

Westport Light State Park Wildlife Habitat Assessment

1595 West Ocean Avenue
Westport, Washington 98595

Grays Harbor County, Washington

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Acronyms and Abbreviations

Acronym and Abbreviations	Definition
BCC	Birds of Conservation Concern
BGEPA	Bald and Golden Eagle Protection Act
ESA	Endangered Species Act
GIS	geographic information system
GPS	global positioning system
IPaC	USFWS Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
NMFS	National Marine Fisheries Service
PHS	Priority Habitats and Species
SWIFD	Statewide Washington Integrated Fish Distribution
USFWS	U.S. Fish and Wildlife Service
WSPRC	Washington State Parks and Recreation Commission
WLSP	Westport Light State Park
WDFW	Washington Department of Fish and Wildlife
WHA	Wildlife Habitat Assessment

1. Introduction

On behalf of Washington State Parks and Recreation Commission (WSPRC), AECOM conducted a Wildlife Habitat Assessment (WHA) at Westport Light State Park (WLSP or “the state park”). The area is located immediately west of the community of Westport on the Westport peninsula in Grays Harbor County, Washington (Appendix A – Figure 1). AECOM has previously conducted vegetation surveys at the park (AECOM 2017) and was contracted to perform a variety of environmental studies within the park boundaries in 2021 (AECOM 2021a, 2021b). This report summarizes the WHA conducted by AECOM to quantify habitat quality and function in order to establish an environmental baseline for the park. The park encompasses approximately 560 acres and includes a variety of wildlife habitats.

AECOM biologists visited the state park on May 12-13, 2021, to identify/document wildlife habitats and to determine the potential presence or absence of special status wildlife species. In the context of this report, special status wildlife species include species protected or managed under the Endangered Species Act (ESA), the Bald and Golden Eagle Protection Act (BGEPA), the Migratory Bird Treaty Act (MBTA), and those species listed on the Washington Department of Fish and Wildlife (WDFW) State Threatened and Endangered List or the WDFW Priority Habitats and Species (PHS) List.

This WHA includes an office-based research phase and a field verification and data collection phase. This assessment documents background research to identify the potential presence, distribution, and abundance of special status wildlife species within or adjacent to the state park; survey methodology; and results for wildlife habitat types/plant communities and general and special status wildlife species observed during field visits.

2. Methods

This section describes the methods used for this investigation, which include defining the study area, conducting background research through desktop review, and conducting field surveys of the study area.

2.1 Study Area

To ensure that wildlife species and habitats were adequately evaluated during survey efforts, the entire 560-acre park was surveyed. The survey did not include an assessment of the beach/shoreline habitats that are included in the adjacent Seashore Conservation Area (Appendix A – Figure 1).

2.2 Background Research

Background research for this assessment entailed a desktop review of available literature, maps, and other resources provided by federal, state, and local agencies, in addition to previous reports and surveys conducted at the site. The review of background documents provided information to aide field investigations by identifying potential survey routes and areas for detailed assessment.

The following online documents were reviewed for identification and determination of wildlife habitats and animal species near/within the study area:

- Aerial photographs publicly available via the internet (Google Earth, Bing Maps)
- U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) Resource Lists (USFWS 2021)
- WDFW Priority Habitats and Species on the Web (WDFW 2021a)
- WDFW SalmonScape (WDFW 2021b)
- WDFW Threatened and Endangered Species List (WDFW 2020)
- Northwest Indian Fisheries Commission, Statewide Washington Integrated Fish Distribution (SWIFD) (NWIFC 2021)
- National Marine Fisheries Service (NMFS), Protected Resources App (NMFS 2021)
- Previous reporting/surveys conducted at the park (AECOM 2017)

Prior to field work, wildlife habitat types were mapped as geographic information system (GIS) polygons, based on evaluation of aerial imagery and previous reporting. Wildlife survey data, including mapped habitat types, were formatted to conform to WSPRC GIS data standards.

Wildlife habitat types (group of vegetation cover types based on a similarity of wildlife use) were interpreted from apparent vegetation signatures (e.g., shape, tone/color, pattern) in aerial imagery, as well as topographic contour data. Typical wildlife habitat types for the environments present at the park were assigned based on Johnson and O'Neil (2001). The initial polygons developed during the desktop analysis were printed onto field maps for ground-truthing and refinement during the field surveys described in Section 2.3.

2.3 Field Surveys

Wildlife habitat field surveys occurred from May 12-13, 2021, and were timed to maximize the likelihood of detecting important habitat features and/or presence of special status wildlife species within the park. The survey period coincides with the period when migratory birds may use the area for breeding. Surveys consisted of walkthrough surveys, habitat analyses, avian point count surveys, and seabird surveys conducted while in the field.

2.3.1 Walkthrough Surveys

Walkthrough surveys consisted of pedestrian area searches, where biologists traversed WLSP and documented major habitat types and features (Appendix B – Photolog) while looking for special status species evidence. For this assessment habitat features and elements were identified as components in the environment believed to most influence wildlife species' distribution, abundance, fitness, and viability.

When a biologist encountered habitat with a high potential for the occurrence of special status species (as identified during the pre-field desktop analysis or on the ground during surveys), an intensive visual examination for the species was conducted. Species presence was confirmed by sightings, calls, tracks, scat, nests, burrows, feathers, or feeding signs.

Special status wildlife activity centers (e.g., a nest or den) encountered during surveys were hand-drawn on field maps at the time of observation.

Walkthrough surveys were also used to validate the initial polygons of wildlife habitats. Field validation included hand-drawn edits on field maps and occasional global positioning system (GPS) survey points to document the representative edges of communities within the study area. These hand-drawn polygons and GPS points were then digitized using GIS software after field surveys and used to update the polygons drafted during pre-field background research.

2.3.2 Habitat Analyses

A WHA methodology was used to document and rank existing conditions and identify potential opportunities for habitat improvement (City of Portland 1986) (Appendix C – Wildlife Habitat Assessment Forms). The WHA rating system provides a framework for assessing wildlife habitat quality and function based on wildlife habitat requirements in terms of habitat size, species diversity, seasonality of food, water, and cover. The WHA also considers the degree of physical and human disturbance at the site and other unique features such as rarity of habitat, flora, and educational potential. The WHA system assigns relative ranks of high, medium, or low. Fish and stream habitat were evaluated based on Washington State Department of Natural Resources stream typing, aquatic species presence, connectivity, and riparian buffers.

2.3.3 Avian Point Counts

Point count surveys are a common way to monitor bird populations and develop an avian species assemblage for a given location. Point count surveys used in this investigation generally followed the protocols outlined in Huff et al. (2000). Point count surveys are conducted at fixed locations for a given length of time, where all bird species encountered (heard/seen) are recorded (Appendix D – Point Count Field Data). They establish a baseline inventory of bird demographics, which may be useful for future monitoring and research. Twelve point count stations were placed throughout the park, with locations selected based on the available habitat types in the park, as well as the spatial distribution of the points within WLSP. General point count locations are shown on Figure 1 (Appendix A).

Point counts were conducted starting at sunrise and were completed before 10:00 a.m., roughly 3 to 5 hours after the dawn chorus (a daily peak in bird singing activity, usually occurring around sunrise). Point counts were conducted on days that were generally calm and warm enough for bird activity. Excessive wind and/or rain can inhibit bird activity and can also make detecting birds difficult. Point counts at each station lasted 10 minutes, and every bird detected during this period was recorded. To limit the size of the survey area, only birds observed within 50 meters of the survey location were included in the point count results. During point counts, the number and sex of each bird detected, the time of detection, and the approximate location of detection within the point count area were recorded for each bird (see Appendix D for details).

2.3.4 Seabird Survey

The majority of point count stations were located inland, and those on the shoreline had mostly obscured views of marine habitats. While marine environments were not analyzed or addressed in this habitat assessment, this precluded a comprehensive sampling of the bird assemblage on the water immediately adjacent to WLSP. To more accurately capture avian use of the park and adjacent areas, a separate survey was conducted, generally following the Seattle Audubon Society's Puget Sound Seabird Survey "In-The-Field Protocol Checklist" (Seattle Audubon Society 2020).

Seabird surveys were conducted northwest of WLSP in a public beach area (Appendix A – Figure 1). The seabird survey lasted 15 minutes. During this time, the number, species, and sex (if possible to determine) of all birds observed was recorded. Biologists worked in pairs when conducting these surveys, using binoculars with a magnification of 8X/10X and 20-60X spotting scopes to aid in identification. An approximately 400-meter-radius area was used to sample birds. Birds were only included in the survey if they were within a 400-meter radius of the survey location and were actually swimming on the water's surface or were present on the shore (although fly-overs were recorded with an associated comment).

3. Results

3.1 Environmental Setting

The climate of WLSP typically experiences little in the way of extremes and is uniformly wet and mild. Precipitation averages 2,000-3,000 millimeters along the Washington and Oregon coast. Most precipitation falls during the fall and winter months, although the frequent fog and low clouds experienced during the relatively drier summer months are probably equally as important for plant species (Franklin and Dyrness 1973).

While no streams or major water features are mapped within the study area by SalmonScape or SWIFD (WDFW 2021b; NWIFC 2021), the study area is adjacent to the Pacific Ocean (although the study area does not include the beach and nearshore environments near the park). Multiple wetlands are mapped throughout the study area by Grays Harbor Count Mapping (Grays Harbor 2021), and many of these were confirmed during delineations within the park by AECOM wetland scientists (AECOM 2021a).

3.2 Wildlife Habitat Types

A combination of desktop analysis of aerial imagery, review of previous survey efforts, and ground truthing during surveys was used to develop GIS polygons that describe available wildlife habitat within WLSP. Wildlife habitat types were classified using Johnson and O'Neil (2001) wildlife-habitat relationships which were modified to fit the site-specific physical setting, landscape setting, structure, composition, and system dynamics of WLSP.

The dominant wildlife habitat types and features within WLSP are shown in Figure 1 in Appendix A and summarized in Table 1, with detailed descriptions provided in Sections 3.2.1 through 3.2.8. Representative photos are provided in Appendix B for most habitat types.

A general description of each wildlife habitat's rating summary, based on the WHA methodology (City of Portland 1986), is included below. Data sheets are included in Appendix C, and a summary table of habitat scores is included in Table 2. Scores listed in the habitat descriptions are an average of the scores for all analysis points within each habitat type.

Table 1. Wildlife Habitat Types and Features in Westport Light State Park

Wildlife Habitat Type	Approximate Acres in Study Area	Approximate Percent of Study Area
Mixed Conifer Forest	251.97	45.12
Mixed Open Wet Areas	121.00	21.67
Coastal Shrublands	56.18	10.06
Riparian Shrub Areas	50.72	9.08
Mixed Deciduous Forest	32.13	5.75
Disturbed Open Grasslands	30.24	5.42
Developed	14.05	2.52
Special Habitat Features	3.59	0.64
Total	~560	~100

Table 2. Habitat Rating Scores for Wildlife Habitats Identified in Westport Light State Park

Wildlife Habitat Type	Average Habitat Scoring	Habitat Rating
Mixed Conifer Forest	64	Medium-High
Mixed Open Wet Areas	73	High
Coastal Shrublands	36	Low
Riparian Shrub Areas	60	Medium
Mixed Deciduous Forest	78	High
Disturbed Open Grasslands	36	Low
Developed	Not Scored	N/A
Special Habitat Features	Not Scored	N/A

3.2.1 Mixed Conifer Forest

This habitat type is predominantly located at the southern and eastern portions of the park, although small patches of shore pine (*Pinus contorta* var. *contorta*)/Douglas-fir (*Pseudotsuga menziesii*) forest are also present at the northern portion of the park between cleared areas (Appendix A – Figure 1).

This forested habitat type includes both wetland and upland habitats. Previous vegetation surveys conducted at the state park identified both shore pine wetland forest and shore pine/Douglas-fir upland vegetation communities throughout the northern portion of the park (AECOM 2017). The patches of wetland forest were included with the larger shore pine/Douglas-fir forest, as they offer similar habitat conditions and wildlife associations. However, the wetland forest portions of this habitat type may provide additional habitat for amphibians, forage for insectivorous birds, and resources for other wildlife species beyond what the upland portions provide.

The habitat type is dominated by shore pine and slough sedge (*Carex obnupta*) (Appendix B – Photo 1). Evergreen huckleberry (*Vaccinium ovatum*), sword fern (*Polystichum munitum*), Pacific crabapple (*Malus fusca*), and Pacific bayberry (*Morella californica*) are also present to smaller degrees throughout the habitat. Douglas-fir is generally present as inclusions within the overall habitat type, growing throughout the forest in upland patches. Hooker's willow (*Salix hookeriana*) stands are scattered throughout the forest in openings in the canopy.

In general, the forests at the site are young, and the trees do not exhibit the traits of old growth forests. However, early successional stands have been found to be used by many forest-dependent wildlife species. For example, moderately open multi-story canopied forests composed of medium-sized trees in western Oregon and Washington provide habitat for over 28 species of amphibian, 9 reptiles, 101 bird species, and 60 mammal species (Johnson and O'Neil 2001). Within these forests, several habitat features stand out as important, including logs, snags, live trees, and cavities (Johnson and O'Neil 2001). While snags were not observed to be abundant at WLSP, these other features were, indicating that WLSP supports complex forests that likely provide a diversity of habitat features for wildlife.

Wildlife Habitat Rating Summary

This habitat was rated at survey points HA/PC04 and HA/PC05.

Habitat Component	Rating	Rationale
Water	Medium	Scattered seasonally saturated wetlands and ephemeral drainages
Food	High	Proximity to cover, variety, and quantity increases this score
Cover	High	Tree canopy with mix of medium sized shrubs and patches of tall grasses
Disturbance	High	Low disturbance and limited recreation increase this rating
Interspersion	High	Large contiguous patches
Uniqueness	Low	Shore pine forest is common for the park and the vicinity

Overall Score Medium-High Score: 64. Scores for the park ranged from 36-78.

Wildlife Observed

Common wildlife species observed in that habitat type included black-capped chickadees (*Poecile atricapillus*), black headed grosbeak (*Pheucticus melanocephalus*), and black-throated grey warblers (*Setophaga nigrescens*), among others. Coyote (*Canis latrans*) scat and black bear (*Ursus americanus*) scat were also observed throughout this habitat type.

3.2.2 Mixed Open Wet Areas

This habitat type is mostly located in the north and west portions of the park (Appendix A – Figure 1). It is strongly associated with the linear forest clearings likely created when this part of the park was cleared for creation of a golf course (AECOM 2017).

This habitat type was delineated from both the mixed conifer forest and riparian shrub habitat types due to its complex assortment of different habitat types (Appendix B – Photo 2). Portions of this habitat contain large amounts of emergent cover, where shrubs like Hooker’s willow and forest communities are absent. Herbaceous species such as dune rush (*Juncus nevadensis* var. *inventus*), Brewer’s rush (*Juncus breweri*), and Alaskan sickle-leaved rush (*Juncus falcatus* var. *sitchensis*) are present in wetland depressions; seashore bentgrass (*Agrostis pallens*), sand sedge (*Carex pansa*), sandmat (*Cardionema ramosissima*), and European beachgrass (*Ammophila arenaria* ssp. *arenaria*) are present in uplands.

Scattered throughout these generally open areas are dense stands of willow, small shrub-like growth forms of shore pine, and Scotch broom (*Cytisus scoparius*). At the eastern end of this habitat mapping, the stands of willow become more expansive, and the shore pine becomes more forest like. This is likely a result of natural succession, where the shore pine forest and wetland communities have begun to reclaim areas that were cleared during development of the golf course fairways.

Wildlife Habitat Rating Summary

This habitat was rated at survey points HA/PC09, HA/PC10, and HA/PC12.

Habitat Component	Rating	Rationale
Water	Medium	Several scattered small semi-permanently inundated areas
Food	High	Proximity to cover, variety, seasonality, and quantity increases this score
Cover	High	Mix of cover types increases this score
Disturbance	High	Low disturbance and limited recreation increase this rating
Interspersion	High	Habitat weaves through larger patches of willow scrub-shrub, pine, and alder forest stands.
Uniqueness	Medium	These areas were remnant wetlands that were disturbed from initial golf course development and are common for the park but rare in the vicinity.
Overall Score	High	Score: 73. Scores for the park ranged from 36-78.

Wildlife Observed

Wildlife species observed in this habitat type included killdeer (*Charadrius vociferus*), olive-sided flycatchers (*Contopus cooperi*), Pacific-slope flycatchers (*Empidonax difficilis*), rufous hummingbirds (*Selasphorus rufus*), and violet-green swallows (*Tachycineta thalassina*), among others. Black-tailed deer (*Odocoileus hemionus columbianus*) were also observed in this habitat type, although they were most commonly observed near the fore-dune at the west end of the park. Northwestern gartersnakes (*Thamnophis ordinoides*) were also observed throughout this habitat, particularly at the abandoned building foundation (Appendix A – Figure 1).

3.2.3 Coastal Shrublands

This habitat type is primarily located along the large fore-dunes at the west and north ends of the park (Appendix A – Figure 1). It is immediately adjacent to the paved walking path that traverses the western boundary along the top of the western fore-dune. The fore-dunes continue beyond the study area and quickly transition to nearshore sandy beach habitat.

These shrub habitats are primarily dominated by Scotch broom and evergreen huckleberry with scattered dwarf shore pine, trailing blackberry (*Rubus ursinus*), and Pacific crabapple present. Grass species present in this habitat type include European beachgrass and American dunegrass (*Leymus mollis* ssp. *mollis*) (Appendix B – Photo 3). These shrublands can form dense walls of nearly impenetrable shrubs along the paved walking path at the western end of the park, although established social/game trails do occasionally bisect these areas.

Dune and beach environments in the Pacific Northwest play an important role for shorebirds. For instance, beaches adjacent to Grays Harbor support some of the highest densities of migrating sanderlings (*Calidris alba*) in North America and also provide roosting habitat for a large number of shorebirds when other habitats (e.g., mudflats) become inundated at high tide. Additionally, beaches in southwest Washington can support as many as 618.7 overwintering

dunlins (*Calidris alpina*) per square kilometer (Johnson and O’Neil 2001). Coastal headlands may also provide unique and rare nesting habitat in Washington state; many bluffs in Washington are fronted by cobblestone beaches. In areas with enough soil, evergreen shrubs and dune grasses can grow and in turn stabilize the soil enough for burrowing animals and birds to capitalize on the dunes themselves (Johnson and O’Neil 2001).

Wildlife Habitat Rating Summary

This habitat was rated at survey points HA/PC01, HA/PC07 and HA/PC08.

Habitat Component	Rating	Rationale
Water	Low	These areas are dry but near the Pacific Ocean
Food	Medium	Quantity and seasonality; proximity to cover increases this score; variety is low
Cover	Low-Medium	Cover is limited low shrubs and rolling dunes.
Disturbance	Low	Paved recreation trail fragments this habitat, and human disturbance lowers rating
Interspersion	Medium	Limited interspersion habitat
Uniqueness	Medium	Potential for restoration but limited by recreation
Overall Score	Low	Score: 36. Scores for the park ranged from 36-78.

Wildlife Observed

Few wildlife species were specifically observed here, although the species found in this habitat were often not observed elsewhere. Black-tailed deer were most commonly observed in this habitat type. Bird species closely associated with this habitat type were common yellowthroats (*Geothlypis trichas*), white-crowned sparrows (*Zonotrichia leucophrys*), and spotted towhees (*Pipilo maculatus*).

3.2.4 Riparian Shrub Areas

This habitat is primarily located in the southwestern portion of the park, where Hooker’s willow is the dominant species, with scattered amounts of shore pine present to a lesser degree (Appendix A – Figure 1). This habitat type is also present as small inclusions within the shore pine/Douglas-fir/evergreen huckleberry forest type, where breaks in the forest canopy are dominated by Hooker’s willow. However, the mapping of this habitat type at the southern end of the park is distinct from these smaller patches within other habitats due to its size relative to similar patches within the park. Use of the term ‘riparian’ to identify these shrub areas is based on the ponded nature of the habitat and proximity to the marine environment as there are no streams present.

This habitat is dominated by Hooker’s willow, although shrub-sized shore pine may be mixed within the willow patches (Appendix B – Photo 4). Larger shore pine is also present around the periphery of this habitat type. Slough sedge, Douglas spiraea (*Spiraea douglasii* var. *douglasii*), and black twinberry (*Lonicera involucrata* ssp. *involucrata*) are present in this habitat type (AECOM 2017).

Wetland and riparian habitats in Oregon and Washington play a large role in providing habitat to wildlife species in the region. For instance, roughly 72 percent of the bird species in Oregon and Washington use wetland/riparian habitats, increasing to 82 percent if coastal and marine birds

are not included (Johnson and O'Neil 2001). Additionally, 77 percent of the region's bird species breed in wetland/riparian habitats. Consequently, wetland habitats within WLSP, especially those with a complicated canopy structure including willow and shore pine, are of immense value to wildlife.

Wildlife Habitat Rating Summary

This habitat was rated at survey points HA/PC02 and HA/PC03.

Habitat Component	Rating	Rationale
Water	Medium	Seasonally inundated and saturated wetlands
Food	High	Proximity to cover, variety, and quantity increases this score
Cover	Medium	Mix of tall and low-stature shrubs
Disturbance	Medium	Moderate-sized patch in interior with intact vegetated buffer away from recreation
Interspersion	Medium	Patches mixed with shore pine forested areas
Uniqueness	High	Hooker's willow is common for the park but provides high quality bird habitat
Overall Score	Medium	Score: 60. Scores for the park ranged from 36-78.

Wildlife Observed

Bird species observed in this habitat type included Anna's hummingbirds (*Calypte anna*), black-capped chickadees, hermit warblers (*Setophaga occidentalis*), and orange-crowned warblers (*Leiothlypis celata*). While deer were not directly observed in this habitat type, deer scat was observed.

3.2.5 Mixed Deciduous Forest

This habitat type is located at the eastern end of the state park, along the eastern boundary and North Forrest Street (Appendix A – Figure 1).

This habitat type is dominated by red alder (*Alnus rubra*), salmonberry (*Rubus spectabilis*), and evergreen huckleberry (Appendix B – Photo 5). Sword fern and slough sedge are present in the understory. This habitat type is present in both discrete patches where red alder is the only tree species present (predominantly at the southern extent of the mapping), and in combination with species like shore pine and Douglas-fir, where it forms a matrix with the shore pine/Douglas-fir/evergreen huckleberry forest habitat type (predominantly at the northern end of the mapping).

Hardwood trees and shrubs are one of the most important factors influencing bird community composition in the Pacific Northwest (Johnson and O'Neil 2001). Abundance and diversity of bird species in the region has been correlated with the abundance and distribution of hardwoods. Additionally, unique associations between bird species and either deciduous and/or coniferous trees develop where deciduous and coniferous trees are adjacent to one another (Johnson and O'Neil 2001). Consequently, the forested areas of WLSP that are at least partially composed of deciduous trees/shrubs may be of increased value for wildlife.

Wildlife Habitat Rating Summary

This habitat was rated at survey points HA/PC06 and HA/PC11.

Habitat Component	Rating	Rationale
Water	Medium	Scattered seasonally saturated wetlands and ephemeral drainages
Food	High	Proximity to cover, variety, seasonality, and quantity increases this score
Cover	High	Tree overstory with tall understory of shrubs and patches of grasses
Disturbance	High	Low disturbance and limited recreation increase this rating
Interspersion	High	Interspersed with shore pine forest
Uniqueness	Medium	Alder forest is uncommon for the park but common in the vicinity
Overall Score	High	Score: 78. Scores for the park ranged from 36-78.

Wildlife Observed

Wildlife observed in this habitat type was limited to avian species. These included chestnut-backed chickadees (*Poecile rufescens*), dark-eyed juncos (*Junco hyemalis*), Pacific wrens (*Troglodytes pacificus*), and spotted towhees, among others.

3.2.6 Open Disturbed Grasslands

This habitat type was observed throughout the non-forested uplands of the northwest end of WLSP (Appendix A – Figure 1). This habitat's distribution is, at least partially, a result of the intensive clearing that historically occurred in association with an attempt to develop a golf course at the park.

Dominant species in this habitat type are European beachgrass, Scotch broom, and shore pine (Appendix B – Photo 6). The habitat type is dominated by non-native grass and shrub species, although some bare ground/sand is present throughout these portions of the park. Where European beachgrass is present, little else is present, and bare ground is scarce. Shore pine in this habitat type is generally shrub sized and offers little in the way of vertical habitat structure.

Wildlife Habitat Rating Summary

This habitat was rated at survey point HA13.

Habitat Component	Rating	Rationale
Water	Low	These areas are dry but near the Pacific Ocean
Food	Medium	Quantity and seasonality; proximity to cover increases this score; variety is low
Cover	Low-Medium	Cover is limited to low shrubs and rolling dunes
Disturbance	Low	Proximity to the parking area and human disturbance lowers rating
Interspersion	Medium	Limited interspersion habitat
Uniqueness	Medium	Potential for restoration but limited by proximity to recreation
Overall Score	Low	Score: 36. Scores for the park ranged from 36-78.

Wildlife Observed

Fewer wildlife species were observed in this habitat type than in others, but two bird species were found only here: golden-crowned sparrows (*Zonotrichia atricapilla*) and savannah sparrows (*Passerculus sandwichensis*).

3.2.7 Developed

Developed habitats were classified as those areas that were paved (roads/parking areas) or were graveled for car travel (primitive roads). While some species may use these environments' features (e.g., reptiles may use paved roads to bask, mammals may burrow into road shoulders, and some bird species may forage on road kill), developed landscapes are generally considered degraded. Developed environments primarily provide wildlife habitat only for a few generalist species that are able to adapt to these highly altered landscapes.

Developed habitats within WLSP are largely represented by paved roads and walkways and represent a relatively small component of the study area. Consequently, while wildlife was observed near developed areas, their presence is recorded in association with the adjacent habitat type they were observed in.

3.2.8 Special Habitat Features

Special features may play a prominent role in the ecology of wildlife species, as many species are dependent on these features to continue to inhabit a given area.

3.2.8.1 Ponded Areas

Two ponded areas are present at the northwestern portion of the park, which are the result of excavation occurring during the initial development of a golf course (that was not completed) in the area prior to Washington State Parks acquiring the property (Appendix A – Figure 1). These two excavated areas (1.47 acres total) filled with water and were presumably developed to create golf hazards (AECOM 2017) but now provide unique habitat features within WLSP.

During surveys to the park, several species of shorebird, gull, and waterfowl were observed using these ponds either for foraging (e.g., spotted sandpiper [*Actitis macularius*]), bathing (e.g.,

gulls [*Larus* spp.]) or for nesting/raising young (e.g., mallard [*Anas platyrhynchos*]). As discussed above, riparian and wetland habitats (including areas surrounding standing water) are disproportionately productive for a variety of wildlife taxa (Johnson and O’Neil 2001). As perennial water features are otherwise absent from WLSP, it is likely that these ponded areas now provide important habitat features for these species, despite their artificial origin.

3.2.8.2 Beach

Beach habitats were not directly surveyed for wildlife during these surveys, as this was out of scope for the WHA. However, a small portion of beach habitat is within the mapped boundary of WLSP (Appendix A – Figure 1). This small portion of beach within the state park may provide habitat for a variety of shorebirds, including federally protected species like the western snowy plover (*Charadrius nivosus nivosus*), and is consequently delineated from aerial imagery (Appendix A – Figure 1). While beach habitats were not directly surveyed/assessed for habitat quality, a seabird survey was conducted at a public beach site adjacent to WLSP to ensure a comprehensive sampling of birds at WLSP.

3.3 Wildlife Observed During Field Visits

This section provides a comprehensive list of wildlife observations during field surveys (walkthrough and point count surveys combined). A list of additional species that were not observed during surveys, but which may occur in WLSP, are included in Appendix F.

3.3.1 Bird Species

Fifty bird species were observed during field surveys (Table 3). While some birds were observed in multiple habitat types within WLSP, the highest diversity of birds was observed in the riparian shrub areas habitat type. Many of the observed bird species were also found in the mixed conifer forest habitat type. The lowest bird diversity was observed in the open disturbed grassland habitat type. Table 3 notes which bird species observed have special species status. Non-native species were not observed.

Table 3. Bird Species Observed in Westport Light State Park

Common Name	Scientific Name	Habitat Associations in WLSP	Status
American Crow	<i>Corvus brachyrhynchos</i>	Coastal Shrubland; Mixed Conifer Forest; Mixed Open Wet Areas	--
American Goldfinch	<i>Spinus tristis</i>	Mixed Open Wet Areas	--
American Robin	<i>Turdus migratorius</i>	Coastal Shrubland; Riparian Shrub Areas; Mixed Open Wet Areas	--
Anna’s Hummingbird	<i>Calypte anna</i>	Riparian Shrub Areas; Mixed Deciduous Forest; Mixed Open Wet Areas	--
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Flyover	BGEPA
Barn Swallow	<i>Hirundo rustica</i>	Mixed Open Wet Areas	--

Common Name	Scientific Name	Habitat Associations in WLSP	Status
Black-capped Chickadee	<i>Poecile atricapillus</i>	Riparian Shrub Areas; Mixed Conifer Forest; Mixed Deciduous Forest; Mixed Open Wet Areas	--
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>	Mixed Conifer Forest	--
Black-throated Grey Warbler	<i>Setophaga nigrescens</i>	Mixed Conifer Forest	--
Brown-headed Cowbird	<i>Molothrus ater</i>	Coastal Shrubland; Riparian Shrub Areas; Mixed Conifer Forest; Mixed Deciduous Forest; Mixed Open Wet Areas	--
Bushtit	<i>Psaltriparus minimus</i>	Mixed Conifer Forest	--
Chestnut-backed Chickadee	<i>Poecile rufescens</i>	Red Alder/Slough Sedge Flooded Forest; Mixed Open Wet Areas	--
Common Loon	<i>Gavia immer</i>	Flyover	State Sensitive
Common Yellowthroat	<i>Geothlypis trichas</i>	Coastal Shrubland	--
Dark-eyed Junco	<i>Junco hyemalis</i>	Mixed Conifer Forest; Mixed Deciduous Forest; Mixed Open Wet Areas	--
Double-crested Cormorant	<i>Nannopterum auritum</i>	Seabird Survey	--
Dunlin	<i>Calidris alpina</i>	Seabird Survey	--
Glaucous Winged Gull	<i>Larus glaucescens</i>	Mixed Open Wet Areas	--
Golden-crowned Kinglet	<i>Regulus satrapa</i>	Mixed Conifer Forest	--
Golden-crowned Sparrow	<i>Zonotrichia atricapilla</i>	Disturbed Open Grasslands	--
Hermit Warbler	<i>Setophaga occidentalis</i>	Riparian Shrub Areas	--
House Finch	<i>Haemorhous mexicanus</i>	Riparian Shrub Areas	--
Killdeer	<i>Charadrius vociferus</i>	Mixed Open Wet Areas	--
Mallard	<i>Anas platyrhynchos</i>	Mixed Open Wet Areas	--
Marsh Wren	<i>Cistothorus palustris</i>	Coastal Shrubland	--
Northern Flicker	<i>Colaptes auratus</i>	Mixed Conifer Forest	--
Olive-sided Flycatcher	<i>Contopus cooperi</i>	Mixed Open Wet Areas	BCC
Orange-crowned Warbler	<i>Leiothlypis celata</i>	Riparian Shrub Areas; Mixed Conifer Forest	--

Common Name	Scientific Name	Habitat Associations in WLSP	Status
Osprey	<i>Pandion haliaetus</i>	Flyover	--
Pacific Wren	<i>Troglodytes pacificus</i>	Mixed Deciduous Forest	--
Pacific-slope Flycatcher	<i>Empidonax difficilis</i>	Mixed Open Wet Areas	--
Purple Finch	<i>Haemorhous purpureus</i>	Riparian Shrub Areas; Mixed Conifer Forest	--
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	Coastal Shrubland	--
Rufous Hummingbird	<i>Selasphorus rufus</i>	Mixed Open Wet Areas	BCC
Sanderling	<i>Calidris alba</i>	Seabird Survey	--
Savannah Sparrow	<i>Passerculus sandwichensis</i>	Disturbed Open Grasslands	--
Short-billed Gull	<i>Larus brachyrhynchus</i>	Mixed Open Wet Areas	--
Song Sparrow	<i>Melospiza melodia</i>	Coastal Shrubland; Mixed Deciduous Forest; Mixed Open Wet Areas	--
Spotted Sandpiper	<i>Actitis macularius</i>	Mixed Open Wet Areas	--
Spotted Towhee	<i>Pipilo maculatus</i>	Coastal Shrubland; Riparian Shrub Areas; Mixed Conifer Forest; Mixed Deciduous Forest; Mixed Open Wet Areas	--
Steller's Jay	<i>Cyanocitta stelleri</i>	Mixed Conifer Forest	--
Turkey Vulture	<i>Cathartes aura</i>	Flyover	--
Violet-green Swallow	<i>Tachycineta thalassina</i>	Mixed Open Wet Areas	--
Warbling Vireo	<i>Vireo gilvus</i>	Riparian Shrub Areas	--
Western Gull	<i>Larus occidentalis</i>	Mixed Open Wet Areas	--
Western Wood-pewee	<i>Contopus sordidulus</i>	Mixed Open Wet Areas	--
Whimbrel	<i>Numenius phaeopus</i>	Flyover	BCC
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	Coastal Shrubland; Mixed Open Wet Areas	--
Wilson's Snipe	<i>Gallinago delicata</i>	Mixed Open Wet Areas	--
Yellow Warbler	<i>Setophaga petechia</i>	Riparian Shrub Areas; Mixed Conifer Forest	--

Key: BCC = USFWS Birds of Conservation Concern; BGEPA = Bald and Golden Eagle Protection Act

While this is a complete list of the species that were observed during surveys, it does not represent the entire bird species diversity of the area. For instance, birds like mourning doves (*Zenaidura macroura*) occur throughout Washington but were not observed during surveys. The list can be considered a good snapshot of spring bird use.

3.3.2 Other Wildlife

While bird species were the most common form of wildlife encountered during surveys at WLSP, several other species were either directly (observation of the animal itself) or indirectly (scat, tracks, etc.) encountered during the visits. As with bird species, many other wildlife species may be present in WLSP that were not observed during surveys. Non-avian wildlife species observed during surveys are included in Table 4.

Table 4. Non-Avian Wildlife Species Observed in Westport Light State Park

Common Name	Scientific Name	Habitat Associations in WLSP	Status
Reptiles			
Northwestern Gartersnake	<i>Thamnophis ordinoides</i>	Mixed Open Wet Areas	--
Mammals			
Coyote	<i>Canis latrans</i>	Throughout most habitats	--
Black-tailed Deer	<i>Odocoileus hemionus columbianus</i>	Throughout most habitats	--
Black Bear	<i>Ursus americanus</i>	In conifer forest habitats	--

3.3.2.1 Mammals

A variety of mammal species are likely present at WLSP, as over 40 species have been documented or are likely to occur in the nearby Willapa Bay National Wildlife (USFWS 2011). For instance, habitat generalists like deer mice (*Peromyscus maniculatus*) and raccoon (*Procyon lotor*) are documented within the refuge and are likely present throughout WLSP despite not being observed during the 2021 surveys. A variety of small mammals may also be present in the park that were not observed during surveys, like chipmunks (*Tamias townsendii*) and bats (*Myotis* spp.) (USFWS 2011), as these species can be difficult to detect due to a secretive or nocturnal nature.

During surveys, coyote scat was observed throughout the park, and black bear scat was observed in the forested areas of the park. Black-tailed deer were commonly observed throughout the park, particularly in the coastal shrub areas (Appendix B – Photo 7).

3.3.2.2 Reptiles and Amphibians

Few reptile species are known to occur in western Washington coastal habitats, as compared to the abundance of reptiles found on the drier, east side of the state. However, the wet habitats found on the west side may provide habitat for a diversity of amphibian species. Fourteen species of amphibian and two reptiles species are documented, or are likely to occur, in the Willapa Bay National Refuge area (USFWS 2011). Gartersnakes (*Thamnophis* sp.) are common in habitats west of the Cascade Mountains, as are a diversity of frog and salamander species. Nine salamander species and five species of frog/toad can be found in the Willapa National Wildlife Refuge area (USFWS 2011) and may also occur within WLSP.

Northwestern gartersnakes were observed in high densities near an abandoned concrete building foundation within the park (Appendix A – Figure 1; Appendix B – Photo 8). Silt fence material has been stockpiled here and apparently provides habitat for numerous snakes; over

15 snakes were found under artificial cover in a short period of searching (10-15 minutes). No amphibians were observed during surveys, although wetland scientists conducting a delineation at the site roughly a month earlier reportedly found numerous tadpoles in the ponded areas of the park (many of which had dried by the time this assessment was conducted). The majority of these are likely Pacific treefrog (*Pseudacris regilla*) tadpoles, which are common throughout western Washington.

3.4 Special Status Fish and Wildlife Species

An evaluation was conducted for the potential presence or absence of habitat for special status wildlife species. This includes federal ESA-listed species (Appendix E – USFWS Species List), those species included in the WDFW Threatened and Endangered species list, and those species included in the WDFW PHS list that were mapped or observed within WLSP during surveys. Only wildlife species that have potential to occupy terrestrial habitats within the park are addressed in this section, as no streams or nearshore habitats are present in the surveyed areas.

Seven ESA-listed species (Table 5) were indicated as potentially present in the park by the USFWS IPaC tool (USFWS 2021). Two of these species may have suitable habitat in or adjacent to the park. No special status species under the jurisdiction of NMFS were identified as present in the park (NMFS 2021). A USFWS Species List is included in Appendix E.

Species included on the WDFW PHS list that may have potential to occur in WLSP were identified by referencing the WDFW PHS Mapper (WDFW 2021a). According to the WDFW PHS Mapper report generated for WLSP, several state-listed threatened, endangered, and/or candidate species were indicated as potentially present (Table 5).

Table 5. Special Status Wildlife Species and Suitable Habitat in Westport Light State Park

Species Common Name <i>Scientific Name</i>	Status	Species Suitable Habitat	Potential to Occur in WLSP
Insects			
Oregon Silverspot Butterfly <i>Speyeria zerene hippolyta</i>	USFWS Threatened WDFW Endangered	Suitable habitat includes coastal meadows and grasslands with hookedspur violet (<i>Viola adunca</i>).	Occurrence is mapped by USFWS IPaC Potential to occur in the park, although remote
Fish			
Bull Trout <i>Salvelinus confluentus</i>	USFWS Threatened WDFW Candidate	Prefers pristine cold-water streams, clean gravel substrates, complex and diverse instream cover, stable stream channels	Occurrence is mapped by USFWS IPaC Not expected to occur in WLSP
Birds			
Brown Pelican <i>Pelecanus occidentalis</i>	PHS listed due to vulnerable aggregations	The brown pelican occurrence is mapped just northeast of the state park, immediately to the north of the Westport Jetty.	Occurrence is mapped by PHS Not expected to occur in terrestrial habitats of WLSP

Species Common Name			
Scientific Name	Status	Species Suitable Habitat	Potential to Occur in WLSP
Great Blue Heron (Breeding Area) <i>Ardea herodias</i>	PHS listed due to vulnerable aggregations	Heron rookeries are often located in mature forest stands of alder, cedar, hemlock, and/or Douglas-fir. The mapped rookery is roughly 0.5-mile to the SE of the state park.	Occurrence is mapped by PHS Not observed during surveys
Marbled Murrelet <i>Brachyramphus marmoratus</i>	USFWS Threatened WDFW Endangered	Forages in near-shore marine waters on fish and invertebrates. May nest up to 70 miles inland in mature, old growth forests.	Occurrence is mapped by USFWS IPaC Not expected to occur in terrestrial habitats of WLSP
Shorebird Concentration	PHS listed due to vulnerable aggregations	The shorebird concentration areas are mapped directly to the west of the park along the Westport Jetty and in the tidal areas to the east of Westport	Occurrence is mapped by PHS Observed during surveys
Short-tailed Albatross <i>Phoebastria (=Diomedea) albatrus</i>	USFWS Endangered WDFW Candidate	Breed on small islands in the north Pacific. Forage throughout the Pacific, and sub-adults may occur in the eastern Pacific along the Washington coast.	Occurrence is mapped by USFWS IPaC Not expected to occur in terrestrial habitats of WLSP
Streaked Horned Lark <i>Eremophila alpestris strigata</i>	USFWS Threatened WDFW Endangered	Habitat consists of large areas of barren or sparsely vegetated areas in the Puget Trough, along coastlines, or seasonal wetlands.	Occurrence is mapped by USFWS IPaC Not expected to occur within WLSP
Western Snowy Plover <i>Charadrius nivosus nivosus</i>	USFWS Threatened WDFW Endangered	In Washington, found above high tideline on coastal beaches and dunes. Found in Grays Harbor County.	Occurrence is mapped by USFWS IPaC. An additional occurrence is mapped roughly 0.5 -mile east of the park by PHS. This species has the potential to occur in the beach areas adjacent to the state park. Nest sites have been observed on the Ocean Shores Peninsula, and just east of Westport (WDFW 2013). Critical Habitat is designated on the Ocean Shores Peninsula.
Yellow-billed Cuckoo Western DPS <i>Coccyzus americanus</i>	USFWS Threatened WDFW Endangered	Suitable habitat includes intact deciduous riparian areas. The bird is extremely rare in Washington, and no critical habitat occurs in the state.	Occurrence is mapped by USFWS IPaC Not expected to occur within WLSP

Source: WDFW 2020, 2021a; USFWS 2021

Key: DPS = distinct population segment; IPaC = Information for Planning and Consultation; PHS = Priority Habitats and Species; USFWS = U.S. Fish and Wildlife Service; WDFW = Washington State Department of Fish and Wildlife; WLSP = Westport Light State Park.

3.4.1 ESA-Listed Fish and Wildlife Species

Seven ESA-listed fish and wildlife species were listed as potentially present in WLSP by the USFWS IPaC Mapper (USFWS 2021). All of these species are either not expected or very unlikely to occur within the terrestrial habitats of WLSP. In addition, no critical habitat for these species occurs in WLSP.

3.4.1.1 Oregon Silverspot Butterfly

Oregon silverspot butterflies (*Speyeria zerene hippolyta*) are closely associated with the hookedspur violet (*Viola adunca*). Historical fire regimes helped maintain natural meadows that favored the species' preferred habitat. Current fire control methods, natural succession, and invasive plants have altered the species coastal habitats (WDFW 2013). While intensive recovery efforts are being implemented (e.g., captive breeding, habitat restoration), including at areas relatively close to the park (e.g., habitat restoration at John's River State Wildlife Area), the species is considered extirpated from the state. The population at Westport disappeared sometime prior to 1982 (WDFW 2013). Consequently, the species is not thought to currently occur at the state park, although the park itself may represent a unique habitat opportunity within the species historic range.

3.4.1.2 Fish Species

No listed fish species under NMFS jurisdiction were identified as potentially occurring at the park (NMFS 2021). Bull trout (*Salvelinus confluentus*) was identified as potentially occurring in the vicinity of the park (USFWS 2021). However, while this species does use nearshore marine areas (and has designated critical habitat in Grays Harbor) along the Washington coast, no streams are present within the park, and consequently, no habitat for listed fish species is present in the area.

3.4.1.3 Yellow-Billed Cuckoo

The yellow-billed cuckoo (*Coccyzus americanus*) is a small robin-sized bird that specializes in intact, large patches of deciduous riparian woodlands. The species was once considered common along the Columbia River in the late 1800s but no longer occurs in Washington state (WDFW 2013). They were observed nesting in the Puget Trough throughout the earlier 1900s, but the species was considered rare by the 30s and 40s, and the last documented nesting pair was observed in 1934. Observations in the state are extremely rare, with only 12 observations between 1950 and 2000 (WDFW 2013). Consequently, the species is not thought to occur in the park, and no critical habitat occurs in Washington state.

3.4.1.4 Marbled Murrelet

Marbled murrelets (*Brachyramphus marmoratus*) are small seabirds that forage in nearshore waters, including the nearshore waters of Washington. Nesting typically occurs in old growth forests up to 70 miles inland. Nesting substrates are typically large diameter branches or other suitable platforms in large, old trees. While the species may forage in the near-shore waters adjacent to the park, it is unlikely that the species would nest in the park. The shore pine dominated forested habitats do not exhibit the large platforms typically necessary for nesting.

3.4.1.5 Short-tailed Albatross

This species is not known to breed in Washington state. The short-tailed albatross (*Phoebastria [=Diomedea] albatrus*) breeding colonies are primarily found on small islands in the north

Pacific. The species forages throughout the Pacific and may occasionally occur in the open marine waters offshore from the state park. However, the species is unlikely to occur within the terrestrial habitats of the state park that were surveyed as a part of this assessment.

3.4.1.6 Streaked Horned Lark

Streaked horned larks (*Eremophila alpestris strigata*) preferentially select open habitats with low stature vegetation to nest, and these habitats are rare within the assessed portions of the state park. Dense vegetation and abundant invasive plants (e.g., Scotch broom) provide abundant cover, meaning areas of sparsely vegetated bare ground are rare. However, small amounts of bare, sandy areas are present in areas of the northwest corner of the park, which may provide limited habitat for streaked horned larks in the analysis area. Additionally, birds have been detected at John's River Island and Damon Point (WDFW 2013) and are occasionally found along beach habitats in coastal Washington state. Consequently, it is unlikely, albeit possible, that streaked horned larks may occur in WLSP.

3.4.1.7 Western Snowy Plover

This species has potential to occur in the beach habitats adjacent to the surveyed portions of the state park. The entire known breeding population in Washington state is thought to occur in beach habitats on Washington's outer shore near Willapa Bay and Grays Harbor. Since 2000, at least one nest has been found on the south peninsula at the entrance to Grays Harbor (the same peninsula that the state park is located on) (WDFW 2013). Additional nests have been found directly across the entrance to Grays Harbor on the Ocean Shores Peninsula, and critical habitat is located here as well (although not within the WLSP, or on the southern peninsula). Nests were also observed in 2020 and 2021 at Griffiths-Priday State Park, north of Ocean Shores.

3.4.2 Washington State Sensitive Species

According to the WDFW PHS Mapper report generated for the state park (WDFW 2021a), no state-listed threatened, endangered, and/or candidate species were indicated as potentially present in the state park. However, several state-listed and/or sensitive PHS features are mapped (Table 5) in the immediate vicinity of the park. No mapped fish/aquatic species were included in this analysis, as only those wildlife species that have potential to occupy terrestrial habitats within the park are addressed.

Several wetlands are mapped by PHS as within the park boundaries, but wetland presence in the park is addressed in a separate report (AECOM 2021), and wetlands are consequently not discussed further.

No PHS-mapped features were observed during field surveys in the area. However, several state priority species may occur within the beach and/or forested habitats adjacent to the analysis area. These include brown pelicans (*Pelecanus occidentalis*), great blue heron (*Ardea herodias fannini*) breeding areas, shorebird concentrations, and streaked horned larks and western snowy plovers. Common loons were observed flying over the park (WDFW State Sensitive) during surveys. However, these species are largely dependent on large aquatic

habitats in Washington State, and would be unlikely to utilize the terrestrial habitats with WLSP (aside from occasionally flying over the park).

3.4.3 Birds of Conservation Concern

In addition to those species listed under the ESA, USFWS IPaC reports also generate a list of migratory bird species that may warrant attention for a given project (USFWS 2021). This list is used by USFWS to identify those birds that, without additional conservation action, may become candidates for listing under the ESA. However, birds included on this list are not provided additional regulatory protections under the ESA, aside from those that may apply under the MBTA or BGEPA or other relevant regulations. All of these birds have potential to occur in WLSP or the nearby open water. Those species observed during surveys are indicated by bolding in Table 6. The birds listed in Table 6 are either USFWS Birds of Conservation Concern (BCC) in the area or are protected by the BGEPA.

Table 6. Birds of Conservation Concern and Likelihood of Occurring in Westport Light State Park

Species Common Name Scientific Name	Reason for Inclusion	Brief Description of Suitable Habitat
Bald Eagle <i>Haliaeetus leucocephalus</i>	BGEPA	Often occur near rivers, marshes, lakes, and coastlines. Often perch/nest on tall structures with a commanding view of the area.
Black Oystercatcher <i>Haematopus bachmani</i>	BGEPA	The Black Oystercatcher's habitat includes rocky seacoasts and islands, less commonly sandy beaches, where they eat mollusks, especially mussels and limpet.
Black Turnstone <i>Arenaria melanocephala</i>	BCC	Inhabit the Pacific coastlines, especially rocky habitats. Foraging and roosting occurs on rocks, but they may feed in adjacent muddy or sandy habitats.
Black-footed Albatross <i>Phoebastria nigripes</i>	BCC	Nest on sandy islands, but spend the majority of the nonbreeding season on the open ocean.
Clark's Grebe <i>Aechmophorus clarkii</i>	BCC	Nest on large lakes and marshes. Nesting in tidal areas is unusual. May occupy saltwater or brackish habitats during the non-breeding season.
Great Blue Heron <i>Ardea herodias fannini</i>	BCC	Prefer areas with short grasses such as prairies and agricultural fields. Found in wetland habitats outside the breeding season.
Lesser Yellowlegs <i>Tringa flavipes</i>	BCC	Breed in areas with water and dense shrubbery. Riparian areas are often used.
Long-billed Curlew <i>Numenius americanus</i>	BCC	Summers are spent in areas with sparse grasses (prairies, agricultural fields, etc.). Winter in wetlands, tidal estuaries, and beaches.
Marbled Godwit <i>Limosa fedoa</i>	BCC	Breed in shortgrass areas near wetlands. Overwinter in coastal mudflats, estuaries, and beaches.
Olive-sided Flycatcher <i>Contopus cooperi</i>	BCC	Breed in coniferous forests, including spruce, fir, hemlock, cedar, and others. May use any forested area.
Pink-footed Shearwater <i>Puffinus creatopus</i>	BCC	Nesting occurs on islands off south America. Commonly seen during summer off the pacific coast in the open ocean.

Species Common Name Scientific Name	Reason for Inclusion	Brief Description of Suitable Habitat
Red-throated Loon <i>Gavia stellata</i>	BCC	Use wetlands and small lakes to breed in the far north. Fly along ocean shores during migration. May winter in marine waters near land.
Rufous Hummingbird <i>Selasphorus rufus</i>	BCC	Breed in shrubby/open areas such as forest openings, parks, etc. throughout the Pacific Northwest.
Scripps's Murrelet <i>Synthliboramphus scrippsi</i>	BCC	Breed in southern California and into Mexico on small islands off the coast. Rarely seen near shore, and may forage well out into the open ocean.
Semipalmated Sandpiper <i>Calidris pusilla</i>	BCC	Typically nest in tundra near marshes or ponds. Migrating birds may stop over at wetlands, beaches, beaches, and others.
Short-billed Dowitcher <i>Limnodromus griseus</i>	BCC	Breed in the northern wetlands in areas where tree growth is stunted. Winter in saltwater environments such as estuaries and lagoons.
Whimbrel <i>Numenius phaeopus</i>	BCC	Winter on tidal mudflats, saltmarshes, lagoons, etc. Breed in subarctic tundra.
Willet <i>Tringa semipalmata</i>	BCC	Willetts inhabit open beaches, bayshores, marshes, etc. Wintering is widespread in similar habitats.

Source: Cornell Lab of Ornithology 2021

Key: BCC = Birds of Conservation Concern; BGEPA = Bald and Golden Eagle Protection Act

Three BCC were observed during surveys of the park, including the olive-sided flycatcher, rufous hummingbird, and whimbrel (*Numenius phaeopus*). Whimbrels were observed flying over the park, but were not observed utilizing available terrestrial habitats at the park. They are closely associated with coastal and estuarine sand beaches and mudflats/saltmarshes (Larson et al. 2004), which are not present in the surveyed portions of WLSP. However, this species does occasionally use habitats like marshes, meadows, and fields that do occur in WLSP (Cornell Lab of Ornithology 2021). They would be most likely to occur in the coastal areas immediately adjacent to WLSP (outside the survey area), although may occasionally use available upland habitats within the park.

Both olive-sided flycatchers and rufous hummingbirds were observed using habitat within WLSP. The presence of these birds in WLSP is notable due to the substantial reductions in population both species have experienced throughout their range.

Olive sided flycatchers have experienced an annual decrease of approximately 3.5 percent in population throughout their range, resulting in an estimated 75 percent decrease in overall population size, as measured over 40 years of surveying (Kotliar et al. 2007). The species is closely associated with forest openings and edges, often following disturbance. Particularly important aspects of the species habitat includes the combination of forest openings and mature forest, including an abundance of snags (Kotliar et al. 2007). As WLSP combines both forested and open areas with areas of wetland matrix, WLSP may serve as valuable areas of available habitat for the species.

Rufous hummingbirds have also experienced significant declines. Data collected as a part of the Breeding Bird Survey indicate that the species has declined at an annual rate of 2.1 percent, resulting in an estimated 65 percent decrease in overall population size (English et al. 2021). These trends have recently accelerated and are especially pronounced on the Pacific Coast

(English et al. 2021). The species is typically associated with open/shrubby areas and forest openings, although they can also be found in meadows and brushy wetlands. The habitats present at WLSP may serve as valuable areas of available habitat for the species.

Bald eagles were also observed flying over WLSP. The species appears in the BCC list provided by USFWS due to protections for the species established under the BGEPA. Eagles are often associated with coastal areas, particularly where suitable trees are available for perching and roosting in proximity to water bodies. While eagles were not observed perching or using terrestrial habitats within WLSP during surveys (rather, flying above the park), the terrestrial habitats present in the park could support bald eagles.

4. Conclusion and Recommendations

WLSP represents an important area in terms of conserving and protecting undeveloped coastal wildlife habitat in Washington. While some portions of the park have clearly been heavily impacted by invasive plant species, valuable interdunal wetland and dune habitats remain. There is opportunity to conserve rare wildlife species within the park, including species that were observed during field surveys or are known to occur in the area (e.g., olive-sided flycatcher [Appendix B – Photo 9]). As in other dune habitats in Washington, the dune habitats at WLSP have been invaded by non-native plants (e.g., Scotch broom and European beachgrass). Restoration of these communities would likely benefit wildlife diversity and abundance in general within the park.

Recommendations to improve wildlife habitat within the park are largely similar to those detailed in the 2017 vegetation survey report (AECOM 2017). These include control of non-native species, removal of construction debris, controlling unauthorized campsites, wetland protection, and upland dune restoration.

- **Control of non-native plant species.** Non-native plants, particularly Scotch broom and European beachgrass, are a dominant component of many habitat types within the park. Because these infestations are often interspersed among high-quality habitats, manual and mechanical methods are recommended to avoid damaging other habitat types.
- **Construction debris removal.** Silt fence, plastic poles, and various other construction materials still remain at the park from the attempt at constructing a golf course. These should be removed from the park.
- **Control of unauthorized campsites.** As the park is adjacent to the community of Westport and offers access to forested areas that can conceal camps, it is attractive to unauthorized campers. Several unauthorized campsites were observed in the park during surveys.
- **Wetland protection.** The wetlands present at WLSP are uncommon in the landscape and in good condition. These wetlands should be protected and prioritized as development/management projects are considered for WLSP.
- **Upland dune restoration.** The upland dune habitats in the park are in poor condition, largely due to invasion by non-native plant species. These areas could be restored with removal of Scotch broom, European beachgrass, and control of encroaching shore pine.
- **Prioritize riparian shrub areas with intact adjacent upland habitats for protection.** Riparian-associated birds make use of grass, shrub and woodland habitats adjacent to riparian zones throughout their lives. Upland zones provide migratory stopover grounds, foraging habitat, and dispersal corridors for non-breeding adults and juveniles.
- **Promote mixed open wet area health.** These patchy areas were somewhat isolated during construction of the golf course but are recovering and developing into a somewhat unique habitat. The size and connectivity of the wet area patches may be limiting to wildlife species' occupancy and population size. Patch sizes must not fall below the minimum necessary to support populations based on territory size requirements, community dynamics, and sensitivity of some species to fragmentation and edge effects (increased predation/parasitism rates).

5. References

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Appendix A Figure

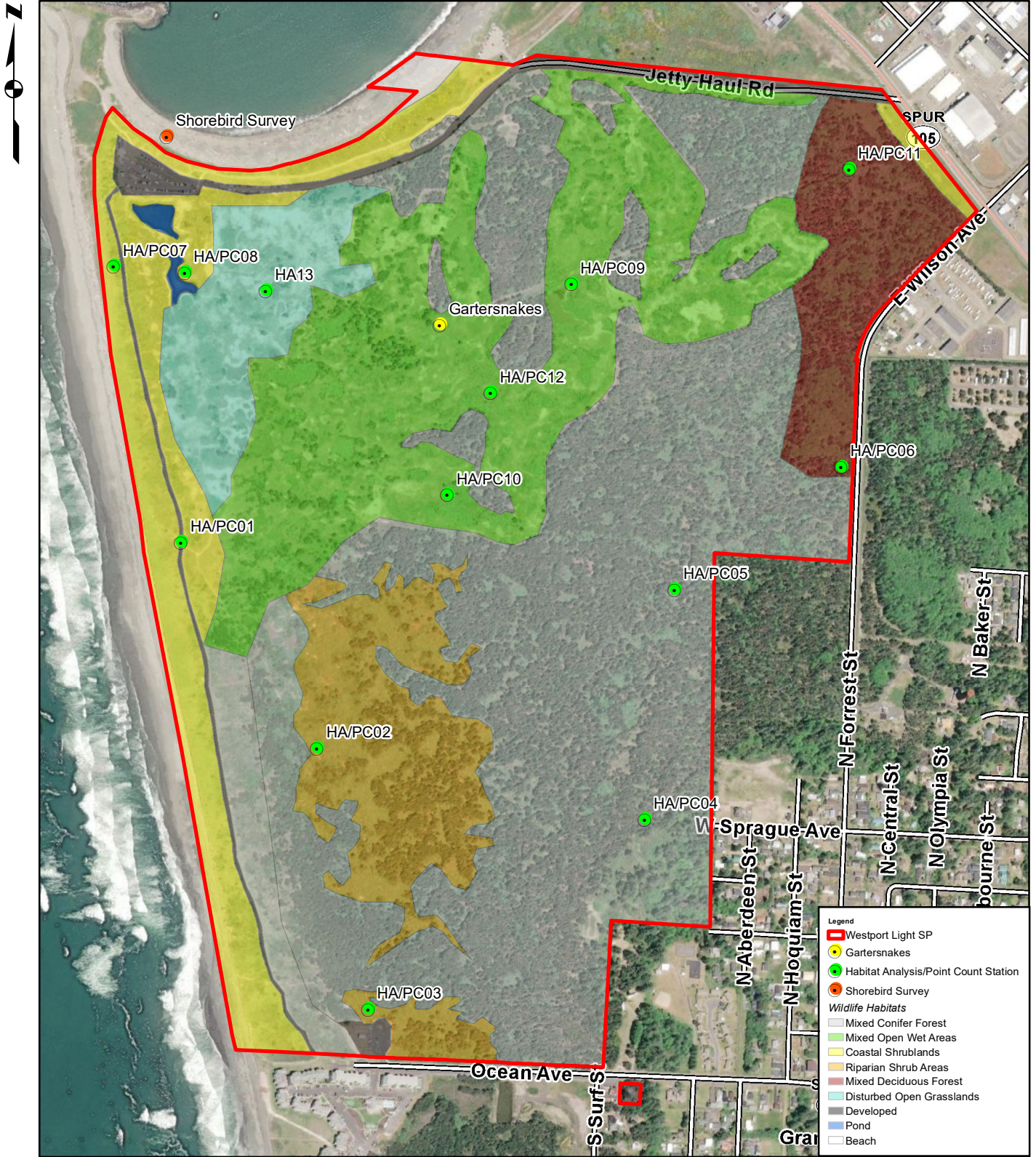
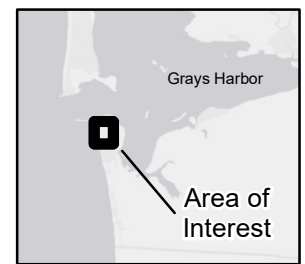


Figure 1

Westport Light State Park
Wildlife Habitat Assessment
Westport, Washington



Appendix B Photolog



Photo 1. Representative mixed conifer forest habitat within the study area.



Photo 2. Representative mixed open wet areas habitat within the study area.



Photo 3. Representative coastal shrubland habitat within the study area.



Photo 4. Representative riparian shrub areas habitat within the study area.



Photo 5. Representative mixed deciduous forest habitat within the study area.



Photo 6. Representative disturbed open grassland habitat within the study area.



Photo 7. Photo of black-tailed deer within the study area.



Photo 8. Photo of a northwestern gartersnake, as observed in the study area. Snakes were commonly found under cover within the study area.



Photo 9. Photo of olive-sided flycatcher within the study area.

Appendix C Wildlife Habitat Assessment Forms

Site Number	Total Habitat Score as Existing	Total Acres
PC#01	36	
Site Location	Field Dates	Field Observers
Westport SP	5/12/2021	GM + JDB
General Comments: Large line/developed trail		

Habitat Component		Degree Present			Score	Comments
Water	Quantity and Seasonality	None 0	Seasonal 4	Perennial 8	0	No water/ Present
	Diversity Streams/Ponds/Etc.	None 2	Two 4	Three 8	2	
	Proximity to Cover	None 0	Near 4	Adjacent 8	0	
	Quality Flushing	Stagnant 0	Seasonal 3	Continuous 6	0	
Food	Quantity and Seasonality	None 0	Limited 4	Year Rnd 8	4	Huckleberry seeds
	Variety	Low 0	Medium 4	High 8	0	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
Cover	Structural Diversity	Low 0	Medium 4	High 8	0	Essentially just shrubs
	Variety	Low 0	Medium 4	High 8	4	
	Seasonality	None 0	Limited 2	Year Rnd 4	4	
	Nesting Denning, etc.	Low 0	Medium 2	High 4	2	
	Escape	Low 0	Medium 2	High 4	4	
Other Values	Physical Disturbance	Permanent 0	Temporary 2	None 4	2	Permanent Road trail, but small footprint
	Human Disturbance	High 0	Medium 2	Low 4	0	
	Interspersion With Other Habitats	Low 0	Medium 3	High 6	0	
Unique Features	Habitat Type	0	-	4	3	Undeveloped shrubs
	Flora	0	-	4	2	Potential for restoration
	Fauna	0	-	4	1	functional 1 ft ↓

Site Number	Total Habitat Score as Existing	Total Acres
PCH 01	36	
Weather on Day of Field Observation		
Precipitation: Dry	Wind Speed: 5-10	
Cloud Cover: 60%	Temperature: 60	

Physical Environment	
Topography Description: long dune, hills	
Slope Orientation and degree of slope: 0-5%	
Types of Water Features Present: None	
Portion of Site Inundated: N/A	
Major Structures or Roads: Paved walking path	

Vegetation		
List of Herb Species: Dune grasses		
List of Shrub Species: Scott's broom, evergreen huckleberry		
List of Tree Species: Shore pine		
Types of Plant Communities: Shrub Dominated dune		
Serial Stages of Plan Communities: Mid successional		
General Health and Vitality of Plant Communities: good.		
% Canopy Closure Herb Zone: 100	Shrub Zone: 60	Tree Zone: 2
Appx # of Snags Per Acre: 0	Diameter of Largest Snag (ft): 0	
% Aquatic Veg Floating: 0	Emergent %: 0	Inundated %: 0

Site Number	Total Habitat Score as Existing	Total Acres
PC #02	65	
Site Location	Field Dates	Field Observers
Westland SP	5/12/21	GM+SD
General Comments:		
Hookers Willow		

Habitat Component		Degree Present			Score	Comments
Water	Quantity and Seasonality	None 0	Seasonal 4	Perennial 8	4	
	Diversity Streams/Ponds/Etc.	None 2	Two 4	Three 8	2	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
	Quality Flushing	Stagnant 0	Seasonal 3	Continuous 6	0	
Food	Quantity and Seasonality	None 0	Limited 4	Year Rnd 8	4	
	Variety	Low 0	Medium 4	High 8	4	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
Cover	Structural Diversity	Low 0	Medium 4	High 8	4	
	Variety	Low 0	Medium 4	High 8	0	
	Seasonality	None 0	Limited 2	Year Rnd 4	2	
	Nesting Denning, etc.	Low 0	Medium 2	High 4	2	
	Escape	Low 0	Medium 2	High 4	4	
Other Values	Physical Disturbance	Permanent 0	Temporary 2	None 4	4	
	Human Disturbance	High 0	Medium 2	Low 4	4	
	Interspersion With Other Habitats	Low 0	Medium 3	High 6	6	
Unique Features	Habitat Type	0	-	4	3	Unique habitat for Park
	Flora	0	-	4	3	
	Fauna	0	-	4	3	↓

Site Number PC# 02	Total Habitat Score as Existing 65	Total Acres
Weather on Day of Field Observation		
Precipitation: Dry	Wind Speed: 5-10	
Cloud Cover: 60%	Temperature: 60	

Physical Environment	
Topography Description:	flat, in a slight depression
Slope Orientation and degree of slope:	0%
Types of Water Features Present:	Seasonal inundation
Portion of Site Inundated:	70
Major Structures or Roads:	Small game trail

Vegetation		
List of Herb Species:	Sloagh sedge	
List of Shrub Species:	hookers willow	
List of Tree Species:	Shore pine	
Types of Plant Communities:	hookers willow	
Serial Stages of Plan Communities:	late successional	
General Health and Vitality of Plant Communities:	Good	
% Canopy Closure Herb Zone:	60	Shrub Zone: 100
Appx # of Snags Per Acre:	0	Tree Zone: 5
Diameter of Largest Snag (ft):	N/A	
% Aquatic Veg Floating:	0	Emergent %:
		Inundated %: 70%

Shrub Shrub ~~70%~~
70%

Site Number	Total Habitat Score as Existing	Total Acres
PC# 03	54	
Site Location	Field Dates	Field Observers
Westport SP	5/12/2021	GM + JDB
General Comments:		
Scrub Willow + flowers		

Habitat Component		Degree Present			Score	Comments
Water	Quantity and Seasonality	None 0	Seasonal 4	Perennial 8	4	Seasonal Zonation
	Diversity Streams/Ponds/Etc.	None 2	Two 4	Three 8	2	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
	Quality Flushing	Stagnant 0	Seasonal 3	Continuous 6	0	
Food	Quantity and Seasonality	None 0	Limited 4	Year Rnd 8	4	
	Variety	Low 0	Medium 4	High 8	4	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
Cover	Structural Diversity	Low 0	Medium 4	High 8	0	
	Variety	Low 0	Medium 4	High 8	0	
	Seasonality	None 0	Limited 2	Year Rnd 4	2	
	Nesting Denning, etc.	Low 0	Medium 2	High 4	2	
	Escape	Low 0	Medium 2	High 4	4	
Other Values	Physical Disturbance	Permanent 0	Temporary 2	None 4	2	
	Human Disturbance	High 0	Medium 2	Low 4	2	
	Interspersion With Other Habitats	Low 0	Medium 3	High 6	3	
Unique Features	Habitat Type	0	-	4	3	Willow patches are core in SP
	Flora	0	-	4	3	
	Fauna	0	-	4	3	riparian areas have higher diversity

Site Number PC#03	Total Habitat Score as Existing 54	Total Acres
Weather on Day of Field Observation		
Precipitation: Dry	Wind Speed: 5-10	
Cloud Cover: 0%	Temperature: 60	

Physical Environment	
Topography Description:	Flat
Slope Orientation and degree of slope:	0%
Types of Water Features Present:	Seasonal inundation
Portion of Site Inundated:	70
Major Structures or Roads:	Trail and adjacent parking lot

Vegetation		
List of Herb Species:	Slough sedge	
List of Shrub Species:	Slough sedge Hookers Willow, spirea	
List of Tree Species:	N/A	
Types of Plant Communities:	Hookers Willow	
Serial Stages of Plant Communities:	late successional	
General Health and Vitality of Plant Communities:	good.	
% Canopy Closure Herb Zone:	60	Shrub Zone: 100
		Tree Zone: 0
Appx # of Snags Per Acre:	0	Diameter of Largest Snag (ft): N/A
% Aquatic Veg Floating:	0	Inundated %: 70
	Emergent %:	

Shrub wetland

Site Number	Total Habitat Score as Existing	Total Acres
Pottery	63	
Site Location	Field Dates	Field Observers
Westport SP	5/12/21	GM + JDB
General Comments:		
Sheepline Forest		

Habitat Component		Degree Present			Score	Comments
Water	Quantity and Seasonality	None 0	Seasonal 4	Perennial 8	4	Ephemeral Saturation
	Diversity Streams/Ponds/Etc.	None 2	Two 4	Three 8	2	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
	Quality Flushing	Stagnant 0	Seasonal 3	Continuous 6	0	
Food	Quantity and Seasonality	None 0	Limited 4	Year Rnd 8	4	Pine seeds Invertebrates
	Variety	Low 0	Medium 4	High 8	4	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
Cover	Structural Diversity	Low 0	Medium 4	High 8	4	
	Variety	Low 0	Medium 4	High 8	4	
	Seasonality	None 0	Limited 2	Year Rnd 4	4	
	Nesting Denning, etc.	Low 0	Medium 2	High 4	2	
	Escape	Low 0	Medium 2	High 4	4	
Other Values	Physical Disturbance	Permanent 0	Temporary 2	None 4	2	Small hidden trail
	Human Disturbance	High 0	Medium 2	Low 4	4	
	Interspersion With Other Habitats	Low 0	Medium 3	High 6	6	
Unique Features	Habitat Type	0	-	4	1	Inter habitat but not rare.
	Flora	0	-	4	1	
	Fauna	0	-	4	1	

Site Number	Total Habitat Score as Existing	Total Acres
PCH 04	63	
Weather on Day of Field Observation		
Precipitation: Dry	Wind Speed: 5-10	
Cloud Cover: 0%	Temperature: 60	

Physical Environment	
Topography Description:	flat with mounds
Slope Orientation and degree of slope:	0%
Types of Water Features Present:	Ephemeral Wetland
Portion of Site Inundated:	20
Major Structures or Roads:	Small hiking trail

Vegetation		
List of Herb Species:	SloUGH sedge	
List of Shrub Species:	Scott's broom, Evergreen Huckleberry, Red huckleberry, Salvaal	
List of Tree Species:	Sitka spruce, Shore pine, alder	
Types of Plant Communities:	Shore pine forest	
Serial Stages of Plant Communities:	late successional	
General Health and Vitality of Plant Communities:	good, healthy some invasive	
% Canopy Closure Herb Zone:	Shrub Zone:	Tree Zone:
30	40	40
Appx # of Snags Per Acre:	Diameter of Largest Snag (ft):	
2	9"	
% Aquatic Veg Floating:	Emergent %:	Inundated %:
0	20	0

Site Number	Total Habitat Score as Existing	Total Acres
PC#05	66	
Site Location	Field Dates	Field Observers
Westport SP	5/12/21	GM + SDB
General Comments: Shore pine Forest		

Habitat Component		Degree Present			Score	Comments
Water	Quantity and Seasonality	None 0	Seasonal 4	Perennial 8	4	Seasonal Ephemeral Submerston
	Diversity Streams/Ponds/Etc.	None 2	Two 4	Three 8	2	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
	Quality Flushing	Stagnant 0	Seasonal 3	Continuous 6	0	
Food	Quantity and Seasonality	None 0	Limited 4	Year Rnd 8	4	Pine seed, Huckleberry
	Variety	Low 0	Medium 4	High 8	4	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
Cover	Structural Diversity	Low 0	Medium 4	High 8	4	
	Variety	Low 0	Medium 4	High 8	4	
	Seasonality	None 0	Limited 2	Year Rnd 4	4	
	Nesting Denning, etc.	Low 0	Medium 2	High 4	2	
	Escape	Low 0	Medium 2	High 4	4	
Other Values	Physical Disturbance	Permanent 0	Temporary 2	None 4	4	
	Human Disturbance	High 0	Medium 2	Low 4	4	
	Interspersion With Other Habitats	Low 0	Medium 3	High 6	6	
Unique Features	Habitat Type	0	-	4	1	Intact Habitat but not particularly rare
	Flora	0	-	4	1	
	Fauna	0	-	4	1	

Site Number	Total Habitat Score as Existing	Total Acres
PCH05	65	
Weather on Day of Field Observation		
Precipitation: Dry	Wind Speed: 5-10	
Cloud Cover: 15%	Temperature: 60	

Physical Environment	
Topography Description:	flat with mounds
Slope Orientation and degree of slope:	0%
Types of Water Features Present:	Ephemeral wetland
Portion of Site Inundated:	20
Major Structures or Roads:	None

Vegetation		
List of Herb Species:	slough sedge,	
List of Shrub Species:	Sott's broom, Evergreen Huckleberry Labrador tea	
List of Tree Species:	Shore pine	
Types of Plant Communities:	Shore pine forest	
Serial Stages of Plant Communities:	Late successional	
General Health and Vitality of Plant Communities:	good, healthy. Some invasive	
% Canopy Closure Herb Zone:	Shrub Zone:	Tree Zone:
30	30	40
Appx # of Snags Per Acre:	Diameter of Largest Snag (ft):	
1	8"	
% Aquatic Veg Floating:	Emergent %:	Inundated %:
0	20	0

Site Number	Total Habitat Score as Existing	Total Acres
PC#06	78	
Site Location	Field Dates	Field Observers
Westport SP	9-12-21	GM JD
General Comments: Alder forest		

Habitat Component		Degree Present			Score	Comments
Water	Quantity and Seasonality	None 0	Seasonal 4	Perennial 8	4	rough edge
	Diversity Streams/Ponds/Etc.	None 2	Two 4	Three 8	2	wetland
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	over
	Quality Flushing	Stagnant 0	Seasonal 3	Continuous 6	0	
Food	Quantity and Seasonality	None 0	Limited 4	Year Rnd 8	8	
	Variety	Low 0	Medium 4	High 8	8	insects, seed beam
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
Cover	Structural Diversity	Low 0	Medium 4	High 8	4	apple tree canopy
	Variety	Low 0	Medium 4	High 8	8	
	Seasonality	None 0	Limited 2	Year Rnd 4	2	deciduous tree
	Nesting Denning, etc.	Low 0	Medium 2	High 4	4	
	Escape	Low 0	Medium 2	High 4	4	
Other Values	Physical Disturbance	Permanent 0	Temporary 2	None 4	4	
	Human Disturbance	High 0	Medium 2	Low 4	2	road nearby
	Interspersion With Other Habitats	Low 0	Medium 3	High 6	6	
Unique Features	Habitat Type	0	-	4	2	Not unique for region, but potentially unique for Pav.
	Flora	0	-	4	2	
	Fauna	0	-	4	2	↓

Site Number	Total Habitat Score as Existing	Total Acres
	78	
Weather on Day of Field Observation		
Precipitation: Dry	Wind Speed: 5-10	
Cloud Cover: 15%	Temperature: 55°	

Physical Environment	
Topography Description: Flat,	
Slope Orientation and degree of slope: 0%	
Types of Water Features Present: Wetland (seasonal) mosaic	
Portion of Site Inundated: 60% seasonal	
Major Structures or Roads: Medium trafficked local road adjacent	

Vegetation		
List of Herb Species: Slough sedge		
List of Shrub Species: Evergreen Huckleberry, Red huckleberry		
List of Tree Species: Red Alder		
Types of Plant Communities: Red Alder / slough sedge wetland		
Serial Stages of Plant Communities: ^{seral} late successional		
General Health and Vitality of Plant Communities: Vital + healthy good.		
% Canopy Closure Herb Zone: 70	Shrub Zone: 35	Tree Zone: 45
Appx # of Snags Per Acre: 1	Diameter of Largest Snag (ft): 8"	
% Aquatic Veg Floating: 0%	Emergent %: 60	Inundated %: 60 seasonal

Site Number	Total Habitat Score as Existing	Total Acres
PC#07	36	
Site Location	Field Dates	Field Observers
Westport SP	5/13/21	GM + SDB
General Comments: <i>Dune grass habitat</i>		

Habitat Component		Degree Present			Score	Comments
Water	Quantity and Seasonality	None 0	Seasonal 4	Perennial 8	0	No water
	Diversity Streams/Ponds/Etc.	None 2	Two 4	Three 8	2	
	Proximity to Cover	None 0	Near 4	Adjacent 8	0	
	Quality Flushing	Stagnant 0	Seasonal 3	Continuous 6	0	
Food	Quantity and Seasonality	None 0	Limited 4	Year Rnd 8	4	Jus grasses
	Variety	Low 0	Medium 4	High 8	0	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
Cover	Structural Diversity	Low 0	Medium 4	High 8	0	
	Variety	Low 0	Medium 4	High 8	0	
	Seasonality	None 0	Limited 2	Year Rnd 4	4	
	Nesting Denning, etc.	Low 0	Medium 2	High 4	2	
	Escape	Low 0	Medium 2	High 4	2	
Other Values	Physical Disturbance	Permanent 0	Temporary 2	None 4	2	
	Human Disturbance	High 0	Medium 2	Low 4	2	
	Interspersion With Other Habitats	Low 0	Medium 3	High 6	3	
Unique Features	Habitat Type	0	-	4	4	Unique divergent assemblage
	Flora	0	-	4	2	possibly some unique elements
	Fauna	0	-	4	1	

Site Number	Total Habitat Score as Existing	Total Acres
PCA07	36	
Weather on Day of Field Observation		
Precipitation: Dry	Wind Speed: 5-10	
Cloud Cover: 100	Temperature: 55	

Physical Environment	
Topography Description: rolling dunes	
Slope Orientation and degree of slope: 0-5%	
Types of Water Features Present: None	
Portion of Site Inundated: N/A	
Major Structures or Roads: social trails cutting through habitat	

Vegetation		
List of Herb Species: Dune grasses		
List of Shrub Species: Trace scott's broom and salvia		
List of Tree Species: N/A		
Types of Plant Communities: Dune grasslands		
Serial Stages of Plan Communities: late Early successional		
General Health and Vitality of Plant Communities: healthy		
% Canopy Closure Herb Zone: 100	Shrub Zone: 5	Tree Zone: N/A
Appx # of Snags Per Acre: 0	Diameter of Largest Snag (ft): 0	
% Aquatic Veg Floating: 0	Emergent %: 0	Inundated %: 0

Site Number	Total Habitat Score as Existing	Total Acres
P408	70 64	
Site Location	Field Dates	Field Observers
Westport	5/16/81	GM + JDD
General Comments:		
Disturbed uplands (grasslands w/ scattered Sycamore)		

Habitat Component		Degree Present			Score	Comments
Water	Quantity and Seasonality	None 0	Seasonal 4	Perennial 8	8	
	Diversity Streams/Ponds/Etc.	None 2	Two 4	Three 8	4	
	Proximity to Cover	None 0	Near 4	Adjacent 8	4	
	Quality Flushing	Stagnant 0	Seasonal 3	Continuous 6	0	
Food	Quantity and Seasonality	None 0	Limited 4	Year Rnd 8	8	Pine cones Grass, strawberry seeds, insects
	Variety	Low 0	Medium 4	High 8	8	
	Proximity to Cover	None 0	Near 4	Adjacent 8	4	
Cover	Structural Diversity	Low 0	Medium 4	High 8	4	
	Variety	Low 0	Medium 4	High 8	4	
	Seasonality	None 0	Limited 2	Year Rnd 4	4	
	Nesting Denning, etc.	Low 0	Medium 2	High 4	4	
	Escape	Low 0	Medium 2	High 4	2	
Other Values	Physical Disturbance	Permanent 0	Temporary 2	None 4	4	
	Human Disturbance	High 0	Medium 2	Low 4	0	
	Interspersion With Other Habitats	Low 0	Medium 3	High 6	30	
Unique Features	Habitat Type	0	-	4	3	Trees, grasslands, Ponds
	Flora	0	-	4	1	
	Fauna	0	-	4	2	Potentially Diverse Habitats

Site Number	Total Habitat Score as Existing	Total Acres
PC# 08	70 64	
Weather on Day of Field Observation		
Precipitation: Dry	Wind Speed: 10-15	
Cloud Cover: 100	Temperature: 50	

Physical Environment	
Topography	Description: rolling hills, mostly flat though. Occasional man-made depressions/basins (Ponds)
Slope Orientation and degree of slope:	0-5%
Types of Water	Features Present: Ponds, Emergent wetlands
Portion of Site Inundated:	30%
Major Structures or Roads:	Access road to road and parking lot

Vegetation		
List of Herb	Species: Grasses	
List of Shrub	Species: Scott's broom, Evergreen huckleberry, Hookers willow	
List of Tree	Species: Shore pine,	
Types of Plant Communities:	Disturbed	
Serial Stages of Plant Communities:		
General Health and Vitality of Plant Communities:	Mid/early successional	
% Canopy Closure Herb Zone:	Shrub Zone:	Tree Zone:
100	10	15
Appx # of Snags Per Acre:	Diameter of Largest Snag (ft):	
1	8"	
% Aquatic Veg Floating:	Emergent %:	Inundated %:
0	30%	30%

Site Number	Total Habitat Score as Existing	Total Acres
PC#09	76	
Site Location	Field Dates	Field Observers
Westport	5/12/2021	GM + JTB
General Comments:		
Scott's broom + Hookers Willow, Pond Complex		

Habitat Component		Degree Present			Score	Comments
Water	Quantity and Seasonality	None 0	Seasonal 4	Perennial 8	8	
	Diversity Streams/Ponds/Etc.	None 2	Two 4	Three 8	2	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8 4	
	Quality Flushing	Stagnant 0	Seasonal 3	Continuous 6	0	
Food	Quantity and Seasonality	None 0	Limited 4	Year Rnd 8	4	
	Variety	Low 0	Medium 4	High 8	8	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
Cover	Structural Diversity	Low 0	Medium 4	High 8	4	
	Variety	Low 0	Medium 4	High 8	8	
	Seasonality	None 0	Limited 2	Year Rnd 4	2	
	Nesting Denning, etc.	Low 0	Medium 2	High 4	4	
	Escape	Low 0	Medium 2	High 4	4	
Other Values	Physical Disturbance	Permanent 0	Temporary 2	None 4	4	
	Human Disturbance	High 0	Medium 2	Low 4	4	
	Interspersion With Other Habitats	Low 0	Medium 3	High 6	6	
Unique Features	Habitat Type	0	-	4	2	
	Flora	0	-	4	2	submerged plants
	Fauna	0	-	4	2	Amphibians

Site Number	Total Habitat Score as Existing	Total Acres
PCA09	76	
Weather on Day of Field Observation		
Precipitation: Dry	Wind Speed: 5-10	
Cloud Cover: 100	Temperature: 50	

Physical Environment	
Topography	Description: undulating with small ponded depressions
Slope Orientation and degree of slope:	0-5%
Types of Water	Features Present: Ponds, wetlands
Portion of Site Inundated:	50
Major Structures or Roads:	Small overgrown dirt road, old concrete building foundation

Vegetation		
List of Herb	Species: Grasses, sough sedge, spike ash	
List of Shrub	Species: Scott's broom, Hookers willow, spiraea	
List of Tree	Species: Short pine	
Types of Plant Communities:	Hookers willow, ponds, Scott's broom	
Serial Stages of Plan Communities:	Mid succession	
General Health and Vitality of Plant Communities:	good	
% Canopy Closure Herb Zone:	Shrub Zone:	Tree Zone:
30	30	10
Appx # of Snags Per Acre:	Diameter of Largest Snag (ft):	
0	0	
% Aquatic Veg Floating:	Emergent %:	Inundated %:
0	0	0

Site Number	Total Habitat Score as Existing	Total Acres
PCH10	66	
Site Location	Field Dates	Field Observers
Westport SP	5/13/2021	GM+JD
General Comments: Hooker willow, shore pine, Scotts bloom Depressions		

Habitat Component		Degree Present			Score	Comments
Water	Quantity and Seasonality	None 0	Seasonal 4	Perennial 8	9	
	Diversity Streams/Ponds/Etc.	None 2	Two 4	Three 8	2	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
	Quality Flushing	Stagnant 0	Seasonal 3	Continuous 6	0	
Food	Quantity and Seasonality	None 0	Limited 4	Year Rnd 8	4	
	Variety	Low 0	Medium 4	High 8	4	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
Cover	Structural Diversity	Low 0	Medium 4	High 8	4	
	Variety	Low 0	Medium 4	High 8	8	
	Seasonality	None 0	Limited 2	Year Rnd 4	2	
	Nesting Denning, etc.	Low 0	Medium 2	High 4	4	
	Escape	Low 0	Medium 2	High 4	4	
Other Values	Physical Disturbance	Permanent 0	Temporary 2	None 4	4	
	Human Disturbance	High 0	Medium 2	Low 4	4	
	Interspersion With Other Habitats	Low 0	Medium 3	High 6	6	
Unique Features	Habitat Type	0	-	4	2	
	Flora	0	-	4	2	
	Fauna	0	-	4	2	

Site Number	Total Habitat Score as Existing	Total Acres
PCH 10		
Weather on Day of Field Observation		
Precipitation: missing	Wind Speed: 0-5	
Cloud Cover: 80%	Temperature: 55	

Physical Environment	
Topography Description:	rolling with scattered depressions
Slope Orientation and degree of slope:	0-5%
Types of Water Features Present:	Scrub-shrub wetland
Portion of Site Inundated:	50
Major Structures or Roads:	None. Historic

Vegetation		
List of Herb Species:	slough sedge	
List of Shrub Species:	Hookers willow, Scotts broom	
List of Tree Species:	short pine	
Types of Plant Communities:	willow, scotts broom, pine depressions	
Serial Stages of Plan Communities:	Mid successional	
General Health and Vitality of Plant Communities:	good	
% Canopy Closure Herb Zone:	60	Shrub Zone: 80
		Tree Zone: 25
Appx # of Snags Per Acre:	0	Diameter of Largest Snag (ft): 0
% Aquatic Veg Floating:	0	Emergent %: 50
		Inundated %: 50

Site Number	Total Habitat Score as Existing	Total Acres
PCH 11	78	
Site Location	Field Dates	Field Observers
Westport	5/13/21	GM + JD
General Comments:		
Physical Environment		
Topography		
Description		

Habitat Component		Degree Present			Score	Comments
Water	Quantity and Seasonality	None 0	Seasonal 4	Perennial 8	4	Seasonal number, on
	Diversity Streams/Ponds/Etc.	None 2	Two 4	Three 8	2	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
	Quality Flushing	Stagnant 0	Seasonal 3	Continuous 6	0	
Food	Quantity and Seasonality	None 0	Limited 4	Year Rnd 8	4	
	Variety	Low 0	Medium 4	High 8	8	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
Cover	Structural Diversity	Low 0	Medium 4	High 8	8	
	Variety	Low 0	Medium 4	High 8	8	
	Seasonality	None 0	Limited 2	Year Rnd 4	2	
	Nesting Denning, etc.	Low 0	Medium 2	High 4	4	
	Escape	Low 0	Medium 2	High 4	4	
Other Values	Physical Disturbance	Permanent 0	Temporary 2	None 4	4	
	Human Disturbance	High 0	Medium 2	Low 4	2	
	Interspersion With Other Habitats	Low 0	Medium 3	High 6	6	
Unique Features	Habitat Type	0	-	4	2	
	Flora	0	-	4	2	
	Fauna	0	-	4	2	

Site Number	Total Habitat Score as Existing	Total Acres
PG# 11	78	
Weather on Day of Field Observation		
Precipitation: Dew	Wind Speed: 0-5	
Cloud Cover: 60%	Temperature: 55F	

Physical Environment	
Topography Description:	Flat
Slope Orientation and degree of slope:	0%
Types of Water Features Present:	Forested wetland
Portion of Site Inundated:	40
Major Structures or Roads:	Maintained road through habitat adjacent to industrial land use

Vegetation		
List of Herb Species:	slough scabier, grasses	
List of Shrub Species:	scars broom, sporan, lookers willow blackberry	
List of Tree Species:	red alder, shagbark	
Types of Plant Communities:	red alder forest	
Serial Stages of Plant Communities:	Mid-late successional	
General Health and Vitality of Plant Communities:	good	
% Canopy Closure Herb Zone:	100	Shrub Zone: 30
		Tree Zone: 50
Appx # of Snags Per Acre:	1	Diameter of Largest Snag (ft): 5"
% Aquatic Veg Floating:	0	Emergent %: 40
		Inundated %: 40

Forest

Site Number <i>PL 12</i>	Total Habitat Score as Existing <i>72</i>	Total Acres
Site Location <i>WESTPOET SR</i>	Field Dates <i>5/13/2021</i>	Field Observers <i>GM JD</i>
General Comments: <i>Holm Willow, show pine, cuts Brown depress</i>		

Habitat Component		Degree Present			Score	Comments
Water	Quantity and Seasonality	None 0	Seasonal <i>4</i>	Perennial 8	<i>4</i>	
	Diversity Streams/Ponds/Etc.	None <i>2</i>	Two 4	Three 8	<i>2</i>	
	Proximity to Cover	None 0	Near 4	Adjacent <i>8</i>	<i>8</i>	
	Quality Flushing	Stagnant <i>0</i>	Seasonal 3	Continuous 6	<i>0</i>	
Food	Quantity and Seasonality	None 0	Limited <i>4</i>	Year Rnd 8	<i>4</i>	
	Variety	Low 0	Medium <i>4</i>	High 8	<i>4</i>	
	Proximity to Cover	None 0	Near 4	Adjacent <i>8</i>	<i>8</i>	
Cover	Structural Diversity	Low 0	Medium <i>4</i>	High 8	<i>4</i>	<i>mature pine</i>
	Variety	Low 0	Medium 4	High <i>8</i>	<i>8</i>	
	Seasonality	None 0	Limited <i>2</i>	Year Rnd 4	<i>2</i>	
	Nesting Denning, etc.	Low 0	Medium 2	High <i>4</i>	<i>4</i>	
	Escape	Low 0	Medium 2	High <i>4</i>	<i>4</i>	
Other Values	Physical Disturbance	Permanent 0	Temporary 2	None <i>4</i>	<i>4</i>	
	Human Disturbance	High 0	Medium 2	Low <i>4</i>	<i>4</i>	
	Interspersion With Other Habitats	Low 0	Medium 3	High <i>6</i>	<i>6</i>	
Unique Features	Habitat Type	0	-	4	<i>2</i>	
	Flora	0	-	4	<i>2</i>	
	Fauna	0	-	4	<i>2</i>	

Site Number <i>PC 12</i>	Total Habitat Score as Existing <i>72</i>	Total Acres
Weather on Day of Field Observation		
Precipitation: <i>dry</i>	Wind Speed: <i>0-5</i>	
Cloud Cover: <i>80</i>	Temperature: <i>55</i>	

Physical Environment	
Topography Description:	<i>relatively flat</i>
Slope Orientation and degree of slope:	
Types of Water Features Present:	<i>scrub-shrub wetland</i>
Portion of Site Inundated:	<i>50</i>
Major Structures or Roads:	<i>none</i>

Vegetation		
List of Herb Species:	<i>Slope sedge</i>	
List of Shrub Species:	<i>Hookers willow, scotts brown</i>	
List of Tree Species:	<i>Shore pine</i>	
Types of Plant Communities:	<i>willow, scotts brown, pine forest</i>	
Serial Stages of Plant Communities:	<i>mid succumb</i>	
General Health and Vitality of Plant Communities:	<i>good</i>	
% Canopy Closure Herb Zone:	<i>60</i>	Shrub Zone: <i>70</i>
		Tree Zone: <i>25</i>
Appx # of Snags Per Acre:	<i>2</i>	Diameter of Largest Snag (ft): <i>8</i>
% Aquatic Veg Floating:	<i>0</i>	Emergent %: <i>50</i>
		Inundated %: <i>50</i>

Site Number	Total Habitat Score as Existing	Total Acres
PC# 13	36	
Site Location	Field Dates	Field Observers
Westport SP	5/13/21	GM+JTB
General Comments: Disturbed dunes/grasslands/shoreline		

Habitat Component		Degree Present			Score	Comments
Water	Quantity and Seasonality	None 0	Seasonal 4	Perennial 8	0	No water
	Diversity Streams/Ponds/Etc.	None 0	Two 4	Three 8	2	
	Proximity to Cover	None 0	Near 4	Adjacent 8	0	
	Quality Flushing	Stagnant 0	Seasonal 3	Continuous 6	0	
Food	Quantity and Seasonality	None 0	Limited 4	Year Rnd 8	4	Plant berries and seeds
	Variety	Low 0	Medium 4	High 8	0	
	Proximity to Cover	None 0	Near 4	Adjacent 8	8	
Cover	Structural Diversity	Low 0	Medium 4	High 8	0	Essentially just shrubs
	Variety	Low 0	Medium 4	High 8	4	grass & scattered trees
	Seasonality	None 0	Limited 2	Year Rnd 4	4	
	Nesting Denning, etc.	Low 0	Medium 2	High 4	2	
	Escape	Low 0	Medium 2	High 4	4	
Other Values	Physical Disturbance	Permanent 0	Temporary 2	None 4	2	cleared land from historic use
	Human Disturbance	High 0	Medium 2	Low 4	0	
	Interspersion With Other Habitats	Low 0	Medium 3	High 6	0	
Unique Features	Habitat Type	0	-	4	3	Potential for
	Flora	0	-	4	2	restoration
	Fauna	0	-	4	1	

Site Number	Total Habitat Score as Existing	Total Acres
PG#13	36	
Weather on Day of Field Observation		
Precipitation: Dry	Wind Speed: 5-10	
Cloud Cover: 60%	Temperature: 60	

Physical Environment	
Topography Description:	rolling sandy grassy flats abutting large dune
Slope Orientation and degree of slope:	0-5
Types of Water Features Present:	none
Portion of Site Inundated:	N/A
Major Structures or Roads:	N/A

Vegetation		
List of Herb Species:	Pure grasses	
List of Shrub Species:	Sally broom, green Huckleberry	
List of Tree Species:	Star pine	
Types of Plant Communities:	grass/shrub dominated disturbed dune lands	
Serial Stages of Plant Communities:	Mid-successional	
General Health and Vitality of Plant Communities:	good	
% Canopy Closure Herb Zone:	60	Shrub Zone: 60
		Tree Zone: 5
Appx # of Snags Per Acre:	0	Diameter of Largest Snag (ft): 0
% Aquatic Veg Floating:	0	Emergent %: 0
		Inundated %: 0

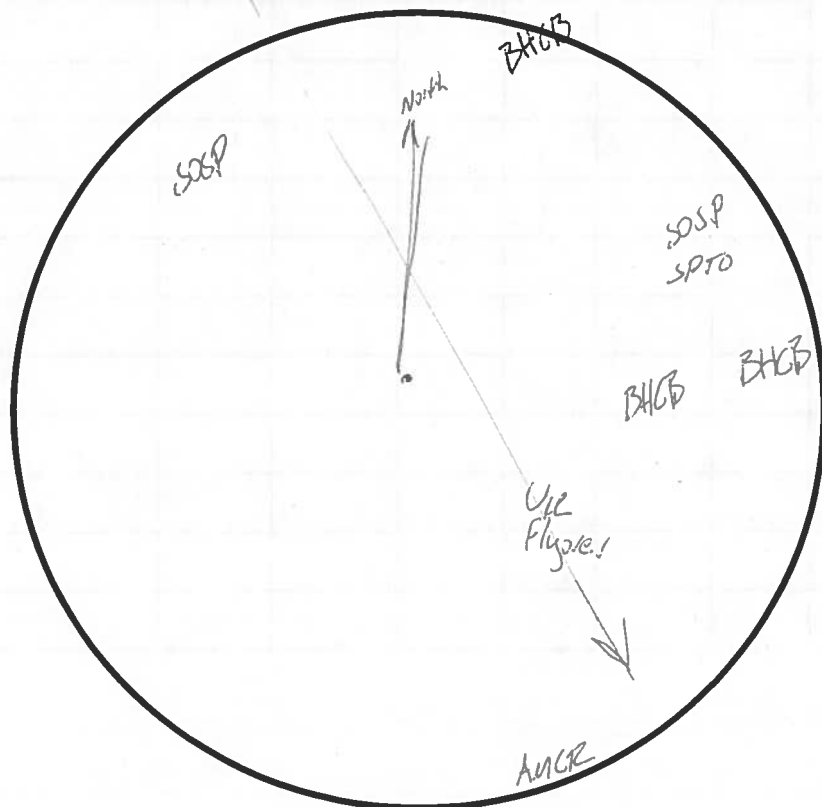
Appendix D Point Count Field Data

POINT COUNT SURVEY FORM

Survey Date 5/12/2021
 Station ID PC# 01
 Start Time 7:05 am
 End Time 7:15

Surveyors (Primary First) Glen Major
JD Brooks
 Weather 50°, 5-10 mph, 80% overcast

Map Code	Primary?	Species Code	Number of Birds			Audio/Visual	Distance <small>meters</small>	Bearing	Comments	
			Total	Male	Female					Unk.
1		SOSP	1			1	A	40	30°	
2		SPTO	1			1	A	40	30°	
3		BHCB	1			1	A	50	100	
4		BHCB	1			1	A	50	112	
5		UR	1			1	✓			flyover
6		ANCR	1			1	✓	50	160	
7		BHCB	2	2			✓	35	30	
8		SOSP	1			1	✓	40	310	
9										
10										

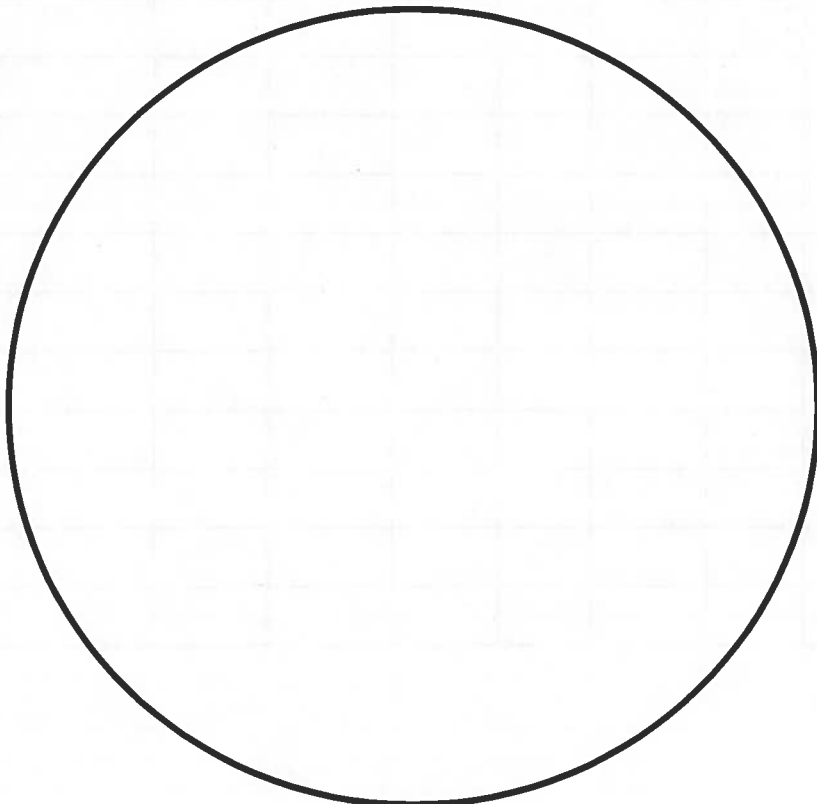


POINT COUNT SURVEY FORM

Survey Date 5/12/2021
 Station ID PKH22
 Start Time 748
 End Time 758

Surveyors (Primary First) Glen Mejin
JD Drake
 Weather 55, 80%, 5-10

Map Code	Primary?	Species Code	Number of Birds			Audio/Visual	Distance	Bearing	Comments	
			Total	Male	Female					Unk.
1	✓	AMRD	1				V	10	230	
2	✓	BHCB	3	2	1		V	35	342	
3	✓	Flycatcher	1			1	V	50	98	silbluetted, no song
4		YGWA	1	1			A	35	352	
5		ANHV	1			1	V	35	62	
6		OMRD	3			3	V	35	62	
7	✓	ANHV	2		2		V	20	248	
8	✓	WAVI	1			1	A	30	40	
9	✓	KOFS	2		2		V	10	40	
10		DCCH	2			2	A	25	180	



POINT COUNT SURVEY FORM

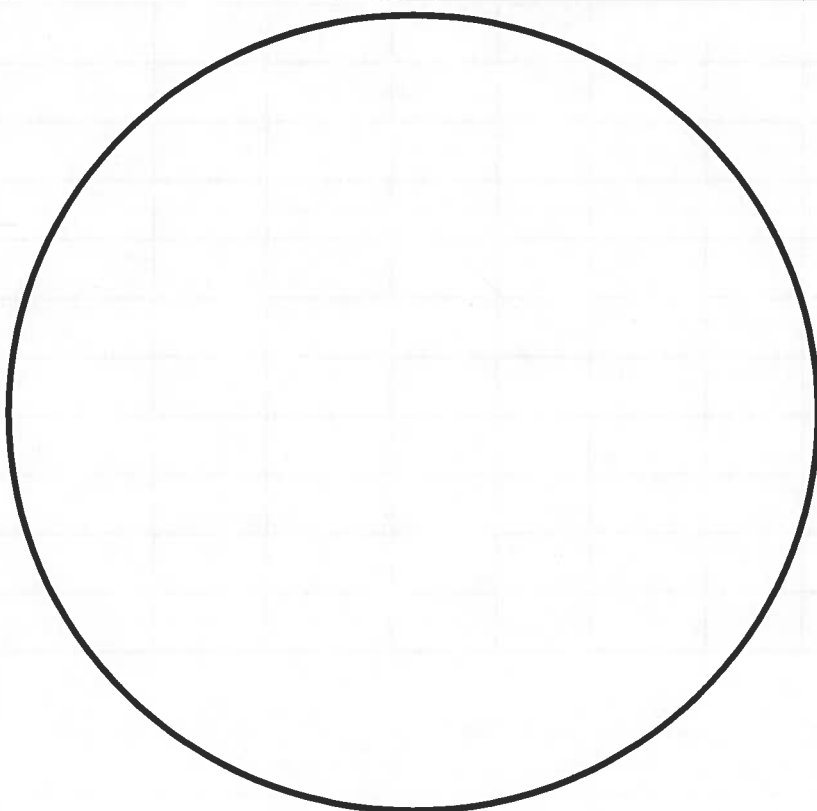
Survey Date 5/16/2021
 Station ID PC#03
 Start Time 8:17
 End Time 8:27

Surveyors (Primary First) Glen Myia

JD Brooks

Weather SS, 80% cloud, 5-10 w/d

Map Code	Primary?	Species Code	Number of Birds			Audio/Visual	Distance	Bearing	Comments	
			Total	Male	Female					Unk.
1	✓	BCCH	3			3	✓	20	152	
2	✓	PUFZ	1	1			A/V	20	188	
3	✓	ORCW	1		1		✓	10	202	
4	✓	BHCB	1			1	✓	30	78	
5		ANHU	1	1			✓	10	172	
6	✓	AMBO	2			2	✓	30	180	
7		SPTO	1			1	A	50	82	
8		BHCB	1			1				Fly over
9		BCB	2	2	1		✓	20	224	
10		OCWA	1		1		✓	15	348	

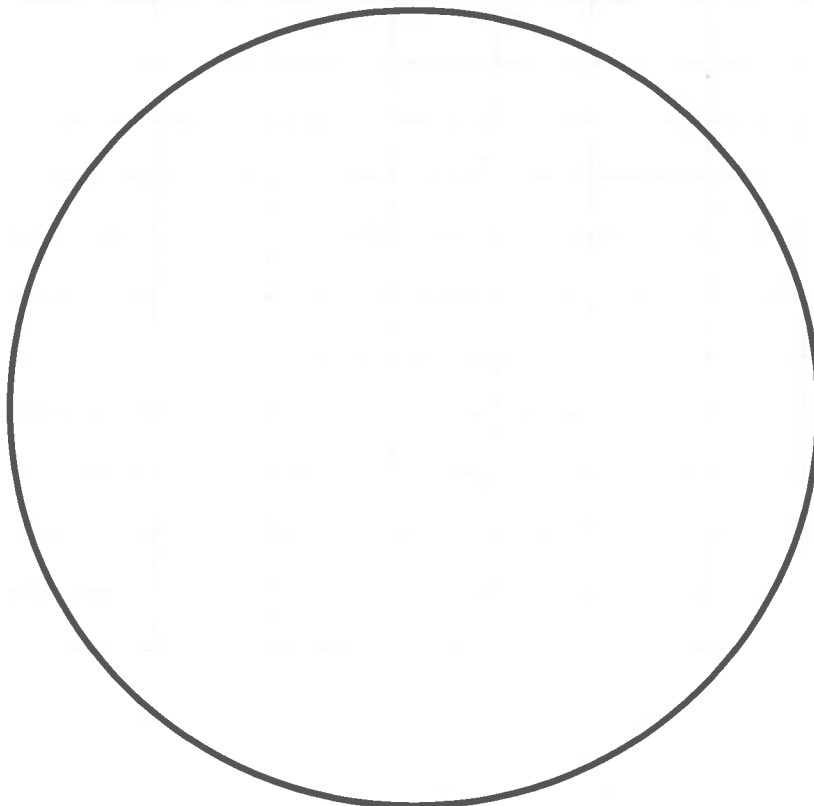


POINT COUNT SURVEY FORM

Survey Date 5/12/2021
 Station ID PC#04
 Start Time 852
 End Time 902

Surveyors (Primary First) Glen Mojica
JD Brooks
 Weather 55, 80 h, 5-10

Map Code	Primary?	Species Code	Number of Birds				Audio/Visual	Distance	Bearing	Comments
			Total	Male	Female	Unk.				
1		BGGH	3			3	A	20	20	
2		SPTO	1			1	A	25	28	
3		STJA	1			1	A	50	60	
4		STJA	1			1	A	50	120	
5		ANHU	1			1	✓	35	4	
6		GCKI	1			1	A	50	38	
7		PUEI	1			1	A	50	8	
8										
9										
10										

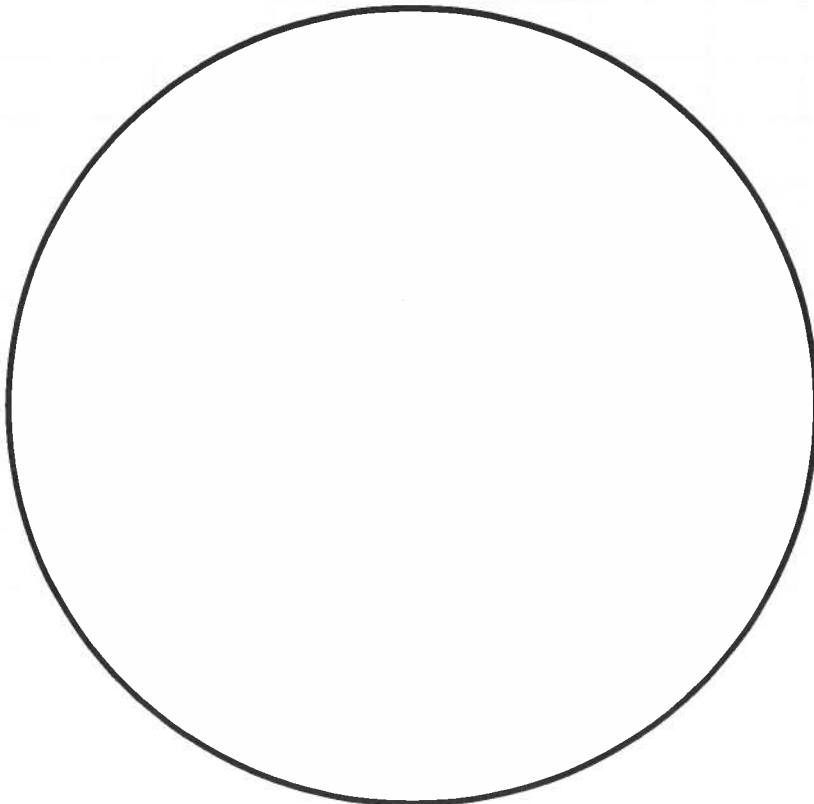


POINT COUNT SURVEY FORM

Survey Date 5/18/2021
 Station ID PC#05
 Start Time 918
 End Time 928

Surveyors (Primary First) Glen Meina
SD Penasoles
 Weather ☁-5, 60%, 55°

Map Code	Primary?	Species Code	Number of Birds			Audio/Visual	Distance	Bearing	Comments	
			Total	Male	Female					Unk.
1	✓	JPTD	1			1	A	20	130	
2		BACB	1			1	A	20	170	
3		AMCR	1			1	✓			Fly over
4		AMCR	1			1	✓			Fly over
5		BUTZ	1			1	V	5	330	
6		BCCH	3			3	✓	10	328	
7		OCWA	1	1			V	10	20	
8		BHGB	2			2	A	20	42	
9		YENW	1	1			A	20	222	
10										

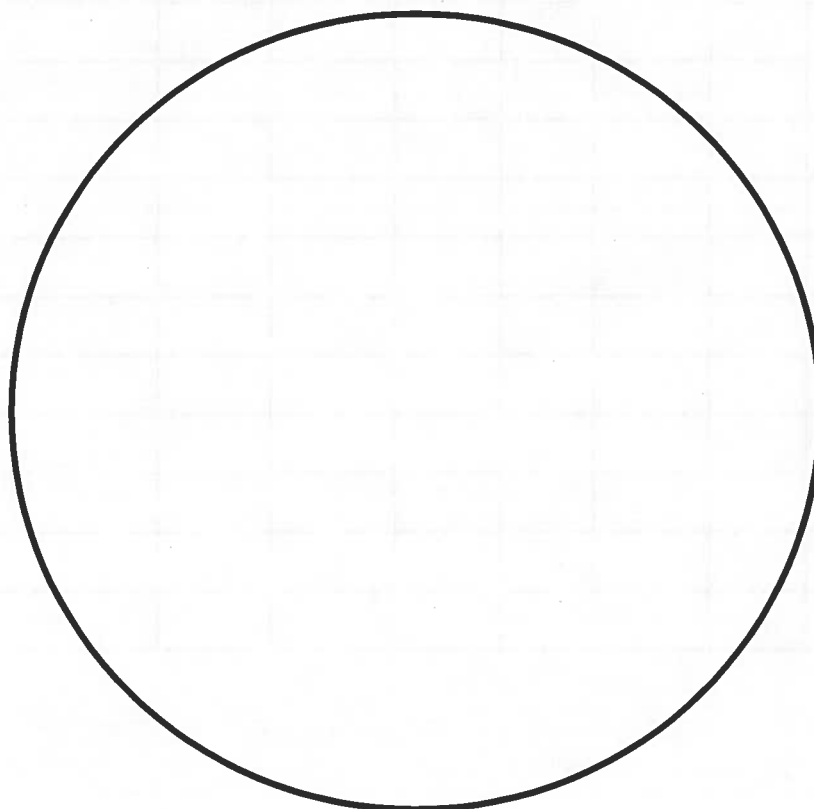


POINT COUNT SURVEY FORM

Survey Date 5/2/2
 Station ID PGH 06
 Start Time 9:50
 End Time 10:00

Surveyors (Primary First) Glen Mejin
SD Drees
 Weather 0-5, 55, 60%

Map Code	Primary?	Species Code	Number of Birds			Audio/Visual	Distance	Bearing	Comments	
			Total	Male	Female					Unk.
1	✓	SPTD	1			1	A	20	182	
2		SOSP	1			1	A	20	324	
3		PAWR	1			1	V	15	310	
4		BCH	2			2	A	10	98	
5		ANHU	1			1	V	10	84	
6	✓	MEGV	2			2	V			Flyover
7		BHCB	1			1	A	15	300	
8	✓	AMCR	1			1	V			Flyover
9		CHCH	2			2	V	5	326	
10										

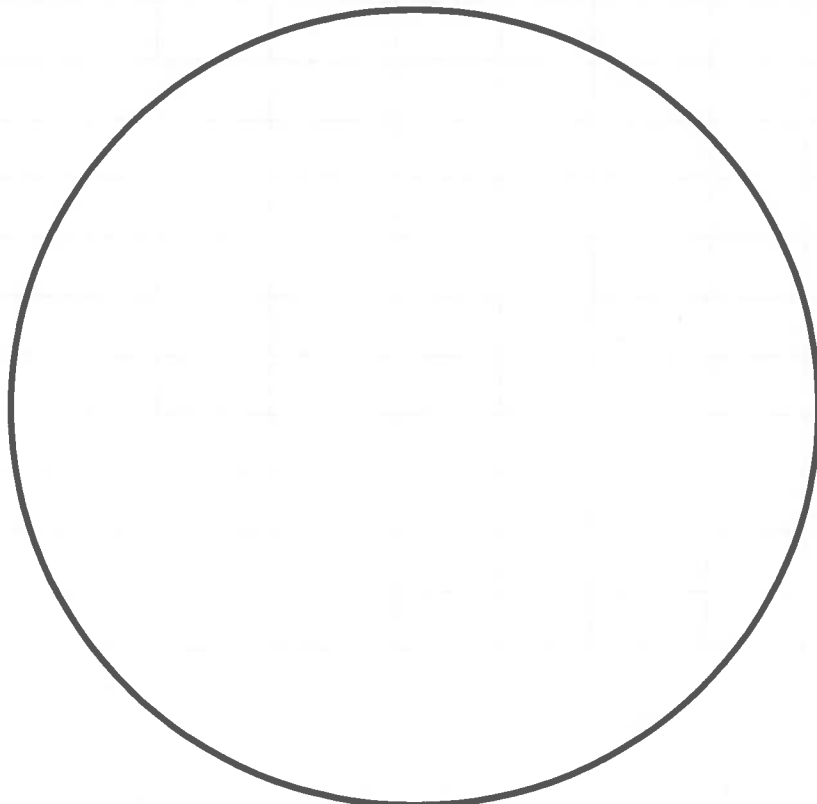


POINT COUNT SURVEY FORM

Survey Date 5/13/21
 Station ID PE#07
 Start Time 046
 End Time 056

Surveyors (Primary First) Glen Mason
JD Brooks
 Weather 100% overcast, 0-5, 55
Dewy

Map Code	Primary?	Species Code	Number of Birds				Audio/Visual	Distance	Bearing	Comments
			Total	Male	Female	Unk.				
1	✓	COYE	1	1			A	50	128	
2		WBSP	1	1			A	50	42	
3		SDSP	1			1	V	40	92	
4		Gull sp.	1			1	V		118	fly over
5		AMCR	1			1	V		314	fly over
6										
7										
8										
9										
10										

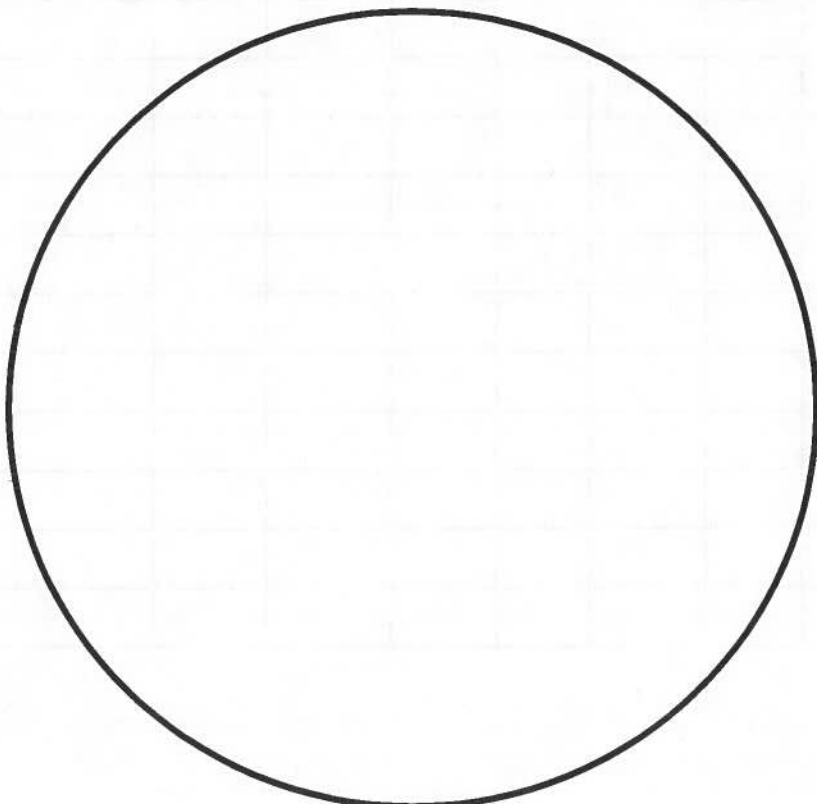


POINT COUNT SURVEY FORM

Survey Date 5/13/21
 Station ID PC# 28
 Start Time 7:08
 End Time 7:18

Surveyors (Primary First) Glen Major
JD Brooks
 Weather 100%, 55, Dewy
0-5

Map Code	Primary?	Species Code	Number of Birds			Audio/Visual	Distance	Bearing	Comments	
			Total	Male	Female					Unk.
1	✓	COYE	1	1			A	40	220	
2		RWBIB	1	1			A	40	302	
3		BHCB	2			2	V	40	248	
4		RWBB	1	1			V	40	228	
5		RWBB	1	1			V	40	150	
6		SPTO	1			1	V	40	260	
7		JPTO	1			1	A	40	134	
8		AMRO	2			2	V		278	flyover
9		WCSP	1	1			A	50	50	
10		MAWR	1			1	V	10	302	

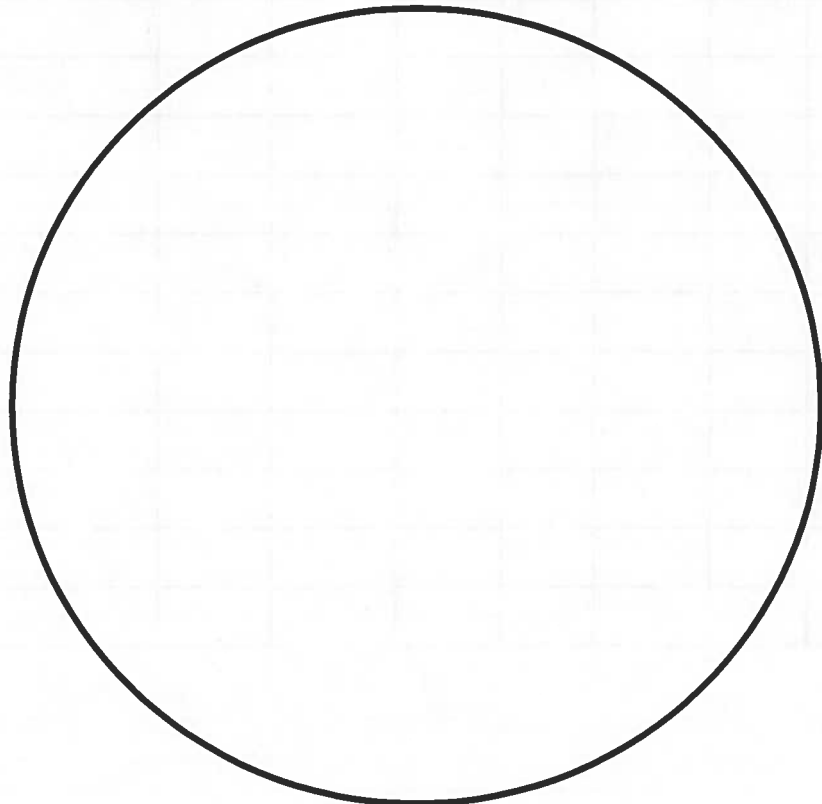


POINT COUNT SURVEY FORM

Survey Date 9/24/09
 Station ID 5/1.3/01
 Start Time 901
 End Time 911

Surveyors (Primary First) Glen Major
JD Brooks
 Weather 2-5, Dewy, 70%
55

Map Code	Primary?	Species Code	Number of Birds				Audio/Visual	Distance	Bearing	Comments
			Total	Male	Female	Unk.				
1	✓	MALD	2	1	1		V	15	230	
2	✓	SPTD	1			1	A	30	258	
3		BHCB	1	1			V		160	flyover
4		WCSP	1	1			A	35	8	
5		AMRD	1			1	V		238	flyover
6		BCCH	1			1	A	45	252	
7		BHCB	1	1			V	25	60	
8		WA sp.	1			1	V	30	266	
9		AMCR	1			1	V		240	flyover
10		AMRD	2			2	V		138	flyover

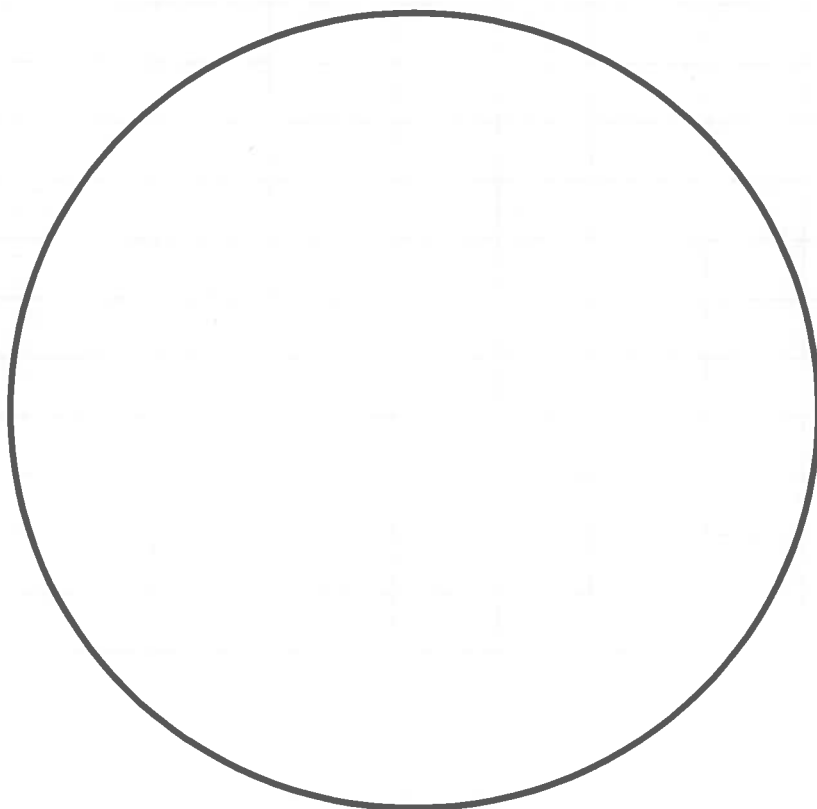


POINT COUNT SURVEY FORM

Survey Date 5/13/21
 Station ID PGH10
 Start Time 808
 End Time 818

Surveyors (Primary First) JD Glon Mejia
JD Brooks
 Weather 100% 0-5, Misty
55

Map Code	Primary?	Species Code	Number of Birds				Audio/Visual	Distance	Bearing	Comments
			Total	Male	Female	Unk.				
1	✓	AMGF	1	1			✓	30	212	
2	✓	SPTD	1			1	A	35	188	
3		WGSP	1			1	A	40	242	
4	✓	AMRO	1			1	✓		198	flyover
5		ANAU	1	1			A	35	288	
6	✓	GLCE	1			1	✓		90	flyover
7		SOSP	1			1	✓	50	214	
8		SPTD	1			1	A	40	322	
9										
10										

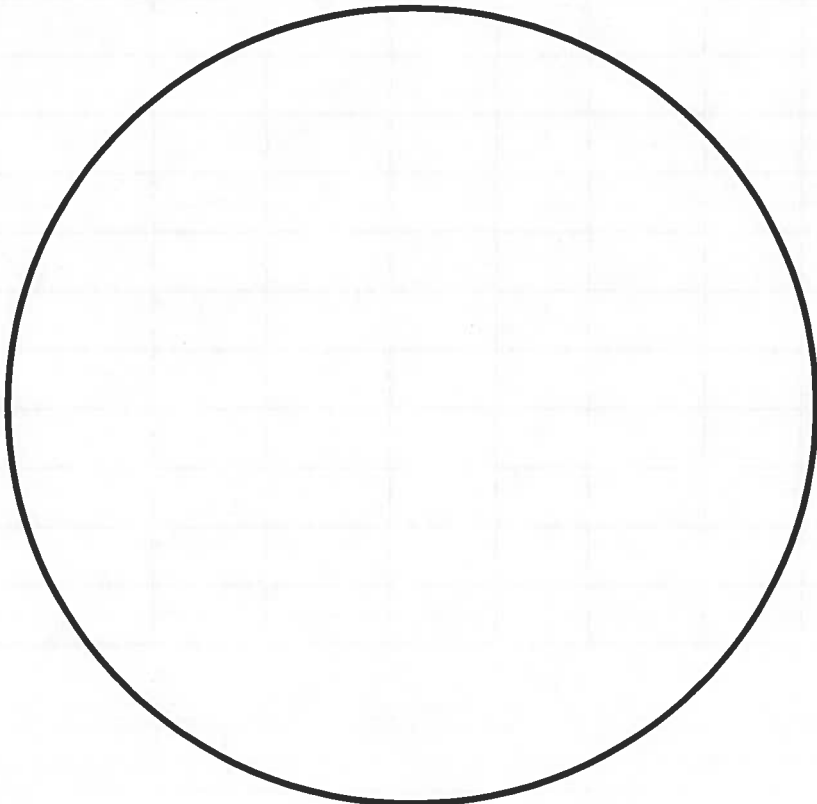


POINT COUNT SURVEY FORM

Survey Date 5/13/21
 Station ID PGH 11
 Start Time 9:31
 End Time 9:41

Surveyors (Primary First) Glen Meja
JD Brooks
 Weather 70%, Dewy 55,
0-5

Map Code	Primary?	Species Code	Number of Birds			Audio/Visual	Distance	Bearing	Comments	
			Total	Male	Female					Unk.
1	✓	AMCR	1			1	A	50	120	
2		BHCB	1			1	A	40	178	
3	✓	AMRD	1			1	A	40	340	
4	✓	SWI SP	1			1	V		252	Flyover
5		AMGR	1			1	V		250	Flyover
6		BHCB	1			1	A	30	102	
7		BCCH	1			1	A	30	22	
8	✓	AMGR	2			2	V		180	Flyover
9										
10										

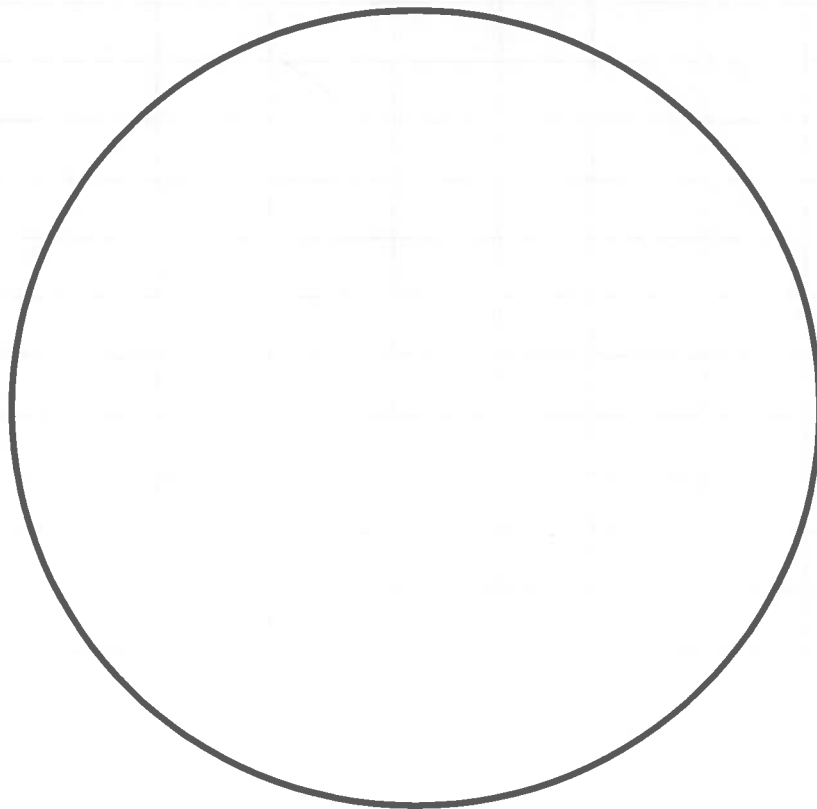


POINT COUNT SURVEY FORM

Survey Date 5/13/21
 Station ID 96#12
 Start Time 838
 End Time 848

Surveyors (Primary First) Don Mejia
JD Prueker
 Weather 70% Misty 55
0-5

Map Code	Primary?	Species Code	Number of Birds				Audio/Visual	Distance	Bearing	Comments
			Total	Male	Female	Unk.				
1		SPTD	1			1	AV	10	314	
2		ROHU		1		1	V	10	280	
3		OSFC	1			1	V	10	280	
4		chch	1			1	V	20	222	
5		AMGO	2	1	1		V	35	222	Fluover
6		COLD	2				V		290	Fluover
7		BASW	1			1	V	90	240	
8		SUOP	1			1	V	30	340	
9		GULP	1			1	✓		262	Fluover
10		AMRO	1			1	V	15	258	



Appendix E USFWS Species List

IPaC Information for Planning and Consultation **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.


Location


Grays Harbor County, Washington



Local office

Washington Fish And Wildlife Office

 (360) 753-9440

 (360) 753-9405

510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263

<http://www.fws.gov/wafwo/>

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
<p>Marbled Murrelet <i>Brachyramphus marmoratus</i></p> <p>There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/4467</p>	Threatened
<p>Short-tailed Albatross <i>Phoebastria (=Diomedea) albatrus</i></p> <p>Wherever found</p> <p>No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/433</p>	Endangered
<p>Streaked Horned Lark <i>Eremophila alpestris strigata</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/7268</p>	Threatened
<p>Western Snowy Plover <i>Charadrius nivosus nivosus</i></p> <p>There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8035</p>	Threatened
<p>Yellow-billed Cuckoo <i>Coccyzus americanus</i></p> <p>There is proposed critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3911</p>	Threatened

Fishes

NAME	STATUS
<p>Bull Trout <i>Salvelinus confluentus</i></p> <p>There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8212</p>	Threatened

Insects

NAME	STATUS
------	--------

Oregon Silverspot Butterfly *Speyeria zerene hippolyta*

Threatened

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/6930>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project

area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Jan 1 to Sep 30

Black Oystercatcher *Haematopus bachmani*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9591>

Breeds Apr 15 to Oct 31

Black Turnstone *Arenaria melanocephala*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Black-footed Albatross *Phoebastria nigripes*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8033>

Breeds elsewhere

Clark's Grebe *Aechmophorus clarkii*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Dec 31

Great Blue Heron *Ardea herodias fannini*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Mar 15 to Aug 15

Lesser Yellowlegs *Tringa flavipes*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9679>

Breeds elsewhere

Long-billed Curlew *Numenius americanus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/5511>

Breeds elsewhere

Marbled Godwit *Limosa fedoa*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9481>

Breeds elsewhere

Olive-sided Flycatcher *Contopus cooperi*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3914>

Breeds May 20 to Aug 31

Pink-footed Shearwater *Puffinus creatopus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Red-throated Loon *Gavia stellata*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Rufous Hummingbird *selasphorus rufus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

Breeds Apr 15 to Jul 15

Scripps's Murrelet *Synthliboramphus scrippsi*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Feb 20 to Jul 31

Semipalmated Sandpiper *Calidris pusilla*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Short-billed Dowitcher *Limnodromus griseus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9480>

Breeds elsewhere

Whimbrel *Numenius phaeopus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9483>

Breeds elsewhere

Willet *Tringa semipalmata*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be

breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

ESTUARINE AND MARINE WETLAND

[E2EM1P](#)

[E2USN](#)

FRESHWATER EMERGENT WETLAND

[PEM1C](#)

FRESHWATER FORESTED/SHRUB WETLAND

[PFO1C](#)

[PSS/EM1C](#)

[PSS1C](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix F Wildlife Species that May Occur in Westport Light State Park

The following table includes wildlife species that may occur within WLSP that were not observed during the 2021 field surveys. These results are based on publicly reported wildlife sightings (iNaturalist 2021, eBird 2021), state and federal wildlife resources (USFWS 2021, WDFW 2021a), and wildlife inventories associated with the nearby Willapa National Wildlife Refuge (USFWS 2011). Species provided by iNaturalist, eBird, USFWS IPaC, and the WDFW PHS Mapper were limited to mapped observations within roughly 1 mile of the WLSP boundary. iNaturalist observations were filtered to include only “verified” and/or “research grade” observations. This list should not be considered comprehensive but rather a generalized list based on species assumed to be present in the area. Many of the species included here are assumed present in WLSP due to their presence in nearby areas, and several of the resources used in its development may favor species that are easily observed/reported by the public. Some species listed below may not typically use the habitats provided by WLSP, but they are included below due to past sightings recorded by sources like iNaturalist and eBird. These sightings may include birds seen offshore that were attributed to WLSP, as it may have been the closest eBird hotspot.

Common Name	Scientific Name	Source
Amphibians		
Bullfrog	<i>Rana catesbeiana</i>	USFWS 2011
Columbia Torrent Salamander	<i>Rhyacotriton kezeri</i>	USFWS 2011
Cope's Giant Salamander	<i>Dicamptodon copei</i>	USFWS 2011
Dunn's Salamander	<i>Plethodon dunni</i>	USFWS 2011
Ensatina	<i>Ensatina eschscholtzii</i>	USFWS 2011
Northern Pacific Treefrog	<i>Pseudacris regilla</i>	iNaturalist
Northern Red-legged Frog	<i>Rana aurora</i>	iNaturalist
Northwestern Salamander	<i>Ambystoma gracile</i>	USFWS 2011
Rough-skinned Newt	<i>Taricha granulosa</i>	USFWS 2011
Tailed Frog	<i>Ascaphus truei</i>	USFWS 2011
Van Dyke's Salamander	<i>Plethodon vandykei</i>	USFWS 2011
Western Red-backed Salamander	<i>Plethodon vehiculum</i>	USFWS 2011
Western Toad	<i>Bufo boreas</i>	USFWS 2011
Reptiles		
Common Garter Snake	<i>Thamnophis sirtalis</i>	iNaturalist
Birds		
American Bittern	<i>Botaurus lentiginosus</i>	eBird 2021; USFWS 2011
American Coot	<i>Fulica americana</i>	eBird 2021; iNaturalist 2021; USFWS 2011

Common Name	Scientific Name	Source
American Kestrel	<i>Falco sparverius</i>	eBird 2021; USFWS 2011
American Pipit	<i>Anthus rubescens</i>	eBird 2021; USFWS 2011
American White Pelican	<i>Pelecanus erythrorhynchos</i>	eBird 2021
American Wigeon	<i>Mareca americana</i>	eBird 2021; USFWS 2011
Ancient Murrelet	<i>Synthliboramphus antiquus</i>	eBird 2021
Arctic Tern	<i>Sterna paradisaea</i>	USFWS 2011
Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>	USFWS 2011
Baird's Sandpiper	<i>Calidris bairdii</i>	eBird 2021; USFWS 2011
Band-tailed Pigeon	<i>Patagioenas fasciata</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Barn Owl	<i>Tyto alba</i>	eBird 2021; USFWS 2011
Barred Owl	<i>Strix varia</i>	eBird 2021; USFWS 2011
Barrow's Goldeneye	<i>Bucephala islandica</i>	eBird 2021
Bar-Tailed Godwit	<i>Limosa lapponica</i>	eBird 2021; USFWS 2011
Belted Kingfisher	<i>Megaceryle alcyon</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Bewick's Wren	<i>Thryomanes bewickii</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Black Oystercatcher	<i>Haematopus bachmani</i>	eBird 2021
Black Phoebe	<i>Sayornis nigricans</i>	eBird 2021
Black Scoter	<i>Melanitta americana</i>	eBird 2021; USFWS 2011
Black Tern	<i>Chlidonias niger</i>	eBird 2021
Black Turnstone	<i>Arenaria melanocephala</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Black-bellied Plover	<i>Pluvialis squatarola</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Black-footed Albatross	<i>Phoebastria nigripes</i>	eBird 2021; USFWS 2011
Black-legged Kittiwake	<i>Rissa tridactyla</i>	eBird 2021; USFWS 2011
Black-Scoter	<i>Melanitta americana</i>	eBird 2021
Blue Jay	<i>Cyanocitta cristata</i>	eBird 2021
Blue-winged Teal	<i>Spatula discors</i>	eBird 2021; USFWS 2011
Bobolink	<i>Dolichonyx oryzivorus</i>	eBird 2021
Bonaparte's Gull	<i>Chroicocephalus philadelphia</i>	eBird 2021; USFWS 2011
Brambling	<i>Fringilla montifringilla</i>	eBird 2021
Brandt's Cormorant	<i>Phalacrocorax penicillatus</i>	eBird 2021; iNaturalist 2021; USFWS 2011

Common Name	Scientific Name	Source
Brant	<i>Branta bernicla</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Bristle-thighed Curlew	<i>Numenius tahitiensis</i>	eBird 2021
Brown Booby	<i>Sula leucogaster</i>	eBird 2021
Brown Creeper	<i>Certhia americana</i>	eBird 2021; USFWS 2011
Brown Pelican	<i>Pelecanus occidentalis</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Bufflehead	<i>Bucephala albeola</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Buller's Shearwater	<i>Ardenna bulleri</i>	eBird 2021; USFWS 2011
Bullock's Oriole	<i>Icterus bullockii</i>	eBird 2021
Cackling Goose	<i>Branta hutchinsii</i>	eBird 2021; iNaturalist 2021; USFWS 2011
California Gull	<i>Larus californicus</i>	eBird 2021; iNaturalist 2021; USFWS 2011
California Scrub-jay	<i>Aphelocoma californica</i>	eBird 2021
Canada Goose	<i>Branta canadensis</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Canvasback	<i>Aythya valisineria</i>	eBird 2021; USFWS 2011
Caspian Tern	<i>Hydroprogne caspia</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Cassin's Auklet	<i>Ptychoramphus aleuticus</i>	eBird 2021; USFWS 2011
Cassin's Vireo	<i>Vireo cassinii</i>	eBird 2021; USFWS 2011
Cedar Waxwing	<i>Bombycilla cedrorum</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Chipping Sparrow	<i>Spizella passerina</i>	eBird 2021; USFWS 2011
Cinnamon Teal	<i>Spatula cyanoptera</i>	eBird 2021; USFWS 2011
Clark's Grebe	<i>Aechmophorus clarkii</i>	eBird 2021; iNaturalist 2021
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>	eBird 2021; USFWS 2011
Common Eider	<i>Somateria mollissima</i>	eBird 2021
Common Goldeneye	<i>Bucephala clangula</i>	USFWS 2011
Common Merganser	<i>Mergus merganser</i>	eBird 2021; USFWS 2011
Common Murre	<i>Calidris mauri</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Common Nighthawk	<i>Chordeiles minor</i>	eBird 2021; USFWS 2011
Common Raven	<i>Corvus corax</i>	eBird 2021; USFWS 2011
Common Tern	<i>Sterna hirundo</i>	eBird 2021; USFWS 2011
Cooper's Hawk	<i>Accipiter cooperii</i>	eBird 2021; USFWS 2011
Dickcissel	<i>Spiza americana</i>	eBird 2021

Common Name	Scientific Name	Source
Downy Woodpecker	<i>Dryobates pubescens</i>	eBird 2021; USFWS 2011
Eared Grebe	<i>Podiceps nigricollis</i>	eBird 2021
Elegant Tern	<i>Thalasseus elegans</i>	eBird 2021
Emperor Goose	<i>Anser canagicus</i>	iNaturalist 2021; USFWS 2011
Eurasian Collared Dove	<i>Streptopelia decaocto</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Eurasian Wigeon	<i>Anas penelope</i>	USFWS 2011
European Starling	<i>Sturnus vulgaris</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	eBird 2021; USFWS 2011
Flesh-footed Shearwater	<i>Ardenna carneipes</i>	eBird 2021
Fork-tailed Storm-Petrel	<i>Hydrobates furcatus</i>	eBird 2021; USFWS 2011
Forster's Tern	<i>Sterna forsteri</i>	eBird 2021
Fox Sparrow	<i>Passerella iliaca</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Gadwall	<i>Mareca strepera</i>	iNaturalist 2021; USFWS 2011
Glaucous-winged Gull	<i>Larus glaucescens</i>	eBird 2021; USFWS 2011heema
Gray Jay	<i>Perisoreus canadensis</i>	USFWS 2011
Great Blue Heron	<i>Ardea herodias</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Great Egret	<i>Ardea alba</i>	eBird 2021; USFWS 2011
Great Horned Owl	<i>Bubo virginianus</i>	USFWS 2011
Greater Scaup	<i>Aythya marila</i>	USFWS 2011
Greater White-fronted Goose	<i>Anser albifrons</i>	eBird 2021; USFWS 2011
Greater Yellowlegs	<i>Tringa melanoleuca</i>	eBird 2021; iNaturalist 2021
Green Heron	<i>Butorides virescens</i>	eBird 2021; USFWS 2011
Green-winged Teal	<i>Anas crecca</i>	eBird 2021; USFWS 2011
Guadalupe Murrelet	<i>Synthliboramphus hypoleucus</i>	eBird 2021
Gyr Falcon	<i>Falco rusticolus</i>	iNaturalist 2021; USFWS 2011
Hairy Woodpecker	<i>Dryobates villosus</i>	eBird 2021; USFWS 2011
Hammond's Flycatcher	<i>Empidonax hammondi</i>	USFWS 2011
Harlequin Duck	<i>Histrionicus histrionicus</i>	eBird 2021; USFWS 2011
Harris's Sparrow	<i>Zonotrichia querula</i>	eBird 2021
Heermann's Gull	<i>Larus heermanni</i>	eBird 2021; iNaturalist 2021; USFWS 2011

Common Name	Scientific Name	Source
Hermit Thrush	<i>Catharus guttatus</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Hooded Merganser	<i>Lophodytes cucullatus</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Horned Grebe	<i>Podiceps auritus</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Horned Lark	<i>Eremophila alpestris</i>	eBird 2021
Horned Lark	<i>Eremophila alpestris</i>	eBird 2021
Horned Puffin	<i>Fratercula corniculata</i>	eBird 2021
House Sparrow	<i>Passer domesticus</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Hudsonian Godwit	<i>Limosa haemastica</i>	iNaturalist 2021
Hutton's Vireo	<i>Vireo huttoni</i>	eBird 2021; USFWS 2011
Iceland Gull	<i>Larus glaucoides</i>	eBird 2021
King Eider	<i>Somateria spectabilis</i>	eBird 2021
Lapland Longspur	<i>Calcarius lapponicus</i>	eBird 2021; USFWS 2011
Lazuli Bunting	<i>Passerina amoena</i>	eBird 2021
Leach's Storm-Petrel	<i>Hydrobates leucorhous</i>	eBird 2021; USFWS 2011
Least Sandpiper	<i>Calidris minutilla</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Lesser Scaup	<i>Aythya affini</i>	USFWS 2011
Lesser Yellowlegs	<i>Tringa flavipes</i>	eBird 2021; USFWS 2011
Lincoln's Sparrow	<i>Melospiza lincolni</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Long-Billed Curlew	<i>Numenius americanus</i>	eBird 2021; USFWS 2011
Long-billed Dowitcher	<i>Limnodromus scolopaceus</i>	eBird 2021; USFWS 2011
Long-tailed Duck	<i>Clangula hyemalis</i>	eBird 2021; USFWS 2011
Long-tailed Jaeger	<i>Stercorarius longicaudus</i>	eBird 2021; USFWS 2011
Macgillivray's Warbler	<i>Oporornis tolmiei</i>	USFWS 2011
Manx Shearwater	<i>Puffinus puffinus</i>	eBird 2021; USFWS 2011
Marbled Godwit	<i>Limosa fedoa</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Marbled Murrelet	<i>Brachyramphus marmoratus</i>	eBird 2021; USFWS 2011
Merlin	<i>Falco columbarius</i>	eBird 2021; USFWS 2011
Mountain Chickadee	<i>Poecile gambeli</i>	eBird 2021
Mourning Dove	<i>Zenaidura macroura</i>	eBird 2021; USFWS 2011
Northern Bobwhite	<i>Colinus virginianus</i>	USFWS 2011

Common Name	Scientific Name	Source
Northern Fulmar	<i>Fulmarus glacialis</i>	eBird 2021; USFWS 2011
Northern Goshawk	<i>Accipiter gentilis</i>	USFWS 2011
Northern Harrier	<i>Circus hudsonius</i>	eBird 2021; USFWS 2011
Northern Pintail	<i>Anas acuta</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Northern Pygmy Owl	<i>Glaucidium gnoma</i>	USFWS 2011
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	eBird 2021; USFWS 2011
Northern Saw-whet Owl	<i>Aegolius acadicus</i>	USFWS 2011
Northern Shoveler	<i>Spatula clypeata</i>	eBird 2021; USFWS 2011
Northern Shrike	<i>Lanius borealis</i>	eBird 2021; USFWS 2011
Northern Wheatear	<i>Oenanthe oenanthe</i>	eBird 2021
Olympic Gull	<i>Larus glaucescens</i> × <i>occidentalis</i>	iNaturalist 2021
Pacific Golden-plover	<i>Pluvialis fulva</i>	eBird 2021
Pacific Loon	<i>Gavia pacifica</i>	eBird 2021; USFWS 2011
Palm Warbler	<i>Setophaga palmarum</i>	eBird 2021; USFWS 2011
Parasitic Jaeger	<i>Stercorarius parasiticus</i>	eBird 2021; USFWS 2011
Pectoral Sandpiper	<i>Calidris melanotos</i>	eBird 2021; USFWS 2011
Pelagic Cormorant	<i>Phalacrocorax pelagicus</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Peregrine Falcon	<i>Falco peregrinus</i>	eBird 2021, iNaturalist 2021; USFWS 2011
Pied-billed Grebe	<i>Podilymbus podiceps</i>	eBird 2021; USFWS 2011
Pigeon Guillemot	<i>Cephus columba</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Pileated Woodpecker	<i>Dryocopus pileatus</i>	eBird 2021; USFWS 2011
Pine Siskin	<i>Spinus pinus</i>	eBird 2021; USFWS 2011
Pink-footed Shearwater	<i>Ardenna creatopus</i>	eBird 2021; USFWS 2011
Pomarine Jaeger	<i>Stercorarius pomarinus</i>	eBird 2021; USFWS 2011
Prairie Falcon	<i>Falco mexicanus</i>	eBird 2021
Purple Martin	<i>Progne subis</i>	eBird 2021; USFWS 2011
Red Crossbill	<i>Loxia curvirostra</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Red Knot	<i>Calidris canutus</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Red Phalarope	<i>Phalaropus fulicarius</i>	eBird 2021; USFWS 2011
Red throated Loon	<i>Gavia stellata</i>	eBird 2021; iNaturalist 2021; USFWS 2011

Common Name	Scientific Name	Source
Red-breasted Merganser	<i>Mergus serrator</i>	iNaturalist 2021; USFWS 2011
Red-breasted Nuthatch	<i>Sitta canadensis</i>	eBird 2021; USFWS 2011
Red-breasted Sapsucker	<i>Sphyrapicus ruber</i>	USFWS 2011
Red-necked Grebe	<i>Podiceps grisegena</i>	iNaturalist 2021; USFWS 2011
Red-necked Phalarope	<i>Phalaropus lobatus</i>	eBird 2021; USFWS 2011
Red-shouldered Hawk	<i>Buteo lineatus</i>	USFWS 2011
Red-tailed Hawk	<i>Buteo jamaicensis</i>	eBird 2021; USFWS 2011
Rhinoceros Auklet	<i>Cerorhinca monocerata</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Ring-billed Gull	<i>Larus delawarensis</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Ring-necked Duck	<i>Aythya collaris</i>	eBird 2021; USFWS 2011
Ring-necked Pheasant	<i>Phasianus colchicus</i>	eBird 2021; USFWS 2011
Rock Dove	<i>Columba livia</i>	USFWS 2011
Rock Pigeon	<i>Columba livia</i>	eBird 2021; iNaturalist 2021
Rock Sandpiper	<i>Calidris ptilocnemis</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Ross's Goose	<i>Chen rossii</i>	USFWS 2021
Rough-legged Hawk	<i>Buteo lagopus</i>	eBird 2021; USFWS 2011
Ruby-crowned Kinglet	<i>Regulus calendula</i>	eBird 2021; USFWS 2011
Ruddy Duck	<i>Oxyura jamaicensis</i>	eBird 2021; USFWS 2011
Ruddy Turnstone	<i>Arenaria interpres</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Ruffed Grouse	<i>Bonasa umbellus</i>	eBird 2021; USFWS 2011
Sabine's Gull	<i>Xema sabini</i>	eBird 2021; USFWS 2011
Sandhill Crane	<i>Antigone canadensis</i>	eBird 2021
Semipalmated Plover	<i>Charadrius semipalmatus</i>	eBird 2021; iNaturalist 2021
Semipalmated Sandpiper	<i>Calidris pusilla</i>	USFWS 2011
Sharp-Shinned Hawk	<i>Accipiter striatus</i>	eBird 2021; USFWS 2011
Sharp-tailed Sandpiper	<i>Calidris acuminata</i>	USFWS 2011
Short-billed Dowitcher	<i>Pluvialis squatarola</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Short-eared Owl	<i>Asio flammeus</i>	eBird 2021; USFWS 2011
Short-tailed Shearwater	<i>Ardenna tenuirostris</i>	eBird 2021; USFWS 2011
Slaty-backed Gull	<i>Larus schistisagus</i>	eBird 2021
Snow Bunting	<i>Plectrophenax nivalis</i>	eBird 2021; USFWS 2011

Common Name	Scientific Name	Source
Snow Goose	<i>Anser caerulescens</i>	eBird 2021; USFWS 2011
Snowy Owl	<i>Bubo scandiacus</i>	USFWS 2011
Snowy Plover	<i>Charadrius nivosus</i>	eBird 2021
Sooty Grouse	<i>Dendragapus fuliginosus</i>	eBird 2021; USFWS 2011
Sooty Shearwater	<i>Ardenna grisea</i>	eBird 2021; USFWS 2011
Sora	<i>Porzana carolina</i>	USFWS 2011
South Polar Skua	<i>Stercorarius maccormicki</i>	eBird 2021
Surf Scoter	<i>Melanitta perspicillata</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Surfbird	<i>Calidris virgata</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Swainson's Thrush	<i>Catharus ustulatus</i>	eBird 2021; USFWS 2011
Townsend's Solitaire	<i>Myadestes townsendi</i>	USFWS 2011
Townsend's Warbler	<i>Setophaga townsendi</i>	eBird 2021; USFWS 2011
Tree Swallow	<i>Tachycineta bicolor</i>	eBird 2021; USFWS 2011
Tropical Kingbird	<i>Tyrannus melancholicus</i>	eBird 2021
Trumpeter Swan	<i>Cygnus buccinator</i>	USFWS 2011
Tufted Puffin	<i>Fratercula cirrhata</i>	USFWS 2011
Tundra Swan	<i>Cygnus columbianus</i>	eBird 2021; USFWS 2011
Varied Thrush	<i>Ixoreus naevius</i>	eBird 2021; USFWS 2011
Vaux's Swift	<i>Chaetura vauxi</i>	eBird 2021; USFWS 2011
Vesper Sparrow	<i>Poocetes gramineus</i>	eBird 2021
Virginia Rail	<i>Rallus limicola</i>	eBird 2021; USFWS 2011
Wandering Tattler	<i>Tringa incana</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Western Bluebird	<i>Sialia mexicana</i>	eBird 2021; Regulus calendula
Western Grebe	<i>Aechmophorus occidentalis</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Western Meadowlark	<i>Sturnella neglecta</i>	eBird 2021; USFWS 2011
Western Sandpiper	<i>Calidris mauri</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Western Screech Owl	<i>Megascops kennicottii</i>	USFWS 2011
Western Scrub-jay	<i>Aphelocoma californica</i>	USFWS 2011
Western Tanager	<i>Piranga ludoviciana</i>	eBird 2021; USFWS 2011
White-tailed Kite	<i>Elanus leucurus</i>	eBird 2021; USFWS 2011

Common Name	Scientific Name	Source
White-throated Sparrow	<i>Zonotrichia albicollis</i>	eBird 2021; USFWS 2011
White-winged Scoter	<i>Melanitta deglandi</i>	eBird 2021; USFWS 2011
Wild Turkey	<i>Meleagris gallopavo</i>	USFWS 2011
Willet	<i>Tringa semipalmata</i>	eBird 2021; USFWS 2011
Willow Flycatcher	<i>Empidonax traillii</i>	USFWS 2011
Wilson's Phalarope	<i>Phalaropus tricolor</i>	eBird 2021; USFWS 2011
Wilson's Warbler	<i>Cardellina pusilla</i>	iNaturalist 2021; USFWS 2011
Wood Duck	<i>Aix sponsa</i>	eBird 2021; USFWS 2011
Yellow-billed Loon	<i>Gavia adamsii</i>	eBird 2021
Yellow-rumped Warbler	<i>Setophaga coronata</i>	eBird 2021; iNaturalist 2021; USFWS 2011
Mammals		
Bat Species	<i>Myotis</i> sp.	USFWS 2011
Beaver	<i>Castor canadensis</i>	USFWS 2011
Bobcat	<i>Lynx rufus</i>	USFWS 2011
Bushy-tailed Woodrat	<i>Neotoma cinerea</i>	USFWS 2011
California Sea Lion	<i>Zalophus californianus</i>	iNaturalist 2021; USFWS 2011
Cougar	<i>Puma concolor</i>	USFWS 2011
Deer Mice	<i>Peromyscus</i> sp.	USFWS 2011
Harbor Seal	<i>Phoca vitulina</i>	iNaturalist 2021; USFWS 2011
Harbour Porpoise	<i>Phocoena phocoena</i>	iNaturalist 2021; USFWS 2011
Humpback Whale	<i>Megaptera novaeangliae</i>	iNaturalist 2021
Long-tailed Weasel	<i>Mustela frenata</i>	USFWS 2011
Mink	<i>Mustela vison</i>	USFWS 2011
Mountain Beaver	<i>Aplodontia rufa</i>	USFWS 2011
Muskrat	<i>Ondatra zibethicus</i>	USFWS 2011
Northern Flying Squirrel	<i>Glaucomys sabrinus</i>	USFWS 2011
Northern Fur Seal	<i>Callorhinus ursinus</i>	iNaturalist 2021; USFWS 2011
Northern Right Whale Dolphin	<i>Lissodelphis borealis</i>	iNaturalist 2021
Norway Rat	<i>Rattus norvegicus</i>	USFWS 2011
Nutria	<i>Myocastor coypus</i>	iNaturalist 2021; USFWS 2011
Pacific Jumping Mouse	<i>Zapus trinotatus</i>	USFWS 2011

Common Name	Scientific Name	Source
Pacific White-sided Dolphin	<i>Lagenorhynchus obliquidens</i>	iNaturalist 2021
Pine Marten	<i>Martes americana</i>	USFWS 2011
Porcupine	<i>Erethizon dorsatum</i>	USFWS 2011
Raccoon	<i>Procyon lotor</i>	USFWS 2011
River otter	<i>Lontra canadensis</i>	USFWS 2011
Roosevelt Elk	<i>Cervus canadensis roosevelti</i>	USFWS 2011; iNaturalist 2021
Shrew Species	<i>Sorex</i> sp.	USFWS 2011
Snowshoe Hare	<i>Lepus americanus</i>	USFWS 2011
Steller Sea Lion	<i>Eumetopias jubatus</i>	iNaturalist 2021; USFWS 2011
Striped Skunk	<i>Mephitis mephitis</i>	USFWS 2011
Townsend's Chipmunk	<i>Tamias townsendii</i>	USFWS 2011
Virginia Opossum	<i>Didelphis virginiana</i>	USFWS 2011
Voies	<i>Myodes</i> sp. and <i>Microtus</i> sp.	USFWS 2011