

Section 5. Conservation Plan

5.1. Introduction

This section begins with a discussion of the conservation strategy that was used to develop the approach for addressing potential effects of the covered activities on snowy plover. The conservation strategy also considers how best to contribute to the recovery of the species within the covered lands.

Using the Federal Recovery Plan (U.S. Fish and Wildlife Service 2007) as a guide, State and Federal biologists and an appointed Steering Committee identified 17 management areas determined to be the best existing and potential snowy plover habitat. This list was further refined based on comments from the public to exclude Pistol River for a total of 16 management areas. Five of these management areas are either owned or leased by the Oregon Parks and Recreation Department (OPRD) as park units and are identified as Snowy Plover Management Areas (SPMAs). The remaining 11 areas are identified as Recreation Management Areas (RMAs) and are not part of an OPRD park unit, but are managed by OPRD as part of the Ocean Shore. Some are privately owned or owned by counties. Others are adjacent to federally owned lands. These management areas constitute approximately 48 miles of the 230 miles of sandy Ocean Shore unless otherwise amended through implementation of the adaptive management measures. Snowy plovers that inhabit beach areas outside of these 48 miles will receive limited protection, i.e., only known active nest sites will be protected.

The conservation strategy focuses on these SPMAs and RMAs through implementation of the conservation plan as described in Section 5.3. The conservation plan includes 1) the conservation measures outlined in Section 5.3.1, 2) the goals and actions to implement these measures as outlined in Section 5.3.2, and 3) the adaptive management measures outlined in Section 5.3.3. This section concludes with a summary of the conservation measures.

5.2. Conservation Strategy

OPRD prepared a set of guiding principles to assist in determining the extent of its participation in the conservation and recovery of the snowy plover. From these principles, OPRD (working with other State and Federal agencies) identified a conservation strategy that will ensure that habitat for snowy plover is provided along the Oregon coast, not just in the southern portion of the state where most populations of nesting snowy plovers are currently located. The guiding principles used to develop the conservation strategy are discussed below.

5.2.1. Guiding Principles

The OPRD guiding principles, herein set forth in this Habitat Conservation Plan (HCP) and included below, provide that OPRD will:

- Assist with and contribute to conservation and protection of the Pacific coast population of the snowy plover in Oregon;
- Manage for conservation and recovery of snowy plover and their habitat in a manner that balances this effort with human use of the Ocean Shore;
- Identify areas along the Oregon Ocean Shore where public use will be managed to reduce the likelihood of impacts to snowy plovers;
- Protect and restore habitat in critical locations at OPRD SPMA's;
- Work with the other resource agencies to manage for predators to minimize impacts on snowy plover breeding success and improve the survival of the snowy plover in occupied SPMA's and RMA's;
- Work to increase public support and understanding of snowy plover and habitat needs, in cooperation with partners;
- Work with other resource management agencies on habitat restoration, predator management, snowy plover population monitoring, snowy plover research, and public outreach, where appropriate to achieve cost efficiencies;
- Develop strategies that complement the habitat needs of other Ocean Shore wildlife (e.g., shorebirds, marine mammals, seabirds) in addition to snowy plover;
- Use future research as one of the criteria for guiding adaptive management principles to help in management of the snowy plover; and
- Seek assurances from USFWS about future human use of Oregon's beaches by completing an HCP and submitting an Incidental Take Permit (ITP) application. Following issuance of the ITP, OPRD will comply with the permit conditions, including implementation of the HCP.

Using these guiding principles as a basis for the development of the HCP, OPRD developed the following conservation and management approaches for conducting snowy plover management along Oregon's coast.

5.2.2. Conservation Approach to Site Selection

Historically snowy plovers nested at 21 or more separate sites along the Oregon coast. Today, only six sites (represented by one OPRD-owned SPMA and five RMAs owned by other landowners) are occupied by snowy plovers for breeding and wintering. Snowy plover habitat is subject to frequent and unpredictable natural changes due to coastal formation processes (including the occurrence or lack of major storm events) that change its suitability. Selecting relatively large areas for snowy plover management would increase the opportunity for averaging the effects of natural changes on snowy plover distribution and productivity. Sufficient breeding and wintering sites along the Oregon south, central, and north coast are needed to ensure availability of sufficient habitat given the potential for human disturbances to affect snowy plovers.

Sites along the north coast have the potential to play a particularly important role in snowy plover recovery because this area is closest to historically occupied sites to the north in Washington, and would provide a protected nesting area between sites in southern Oregon and Washington. This habitat should be of sufficient quantity and quality to allow breeding, foraging, brood-rearing, and roosting activities. The north coast sites will provide habitat to accommodate breeding and wintering snowy plover as their numbers increase and in the event of a demographic disturbance that destroys existing habitat on the southern and central coast.

Criteria for Selecting SPMAs and RMAs

Based on the above conservation approach for site selection, OPRD, along with other State and Federal agencies, developed the following criteria for identifying potential SPMAs/RMAs:

- Areas should provide breeding and wintering habitat for multiple pairs of snowy plovers within SPMAs/RMAs;
- Large, wide SPMAs/RMAs should be established rather than linear areas;
- Areas should be scattered geographically to provide for a well-distributed snowy plover population, yet close enough to facilitate snowy plover dispersal between occupied and unoccupied areas;
- Areas should provide all necessary habitat components (courtship, nesting, roosting, foraging and brood-rearing);
- Areas should be managed for quality habitat in sufficient amounts to minimize impacts of tides, weather, predators, and human use of the Ocean Shore;

- Areas should be established in locations that will provide ongoing and future management certainty. For example, Federal and State-owned land are more likely to conserve resources in perpetuity than privately owned land;
- The approach should be flexible so it can be adaptively managed as new information becomes available; and
- OPRD should seek State and local community support.

Based on these criteria, 16 separate areas along Oregon’s coast were identified for snowy plover management (Table 5-1). Of these 16 areas, the HCP focuses on up to five OPRD-owned or leased SPMA’s, which are discussed in greater detail below.

Table 5-1. SPMA’s and RMA’s

Recovery Unit*	Snowy Plover Management Areas	Land Ownership and Management Designation	Miles	County
OR-1	Columbia River South Jetty	Owned by Army Corps of Engineers (Corps); leased by OPRD – SPMA	0.62	Clatsop
OR-1	Necanicum Spit	OPRD - SPMA	1.00	Clatsop
OR-2	Nehalem Spit	OPRD - SPMA	2.11	Tillamook
OR-3	Bayocean Spit	Adjacent to land owned by Corps - RMA	1.73	Tillamook
OR-4	Netarts Spit	OPRD - SPMA	2.01	Tillamook
OR-5	South Sand Lake Spit	Private - RMA	1.44	Tillamook
OR-8	<i>Sutton/Baker Beach**</i>	<i>Adjacent to land owned by U.S. Forest Service (USFS) - RMA</i>	<i>4.00</i>	<i>Lane</i>
OR-9	<i>Sillcoos Estuary/Dunes Overlook/ Tahkenitch Estuary</i>	<i>Adjacent to land owned by USFS - RMA</i>	<i>6.87</i>	<i>Lane</i>
OR-10	Tahkenitch South	Adjacent to land owned by USFS - RMA	2.00	Douglas
OR - 11	Umpqua River North Jetty	Adjacent to land owned by USFS - RMA	3.00	Douglas
OR-12	<i>Tenmile Estuary</i>	<i>Adjacent to land owned by USFS - RMA</i>	<i>4.20</i>	<i>Coos</i>
OR-13	<i>Coos Bay North Spit</i>	<i>Adjacent to land owned by U.S. Bureau of Land Management (BLM), Corps – RMA</i>	<i>3.37</i>	<i>Coos</i>
OR-15	<i>Bandon</i>	<i>OPRD - SPMA</i>	<i>3.41</i>	<i>Coos</i>
OR-15	<i>New River</i>	<i>Owned by Curry County and private, landowner and adjacent to land owned by BLM - RMA</i>	<i>8.75</i>	<i>Coos</i>
OR-17	Elk River	Private – RMA	2.27	Curry
OR-18	Euchre Creek	Private – RMA	1.13	Curry
TOTAL			47.91	

* Recovery Unit identified in the USFWS Recovery Plan; duplicate Recovery Unit numbers indicate more than one Snowy Plover Management Area is located in one Recovery Unit.

****Bolded and italicized** Snowy Plover Management Areas are shaded in gray and indicate that the site was occupied by snowy plover in 2006.

Targeted Areas for Snowy Plover Management

Of the 16 snowy plover management areas located on Oregon's coast, five of these areas are owned or leased by OPRD as part of park units (SPMAs). The remaining 11 areas (identified as RMAs) are owned by private landowners or counties, or are adjacent to federally owned lands (Table 5-1) but are managed by OPRD as part of the Ocean Shore. These 16 areas are located from the Columbia River South Jetty in Clatsop County to Euchre Creek in Curry County, and range in size from approximately 0.62 mile to 8.75 miles long. Six areas are currently occupied by snowy plovers during the breeding season (Table 5-1). Most, if not all, of these areas have been used by snowy plovers in the past during both the breeding season and winter.

The goal for all landowners that have snowy plover management areas is to restore sufficient habitat for snowy plover nesting and brood rearing to occur, reduce the amount of predators present, and keep human disturbance to a minimum. While human use can continue in these areas, the type of use that can occur will be restricted through implementation of management plans, developed when OPRD and other landowners begin managing SPMAs/RMAs for snowy plover occupancy, to reduce the potential disturbance to the snowy plover.

Of the five areas owned or leased by OPRD (approximately 9.15 miles), four of these SPMAs will be the primary focus for OPRD snowy plover conservation activities (refer to Figures 2-2 through 2-6) for this HCP. These SPMAs and the order of implementation are described below.

Under the HCP, the Bandon State Natural Area (SNA), including the habitat restoration area (HRA) and the area extending north to the south end of the China Creek access point parking lot, will be identified and managed as the Bandon SPMA. Within 1 year of issuance of an ITP, OPRD will complete a draft site management plan. USFWS would have 6 months after the completion of the draft site management plan to make a decision about whether to approve it. Active management of the Bandon SPMA will begin the nesting season following the completion and approval of the site management plan.

In addition, as many as four currently unoccupied areas will be identified as SPMAs and targeted for management of potential nesting populations of snowy plover over the term of the 25-year ITP. Three SPMAs will initially be managed by OPRD for nesting populations of snowy plover:

- Columbia River South Jetty,
- Necanicum Spit, and
- Nehalem Spit.

Within 2 years of obtaining an ITP, OPRD will prepare draft site management plans for these three SPMA as described below. Active management will begin the nesting season after site plans have been reviewed for potential approval by USFWS. Approval will be granted within 6 months of completion of the draft plan.

One additional SPMA, Netarts Spit, could also be managed if (1) Columbia River South Jetty, Necanicum Spit, or Nehalem Spit becomes occupied, and (2) one of the RMAs is not already under active, USFWS-approved management for snowy plover.

The five SPMA under OPRD's ownership or lease responsibility that form the basis of the conservation plan are described below. Descriptions of the 11 RMAs are provided in Appendix F.

Columbia River South Jetty – Unoccupied (Clatsop County)

The SPMA encompasses 0.62 mile of beach along the Columbia River within the park and is located north of the south jetty of the Columbia River. This SPMA is a river beach rather than an ocean beach. It is owned by the Corps but is under lease to OPRD until 2023 as part of Fort Stevens State Park, at which time OPRD will renew the lease or purchase the land. Under the lease-related site management plan OPRD develops with the Corps, OPRD can impose HCP restrictions. OPRD has the responsibility for management of the natural resources, facilities, and visitors within the lease area, except for any jetty maintenance projects undertaken by the Corps. Snowy plovers have not been observed here since 1983. The beach is relatively flat and wide, although narrow in some places (approximately 30 feet), with a relatively low foredune. The foredune height increases with great proximity to the jetty. Inland, the beach is overgrown with shore pine, European beachgrass, and some alder.

This SPMA has the potential for playing a particularly important role in snowy plover recovery because this area is closest to historically occupied sites to the north in Washington and would provide a protected nesting area between those in southern Oregon and Washington. This SPMA is one of three northern sites considered important because it is so far north relative to where snowy plovers are currently nesting in Oregon.

Snowy plover habitat could be restored in this SPMA by grading the vegetation to make the open sand area wider and flatter. A row of trees may be left to provide a visual barrier from the lookout tower at the south jetty. Some sections of the beach collect a lot of driftwood, which may require removal. With moderate effort towards restoration and recreation management, this SPMA could easily accommodate two or more pairs of breeding snowy plovers.

The proposed SPMA is a very small portion of the 4,500-acre Fort Stevens State Park. The park has 174 full hookup sites, 303 electrical sites, 19 tent sites, 15 yurts, hiker/biker sites, a day use area with beach access, 9 miles of bike trails, 5 miles of

hiking trails, a coastal wildlife-viewing platform, large historic fort site, and large administrative area. OPRD has full-time staff at Fort Stevens State Park.

There are two parking lots near this SPMA. From both lots, the public can access the river shore. The Oregon Department of State Lands governs the wet sand up to the mean high water mark as part of the Columbia River Estuary and currently has no restrictions on river shore driving in this area. There is an access point from the park road that provides for unofficial vehicular access to the river shore. OPRD manages the upland portion of the park and prohibits driving on the dry sand within this park so this access point will be closed, at least during the nesting season. Because of the ability to control access, the same recreational restrictions that are applied to the Ocean Shore wet sand will be in place for the river shore wet sand.

Necanicum Spit – Unoccupied (Clatsop County)

This SPMA is owned by OPRD and is a portion of its Gearhart Ocean State Recreation Area. The SPMA encompasses 0.74 mile along the Ocean Shore. Snowy plovers have nested here as recently as 2002. While the nest hatched, the brood failed shortly thereafter. In 2000, a nest hatched and at least one chick fledged. Habitat for this SPMA is good because much of it is flat and open, especially near the river mouth. There is some driftwood. A local birder regularly monitors this area.

While recreation use here is primarily limited to local residents, there is heavy use in the vicinity, which attracts predators. This is a popular dog-walking beach. Also, during the 4th of July, local residents gather on the beach to let off fireworks, which is prohibited under State rules. Although OPRD owns the SPMA, it has not developed the property, and therefore does not have full-time staff stationed there. The beach is closed to vehicle driving. Habitat restoration is not likely to be needed here, but additional docent outreach and supervision will be essential in helping to keep dogs on leash and driving off this section of the beach.

Nehalem Spit – Unoccupied (Tillamook County)

OPRD owns and manages this SPMA as part of Nehalem Bay State Park. The SPMA encompasses 2.11 miles of the Ocean Shore. The beach is very linear with steep foredunes (20 feet or wider). Extensive habitat restoration work would be needed for this site at the far south end of the spit. The area of the spit with restoration potential is miles from the northern boundary of the proposed SPMA. At the end of the spit, large amounts of driftwood accumulate, and would need to be removed annually as necessary. The jetty at the end of Nehalem Spit is owned by the Corps. Snowy plover have not been observed at this site since winter 1983 (one snowy plover observed) and summer 1984.

Nehalem Bay State Park includes a campground with 276 sites, 16 yurts, 17 horse campsites (maximum capacity of 68 horses), and a day use area with beach access. This SPMA includes a very popular horse-use beach and inland horse trails on the

spit. A horse concession operates between May and September. OPRD has staff members stationed full time at Nehalem Bay State Park. Equestrian access to the wet sand will be directed away from the spit end but will allow access to the wet sand portion of most of the spit. The beach is closed to vehicle driving.

Netarts Spit – Unoccupied (Tillamook County)

OPRD owns and manages this SPMA as part of Cape Lookout State Park. The SPMA encompasses 2.01 miles of the Ocean Shore. From the Cape Lookout State Park campground to almost the end of the spit, the foredune is very high, very stable, and covered with Shore pines (*Pinus contorta*), Scotch broom (*Cytisus scoparius*), and European beachgrass. At high tide the beach is very narrow in places. At the end of the spit the dunes are much lower and covered primarily with European beachgrass at the spit. There is a broad expanse of open beach during low tide and driftwood would likely need to be removed annually as necessary. A large area could easily be restored (bulldozed). A subsurface sewage disposal system is located on the spit, north of the campground. This beach is highly erodible. Portions of the beach further south from the spit are rocky (cobbles).

Snowy plover have not been observed at this site since 1982, when three birds were observed during the breeding season. The SPMA, which begins several miles from the campground at Cape Lookout State Park, is relatively isolated. Not many people travel the entire length of the spit; however, this area is popular for fishing and crabbing in Netarts Bay. The beach is closed to vehicle driving.

Cape Lookout State Park has 38 full hookup sites, 173 tents sites, 13 yurts, 3 log cabins, 4 group tent camping areas, a hiker/biker camp, and meeting hall. There is also a day-use parking area with beach access in this portion of the park. OPRD has full time staff member stationed at Cape Lookout State Park.

Bandon State Natural Area – Occupied (Coos County)

OPRD owns the Bandon SPMA. Only the Bandon State Nature Area (SNA) is included in this SPMA. The Bandon SPMA is 3.41 miles long.

OPRD has restored approximately 50 acres of habitat at Bandon SNA near the mouth of Two Mile River. Snowy plover have nested at this SPMA as recently as 2009. There were 17 nests producing 15 fledglings on the Bandon portion of the SPMA in 2004. Since 1991, 33 chicks have fledged from Bandon. The significant increase in the number of nests is due in part to the habitat restoration work accomplished by OPRD. OPRD intends to maintain this habitat area, which extends to the south end of the China Creek access parking lot, under the HCP. Bandon is also a popular wintering area for snowy plover.

Predator management activities (lethal control) have been occurring at Bandon and New River since 2002. Park rangers from Bullards Beach State Park provide

periodic maintenance. Recreation at this SPMA is moderate due to the distance from the beach access site. Driving (street vehicles) on the beach is currently allowed on only a small portion of the beach in front of Bandon SNA. Although vehicular access to the beach is blocked, OPRD's Ocean Shore Management Plan recommends that this section of beach open to driving be closed year-round. There is a serious problem with illegal all terrain vehicle (ATV) use, especially near Lower Four Mile at the park's southern boundary. Seasonal dry sand beach restrictions, including no driving, have occurred at Bandon SNA since 1997. The site is popular for dog walking, beach walking, and surf fishing. Some use occurs at night.

5.2.3. Management Approach

OPRD's HCP conservation strategy focuses on implementing snowy plover management activities at up to five OPRD-owned or leased SPMA's, implementing recreational use restrictions at these SPMA's and up to 11 RMA's, and implementing beach management activities on the Ocean Shore.

Implementation of the conservation measures at SPMA's and RMA's will depend on whether a site was occupied by nesting snowy plovers. The definition of occupancy is provided below.

Occupied Snowy Plover Management Areas

An *occupied* SPMA/RMA is an area where there has been at least one nest or nesting attempt in the previous 2 years within the management boundary. RMA's will be considered occupied if at least one nest or nesting attempt has been made in the previous 2 years within the RMA or on adjacent lands. Status of an occupied SPMA/RMA will change to *unoccupied* when nesting or nesting activity has not occurred in the area for two consecutive nesting seasons.

On OPRD-owned or leased lands, once the SPMA is determined to be unoccupied, it will be managed as an *actively managed* unoccupied SPMA.

- Two consecutive nesting seasons refers to nesting between March 15 and September 15 in any 2 consecutive years.

For example:

- Nesting activity occurred in 2002.
- March 15, 2003, through September 15, 2003 – no nesting or nesting activity occurs.
- March 15, 2004, through September 15, 2004 – no nesting or nesting activity occurs.
- September 16, 2004 – management area is considered unoccupied.

A previously identified unoccupied SPMA/RMA will be considered occupied if at least two snowy plovers are present and/or nest scrapes are discovered. The area will then be managed as occupied until July 15th. If a nest is discovered, then the SPMA/RMA will continue to be managed as an occupied area and will be recognized the next year as occupied.

Unoccupied Snowy Plover Management Areas

An *unoccupied* SPMA/RMA is an area that has suitable or potentially suitable habitat and other characteristics that may be attractive to snowy plovers for nesting.

Unoccupied SPMA/RMAs are specific areas that have been identified in this HCP to be managed to attract snowy plovers for nesting. To verify that a SPMA/RMA is unoccupied, surveys will be conducted. If no nests are discovered by July 15th, then the SPMA/RMA will be managed as unoccupied for that given year.

5.3. Conservation Plan

5.3.1. Conservation Measures

To obtain an ITP, OPRD must develop conservation measures that avoid, minimize, or mitigate impacts on snowy plovers resulting from activities it manages on the covered lands. To this end, approximately 48 miles of Ocean Shore have been identified to be managed as SPMA/RMAs as described above unless otherwise amended through implementation of the adaptive management measures. Currently, about 19.8 miles of the Ocean Shore are actively managed for snowy plover through seasonal recreational restrictions.

The proposed conservation measures will restrict some, but not all, of the covered activities that could occur on the Ocean Shore. The activities proposed for restrictions under the HCP are those most likely to adversely affect snowy plovers should they occur in or near nesting sites or near individual birds? The restrictions proposed under the HCP are focused on the SPMA/RMAs because covered activities that occur outside of sites targeted to attract nesting populations are not likely to result in impacts on snowy plovers. However, the covered activities may inadvertently result in harm to snowy plovers if the species is located in the vicinity of the activity. The conservation measures focused on SPMA/RMAs are expected to mitigate for recreational activities that may inadvertently affect snowy plovers somewhere along the 182 miles of Ocean Shore not specifically identified as SPMA/RMAs.

The only exception will occur when a snowy plover nests outside of one of these areas (but within the Ocean Shore on non-federally owned lands) that may be discovered during the annual population monitoring surveys. For these nests a 50-meter radius buffer will be put around the nest to protect the nest from human

disturbance, and an enclosure may be put around the nest, if necessary, to minimize the potential for predation.

Conservation measures are currently being implemented by OPRD and other landowners at specific locations occupied by snowy plovers along the Oregon coast (refer to Section 4.3.4). These measures include yearly monitoring; predator management including use of exclosures; seasonal dry sand beach restrictions; habitat restoration; and law enforcement activities. These measures have helped to increase snowy plover populations in Oregon. Under the HCP, OPRD will commit to continuing these snowy plover conservation and protection measures and/or expand them, as described below, for the entire term of the ITP.

Snowy Plover Management Activities

Snowy Plover Conservation Measures at Snowy Plover Management Areas

OPRD will conduct a number of natural resource related activities on the Ocean Shore related to snowy plover management at up to five of the SPMAs listed above. Conservation measures addressing snowy plovers involve predator management, managing volunteers who conduct public outreach and education to beach users, habitat restoration and maintenance work, and monitoring activities. These activities are described below.

Predator Management

OPRD will contract with the U.S. Department of Agriculture, Animal and Plant Health Inspection Service (APHIS), Wildlife Services or other comparable provider, to perform a variety of snowy plover predator management activities depending on the location; i.e., occupied or managed unoccupied SPMAs. Activities typically begin in February or March and continue into August. Methods used to manage predators may be both lethal (at occupied sites only) and non-lethal. Predator management may entail hazing of corvids, trapping and shooting corvids or mammals, and installing nest exclosures and/or fencing. OPRD staff members will assist the APHIS contractor, as needed.

Public Outreach and Education

OPRD will recruit and train volunteers to serve as docents for public outreach and education efforts on the Ocean Shore for SPMAs. These individuals will be stationed at appropriate beach accesses for at least 20 hours per week, including weekends from May through August. They will be available to advise beach users about any beach restrictions, and to answer questions regarding snowy plovers. Occasionally these individuals will also help clean up the beach by removing litter. Informing and educating the public is an important preventive measure in protecting breeding snowy plovers. OPRD will also provide signage at access points to inform the public of the presence of nesting snowy plovers and the importance of snowy plover protection

measures. Signage will also be installed at SPMA's to indicate the presence of nesting sites and the boundaries of the restricted areas.

Habitat Restoration and Maintenance

Habitat restoration work has been successful in reclaiming snowy plover habitat in Oregon. Restoration efforts have historically included removal of European beachgrass by hand pulling, burning, scarification, spraying with seawater, and removal with a front-end loader, herbicide application, and planting with native vegetation. At some sites, European beachgrass has been bulldozed and the upper beach has been graded, allowing overwash areas to occur during winter storm events, limiting beachgrass regrowth.

Approximately 50 acres of snowy plover habitat in Bandon SNA have been restored by OPRD near the mouth of Two Mile Creek. This restoration effort, begun in fall 2002, resulted in the area being used by snowy plover for nesting during the 2003 to 2006 nesting seasons. Maintenance of this area will continue under the HCP.

Future restoration of as much as 40 acres will be conducted by OPRD at the Columbia River South Jetty SPMA and the Nehalem Spit SPMA, and, if needed, at the Necanicum Spit SPMA. The restoration efforts at Nehalem Spit SPMA, and potentially Necanicum Spit SPMA, will be conducted within 2 years of completing the site management plans if called for in their respective site management plans. Habitat restoration will be conducted within 5 years of completing the site management plan for the Columbia River South Jetty SPMA to accommodate the schedule of ongoing restoration efforts being conducted by the Corps (the lessor), in coordination with OPRD. Removal of European beach grass will be the focus of these restoration efforts, all of which will be completed by a contractor outside of the snowy plover nesting season (primarily from October through December). Effective control of European beachgrass will require ongoing maintenance efforts at each of the SPMA's, and OPRD is committed to maintaining SPMA's for which it has management responsibility so that European beachgrass does not become re-established.

Habitat restoration activities would be conducted within portions of an SPMA consistent with applicable local comprehensive plans and zoning ordinances as specified in each site's management plan.

Monitoring, Reporting, and Enforcement Activities

Monitoring, reporting, and enforcement activities are outlined below. For more information about commitments to monitoring, reporting, and enforcement, see Section 5.2.2, "Goals and Actions Implementing the Conservation Measures."

Detect/Non-detect Monitoring

OPRD staff members will continue to participate in detection/non-detection monitoring activities along the Ocean Shore to determine whether nesting populations of snowy plovers are present. Detect/non-detect monitoring will occur at the beginning of the nesting season (March) and will continue until July 15 as specified in the monitoring protocol. Detection/non-detection monitoring will be conducted at least twice monthly.

The results of the detection/non-detection monitoring surveys will be summarized in the annual compliance report submitted to USFWS, as described below.

Breeding Population Monitoring

OPRD will continue to provide funding in cooperation with several State and Federal agencies for the Oregon Natural Heritage Information Center (ORNHIC) to conduct breeding population monitoring at occupied sites. Should the current funding structure or interagency cooperation fail, OPRD will ensure that this monitoring is continued at OPRD-owned or leased SPMAs.

Breeding population monitoring will be conducted daily during the breeding season (April to September). Monitoring activities will be designed to collect information on snowy plover population, habitat changes, and habitat use. In addition to gathering snowy plover population data, monitors will note and record footprints, vehicle tracks, and animal tracks within the restricted areas. Monitors will also note any humans or animals located within the roped off areas.

The results of breeding population monitoring will be communicated (e.g., via email) to the USFWS once a month. Monthly reports will focus on ongoing concerns, such as recreational use violations or predation at a particular SPMA. This information will also be documented in an annual report provided to the USFWS for review and will be used to determine the effectiveness of the snowy plover conservation management activities and to make adaptive management decisions. A summary of the information collected during breeding population monitoring will also be included in the annual compliance report described below.

Wintering and Breeding Window Surveys

OPRD will continue to provide staff to assist with conducting wintering and breeding window surveys at the currently occupied sites and will provide staff to conduct the surveys at new SPMAs as they become occupied. These surveys will be conducted as indicated in the Monitoring Guidelines for the Western Snowy Plover, Pacific Coast Populations (Appendix J in the Final Recovery Plan [U.S. Fish and Wildlife Service 2007]) and the results will be compiled annually and submitted to USFWS.

Annual Compliance Reporting and Evaluation of the HCP

OPRD will compile and provide an annual report to the USFWS documenting its management actions to date and indicating anticipated efforts for the following year. The following key information will be included in the annual report.

- Summary information collected during the detection/non-detection, wintering and breeding window surveys, and breeding population monitoring efforts, including observations of snowy plover nests outside of managed SPMAs and RMAs. These data should include a summary of trends in the snowy plover breeding population (adults, fledglings, chicks, and eggs).
- Occurrences of take.
- Status of site management plans in development.
- Status of habitat restoration and maintenance efforts at each actively managed SPMA.
- Public outreach and involvement efforts.
- Predator management efforts at SPMAs.
- Recreational use observations in the vicinity of managed nesting areas, including observations by beach rangers, monitors, docents, volunteers, and other State Park staff.
- Anticipated management and conservation efforts for the following annual reporting period.

OPRD will work with the USFWS to develop and implement protocols for assessing the effectiveness of the conservation strategies based in part on the information provided in the annual report. These protocols will be developed in collaboration with other snowy plover partners (Federal, State, and local agencies and private landowners) and will provide a mechanism for the USFWS to evaluate the effectiveness of the HCP on an annual basis. Based on the results of this assessment, OPRD will work with other managers, the USFWS, and the Oregon Department of Fish and Wildlife (ODFW) to implement appropriate adaptive management measures, if necessary, to address declines in snowy plover populations or significant degradation of habitat within SPMAs. (For more information about the adaptive management measures, see Section 5.3.3, “Adaptive Management.”)

In addition to developing and submitting the annual report, OPRD, USFWS, and ODFW will meet every 5 years following issuance of the ITP to evaluate the performance and effectiveness of the conservation measures in minimizing and mitigating effects on snowy plover. This effort will be used to inform necessary adaptive management measures, should it be determined that the covered activities are resulting in a decline in snowy plover populations or degradation of habitat.

Enforcement

OPRD will continue to provide funding for the three full-time beach ranger positions that are currently in place to encourage compliance with beach restrictions. OPRD will also work with the Oregon State Police and/or local law enforcement offices to provide additional enforcement support where necessary and possible. Other OPRD staff members will be available for enforcement on OPRD-owned sites and to assist with monitoring as needed.

Table 5-2. Conservation Measures Specific to OPRD Occupied and Unoccupied Snowy Plover Management Areas

OPRD Occupied Snowy Plover Management Areas
<ul style="list-style-type: none"> ▪ Conduct habitat restoration and maintenance at SPMA's during the non-breeding season, as necessary. ▪ Conduct predator management activities. ▪ Conduct public outreach and education, including providing signage at entrance points. ▪ Conduct detect/non-detect and breeding population monitoring during the nesting season. ▪ Report findings to the USFWS annually and work with snowy plover partners to evaluate the effectiveness of the HCP. Review the program every 5 years. ▪ Continue to provide enforcement of recreational use restrictions in the form of three full time beach ranges, OPRD staff, and support from local law enforcement and State Police as needed. Install signage at all SPMA's to indicate restricted areas. ▪ Complete a draft site management plan at Bandon within one year of ITP issuance for USFWS approval within 6 months of completion of the draft plan.
OPRD Unoccupied Snowy Plover Management Areas
<ul style="list-style-type: none"> ▪ Prepare draft site management plans for the first three actively managed SPMA's within 2 years of ITP issuance for USFWS approval within 6 months of completion of the draft plans. ▪ Conduct public outreach and education; provide interpretive volunteers at selected SPMA's. ▪ Conduct detect/non-detect surveys pursuant to site management plan and USFWS protocols. ▪ Conduct habitat restoration and maintenance work, within 2 to 5 years of site management plan completion, depending on the SPMA, during the non-breeding season pursuant to the site management plan. ▪ Conduct predator management activities (e.g., garbage removal) pursuant to site management plan. ▪ Report finding to the USFWS annually and work with snowy plover partners to evaluate the effectiveness of the HCP. Review the program every 5 years

Snowy Plover Conservation Measures at Recreation Management Areas

In addition to the commitments described above at OPRD-owned or leased SPMA's, OPRD will also review and comment during the development of site management plans at RMA's. In the event that an RMA becomes owned by OPRD and is actively managed for nesting populations of snowy plover, the snowy plover management measures described above will be implemented at that site.

Public Use/Recreation Management

OPRD has management responsibility for recreational activities that occur along Oregon's Ocean Shore. It manages recreation on the State Park units, as well as all areas of the sandy Ocean Shore where snowy plovers could occur. Most recreational

activities are allowed to occur on the Ocean Shore without restrictions. However, a number of activities are currently restricted either seasonally or year-round at various location along the Ocean Shore. These restrictions are intended to protect snowy plover nesting and other natural resource components of the Ocean Shore, and to assure quality beach experiences for the public.

Proposed Recreational Use Restrictions

To minimize the impacts of the covered activities on snowy plovers, OPRD will restrict certain recreation activities on managed SPMA/RMA for the permit term as described below and summarized in Table 5-3 and described below.

Table 5-3. Public Use/Recreational Management Conservation Measures

Occupied Management Areas
<p>For all occupied SPMA/RMA, recreational use restrictions would include the following:</p> <ul style="list-style-type: none"> ▪ Dry sand recreation restrictions will be implemented, including roping off key areas of the beach around nesting sites; ▪ Vehicles prohibited on the dry and wet sand (except in limited circumstances and under permit from OPRD, and for administrative use); ▪ Non-motorized vehicle use prohibited on the dry and wet sand; ▪ Dogs prohibited; ▪ Kite flying prohibited; and ▪ Three full-time beach rangers provided as well as additional support as needed to facilitate enforcement activities.
Unoccupied Actively Managed Areas
<p>For unoccupied SPMA/RMA being actively managed for snowy plover occupancy the following seasonal (breeding) use restrictions will be imposed upon request from the landowner after OPRD coordination with USFWS:</p> <ul style="list-style-type: none"> ▪ Dogs required to be on-leash; ▪ Vehicles prohibited on the dry and wet sand (except in limited circumstances, and under permit from OPRD, and for administrative use); and ▪ Three full-time beach rangers provided as well as additional support as needed to facilitate enforcement activities.

These restrictions will differ depending on whether a site is occupied by nesting snowy plovers. The extent of these restrictions will be developed in consultation with the USFWS through the completion and approval of site management plans. Special considerations specific to implementation of these restrictions at RMA are discussed in greater detail below.

Dog Exercising – Dogs are required to be on leash year-round at all beaches adjacent to State Parks, and either on leash or under voice command within the communities of Seaside, Rockaway, and Cannon Beach. Under the HCP, dogs will be required to be on leash at all unoccupied SPMA/RMA being actively managed for snowy plover occupancy under a plan developed in coordination with the USFWS. Once a SPMA or RMA is occupied, dogs will be prohibited during the nesting season.

Driving and Non-Motorized Vehicle Use – Beach driving includes ATVs/off-highway vehicles (OHVs), ordinary motor vehicles, non-motorized vehicles, and remote-control cars. ATV/OHV riding is allowed on the beach at three locations on the coast: the Sand Lake Recreation Area and on two sections of the Dunes National Recreational Area. None of these areas is adjacent to any of the SPMAs/RMAs, or where snowy plovers are known to occur. All other beach segments are off-limits to ATV/OHV use without a drive-on beach permit or for administrative uses, such as to provide access for emergency and enforcement vehicles, snowy plover monitoring, and land management activities. The HCP does not propose further restrictions on ATV/OHV use.

The Ocean Shore is generally open to street legal motor vehicle access unless otherwise posted. Beaches closed to driving may only be accessed with a vehicle permit issued by OPRD, or in the event of an emergency. Approval of drive-on beach permits and vehicle permits for motorized transport vehicles is contingent on the applicant’s demonstration that such activities would avoid effects on snowy plover.

Driving is currently prohibited on all occupied nesting areas during the breeding season and is prohibited year-round south of Two Mile Creek near Bandon SNA. It is also prohibited in other areas as directed under Oregon Administrative Rules (OAR) (e.g., Sutton Beach, Siltcoos south to south of Tahkenitch, the Tenmile area, Nehalem, etc.). Driving is allowed on the beach at Bandon SNA north of Two Mile Creek but there is no physical access to the beach for driving at this location.

Under the HCP, driving (including non-motorized vehicle use) will be restricted from all managed SPMAs/RMAs during the breeding season whether occupied or not.

Kite Flying – Kite flying is currently unrestricted on the Ocean Shore. Under the HCP, kite flying will be prohibited during the nesting season at occupied SPMAs/RMAs. Similar activities, such as parasailing, hang gliding, and use of remote-control planes, will also be prohibited during the nesting season.

Other Dry Sand Activities – The public uses the dry sand portion of the Ocean Shore for a variety of recreational activities, including pedestrian traffic, nearshore and surf activities, camping, walking, jogging, hiking, picnicking, horseback riding, beach fires, beachcombing, driftwood collection and removal, and many other activities, as listed in Appendix D. These activities and any current restrictions are described in detail in Section 3, “Covered Activities.”

As part of the HCP, these and all other activities will be prohibited from occurring within the dry sand during the nesting season at occupied SPMAs and RMAs. In addition, key areas around nesting sites and access points will be roped off and signage will be provided to indicate the presence of nesting snowy plovers and the applicable recreational use restrictions. These activities will be allowed to continue oceanward of the ropes, which includes the wet sand area and a portion of the dry

sand unless otherwise prohibited by the HCP as described above. Certain activities that are unlikely to occur on the wet sand (e.g., camping, beach fires, and picnicking) would effectively be prohibited from occurring in occupied SPMAs/RMAs during the nesting season. OPRD field staff will install symbolic fencing (ropes and / or signs) around nesting areas at the start of the snowy plover nesting season at OPRD-owned nesting areas, and will provide signs for all SPMAs/RMAs, regardless of ownership. Fencing will be installed in the dry sand area around the nest, but will not extend onto any wet sand areas.

The symbolic fencing will be checked regularly, and maintained as needed. The fencing will be removed after September 15 unless there are no broods present within the nesting area, in which case the symbolic fencing may be removed earlier. This activity will reduce the potential for take from recreational activities such as horseback riding, pedestrian traffic, and other human activities conducted on foot.

Mechanism for Implementing Recreational Use Restrictions on Lands Owned by Other Landowners (RMAs)

Based on OPRD's authority to manage recreational use of the Ocean Shore, OPRD is required to provide authorization to restrict recreational activities within the covered lands at RMAs. As discussed in Section 2, this area extends from the extreme low tide line to the mean high tide line adjacent to Federal lands and from the mean low tide line to the statutory or actual vegetation line, whichever is most landward, on all other lands. Under this HCP, OPRD will potentially implement recreational use restrictions at up to 11 RMAs, which include.

- Bayocean Spit (adjacent to land owned by the Corps);
- South Sand Lake Spit (privately owned);
- Sutton/Baker Beach (currently occupied and adjacent to land owned by the USFS);
- Siltcoos Estuary/Dunes Overlook/Tahkenitch Estuary (currently occupied and adjacent to land owned by the USFS);
- Tahkenitch South (adjacent to land owned by the USFS);
- Umpqua River North Jetty (adjacent to land owned by the USFS);
- Tenmile Estuary (currently occupied and adjacent to land owned by the USFS);
- Coos Bay North Spit (currently occupied and adjacent to land owned by the Corps and BLM);
- New River (currently occupied and owned by Curry County and private individuals, adjacent to land owned by BLM);
- Elk River (privately owned); and
- Euchre Creek (privately owned).

If an RMA becomes occupied, but a site management plan does not exist, OPRD will implement the recreational use restrictions described above within the covered lands. OPRD will issue and continue to enforce recreational use restrictions within the full extent of the RMA until an agreement is reached between USFWS and the landowner and/or a site management plan is developed and OPRD is notified of any changes that may modify recreational use restrictions to a more focused area.

In the event that a USFWS-approved site management plan has been developed, OPRD will implement recreational use restrictions as directed by the site management plan. If an RMA is unoccupied, OPRD will only implement recreational use restrictions at the request of the landowner and after consultation and collaboration with USFWS and ODFW.

OPRD will also seek to modify the Oregon State Rule of Ocean Shore Management to provide an ongoing mechanism for recreational use restrictions.

OPRD will provide supervision, enforcement, and ropes and/or signage at RMAs because these actions cannot legally be implemented within the RMA by the landowner. For RMAs adjacent to Federal land, the Federal landowner will install ropes and/or signage on their lands.

Protections for Nests Outside of Targeted Areas

If a snowy plover should nest outside of an occupied or unoccupied SPMA or RMA within the covered lands, OPRD will install fencing around the individual nest and will consider installing a nest enclosure after consultation with USFWS. Specifically, OPRD will install a 50-meter-radius roped buffer around the nest that allows access along the wet sand, and will determine if use of an enclosure to protect the nest from predation is in the best interest of the nest.

The fenced buffer will consist of ropes affixed to light poles in the dry sand area only (wet sand areas will not be roped off). Signs will be located at intervals around the buffer informing the public of the restriction. No other active management will occur in these areas, including no additional protection of broods (chicks).

Many of these areas receive high recreational use and the probability of snowy plover nesting outside of SPMA/RMA is quite low. However, if snowy plovers nest on OPRD lands outside an SPMA consistently and predictably (3 years in a row), and there is nesting success at least 2 of the 3 years, OPRD will consult with the USFWS to consider adding the site to the list of SPMA. For more information about this adaptive management measure, see Section 5.3.3, “Adaptive Management Measures.”

Enforcement of Recreational Use Restrictions

OPRD will also continue to provide three full-time beach rangers to enforce compliance with all Ocean Shore and State Park rules, including beach use

restrictions designed to protect snowy plover. Additional senior State trooper support will also be solicited, where needed.

Adequacy of Recreational Use Restrictions at Unoccupied SPMAs

Recreational use restrictions at unoccupied SPMAs are limited to prohibitions on the use of vehicles and a requirement that dogs be on leash during the breeding season. Discussions between OPRD and the snowy plover working group revealed that lack of adequate habitat is considered the limiting factor at the Columbia River South Jetty and Nehalem SPMAs, and that predator management and enforcement of current recreational use restrictions are the limiting factors at the Necanicum SPMA. It was also noted that if vehicle use was prohibited and dogs were kept on leash, then snowy plovers would likely occupy the new sites. Thus, OPRD believes that placing restrictions on other recreational activities is unnecessary. The site management plans that OPRD develops in coordination with USFWS will specifically provide for habitat restoration, predator management, public outreach and education, and monitoring, reporting, and enforcement, as appropriate for each SPMA, to facilitate snowy plover occupancy. Site management plans must be approved by the USFWS.

Beach Management

All beach management activities, including marine mammal strandings and removals, public safety, external and internal law enforcement, and response to boat strandings, are conducted in a manner that attempts to avoid take of snowy plover. OPRD will consult with USFWS regarding any of these activities that will occur in an occupied or unoccupied SPMA prior to conducting the activity, unless there is an emergency situation. Emergency situations are considered to be unforeseen circumstances, which are addressed in Section 7 of this HCP.

5.3.2. Goals and Actions Implementing the Conservation Measures

Snowy Plover Management

Habitat Restoration

Goals: Increase the amount and quality of available habitat for nesting and wintering snowy plovers at OPRD-owned SPMAs.

Historically, snowy plovers nested and/or wintered at more than 21 sites along the Oregon coast. In Oregon, snowy plover nest primarily along the sandy beaches or spits. In many cases, those beaches were much wider than they are today, with little adjacent foredune. Much of the snowy plover's habitat has been lost due to the introduction and spread of European beachgrass. With the removal of this invasive species (and others), and the re-contouring of dune areas (including lowering of the

foredune where necessary), snowy plovers may once again begin to use these areas for nesting and wintering activities.

Habitat restoration efforts have proven successful at restoring and maintaining snowy plover habitat at currently occupied SPMAs/RMAs. However, some level of habitat restoration and maintenance is needed at most of these areas.

Action: This management action involves restoring coastal dune habitat through the removal of invasive species (e.g., European beachgrass and gorse) as well as lowering the foredune to allow storm wave overwash to occur. This work will be done in areas that will not impact existing structures or cultural resources.

The acreage and location of habitat restoration efforts will be specified in a site management plan to be developed by OPRD and approved by the USFWS for each SPMA with a maximum of 40 acres at each currently unoccupied SPMA (see Appendix A for a general outline of site management plans). Restoration work will begin within 2 years following the completion and approval by USFWS of each SPMA site management plan except for the Columbia River South Jetty SPMA owned by the Corps but leased by OPRD. For this SPMA, OPRD will work with the Corps and Clatsop County to obtain the necessary approval and consent to do restoration work according to the Corps schedule. Restoration work will begin within 5 years following the completion and USFWS approval of the site management plan.

Habitat Protection

Goal: Protect habitat or potential habitat in OPRD SPMAs by limiting the development of new facilities (including trails) located in an SPMA.

Action: Whenever OPRD staff members desire to develop a facility within an OPRD SPMA boundary, OPRD staffers in cooperation with ODFW and USFWS will inspect the area, review the proposed project, and determine whether the development could potentially impact snowy plover. No development that will increase the capacity of existing facilities will occur within a SPMA.

Predator Management

Goal: Improve nesting success of snowy plover by reducing predator populations.

Predators are one of the primary causes for the loss of snowy plover adults, eggs, and chicks. Predator management efforts began in 1999 and have increased in intensity over the last few years. In 2001, an interagency Predator Management Plan was prepared for the snowy plover. From this plan, an annual action plan will be prepared that addresses predator management activities for the upcoming breeding season at the occupied SPMAs/RMAs.

Predator management activities include, but are not limited to, the following lethal and non-lethal control methods:

Non-lethal Control

- Support, increase or improve trash management;
- Purchase and install special trash receptacles that prevent animal access to trash;
- Relocate live trapped animals (abandoned domestic animals, such as cats and dogs) to nearby animal shelters;
- Employ aversion methods that harass or deter predators such as electronic calls, vehicle harassment, repellants, effigies, electrified or non-electrified exclusionary nest site fencing and exclosures, and habitat removal;
- Prohibit fish cleaning on the beach;
- Remove beached marine mammals and seabirds; and
- Provide public education.

Lethal Control

- Shooting;
- Euthanizing;
- Snaring/Trapping;
- Denning;
- Employing avicide;
- Egg Oiling;
- Using Snap Traps; and
- Performing rodenticide operations.

The effects on snowy plovers of all chemicals used by OPRD for lethal control of predators were analyzed by USFWS in a Biological Opinion published in 2001 (U.S. Fish and Wildlife Service 2001b). Future changes in chemical applications and the potential effects on snowy plover would be addressed through reinitiation of consultation with the USFWS. OPRD or its contractors are required to comply with the terms and conditions of that Biological Opinion, or any amendments to that Biological Opinion, for all predator control activities undertaken in support of the HCP conservation measures.

Predator management activities will vary at each site depending on the type of predators present. The site management plans will address what predator species are present, the extent of the problem, and what efforts will be undertaken to address the problem. Corvids will be the most difficult predator to manage. At unoccupied

SPMAs/RMAs, one of the primary predator management goals is the removal of garbage, which may attract predators to the site.

Action: Continue to participate in the development and implementation of annual predator management action plans. OPRD will provide financial assistance for predator management activities on OPRD SPMAs for which it has snowy plover management control, including full funding for garbage removal at OPRD unoccupied SPMAs and implementation of the annual predator management action plans for all occupied OPRD SPMAs. In addition, OPRD will facilitate predator management efforts through a cooperative agreement with APHIS or a similar organization, for all lethal control methods, and will continue to renew the agreement as necessary based on discussions with USFWS. Exclosures will continue to be used where they are necessary and appropriate.

Monitoring and Reporting

Monitoring is an important component of any program involving the recovery of a listed species or for habitat management purposes. Baseline data established before management actions begin will serve as the starting point for knowing whether goals and objectives are being met. Three types of monitoring will occur: wintering and breeding window surveys, snowy plover breeding population monitoring, and detect/non-detect monitoring.

Wintering and Breeding Window Surveys

Goal: Continue to survey for wintering and breeding populations.

Action: OPRD will continue to provide staff to assist with conducting wintering and breeding window surveys at the currently occupied sites and will provide staff to conduct the surveys at new SPMAs as they become occupied. These surveys will be conducted as indicated in the Monitoring Guidelines for the Western Snowy Plover, Pacific Coast Populations (Appendix J in the Final Recovery Plan [U.S. Fish and Wildlife Service 2007]) and the results will be compiled annually and submitted to USFWS.

Snowy Plover Breeding Population Monitoring

Goal: Determine the nesting success of the breeding population of snowy plovers in occupied SPMAs.

Several State and Federal agencies participate in a joint effort to monitor the breeding population of the snowy plover along the Oregon Coast. This monitoring occurs each year beginning around April 1 and continuing through September 15. Each of the participating agencies, including OPRD, ODFW, USFWS, BLM, and USFS, commit financial resources for monitoring activities conducted by ORNHIC.

Action: OPRD will continue to contribute to the joint funding of annual breeding population monitoring activities of the snowy plover for occupied SPMAs for the

25-year permit term. If the joint funding effort ceases for some reason, OPRD will conduct its own breeding population surveys following accepted USFWS protocols at occupied SPMAAs.

Information from the breeding bird monitoring will be reported both monthly and annually to the USFWS by ORNHIC, and will be used to determine whether the snowy plover numbers are increasing or decreasing. The information will also be used to infer possible reasons for any increase or decrease along the Oregon coast and to assess whether additional habitat restoration, predator management, law enforcement, and/or public outreach efforts are needed. A summary of the information collected during breeding population monitoring will also be included in the annual compliance report submitted by OPRD to USFWS.

Snowy Plover Detect/Non-Detect Monitoring

Goal: Determine whether snowy plovers are dispersing to unoccupied SPMAAs.

Action: OPRD will perform regularly scheduled USFWS-approved detect/non-detect monitoring at unoccupied OPRD SPMAAs pursuant to an established site management plan for the area. The frequency of the monitoring will be set forth in the site management plans established by OPRD, but will occur twice monthly during the nesting season. Detect/non-detect monitoring will continue until July 15 as described in the monitoring protocol. During these surveys, the monitor will record existing habitat quality, predator presence or signs of their presence, recreation use, and snowy plover food availability. If detected birds begin nesting at these locations, breeding population surveys will be implemented.

A summary of the information collected during detect/non-detect monitoring will be included in the annual compliance report submitted by OPRD to USFWS.

Annual Compliance Reporting and Evaluation of the HCP

Goal: To provide the USFWS with an annual report on management actions and conservation measures implemented by OPRD in accordance with the HCP. This information will be used by the USFWS to determine whether OPRD has been implementing the management actions required and whether the conservation measures in the HCP are effective.

Action: OPRD will compile and provide an annual report to the USFWS with the following information, including but not limited to:

- Summary of the detect/non-detect data collected over the course of the year;
- Summary of the breeding population data collected over the course of the year;
- Summary of wintering and breeding window survey data collected over the course of the year;
- Observations regarding non-compliance of recreational use restrictions;

- Take of eggs, nests, and adults;
- Snowy plover management activities conducted for the year, including but not limited to predator management activities, habitat restoration and maintenance, and public outreach and education efforts; and
- Anticipated management and conservation efforts for the following annual reporting period.

OPRD will work with the USFWS to develop and implement protocols for assessing the effectiveness of the conservation strategies based in part on the information provided in the annual report. These protocols will be developed in collaboration with other snowy plover partners (Federal, State, and local agencies and private landowners) and will provide a mechanism for the USFWS to evaluate the effectiveness of the HCP on an annual basis. Based on the results of this assessment, OPRD will work with other managers, the USFWS, and ODFW to implement necessary and appropriate adaptive management measures to address declines in snowy plover populations or significant degradation of habitat within SPMA's (for more information about the adaptive management measures, see Section 5.3.3, "Adaptive Management").

In addition to developing and submitting the annual report, OPRD will review, with the USFWS and ODFW, the performance and effectiveness of the implementation management actions described in the HCP and any site management plan. This review will be conducted every 5 years following issuance of the ITP.

Public Outreach and Education

Goal: Inform coastal park staff, volunteers, and the general public of the ecology of the snowy plover, the significance of the Oregon's sandy beaches as habitat for the snowy plover and the species' recovery, the importance of OPRD's monitoring and habitat restoration and protection efforts, the role predators play, and the importance of working together to conserve the species and its habitat.

The public outreach and education efforts needed for each OPRD SPMA will vary. Specific outreach and education efforts will be identified in the site management plans for each area.

Actions: This goal will be achieved through the measures described below.

Coordination with other Agencies

OPRD will continue to work with other State and Federal agencies in the development of outreach and educational materials to ensure a consistent message and allow for cost efficiencies. Efforts in the past have included the development of a snowy plover "Share the Beach" brochure, table tents, bookmarkers, and interpretive panels.

Department Staff – Education and Interpretation

Provide training on the requirements of the HCP to all State Parks staff assigned to coastal parks and programs, and to all related volunteers. Park staff members will be trained on the natural history and identification of snowy plover so they can field questions from visitors.

Provide Visitor Information

The success of the snowy plover management measures depends on the support of the people who visit Oregon's beaches. Park visitors need to be informed about the plight of the snowy plover and the part the visitors themselves play in protecting the species.

OPRD will work with the Oregon Western Snowy Plover Working Team in coordinating outreach and education efforts. OPRD will undertake the following activities:

a) Interpretive Programs

Continue to assist with implementation of interpretive programs about snowy plovers at Bullards Beach, Honeyman, Nehalem Bay, and Sunset Bay State Parks each year. Additional programs will be offered at other State park sites, including Fort Stevens State Park, Nehalem Bay State Park, Cape Lookout State Park, and Harris Beach State Park. Programs in these areas will focus on shorebirds in general and snowy plovers in particular. OPRD will include discussions of snowy plover ecology in nature talks and walks, campfire programs, and at other direct public contact events.

b) Webpage

Develop a snowy plover webpage that contains the HCP, the management action summary matrix, the list of SPMA/RMA beaches, maps of these areas, and the efforts OPRD is currently undertaking to help recover the snowy plover. Links to other agencies that manage snowy plover habitat will be provided.

c) Brochures

Distribute copies of "Share the Beach" brochure to SPMA visitors. In addition, OPRD will prepare a snowy plover brochure describing OPRD efforts in snowy plover conservation and recovery and how park visitors can help. These brochures will be made available at all coastal State parks. OPRD will also prepare a brochure for occupied OPRD SPMA's featuring an aerial photo showing the areas with beach use restrictions, a brief description of snowy plover biology, an explanation of why OPRD is working toward snowy plover conservation and recovery, and a list of alternative beaches for recreation use.

d) Signs/Kiosks

Signage to be implemented as part of the conservation plan will include:

1. Informational signs at access points – OPRD will develop an information sign to be installed at SPMA State park kiosks at beach access points.
The purpose of these signs will be to inform the public of the presence of nesting snowy plovers, the applicable recreational use restrictions, and the importance of snowy plover protection measures.
2. Recreational use restriction signs at SPMAs/RMAs – OPRD will install signage at SPMA/RMA boundaries to indicate the type and extent of the dry sand restrictions.
3. Carsonite signs at nesting locations – In locations outside of SPMAs/RMAs where snowy plovers have been observed nesting, OPRD will work with the USFWS to install signage as appropriate to indicate the presence of nesting snowy plovers and the applicable recreational use restrictions.

e) Park Reservations

Many coastal campsites are reserved by telephone. Receipts are sent to each person making a reservation. For those located in areas where there are beach restrictions, a statement will be included on the receipt notifying individuals of the beaches with use restrictions and requesting their cooperation in adhering to any restrictions.

f) Volunteers

Volunteers will continue to serve at occupied OPRD SPMAs. OPRD has volunteers who contribute 20 hours per week from May through August at the China Creek parking lot at Bandon SNA. These volunteers provide information to visitors about the purpose for beach restrictions and the plight of snowy plovers. They also record information on the type of recreation use that is occurring, document whether anyone is violating the restrictions, and report observed violations to the USFWS. As additional OPRD SPMAs become occupied, OPRD will provide volunteers to distribute and record the information being provided at Bandon SNA.

g) Interpretive Panels

Bandon SNA has an interpretive panel addressing snowy plover nesting and habitat protections. This panel will be replaced as needed. Similar interpretive panels will be prepared and installed for other OPRD SPMAs that become occupied.

Public Outreach

Public outreach efforts are important so the public understands the needs of the snowy plovers and the efforts OPRD is undertaking to assist in recovery of this species. OPRD will provide programs and/or information about the snowy plover to community groups, chambers of commerce, school groups, and recreational enterprises (boat charters, etc.) where the opportunity arises.

Coordination

Goal: Improve efficiencies and cost of implementation by working with other agencies through cooperative efforts.

Action: Work with land and resource managers on coordinating efforts pertaining to predator management, habitat restoration, monitoring, and public outreach and education on an annual basis and report on these efforts to the USFWS, until no longer deemed necessary by the USFWS.

Public Use/Recreation Management

Recreation Management

Goal: Reduce disturbance to snowy plover by recreational users.

Certain recreational activities have a greater potential threat to snowy plover and their habitat than other types of recreation activities. For instance, dogs off leash have the potential to flush snowy plovers off their nest or kill chicks. If the adult snowy plover is off the nest for too long a time, heat, cold, wind, or predators may kill eggs or chicks.

Action: OPRD will implement the recreational use restrictions outlined in Section 5.3.1 at SPMAs and RMAs. OPRD will also seek to modify the Oregon State Rule of Ocean Shore Management to provide an ongoing mechanism for recreational use restrictions.

OPRD will install symbolic fencing (ropes and /or signs) around the nesting areas in occupied OPRD SPMAs. Signs will be installed by OPRD at the boundaries of restricted areas in RMAs and roping will be installed by OPRD on RMAs that are not adjacent to Federal lands. No recreational use will be allowed within the roped off and/or signed areas. Dogs, kite flying, non-motorized vehicle use, and driving will also be restricted along the Ocean Shore outside the roped off areas. These restrictions will be strictly enforced (see “Law Enforcement/Beach Patrol” below).

Law Enforcement/Beach Patrol

Goal: Ensure that the public adheres to OPRD rules and regulations governing Oregon’s sandy beaches.

Action: OPRD will continue to make a minimum of three full-time staff positions available (one each for the north, central, and south coast) to patrol the beach to inform and educate beach users of park rules governing the Ocean Shore, and about beach resources, including the snowy plover. Where necessary (i.e., where violations occur), warnings and/or citations will be issued. Additionally, OPRD will take proactive action to contract with the Oregon State Police and/or local law enforcement offices to provide additional enforcement support where necessary and possible.

Beach Management

Beach Access Modifications

Goal: Reduce the potential for disturbance of snowy plover by moving beach access points located on OPRD properties within or near SPMAAs while continuing to provide public beach access on the Oregon coast.

Action: No new access points will be created within SPMAAs except where necessary to re-routing an existing access point to move it away from a snowy plover nesting area.

Adaptive Management

Goal: Allow for changing conditions or circumstances and new information in determining management actions at OPRD SPMAAs.

Action: Adaptive management is a framework that seeks to focus research on specific management questions about the snowy plover and then refine the management approach based on what is learned. Adaptive management provisions in this HCP are considered in Section 5.3.3, “Adaptive Management.” Future research efforts to inform those adaptive management measures will be undertaken through joint efforts with the other entities involved in snowy plover recovery efforts including USFS, BLM, USFWS, and ODFW. This information will assist in further refining the requirements of the HCP and will be implemented through the adaptive management framework.

During the annual reporting meetings, OPRD and USFWS will review whether snowy plover recovery efforts (e.g., habitat restoration, predator management, or recreational restrictions) are adequate. Potential changes in management because of the changing status of the snowy plover are discussed in Section 5.3.3, below.

5.3.3. Adaptive Management

Adaptive management is a process that allows resource managers to adjust their actions to reflect new information or changing conditions in order to reach a goal, in this case, minimization of take and conservation of the snowy plover, while minimizing recreational impacts. OPRD will use adaptive management processes to minimize take related to management of Oregon’s beaches and to ensure the long-term survival of the snowy plover along the Oregon coast.

Adaptive management will allow OPRD to minimize the uncertainty associated with gaps in scientific information or biological requirements. Information used in the adaptive management process will come from the activities described in Sections 5.3.1 and 5.3.2 of the HCP and from other research as it becomes available. Monitoring data will be analyzed to determine if the goals of this HCP are being met.

If the management activities are not producing the desired results, adjustments will be made to the HCP by consensus agreement between OPRD and USFWS, as described below.

Redefining Management Action

Sections 5.3.1 and 5.3.2 describe management actions to minimize and mitigate for take. If biological monitoring reports indicate consistent population declines in snowy plovers along the Oregon coast when compared to population numbers provided in previous biological monitoring reports for Oregon, then OPRD and USFWS will meet and confer to determine if inadequate management actions by OPRD are responsible for or are contributing to population declines. If inadequate management actions on the part of OPRD are determined to be responsible (in whole or in part) for such population declines, or if new techniques are available for more effectively implementing management actions, then OPRD will revise the management actions in this HCP, as agreed upon by OPRD and USFWS, as soon as practicable.

Snowy Plovers Nesting Outside Snowy Plover Management Areas

Although OPRD believes that the SPMA and RMA identified in the HCP represent the best current and potential snowy plover habitat and are adequate for conservation purposes, snowy plovers may nest outside the SPMA and RMA. If snowy plovers are discovered to nest outside a SPMA or RMA, during the population surveys conducted annually, the nest area will be exclosed (unless the USFWS determines that exclosures are unnecessary or detrimental to snowy plovers) and will receive symbolic fencing (ropes) to establish a 50-meter radius buffer around the nest while nests are active.

However, if snowy plovers begin to nest on OPRD-owned or leased lands outside a SPMA consistently and predictably (3 years in a row), and there is nesting success at least 2 of the 3 years, OPRD will consult with USFWS to add the site to the list of SPMA with the following conditions:

- The SPMA is considered to have potential to contribute to long-term recovery of the species through its size, location and suitability;
- A SPMA not currently being used by snowy plovers may be dropped in exchange for the new site that is occupied;
- The maximum number of occupied SPMA managed by OPRD will be limited to five;
- SPMA additions or “trades ” will require agreement between OPRD and USFWS, and will be made in collaboration with ODFW; and

- Adding the site to the list of SPMAs will not affect OPRD's ability to manage recreation along the Ocean Shore (i.e., management activities will be conducted as described above for occupied SPMAs).

Success of Nest Exclosures

Through monitoring efforts, OPRD will evaluate the relative success of nest exclosures in preventing predators from destroying nests and eggs. OPRD will meet annually with USFWS to review nest exclosure monitoring results to determine the relative benefits on a site-by-site basis. Continuing evaluation of the effectiveness of nest exclosures may result in elimination of the exclosure, timing changes for application of the exclosure, and/or design changes. If design adjustments are needed to exclude predators, OPRD will work with USFWS and will make the design adjustments, provided such adjustments will not result in significant impacts to existing legal recreational activities.

If nest exclosures are no longer required for nests outside of SPMAs and RMAs, OPRD will still install signs and 50-meter radius buffers around the nest during the nesting season.

Failure of Managed Unoccupied SPMAs

Although certain conservation measures will be implemented at the currently unoccupied SPMAs as they become actively managed to attract snowy plover, it is possible that the sites may not become occupied. As such, OPRD and USFWS will review annually whether snowy plover recovery efforts (e.g., habitat restoration, predator management, or recreational restrictions) are adequate to facilitate snowy plover occupancy. Following the review, OPRD and USFWS will cooperatively determine what adjustments should be made to the plan and management actions to improve the potential for successful occupancy at these SPMAs.

If none of the initial three OPRD SPMAs identified for active management for snowy plover occupancy are occupied after 5 years from the active management start date, (i.e., when the site management plan has been completed) and no RMAs owned and managed by other landowners are being managed for occupancy, then OPRD will begin active management for occupancy at Netarts Spit.

If the condition above is triggered, OPRD will complete a site management plan for Netarts Spit within 1 year, and begin managing the Netarts Spit SPMA for snowy plover occupancy. OPRD will continue to manage the original three SPMAs for snowy plover occupancy.

RMA Exchange for SPMA

RMA Not Being Managed for Occupancy

If OPRD purchases a RMA that was not being managed for occupancy and commits to manage it as a new SPMA for snowy plover management, the new SPMA will be managed instead of the Netarts Spit SPMA. This condition would be triggered only if the existing SPMA targeted for exchange is unoccupied. Under this scenario, if a site management plan does not exist for the newly purchased SPMA, OPRD will develop one within 1 year of purchase, USFWS will evaluate and make a decision about the plan within 6 months following plan completion, and begin managing the new SPMA for snowy plover occupancy the following nesting season. The exchange would only occur after consulting with USFWS and ODFW to determine whether the new SPMA has greater potential for occupancy than the SPMA being exchanged.

RMA Being Managed for Occupancy

If OPRD purchases a RMA that was being managed for occupancy and commits to continuing to manage this new SPMA, the new SPMA will be managed instead of the Netarts Spit SPMA. This condition would be triggered only if the existing SPMA targeted for exchange is unoccupied. Under this scenario, OPRD will continue management of the RMA on purchase and will review the original site management plan within 1 year of purchase, revise the plan as necessary, and begin managing the new SPMA for snowy plover occupancy. The exchange will only occur after consulting with USFWS and ODFW to determine whether the new SPMA has greater potential for occupancy than the SPMA being exchanged.

5.4. Summary of Conservation Measures

5.4.1. Snowy Plover Management

OPRD, USFWS, and other State and Federal natural resource agencies collectively identified 16 specific areas along the Oregon coast as important to snowy plover conservation and recovery. These areas were targeted for snowy plover conservation and recovery efforts based on their potential to provide quality habitat in sufficient amounts at geographically strategic locations that are believed to facilitate a well-distributed sustainable population. The areas owned or leased by OPRD are identified as SPMA's. Those sites belonging to other landowners are identified as RMA's. The conservation measures to be implemented at SPMA's and RMA's are summarized in Tables 5-4 and 5-5, respectively.

Snowy Plover Conservation Measures at Snowy Plover Management Areas

OPRD will manage its SPMA's for snowy plover occupancy according to a USFWS-approved site management plan. A combination of activities will be used including predator management, protection of nesting areas from the recreating public, habitat restoration and maintenance as needed, public outreach and education, and a program for monitoring the breeding population.

Of OPRD's five SPMA's, one area, Bandon SNA, is already occupied. OPRD will develop a draft site management plan within 1 year of ITP issuance for USFWS approval within 6 months of completing the draft plan. The site management plan will be implemented the following nesting season after USFWS approval. OPRD will continue to protect nesting areas at Bandon during the breeding season (March 15 through September 15) with symbolic fencing designed to minimize impacts from human activities on the beach. OPRD will also continue to implement natural resource management activities as described in the site management plan, including habitat maintenance of as much as 50 acres.

Of the four remaining unoccupied OPRD SPMA's, OPRD will manage three of these areas (Columbia River South Jetty, Necanicum Spit, and Nehalem Spit) as soon as site management plans are developed (all three draft plans will be developed within 2 years of permit issuance for USFWS review within 6 months of completion of the draft plans). These areas are believed to have higher potential for snowy plover occupancy than Netarts Spit based on existing habitat quality, area size, and geographic location. The site management plans will be put in place the following nesting season after USFWS approval.

Establishment of an SPMA at Netarts Spit is believed by OPRD and USFWS field staff to be far less important to snowy plover recovery than most of the remaining targeted snowy plover areas, known as RMAs. OPRD will manage Netarts Spit for occupancy, based on a site management plan developed with the USFWS, if one of the following conditions exist: 1) there are fewer than three unoccupied SPMA's and/or targeted snowy plover RMAs, combined, being managed for occupancy by OPRD and other landowners. (This situation could occur either because most of the SPMA's and other targeted areas are occupied or because some landowners are not contributing to recovery of snowy plover by managing their unoccupied targeted snowy plover areas for occupancy.); or 2) after 5 years of OPRD management, none of the SPMA's have become occupied.

Snowy Plover Conservation Measures at Recreation Management Areas

In addition to the commitments described above at OPRD-owned or leased SPMA's, OPRD will also review and comment on the development of site management plans

at RMAs. In the event that an RMA becomes owned by OPRD, the snowy plover management measures described above will be implemented at that site.

5.4.2. Public Use/Recreation Management

In addition to implementing the snowy plover management measures described above at OPRD-owned or leased SPMA, OPRD will implement recreational use restrictions as described below. Implementation of the recreational use restrictions at SPMA and RMA will depend on whether a site was occupied by nesting snowy plovers or being actively managed to attract nesting populations.

Occupied SPMA/RMA

OPRD will implement the following recreational restrictions at occupied SPMA/RMA during the breeding season (March 15 through September 15) within the covered lands. The geographic extent of these restrictions will be developed in consultation with the USFWS during preparation of site management plans.

- Prohibition of motorized (except for administrative and permitted uses) and non-motorized vehicles on SPMA beaches;
- Prohibition of dogs on wet and dry sand;
- Prohibition of kite flying on wet and dry sand;
- Prohibition of activities within the dry sand area of the beach;
- Erection of fences, ropes, and /or signs to define breeding areas in the dry sand; and
- Provision of three full-time beach rangers and additional senior troopers as needed for enforcement of State Park and Ocean Shore regulations, including restrictions to protect snowy plover populations.

Unoccupied SPMA/RMA

OPRD will implement recreational restrictions during the breeding season (March 15 through September 15¹) and enforcement activities in SPMA/RMA unoccupied by snowy plovers as follows:

- Prohibition of motorized (except for administrative and permitted uses) and non-motorized vehicles on SPMA/RMA beaches; and
- Requirement that dogs be on leash on SPMA/RMA beaches.

¹ OPRD may lift the restrictions early if no nesting has occurred by July 15 at a site.

Special Considerations for Recreational Use Restrictions at Recreation Management Areas

Based on OPRD's authority to manage recreational use of the Ocean Shore, OPRD is required to provide authorization to restrict recreational activities at RMAs. Under this HCP, OPRD will implement recreational use restrictions at potentially up to 11 RMAs as the areas become occupied.

The 11 areas include the five RMAs that currently support nesting populations of snowy plover (Sutton/Baker Beach; Siltcoos Estuary/Dunes Overlook/Tahkenitch Estuary; Tenmile Estuary; Coos Bay North Spit; and New River), and six RMAs that may be managed in the future by the appropriate landowner (Bayocean Spit, South Sand Lake Spit, Tahkenitch South, Umpqua River North Jetty, Elk River, and Euchre Creek).

Restrictions on recreational use in these areas are summarized in Table 5-5. The specific restrictions to be implemented depend on the presence of nesting populations of snowy plovers when the permit application is approved.

In the event that a USFWS-approved site management plan has been developed, OPRD will implement recreational use restrictions as directed by the site management plan. If an RMA is unoccupied, OPRD will only implement recreational use restrictions at the request of the landowner and after consultation with USFWS and collaboration with ODFW.

If an RMA becomes occupied, but a site management plan does not exist, OPRD will implement the recreational use restrictions within the covered lands. OPRD will issue and continue to enforce recreational use restrictions within the full extent of the RMA until an agreement is reached between USFWS and the landowner and/or a site management plan is developed and OPRD is notified of any changes that may modify recreational use restrictions to a more focused area. OPRD will also seek to modify the Oregon State Rule of Ocean Shore Management to provide an ongoing mechanism for recreational use restrictions.

OPRD will also work with County and private landowners of RMAs to provide supervision, enforcement, and signage at their RMAs because such restrictions (ropes, signs, enforcement) cannot be implemented by a private landowner without OPRD approval.

Protections for Nests Outside of Targeted Areas

If a snowy plover should nest outside an occupied or unoccupied SPMA or RMA on the covered lands, OPRD will install fencing around the individual nest, and will consider installing a nest enclosure after consultation with the USFWS. Specifically, OPRD will install a 50-meter radius roped buffer around the nest that allows access

along the wet sand, and will determine if use of an enclosure to protect the nest from predation is in the best interest of the nest.

5.4.3. Beach Management

All beach management activities, including marine mammal strandings and removals, public safety, external and internal law enforcement, and response to boat strandings, will continue to be conducted in a manner that attempts to avoid take of snowy plover. OPRD will consult with USFWS regarding any of these activities that will occur in an occupied or unoccupied SPMA or RMA prior to conducting the activity, unless there is an emergency situation. Emergency situations are addressed in Section 7, “Implementation, Organization, and Structure,” of this HCP.

Table 5-4. Summary of Conservation Measures to be Implemented at Snowy Plover Management Areas (SPMAs)

Currently Occupied SPMAs, Parks Owned/Leased by OPRD	Proposed Management Actions In Occupied SPMAs
Bandon SNA	<p>The site management plan will define the area of restricted recreation within the SPMA. Following USFWS approval of an OPRD SPMA site management plan:</p> <p>Seasonal Recreation Restrictions (March 15 – September 15)</p> <ul style="list-style-type: none"> ▪ Vehicles (motorized and non-motorized) prohibited on beach or as otherwise restricted by existing OAR, except for administrative use. ▪ Dogs and kite flying prohibited. ▪ All other recreational activities directed to the wet sand (fences, ropes, and/or signs will define the dry sand breeding areas to be avoided). ▪ Restrictions possibly lifted early if no nesting by July 15. <p>Other Site Management Plan Commitments</p> <ul style="list-style-type: none"> ▪ Habitat restoration and maintenance per site management plan. ▪ Predator management. ▪ Public interpretation and education. ▪ Monitoring, reporting, and evaluation activities. ▪ Continued provision of three full-time beach rangers by OPRD, as well as State Park staff, local law enforcement, and additional senior State troopers, as needed, to facilitate enforcement activities. ▪ Site management plan prepared within 1 year of ITP.
Columbia River South Jetty (Corps/OPRD)	<p>Site management plan will define the area of restricted recreation within the SPMA. Following USFWS approval of an OPRD SPMA site management plan:</p> <p>Seasonal Recreation Restrictions (March 15 – September 15)</p>
Necanicum Spit	<ul style="list-style-type: none"> ▪ Dogs required to be leashed. ▪ Vehicles (motorized and non-motirzed) prohibited or as otherwise directed by existing OAR, except for administrative use.
Nehalem Spit	<ul style="list-style-type: none"> ▪ Restrictions possibly lifted early if no nesting by July 15.
Netarts Spit	<p>Other Site Management Plan Commitments</p> <ul style="list-style-type: none"> ▪ Habitat restoration, per site management plan. ▪ Non-lethal predator management. ▪ Public interpretation and education. ▪ Performance of detect/non-detect monitoring for snowy plover presence and nesting activity twice monthly. ▪ Preparation of site management plans by OPRD within 2 years of obtaining an ITP for the following OPRD SPMAs: Columbia River South Jetty, Necanicum Spit, and Nehalem Spit. ▪ Management of a new site for snowy plover occupancy when one of these sites becomes occupied. A minimum of three unoccupied areas will always be managed for snowy plover occupancy until all OPRD sites are occupied. ▪ Inclusion of other sites among the minimum of three managed unoccupied areas as other land managers implement USFWS-approved site management plans for non-OPRD unoccupied sites. Netarts Spit will be added if and when there are fewer than three unoccupied areas being managed collectively between OPRD and other landowners for snowy plover occupancy.

Table 5-5. Summary of Conservation Measures to be Implemented at Recreation Management Areas (RMAs)

Currently Occupied RMAs (owner/manager)	Proposed Actions In Currently Occupied and Future Occupied RMAs
Sutton/Baker Beach (adjacent to land owned by USFS)	The site management plan will define the area of restricted recreation within the RMA. In the event that a site management plan does not exist, OPRD would automatically issue restrictions within the covered lands.
Siltcoos Estuary/Dunes Overlook/Tahkenitch Estuary (adjacent to land owned by USFS)	Seasonal Recreational Use Restrictions (March 15 – September 15) will be required by OPRD once a RMA site becomes occupied, including the following:
Tenmile Estuary (adjacent to land owned by USFS)	<ul style="list-style-type: none"> ▪ Vehicles (motorized and non-motorized) except for administrative use, kite-flying, and dogs prohibited. ▪ Other public recreational use directed to the wet sand outside of roped and signed breeding areas.
Coos Bay North Spit (adjacent to land owned by BLM, Corps)	<ul style="list-style-type: none"> ▪ Restrictions possibly lifted early if no nesting by July 15.
New River (Owned by Curry County and private landowner; adjacent to land owned by BLM)	Other OPRD RMA Commitments
	<ul style="list-style-type: none"> ▪ Erect fences, ropes, and/or signs to define breeding areas (dry sand only) at County and privately owned RMAs. ▪ Conduct enforcement actions on managed RMA sites.
Currently Unoccupied RMAs (owner/manager)	Proposed Actions In Managed Unoccupied RMAs
Bayocean Spit (adjacent to land owned by Corps)	OPRD will implement the restrictions at the request of the landowner as indicated in USFWS-approved site management plan for that RMA.
South Sand Lake Spit (Private)	Seasonal Recreational Use Restrictions (March 15 – September 15) will be authorized for voluntary management of RMAs after coordination with USFWS, to include the following:
Tahkenitch South (adjacent to land owned by USFS)	<ul style="list-style-type: none"> ▪ Vehicles (motorized and non-motorized) prohibited except for administrative use or as otherwise directed by OAR. ▪ Dogs required to be leashed.
Umpqua River North Jetty (Department of State Lands and adjacent to land owned by USFS)	<ul style="list-style-type: none"> ▪ Restrictions possibly lifted if no nesting by July 15.
Elk River Spit (Private)	Other OPRD RMA Commitments
	<ul style="list-style-type: none"> ▪ Conduct enforcement actions on managed RMA sites.
Euchre Creek (Private, Oregon Department of Transportation)	