

Appendix B

Species Considered but Excluded from the HCP

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1. Brown Pelican

The Brown pelican (*Pelecanus occidentalis*) is delisted under the Federal Endangered Species Act (ESA) and listed as endangered under the Oregon ESA. The brown pelican can be found along the entire Oregon coast, from the Columbia River to the California Border.

The brown pelican is a warm weather species that thrives near coasts and on islands. The California brown pelican generally uses the rocky islands along the California coast for their group or “colonial” nest sites. These islands typically feature steep, rocky slopes and little vegetation, and they must be without terrestrial predators or human disturbances.

Nearby high-quality marine habitat is also essential. Brown pelicans rely in part on the actions of marine predators such as sharks, salmon, and dolphins to force schools of fish to the surface where they can catch them. Pelicans will only breed in areas and at times with enough food to support the breeding colony. Roosting and resting or “loafing” sites where brown pelicans can dry their feathers and rest without disturbance are also important. Pelicans are known to live for approximately 30 years, but the average may be much less than that due to predation, disease, starvation, etc.

Brown pelicans migrate along the Pacific coast as far north as Vancouver Island. The brown pelican is a common spring, summer, and fall visitor along the Oregon coast however this species has wintered in the Charleston and Coos Bay area. Brown pelicans are often seen frequenting the rocky shoreline but rarely occur on the ocean shore. A large number of pelicans have been congregating at the mouth of the Columbia River for the past several years and there is the possibility of breeding occurring on East Sand Island.

The brown pelican is not included as a covered species as there is no known nesting habitat in the area covered by the HCP, i.e. the sandy ocean shore, they perch or rest

on rocky outcrops which are not covered lands, and they forage at sea. Thus, there is little, if any, risk of take of the brown pelican by OPRD management activities on the ocean shore.

2. Marbled Murrelet

The Washington, Oregon, and California population of the marbled murrelet (*Brachyramphus marmoratus marmoratus*) was federally listed as threatened in 1992, and as threatened under the Oregon ESA in 1995. This bird can be found along the entire Oregon coast from the Columbia River to the California border.

The North American subspecies of marbled murrelet ranges from the Aleutian Islands and southern Alaska south to central California, with the largest portion of the population occurring in Alaska and British Columbia. The California, Oregon, and Washington population of the marbled murrelet is declining due to loss of older forests used for nesting sites. Along the Oregon coast, surveys have shown a decline in murrelet numbers during the 1990's. Loss and fragmentation of nesting habitat leading to nesting failure is thought to be a primary factor responsible for an estimated annual 4% to 7% decline in marbled murrelet populations. The population numbers are not expected to increase rapidly due to the naturally low reproductive rate and the continued loss of nesting habitat. Recovery is estimated to take decades.

The marbled murrelet is a small robin-sized diving seabird feeding primarily on fish and invertebrates in near-shore marine waters. The murrelet spends the majority of its time on the ocean, roosting and feeding, but comes inland up to 80 kilometers (50 miles) to nest in forest stands with old growth characteristics. This species nests in stands varying in size from several acres to thousands of acres. However, larger, unfragmented stands of old growth appear to be the highest quality habitat for marbled murrelet nesting. Nesting stands are dominated by Douglas-fir (*Psuedotsuga menziesii*) in Oregon.

The primary cause of marbled murrelet population decline is the loss and modification of nesting habitat in old growth and mature forests through commercial timber harvests, human-induced fires, land conversions, and, to a lesser degree, through natural causes such as wild fires and wind storms. Increased forest fragmentation can reduce nesting success by allowing increased predation of nests by raptors (great horned owls, sharp-shinned hawks, peregrine falcons) and corvids (jays, ravens, crows). In the murrelet's marine habitat, oil spills and gill-net fishing also threaten the population. Recent oil spills off the coasts of California and Oregon have contributed to direct mortality of marbled murrelets and other seabirds.

The marbled murrelet is not included as a covered species as this species does not nest, roost, or forage on the sandy beaches of the HCP covered lands. As such, there is no risk of take from OPRD covered management activities.

3. Bald Eagle

The bald eagle (*Haliaeetus leucocephalus*) is listed as threatened under the Oregon ESA. The bald eagle can be found along the entire coast, from the Columbia River to the California border.

The bald eagle is unique to North America, ranging from central Alaska and Canada to northern Mexico. The majority of nesting bald eagles in Oregon occur in the following areas: Columbia River below Portland, the Oregon coast and Coast Range, the High Cascades, Klamath Basin, and the upper Willamette River Basin. In a statewide nesting survey in 2007, 512 breeding pairs were recorded in Oregon. Wintering migratory bald eagles are found throughout the state.

Bald eagle nest site selection varies widely from deciduous, coniferous, and mixed forest stands. Nest trees are usually large diameter trees characterized by open branching and stout limbs. Nests are in dominant or co-dominant trees often located near a break in the forest such as a burn, clearcut, field edge (including agricultural fields), or water. Most nest sites are within 1/2 mile of a body of water such as coastal shorelines, bays, rivers, lakes, ponds, and dammed up rivers (i.e., beaver dams, log jams, etc.), and that have an unobstructed view of the water. Bald eagle habitat occurs primarily in undeveloped areas with little human activity.

Winter foraging areas are usually located near open water on rivers, lakes, reservoirs, and bays where fish and waterfowl are abundant, or in areas with little or no water (i.e., rangelands, barren land, tundra, suburban areas, etc.) where other prey species (e.g., rabbit, rodents, deer, carrion) are abundant.

These large, powerful raptors can live for 30 or more years in the wild and even longer in captivity. Nests are often reused year after year, and with additions made annually, the nests can become enormous. The bald eagle is an opportunistic predator that feeds primarily on fish but also takes a variety of birds, mammals, and turtles (both live and as carrion) when fish are less abundant or these other species are readily available. Waterfowl are the most common avian prey, but shorebirds and land birds are also eaten. A variety of mammals are also taken as prey, although mammals are less important than fish and birds. Mammals are taken as live prey or carrion in all seasons but become more important during the winter months.

The major factor leading to the decline and subsequent listing of the bald eagle was disrupted reproduction resulting from contamination by organochlorine pesticides.

Loss of habitat and human disturbance are potential threats. Habitat loss results from the physical alteration of habitat as well as from human disturbance associated with development or recreation (i.e., hiking, camping, boating, and ORV use). Activities that can and have negatively impacted bald eagles include logging, mining, recreation, overgrazing (particularly in riparian habitats), road construction, wetland filling, and industrial development. These activities are particularly damaging when they occur in shoreline habitats.

Important conservation measures include (1) Avoidance of disturbance to nests during the nesting season: January – August, (2) Avoidance of disturbance to roosts during the wintering season: November – March, (3) Protection of riparian areas from logging, cutting, or tree clearing, (4) Protection of fish and waterfowl habitat in bald eagle foraging areas, and (5) development of site-specific management plans to provide for the long-term availability of habitat.

The bald eagle is not included as a covered species because OPRD management activities along the ocean shore are not likely to result in disturbance of nesting bald eagles, i.e. nest trees are located remotely relative to the sandy ocean shore covered lands. Potential impacts to bald eagles that may within coastal state park units that have specifically identified portions designated as covered lands will be avoided through implementation of eagle site management plans designed to eliminate the risk of take of bald eagles.

4. Peregrine Falcon

The federal government delisted the peregrine falcon (*Falco peregrinus anatum*) in 1999, and the State of Oregon delisted this species in 2007. Peregrine falcons are not known to nest along Oregon's ocean shoreline.

In North America, peregrine falcons can be found breeding from the Arctic Coast south to Baja. Once an endangered species, these falcons can be found on all continents with the exception of Antarctica. Peregrines use cliff ledges within close proximity to water for nest sites in what are called aeries. Their diet is made up mostly of other birds (including snowy plovers) as well as rodents and fish, which they strike and capture with their sharp talons. Peregrine falcons are most susceptible to human activities during the nesting season. However, no nest sites are known to occur within the HCP covered lands.

The peregrine falcon is not included as a covered species because OPRD management activities along the ocean shore are not likely to result in disturbance of nesting peregrine falcons, should they become established. Thus, impacts to peregrine falcons as a result of OPRD management activities are expected to be negligible.

5. Steller Sea Lions

The Steller sea lion (*Eumetopias jubatus*) is listed as a threatened species in Oregon under the Federal ESA. Steller sea lions are found in the Pacific Ocean from Japan to southern California.

Steller sea lions tend to remain offshore or haulout in unpopulated areas. They roar rather than bark and are much larger and lighter in color than California sea lions. Steller males weigh up to 2,200 pounds and can be 8 to 11 feet long. Females are smaller, weighing 600 to 800 pounds and growing 6 to 8 feet long. Reproduction occurs on offshore islands during the months of June and July, which is also when pups are born. The main haulout areas in Oregon are Rogue Reef, Three Arch Rocks, and Shell Island although they may haulout on other rocky outcrops along the Oregon coast.

The Steller sea lion is not included as a covered species because they do not occur on the HCP covered lands. As such, there is a very low risk of take of Steller sea lion by OPRD management activities in the area covered by the HCP.

6. Western Lily

The western lily (*Lilium occidentale*) is both federal and state listed as endangered. In Oregon it is known to occur only in Coos and Curry Counties.

This species grows up to 5 feet tall, and has as many as ten nodding flowers per stem. They are crimson red shading to yellow and green at the base. The yellow and green areas are dotted with purple. The tepals, 2 inches long, are recurved only halfway. The deep red anthers are one half inch long and closely surround the pistil. The leaves generally are single along the stem except for 1 whorl near the middle, and blooms from late June through July.

This extremely rare lily grows only on the periphery of bogs near the sea, on soils that are poorly drained, and on highly organic soils of sphagnum origin. Although located in close proximity to the beach, the western lily is not a dune species.

The Western lily was not included as a covered species because it is not likely to occur on HCP covered lands or where OPRD management activities occur. Thus, there is a very low risk of take of this species. However, to ensure there will be no risk of take while restoration activities are conducted, OPRD will survey for the western lily on HCP covered lands where the species could potentially be present.

7. Pink Sand Verbena

The pink sand verbena (*Abronia umbellata ssp. breviflora*) is a state listed endangered species, and is considered a species of concern by the U.S. Fish and Wildlife Service. This species has historically occupied beaches from Vancouver Island, British Columbia to northern California. Only a few populations are known to exist in Oregon and California, and the species is believed to be extinct in Washington.

The pink sand verbena is a succulent, annual perennial native herb, in the four o'clock family (*Nyctaginaceae*). Stems are prostrate with ovate to diamond shaped leaves. Inflorescences are slender with 8 to 27 light to bright pink to purple flowers, arranged in umbrellate heads. Pink sand verbena can be found in disturbed sandy areas and coastal dunes below 100 meters.

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

The U.S. Forest Service, Siuslaw National Forest and the Bureau of Land Management, Coos Bay District have undertaken projects to transplant and seed pink sand verbena at several beaches and dune habitats along the coast since 1997.

Pink sand verbena was not included as a covered species because it is not likely to occur on HCP covered lands or where OPRD management activities occur. Thus, there is a very low risk of take of this species. In fact, the habitat restoration efforts to be undertaken may result in the recovery of this species at particular beaches. OPRD, as part of their restoration efforts, will work with the Oregon Department of Agriculture and the Institute of Applied Ecology in re-introducing this species to restored areas. A survey of the restoration sites will be undertaken prior to any restoration work to ensure that newly planted populations are not damaged during European beachgrass removal efforts.

8. Silvery Phacelia

Silvery phacelia (*Phacelia argentea*) is listed as a threatened species under the Oregon ESA and is a federal species of concern. Silvery phacelia is a local endemic, occurring in coastal dunes in Coos and Curry counties, Oregon.

Silvery phacelia is a member of the *Hydrophyllaceae* (waterleaf family) that grows in open sand or dunes. This species has stout stems, with many branched at the base. Leaves are silvery pubescent. Inflorescences are dense, with white flowers.

Silvery phacelia was not included as a covered species because OPRD covered recreation activities are not likely to cause take of this species during the permit period. The known locations for this species are behind the foredunes and, thus, do not occur on the sandy beach covered HCP lands. Any area that will be restored for snowy plover habitat will be surveyed to ensure that such actions will not impact the species.

9. Wolf's Evening Primrose

The Wolf's evening primrose (*Oenothera wolffi*) is listed as threatened under the Oregon ESA. Wolf's evening primrose is found mainly in sandy soil on bluffs above the ocean beach, and is known only from a few sites in Curry County in Oregon.

Wolf's evening primrose is a perennial, or sometimes a biennial plant, growing erectly from 20 to 60 inches tall. The entire plant is covered with coarse, stiff hairs. The flowers are densely arranged along the smaller leaves near the top of the stem. The four petals are about an inch long, yellow turning to orange with age. The sepals are long, triangular, ciliate, and reflexed backward against the stem. The inflorescence is glandular and sticky. This species reportedly blooms from June to October.

Wolf's evening primrose was not included as a covered species because it is not likely to occur in the HCP covered lands and, thus, unlikely to be affected by OPRD covered activities, i.e. the risk of take is extremely low.

10. Large-Flowered Goldfields

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

The large-flowered goldfields is a showy plant about sixteen inches tall. The flower heads are singular on each stem, are about an inch in diameter, and usually have about twelve bright yellow ray flowers. The disk flowers are yellow also. The leaves are linear, untoothed, and generally villous. This species flowers in June and July.

The large-flowered goldfields was not included as a covered species because it is unlikely to occur on HCP covered lands and, thus, the risk of take as a result of covered activities is extremely low. This species is, however, found on the trails leading to the beach. OPRD will conduct a survey of its beach trails to determine whether the species is present and take appropriate action to protect the species and avoid the risk of take.

11. Manyleaf Gilia

Manyleaf gilia (*Gilia millefoliata*) is a federal species of concern but has no state listing status. The manyleaf gilia historically occurred along the Pacific coast from the San Francisco Bay area to the central Oregon coast. There currently are three known populations along the Oregon coast, from Floras Lake to the California state line (Rittenhouse 1995).

This species is found on semi-stabilized sand dunes within 200 yards of the ocean. This species is threatened by habitat development, heavy highway vehicle use, and competition from exotic plants, particularly European beachgrass.

The manyleaf gilia was not included as a covered species because OPRD management activities are not likely to cause take of this species during the permit period. This species will benefit from the removal of European beachgrass associated with snowy plover habitat management and from restrictions placed on locations where recreational activities may occur. Potential sites will be surveyed by OPRD prior to any habitat restoration work to avoid harming existing populations.