



Southern Resident Orca Endangered Species Management Plan-**DRAFT**



SOUTHERN RESIDENT ORCA CONSERVATION ON OREGON STATE
PARKS AND THE OCEAN SHORE STATE RECREATION AREA
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EXECUTIVE SUMMARY

The Southern Resident Orca (SRO), *Orcinus orca ater*, is a cetacean native to the eastern North Pacific Ocean that ranges along the U.S. West Coast from Alaska to California. Due to population declines, the SRO was listed as Endangered by the Federal Endangered Species Act (ESA) in 2005. Orcas have been listed in Washington State, including the SRO distinct population segment, as endangered since 2004. In 2021 areas of critical habitat were added for SRO including the waters off the entire coastline of Oregon (NMFS, 2021). In 2024, the Oregon Fish and Wildlife Commission listed the SRO as Endangered under the Oregon Endangered Species Act. This state listing triggered new requirements for state agency consultation, planning, and coordination. One aspect of the new state agency requirements is for relevant state agencies to produce agency-specific Endangered Species Management Plans (ESMP) that define the agency roles and approaches to conservation of the species.

Oregon Parks and Recreation Department (OPRD) owns and manages over 80 coastal park properties adjacent to critical habitat for SRO, the Pacific Ocean off Oregon. OPRD's management of the 362-mile-long Ocean Shore State Recreation Area (Ocean Shore), which includes Oregon's beaches from the vegetation line to the extreme low tide creates a connection to the ocean. Activities on the Ocean Shore have the potential to impact SRO, additionally, OPRD coordinates the coastwide volunteer program, Oregon Whale Watch (formerly "Whale Watch Spoken Here"), and operates the Whale Watch Center in Depoe Bay.

This plan describes the OPRD system of lands relevant to the species; summarizes OPRD rules, policies, and statutes that already passively protect the species; and describes OPRD's approach to SRO habitat management and species conservation as required by ODFW rules that came into effect after the state listing. The plan describes the agency response and approach to each of the topics required under OAR 635-100-0140, which in summary include:

- 1)** Coordination of permitted Ocean Shore management activities that connect to the ocean and are potentially disruptive (e.g., cable landings which connect to the ocean).
- 2)** Routine beach management, including removal of marine debris and coordination with partners on beach cleanups and oil spill response, as needed.
- 3)** Inclusion of SRO information in the Oregon Whale Watch trainings and materials and opportunistically in other marine mammal programming at coastal state parks.

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Background

Southern Resident Orca Biology and Habitat

The Southern Resident Orca (SRO), a distinct population of the subspecies *Orcinus orca ater*, is a cetacean native to the eastern North Pacific Ocean that ranges along the West Coast from SE Alaska to central California. Orcas are the largest member of the dolphin family and are well known for their distinct black and white markings. Various ecotypes of orcas are found worldwide and have been historically targeted both as a threat to the fishing industry but also for the aquarium and marine park industry (NMFS, 2025). The SRO is a Distinct Population Segment (DPS), known to feed primarily on salmonids and live in tight-knit family “pods” in coastal nearshore waters (NMFS, 2008).

New research indicates that not only are the SRO a distinct population, but they are part of a separate genetically distinct sub-species. Until this past summer, orcas worldwide were all classified as *Orcinus orca*, regardless of ecotype. Two ecotypes that live off the west coast were very recently taxonomically reclassified with new scientific names, *Orcinus orca ater*, for the smaller, fish-eating, resident killer whales and *Orcinus orca rectipinnus* for the larger, marine mammal hunting Bigg’s “transient” killer whales, with all the other orcas around the world, including the “offshore orcas” that live off the Oregon coast, lumped into *Orcinus orca orca*, for now (NMFS, 2024; Committee on Taxonomy, 2024). The decision to not separate them out into entirely separate species was controversial and based on the need for “more information about the worldwide population of killer whales” more so than the differences between the residents and the Bigg’s orcas (Dunagan, 2024). Not only are resident orcas, *O. orca ater*, a more specialized predator (eating almost exclusively fish, primarily salmon), but they are also different behaviorally, hunting fish using echolocation, forming close family groups (“pods”, see Figure 1), and not interacting with each other, even though their habitat overlaps in the North Pacific (NMFS, 2024).



Figure 1. Image of Southern Resident Orca Pod (Source: NOAA)

Thought to historically have more than 200 individuals before the 20th century, the SRO population has averaged around 83 orcas (see Figure 2) since the 1960s (ODFW, 2024a). With continued decline predicted, the SRO is critically endangered, with only 73 documented in the most recent count (MMC, 2025). Due to precariously low numbers, orcas have been listed as Endangered in Canada since 2001 and in Washington State since 2004. The SRO DPS was listed as Endangered by the Federal Endangered Species Act (ESA) in 2005.

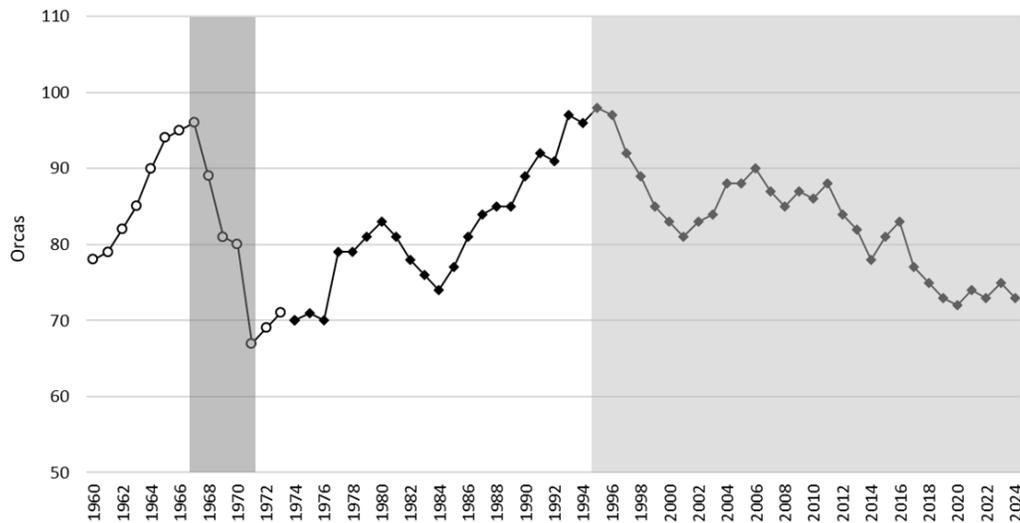


Figure 2. Southern Resident Orca population (1960-2024). Source: ODFW

In 2021, areas of critical habitat were added and expanded the area outside of key inland waters in the Salish Sea to coastal waters off Washington, Oregon and California (NMFS, 2021). SRO use waters off the entire Oregon coastline, particularly as an important travel corridor but also for foraging (ODFW, 2024a). Found to be native to Oregon and in danger of extinction in a significant portion of its range in the state, in 2024, the SRO was state listed by the Oregon Fish and Wildlife Commission (ODFW, 2024b).

Primary threats to Southern Resident Orcas include (ODFW, 2024a):

- Reduced abundance and size of prey, namely Pacific salmonid species (e.g., Chinook). This is notable given that they almost exclusively feed on fish and rely on echolocation to detect prey, which can be adversely affected by human-introduced noise in the water.
- Noise and vessel disturbance, including whale-watching boats, cargo ships, construction and marine energy development. This threat interacts with their ability to find prey, since they rely on being highly vocal, using communication between each other and to find prey using echolocation which can be disrupted with human introduced noises (NMFS, 2024).
- Environmental contaminants, particularly those that bioaccumulate and are persistent in the environment both from their food but also their environment (e.g., oil spills, pollution in water).

- Interactive/cumulative impacts

The SRO was listed as Endangered under the Oregon Endangered Species Act by the Oregon Fish and Wildlife Commission in 2024, which triggered new requirements for state agency consultation, planning, and coordination. One aspect of the new state agency requirements is for relevant state agencies to produce agency-specific Endangered Species Management Plans (ESMP) that define the agency roles and approaches to conservation of the species (ORS 496.182; OAR 635-100-0140). Oregon Department of Fish and Wildlife (ODFW) SRO survival guidelines ([OAR 635-100-0138](#)) will apply to OPRD until superseded by this OPRD ESMP.

OPRD Framework for Conservation

OPRD habitat management is guided by several elements of mission, statute, and rules that passively protect and enhance state park and Ocean Shore habitat, although most of it is not within the Pacific Ocean except for the Ocean Shore. Some of the key elements of existing protection framework are detailed below.

Mission

OPRD's mission includes providing and protecting outstanding natural areas, including coastal state parks and the Ocean Shore. The mission is aligned with SRO preservation and restoration and the recreational component of the mission may also help with the outreach and educational needs for species recovery.

Statutes, Administrative Rule and Policy

Several elements of OPRD administrative rules and policy are relevant to general conservation principles and provision of recreational opportunities may also benefit SRO outreach and awareness efforts. These elements are summarized below.

Ocean Shore Statutes: OPRD's direction for the management of the Ocean Shore is to "do whatever is necessary to preserve and protect scenic and recreational use of Oregon's ocean shore" (ORS 390.610). This includes protecting the public interest by permitting "improvements" to the Ocean Shore through a regulatory program, including for pipelines, cables and conduits below the beach and protecting and providing for public access, including "maintaining the beach...in a safe and litter-free manner" (ORS 390.632-725).

Ocean Shore Administrative Rules: OPRD's Ocean Shore management is targeted to maintain and protect the Ocean Shore for public recreation and to protect Ocean Shore resources (OAR 736-020 and 736-021). Standards include those designed to avoid detrimental impacts of alterations to the Ocean Shore to the public and to the preservation of the natural resources, scenic, recreational and economic values of the Ocean Shore (ORS 736-020).

Oregon Territorial Sea Plan

Statewide Planning Goal 19, coordinated by the Department of Land Conservation and Development (DLCD), is the foundation of Oregon's Territorial Sea Plan (TSP), focusing on ocean resources, namely the protection of living, renewable marine resources. The TSP covers the waters offshore of Oregon from the shoreline out to the boundary of state jurisdiction at three nautical miles. Oregon's Ocean Policy Advisory Council (OPAC) advises state agencies and the Governor on ocean resource management and helps steward the TSP (DLCD, 2023). Three chapters of the TSP, Part 5 (Uses of the Territorial Sea for Renewable Energy Facilities, DLCD 2019), Part 4 (Uses of the Seafloor, DLCD 2023), and Part 2 (Making Resource Decisions) include key elements that require the formation of a Joint Agency Review Team (JART) to review permits for seafloor disturbances such as cable landings and alternative energy development projects, both of which have OPRD listed as a participant.

Role of OPRD in Conservation of Southern Resident Orcas

OPRD's ESMP is not targeted at directly interacting with the actions of any other state or federal agency's specific management areas or plans, apart from existing and planned coordination with relevant agencies (e.g., JART) related to the Oregon Territorial Sea Plan. OPRD and individual OPRD properties and the Ocean Shore have no specified actions or roles called out specifically in the Federal Recovery Plan, however, the following management measures (MM) overlap OPRD's existing stewardship priorities. OPRD's ESMP is broadly consistent with the Federal Recovery Plan for SRO, including specific measures about reducing pollution in the SRO habitats (MM 1.2), being prepared for oil spill response (MM 2.1.2), coordination and minimization of human caused noise from in-water construction (MM 2.3), participation in invasive species prevention efforts (MM 2.4), enhancing public awareness of SRO status and threats (MM 3.1), encouraging land-based viewing of killer whales (MM 3.2.3), and marine mammal stranding response coordination (MM 5.1.2) (NMFS, 2008). Collective coordination related to future coast-wide state agency coordination for outreach and education related to SRO may occur in the future, only initial discussions have occurred so far. OPRD staff plan to participate, as needed, in the state agency SRO working group which is intended to foster inter-agency cooperation and coordination of actions related to SRO conservation.

Lands Covered by the OPRD SRO Endangered Species Management Plan

This plan covers the Ocean Shore under OPRD jurisdiction where it intersects with Oregon's Territorial Sea, above extreme low tide, and all coastal properties owned or managed by OPRD that are on or adjacent to the Ocean Shore where Whale Watch programming occurs, including the Depoe Bay Whale Watching Center.

Agency Selected Role

Oregon Administrative Rules related to Endangered Species Management Plans for SRO require that agencies self-define their lands' roles in conservation of the species. The rules allow for choice

between the categories of (at least) “Take avoidance”, “Contributions to Conservation”, and “Conservation”. The following definitions are what OPRD used to decide its roles, which is consistent with the only previous plan OPRD has completed and had approved by ODFW under these rules, the Marbled Murrelet Endangered Species Management Plan (OPRD, 2023).

1. “Take avoidance” = do the minimum to protect the species and manage resources according to priorities other than habitat conservation (i.e., development), and continuation of existing uses that are not fully aligned with species needs. OAR 635-100-0100 defines “take” as “to kill or obtain possession or control of any species on the state list.”
2. “Contributions to Conservation” = long term management goals are generally in line with the needs of SRO, and minor investments (e.g., funding, staff time) or active enhancement commitments are being made to specifically benefit SRO.
3. “Conservation” = significant investments and commitments are being made specifically for the benefit of SRO. OAR 635-100-0100 defines “conservation” as “the use of methods and procedures necessary to bring a species to the point at which the measures provided under ORS 496.171 to 496.182 are no longer necessary.” This role applies when the agency can take major actions which may lead to significant progress towards delisting the species under Oregon’s ESA.

The staff recommendation is for “contributions to conservation” through application of existing efforts. OPRD would also be doing “take avoidance” through application of existing rules and policies, however, it is possible to provide minor investments to provide outreach and educational opportunities in the network of coastal state park, primarily through existing programming and through partnership opportunities.

OPRD Management Practices to Meet Agency Role

As described in the background section of this plan, OPRD’s management is passively in line with the needs of SRO and does not have a direct impact on their survival. Recreation management and operation of developed facilities such as campgrounds, parking areas, picnic areas, roads, trails, and administrative areas do not impact SRO, nor do most Ocean Shore management activities.

Take Avoidance

Where actions are needed in portions of the Ocean Shore connected to the ocean, OPRD sideboards in permitting may include:

- 1) Pre-project consultation and scoping with ODFW, DLCD, DOGAMI, DEQ and DSL as part of the Territorial Sea Plan (TSP) Part 4 and 5, namely for cable landings and outfalls. This action is in line with the Recovery Plan management measure regarding coordination and

minimization of human noise caused from construction (MM 2.3), and pollution (MM 1.2), and may include:

- a. Participation in the Joint Agency Review Team (JART), as required by Part 4 and 5 of the Territorial Sea Plan (DLCD, 2019; DLCD, 2023).
- 2)** Assessment of suitability of habitat and potential effects for management planning, policy development, rulemaking and project reviews, including Ocean Shore permits. This action is in line with the Recovery Plan (NMFS, 2008) regarding minimization of human noise caused from construction (MM 2.3), and pollution (MM 1.2), and may include:
- a. Application of the Precautionary Principle (UNDC, 1992)
 - b. Coordination regarding optimal timing of actions to reduce noise, pollution and other disturbance effects

Contributions to Conservation

As part of OPRD's ongoing management of the Ocean Shore State Recreation Area (Ocean Shore) and coastal state parks, OPRD will continue to contribute in the following ways:

- 1)** Routine beach management, which includes removal of small to large marine debris from the Ocean Shore and coordination with other agencies in the rare but critical need for timely oil or other material spill response. Although not the primary responder for oil spills (i.e., DEQ on shore, USCG in the water), OPRD beach rangers may be first on scene. The following actions are in line with the SRO Recovery Plan measures to reduce pollution in the SRO habitats (MM 1.2) and related to oil spill response (MM 2.1.2).
 - a. Beach rangers routinely patrol and monitor beaches accessible by vehicles and remove medium to large marine debris, including entanglement hazards such as fishing debris including nets, crab traps and ropes.
 - b. OPRD partners with non-profit organizations to conduct coastwide volunteer cleanups that focus on marine debris, including beaches only accessible to pedestrians
 - c. OPRD beach rangers may be first on scene during the event of an oil, or other material spill on Oregon's beaches. They also may serve as "eyes and ears" for other abnormal items on the beach, including stranded marine mammals and potential non-native, invasive species.

- 2)** OPRD will support programming efforts to promote outreach and education on Southern Resident Orcas to inspire appreciation and awareness of their state and federal status. This will primarily take place through visitor engagements at the Depoe Bay Whale Center and during the "Oregon Whale Watch" program, as appropriate and when possible, but may also extend to other existing programming avenues such as Junior Ranger programs, campground programs, and roving ranger programs. The following ongoing efforts are in line with

Recovery Plan measures to enhance public awareness of SRO status and threats (MM 3.1), as well as encouraging land-based viewing of killer whales (MM 3.2.3).

- a. OPRD coordinates training content and status updates with partners, including ODFW, NOAA, HMSC on the Oregon Whale Watch program volunteer trainings. OPRD will invite partners (e.g., ODFW) to attend and participate in the trainings, when they occur, to have the newest, up to date SRO information included in the training.
- b. Oregon Whale Watch program volunteer training typically occurs annually, with hundreds of active volunteers that provide programming during whale watch weeks (usually in the spring and winter) reaching tens of thousands of visitors annually. It is one of the most organized onshore whale watching programs in the United States.
- c. As appropriate, agency developed materials specific to SRO that have been vetted by OPRD staff will be distributed during volunteer training and/or during the Oregon Whale Watch program weeks, which historically occurred annually (but may change over time) typically during the spring and winter migration periods of grey whales.



Figure 3. Image of Oregon Whale Watch Volunteer and Visitors (Source: OPRD)

Adaptive Management

OPRD natural resources staff developed a draft plan which was reviewed by central resources and operational program management. The draft plan was provided ahead of time for review and presented at the Leadership Team meeting in May 2025. The draft plan was then provided to ODFW for review. The final draft was provided ahead of time for the June 2025 Parks Commission meeting which provides opportunities for public comment.

OPRD's management actions to be completed under this plan are primarily existing, long-term programs and passive efforts that do not include specific measurable proposals for habitat manipulation directly targeted for SRO effects. The agency does not plan to actively monitor

implementation of the ESMP. However, OPRD will revisit the plan and its implementation and adaptively manage, as necessary.

Endangered Species Management Plan Review and Update

OPRD will revisit the ESMP's effectiveness and compatibility with management needs every 10 years. Revisitation of the text of the plan may result in changes when:

- 1) Aspects of understanding of SRO biology change that have a nexus with OPRD management of the Ocean Shore
- 2) Listing changes under the state or federal ESA
- 3) Catastrophic habitat disturbances change nearshore habitat, including the Ocean Shore
- 4) Changes occur to Ocean Shore jurisdiction or management responsibilities, including updates to the coordination requirements of the Oregon Territorial Sea Plan

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