorebirds, as well. The following table lists those shorebirds that have been identified as either highly imperiled or of high concern.

Table A.4 U.S. Shorebird Conservation Plan list of highly imperiled shorebirds or shorebirds of high concern.

Highly Imperiled Shorebirds	
Global Species	**North American Populations**
• Piping Plover • Mountain Plover • Long-billed Curlew • Buff-breasted Sandpiper	• Snowy Plover • Black-necked Stilt (Hawaiian population) • Red knot (Canadian Arctic-Atlantic Coast Population)
High Concern Shorebirds	
Global Species	**North American Populations**
• American Golden-plover • Black Oystercatcher • Solitary Sandpiper • Upland Sandpiper • Bristel-thighed Curlew • Hudsonian Godwit • Marbled Godwit • Black Turnstone • Surfbird • Western Sandpiper • Rock Sandpiper • Short-billed Dowitcher • American Woodcock • Wilson's Phalarope	• Wilson's Plover • American Oystercatcher • Whimbrel • Bar-tailed Godwit • Ruddy Turnstone • Red Knot (populations other than Canadian Arctic-Atlantic Coast Population) • Sanderling • Dunlin (Alaska-East Asian and Alaska-Pacific Coast populations)

The Audubon Society of Portland recently released its list of the 100 Important Bird Areas in Oregon (See Table A.5). The thirty-two (32) areas along the coast were noted for their outstanding importance for breeding, foraging, or resting birds, and the Audubon Society of Portland encourages the continued productivity of these sites through awareness, conservation, monitoring, and research.

Table A.5 Oregon Coast Important Bird Areas

Site Name	County
Alsea Bay	Lincoln
Bandon Marsh National Wildlife Refuge	Coos
Bird Rocks	Clatsop
Blanco Reef	Curry
Cape Blanco Nearshore Ocean	Curry
Clatsop Beaches	Clatsop
Coos Bay	Coos
Coquille Point Rocks	Coos
East Sand Island	Clatsop
Goat Island	Curry
Heceta Bank	Lane
Mack Reef	Curry
Necanicum Estuary	Clatsop
Nestucca Bay NWR	Tillamook
Netarts Bay	Tillamook
New River	Coos, Curry
Orford Reef	Curry
Redfish Rocks	Curry
Salmon River Estuary	Lincoln
Siletz Bay	Lincoln
Siltcoos Estuary	Lane
Siltcoos Lake	Lane, Douglas
Siuslaw River Estuary	Lane
Sutton Beach	Lane
Tahkenitch Creek estuary	Douglas
Three Arch Rocks National Wildlife Refuge	Tillamook
Tillamook Bay	Tillamook
Two Arches Rock	Tillamook
Umpqua River Estuary/Winchester Bay	Douglas
Whalehead Island	Curry
Yaquina Bay	Lincoln
Yaquina Head Outstanding Natural Area	Lincoln

Threats:
Most shorebirds are susceptible to human disturbance. When a human or animal comes too close, the birds flush (fly away), in some cases only a short distance. This effort results in the birds expending energy needed for migratory flight, and with some species, migratory flight that may take them hundreds or thousands of miles. In addition to this disturbance, other impacts to shorebirds include loss or destruction of habitat and various types of pollution. Driving on the beach at the dry/ wet sand interface can destroy the wrack line, where many shorebirds feed.

Strategy:
Oregon Parks and Recreation Department will work with Oregon Department of Fish and Wildlife and US Fish and Wildlife Service on any recreation or permitting issues that may result in adverse impacts to the species; and on the development of a shorebird management plan.

Seabirds
Within three miles of the Oregon coast there are approximately 1,400 rocks and islands under the management of the U.S. Fish and Wildlife Service as part of the Oregon Islands National Wildlife Refuge. These islands are habitat for a variety of wildlife, including marine mammals and seabirds. Over 1.0 million seabirds use these areas for nesting yearly. The rocky headlands along the coast also support marine mammals and seabirds. Rogue, Orford, and Simpson Reef (near Cape Arago) are important rookeries, nesting, or feeding sites for sea lions and seals.

A seabird is a migratory bird that spends most of its life at sea. Seabirds are highly specialized and adapted to life on the open ocean. Most have thick, waterproof feathers to keep them warm at sea and a special gland near their eyes helps remove salt from their food and the water. Strong, pointed wings help certain seabirds "fly" underwater when chasing their prey. Webbed feet also help diving birds chase their prey. Other seabirds have longer wings that allow them to fly far out to sea. Most seabirds rest and sleep on the waves, while others roost on land for a few hours a day. All seabirds must return to land to lay eggs and raise their young. At the start of summer, seabirds will gather on offshore islands and rock outcroppings to form a crowded colony where they will breed and nest. Seabirds may also be found nesting along rocky shore headland areas.

Table A.6: Seabirds Along Oregon's Coast

Species	Species
Common murres	Rhinoceros auklet
Brandt's cormorant	Cassin's auklet
Double-crested cormorant	Caspian tern
Pelagic cormorant	Western gull
Pigeon guillemot	Leach's storm petrel
Tufted puffin	

Of these species, Leach's storm petrels and common murres are the most common. Many of these species can be found at headlands or offshore.

Threats:
Threats for seabirds include reproductive failure due to predation. Predators, including red fox, are attracted to the beach as a result of litter left behind by people using the beach or garbage overflowing in

trash receptacles in campgrounds, day-areas, and access points. The red fox has decimated the seabird colonies at and near Coquille Point. Additionally, people occasionally disturb nesting birds via access to rocks and rock outcrops during low tides. If birds are flushed from their nests, then the eggs can be predated, crushed, or result in the eggs becoming too hot or too cold resulting in the death of the embryo. Haystack Rock at Cannon Beach has docents who educate the public on the importance of staying off the rock.

Strategy:
Oregon Parks and Recreation Department will work with Oregon Department of Fish and Wildlife and US Fish and Wildlife Service on any recreation or permitting issues that may result in adverse impacts to the species.

Anadromous Fish of the Oregon Coast
Of all the fish in the Pacific Northwest, migratory or otherwise, salmon are by far the most important both culturally and economically. They occupy all of the streams and rivers along the Oregon coast that do not have barriers in the lower reaches.

There are five species of salmon found in the Pacific Northwest, three of which are common to Oregon: the Chinook, Coho, and chum salmon. The three Oregon inhabitants hatch in freshwater streams, migrate to the oceans, and spend from one to five years before returning to their natal stream.

In freshwater the eggs left in the gravel of swift flowing streams hatch. Incubation may take 50 days or longer – the colder the water, the longer the incubation period. Young hatchlings, called alevin, are small, translucent fish with a yolk sac attached. After absorbing their yolk sacs, young fish emerge from the rocks as fry and begin foraging for food. Chum go to sea as fry. Chinook and Coho remain in fresh water for at least one year before entering the ocean. When the young fish reach about two inches in length, they are known as parr and begin feeding on insects, worms, mussels and snails. At about six inches in length, salmon are known as smolts. At this stage, most young salmon begin their downstream migration to the ocean and adaptation to a salt-water environment. Once they make it to the estuaries, they will stay there while they adjust to the salt-water environment.

Upon entering the ocean, salmon will move to their traditional feeding grounds. Time spent at sea is variable according to species, ranging from one or two years for Coho to four or five for Chinook. When the time comes, they will begin their journey back to their natal streams. Arrival at natal streams occurs during both spring and fall. Salmon returning in the spring, primarily Chinook, tend to enter the freshwater rivers and streams immediately upon their arrival offshore. After proceeding upstream toward the spawning grounds, they will enter deep pools to rest until fall when they spawn. Fall fish, both Chinook and Coho, will typically concentrate in ocean waters outside their native streams during the summer, where they feed and mature while waiting to enter their natal streams.

Upon entering fresh water, both spring and fall salmon lose their desire to feed and live off their accumulated fat reserves. They make their way by stages upstream, pausing for days at a time to rest and wait for improved water flows. On reaching the spawning grounds, the females clear a series of nests or redds with vertical sweeps of their tails. They repeat the process in separate redds until all eggs have been laid. Salmon then die within days of spawning.

Steelhead, or sea-run rainbow trout, have similar life histories as salmon, but do differ in several significant ways. Steelheads do not migrate in schools, but find their own way at sea; not all steelhead die following their spawning cycle. Although survival percentage is low, some steelhead survive to spawn twice or even more; and steelhead have both winter and summer runs, with considerable overlap.

Oregon also has a sea-run form of cutthroat trout that inhabit all Oregon coastal and lower Columbia River streams that do not have upstream passage barriers in their lower reaches, spending most of its life in the ocean or brackish bays and lagoons. Cutthroats do not confine themselves strictly to salt water, but may run in and out of streams in search of food. At maturity they migrate up the coastal rivers to spawn. Spawning occurs in the headwaters during the early spring months. After spawning is completed, the fish return to larger rivers and ocean bays.

Threats: Salmon, steelhead and cutthroat face a variety of threats while traveling to and from the ocean. Dams, water pollution, increased water temperature, turbidity, agricultural practices, destruction of spawning and rearing habitat, high harvest rates, and the results of other human activities threaten both young and adult fish. Fresh water predators of salmon include sculpins, northern pike minnows, mink, raccoons, mergansers, terns, bland eagles, osprey, and kingfishers. In the ocean, killer whales, seals, porpoises, sea lions, sharks, other fish and humans are the major predators. In El Nino years, West Coast water temperatures become abnormally warm, which disrupts the upwelling of colder, nutrient-rich water containing the species salmon depends upon for food.

Strategy:
Oregon Parks and Recreation Department will work with Oregon Department of Fish and Wildlife and NOAA Fisheries on any development activities or permitting issues that may result in adverse effects on the species.

Marine Mammals - Pinnipeds
Pinnipeds are marine mammals that live mostly in the water but also spend time on land when resting or breeding. Pinnipeds include seals, sea lions, and walruses. Their diet includes fish, crustaceans, birds, and krill. Seals, sea lions, fur seals, and walruses all give birth on land, generally to only one pup. Pinnipeds can live to be twenty years of age.

The two marine mammals that use the coastal beaches and dunes in Oregon are harbor seals, which haul out to rest on tidal sand bars, mudflats, and open beach, and the northern elephant seal. Stellar sea lions were discussed under protected beaches.

Harbor Seals (*Pusa vitulina*)
Harbor seals can be found in both the Pacific and the Atlantic Oceans north of the equator. In the Pacific they range from Alaska to Baja Mexico and often can be seen in near shore coastal waters, bays, estuaries, and on sandy beaches and mudflats. They have small flippers and can only move on land by flopping along on their bellies. They can be 5 - 6 feet in length and weigh up to 300 pounds. In Oregon, pups are born in April and May. Unlike elephant seals, harbor seal pups can swim at birth. Harbor seals will spend half their time on land and half in the water, sometimes sleeping in the water. In Oregon, the number of harbor seals has increased by approximately 7.4 % annually since the 1970s and as of 2002, was estimated at over 10,000. There are 100 harbor seal haul-out sites in Oregon and most of them are at or near rivers where salmon occur. Areas with high harbor seal densities include Tillamook Head, Cape

Arago, Rogue Reef, and Orford Reef. Harbor seals may rest out of the water at haul-out areas for several hours every day to regulate body temperature, interact with each other, and sleep.

Threats:
Harbor seals are less mobile than other pinnipeds and therefore are more vulnerable to disturbance or predation while out of the water. Adult seals are more wary and escape to the water more quickly than pups. Females will flee to the water if disturbed or approached and may leave their pups behind. Up to 50% of harbor seal pups born will not survive their first year of life. Contributing factors to pup mortality are; premature birth; predation by wild predators or domestic dogs; infection; disease; dehydration; or starvation.

Although the percentage of successful female/pup reunions has not been quantified, anecdotal reports indicate that pups have successfully reunited up to 48 hours after separation. A female seal is more likely to return to reclaim her pup once the disturbance near the pup goes away. If activity continues near the pup, the female may eventually give up trying to return. A nursing pup that is separated from its mother will not survive. Often times people walking the beach may see a seal pup alone and think that the pup has been abandoned, most likely it has not.

Strategy
Oregon Parks and Recreation Department will work with Oregon Department of Fish and Wildlife and NOAA Fisheries on any recreation or permitting issues that may result in adverse effects to the species; develop an educational awareness program.

Elephant Seals (*Mirounga angustirostris*)
Northern elephant seals are found in the North Pacific, from Baja Mexico to the Gulf of Alaska and Aleutian Islands. During the breeding season, they live on offshore island beaches and a few remote spots on the mainland. Occasionally elephant seals come ashore on Oregon beaches to molt. The rest of the year the elephant seal live well offshore. Elephant seals are winter breeders, and the northernmost breeding site on the Pacific coast is Shell Island.

Threats:
Stresses to this species include harassment by people and dogs that get too close to the molting seals. A lack of genetic diversity may cause problems in the future, potentially making the population vulnerable to environmental changes. Fishermen occasionally kill elephant seals and occasionally they get entangled in fishing nets, but not often.

Strategy
Oregon Parks and Recreation Department will work with Oregon Department of Fish and Wildlife and NOAA Fisheries on any recreation or permitting issues that may result in adverse effects to the species; develop an educational awareness program.

Invasive Plant Species

As an agency Oregon Parks and Recreation Department plays a stewardship role in conserving threatened and endangered, special, and rare plant and animals species, and a role in the protection and restoration of wetlands and riparian areas. Many of the parks' native plant and animal species are threatened by

invasive, non-native species, e.g., Himalayan blackberries (*Rubus procerus)*, European beachgrass, Japanese knotweed (*Polygonum cuspidatum*)*,* Reed canarygrass *(Phalaris arundinacea)*, and Gorse (*Ulex europaeus*), to name just a few.

Invasive species reduce the native habitat that plant and animal species depend upon. Invasive plant species are a threat because they out compete for native species resources reducing wildlife habitat and increasing the overall threat to the natural ecosystem.

Managing for invasive species on the Oregon coast is resource intensive in terms of both time and money. The three primary invasive species imposing a threat to the Ocean Shore ecosystem are European beachgrass, Scotch broom, and gorse.

While Oregon Parks and Recreation Department was one of the many agencies that planted European beachgrass (at its state parks), along with Scotch broom and shore pine (*Pinus contorta*), the department no longer plants either Scotch broom or European beachgrass. Efforts are now underway in some state parks to control, and where possible, to eradicate these invasive species. The Oregon Parks and Recreation Department can manage for invasive species on its property, but it does not have authority to manage for invasive species on others' property.

Invasive Species

European Beachgrass

European beachgrass continues to dominate the coastal landscape. The species has changed the coastal dune dynamics, creating fore dunes, (some over 50 feet in height), thereby narrowing the beach and affecting sand dispersal. European beachgrass was introduced in the late 1800s and early 1900s to stabilize sand dunes. In some places, European beachgrass is still used for beach stabilization. This species spreads rapidly forming dense mats of grass and rhizomes making it difficult to eradiate. The beachgrass captures sand, decreasing natural sand movement, and causing the dunes to increase in height. Many of the high fore dunes visible from the beach today are the result of European beachgrass.

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As the dunes increase in height and coastal winds diminish behind the dunes, a new microclimate develops that is no longer suitable for species that use dune habitat. Succession ensues toward inland native coastal vegetation species, with colonization by other exotic plant species (such as Scotch broom and gorse), until the entire native dune ecosystem is threatened. Areas heavily infested with European beachgrass are unsuitable as habitat for nesting snowy plovers, and for sensitive plant species such as pink sand verbena. Not only does this result in reduced habitat for plants and animals, it also provides less space for recreational activities on the beach.

Scotch Broom

Scotch broom (aka Scot's broom) is a perennial shrub blooming between April and June in the Pacific Northwest. The seeds of this plant remain viable in the soil for many years. Scotch broom tolerates a variety of soil types and depths but grows best in dry sandy soils with full sunlight, where it can reach heights of more than three meters.

Scotch broom is native to the British Isles as well as central and southern Europe, and first became naturalized in North America on the east coast. By the turn of the 20th century it had become naturalized on Vancouver Island and is now widespread throughout the western portion of the Pacific Northwest. In the Pacific Northwest, Scotch broom has been widely used for landscaping, roadside plantings, and an anti-erosion measure along rivers.

This species continues to expand its range and now dominates many acres of land along the coast, and is a difficult plant to control. This species can overtake an area originally populated with native species, crowding out species that are endemic to the area.

Gorse

Gorse is a many-branched, rigid perennial species with thorns. A native to Europe, it was introduced to Oregon as an ornamental. This species, a relative of Scotch broom, is another invasive species that is expanding its range north along the coast and inland. Currently it covers many acres of land in Douglas, Coos and Curry counties. Infested areas soon become an impenetrable monoculture crowding out desirable native plant species.

While goats and sheep feed on the young growth, other animals are not known to graze on the plant. Control for gorse is difficult due to its waxy cuticle, which inhibits herbicide penetration. Gorse also produces a large number of seeds that can remain viable in the soil for 30-plus years. At one park location, the removal of this species resulted in the discovery of a picnic table that had been overtaken by gorse. The plant is also prone to burning and poses a safety problem.

Invasive Plant Species Management Strategy

Oregon Parks and Recreation Department is developing an internal invasive species committee made up of field staff throughout the state and Salem headquarter staff. This committee will be responsible for developing a statewide invasive species management plan to address invasive species on state park property.

OTHER COASTAL HABITATS

The sandy beaches of Oregon are one component of a complex ecological system. Coastal estuaries and rocky shores/headlands are two other components of that system. These areas are not officially part of the "sandy beach" as defined for this plan, however, they are part of a larger, more complex ecosystem and thus cannot be ignored. The following is a brief description of estuaries and rocky shore areas.

Estuaries

Oregon has 22 major estuaries and many other minor estuaries along its coast. Most of the larger estuaries have been altered through dredging, filling or diking. Many of the smaller ones remain in a natural state. All are important and are covered by Oregon's estuarine management program. The estuaries that remain in their natural state will move over the years and the outlet of the river today may be different from the outlet of the river tomorrow. At times, sand deposition at the mouth of the river may block the river's exist to the ocean, resulting in the river flooding adjacent upland areas.

Table A.7 Oregon Major Estuaries by Region

North Coast	Central Coast	South Coast
Sand Lake	Salmon	Elk River
Necanicum	Alsea	Sixes River
Netarts	Siletz	Pistol River
Nestucca	Siuslaw	Winchuck
Nehalem	Umpqua	Coquille
Tillamook	Yaquina	Rogue
Depoe		Chetco
Columbia		Coos

Statewide Planning Goal 16 (Estuarine Resources) establishes detailed requirements for the planning and management of Oregon's estuaries. The overall objective is to *"recognize and protect the unique environmental, economic and social values of each estuary and associated wetlands, and to protect, maintain, and, where appropriate, develop and restore the long-term environmental, economic, and social values, diversity and benefits of Oregon's estuaries."* (OAR 660-015-0010(1)).

To accomplish this, Goal 16 sets broad requirements for preparation of plans and for review of individual projects; and calls for coordinated action by all local, state and federal agencies that regulate or have an interest in Oregon's estuaries. The Oregon Department of State Lands has management responsibility for estuaries as it is defined in ORS 196.800. Oregon Parks and Recreation Department jurisdiction of the Ocean Shore excluded "estuaries". However, the department will want to ensure that recreation use or activities permitted by the Oregon Parks and Recreation Department are balanced with natural resource protection of these important estuarine systems.

Types of Estuaries

The Land Conservation and Development Commission (LCDC) has adopted an estuary classification system, which defines the overall level of development permitted in each estuary. This system is designed to preserve diversity among Oregon's estuaries and guide development of estuaries that have been altered and which can support more development.

Table A.8 Estuaries by Classification Type

Natural	Conservation	Shallow Draft	Deep Draft
Salmon River	Necanicum River	Nehalem Bay	Columbia River
Sand Lake	Netarts Bay	Tillamook Bay	Yaquina Bay
Elk River	Nestucca River	Depoe Bay	Coos Bay
Sixes River	Siletz Bay	Siuslaw River	
Pistol River	Alsea Bay	Umpqua River	
	Winchuck River	Coquille River	
		Rogue River	
		Chetco River	

Natural estuaries lack maintained jetties or channels, and usually have low levels of residential, commercial or industrial development. They may have altered shorelines, provided that these altered

shorelines are not adjacent to an urban area. Shore lands around natural estuaries are generally used for agriculture, forestry, recreation and other rural uses.

Conservation estuaries lack maintained jetties or channels, and are within or adjacent to urban areas with altered shorelines adjacent to the estuary. Conservation estuaries have conservation and natural management units.

Shallow draft development estuaries with maintained jetties and a main channel (not an entrance channel) maintained by dredging at 22 feet or less. Shallow draft development estuaries have development, conservation and natural management units.

Deep draft development estuaries have maintained jetties and a main channel maintained by dredging to deeper than 22 feet. Deep draft development estuaries have development, conservation and natural management units.

The U.S. Fish and Wildlife Service administers three estuarine wildlife refuges within Oregon. These estuarine refuges (Siletz Bay, Nestucca Bay, Bandon Marsh) preserve a very different, but equally valuable, habitat. These habitats include salt marsh, brackish marsh, riparian wetlands and wooded uplands. They offer sanctuary to a diverse array of fish and wildlife including waterfowl, shorebirds, raptors, small mammals, amphibians and anadromous fish.

ROCKY SHORES

Rocky shores define the beautiful Oregon coast. Tide pools, cliffs, rocks, and submerged reefs support a rich and diverse ecosystem along the shore. Rocky shores attract thousands of visitors annually who come to glimpse marine wildlife and experience an exotic and powerful environment. Rocky shores are thus resources of high ecologic, economic, and social value to local communities, and the state.

Site Management Designations

Six site management designations have been established as part of the Rocky Shore Management Strategy. These management designations include: marine gardens, habitat refuges, research reserves, marine shore, areas not yet designated, and priority offshore rocks and reefs (areas for future study, as necessary). Marine shores are any shoreline not designated as a marine garden, habitat refuge, or research reserve.

Marine gardens are intertidal areas managed as focal points for visitors seeking to learn about and enjoy intertidal resources. These areas are to be specifically managed for visitor use, with special emphasis on marine education programs. Collection of marine invertebrates and shellfish is discouraged at these sites.

Habitat refuges are areas necessary for maintenance of the health of the rocky shore ecosystem. These refuges ensure that the various representative areas of marine life in rocky shore areas are managed to protect natural habitat values associated with the area and to maintain a viable population of marine plants and animals.

Research reserves are areas identified and managed for scientific study and research, including baseline study, monitoring, and applied research. These areas are essential for scientists to obtain ongoing data on natural variations and changes in the marine environment. Research, however, is not limited to these areas. There are limited restrictions on the collection of marine organisms at these sites.

Marine shores are areas of general geologic, biological, or aesthetic interest open to the public for various purposes, including recreational, commercial, and educational use. Collecting and harvesting may be conducted as allowed by law.

Offshore rocks and islands, with a few exceptions, are part of the US Fish and Wildlife Service National Wildlife Refuge System. These marine refuges protect coastal rocks, reefs, islands and several headland areas. These habitats support some of the most important seabird nesting colonies in the United States. Over a million seabirds, including common murres, tufted puffins, cormorants, and storm-petrels nest here. Coastal rocks also provide breeding and haul-out sites for harbor seals, and Steller and California sea lions.

It may be beneficial to note that of these 39 sites that were originally designated in the Territorial Sea Plan, only 15 currently are managed by Oregon Department of Fish and Wildlife as specially regulated zones in the current fishing regulations. To date, the other sites have no specially protected status. Also, many sites have current management designations that vary from the proposed designation in the Territorial Sea Plan.

Current sites include: Haystack Rock Marine Garden, Three Arch Rocks National Wildlife Refuge, Cape Kiwanda Marine Garden, Boiler Bay Research Reserve, Pirate Cove Research Reserve, Whale Cove Habitat Refuge, Otter Rock Marine Garden, Yaquina Head Marine Garden, Yachats Marine Garden, Cape Perpetua Marine Garden, Neptune State Park Research Reserve, Gregory Point Research Reserve, Cape Arago Research Reserve, Harris Beach Marine Garden and Brookings Research Reserve.

Not yet designated areas are sites requiring further study and planning in order to apply one of the other management categories. Priority rock and reef sites are offshore rocks, islands, and reefs determined to be most likely in need of study and management action.

Tables A.9 and A.10 identify the areas that fit within each of the site management designations.

Table A.9 Rocky Shore Management Site Designations

Marine Gardens	Habitat Refuge	Research Reserve	Priority Rocks and Reefs	Not Yet Designated
Haystack Rock (Cannon Beach)	Tillamook Head	*Boiler Bay*	Sea Lion Rock at Ecola Point	Ecola Point/Seal Lion Rock
Cape Kiwanda	Three Arch Rocks NWR	Pirate Cove	Gull Rock near Otter Crest	Part of the tip of Cape Falcon
Otter Rock	Cape Lookout (south side)	Neptune State Park	Shell Island/Simpson Reef	Seal Rock
Yaquina Head	Cascade Head/Cliff Cr. Cove	Gregory Point	Redfish Rocks/Island Rock	Part of Heceta Head
Yachats State Park	Whale Cove	Cape Arago	Rogue Reef	Blacklock Point
Cape Perpetua	Simpson Reef/North Cove Cape Arago	Cape Blanco	Twin Rocks/Goat Island	Sisters Rock to Devil's Backbone
Sunset Bay	Coquille Point & Rocks	Humbug Mountain/Lookout Rock		Nesika Head to Otter Point
South Cove, Cape Arago	Crook Point/Mack Reef	Brookings		South Sam Boardman State Park
Harris Beach	Hooskanaden Creek			

Table A.10 Oregon Marine Shore Designated Management Sites

Marine Shores	
Parts of Tillamook Head (not in other categories)	Base of cliff south of Cape Arago South Cove
Silver Point to Cape Falcon	Five Mile Point
Cape Meares/Maxwell Point	The Heads (Port Orford)
Cape Lookout (north side)	Nellies Cove/Tichenor Cove (Point Orford)
Parts of Cascade Head (not in other categories)	Rocky and Coal points
Headland to Roads End	Arizona Beach to Sisters Rock
Lincoln City to Fogarty Creek	Cape Sebastian
Depoe Bay	Deer Point/Natural Bridges
Parts of Cape Foulweather (not in other categories)	Thomas Creek/Indian Sands/Whaleshead
Yachats oceanfront (excl. marine garden area)	Lone Ranch (south end)
Bob Creek to Heceta Head	Chetco Point
Yoakam Point	Harbor oceanfront
Shore Acres	Any other rocky shoreline area not listed
Tip of Cape Arago (not in other categories)	

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Appendix B: Cultural Resource Management

Life on the Oregon Coast before Euro-American Settlement

The modern Oregon Coast contains a variety of distinctive environments, derived from local differences in geology, hydrology, biology, and the dynamic nature of coastal processes. All coastal physical environments are influenced by the Pacific Ocean, and this comprises the main unifying characteristic of the resource types found within the Ocean Shore. Individual areas contain or are influenced by a variety of estuaries, rivers, streams, and creeks. Terrestrial surfaces range from highly resistant volcanic bedrock to shifting sand dunes. Beginning in the prehistoric period, Native Americans made productive use of a wide range of maritime, coastal, littoral, riverine, and terrestrial resources. The archaeological sites, with dates ranging from approximately 12,000 years ago until A.D. 1900, located within this zone, contain substantial data regarding how Native Americans used coastal landscapes and clues pertaining to Native American occupation during earlier time periods when sea levels were different from their modern period.

The dynamic physical environments and ecosystems of coastal Oregon were constantly changing even before Euro-American settlement. Perhaps the dominant factor in coastal environment change has been the post-glacial rise in sea level. The history of sea level change on the Oregon Coast is a puzzle with many missing pieces. Relative sea level changes have been influenced by worldwide changes in sea level as well as local tectonic events. While general information on sea level change exists, research has demonstrated the complexity of deciphering the changes in sea level and resulting effects at the local level. Previous research indicated that the Oregon coast sea levels stabilized 3000 to 5000 years ago, while more recent research indicates that changes have occurred since that time. The history of Oregon Coast vegetative and wildlife communities is perhaps even less well known, and archaeological research provides an important avenue to understanding the evolution and development of modern ecosystems.

In the early 1800s, the Oregon coast was occupied by a diverse array of Native American tribes, including (from north to south) various bands of the Chinook, Tillamook, Alsea, Siuslaw, Umpqua, Coos, Coquille, Tututni, and Tolowa peoples. These societies are all generally regarded as part of the distinctive Northwest Coast culture area. Before European contact, Northwest Coast peoples relied predominantly on fishing, hunting, gathering, and trading for subsistence. Northwest Coast peoples in general are most renowned, however, for their maritime lifeways, elaborate technology, high population densities, sophisticated art and architectural traditions, and socio-political complexity.

Despite the similarities implied by an overall Northwest Coast culture, the Native American peoples of the Oregon Coast had distinctive lifeways. Their cultural diversity derives, in part, from the development of different adaptations to variations in Oregon coast environments, but is also related to their diverse origins. Interpretations of linguistic data suggest that at least five language families (Athabaskan, Chinookan, Alsean, Siuslaw, and Coos) were spoken by Oregon coast peoples. This linguistic diversity, accompanied by considerable cultural variation between different groups, suggests a relatively long and complex history for the peopling of the Oregon coast and the subsequent development of coastal cultures.

Impacts on Native American Life Since Euro-American Settlement

While the first historically documented European contact with Oregon coast Native Americans occurred in 1792, it is possible that earlier contacts occurred. Up and down the Oregon coast, the nature and timing of

sustained contacts between peoples of Native American and European ancestries were quite variable. Early encounters between Indian people and explorers like Lewis and Clark or fur trappers and traders were relatively limited and often quite brief, with the whites often hiring Indian guides and trading for food and supplies. Native Americans soon suffered from epidemics of Old World diseases to which they had little or no immunities. In the early 1840s, emigrants streamed into Oregon, and in 1848, the U.S. Congress passed the Organic Act that created the Oregon Territory. Oregon settlers staked claims to Indian lands, and in 1850, the Oregon Donation Land Act authorized the federal government to give away huge tracts inhabited by Indians to settlers before any treaty negotiations. Treaty programs were initiated in 1851, but none were ratified with Oregon coastal tribes. Nevertheless, the federal government and Oregon settlers acted as if Indian lands had passed into the public domain.

By the 1850s, historical accounts clearly documented some of the tragic consequences that European contact had on Oregon's coastal Native Americans. Early in the 1850s, discoveries of gold and other minerals along the Oregon Coast led to an influx of miners and other settlers who quickly came into conflict with Oregon's coastal tribes. This resulted in a series of skirmishes and massacres along the Umpqua and Rogue Rivers in southwest Oregon between 1852 and 1856, often referred to as the "Rogue River Wars."

In 1855, the Coast Reservation (later known as Siletz) was established on the central Oregon coast through federal Executive Order. Shortly thereafter, most Native Americans of the Oregon coast were forcibly removed from their traditional territories and transported to the reservation. The reservation was dramatically reduced in size during ensuing decades, with the highly productive 200,000 acre Yaquina Bay area being removed from the Coast Reservation in 1865, and another 700,000 acres being removed in 1875. In 1887, the General Allotment Act (the "Dawes Act") divided Indian reservations into allotments assigned to individuals to end communal living practices and tribal integrity. The Siletz Reservation still contained 250,000 acres in 1892 when the Indians agreed to the allotment program. After that, over 75% of the reservation lands fell to non-Indians, with 44,000 acres to individuals and 3,000 acres for the tribes. After 1887, some members of the Coquille, Coos, Lower Umpqua, and Siuslaw tribes obtained public domain allotments along the central and southern Oregon coast. Nevertheless, by the 1940s, very little land remained in Indian ownership, and in the 1950s, the federal government launched a program to terminate Indian tribes as officially recognized entities. Oregon coast tribes were disenfranchised from most of their lands and their rights to fish and hunt, even on their own lands, were restricted by the State of Oregon.

Restoration and self-determination for Oregon coast Indian tribes has come only recently, with Congressional recognition of the Siletz in 1977, Confederated Tribes of Coos, Lower Umpqua, and Siuslaw in 1984, and the Coquille Tribe in 1989. While most members of the Confederated Tribes of the Grand Ronde community (recognized in 1983) are the descendents of the Willamette Valley and Upper Rogue River groups, descendents of the Oregon coast Indians, including those of the Clatsop, Chinook, and Tillamook affiliation are also represented among the Grande Ronde.

Other Effects from Euro-American Settlement

With the arrival of the white settlers and miners in the mid-nineteenth century, Oregon's coast underwent dramatic changes. The economic base of settlement in large portions of the Oregon coast in the 1850s-1890s was agriculture, coal mining, shipbuilding, logging, lumber manufacture, and commercial fishing. Residential and commercial construction, road building, dredging and breakwater construction, wetland draining, agriculture, logging, the introduction of exotic species, and other developments have altered the physical and biological landscapes of the Oregon coast.

Early impacts were related to the construction of wharves and landings for maritime shipping use, and scattered early logging, grazing and farm settlement, as well as the initial development of coastal towns along the Oregon coast. Support facilities for maritime traffic sprang up, such as lighthouses and related keeper buildings, and life saving stations. These buildings were to become important in current times both for their scenic and historic values, and in the case of lighthouses, for their on-going value to safe ocean navigation. In spite of efforts to make navigation as safe as possible, there have been many shipwrecks along the Oregon coast, some of which have been inundated by accumulating beach sands and are a part of the beach setting, such as the wreck of the Peter Iredale on the north coast.

Shipbuilding was a natural pair with the logging and lumber industry. Ships were needed to carry logs and lumber to mills and market, while lumber was needed to build new and larger ships. Lumber companies were a formidable force for the first half of the twentieth century along the Oregon coast, particularly the south coast. Forest industrial development resulted in the purchase of extensive timberlands in coastal counties and increased the number and size of coastal communities. The logging export business resulted in an increase in the number and size of ports along the Oregon coast, which was assisted by federally funded harbor improvements.

Commercial salmon fishing became a large portion of the Oregon coast economy beginning in the last quarter of the nineteenth century. In 1876, a commercial salmon-canning site was constructed at the mouth of the Rogue River. Other canneries followed in later years on the Coquille River, Coos Bay, Umpqua River, and Siuslaw River.

However, it was not until the machine age that physical changes to the coast became extensive and severe. The cessation of the burning of grassy headlands by Native Americans occurred quite early, but the resulting dense growth of vegetation took almost a hundred years to become evident on a widespread basis. Before to settlement, the coastal landscape had many more grassy and shrubby areas, on headlands, points and along open sand areas.

The era of jetty building had a direct and very profound impact on the sand dynamics of the beaches adjacent to them. In some places, the location of the beach has moved to the west by half a mile due to jetty related sand accretion.

The scale of logging increased continuously until the 1980's, bringing with it tremendous loads of driftwood that accumulated on beaches and in estuaries. Forest logging adjacent to the coast has resulted in most of the forest being converted from mature, mixed species forests to second and third growth forests, of much more dense and monocultural composition. Some of the coastal public lands still harbor remnants of the old growth forests that once were more prevalent. Extensive timber harvest also accelerated siltation in the estuaries, and caused changes to the ecosystems there.

Farming had similar impacts, especially in the salt and fresh water marshes and swamps associated with estuaries. Many areas were ditched and drained to be used for pasture, buildings and crops. These changes had affects on the hydrology of the estuaries and may have changed some of the sand supply characteristics of estuaries on their adjacent beaches. Farming brought with it the introduction of new plant and animal species and the complete or partial elimination of native species. Trees were removed for lumber, resulting in deforestation of the coast, especially near coastal bays and the accessible shoreline. White settlements frequently occurred on or near former Indian villages, however they were larger in scale

and resulted in the clearing of adjacent forests. Soils were modified to improve crop production and marshlands became cranberry bogs. Cattle drives were conducted up and down the coast, then overland to the railheads to go to market. Dairy farming was also popular and creameries were developed to process milk into cheese for export.

Construction of mining camps and the impacts of both gold and coal mining could be seen through underground tunneling, aboveground excavation and industrial construction. Gold mining and the technology used to extract the ore brought with it and left behind trestles, flumes, stamp mill machinery and abandoned mine shafts. While having direct impacts on the land, large coal extraction necessitated larger ships to take the ore to market.

Then, starting in the early 1900's and continuing into the 1950's, the government implemented a large-scale effort to plant the open sand dunes to arrest blowing sand. This was done to protect roads and buildings from inundation, for the most part. The result, over more than 50 years, has been startling change in the look of the coastal dune landscape of Oregon. Where there were once large, areas of open sand there are now established forests, more inter-dunal lakes and large areas covered with European beachgrass. Only a few areas, within public lands, retain vestiges of the once vast open sand dunal habitats. In more recent times, large-scale infrastructure construction has brought extensive excavation and installation of sewer outfalls, roads and bridges and various undersea cable landings.

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Appendix C: Recreation on the Ocean Shore

Because the beach is such a popular destination, Oregon Parks and Recreation Department needed to understand, as much as possible, how people are using the beach, where they go and whether there are management challenges or concerns associated with providing beach activities. Since the department is charged with overseeing the management of recreation on the beaches, it must have solid information on desired activities, adequate access, adjacent opportunities, and emergency and routine supervision and enforcement. The information included in this chapter is based on the surveys, interviews and other reference materials staff have compiled and analyzed for the Ocean Shore Management Plan.

The chapter covers:

- Activity trends and other recreation statistics,
- A regional recreation overview,
- A regional view of beach access gaps and other recreation lands gaps,

The Beach as a Destination

Oregon's Ocean Shore is nationally known as an outstanding destination and is a key tourism marketing focus for the state. Just over half of the visitors to the beach are coming primarily to visit the beach, while just under half are going to the beach as a secondary destination.

Participating in beach-related activities is one of the top ten outdoor recreational activities for Oregonians and out of state visitors. The 2001-2002 "Oregon Outdoor Recreation Survey" reports 6 million annual beach visits to coastal regions. Oregon residents made 4.2 million of those visits. Oregonians who are not residents of the coast made most of those visits, while coastal residents made about 1.8 million visits. The beach is indeed a destination that visitors are willing to travel to from other parts of Oregon and from out of state. At the same time, a smaller number of coastal residents visit the beach many more times than those who travel to the beach from elsewhere. (The "Ocean Shore Recreational Use Study" was completed by Oregon State University for the Oregon Parks and Recreation Department.)

Oregon's ocean beaches are one of the top vacation destinations for the Portland area population. Over twice as many Portland area residents come to an ocean beach as from any other area of the state. This is particularly true on the north coast and approaching the central coast. The farther south along the coast you go, the more likely it is to have beaches used more by local residents and by nearby inland residents than by long distance travelers from the north.

In south Curry County, however, beach visitors tend to include a larger percentage of California residents. The surveys have underscored what most coastal visitors and residents have said, that most people travel to those areas of the coast that take the shortest time to get to. Those areas of the coast that are closest to population centers have higher visitation levels, and most visitors on the beach are from out of town on peak days (summer weekend days).

Coast-wide, visitors to Oregon's ocean beaches are primarily coming to relax, walk or jog, enjoy the scenery, swim and wade in the waves and picnic in the sand. About 20% of the same beach visitors are also doing other things such as flying kites, enjoying nature, exercising dogs, making driftwood fires, collecting driftwood, shooting fireworks and attending events. A smaller percentage are also birding, beach

combing, surfing or boogie boarding, biking, fishing, clamming or crabbing on the beach. An even smaller percentage, coast-wide, are horseback riding, driving on the beach, windsurfing, kite boarding or kayaking. But all of the visitors to the beach primarily want *to be there.* The beach is the thing, the goal and destination, the background for a very wide variety of activities, the same setting desired for large social gatherings and events as for those seeking solitude.

Activity Trends Coast-wide

Understanding emerging trends helps planners to focus on areas where increasing demand may be creating serious management and resource protection issues. The trends information from 2003-2007 Statewide Comprehensive Outdoor Recreation Plan has been summarized below for key activities. This information has been combined with issues gathered from public meetings and provider insights to determine the regional focus for the management of beach recreation. (See the "Regional Overview" section, below, for a definition of the three coastal regions.)

The State Comprehensive Outdoor Recreation Plan made comparisons of how recreation participation for a comparable set of activities in Oregon changed over a period from 1987 to 2002. Ocean beach-related activities, in general, are up significantly from 4.45 million user occasions (or each time a person participated in a single activity) in 1987 to 7.6 million use occasions in 2001. For the North and Central coastal regions, "beach activities" was the #1 growth activity from 1987 to 2002 (an increase of 2.7 million user occasions). On the South Coast, it was the #2 growth activity during this period of time (an increase of .4 million user occasions).

There have been noticeable increases in some types of recreational activities in the coastal regions, such as driving off road vehicles, horseback riding and surf sports; and there have been noticeable decreases in some traditional activities such as picnicking. For the North and Central Coast region horseback riding is up 39% and off highway vehicle riding is up 27%, while picnicking is down by 53%. For the South Coast region, off highway vehicle riding is up 144% to 185,181 annual user occasions.

The 2001 Ocean Shore Recreational Use Study

A survey of beach visitors, during the summer of 2001, was conducted by Oregon State University for Oregon Parks and Recreation Department to better understand visitor opinions and perceptions about several key issues that had been brought up over the last few years. Understanding user perceptions helps the department to determine whether management actions are needed and may help to indicate what specific problems need to be addressed and how.

The 2001 "Ocean Shore Recreational Use Study" focused on five key issues related to beach use:

1. Concerns about dogs on the beach
2. Concerns about horses on the beach
3. Visitor perceptions about crowding
4. Visitor perceptions about motorized vehicle use on the beach
5. Visitor perceptions about western snowy plover recovery efforts

A greater understanding of these issues helps to identify where there are serious management considerations that need to be addressed in the plan. The survey results were combined with public comments and provider insights to create management focus areas and recommendations for the plan, (which can be found in the "Beach by Beach Summary" and "Recommended Actions" chapters). The

survey and results can be read in the separate publication Oregon Shore Recreational Use Study, June 2002. The following summarizes those questions and results.

Dogs on the Beach: About one third of beach visitors, coast-wide, bring their dogs to the beach. Only a small percentage of people come to the beach just to exercise their dogs. Most bring their dogs as companions to share being on the beach with them. Almost 96% of survey respondents said they have encountered dogs on the beach at least once during a visit. Running into dogs on the beach is, apparently, a fairly common thing.

Survey respondents report that most dogs are well behaved and are properly controlled by their owners. However, the survey shows that it only takes a few bad encounters with misbehaving dogs and dog owners to create a perception that there is a large dog control problem on the beaches. About 30% of respondents reported having at least one "bad" experience with dogs encountered on the beach. However, only 1-3% had a bad experience on the day of their survey interview. Statistically this may indicate that the actual frequency of "bad" encounters is very low, but the memory of any one "bad" encounter is strong and very undesirable. Conflicts with dogs were reported to be about 67% with the dogs off leash, either bothering people or other dogs, and 33% with encountering dog excrement. Although the reported percentage of "bad experiences" is very low, with 6 million annual beach visits, the actual number of incidents has to be quite high in any one year.

(There was no specific survey information collected regarding dog conflicts with horses on the beach.)

Horses on the Beach: Survey responses show fewer conflicts with horses than with dogs. About 50% of the survey respondents have encountered a horse at least once on the beach. Only about 7% reported ever having a bad experience with horses or their excrement, while less than 1% had had a bad encounter on the day of the survey interview. Most of the negative experiences were with horse excrement, not with horses themselves. Areas of conflict between non-equestrians and horses are generally on very narrow beaches or at shared beach access points.

Perceived Beach Crowding: Survey respondents were asked about their perceptions of crowding, for the beach they were visiting. This was done rather than calculating the actual density of beach use because visitor perceptions of crowding vary based on the respondent's expectations for the beach they are visiting. Most visitors are already familiar with the beach they are planning to visit, and select a destination that matches their desired experience. Those planning to go to a large event on the beach are looking forward to the intense social situation they will find there. Those who want quiet and seclusion go to a beach where they know there is generally little use, or on a day when they know the use will be much lower than on peak weekends in the summer.

The 2001 beach survey findings show that there are some Oregon beaches that are "extremely crowded" and several that are "moderately crowded", at least on peak days. The most crowded beaches, given this approach, are Short Sands at Oswald West State Park and Indian Beach at Ecola State Park. According to Oregon Parks and Recreation Department attendance data each receive about 500,000 visitors a year, mostly in the summer months. Other "very crowded" beaches include Pacific City, Neskowin, Seaside, Cannon Beach, Manzanita and Rockaway Beach. All of these beaches are adjacent to cities where most access is by street ends along the beach, where large numbers of visitors can stream onto the beaches from concentrations of motels and residential neighborhoods.

Beaches with more "moderate" levels of crowding included Harris Beach, Sunset Bay, Sutton Creek, Cape Lookout, North Sand Lake, Oceanside and Netarts. Beyond these beaches, the rest of the coast is reported to be "slightly crowded" to "uncrowded".

Similar perceived crowding questions have been used in studies of other recreation areas in the state. Even the most crowded Oregon beach, Short Sands Beach, is perceived to be less crowded than other heavily used recreation areas in Oregon. For instance, certain sections of the Deschutes River, and the main day use and marina area at The Cove Palisades State Park, are in the next crowding level above Short Sands Beach, in the highest level of perceived crowding in the state. It is also important to point out that, according to observations, even the "extremely crowded" beaches are used much less during off peak days, especially during the non-summer season.

Motorized Vehicles on the Beach: Motorized vehicle use has risen in the coastal regions, yet actual conflicts with non-motorized visitors are low. However, the perception of the potential for conflicts between non-motorized users and motor vehicles on the beach is much higher. The beach survey showed, for the day interviewed, respondents had almost no conflicts. However, in the follow up mail survey, 70% of respondents felt that meeting a motorized vehicle on the beach would decrease their enjoyment of the beach.

A very likely interpretation of this data is that most non-motorized beach visitors are choosing to visit beaches where they know they will not be meeting vehicles on the beach, resulting in very few actual encounters. Most conflicts occur when non-motorized beach visitors are unknowingly attracted to beaches they must share with generally high levels of vehicular use. Examples are at Cape Kiwanda/Pacific City and Sand Lake.

Survey participants were also asked about their views on whether motorized vehicles should be allowed to drive on the beaches, and about regulating that use. A slight majority of respondents, (57%), were opposed to any type of motorized vehicle use on the beach. However, 41% supported allowing motorized vehicle use with limits on which beaches were open to vehicles and/or possible seasonal limitations. (Only 3% supported beach driving without any restrictions.) This statistic is interesting in that only 27% of the respondents said they had actually driven on the beach one or more times. This may show that there is a good level of support for driving on the beach by a segment of people who have never done that activity themselves, as long as the activity is "regulated". The survey did not ask whether specific beaches should be open or not.

Regarding regulations, up to 94% of the respondents felt that any imposed regulations, (short of an outright ban), should restrict use areas, time of use, speed and noise levels.

Western Snowy Plover Recovery: Survey results indicate widespread support for beach management to help with the recovery of the protected snowy plover, especially by persons who have not personally experienced current management actions. Most would be willing to change the way they use the beach, but are not as supportive of the idea of predator controls or beach habitat enhancement through bulldozing the sand.

The opposition to enhancement was somewhat surprising, but seems to indicate a reluctance to see the dunes changed much from the way they look now. Respondents may not realize that the appearance of

the dunes has changed dramatically in the last 50 years due to the spread of European beachgrass. Grading the dunes to create better habitat was supported by only 20% of respondents.

About 45% of the respondents said they are opposed to "removing predators" as a snowy plover conservation and recovery measure. Predator controls were supported by only 21%. The opposition to predator management may reflect the larger public reluctance to trap and kill problem animals.

Only 5% of the respondents were sure they had experienced current plover management restrictions. Another 24% had heard of the restrictions but had not experienced them. **Most were unaware of the issue.** Even so, 70% said they would be willing to change their beach use behavior in some undefined manner and location to benefit the plovers. The survey did not ask if respondents would be willing to curtail the time, season or area of use of their favorite beach to assist in the recovery of the plover. Generally, the most common public complaints involving use restrictions are from those who have experienced plover management restrictions at a beach they visit often.

Regarding potential management actions, 76% of respondents supported some type of seasonal prohibition of activities on the beaches. In response to a separate question, 70% supported the use of warning signs on the beach, 62% supported partial beach closures and 43% supported fencing only the nests, but not along stretches of beach. Only 29% supported total beach closures, while 14% opposed even partial beach closures. (Since respondents could provide multiple answers for this question, these percentages do not add to 100%.)

Getting Onto the Beach

Oregon's unique legislation keeps the entire length of Oregon coast beaches open to the public, regardless of ownership. However, it does not mandate the provision of public access sites from adjacent lands to the beach, except for the protection of the "current" number of sites, included in Goal 17 of the "Oregon Statewide Planning Goals and Guidelines". Over the years some studies of the type, location and need for beach access sites have been completed. Most have included beach access inventories with recommendations focusing on how best to satisfy recreational demand. The Department of Land Conservation and Development's Coastal Program has created an excellent digital inventory, called Coastal Access, of current accesses of various types, which was very useful in working on this plan. The inventory and interactive mapping can be found on www.costalatlas.net.

During the summer of 2001, a survey of beach users added to the body of information that was already available. The survey's goal was to identify the types of accesses that beach visitors use and how the different types of access affect the level and distribution of use on the beaches served by those accesses. This kind of information is critical for determining how to manage access to provide for the wide range of settings that are desired by different user groups, and is important for determining how access can be best managed to protect sensitive natural and cultural beach resources.

The Oregon Parks and Recreation Department survey asked beach visitors about the use of four types of accesses:

1. public beach access with a parking lot,
2. public street ends,
3. private land they own or rent, and
4. private land they do not own or rent.

Although there is a good deal of regional variation, a majority of beach visitors interviewed (57-87%) accessed the beach via a public beach access site. The higher percentage, 87%, represents the South Coast, 76% on the Central Coast and 57% on the North Coast. Street ends were more prevalent on the North Coast, and private lands on the Central Coast.

The survey information, combined with computer mapping of the distribution of visitors on the beach revealed marked differences depending on the type of access available for the beaches. Public access sites create very localized concentrations of use on the adjacent beach, if the beach is not open to driving. Very few visitors walk as far as a mile from their access point. Even if the beach is open to driving, the use is still somewhat concentrated around the access point. Street ends create a well-distributed access pattern that varies in intensity depending on the size of the community. Access via private lands that are owned or rented creates very dispersed use, while access from private lands, such as from a resort or hotel complex, results in very concentrated use around the complex.

A gap analysis was conducted for this planning effort to identify gaps in providing for public beach access and opportunities for filling those gaps. Identified gaps and suggested solutions are listed in the "Regional Access Gaps" section of this chapter.

Table 1: Methods of Beach Access by Region

Access Type	North Coast Columbia River to Nehalen River	North Coast Nehalem River to Cascade Head	Central Coast Roads End to Yaquina River	Central Coast South Beach to Umpqua River	South Coast Umpqua River to Blacklock Point	South Coast Sixes River to California
Public Access	56%	60%	57%	76%	87%	87%
Street End	24%	15%	13%	8%	2%	5%
Private property (owned or rented)	16%	22%	23%	13%	5%	5%
Private property (not owned or rented)	4%	4%	7%	4%	6%	4%

Table is taken from Ocean Shore Recreational Use Study, Shelby and Tokarczyk, 2002.

Regional Visitation Overview

The Ocean Shore Management Plan, especially its recreation component, is based on viewing the coast as three distinct regions.

The three regions are defined as follows:

- North Coast: Columbia River to Cascade Head/Salmon River area. This includes Clatsop and Tillamook Counties.
- Central Coast: Salmon River area to the mouth of the Umpqua River, generally. This includes Lincoln and Lane Counties.
- South Coast: Umpqua River to the California border, including Douglas, Coos and Clatsop Counties.

The North Coast is visited mostly by Portland residents, state of Washington residents and residents of the North Coast. Highways 6, 26, 30 and 22 bring visitors from the Portland area and the northern Willamette Valley to their coastal outlets in no more than two hours.

The Central Coast is visited mostly by residents of the central to south Willamette Valley, along with a moderate number of Washington state residents and residents of the Central Coast. The cities of Salem, Corvallis and Eugene supply many of the visitors to the Central Coast. Highways 18, 20, 34,126 and 36 bring visitors to the Central Coast in less than two hours. Portland residents visit the Central Coast as well, traveling via Highway 18.

The South Coast is visited mostly by residents of the Medford and Grants Pass area, inland Douglas County, residents of California and by residents of the South Coast. Highways to the South Coast are fewer in number, and tend to increase the time it takes to get to the more distant sections of the South Coast. They include Highways 38 and 42 in Oregon and the Redwood Highway through northern California and Oregon, which connects the far south coast with Grants Pass.

Each of these regions has distinctions in recreational use patterns that are based on where the visitors are coming from, recreational objectives, settlement patterns and differences in highway access to the region. All three regions, however, show a lot of similarity of recreational use patterns for the top "primary" activities, walking, picnicking and relaxing, and scenic enjoyment. Recreational activities with lower percentages of participation are the ones that show marked differences according to location. Characteristics and differences by region are illustrated and discussed below.

Primary Recreational Activities: Similarities and Differences in Activities Among the Regions

This section is provided to help illustrate some of the major differences in primary recreational activities among the regions and regional segments. Understanding why there are differences can help planners to better understand what is needed to provide for the uses in each of the three coastal regions. All of the recreational activities that occur on the beaches occurred consistently in each of the three regions, although some occurred in such low numbers as to be relatively immeasurable. (Only the top 15 are listed in Table 3.) This does not mean that low use activities should not be provided for in each region, however. The department is interested in seeing that the range of activities is provided for in each region.

Table 3. Top 15 Primary Recreation Activities Pursued by Segment and Region

North Coast				Central Coast				South Coast			
Segment 1		Segment 2		Segment 3		**Segment 4**		**Segment 5**		**Segment 6**	
Activity	**%**	**Activity**	**%**	**Activity**	**%**	**Activity**	**%**	**Activity**	**%**	**Activity**	**%**
Walking	38	Walking	39	Walking	37	Walking	29	Walking	34	Walking	35
Picnicking	27	Picnicking	18	Picnicking	26	Picnicking	21	Scenic	16	Scenic	18
Scenic	12	Scenic	10	Scenic	13	Scenic	9	Picnicking	13	Picnicking	16
Dogs	4	Dogs	5	Dogs	4	Camping	6	Beachcomb	10	Windsurf	7
Surfing	3	Exercise	4	Kites	4	ATV	5	Dogs	6	Beachcomb	4
Sandplay	3	Beachcomb	3	Beachcomb	3	Kites	5	ATV	5	Kites	3
Exercise	2	Kites	3	Sandplay	3	Dogs	4	Exercise	2	Swimming	2
Kites	2	Sandplay	3	Exercise	2	Exercise	4	Camping	2	Camping	2
Swimming	2	Camping	2	Surfing	1	Beachcomb	4	Kites	2	Exercise	2
Boogie Bd	2	Swimming	2	Crabbing	1	Sandplay	3	Fishing	2	Surfing	2
Camping	1	Surfing	2	Swimming	1	Swimming	2	Driftwood	1	Dogs	1
Beachcomb	1	ATV	2	Camping	1	Fishing	2	Horses	1	Sandplay	1
Bicycle	1	Fishing	1	Boogie Bd	1	Fires	1	Sandplay	1	Family	1
Family	< 1	Boogie Bd	1	Family	1	Surfing	1	Swimming	<1	Clamming	1
Kayak	<1	Family	1	Fishing	1	Boogie Bd	1	Fires	<1	Fishing	1

Table 1 is taken from the Oregon Shore Recreational Use Study, Shelby and Tokarczyk, 2002.

Walking: Walking is the number one primary activity across the entire coast. Only the southern portion of the Central Coast, which stretches from the Yaquina River to the Umpqua River, has a lower percentage of visitors who are at the beach primarily to walk, than the other segments. This is likely due to the long distances of beach that can only be reached by driving on sand roads with four-wheel drive vehicles.

Picnicking: The highest percentage of picnicking occurs on the Central Coast (26% of respondents), in areas that are adjacent to Lincoln City, Salishan and Gleneden Beaches. Picnicking on the South Coast is of the lowest percentage, ranking lower than scenic enjoyment. This may be due to the exceptional draw of the region's rocky coastline for scenic enjoyment, and the remoteness of the beaches there. The beaches on the far South Coast are much smaller than in the other sections and may not be conducive to picnicking on peak days. Scenic enjoyment follows picnicking closely in the North and Central Coast regions, but occurs in lower percentages than in the South Coast.

Dogs: Going to the beach primarily to exercise dogs ranged from 6% in the northern portion of the South Coast to 4% on the North and Central Coast. The far South Coast reported only 1% primarily exercising dogs. Although the percentage is higher for Segment 5, the actual number of occasions for the North and Central Coast would be far higher due to the relatively higher number of occasions there. However, specific beaches in each region reported markedly higher levels of participation for exercising dogs, in each of the regions.

Near shore activities/surf sports: In the far northern portion of the North Coast, surfing is the most prominent of the "surf sports" as a primary activity. The numerous jetties play a big role in supporting this level of use, as they create necessary surf conditions and allow for public access. Also, many of the jetties are located closest to the larger Portland area where most of the surfers come from.

The percentage of participation in surfing as a primary activity drops gradually from north to south, and then jumps up a bit at the far south where beaches are closer to the California population centers. Windsurfing is markedly higher on the far South Coast, where prime destination sites such as Pistol River and Floras Lake are well known and heavily used.

Camping on the beach: Camping on the beach as a primary activity is far higher, by percentage, in the Central Coast than any other. Most of this activity is due to the popularity of remote camping via four-wheel drive vehicles in the Tahkenitch Creek to Umpqua River Area. Although the relative percentage is high, (7%), the actual numbers are very low due to the low numbers of actual visitors in this hard to reach area.

Off highway vehicles: Non-street legal, off highway vehicle riding on the beach as a primary activity is measurable in a portion of the North Coast, reflecting the concentration of this activity at Sand Lake; and in the Central and South Coast, reflecting the portion of the Dunes National Recreation Area open to riding on the beach.

Horseback riding: Although the most concentrated location for horseback riding is Baker Beach in the Central Coast, that level of use is lost in the larger number of visitors coming to those beaches to do other recreational activities. On the South Coast, however, horseback riding shows up in the reports as a measurable percentage in relation to other primary activities. Actual numbers, however, are much lower on the South Coast.

All Activities: Similarities and Differences in Recreation Activities Among the Regions

Most visitors to the beach are coming to do one primary activity, as well as one or more additional recreational activities while on the beach. Activities such as surf sports, surf fishing, camping on the beach, and even off highway driving on the beach, occur in higher percentages as something other than the primary reason for being on the beach. On the other hand, visitors who are coming to do many of the lower percentage primary activities are also walking on the beach and enjoying the scenery. As a result, when all of the activities each visitor engages in are considered, the vast majority of beach visitors are walking on the beach, enjoying the scenery and relaxing, picnicking and getting some exercise, across the coastal regions. Beyond the top three activities; walking, picnicking and relaxing, and scenic enjoyment; real differences among the segments and regions emerge from the survey data.

The camping statistics, in Table 3, are assumed to mostly reflect camping in developed campgrounds that are adjacent to the beaches, rather than primitive camping on the beach itself, as camping on the beach has been observed in very small numbers. However, in those areas where access is remote, camping on the beach by four-wheel drive vehicles is done in moderate numbers on peak use days, or in relation to peak events such as a fish run.

The percentage of respondents bringing dogs to the beach ranges from one quarter to one third, with the northern portion of the South Coast being the area with more than a third of respondents.

Table 4: Top 30 Recreation Activities Pursued by Segment and Region

North Coast				Central Coast				South Coast			
Segment 1		**Segment 2**		**Segment 3**		**Segment 4**		**Segment 5**		**Segment 6**	
Activity	**%**	**Activity**	**%**	**Activity**	**%**	**Activity**	**%**	**Activity**	**%**	**Activity**	**%**
Walking	90.2	Walking	91.0	Walking	92.5	Walking	89.4	Walking	93.2	Walking	88.8
Scenic	70.3	Scenic	72.3	Scenic	74.0	Scenic	71.9	Scenic	81.9	Scenic	64.2
Picnicking	60.6	Picnicking	55.1	Picnicking	60.8	Picnicking	58.7	Picnicking	56.7	Picnicking	45.1
Exercise	37.1	Exercise	39.1	Kites	38.2	Exercise	35.2	Exercise	51.2	Camping	29.1
Kites	32.7	Kites	31.4	Exercise	35.2	Camping	33.8	Beachcomb	38.0	Exercise	27.5
Swimming	30.3	Dogs	29.0	Swimming	24.6	Kites	33.8	Dogs	35.2	Dogs	24.1
Dogs	21.6	Swimming	24.7	Dogs	22.1	Dogs	26.3	Driftwood	26.4	Swimming	21.1
Fires	20.7	Fires	22.2	Fires	18.8	Swimming	24.8	Birding	24.3	Kites	16.7
Bicycle	14.4	Camping	20.4	Driftwood	14.5	Fires	16.5	Kites	22.4	Driftwood	16.0
Camping	13.8	Driftwood	12.7	Camping	11.6	Driftwood	10.6	Camping	16.8	Fires	11.5
Boogie Bd	12.8	Birding	11.1	Birding	10.5	Birding	9.4	Swimming	15.1	Birding	9.9
Surfing	10.8	Fireworks	10.6	Fireworks	9.7	ATV	7.9	Events	13.2	Surfing	9.4
Birding	8.1	Boogie Bd	9.7	Beachcomb	7.1	Fishing	7.7	Fires	11.7	Fishing	8.5
Fireworks	8.1	Bicycle	8.9	Boogie Bd	6.4	Beachcomb	6.9	Fishing	9.8	Fireworks	8.3
Drftwood	7.9	Events	7.5	Crabbing	6.2	Fireworks	6.3	ATV	7.0	Boogie Bd	8.2
Clamming	6.6	Beachcomb	7.4	Events	5.7	Bicycle	6.2	Crabbing	6.6	Bicycle	7.7
Events	5.0	Surfing	6.8	Fishing	5.1	Boogie Bd	5.2	Fireworks	6.6	Wind Surf	7.7
Sandplay	4.5	Fishing	6.8	Sandplay	5.1	Events	5.2	Clamming	6.4	Beachcomb	5.8
Fishing	4.0	Clamming	6.6	Clamming	4.6	Sandplay	5.0	Horses	4.7	Clamming	5.0
Horses	3.8	Sandplay	5.4	Surfing	4.4	Surfing	3.8	Bicycle	3.6	Events	4.7
Crabbing	3.6	Crabbing	4.3	Bicycle	3.5	Clamming	3.8	Boogie Bd	3.0	Crabbing	4.2
Kayak	2.6	Horses	3.5	Horses	2.4	Crabbing	3.5	Surfing	2.1	Horses	3.1
Family	1.9	Kayak	2.1	Kayak	1.3	Horses	3.1	Sandplay	1.9	Sandplay	2.5
Beachcomb	1.4	ATV	1.8	Family	1.3	Sports	2.3	Kayak	1.1	Kayak	2.0
Spiritual	1.3	Sports	1.7	Tidepooling	1.2	Kayak	1.9	Wind surf	0.6	Family	1.6
Wind surf	1.1	Family	1.3	Sports	0.6	Reading	1.3	Family	0.6	Photography	1.4
Sports	0.7	Tidepooling	1.0	Wildlife	0.5	Spiritual	1.2	Tidepooling	0.6	Sports	1.3
Hang glide	0.4	Reading	0.7	Photography	0.4	Wind surf	0.8	Sports	0.4	Tidepooling	0.6
Skim board	0.4	Wind surf	0.4	Reading	0.4	Family	0.8	Photography	0.4	Wildlife	0.6

Table 2 information was taken from Oregon Shore Recreational Use Study, Shelby and Tokarczyk, 2002.
Note: ATV use in Segment 1 was 0.1%, Segment 3 was 0.1 and Segment 6 was 0.3%.
Kiteboarding was measurable only in Segment 6 at 0.2%.

Birding: Birding is done by about 10% of the respondents in all three regions, except for Segment 5 of the South Coast where it is closer to 24%. The reason for this difference is not readily apparent, but may reflect the availability of a wide variety of shorebird species, or an interest in the snowy plover and/or other rare species.

Building beach fires and collecting driftwood: Building beach fires and collecting driftwood are common activities across the regions, with 11-25% of the respondents participating in building fires and 8-26% collecting driftwood. Beach fires appear to be most popular on the North Coast, while driftwood collection occurs at a higher percentage on the far South Coast.

Surf sports: Boogie boarding is a fairly popular activity on the North Coast with over 10% of respondents participating. Surfing is also high, about 10%, on the far North Coast, but drops to lower levels in other areas, as a percentage of the larger total. Locally, however, surfing can be very concentrated in specific locations as was mentioned in the primary activities section.

Fireworks: Fireworks is a moderately popular activity coast-wide, with the highest percentage on the North Coast, north Central Coast and the far South Coast.

Beachcombing: Beachcombing occurs in all of the regions but is exceptionally high in the northern portion of the South Coast. This may be due to the remoteness of many of the beaches there that are most easily accessed by four-wheel drive vehicles on rough sand roads. There may also be influences from wind and wave patterns that favor the deposition of popular beach-combing items, such as glass floats, in this area.

Clamming and crabbing: Clamming and crabbing occur in all of the regions with fairly consistent percentages throughout. Fishing from the beach, or surf fishing, also occurs in all of the regions, ranging from 4 to almost 10%. The highest percentages are reported to occur on the South Coast, more than twice that on the North and north Central Coast.

Horseback riding: Horseback riding also occurs in all regions, with a slightly higher percentage reported South Coast, but higher numbers of riders on the Central Coast.

Off highway driving: Non-street legal, off highway driving on the beach occurs in the highest percentages of participation in the Dunes National Recreation Area. The activity also occurs at Sand Lake Recreation Area. The activity was reported in other areas, in extremely low percentages. This is likely reflecting driving on beaches that are legally not open to non-street legal driving.

Others: Emerging sports include sea kayaking, which was measurable in all three regions, and was reported in higher percentages than wind surfing, except for the far South Coast. Bicycling on the beach also occurs in all of the regions, but has the highest percentage on the North Coast and far South Coast regions. Kite-boarding was only measurable on the far South Coast, but has been observed in very small numbers in other areas.

As a note, whale watching was not included as an activity and none of the respondents wrote it into their responses are likely because whale watching is generally done from the higher rocky areas, not from the beach.

Regional Recreation Overview

North Coast Recreation Overview

Recreationists can find opportunities to participate in the full set of desired recreational activities on North Coast beaches. Opportunities range from street legal driving on the Clatsop Plain and off highway vehicle driving at Sand Lake Recreation Area, to the many festivals at the coastal cities. The full set of surfing sports can be found, as well as a number of emerging activities such as beach biking, and sea kayaking. Many opportunities exist for horseback riding, clamming, and surf and jetty fishing. In fact, the North Coast has the largest number of miles of beach for clamming of all three regions.

For the most part, however, North Coast beaches have few opportunities, on peak days, for secluded settings close to an access. Seclusion is available only after a very long walk from an access along a spit or by visiting during the off season. During the high use summer season, especially on weekends and holidays, there are very few beaches on the North Coast where seclusion can be found. Those that can be found are secluded because of limited public access.

Regarding adjacent settings for recreating on the beach, the North Coast has several including town settings, low key rural subdivision settings and large scale natural settings such as a large state park or

federal lands. Because of the proximity of the North Coast to major population centers, each of these settings will be full of visitors on peak days, however. Visitors will be coming to the summer homes and motels in the town settings, to summer homes in the subdivision settings and to the campgrounds and day use areas on the state and federal lands.

The full urban experience can be found on peak days at Seaside, Cannon Beach, Rockaway Beach, Manzanita and Pacific City. Motel complexes in these towns greatly contribute to the concentration of use on adjacent beaches on peak days. In contrast, the North Coast's several small, quaint, mostly residential beachside communities offer unique settings for enjoying the beach including Oceanside and Netarts, Gearhart, Neskowin and Tierra del Mar. There are a few quiet "get away" beaches at north Neskowin, Cape Beach and Arch Cape.

Opportunities for camping near the beach occur at Fort Stevens State Park, Nehalem Bay State Park, Barview Jerry County Park, Cape Lookout State Park, Sand Lake Recreation Area and the private campground at Pacific City. Nearby camping, on a small scale, is offered at Whalen Island County Park and at the large private club campground north of Pacific City.

Central Coast Recreation Overview

The Central Coast also offers opportunities for the full range of desired recreational activities at the beach. This includes recreational driving on the beach, including off highway and street legal vehicle riding, along portions of the Dunes National Recreation Area. The beaches at Lincoln City and Newport offer intensive social settings for enjoying the beach, while Florence and Waldport offer the smaller town setting. There are several rural subdivisions including Gleneden, Seal Rock and Driftwood Shores that offer neighborhood access from retirement and second homes, and other private residences.

The beaches in most of the Central Coast region are interspersed among rocky intertidal areas, offering a great variety of experiences from site to site. At the south end of the region, the Dunes National Recreation Area provides around 23 miles of continuous beach opportunities with no adjacent settlements and a few, small access sites and campgrounds. This unique opportunity provides access to motorized use and exclusive non-motorized use at intervals.

Popular state parks with beaches within walking distances from campgrounds occur in this region, such as at Beverly Beach State Park, South Beach State Park, Beachside State Recreation Site and Carl Washburne State Park. In addition, the Forest Service provides two fairly large campgrounds near the beach at Sutton Creek and Tillicum Beach.

Prime spots are available for surfing, surf and jetty fishing, and crabbing and clamming, and extremely remote beach camping can be found on the Umpqua river north spit. One of the most popular horse backing riding destinations, Baker Beach, is located in this region.

Visitation on the Central Coast is more moderate than at the major sites on the North Coast. Distance from the Portland area contributes to this effect, while the cities of Corvallis and Eugene provide a smaller population base to draw from. The Central Coast has a higher percentage of beach access from privately owned homes or rentals than the other regions, reflecting the large number of miles of rural and suburban residential areas along the beach here. Hotel complexes in Lincoln City, Florence and Newport funnel concentrations of visitors onto the beach in the vicinity of each complex.

The Central Coast has more opportunities to find seclusion on the beach during peak summer days than the North Coast, especially in those stretches of the Dunes National Recreation Area where motorized vehicular access is prohibited and access can only be achieved by hiking a couple of miles or more from distant trailheads and campgrounds. However, close to beach access parking lots it is difficult to find seclusion on a peak summer day.

South Coast Recreation Overview

Although the South Coast is often perceived as having many more rocky headlands and high terraces than the rest of the coast, it actually has several long beaches, especially in the northern half. These beaches include the Dunes National Recreation Area, (about 14 miles), Coos Bay North Spit, (6 miles), Seven Devils/Bullards Beach area, (8 miles), Bandon/New River, (14 miles), and Cape Blanco/Elk River/Agate Beach another 6 miles. In the south half of the region beaches become shorter and are more often closely associated with river and creek mouths, and coves within rocky headlands. Examples are the beaches at Euchre Creek, Pistol River, Whaleshead, Lone Ranch, Harbor and Winchuck/Crissey Field. Also, the South Coast offers a few small urban beaches, such as at Sunset Bay and Bastendorf, as well as small, almost inaccessible beaches that only those locals who have little fear of heights and cliff climbing use.

The level of use on the South Coast is much lower than even the Central Coast. Farther distances from population centers and much smaller coastal towns offer places to escape to that can provide solitude without a long walk, even on peak weekends. Exceptions include thoroughly urban sites such as Harris Beach State Park in Brookings, where townsfolk come on their lunch breaks, Bastendorf Beach in Charleston and the beaches at Bandon.

There are a somewhat wider variety of access providers in this region, with Curry County providing one of the more important destination sites through their Boice Cope park at Floras Lake, the local access at Bastendorf Beach and the privately owned campground at Arizona Beach. There are even unofficial beach accesses that are well used but are not officially managed by any agency, such as Whiskey Run and Five Mile Point.

All of the desired recreational activities can be pursued somewhere on beaches on the South Coast. Beach driving is allowed at portions of the Dunes National Recreation Area and Coos Bay North Spit. Remote non-vehicular experiences can be found at New River. Windsurfing destinations occur on the South Coast at Floras Lake and Pistol River, while surfing becomes more popular at the far south end of the region.

Camping close to the beach is available at a variety of places including a private RV camp and a county camp at Bastendorf Beach, Sunset Bay State Park, Bullards Beach State Park, Boice Cope County Park, Cape Blanco State Park, Humbug Mountain State Park, Arizona Beach private park and Harris Beach State Park. Other camping opportunities a few miles from the beach include several Dunes National Recreation Area sites.

The South Coast has fewer stretches of rural residential subdivisions, outside of cities, with only Nesika Beach and the McVay Rock area occurring right on the beach. Otherwise, beachside development is contained almost exclusively within the boundaries of the several small to medium towns in Coos and Curry County including Charleston, Bandon, Port Orford, Gold Beach and Brookings. These urbanized areas offer some concentrated motel opportunities on the beach, but of a much smaller scale and capacity than the North and Central Coast regions. Also, the South Coast still has some large private rural landholders

along the shore, in the New River, Sixes River and Elk River areas, and hosts the only full service golf resort located adjacent to the beach. The Central Coast's equivalent, Salishan, has most of its motel and restaurant services on the east side of Highway 101. However, this may change if the proposed resort is developed at the Beltz Farm in Tillamook County.

NORTH COAST REGION
(Columbia River to Cascade Head)

Recreation & Setting Matrix

Recreation Segment	Littoral Cell	Beach Name	GENERAL: Length (in miles)	GENERAL: Sandy or Rocky	GENERAL: Smaller Beaches?	ACCESS: OHV, Year round	ACCESS: OHV, Seasonal	ACCESS: Street Legal, Year round	ACCESS: Street Legal, Seasonal	ACCESS: Boat Launch Veh., Year round	ACCESS: Boat Launch Veh., Seasonal	ACCESS: OPRD Access Gap	ACCESS: OPRD Access Sites	ACCESS: Public Site Access Gap	ADJACENT USE: Adjacent Land Use: Dev	Adjacent Land Use: Mod	Adjacent Land Use: UnDev.	Adjacent Land Use: Potential	ADJACENT USE: Adjacent Communities	RECREATION USE: Relaxing / Swimming	Walking / Running	Surf Sports	Surf Fish	Jetty Fish	Clamming	Crabbing	Equestrian	Beach Camping	Vehicles**	Dogs	ADJACENT RECREATION: Adjacent/Nearby (A/N) Camping: SP	Camping: FED	Camping: Local	Adjacent Trals: SP	Trails: FED	Trails: Local	Coast Trail	CAPACITY: Crowding	Level of Peak Use	Distribution	PLOVER: Current Plover Restrictions (2004)	Emphasis Area
			#	S / R	Y / N	Part / All	Part / All	Part / All	Part / All	Part / All	Part / All	Y / N	#	Y/N	Dev	Mod	UnDev.	Potential	Name of City	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	SP	FED	Local	SP	FED	Local	Y/N	1-5	#	See Key	Y/N	0-3
SEGMENT ONE	CLATSOP CELL	Columbia to Necanicum River	16.03	S	N			Part	Part	Part		Y	4	Y	X	X	X	X	Seaside UGB	67	15	<1	Y	Y	Y	N	Y	N	0	5	N			X			Y	1	277	L	N	2
SEGMENT ONE	CLATSOP CELL	Necanicum River to Tillamook Head	2.14	S	N					All		Y	0	N	X				Seaside UGB	75	14	<1	Y	N	Y	N	N	N	0	3						X	Y	3	466	Den	N	0
SEGMENT ONE	CLATSOP CELL	Tillamook Head		R								Y	0	N																												
SEGMENT ONE	CANNON CELL	Tillamook Head		R								Y	0	N																												
SEGMENT ONE	CANNON CELL	Indian Beach	0.46	S	N							N	1	N			X			71	14	9	Y	N	N	N	N	N	0	3				X			Y	4		Den	N	0
SEGMENT ONE	CANNON CELL	Ecola Beach	0.50	S	N							N	1	N			X			42	49	0	Y	N	N	N	N	N	1	5				X			Y	4		Dis	N	0
SEGMENT ONE	CANNON CELL	Chapman Pt. To Humbug Pt.	4.21	S	Y							N	2	N	X		X	X	Tolovana/Cannon Beach	60	29	1.2	Y	N	N	N	Y	Y	0	4							Y	2	726	Den	N	0
SEGMENT ONE	CANNON CELL	Humbug Pt. To Hug Pt.	1.12	S	N							N	2	N		X	X	X	Arcadia Beach	79	13	2	N	N	N	N	N	Y	0	4							Y	1	117	Dis	N	
SEGMENT ONE	CANNON CELL	Hug Pt. To Arch Cape	2.01	S	N							N	1	N		X		X	Arch Cape	79	15	1.5	Y	N	N	N	N	Y	0	3							Y	2	101	Mod	N	0
SEGMENT ONE	CANNON CELL	Arch Cape to Cape Falcon	1.45	S	N							Y	0	Y		X			Cove Beach	63	0	0	Y	N	N	N	N	N	0	0							N	1	7	Dis	N	0
SEGMENT ONE	CANNON CELL	Cape Falcon		R								Y	0	Y																												
SEGMENT ONE	ROCKAWAY CELL	Cape Falcon		R								Y	0	Y																												
SEGMENT ONE	ROCKAWAY CELL	Short Sands Beach	0.53	S	N							Y	1	Y			X			59	9	27	Y	N	N	N	N	Y	0	2	A			X			N	4	232	Den	N	0
SEGMENT ONE	ROCKAWAY CELL	Neahkanie Mt.		R								Y	0	Y																												
SEGMENT ONE	ROCKAWAY CELL	Neahkanie Mt. to Nehalem River	5.15	S	N				Part			N	5	N	X		X		Manzanita UGB	60	22	3	Y	Y	N	N	Y	Y	0	8	A			X			Y	1	128	DE/DI	N	1
SEGMENT TWO	ROCKAWAY CELL	Nehalem River to Tillamook Bay	5.95	S	N						Part	N	3	N	X	X	X		Rockaway UGB	63	24	1.5	Y	Y	N	N	N	Y	0	3			N				N	1	337	Den	N	0
SEGMENT TWO	ROCKAWAY CELL	Tillamook Bay to Cape Meares	5.00	S	N						Part	Y	0	N			X	X		44	36	1.3	Y	Y	N	N	Y	Y	0	3							N	1	84	Dis	N	1
SEGMENT TWO	ROCKAWAY CELL	Cape Meares		R								N	0	N																												
SEGMENT TWO	NETARTS CELL	Cape Meares to Maxwell Pt.		R								N	0	N																												
SEGMENT TWO	NETARTS CELL	Maxwell Pt. to Netarts River	2.11	S	N					Part		N	1	N	X		X	X	Netarts UGB	52	36	2.6	Y	N	N	N	N	Y	0	5							Y	2	181	Den	N	0
SEGMENT TWO	NETARTS CELL	Netarts River to Cape Lookout	5.66	S	N							N	2	N		X	X			38	31	2	Y	N	N	N	N	N	0	3	A			X			N	2	119	DI/DE	N	1
SEGMENT TWO	NETARTS CELL	Cape Lookout		R								Y	0	Y																												
SEGMENT TWO	SAND LAKE CELL	Cape Lookout		R								Y	0	Y																												
SEGMENT TWO	SAND LAKE CELL	North Sand Lake	4.06	S	N	Part						Y	0	Y		X	X			12	8	0	N	N	N	N	Y	N	80	0		N		X			Y	2	33	L	N	1
SEGMENT TWO	SAND LAKE CELL	Sand Lake to Cape Kiwanda	3.90	S	N			Part	Part			N	2	N	X	X	X	X	Tierra Del Mar	44	29	2	Y	N	N	N	Y	Y	0	3							Y	2	77	DI/DE	N	1
SEGMENT TWO	SAND LAKE CELL	Cape Kiwanda		R								N		N																												
SEGMENT TWO	NESKOWIN CELL	Cape Kiwanda		R								N		N																												
SEGMENT TWO	NESKOWIN CELL	Cape Kiwanda to Nestucca River	4.03	S	N			Part		Part		N	1	N	X	X	X	X	Pacific City	59	25	6	Y	N	N	N	Y	Y	0	2				X			N	3	295	DE/DI	N	1
SEGMENT TWO	NESKOWIN CELL	Nestucca River to Cascade Head	4.51	S	N							Y	1	Y	X	X	X	X	Neskowin UGB	52	37	1.7	Y	N	N	N	Y	Y	0	4							Y	1	85	L	N	0
SEGMENT TWO	NESKOWIN CELL	Cascade Head		R								Y	0	Y																												

1 **Access Gap**

At least one public access facility to water every 3 miles. Gaps to not correspond with beaches.

2 **Adjacent Land Use**

Dev - Urban or large subdivision
Mod - smaller subdivision, rural residential & large recreation site
Undev - Scattered residential & minor recreation
Potential - zoning allows development
Adjacent Communities - UGB or large rural subdivision

3 **Crowding**

5 Levls from Survey Results

4 **Level of Peak Use**

Average number people observed on weekend day

5 **Distribution Key**

L= Local
Den = Dense
Dis = Dispersed
Mod = Moderate
DE/DI = Dense/Dispersed
DI/DI = Dispersed / Dense

*Not Surveyed

CENTRAL COAST REGION
(Cascade Head to Umpqua River)

LOCATIONS			ATTRIBUTES: GENERAL			ACCESS									ADJACENT USE					RECREATION USE											ADJACENT RECREATION							CAPACITY			PLOVER	
Recreation Segment	Littoral Cell	Beach Name	Length (in miles)	Sandy or Rocky	Smaller Beaches?	OHV, Year round	OHV, Seasonal	Street Legal, Year round	Street Legal, Seasonal	Boat Launch Veh., Year round	Boat Launch Veh., Seasonal	OPRD Access Gap	OPRD Access Sites	Public Site Access Gap	Adjacent Land Use				Adjacent Communities	Relaxing / Swimming	Walking / Running	Surf Sports	Surf Fish	Jetty Fish	Clamming	Crabbing	Equestrian	Beach Camping	Vehicles**	Dogs	Adjacent/Nearby (A/N) Camping			Adjacent Trals			Coast Trail	Crowding	Level of Peak Use	Distribution	Current Plover Restrictions (2004)	Emphasis Area
			#	S / R	Y / N	Part / All	Part / All	Part / All	Part / All	Part / All	Part / All	Y / N	#	Y/N	Dev	Mod	UnDev.	Potential	Name of City	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	SP	FED	Local	SP	FED	Local	Y/N	1-5	#	See Key	Y/N	0-3
SEGMENT THREE	LINCOLN CELL	Salmon River Mouth Area		R								Y	0	Y																												
		Roads End to Siletz River	6.93	S	Y							N	2	N	X				Lincoln City UGB	58	26	0.75	Y	N	N	Y	N	Y	0	2	N						Y	1	1089	DEN	N	0
		Siletz River to Boiler Bay	9.00	S	N							N	3	N	X		X		Gleneden UGB	54	27	1	Y	N	Y	Y	Y	Y	0	4							Y	1	279	DEN	N	0
		Boiler Bay to Cape FoulWeather*		R								N	2	N																												
	BEVERLY CELL	Cape FoulWeather to Otter Rock		R								N	0	N																												
		Otter Rock to Schooner Pt.	4.37	S	N							N	2	N		X	X		Newport UGB	53	29	4.4	Y	N	N	N	Y	Y	0	3	N						Y	1	187	LOC	N	0
		Yaquina Head		R								Y	0	N																												
SEGMENT FOUR	NEWPORT CELL	Yaquina Head		R								Y	0	N																												
		Yaquina Head to Yaquina River	3.96	S	N							N	2	N	X			X	Newport UGB	51	34	1.9	Y	N	Y	Y	N	N	0	2							Y	1	442	DEN	N	0
		South Beach	1.91	S	N							N	2	N	X	X	X	X	Newport UGB	28	43	2.3	Y	Y	Y	N	Y	Y	0	5	N			X			Y	1	73	DE/DI	N	0
		Grant Crk to Seal Rock	6.00	S	N							N	2	N	X	X	X	X																			Y			MOD	N	0
		Seal Rock to Alsea River	4.43	S	N							N	2	N	X	X	X	X	Waldport UGB	38	40	1.2	N	N	N	N	Y	Y	0	4							Y	1	60	MOD	N	0
		Alsea River to Starr Crk	6.39	S	N							N	4	N	X	X	X	X	Waldport UGB	54	29	1.1	Y	N	Y	N	Y	Y	0	4	A	A					Y	1	220	DEN	N	0
		Starr Crk to Cape Perpetua		R								N	2	N																												
	HECETA CELL	Cape Perpetua to Bob Crk.		R								N	4	N																												
		Bob Crk to Rocky Knoll*	4.00	S	N							N	3	N			X	X																			N			DIS	N	0
		Rocky Knoll to Heceta Head	3.04	S	N							N	3	N		X				39	39	0	N	N	N	N	N	Y	0	8			X				N	1	55	LOC	N	0
		Heceta Head*		R								N	1	N																												
	COOS CELL	Heceta Head to Lilly Lake Pt		R								N	1	N																												
		Lily Lake Pt. to Sutton Creek	3.42	S	N							Y	0	N			X			25	0	0	Y	N	N	N	Y	N	0	0			N				Y	1	16	DIS	Y	1
		Sutton Creek to Siuslaw River	2.71	S	N							Y	1	N	X		X	X	Florence UGB	47	37	0.3	Y	Y	N	N	Y	N	0	6		N					Y	2	259	DEN	Y	1
		Siuslaw River to Siltcoos River	9.80	S	N	Part			Part			Y	0	Y		X	X			33	21	2.4	Y	Y	N	N	Y	Y	27	3		N			X		Y	1	163	LOC	Y	1
		Siltcoos River to Takenitch Creek	5.09	S	N							Y	0	Y			X			29	52	0	N	N	N	N	Y	Y	0	2		N			X		Y	1	25	DIS	Y	3
		Takenitch Creek to Three Mile Creek	3.92	S	N			Part				Y	0	Y			X			18	25	1.5	Y	N	N	N	Y	Y	10	3							Y	1	34	DIS	Y	1
		Three Mile Creek to Umpqua River	5.22	S	N			All				N	0	N			X	X		20	22	0	Y	N	Y	N	Y	Y	0	5							N	1	8	DIS	N	1

1 **Access Gap**

At least one public access facility to water every 3 miles. Gaps to not correspond with beaches.

2 **Adjacent Land Use**

Dev - Urban or large subdivision
Mod - smaller subdivision, rural residential & large recreation site
Undev - Scattered residential & minor recreation
Potential - zoning allows development
Adjacent Communities - UGB or large rural subdivision

3 **Crowding**

5 Levls from Survey Results

4 **Level of Peak Use**

Average number people observed on weekend day

5 **Distribution Key**

L= Local
Den = Dense
Dis = Dispersed
Mod = Moderate
DE/DI = Dense/Dispersed
DI/DI = Dispersed / Dense

* Not Surveyed

SOUTH COAST REGION
(Umpqua River to California)

LOCATIONS			ATTRIBUTES: GENERAL			ACCESS									ADJACENT USE					RECREATION USE											ADJACENT RECREATION							CAPACITY			PLOVER	
Recreation Segment	Littoral Cell	Beach Name	Length (in miles)	Sandy or Rocky	Smaller Beaches?	OHV, Year round	OHV, Seasonal	Street Legal, Year round	Street Legal, Seasonal	Boat Launch Veh., Year round	Boat Launch Veh., Seasonal	OPRD Access Gap	OPRD Access Sites	Public Site Access Gap	Adjacent Land Use				Adjacent Communities	Relaxing / Swimming	Walking / Running	Surf Sports	Surf Fish	Jetty Fish	Clamming	Crabbing	Equestrian	Beach Camping	Vehicles**	Dogs	Adjacent/Nearby (A/N) Camping			Adjacent Trals			Coast Trail	Crowding	Level of Peak Use	Distribution	Current Plover Restrictions (2004)	Emphasis Area
			#	S / R	Y / N	Part / All	Part / All	Part / All	Part / All	Part / All	Part / All	Y / N	#	Y/N	Dev	Mod	UnDev.	Potential	Name of City	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	SP	FED	Local	SP	FED	Local	Y/N	1-5	#	See Key	Y/N	0-3
SEGMENT FIVE	COOS CELL	Umpqua River to Ten Mile Creek	6.62	S	N							Y	0	Y			X			41	36	3	Y	N	N	N	Y	Y	0	10					X		Y	1	64	LOC	N	1
		Ten Mile Creek to Coos Bay	15.62	S	N	Part	Part	Part	Part			Y	0	Y			X			21	16	0.1	Y	Y	N	N	Y	Y	54	4		N			X		Y	1	60	DIS	Y	2
		Bastendorf Beach	1.00	S	N							Y	0	N		X		X	Coos Bay	51	27	2.4	Y	Y	N	N	N	Y	0	13			A				N	1	98	DEN		0
		Yoakum Pt. to Cape Arago		R								N	4	N																												
	BANDON CELL	Cape Arago to Sacchi Beach		R								Y	0	N																												
		Sacchi Beach*	0.80	S								Y	0	Y			X	X																			N	1	4	DIS	N	0
		Agate Beach to Five Mile Pt.	2.53	S	N							Y	1	Y		X		X		13	50	0	Y	N	N	N	Y	N	0	15							Y	1	6	DIS	N	0
		Five Mile Pt. to Coquille River	6.80	S	N			Part				Y	2	Y		X	X	X	Resort Bandon UGB	31	43	0	Y	Y	N	N	Y	Y	0	10	N			X		X	Y	1	57	DIS	N	1
		Coquille River to New River	6.81	S	Y				Part			Y	3	Y	X	X	X	X	Bandon UGB	27	47	1.4	Y	Y	Y	N	Y	N	0	7							Y	1	90	DEN/DIS	Y	2
		New River to Blacklock Pt.	9.85	S	N			Part				Y	0	Y			X			12	71	8.5	Y	N	N	N	Y	N	0	4			N	X	X	X	Y	1	34	DIS	Y	1
SEGMENT SIX		Blacklock Pt.		R								Y	0	Y																												
		Sixes River Mouth	3.01	S	N							Y	0	Y			X			6	61	10	Y	N	N	Y	N	N	0	6				X			N	1	22	DIS	N	1
		Cape Blanco		R								N	1	Y																												
	ELK CELL	Cape Blanco to Elk River	2.13	S	N			All				N	1	N		X				29	61	0	Y	N	N	Y	Y	N	0	3	N			X			Y	1	3	DIS	N	1
		Elk River to Port Orford Heads	4.95	S	N			All				Y	2	Y		X	X		Port Orford UGB	0	75	0	Y	N	N	N	N	N	0	0							Y	1	19	DIS	N	1
		Port Orford Heads		R								N	3	Y																												
	HUMBUG CELL	Port Orford Heads		R								N	3	Y																												
		Battle Rock to Humbug Mt.	1.88	S	N			All				N	2	N		X	X	X	Port Orford UGB	42	39	7	Y	N	N	Y	N	Y	0	1							N	1	12	DIS	N	0
		Humbug Mt.		R								Y	0	Y																												
		Arizona Beach*	1.04	S	N							Y	0	Y		X		X															A				Y			MOD	N	0
	NESIKA CELL	Sisters Rock to Devils Backbone		R								Y	0	Y																												
		Devils Backbone to Nesika Beach South	5.59	S	N			Part				Y	0	Y	X	X	X	X	Gold Beach UGB	10	72	0	Y	N	N	N	Y	N	0	0							Y	1	4	DIS	N	1
		Nesika Beach South to Hubbard Mound		R								Y	0	Y																												

1 **Access Gap**

At least one public access facility to water every 3 miles. Gaps to not correspond with beaches.

2 **Adjacent Land Use**

Dev - Urban or large subdivision
Mod - smaller subdivision, rural residential & large recreation site
Undev - Scattered residential & minor recreation
Potential - zoning allows development
Adjacent Communities - UGB or large rural subdivision

3 **Crowding**

5 Levls from Survey Results

4 **Level of Peak Use**

Average number people observed on weekend day

5 **Distribution Key**

L= Local

Den = Dense

Dis = Dispersed

Mod = Moderate

DE/DI = Dense/Dispersed

DI/DI = Dispersed / Dense

* Not Surveyed

SOUTH COAST REGION
(Umpqua River to California)

Recreation Segment	Littoral Cell	Beach Name	GENERAL: Length (in miles)	GENERAL: Sandy or Rocky	GENERAL: Smaller Beaches?	ACCESS: OHV, Year round	ACCESS: OHV, Seasonal	ACCESS: Street Legal, Year round	ACCESS: Street Legal, Seasonal	ACCESS: Boat Launch Veh., Year round	ACCESS: Boat Launch Veh., Seasonal	ACCESS: OPRD Access Gap	ACCESS: OPRD Access Sites	ACCESS: Public Site Access Gap	ADJACENT USE: Adjacent Land Use				ADJACENT USE: Adjacent Communities	RECREATION USE: Relaxing / Swimming	RECREATION USE: Walking / Running	RECREATION USE: Surf Sports	RECREATION USE: Surf Fish	RECREATION USE: Jetty Fish	RECREATION USE: Clamming	RECREATION USE: Crabbing	RECREATION USE: Equestrian	RECREATION USE: Beach Camping	RECREATION USE: Vehicles**	RECREATION USE: Dogs	ADJACENT RECREATION: Adjacent/Nearby (A/N) Camping			ADJACENT RECREATION: Adjacent Trails			ADJACENT RECREATION: Coast Trail	CAPACITY: Crowding	CAPACITY: Level of Peak Use	CAPACITY: Distribution	PLOVER: Current Plover Restrictions (2004)	PLOVER: Emphasis Area
			#	S / R	Y / N	Part / All	Part / All	Part / All	Part / All	Part / All	Part / All	Y / N	#	Y/N	Dev	Mod	UnDev.	Potential	Name of City	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	SP	FED	Local	SP	FED	Local	Y/N	1-5	#	See Key	Y/N	0-3
SEGMENT SIX	ROGUE CELL	Hubbard Mound to Otter Pt.		R								Y	0	Y																											
		Otter Pt. to Rogue River	2.90	S	N							Y	1	N		X	X	X	Gold Beach UGB		100	0	Y	Y	N	N	Y	N	0	0				X			Y	1	5	DIS	N	0
		Rogue River to Cape Sebastian	5.45	S	Y			All				Y	0	Y	X	X	X		Gold Beach UGB	38	46	1.2	Y	Y	N	N	Y	N	0	<1							Y	1	21	DIS	N	0
		Cape Sebastian		R								Y	0	Y																											
	PISTOL CELL	Cape Sebastian		R								Y	0	Y																											
		Cape Sebastian		R								Y	0	Y																											
		Cape Sebastian to Crook Pt.	3.98	S	Y			Part				Y	2	Y			X			23	56	10	Y	N	N	N	Y	N	0	5				X			Y	1	5	DIS	N	1
	FERRELO CELL	Crook Pt. to Whaleshead Beach		R								Y	0	Y																											
		Whaleshead Beach	1.21	S	N							N	1	N		X				37	53	0	Y	N	N	N	N	N	0	1	N			X			Y	1	19	DEN	N	0
		Whaleshead Beach to Lone Ranch Beach		R								N	0	N																											
		Lone Ranch Beach*	1.00	S								N	1	N			X																									
		Lone Ranch Beach to Harris Beach		R								N	0	N																											
		Harris Beach	0.46	S	N							N	1	N	X	X				62	25	0.71	Y	N	N	N	N	N	0	1	N			X			N	2	54	DEN	N	0
		Harris Beach to Chetco River		R								N	0	N																											
		Harbor Beach	0.92	S	N							N	1	N	X				Brookings UGB	58	31	1.2	Y	N	N	N	N	N	0	1			A				N	1	36	MOD	N	0
		Harbor Beach to McVay Rock Beach		R								N	0	N																											
		McVay Rock Beach	1.20	S	N							N	1	N	X		X			39	16	0	Y	N	Y	N	N	N	0	1							N	1	16	DIS	N	0
	WINCHUCK CELL	Crissey Field Beach	1.50	S	Y							N	1	N	X		X			28	3	0	Y	N	Y	N	N	Y	0	6							Y	1	?	DIS	N	0

1 Access Gap

At least one public access facility to water every 3 miles. Gaps to not correspond with beaches.

2 Adjacent Land Use

Dev - Urban or large subdivision
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Undev - Scattered residential & minor recreation
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3 Crowding

5 Levls from Survey Results

4 Level of Peak Use

Average number people observed on weekend day

5 Distribution Key

L= Local
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Mod = Moderate
DE/DI = Dense/Dispersed
DI/DI = Dispersed / Dense

* Not Surveyed

Appendix D: The Permitting Program

Ocean Shore Alterations Permitting

The types of Ocean Shore Alterations permits and their application and approval processes are described below.

Shoreline Protection Structures: This includes the construction of riprap, seawalls and other stabilizing structures. The completion of Addendum A is required for project of this type. On some areas of coastline, shoreline protection structures are prohibited, as follows: Permits for shoreline protective structures may be issued only where development existed on January 1, 1977, as required under Statewide Planning Goal 18, Beaches and Dunes. "Development" is defined as houses, commercial and industrial buildings, and vacant subdivision lots which are physically improved through construction of streets and provision of utilities to the lot, or where an exception has been granted to the local city or county comprehensive plan.

Applicants for shoreline protection structures are asked to assess the hazards affecting the property, examine hazard alleviation alternatives, evaluate potential adverse impacts associated with each feasible technique, and propose actions that help to minimize short and long-term impacts. For shoreline protection structures 50 feet or greater in length, a geologist's report is required to address a number of factors, including potential adverse impacts from the proposed structure, erosion rates, non-structural alternatives, and known seismic or geologic hazards in the area. (Specific requirements for the geologic review may be found in the permit application instructions.)

Applications for shoreline protective structures also must address the alternative of hazard avoidance, which may involve building relocation or increasing oceanfront setbacks to avoid the hazard. Where cost is used as a reason for why a building cannot be relocated, documentation is required in the form of a written estimate from a professional to indicate the cost of relocation.

Fees for shoreline protective structure permit applications are established by statute, and are determined by the value of the proposed project. Value must be documented by providing a written estimate by a duly certified contractor as to the estimated costs, including materials and labor, for construction of the proposed project. If the property owner is doing the proposed work, an itemized list of construction materials and equipment rental fees must be provided. Other forms of documentation to establish a project's construction value may be determined by the department on a case-by-case basis. A fee calculation form is provided with the application packet to provide assistance in calculating the correct fee.

Access Ways / Other Miscellaneous Projects: This type of permit application includes beach access stairways, pathways, boat ramps, viewing platforms, boardwalks and other miscellaneous projects. Addendum B must be completed for these types of projects. When private beach access improvements are proposed, the department assesses the need for the project by reviewing the location of the nearest public beach access facilities. Fees for access ways/other miscellaneous project permit applications are established by statute, and are determined by the value of the proposed project. Value must be documented by providing a written estimate by a duly certified contractor as to the estimated costs, including materials and labor, for construction of the proposed project. If the property owner is doing the proposed work, an itemized list of construction materials and equipment rental fees must be provided. Other forms of documentation to establish a project's construction value may be determined by the

department on a case-by-case basis. A fee calculation form is provided with the application packet to provide assistance in calculating the correct fee.

Sand Alterations: Sand alterations include dune enhancement projects, stream channel alterations, dune management plans, and other projects that involve fill or relocation of beach sand. Addendum C must be completed for sand alterations. Fees for sand alteration permit applications are established by statute, and are determined by the value of the proposed project. Value must be documented by providing a written estimate by a duly certified contractor as to the estimated costs, including materials and labor, for construction of the proposed project. If the property owner is doing the proposed work, an itemized list of construction materials and equipment rental fees must be provided. Other forms of documentation to establish a project's construction value may be determined by the department on a case-by-case basis. A fee calculation form is provided with the application packet to provide assistance in calculating the correct fee.

Natural Product Removal: Proposals that call for the removal of material from the Ocean Shore fall under the category of natural product removal. This includes material such as sand, rock, or other mineral resources, marine growth (algae) and other natural products from the ocean shore, collected for reasons other than personal souvenirs. Addendum D must be completed for natural product removal proposals. Rather than using a set permit fee, the department determines an appropriate amount of just compensation that will be required before the project being undertaken. Just compensation may be comprised of a combination of a flat fee, a flat fee plus reporting requirements, a percentage of gross revenues resulting from the sale of the product, or a fee rate per volume of product removed.

Marine Algae Collection: Commercial collection of marine algae requires a permit for natural product removal (See above). Personal use collection of marine algae is exempt from the requirements for natural product removal, however, an abbreviated permit is required when collection will exceed 10 pounds (wet weight) per person, per day. Collection of marine algae may be for personal consumption, commercial sale, use as a soil amendment, scientific research, or for other purposes. Collection of algae is not officially prohibited within designated marine gardens and habitat refuges, although park managers discourage collection. Collection is limited to scientific or educational purposes only within Intertidal Research Reserves.

Pipelines, Cables or Conduit: Projects involving the placement of underground pipelines, outfall lines, fiber optic cables, or other conduits across the ocean shore fall within this category. Addendum F must be completed for these types of projects. Just compensation is determined during the permit review, and is based on such factors as: the length and width of the Ocean Shore occupied by the project, potential natural resource impacts, impacts to recreation, public benefits, and administrative costs to the State in processing the permit application and monitoring the project. Pipelines, cables, conduits, and similar facilities are limited to routes that cross the beach from land to sea. Administrative rule policies prohibit the use of the ocean shore as a north-south utility corridor.

The permit matrix at the end of this chapter, details what activities have been permitted at particular beaches on the north, central, and south coast.

The Ocean Shore Permit Application Process

Upon receiving an application, Oregon Parks and Recreation Department checks to see that all of the required information is thoroughly completed, that the plan drawings meet the standards for neatness and

accuracy as specified in the permit instructions, and that the correct permit fee is included. The local planning department affidavit also must be completed and signed by the local planning official, to verify that the project is consistent with the local comprehensive plan. When the application is deemed complete, Oregon Parks and Recreation Department posts notices at the site and circulates the permit application to state, federal and local governments and persons requesting notice of permit applications. In addition, OAR 736-020-0003(4) requires that the department send notice of the application to adjacent, ocean front landowners with property boundaries common to those of the property described in the application. The public notice must remain posted at the site for a minimum of 30 days.

Oregon Parks and Recreation Department is required to hold a public hearing for the purpose of receiving public testimony on an application if: (1) written request is received from the applicant; (2) a minimum of 10 or more interested persons request a hearing; or (3) the Director of the department determines a hearing to be necessary. The site is posted for a second 30-day period to notify the public of the time and place of the hearing. If a hearing is held, Oregon Parks and Recreation Department must make a decision on the permit application within 45 days after the hearing. If a hearing is not required, the department must make a decision on the application within 60 days from the date that the application was originally received and deemed complete. Permit decisions can be appealed through a contested case hearing process.

Ocean Shore Emergency Permits

Oregon Parks and Recreation Department may issue an emergency permit for a new improvement or alteration whenever property abutting the Ocean Shore is in imminent peril of destruction by the Pacific Ocean, waters of a bay or river, a landslide, or natural forces (OAR 736-020-0050).

The purpose of granting an emergency permit is to provide immediate and temporary protection. Imminent peril is defined as *"… a situation in which property is likely to be severely damaged or destroyed by action of the Pacific Ocean or waters of a bay or river, or by landslide or other natural forces, and where such damage would be likely to occur in the time required for approval of an Ocean Shore Permit."* (OAR 736-020-0050(3)).

An emergency permit for a new improvement or repair or replacement or restoration of an existing authorized improvement may be written or verbal. Emergency permits issued verbally are followed up in writing within 10 days. With the exception of some sand alteration projects, emergency permits are considered to be temporary. The permittee must apply for an Ocean Shore alteration permit in order to seek approval to convert the temporary project approved under an emergency permit into a permanent Ocean Shore alteration.

Permit Evaluation Standards

Oregon Parks and Recreation Department reviews applications for compliance with state requirements in order to minimize potential negative impacts on the shoreline. These standards, as spelled out in OAR 736-020-0010 through 0030, include the following: project need, protection of public rights, public costs, available alternatives, scenic concerns, recreation use and beach access, safety, and other natural resource considerations.

Permit Issuance

Not all Ocean Shore alteration permit applications submitted are issued. Since 1967, Oregon Parks and Recreation Department has denied 82 permit applications. This does not include those who have been told that they are not eligible for a permit and thus did not file an application, or permits that have been

withdrawn by the applicant. A common reason for a denial is that upland development is not "threatened", and there is no project need or justification for the structure. In some cases, a property owner whose permit is denied may request another permit in later years when the threat to their structure is more real. Not all properties are eligible for an Ocean Shore Alteration Permit even if their property is threatened. Pursuant to Statewide Goal 18, properties developed after January 1, 1977, are not entitled to a permit for a shoreline protective structure.

The permits that are issued for shoreline protection and for access/stairways allows initial installation as well as future maintenance and repair. Repairs are exempt from the permit requirements of ORS 390.650. The Oregon Parks and Recreation Department can authorize immediate repairs when necessary. Riprap repairs may involve the addition of new material, as needed to regain the original dimensions and integrity of the structure. Thus repair work cannot involve the addition of new material beyond the original footprint approved under the permit.

Over 415 permits have been issued to date for such things as dune grading, riprap, emergency riprap, decks and stairs, cables and conduits, natural product removal. Of these, 278 have been issued for shoreline protection structures: riprap, block walls, concrete walls, wood walls, and other structures.

Table D.1 Types of Ocean Shore Alteration Permits Issued Between 1967 and 2003

Activity	Number of Permits Issued
Shoreline Protection Structures	
■ Riprap	228
■ Emergency Riprap	27
■ Seawalls	15
■ Other Shore Protection Structures	4
■ Gabions	3
■ Dynamic revetments	1
Access	48
Cables/Pipelines/Conduits	17
Natural Product Removal	5
Marine Algae Collection	1*
Sand Alteration	39
Emergency Sand Alterations	9
Others	19
Total Permits Issued	**415**

*Included as one of the five permits issued for natural product removal

The dynamic revetment permit was issued to Oregon Parks and Recreation Department for a shoreline protection project at Cape Lookout State Park. A permit was issued for construction of a helipad in Tillamook County. Many of the sand alteration projects involved habitat restoration efforts for the western snowy plover at Bandon State Natural Area, New River, and the Oregon Dunes National Recreation Area.

Shoreline Protection Structures

From 1967 through 2001, Oregon Parks and Recreation Department issued 278 permits for shoreline protection structures, covering an estimated 33,516 feet (approximately 6.35 miles) of shoreline, with 35

percent of this amount occurring in the north region (Clatsop and Tillamook Counties), 54 percent occurring on the central coast (Lincoln and Lane, and the north half of Douglas County), and 11 percent occurring on the south coast (south half of Douglas County, and Curry and Coos Counties. These numbers do not reflect permits that may have been issued by the Oregon Division of State Lands (who shared joint authority with Oregon Parks and Recreation Department prior to 1999), or emergency authorizations for which no record exist. Table D.2 lists data for all existing shoreline protective structures, including those built prior to agency permitting programs, approved under emergency permits, or by other agencies when the project was outside of Oregon Parks and Recreation Department jurisdiction.

The reason for the small amount of shoreline protective structures in Douglas, Coos, and Curry counties has to do with land ownership, and less extensive development existing along the immediate coastline. In Douglas County, the major landowner is the federal government. In Coos and Curry Counties, much of the land is in public ownership: federal (Bureau of Land Management, USDA Forest Service), state (Oregon Parks and Recreation Department, Division of State Lands), and local (counties). In all likelihood these counties will not see the same types of permitting that occur in Lincoln, Tillamook, and Clatsop Counties.

Table D.2 Shoreline Protection Structures Along Oregon's Coast

Littoral Cell	# of SPS	Shoreline (mi)	Shoreline (ft)	SPS length (ft)	% of Littoral Cell Hardened	% of Total Shoreline Hardened
Lincoln	71	28.37	149794	39053	26.07	2.037
Cannon	43	15.45	81576	10502	12.87	0.548
Nesika	3	10.06	53117	6116	11.51	0.319
Newport	34	30.58	161462	13186	8.17	0.688
Neskowin	8	12.72	67162	4828	7.19	0.252
Clatsop	2	21.81	115157	6962	6.05	0.363
Sand Lake	3	10.19	53803	22683	4.99	0.140
Rockaway	5	20.88	110246	4501	4.08	0.235
Beverly Beach	4	8.63	45566	978	2.15	0.051
Netarts	1	14.49	76507	1243	1.62	0.065
Ferrello	0	30.65	161832	2619	1.62	0.137
Coos	6	64.48	340454	4005	1.18	0.209
Rogue	1	13.07	69010	550	0.80	0.029
Bandon	1	37.12	195994	0	0	0
Elks	0	12.25	64680	0	0	0
Heceta	0	13.59	71755	0	0	0
Humbug	0	13.43	70910	0	0	0
Pistol	0	5.30	27984	0	0	0
Total	**182**	**363**	**1917010**	**97226**	**5.07 (Avg)**	**5.072**

- Note that these figures do not represent the number of permits that have been issued, rather it represents the number of structures on the beach. A structure includes riprap that may extend across many lots and is separated from another structure by either a bluff or the beach.

The majority of the structures – approximately 50% - are riprap revetments covering approximately 14.8 miles of coastline, followed by concrete seawalls, making up approximately 20% of the structures on the coast and covering approximately 3.1 miles of coastline.

In the winter of 1999 during the La Nina storms, 12 emergency riprap permits were issued, most for residents of Neskowin, a small community located at the southern end of the Neskowin littoral cell (see Ocean Beach Processes Section). These homeowners returned within the year to seek a permanent solution.

Tillamook County obtained a permit for installation of a helipad at Bayview Park. Cities sought permits for installation of sewer pipelines. Nedonna Beach became of the site of cable installations in 1999 and 2001. Most of the riprap in this area was installed during the late 1970s.

While some residents were seeking protection from the waves pounding and eroding their beaches and bluffs, homeowners in Manzanita and Pacific City sought permits for sand alteration following the El Nino and La Nina storms of 1997-1999.

On the southern coast, many of the sand alteration permits issued were for snowy plover habitat restoration work on state and federal lands.

Although 247 Ocean Shore alteration permits for shoreline protective structures have been issued, this does not mean that only 247 individual properties have been structurally protected. A group of homeowners may apply for a permit covering multiple properties. In one case, 50 property owners applied for a permit for approximately 3,000 feet of riprap at Rockaway Beach.

NORTH COAST REGION
(Columbia River to Cascade Head)

Permitting Matrix

LOCATIONS			TYPE OF PERMIT																																
			Miscellaneous Use Permit															DRIVE ON BEACH								BEACH STRUCTURES										
Recreation Segment	Littoral Cell	Beach Name	Filming, Commercial	Scientific Research and Monitoring	Sporting Event/Tournament	Fireworks	Class Reunions Homecomings	Religious Event	Weddings / Receptions	Windsurfing/Surfing Contests	Kite Festivles	Sand Castle Comp.	Run/Walk/Bike/ Ride	BBQ/Picnic	Beach Clean Up	Safety / Training	Other	Handicap Access	Scientific Research or Monitoring	Drftwood Collection	Sand/Rock Removal	Construction Activities	Plover Related Activities	Other	Riprap	Block Wall	Concrete Wall	Wood Wall	Other Structures							
			Y/N	Y/N	Y / N	Y/N	Y/N	Y/N	Y / N	Y/N	Y / N	Y / N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N							
SEGMENT ONE	CLATSOP CELL	Columbia to Necanicum River	Y	Y	Y				Y				Y	Y										Y												
		Necanicum River to Tillamook Head	Y	Y	Y	Y		Y	Y			Y	Y	Y			Y	Y						Y												
		Tillamook Head																																		
	CANNON CELL	Tillamook Head																																		
		Indian Beach	Y	Y					Y				Y					Y																		
		Ecola Beach	Y	Y					Y				Y					Y																		
		Chapman Pt. To Humbug Pt.	Y	Y					Y		Y	Y	Y	Y			Y	Y						Y	Y		Y	Y	Y							
		Humbug Pt. To Hug Pt.		Y					Y				Y					Y										Y								
		Hug Pt. To Arch Cape	Y	Y					Y				Y					Y							Y		Y	Y								
		Arch Cape to Cape Falcon		Y									Y					Y										Y	Y							
		Cape Falcon																																		
	ROCKAWAY CELL	Cape Falcon																																		
		Short Sands Beach	Y	Y									Y	Y				Y																		
		Neahkanie Mt.																																		
		Neahkanie Mt. to Nehalem River	Y	Y		Y			Y				Y	Y				Y						Y	Y											
		Nehalem River to Tillamook Bay		Y		Y			Y				Y			Y		Y							Y											
		Tillamook Bay to Cape Meares		Y									Y					Y																		
		Cape Meares																																		
SEGMENT TWO	NETARTS CELL	Cape Meares to Maxwell Pt.																																		
		Maxwell Pt. to Netarts River		Y									Y					Y																		
		Netarts River to Cape Lookout		Y									Y					Y										Y								
		Cape Lookout																																		
	SAND LAKE CELL	Cape Lookout																																		
		North Sand Lake		Y									Y					Y																		
		Sand Lake to Cape Kiwanda		Y									Y					Y							Y											
		Cape Kiwanda																																		
	NESKOWIN CELL	Cape Kiwanda																																		
		Cape Kiwanda to Nestucca River		Y	Y	Y							Y					Y																		
		Nestucca River to Cascade Head		Y		Y							Y					Y				Y			Y											
		Cascade Head																																		

CENTRAL COAST REGION
(Cascade Head to Umpqua River)

Permitting Matrix

LOCATIONS			TYPE OF PERMIT																														
			MISCELLANEOUS USE PERMITS															DRIVE ON BEACH							BEACH STRUCTURES								
Recreation Segment	Littoral Cell	Beach Name	Filming, Commercial	Scientific Research and Monitoring	Sporting Event/ Tournament	Fireworks	Class Reunions Homecomings	Religious Event	Weddings / Receptions	Windsurfing/Surfing Contests	Kite Festivles	Sand Castle Comp.	Run/Walk/Bike/Ride	BBQ/Picnic	Beach Clean Up	Safety / Training	Other		Handicap Access	Scientific Research or Monitoring	Drftwood Collection	Sand/Rock Removal	Construction Activities	Plover Related Activities	Other		Riprap	Block Wall	Concrete Wall	Wood Wall	Other Structures			
			Y/N	Y/N	Y / N	Y/N	Y/N	Y/N	Y / N	Y/N	Y / N	Y / N	Y/N	Y/N	Y/N	Y/N	Y/N		Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N		Y/N	Y/N	Y/N	Y/N	Y/N			
SEGMENT THREE	LINCOLN CELL	Salmon River Mouth Area																															
		Roads End to Siletz River		Y		Y					Y	Y	Y		Y		Y		Y				Y		Y		Y	Y	Y	Y	Y			
		Siletz River to Boiler Bay		Y					Y		Y		Y	Y			Y		Y								Y		Y					
		Boiler Bay to Cape FoulWeather*																															
	BEVERLY CELL	Cape FoulWeather to Otter Rock																															
		Otter Rock to Schooner Pt.		Y									Y				Y		Y								Y							
		Yaquina Head																															
SEGMENT FOUR		Yaquina Head																															
	NEWPORT CELL	Yaquina Head to Yaquina River		Y	Y		Y				Y		Y		Y				Y	Y	Y				Y									
		South Beach	Y	Y									Y						Y	Y	Y		Y											
		Grant Crk to Seal Rock	Y	Y									Y						Y	Y	Y		Y				Y							
		Seal Rock to Alsea River		Y									Y						Y	Y			Y				Y							
		Alsea River to Starr Crk		Y									Y				Y		Y	Y	Y	Y	Y		Y									
		Starr Crk to Cape Perpetua																															
	HECETA CELL	Cape Perpetua to Bob Crk.																															
		Bob Crk to Rocky Knoll*		Y									Y				Y			Y	Y	Y					Y							
		Rocky Knoll to Heceta Head		Y									Y				Y			Y	Y	Y											
		Heceta Head*																															
	COOS CELL	Heceta Head to Lilly Lake Pt																															
		Lily Lake Pt. to Sutton Creek		Y									Y				Y			Y		Y		Y	Y									
		Sutton Creek to Siuslaw River	Y	Y	Y		Y						Y		Y		Y			Y		Y	Y	Y	Y									
		Siuslaw River to Siltcoos River		Y									Y				Y			Y	Y	Y		Y	Y									
		Siltcoos River to Takenitch Creek		Y									Y							Y	Y			Y	Y									
		Takenitch Creek to Three Mile Creek											Y							Y	Y			Y	Y									
		Three Mile Creek to Umpqua River											Y							Y	Y			Y	Y									

SOUTH COAST REGION
(Umpqua River to California)

Permitting Matrix

LOCATIONS			TYPE OF PERMIT																														
			MISCELLANEOUS USE PERMITS															DRIVE ON BEACH							BEACH STRUCTURES								
Recreation Segment	Littoral Cell	Beach Name	Filming, Commercial	Scientific Research and Monitoring	Sporting Event/Tournament	Fireworks	Class Reunions Homecomings	Religious Event	Weddings / Receptions	Windsurfing/Surfing Contests	Kite Festivles	Sand Castle Comp.	Run/Walk/Bike/Ride	BBQ/Picnic	Beach Clean Up	Safety / Training	Other	Handicap Access	Scientific Research or Monitoring	Drftwood Collection	Sand/Rock Removal	Construction Activities	Plover Related Activities	Other	Riprap	Block Wall	Concrete Wall	Wood Wall	Other Structures					
			Y/N	Y/N	Y / N	Y/N	Y/N	Y/N	Y / N	Y/N	Y / N	Y / N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N					
SEGMENT FIVE	COOS CELL	Umpqua River to Ten Mile Creek		Y									Y					Y	Y	Y			Y	Y										
		Ten Mile Creek to Coos Bay		Y									Y					Y	Y	Y			Y	Y										
		Bastendorf Beach		Y									Y			Y		Y		Y			Y	Y	Y									
		Yoakum Pt. to Cape Arago																																
	BANDON CELL	Cape Arago to Sacchi Beach																																
		Sacchi Beach*		Y									Y					Y					Y	Y										
		Agate Beach to Five Mile Pt.		Y									Y					Y	Y				Y	Y										
		Five Mile Pt. to Coquille River	Y	Y									Y				Y	Y	Y				Y	Y										
		Coquille River to New River	Y	Y									Y		Y			Y	Y	Y		Y	Y	Y										
		New River to Blacklock Pt.											Y					Y	Y				Y	Y										
SEGMENT SIX		Blacklock Pt.																																
		Sixes River Mouth											Y						Y				Y	Y										
		Cape Blanco																																
	ELK CELL	Cape Blanco to Elk River											Y						Y				Y	Y										
		Elk River to Port Orford Heads											Y					Y	Y				Y	Y										
		Port Orford Heads																																
	HUMBUG CELL	Port Orford Heads																																
		Battle Rock to Humbug Mt.	Y			Y							Y				Y		Y				Y	Y										
		Humbug Mt.																																
		Arizona Beach*											Y										Y	Y										
	NESIKA CELL	Sisters Rock to Devils Backbone																																
		Devils Backbone to Nesika Beach South											Y					Y					Y	Y	Y									
		Nesika Beach South to Hubbard Mound																																

SOUTH COAST REGION
(Umpqua River to California)

Permitting Matrix

LOCATIONS			TYPE OF PERMIT																														
			MISCELLANEOUS USE PERMITS															DRIVE ON BEACH								BEACH STRUCTURES								
Recreation Segment	Littoral Cell	Beach Name	Filming, Commercial	Scientific Research and Monitoring	Sporting Event/Tournament	Fireworks	Class Reunions Homecomings	Religious Event	Weddings / Receptions	Windsurfing/Surfing Contests	Kite Festivles	Sand Castle Comp.	Run/Walk/Bike/Ride	BBQ/Picnic	Beach Clean Up	Safety / Training	Other	Handicap Access	Scientific Research or Monitoring	Drftwood Collection	Sand/Rock Removal	Construction Activities	Plover Related Activities	Other	Riprap	Block Wall	Concrete Wall	Wood Wall	Other Structures					
			Y/N	Y/N	Y / N	Y/N	Y/N	Y/N	Y / N	Y/N	Y / N	Y / N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N					
SEGMENT SIX	ROGUE CELL	Hubbard Mound to Otter Pt.																															
		Otter Pt. to Rogue River											Y					Y					Y	Y										
		Rogue River to Cape Sebastian											Y		Y			Y					Y	Y										
		Cape Sebastian																															
	PISTOL CELL	Cape Sebastian																															
		Cape Sebastian to Crook Pt.	Y							Y			Y				Y	Y					Y	Y										
	FERRELO CELL	Crook Pt. to Whaleshead Beach																															
		Whaleshead Beach	Y										Y					Y						Y										
		Whaleshead Beach to Lone Ranch Beach																															
		Lone Ranch Beach*	Y										Y					Y						Y										
		Lone Ranch Beach to Harris Beach																															
		Harris Beach	Y	Y									Y					Y						Y										
		Harris Beach to Chetco River																															
		Harbor Beach				Y							Y					Y						Y	Y									
		Harbor Beach to McVay Rock Beach																															
		McVay Rock Beach				Y							Y					Y						Y										
	WINCHUCK CELL	Crissey Field Beach											Y																					

Appendix E: Recommended Actions by Location

The "Recommended Management, Development and Acquisition" actions have been organized by region and beach, and in a north to south progression for easier reference. The recommendations include responsible agencies and a brief description of the action. The "Recommended Program Actions" are organized by program. State Park master plan proposals are not specifically mentioned here, but are addressed in the Consistency Section of the Appendix. Also, unless specifically mentioned for restrictions in this text, all existing beach access parking lots and campgrounds are recommended to continue to be open to the public. Any of the state parks actions will be initiated by the respective Area Manager.

Note: For specifics on the management actions and restrictions for snowy plover management areas, and related implementation options and priorities, see the Habitat Conservation Plan for Western Snowy Plover.

Also, Oregon Parks and Recreation Department intends to continue to operate all of it's current day use and campground sites along the coast, in addition to the new actions listed below.

Recommended Management, Development & Acquisition

North Coast

N1 Columbia River to Necanicum River

N1-1: **Oregon Parks and Recreation Department,** Implement management actions for Columbia River South Jetty snowy plover management area according to the Habitat Conservation Plan. The site is located along the riverbank, north and east of the viewing platform.

N1-2: **Oregon Park and Recreation Department,** Provide and maintain beach access improvements at the south jetty and Peter Iredale, at Fort Stevens State Park, for emergency vehicular use. Also provide parking and restrooms for persons with disabilities at the Peter Iredale motorized access site parking lot. This site currently provides motorized access to the beach for persons with disabilities.

N1-3: **Oregon Parks and Recreation Department,** Maintain the Fort Stevens State Park beach viewpoint at Peter Iredale upper parking lot. Restroom for persons with disabilities would be provided at the nearby Peter Iredale motorized beach access parking lot mentioned above.

N1-4: Oregon Parks and Recreation Department, Expand Fort Stevens State Park to the south by acquiring county land there, with county approval. Develop as a pedestrian beach access. Develop a parking lot with restrooms. This will require updating the Fort Stevens Master Plan.

N1-5: National Park Service, Provide new interpretive site and parking lot with pedestrian beach access, just south of Camp Rilea border, near Sunset Beach.

N1-6: Clatsop County, Maintain Sunset Beach and Gearhart motorized accesses to beach. Provide new parking and restrooms for persons with disabilities. The site can currently provide motorized access to the beach for persons with disabilities.

N1-78: Oregon Parks and Recreation Department, Provide parking and restrooms for persons with disabilities at the Del Rey State Recreation Site beach access parking lot. This site can currently provide motorized access to the beach for persons with disabilities.

N1-8: **Oregon Parks and Recreation Department,** Implement management actions for Necanicum snowy plover management area according to the Habitat Conservation Plan.

N2 Necanicum River to Tillamook Head

N2-1: City of Seaside/Clatsop County, Retain and improve public beach access site at the south end of beach. If not already completed, provide parking and restrooms for those with disabilities. Site parking to allow views of the beach, for those with disabilities.

N2-2: Oregon Parks and Recreation Department, Cooperate with the land trust which will be acquiring the Circle Creek property for trail connections to the beach via trails at south end of Seaside.

N2-3: Oregon Parks and Recreation Department, Acquire privately-owned inholdings, when offered for sale, on Tillamook Head.

N3/4 Indian and Ecola Beaches

N3/4-1, Oregon Parks and Recreation Department, Maintain use levels, of each beach, at current levels by not expanding the existing amount of parking and not building additional parking lots that would provide access to these beaches. Limit tour bus access except during special events.

N5 Chapman Point to Humbug Point

N5-1: City of Cannon Beach/Clatsop County, Provide non-motorized access for persons with disabilities to the water from street end, and/or a parking viewpoint in Cannon Beach. The City of Cannon Beach is working on a new access for persons with disabilities at Tolovana Beach State Recreation Site (2003-04).

N5-2: Oregon Parks and Recreation Department/Clatsop County, Acquire undeveloped, beachside land from private land owners when offered for sale, between Silver Point and Humbug Point and develop new non-motorized access to the beach at one location. Provide parking and restrooms for persons with disabilities. Design to support beach viewing from vehicles by persons with disabilities at the parking lot. Protect the majority of the sites from development.

N6 Humbug Point to Hug Point

N6-1: Oregon Parks and Recreation Department, Maintain emergency access at Arcadia Beach State Recreation Site.

N6-2: Oregon Parks and Recreation Department, Acquire undeveloped, beachside land from private landowners when offered for sale, and maintain in an undeveloped condition to increase protection of the low use setting of this beach.

N6-3: Oregon Parks and Recreation Department, Acquire, when available, private land in the Arcadia Beach area for day use parking, picnicking, beach access, resource protection and trails.

N7 Hug Point to Arch Cape

N7-1: Oregon Parks and Recreation Department, Maintain emergency access at Hug Point State Recreation Site.

N8 Arch Cape to Cape Falcon

N8 No action recommended. Oregon Parks and Recreation Department supports the continued street end access only here. Work with Clatsop County to ensure continued low use of this beach via street end.

N9 Short Sands Beach

N9-1: Oregon Parks and Recreation Department, Maintain pedestrian bridge from campground to beach. Keep parking lot capacity at current levels. Do not allow additional parking along the highway.

N9-2: Oregon Parks and Recreation Department, Acquire private lands, as they become available, that are needed to consolidate ownership of Oswald West State Park.

N10 Neahkanie Mountain to Nehalem River

N10-1: Oregon Parks and Recreation Department, Implement management actions for Nehalem Spit snowy plover management area according to Habitat Conservation Plan.

N10-3: City of Manzanita, Provide non-motorized access from street end to the water, and/or view only, with parking and restrooms for persons with disabilities.

N11 Nehalem River to Tillamook Bay

N11-1: Oregon Parks and Recreation Department, Continue to maintain drainages on Oregon Parks and Recreation Department lands in the Rockaway area to avoid flooding.

N11-2: City of Rockaway/Tillamook County, At Rockaway Beach, provide non-motorized access from street end to water, and/or viewpoint only, with parking and restrooms, for persons with disabilities.

N11-3: Tillamook County, At Barview Jetty County Park, provide non-motorized access to the water and/or viewpoint only, with parking and restrooms for persons with disabilities.

N12 Tillamook Bay to Cape Meares

N12-1: Army Corps of Engineers/Tillamook County/Oregon Parks and Recreation Department, Implement management actions at north end of Bayocean spit according to the Habitat Conservation Plan.

N12-2: Oregon Parks and Recreation Department/Tillamook County, Acquire county and/or private land, when offered for sale, to consolidate public ownership of Bayocean spit to improve resource protection and provide access for low levels of recreational use.

N12-3: Tillamook County, Provide beach viewpoint with parking and restrooms for persons with disabilities at Cape Meares county access site.

N13 Maxwell Point to Netarts River

N13-1: Oregon Parks and Recreation Department, At Oceanside State Recreation Site, provide non-motorized access to water and/or viewpoint, with parking and restrooms for persons with disabilities. Maintain as emergency vehicular access.

N13-2: Tillamook County, Continue to provide public access to beach and parking near Netarts/Happy Camp.

N14 Netarts River to Cape Lookout

N14-1: Oregon Parks and Recreation Department, Implement management actions for Netarts Spit snowy plover management area according to Habitat Conservation Plan.

N14-2: Oregon Parks and Recreation Department, At Cape Lookout State Park, continue to monitor experimental fore dune and area erosion and flooding, and provide for continued beach stabilization and nourishment.

N14-3: Oregon Parks and Recreation Department, At Cape Lookout State Park, maintain main campground beach access for emergency vehicular access.

N15 Cape Lookout to North Sand Lake

N15-1: USDA Forest Service, At Sand Lake, retain vehicular beach access and off highway vehicles driving opportunity. Work with Oregon Parks and Recreation to have more prominent boundary signs installed at north and south end. Provide adequate supervision and enforcement on peak days. This site currently provides motorized access to the beach for persons with disabilities who can operate off highway vehicle's.

N15-2: USDA Forest Service/Oregon Parks and Recreation Department , Implement management actions at Sand Lake north spit snowy plover management area according to Habitat Conservation Plan.

N15-3: USDA Forest Service, Acquire county inholding for consolidation of federal ownership of Sand Lake Recreation Area.

N16 Sand Lake to Cape Kiwanda

N16-1: Oregon Parks and Recreation Department, Acquire the Beltz Farm, if it is offered for sale. Manage for natural values and passive recreation.

N16-2: Land owner/Oregon Parks and Recreation Department, Implement management actions for South Sand Lake snowy plover management area, according to the Habitat Conservation Plan.

N16-3: Oregon Parks and Recreation Department, Acquire Sears Lake, if offered for sale. Provide small day use area with parking and restrooms for persons with disabilities. This facility would provide parking for access to the beach on the west side of the county road.

N16-4, Oregon Parks and Recreation Department, Maintain south Tierra del Mar access, which is a part of Cape Kiwanda State Natural Area, for emergency vehicular use. This site currently provides motorized vehicular access to the beach for persons with disabilities. Also, continue public access at South Cape Kiwanda State Natural Area for non-motorized access.

N17 Cape Kiwanda to Nestucca River

N17-1: Tillamook County, Continue to maintain emergency vehicular access at county lot next to the brew pub in Pacific City and at Pacific Avenue access. Support county or state improvements to beach access at lot near brew pub to include parking with views of beach and restrooms for persons with disabilities.

N17-2: County/Oregon Parks and Recreation Department, Develop an additional peak use parking area near the current north access near the brew pub. Consider acquiring nearby site, when available for sale, and convert it to public day use and beach access parking. Seek a right of first refusal from the owner. Control feral rabbit population.

N18 Nestucca River to Cascade Head

N18-1: Oregon Parks and Recreation Department, Acquire easements for a small parking lot and non-motorized beach access south of Camp Winema, or acquire only to provide a buffer between future residential development and beach setting, if needed.

N18-2: Tillamook County, Maintain emergency vehicular access at Mt. Angel Street.

N18-3: Oregon Parks and Recreation Department, Maintain Neskowin Beach State Recreation Site beach access for emergency vehicles.

N18-4, Oregon Parks and Recreation Department/Tillamook County/City of Neskowin, Neskowin is a potential beach nourishment site. Work with local government to identify implementing partners, and with local residents to identify preferred approaches. Consult Oregon Department of Geology and Mineral Industries experts on hazard conditions and with universities and engineering teams to identify feasible approaches. Also provide safety information/warnings regarding steep beach.

Central Coast

C1 Roads End to Siletz River

C1-1: Lincoln City, Maintain emergency vehicular accesses at D River, 15th and 64th streets. .

C1-2: Oregon Parks and Recreation Department, Construct emergency vehicular access at Roads End State Recreation Site. Develop for non-motorized access to water and viewpoint, with parking and restrooms for persons with disabilities.

C1-3: Oregon Parks and Recreation Department, Maintain D River access as emergency vehicular access. Provide for viewpoint with parking and restrooms for persons with disabilities.

C2 Siletz River to Boiler Bay

C2-1: Gleneden community, Maintain emergency vehicular access at Wallace Street.

C2-2: Oregon Parks and Recreation Department, Maintain emergency non-vehicular access at Gleneden Beach and Fogarty Creek State Recreation Sites.

C2-3: Oregon Parks and Recreation Department, Acquire key privately owned, undeveloped beachside sites between Fogarty Creek and Rocky Creek, when offered for sale, to protect beach setting. Do not develop.

C3 Otter Rock to Schooner Point

C3-1: Oregon Parks and Recreation Department, Consolidate ownership at Otter Rock State Scenic Viewpoint, when gift shop is available. Pursue right of first refusal. Provide restrooms and parking for use by persons with disabilities.

C3-2: Oregon Department of Transportation, Maintain emergency vehicular access at Wade Creek.

C3-3: Oregon Parks and Recreation Department/Oregon Department of Transportation, Ensure continued beach access from Beverly Beach State Park as part of new highway bridge construction, including emergency vehicular access. Also, pursue beach nourishment project, if feasible.

C3-4: Oregon Parks and Recreation Department, Acquire private land upstream from Beverly Beach State Park, when offered for sale, to provide improved resource protection and hike in camping. Update master plan.

C3-5: Oregon Parks and Recreation Department/Oregon Department of Transportation Obtain management responsibility for highway pull offs along Moolack Beach as beach access sites. Provide highway signs, parking and restrooms. Design parking to provide viewpoint for persons with disabilities. Restrooms and parking will support use by persons with disabilities. Improve beach access for pedestrians.

C4 Yaquina Head to Yaquina River

C4-1: Oregon Parks and Recreation Department, Maintain Agate Beach State Recreation Site for emergency vehicular access.

C4-2: City of Newport, Maintain Nye Beach access for emergency vehicular access.

C5 South Beach

C5-1: Oregon Parks and Recreation Department, Maintain south jetty and south day use area emergency non-vehicular accesses, at South Beach State Park.

C5-2: Oregon Parks and Recreation Department, Acquire privately owned inholdings, when offered for sale, at South Beach State Park.

C6 Grant Creek to Seal Rock

C6-1: Oregon Parks and Recreation Department, Maintain emergency vehicular access at Lost Creek State Recreation Site.

C6-2: Lincoln County/Oregon Department of Transportation , Maintain emergency vehicular accesses at highway pull offs at north side of Beaver Creek and at Seal Rock Wayside (county park).

C6-3: Oregon Parks and Recreation Department, Acquire privately owned, undeveloped beachside sites, when offered for sale, to protect beach setting. Do not develop.

C7 Seal Rock to Alsea River

C7-1: Oregon Parks and Recreation Department, Acquire privately owned, undeveloped beachside sites, when offered for sale, to protect beach setting and provide beach access where needed and feasible. Property adjacent to Collins Creek and north of the Gill property are priorities.

C7-2: Oregon Parks and Recreation Department, Maintain emergency vehicular access at Driftwood Beach State Recreation Site. Provide viewpoint parking and restrooms for persons with disabilities.

C7-3: Oregon Parks and Recreation Department, Maintain emergency vehicular access at Collins Creek State Recreation Site.

C7-4: Lincoln County or City of Waldport or Oregon Parks and Recreation Department, Acquire site and develop public parking and restroom, with pedestrian access to the beach on Bayshore spit. If site conditions allow, design parking to provide view from parking, and restrooms for persons with disabilities.

C7-5: Oregon Parks and Recreation Department, Acquire undeveloped, privately owned sites, offered for sale, to protect setting along beach. Do not develop.

C8 Alsea Bay to Starr Creek

C8-1: Oregon Parks and Recreation Department, Maintain emergency, non-vehicular access at Governor Patterson, and Yachats Ocean Road State Recreation Sites. Upgrade to emergency vehicular access.

C8-2: Lincoln County, Maintain emergency vehicular access at Colorado Street in San Marine.

C8-3: Lincoln County, Continue to provide street end access at Oceania and Seabrooke. Work with Oregon Parks and Recreation Department if additional management support is needed.

C8-4: Oregon Parks and Recreation Department, Continue experiments to stabilize erosion area at Beachside State Recreation Area.

C8-5:Oregon Parks and Recreation Department, Provide for non-motorized access to the water and viewpoint, with parking and restrooms for persons with disabilities, at Beachside State Recreation Area.

C9 Bob Creek to Rocky Knoll

C9-1:Oregon Parks and Recreation Department, Maintain pedestrian emergency access at Bob Creek, Stonefield Beach and Tokatee Kloochman State Recreation Sites. Work with US Fish and Wildlife Service on silver spot butterfly recovery efforts on uplands.

C9-2:Oregon Department of Transportation/Oregon Parks and Recreation Department, Maintain pedestrian emergency access at Rocky Knoll pull off. Transfer management to Oregon Parks and Recreation Department.

C10 Rocky Knoll to Heceta Head

C10-1: Oregon Parks and Recreation Department, Maintain pedestrian only emergency access at Muriel Ponsler State Scenic Viewpoint and Carl Washburne State Park.

C10-2: Oregon Parks and Recreation Department/Oregon Department of Transportation, Take over management of "Hobbit Trail" highway pull off beach access from Department of Transportation. Provide highway signs and supervise recreational use. Maintain for safe emergency pedestrian access.

C10-3: Oregon Parks and Recreation Department, Acquire inholdings, as offered for sale or trade, within Carl Washburne State Park and Heceta Head State Scenic Viewpoint.

C10-4: Oregon Parks and Recreation Department, Provide non-motorized access to the water and viewpoint, with parking and restrooms for persons with disabilities at Heceta Beach, on south side of Heceta Head State Scenic Viewpoint.

C10-5: Oregon Parks and Recreation Department, Provide additional tent or primitive camping at Carl Washburne State Park and/or Heceta Head State Scenic Viewpoint. Update master plans for both parks.

C10-6: Oregon Parks and Recreation Department, Acquire, when available, viewpoint near Sea Lion Caves.

C11 Lily Lake to Sutton Creek

C11-1: USDA Forest Service/Oregon Parks and Recreation Department, Maintain emergency vehicular access via Lily Lake area.

C11-2: USDA Forest Service/Oregon Parks and Recreation Department, Implement management actions for Sutton /Baker Beach snowy plover management area according to Habitat Conservation Plan.

C12 Sutton Creek to Siuslaw River

C12-1: Army Corp of Engineers/Oregon Parks and Recreation Department, Maintain emergency vehicular access at county beach access at north end of town, and at north jetty in Florence. Develop a campground.

C13 Siuslaw River to Siltcoos River

C13-1: USDA Forest Service - Dunes National Recreation Area, Maintain emergency vehicular access via South Jetty Road, and for long distance emergency vehicular access via Goose Pasture, Chapman and Breach Sand Roads, south of Florence.

C13-2: Oregon Parks and Recreation Department, Implement management actions for Siltcoos/Dunes Overlook/Tahkenitch snowy plover management area according to Habitat Conservation Plan.

C13-3: Oregon Parks and Recreation Department, Acquire privately owned lands on south side of Honeyman State Park, when offered for sale.

C13-4: US Forest Service-Dunes National Recreation Area, Provide a horse camp on the Siuslaw spit.

C14 Siltcoos River to Tahkenitch Creek

C14-1: USDA Forest Service-Dunes National Recreation Area, Maintain Wax Myrtle access for emergency vehicles.

C14-2: USDA Forest Service-Dunes National Recreation Area/Oregon Parks and Recreation Department, Implement management actions for Siltcoos/Dunes Overlook/Tahkenitch snowy plover management area according to Habitat Conservation Plan.

C14-3: USDA Forest Service/Dunes National Recreation Area/Oregon Parks and Recreation Department, Implement management actions for Siltcoos/Dunes Overlook/Tahkenitch snowy plover management area according to Habitat Conservation Plan.

C15 Tahkenitch Creek to Three Mile Creek

C15-1: USDA Forest Service-Dunes National Recreation Area/Oregon Parks and Recreation Department, Implement management actions for South Tahkenitch snowy plover management area according to Habitat Conservation Plan.

C15-2: Lane County/Dunes National Recreation Area, Maintain Three Mile Creek access for emergency vehicles. This access provides motorized access for persons with disabilities.

C16 Three Mile Creek to Umpqua River

C16-1: Same as C15-2.

C16-2: US Forest Service -Dunes National Recreation Area/Oregon Parks and Recreation Department, Implement management actions for Umpqua River North Jetty snowy plover management area according to Habitat Conservation Plan.

C16-3: Dunes National Recreation Area or Douglas County, Acquire privately owned land on Umpqua spit, when offered for sale for improved resource management and low intensity recreation.

C16-4: Douglas County or USDA Forest Service - Dunes National Recreation Area or Oregon Parks and Recreation Department: Acquire private land, when offered for sale, and develop a primitive campground in the Sparrow Park Road area.

South Coast

S1 Umpqua River to Ten Mile Creek

S1-1: Douglas County, Maintain Ziolkowski access for emergency vehicular access and continued public pedestrian access. Provide viewpoint parking and restrooms for persons with disabilities.

S1-2: USDA Forest Service-Dunes National Recreation Area, Maintain south Dunes National Recreation Area access, south of the Umpqua River, for emergency vehicles.

S1-3: USDA Forest Service-Dunes National Recreation Area/Oregon Parks and Recreation Department, Implement management actions for Ten Mile Creek snowy plover management area according to Habitat Conservation Plan.

S2 Ten Mile Creek to Coos Bay

S2-1: USDA Forest Service-Dunes National Recreation Area/Oregon Parks and Recreation Department, Implement management actions for Ten Mile Creek snowy plover management area according to Habitat Conservation Area**.**

S2-2: USDA Forest Service-Dunes National Recreation Area, Maintain emergency vehicular access at Horsfall Beach site.

S2-3: Bureau of Land Management, Maintain emergency vehicular access via the road to the New Carissa site.

S2-4: Bureau of Land Management/Oregon Parks and Recreation Department, Implement management actions for Coos Bay North Spit snowy plover management area according to Habitat Conservation Plan.

S3 Bastendorf Beach

S3-1: Coos County, Maintain emergency vehicular access to Bastendorf Beach. Provide non-motorized access to the water or viewpoint, with parking and restrooms for persons with disabilities.

S3-2: Oregon Parks and Recreation Department, Provide for an emergency vehicular access at Sunset Beach. Review in more detail the feasibility and appropriateness of providing pedestrian access at Yoakum Point. If appropriate, provide it. Maintain pedestrian emergency access at Simpson Beach.

S4 Sacchi Beach

S4-1: Oregon Parks and Recreation Department, Acquire a trail easement from private landowners, when available, from Cape Arago to Sacchi Beach.

S4-2: Oregon Parks and Recreation Department, Acquire lands necessary to provide a public trail between the Coast Trail and Sacchi Beach.

S5 Agate Beach to Five Mile Point

S5-1: Oregon Parks and Recreation Department, Maintain emergency vehicular access at Seven Devils State Recreation Site.

S6 Five Mile Point to Coquille River

S6-1: Coos County or Oregon Parks and Recreation Department, Provide official public access site at Whiskey Run. Acquire private land when offered for sale and develop beach access parking and day use, with restrooms.

S6-2: Oregon Parks and Recreation Department, Maintain emergency vehicular accesses at north Bullards Beach State Park beach access and at Coquille River lighthouse site parking area.

S6-3: Oregon Parks and Recreation Department, Research the potential for a beach stabilization/nourishment project and/or flooding protection project at the lighthouse parking lot, at Bullards Beach State Park. If feasible, implement.

S6-4: Oregon Park Recreation Department, Provide non-motorized beach access to the water, and/or a viewpoint, with parking and restrooms for persons with disabilities at the lighthouse parking lot area at, Bullards Beach State Park.

S6-5: Oregon Parks and Recreation Department, Acquire privately owned land, when offered for sale, on spit at Bullards Beach State Park and manage for natural and scenic values.

S6-6: Oregon Parks and Recreation Department, Expand campground at Bullards Beach State Park according to master plan.

S7 Coquille River to New River

S7-1: City of Bandon, Provide non-motorized beach access, and/or beach viewpoint, with parking and restrooms for persons with disabilities, at Coquille River south jetty.

S7-2: Oregon Parks and Recreation Department, Maintain Tish Tang Road and China Creek beach accesses for emergency vehicular access. Close China Creek beach to public vehicular use year-round. This is a very small stretch of beach with no public access point for motorized use.

S7-3: City of Bandon, Maintain pedestrian beach access at Bandon Golf Course beach access.

S7-4: Oregon Parks and Recreation Department/Bureau of Land Management, Coos and Curry Counties. Implement management actions for Bandon/New River snowy plover management area according to Habitat Conservation Plan.

S7-5: Oregon Parks and Recreation Department, Acquire county land adjacent to south boundary of Bandon State Park, from county when available, and manage as a natural area. Close beach access site. Maintain for emergency non-vehicular access.

S8 New River to Blacklock Point

S8-1: Bureau of Land Management /Oregon Parks and Recreation Department, Implement management actions for Bandon/New River snowy plover management area according to Habitat Conservation Plan.

S8-2: Curry County/Bureau of Land Management/Oregon Parks and Recreation Department, Provide for and maintain emergency vehicular access via Boise Cope and Floras Lake State Natural Area.

S8-3: Oregon Parks and Recreation Department, Provide for non-vehicular emergency access to Blacklock Point through airport.

S9 Sixes River Mouth

S9-1: Oregon Parks and Recreation Department, Maintain pedestrian access, for emergency use and general use, to mouth from Sixes River parking area.

S9-2: Oregon Parks and Recreation Department, Acquire private lands north of Cape Blanco and Sixes River, and south of Floras Lake State Natural Area to protect river and beach views and provide improved natural resource management.

S10 Cape Blanco to Elk River

S10-1: Oregon Parks and Recreation Department, Maintain emergency vehicular access at south Cape Blanco State Park access. Keep this section of beach open to driving, especially for spring and fall fishing.

S11 Elk River to Port Orford Heads

S11-1: Oregon Parks and Recreation Department, Maintain Paradise Point State Recreation Site access for emergency vehicular access, and for off season, street legal driving that coincides with management restrictions on the Elk River spit for the snowy plover management area. Upgrade the access road for street legal use. Enforce "no off highway vehicle riding" on this beach without a permit. Provide parking with views of water and beach, and restrooms for persons with disabilities.

S11-2: Oregon Parks and Recreation Department/Private land owner, Implement management actions for Elk River Spit snowy plover management area according the Habitat Conservation Plan.

S11-3: Oregon Parks and Recreation Department, Develop and manage new, pedestrian public access at state site at Agate Beach, near Garrison Lake, in Port Orford. The state acquired the land in 2003. Work with State Historic Preservation Office and tribes to complete archeological investigations and mitigation. Work with City of Port Orford to implement feasible and effective lake outfall development and management, and sewer outfall. Provide access for on-going maintenance and emergency repair of outfall. This site will not provide motorized access to the beach for the general public.

S12 Battle Rock to Humbug Mountain

S12-1: Oregon Department of Transportation/Curry County/City of Port Orford, Maintain emergency vehicular access at Battle Rock. This site already provides viewpoint parking and restrooms for persons with disabilities.

S12-2: Oregon Parks and Recreation Department, Maintain emergency vehicular access to Brush Creek at Humbug Mountain State Park.

S12-3: Oregon Parks and Recreation Department, Acquire private land or easement, as offered for sale, for Coast Trail extension south of Humbug Mountain.

S13 Arizona Beach

S13-1: Oregon Parks and Recreation Department, Monitor private ownership of the site for potential change in use. Pursue obtaining a right of first refusal. Acquire if offered for sale. Redevelop, if acquired, for public beach access.

S13-2: Oregon Parks and Recreation Department/Oregon Department of Transportation, Develop a new public parking lot with restrooms and pedestrian beach access trail at Sisters Rock/Frankport. The state purchased this site in 2003.

S14 Devil's Backbone to Nesika Beach South

S14-1: Oregon Parks and Recreation Department/Private land owner, Implement management actions for Euchre Creek snowy plover management area according to Habitat Conservation Plan. Acquire private land west of highway and north of the creek, if offered for sale.

S14-2: Oregon Department of Transportation/Oregon Parks and Recreation Department , Provide for an emergency vehicular access at Ophir rest area. Transfer ownership and management of this site to Oregon Parks and Recreation Department.

Otter Point to Rogue River

S15-1: Oregon Parks and Recreation Department/Oregon Department of Transportation , Acquire state-owned right of way land south of Otter Point from Department of Transportation, and develop new beach non-motorized access, and parking lot with restrooms. This acquisition does not include the road itself, which is a county road. Update master plan.

S15-2: Port/Curry County/City of Gold Beach, Provide and maintain emergency vehicular access at the north jetty of the Rogue River.

S15-3: Port/Curry County/City of Gold Beach, At the north jetty, provide parking and restrooms and public vehicular access that can be used by persons with disabilities. Design parking to allow views of the beach from some parking spaces, including some reserved for persons with disabilities.

S16 Rogue River to Cape Sebastian

S16-1: Port/Curry County/City of Gold Beach, Provide and maintain emergency vehicular access at south jetty of Rogue River. Provide vehicular access to the beach, and parking and restrooms for persons with disabilities.

S16-2: Curry County/Oregon Department of Transportation, Provide parking spaces reserved for persons with disabilities with view of beach, at Hunter Creek pull off. Consider transferring to Oregon Parks and Recreation Department management.

S16-3: Oregon Parks and Recreation Department, Transfer management of Buena Vista highway pull off and pedestrian beach access, north of Cape Sebastian to Oregon Parks and Recreation.

S16-4: Oregon Parks and Recreation Department/Oregon Department of Transportation, Acquire land from Department of Transportation and develop a new trailhead at Cape Sebastian State Natural Area with trails to beach and hike in camping, according to master plan.

S17 Cape Sebastian to Crook Point

S17-1: Oregon Parks and Recreation Department/Oregon Department of Transportation, Transfer management of Myers Creek highway pull off accesses to Oregon Parks and Recreation. Develop parking, and include designated sites with a view of the beach and restrooms for persons with disabilities at "The Capes" northernmost pullout.

S17-2: Oregon Parks and Recreation Department, Implement management action for Pistol River snowy plover management area according to Habitat Conservation Plan.

SC17-3: Oregon Parks and Recreation Department, Officially close the beach at Myers Creek to driving year-round without a permit. It has not been accessible for many years.

S18 Whaleshead Beach

S18-1: Oregon Parks and Recreation Department, Repair road to Whaleshead beach access, which is a part of Sam Boardman State Scenic Corridor. Maintain pedestrian access to the beach. Designate some parking spaces, with view of the beach and provide restrooms for persons with disabilities.

S19 Lone Ranch Beach

S19-1: Oregon Parks and Recreation Department, Maintain emergency pedestrian access to beach. Keep parking at existing capacity regardless of development across highway. Provide designated parking spaces with view of beach and restrooms for persons with disabilities.

S20 Harris Beach

S20-1: Oregon Parks and Recreation Department, Improve beach access parking and restrooms according to master plan. Designate some parking spaces with view of the beach and provide restrooms for persons with disabilities.

S21 Harbor Beach

S21-1: Oregon Parks and Recreation Department/Harbor, Provide and maintain emergency vehicular access. Transfer management of beach access parking facility to Oregon Parks and Recreation.

S22 McVay Rock Beach

S22-1: Oregon Parks and Recreation Department, Maintain emergency pedestrian access at McVay Rock State Recreation Site. Experiment with better beach access structure and erosion control methods.

S23 Crissey Field Beach

S23-1: Oregon Parks and Recreation Department, Provide and maintain emergency pedestrian access from Winchuck and Crissey Field State Recreation Sites. Provide new public beach access and visitor information at this site.

Appendix F: Land Conservation Summary

Looking beyond the sites that are recommended to provide beach access and beyond existing public parks along the beach, there are places that could contribute to expanded recreational use and resource protection, along the coast. These sites have been identified, by region. Most of these opportunities occur adjacent to the beach, rather than exclusively on the beach, but still support the state's interests in beach use and management. The location and importance of the sites is discussed here.

Decisions about pursuing any of these sites will be made by the Commission, and this plan should not be construed to be the final word for any agency on increasing the extent of publicly held or managed lands on the coast. Options for conserving land include easements, leases, agreements and fee title acquisition through sale or trade with willing owners. Land trusts can assist in the conservation effort in areas where their interests coincide with the department's.

North Coast Recreation Lands Opportunities

County land at Delaura Beach: Improved management of the county owned parcel located south of Fort Stevens State Park is important to the management of official trails and illegal four wheel driving in the state park to the north, as is mentioned in the master plan for Fort Stevens State Park. With county approval, Oregon Parks and Recreation Department acquisition of the county land would provide better access management to the park; and could also be the site of a new official, non-motorized beach access in this region.

Necanicum River/Circle Creek site: This is a lowland ranch with cattle grazing along Circle Creek and a farmstead site at one end, located between Highway 101 and Tillamook Head, has natural values and an opportunity for trail connections to Tillamook Head. The site is currently under consideration for grant funding for acquisition by the local land trust. Oregon Parks and Recreation Department may be considered for managing the site.

Tillamook Head consolidation: Adjacent parcels would, primarily, provide better protection for the Ecola State Park entrance road settling.

Silverpoint to Humbug Point: Undeveloped parcels would protect the beach setting.

Arcadia Beach area: The parcel, east of the highway, could provide expanded day use parking, picnicking and trails potential to supplement existing beach access, as well as resource and setting protection.

Oswald West consolidation: This would consolidate the north slope of Cape Falcon itself, and ownership of the upland area on the east side of the highway between the Oswald West State Park parcel at Arch Cape with the main parcel to the south.

Bayocean Spit: The north end of the spit is owned by the county and Army Corp of Engineers. The southern portion is privately owned. Tillamook County provides a beach access site at the far south end. The public uses the county road along the spit, to access public lands on the spit both on the bay and ocean beach, for birding, clamming, fishing and other passive activities. Development of this spit would threaten the low use recreation setting and potentially high quality natural resource areas. Acquisition of

private and/or county land, when available, would support protecting the recreational and resource values of the spit. Public ownership and/or management could be provided by either the county, or potentially by Oregon Parks and Recreation Department with county approval.

County land at Whalen Island: Although Whalen Island is located within the Sand Lake estuary and is somewhat removed from the Ocean Shore, it is easily viewed from the beach and the beach can be seen from the island. Most of the island was recently acquired by Oregon Parks and Recreation Department through a funding partnership with several entities. The south shore of the island remains in Tillamook County ownership and hosts a small but intensively used campground and day use area. Oregon Parks and Recreation Department has developed a small trailhead parking lot just to the north of the county park. Consolidating ownership and/or management of the entire island could provide more consistency in the type of experience available on the island and could bring more management resources to the park.

The Beltz Farm: Acquisition of the Beltz Farm by a public entity could fill a setting/habitat gap. The site is one of the last largely unspoiled estuary settings on the Oregon coast. However, the farm is currently undergoing county land use approval for the construction of a golf course and is likely to not be available.

Sears Lake site: This privately owned site is located across the county road from the Tierra del Mar end of the Cape Kiwanda beach access site. Currently, visitors park along the road to access the beach. If available, this site may be able to provide off road parking and a related small day use area, in a very heavily used area. The site has a small lake that offers nice views and some natural values.

Private site between Neskowin and Camp 'Winema: North of Neskowin is a large hill that has been considered for resort and residential development, and currently includes a few residences, with some potential for further residential development. A portion of this site could be considered for providing a small new beach access and to protect the existing natural setting from further development.

Central Coast Recreation Lands Opportunities

Fogarty Creek to Boiler Bay, and restaurant site at Whale Cove: Look for opportunities to purchase parcels that would protect the setting of the beach if protected from development.

Gift shop inholding at Cape Foulweather: Although this property does not provide access to the beach, it is mentioned here about the larger Oregon Parks and Recreation Department interests along the ocean shore. It consists of a small private inholding with a gift shop at the high viewpoint at Otter Crest State Scenic Viewpoint. Clients of the gift shop use the public parking lot. If the use of the building were changed to a restaurant or other use requiring more parking, there may not be sufficient parking for visitors to enjoy the view. The site has potential to be used as a refuge from the weather for viewing the beach, by the general public, and for providing interpretation.

Beverly Beach addition on Spencer Creek: There is an area upstream from the campground at Beverly Beach that is privately owned, that is largely natural and could offer a buffer to the campground from surrounding land uses and provide additional trail access, if available.

South Beach inholding: South Beach State Park has a few small, isolated private inholdings along the south jetty and near the residential area to the east of the park. Consolidating these parcels into the park

would ensure they would not be developed for residential or commercial purposes. These parcels are important for protecting natural and scenic values in this area of the park.

South Beach to Alsea River: Look for opportunities to purchase parcels needed to protect the beach setting from further development, especially adjacent to Collins Creek.

Property north of the Gill property, near Driftwood Beach access: To provide additional day use access to the beach and preserve the scenic, undeveloped setting.

Heceta Head inholding: The Heceta Head lighthouse keeper site is currently an inholding within Heceta Head Lighthouse State Scenic Viewpoint. The parcel is owned by the USDA Forest Service. Purchase or management agreement by Oregon Parks and Recreation Department with the U.S. Forest Service could provide more consistent management of the area.

Property adjacent to Sea Lion Cave: This would protect views to the ocean from the highway.

South of Honeyman: This would buffer the park from off highway vehicle use.

Umpqua spit inholding: The spit has private lands that have been considered for mining and may have a potential for rural residential development. This area is extremely remote and as such is relatively rare and valuable for protecting and enhancing natural resource values and providing remote recreational settings.

South Coast Recreation Lands Opportunities

Lower Four Mile Creek county site: This site is owned by Coos County and is accessed via nearby rural residential roads, but has been gated in recent years but is still used as an unofficial local access. The site has had management problems including litter, parties and rowdy behavior and suffers from a lack of adequate supervision. It also provides access into an area that will become a snowy plover management area, and will need reliable management assurances. The site is located adjacent to the south boundary of Bandon State Park. Consolidating ownership with the state park could provide additional natural area for habitat and setting purposes. However, it may not be a feasible site for providing beach access.

Cape Arago to Seven Devils trail easement: Between these two points the Coast Trail is forced to follow Seven Devils Road for several miles along a winding, narrow inland route. At times, the road is heavily used by logging trucks and does not offer a good route for hiking and biking. An easement across private lands nearer to the shore would greatly enhance the Coast Trail experience in this trail segment.

Coquille River spit inholding: Along the river shore portion of the spit at Bullards Beach State Park is a privately owned inholding that could be consolidated into the park to provide consistent management.

Sixes River north shore: The land between Floras Lake State Natural Area and Cape Blanco State Park is privately owned and fronts both the Ocean Shore and the Sixes River. The property is viewed from Cape Blanco State Park's entrance road and from its historic Hughes House site. Consolidating this site into one of the state parks would protect scenic and historic values, as well as natural resource values and provide consistent management in relation to the adjoining parks.

Garrison Lake/Agate Beach development: Oregon Parks and Recreation Department has recently purchased the private park at the outlet of Garrison Lake onto Agate Beach. The purchase was supported by Curry County to aid in correcting the alternating flooding and low water problems in the lake, to provide for city sewer outfall maintenance access and to provide public access to the beach. Oregon Parks and Recreation Department will be redeveloping the old trailer park into a small day use area and beach access site.

Humbug south trail connection: This is a critical location for continuation of the Coast Trail, away from the highway, to the south of Humbug Mountain, and may also provide an opportunity to develop a trailhead site.

Arizona Beach, if threatened: This is currently a privately owned and operated campground that is located on the beach itself. If this property is converted to private residential use and no campground is provided, a key access site that is now controlled by a private landowner would be eliminated. Oregon Parks and Recreation Department will seek a "right of first refusal" from the landowner, to provide an opportunity for the site to be retained for public access in the future.

Sisters Rock: This site is has been acquired by Oregon Parks and Recreation Department. Curry County would like to see it reopened as a beach access. Oregon Parks and Recreation Department is exploring how to provide safe public access off of Highway 101. Oregon Parks and Recreation Department is also looking at how to provide public parking on the site that would support beach access.

Euchre Creek: The beach at the mouth of Euchre Creek, just north of Ophir, is privately owned and the adjacent area is used as a cattle pasture. The portion of this land located west of the highway, could help to provide a buffer to use of the adjacent beach for the snowy plover management area. Resource constraints preclude using it as a new beach access.

Otter Point right of way: To the south of Otter Point State Recreation Area, north of Gold Beach, is a large ocean-side tract that is owned by the Oregon Department of Transportation and is no longer needed by that agency. Oregon Parks and Recreation Department acquisition could help to protect the rare plant communities found on this site, and could provide for consistent management of the resource. The site could be used for beach access and trail connections if designed to protect the plant communities there.

Cape Sebastian right of way: Oregon Department of Transportation owns a storage site just west of Highway 101 and adjacent to a newly acquired portion of Cape Sebastian State Natural Area. If the storage area could be transformed into a trailhead parking lot, it could be used as a hiking access point via Cape Sebastian's trails and old roads to the extensive beach below.

Appendix G: The Planning Community

Because the Ocean Shore jurisdiction often overlays other public or private lands, the Ocean Shore Management Plan needs to recognize the plans and management mandates of those other owners and ensure that it is consistent with them. This plan has considered the following:

1. Local zoning and state land use goals
2. Federal land mandates and plans
3. Other state lands mandates and plans

Local Zoning

Any proposals in the plan that constitute legal land use actions, such as construction or major land grading, will need to go through local governmental review to determine whether local development permits are needed prior to beginning each project. Those recommendations that involve the management of people or resources on the ground are not "land use actions" unless they involve some type of site disturbance or alternation.

State Land Use Goals

Any land use related proposals will need to be consistent with the state land use goals. Oregon Parks and Recreation Department will seek consistency by conferring with local governments to determine whether development permits will be needed, or whether zone changes are required before to ground disturbance. The department will comply with whatever public involvement processes are required by the local government for the appropriate land use action.

One goal that is specifically related to beach access, Goal 18, requires no net loss of beach accesses. This plan's recommendations have been provided in a manner that will support Goal 18. None of the current public beach accesses will be closed year-round without providing a substituting access nearby.

Federal Lands

There are a number of federal landholders with lands that coincide with the Ocean Shore. They include the Army Corp of Engineers, USDA Forest Service, U.S. Bureau of Land Management, and U.S. Fish and Wildlife Service. Each of these federal land owners have legal mandates they must meet regarding the management of their lands, and most prepare management plans that spell out how they will fulfill their management responsibilities. Oregon Parks and Recreation Department must recognize that the state plan cannot preclude the federal owners from implementing any management actions that they are required to do, such as the management of protected species. The Habitat Conservation Plan provides for federal landowners to complete their own site management plans for areas of recovery. There are also certain resource management regulations that the department will need to comply with in implementing some of the recommendations in the plan, such as an Army Corp of Engineers wetland permit.

Other State Lands and Mandates

There are some overlapping state agency jurisdictions along the Ocean Shore, however each location generally has primarily responsibility by the land owning agency. Most state jurisdictions are adjacent to rather than overlying the Ocean Shore, such as the Division of State Lands jurisdiction on the estuaries and ocean. The Department of Fish and Wildlife has general interest in seeing that protected species are managed for appropriately, and they work with landowners to achieve those ends. There are some state

permits that can be required for certain of the management recommendations mentioned in this plan, such as wetland mitigation permitting.

The State Agency Coordination Process

This plan falls under the State Agency Coordination Process and as such, is required to be reviewed and approved by a number of state agencies before it is adopted.

Appendix H: Advisory Committee Membership

Portland Audubon Society
Bob Altman, American Bird Conservancy
Ed Becker/Paul Thomas, Siuslaw National Forest
Charlie Bruce, Oregon Department of Fish and Wildlife
Cindy Burns, US Forest Service
Brian Cole, representative assigned by Lane County Board of Commissioners
Mandy Cole, Oregon Tourism Commission
Nan Evans and Paul Klarin, Department of Land Conservation and Development
Jim Good, Oregon State University, Sea Grant Program
Bob Green/Bill Gregory, Oregon Parks and Recreation Commission
Onno Hussing, Oregon Coastal Zone Management Association
Mark Johnson, Coos Bay District, US Bureau of Land Management
Cheryle Kennedy, Confederated Tribes of Grand Ronde
Robert Kentta, Confederated Tribes of Siletz Indians
Mike Knapp, Member at Large
Lucie LaBonte, Curry County Board of Commissioners
Richard Lee, Clatsop County Board of Commissioners
Al LePage, National Coast Trail Association
John Lilly, Division of State Lands
Jack Peasley, Oregon Equestrian Trails
Jeff Powers, representative assigned by Douglas County Board of Commissioners
Foncy Prescott, Kalmiopsis Audubon Society
Fran Recht, Oregon Shores Conservation Coalition
David Revell/Marcus Mead, Surfriders
Arnold Ryland, Northwest Sand Dunes and off highway vehicle riders
Fred Seavey, US Fish and Wildlife Service
Terry Thompson, Lincoln County Board of Commissioners
Dave Tovey, Coquille Indian Tribe
Isaiah Ursprung, Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians

Appendix I: Record of Public Involvement

Steering Committee Meetings

- April 2002, Coos Bay
- June/July 2002, South Beach/Newport
- October 2002, Seaside
- March 2003, Newport
- July 2003, Florence
- December 2003, South Beach/Newport
- June 29 2004, Reedsport
- August 23, 2004 Florence
- September 28, 2004 Florence

Public Meetings

- Late April and early May 2002, evening meetings in Coos Bay, Gold Beach, Florence, Newport, Tillamook, Seaside and Portland
- October 2002, evening meetings in Coos Bay, Gold Beach, Portland, Eugene, Florence, Newport, Tillamook and Seaside
- March 2003 evening meetings in Coos Bay, Newport, Tillamook and Portland
- Late January and early February 2004, evening meetings in Seaside, Salem, Coos Bay, Gold Beach and Newport, March 2004 Tillamook and Pacific City