Oregon Department of State Lands

SOUTHERN RESIDENT ORCA MANAGEMENT PLAN

Requested by the Oregon Fish and Wildlife Commission
under the Oregon Endangered Species Act

Prepared by:
Dr. Nataliya Stranadko
Planning & Policy Unit

2025

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EXECUTIVE SUMMARY

The Southern Resident Orcas (SROs, *Orcinus orca ater*) are a distinct population of orcas (killer whales) with 73 individuals remaining in 2024, compared to 98 in 1995, in the eastern North Pacific Ocean. Prey availability, sound and vessel disturbance, environmental contaminants, and oil spills are the primary threats to SROs that impact their biological conditions, lifespan, survival, and recovery.

In 2001, the United Nations Convention on the Conservation of Migratory Species of Wild Animals required international cooperation and agreements for the conservation and management of killer whales. In 2003, the National Marine Fisheries Service designated the SROs as depleted under the Marine Mammal Protection Act, and in 2005, they were listed as endangered under the U.S. Endangered Species Act.

In 2024, the Oregon Fish and Wildlife Commission listed SROs as endangered under the Oregon Endangered Species Act, requiring state land-owning or managing agencies to define their role in the conservation of SROs and develop an Endangered Species Management Plan (ESMP).

Considering the statutory requirements and policies, and the role of the agency's lands through overseeing the Oregon waters and seabed extending three geographical miles seaward from the coastline of the Pacific Ocean, the Oregon Department of State Lands defines the role its lands play in SROs' conservation as "contributing to conservation."

This ESMP includes the following proprietary (ownership) and non-proprietary (regulatory) actions that the agency is currently taking or planning to implement to contribute to SROs' conservation:

- Including SRO requirements in the proprietary authorization process for anyone who wants to develop a project and place renewable energy facilities and undersea infrastructure (e.g., cables, pipelines, and other utilities) in the territorial sea.

- Including SRO requirements in the removal-fill permit application process for project activity that moves materials in water, such as grading or dredging, in submersible and submerged lands within the territorial sea.

- Providing necessary information and requirements about SROs during the Joint Agency Review Team meetings under the Oregon Territorial Sea Plan Parts 4 and 5.

Introduction

On February 16, 2024, the Oregon Fish and Wildlife Commission (the Commission) voted to amend OAR 635-100-0125, listing the Southern Resident Orca (SRO) as an endangered species under the Oregon Endangered Species Act. At the time of listing, the Commission also adopted survival guidelines for the species (OAR 635-100-0138), as required by statute. These rule changes affect decisions made on state-owned or managed lands, including leased lands or those where the state holds a recorded easement, as well as state waters.

In June 2024, the Commission determined that the Oregon Department of State Lands (ODSL) is an agency that owns and manages state lands where SROs or their habitat are found and that ODSL can play a role in SRO conservation.

In March 2025, the Commission determined that ODSL is also a non-land-owning or managing agency that can contribute to SROs' conservation.

This Southern Resident Orca Endangered Species Management Plan (ESMP) is prepared at the request of the Oregon Fish and Wildlife Commission and covers both ODSL proprietary (ownership) and non-proprietary (removal-fill) roles in the conservation of SROs.

This ESMP begins by introducing basic information about the Southern Resident Orcas, including their biology, habitat, and population status. Then, it highlights the key threats to these endangered species, as well as current international, federal, and state policies and protective measures in place. Moving forward, the ESMP emphasizes the ODSL's role in SRO conservation and proprietary and removal-fill practices to meet this role.

The ESMP concludes with the Adaptive Management Strategy that the agency uses for the development and implementation of this Plan, highlighting monitoring, evaluation, review, and coordination as essential components for achieving conservation goals.

For more information about the SRO ESMP, please contact:

Dana Hicks
Planning & Policy Manager
Dana.Hicks@dsl.oregon.gov

Charles Redon
Removal-Fill Specialist
Charles.Redon@dsl.oregon.gov

or

Dr. Nataliya Stranadko
Territorial Sea Specialist
Nataliya.Stranadko@dsl.oregon.gov

Blake Helm
Proprietary Specialist
Blake.Helm@dsl.oregon.gov

Background

Southern Resident Orca Biology and Habitat

The Southern Resident Orcas (SROs, *Orcinus orca ater*) are a distinct population of orcas (killer whales) native to the eastern North Pacific Ocean with a range that extends from southeastern Alaska to central California (Figure 1).

SROs spend much of the late spring, summer, and fall in the inland marine waters of Washington State and southern British Columbia, collectively referred to as the Salish Sea, which includes Puget Sound, the Strait of Juan de Fuca, and the Strait of Georgia. During the winter and early spring, SROs spend a considerable amount of time off the coasts of Washington, Oregon, and northern California (ODFW, 2024).

Figure 1. Distribution location of Southern Resident Orcas (OCEANA)

Orcas, also known as killer whales, are the largest members of the dolphin family and apex marine predators. The name “killer whale” originates from early whalers and is appropriately based on the species’ predatory habits, as well as its large size, which distinguishes them from other dolphins (NMFS, 2008).

Killer whales are easily identifiable by their distinctive black-and-white color pattern, and differences in the appearance of their dorsal fins and saddle patches are unique to individual orcas, allowing them to be identified visually during annual censuses (Figure 2).

Figure 2. Orcas' black-and-white appearance (Center for Whale Research; Photo by Mark Malleson)

Adult males can attain a length of 9.0 m (29.5 ft) and a weight up to 5,568 kg (12,275 lb), while females may reach a length of 7.7 m (25.3 ft) and a weight of 3,810 kg (8,400 lb). The average life expectancy of Southern Resident orcas is 29 years for females and 17 years for males, with maximum life spans of 80–90 years and 60–70 years, respectively (ODFW, 2024).

Among the three ecotypes of orcas (Figure 3), SROs are one of the four distinct populations of resident orcas, who rely almost entirely on fish for their diet, particularly Pacific Salmon (NMFS 2008; NMFS, 2021a; NMFS, 2021b; ODFW, 2024).

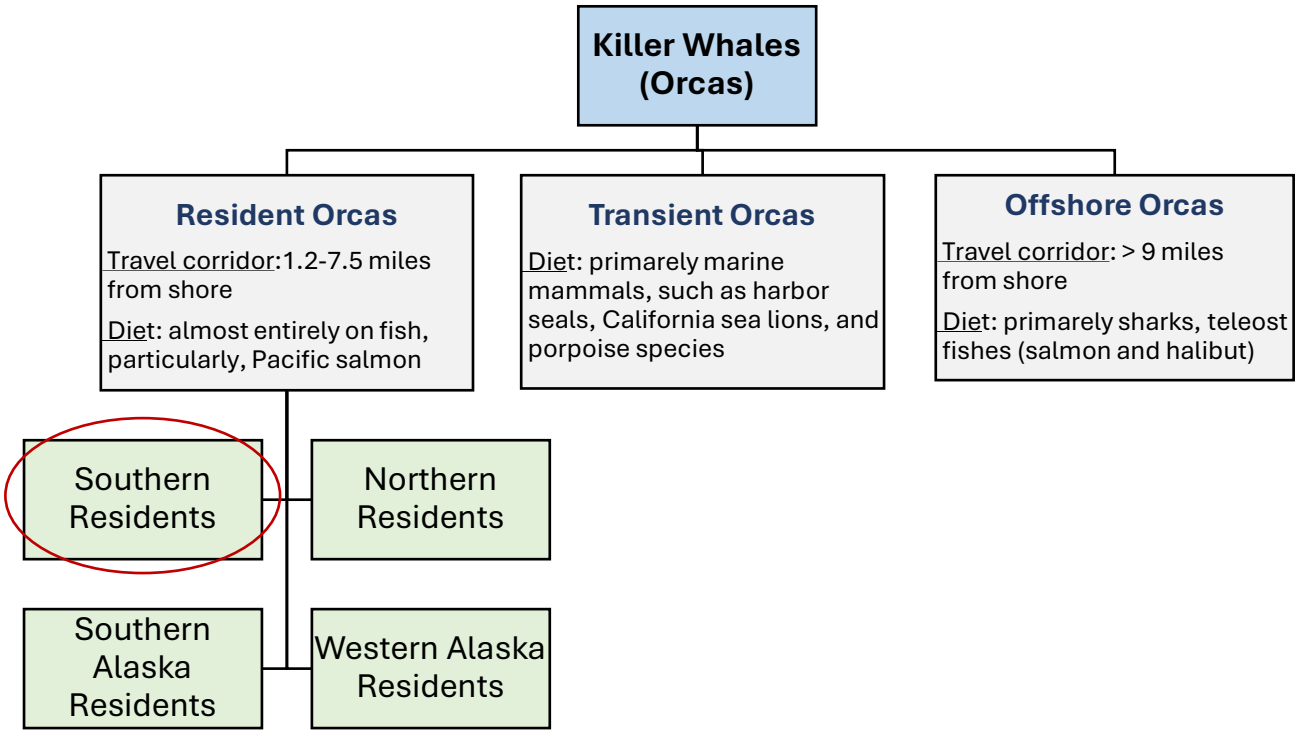


Figure 3. Classification of orcas: ecotypes and populations

Population Status

SROs are highly social animals with a stable and hierarchical family group based on maternal descent. Their social structure consists of several female-led matrilines, organized into three pods designated as J, K, and L.

The SROs community may have numbered more than 200 individuals until the mid-to-late 1800s (Krahn et al., 2002; ODFW, 2024), when Euro-American settlement began to impact the region's natural resources. Scientists estimate the minimum historical population size of Southern Residents in the eastern North Pacific was about 140 animals (NOAA, 2025).

During the late 1960s and early 1970s, the capture of SROs for aquaria and marine parks had an immediate negative impact on the population, resulting in a 30% decline in its members between 1967 and 1971 (Figure 4).

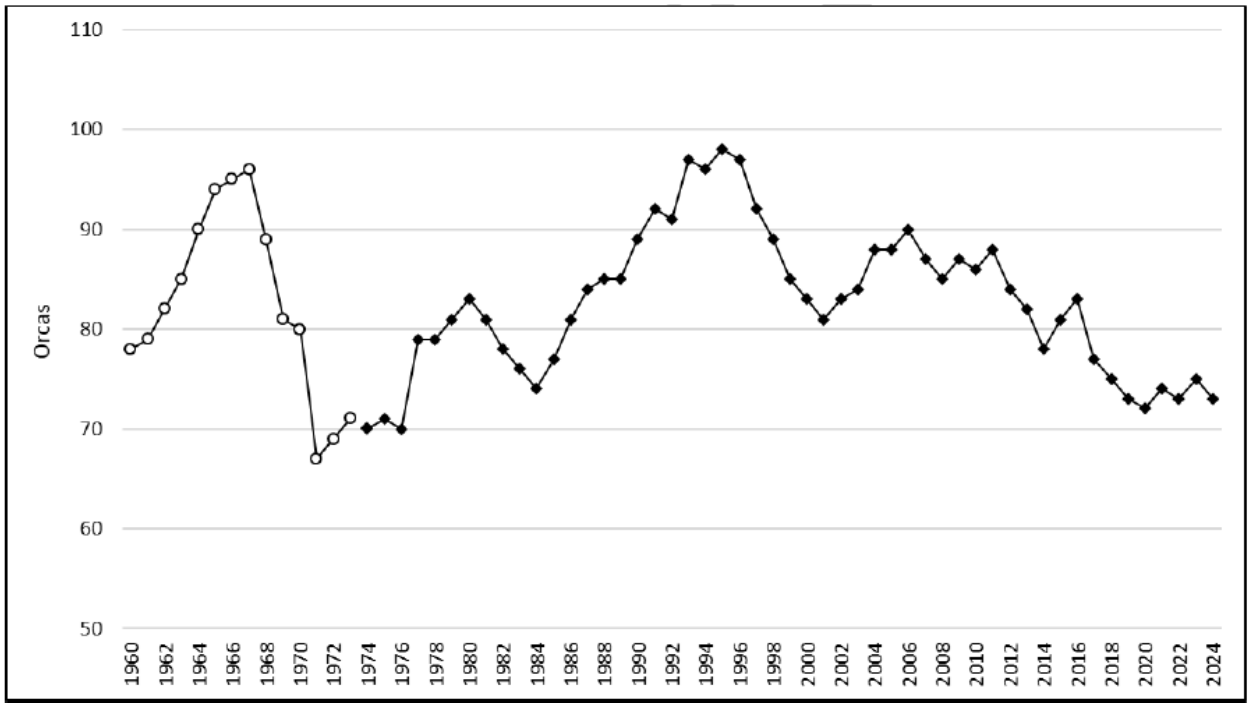


Figure 4. Population size and trend of Southern Resident orcas, 1960–2024 (ODFW, 2025)

Collections for aquaria decreased dramatically after 1971 due to public opposition. Although this allowed the SROs population to gradually rebuild, reaching a peak of 98 orcas in 1995, the population experienced a decline of almost 20% in the late 1990s, leaving 80 killer whales by 2001 (ODFW, 2024; NOAA, 2025).

The current population size for SROs (as of July 1, 2024) is 73 orcas (25 in J pod, 15 in K pod, and 33 in L pod) (Center for Whale Research, 2025; MMC, 2025). In the last decade, every census showing population growth has been followed by a subsequent decline. The Center for Whale Research's data shows that survival rates are tied to Chinook salmon abundance, and recovery of the SROs population cannot occur without an increase in this prey resource.

The Northwest Fishery Science Center recently used a population viability model to project the SROs' population size through 2045 under three different scenarios (Figure 5) (ODFW, 2024; NMFS, 2021b). All three projections indicate an overall decline in the SROs population over the next 25 years.

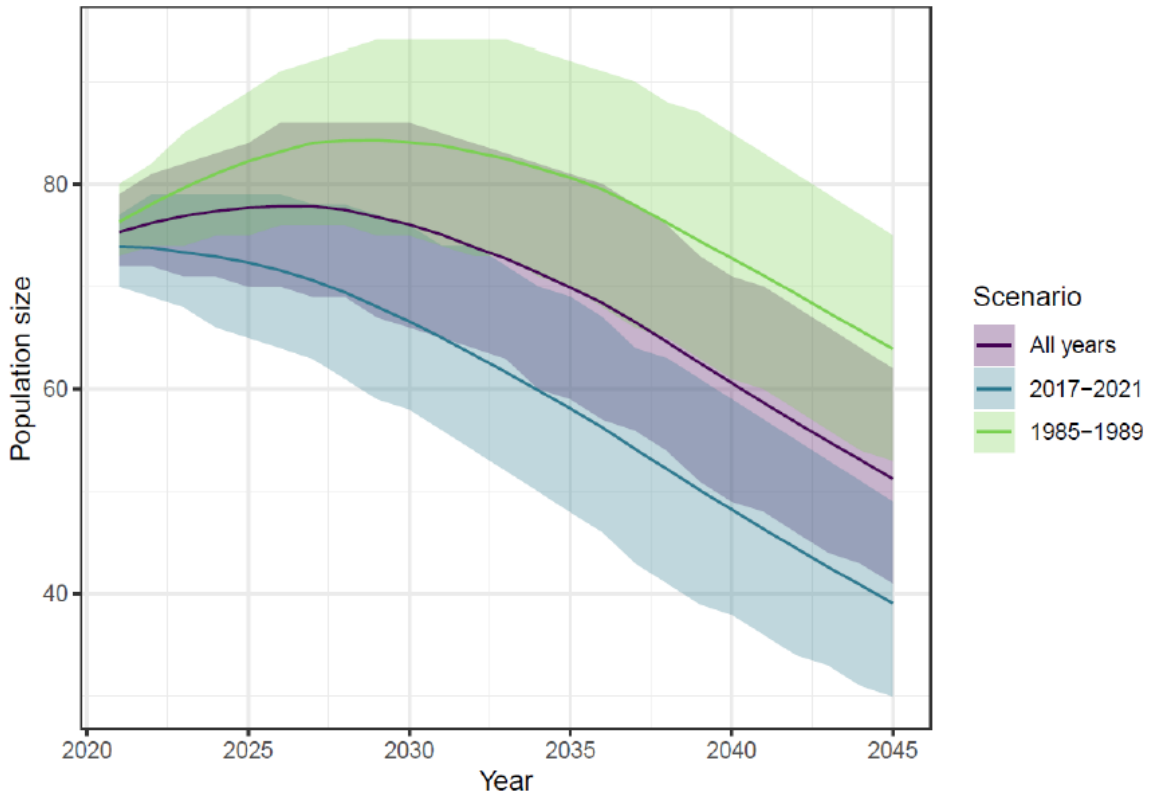


Figure 5. SROs' population size projections from 2020 to 2045 under three scenarios: (1) use of fecundity and survival rates estimated over the entire time series (1985–2021, purple), (2) use of rates estimated over the last five years (2017–2021, blue), and (3) use of the highest estimated survival and fecundity rates (1985–1989, green) (NMFS 2021b)

Key Threats to Southern Resident Orcas

According to the SRO federal recovery plan (NMFS, 2008), the National Marine Fisheries Service identified key threats to the survival and recovery of the SROs (Figure 6).

Prey availability - Reductions in the abundance of Chinook salmon in the Pacific Northwest over the last 150 years due to overfishing, habitat loss, degradation, poor hatchery practices, climate change, and hydropower operations on the Columbia River and other rivers.

In addition to reductions in the quantity of prey, a decrease in the quality of prey is also apparent. Many populations of Pacific salmon, including Chinook salmon, have experienced a decrease in physical size over the past several decades. Potential reasons for this include ocean conditions, as well as harvest and fish culture practices. Smaller prey may result in fewer calories being consumed per unit of foraging effort for the orcas, leading to reduced foraging efficiency and more energy expended to meet dietary needs.

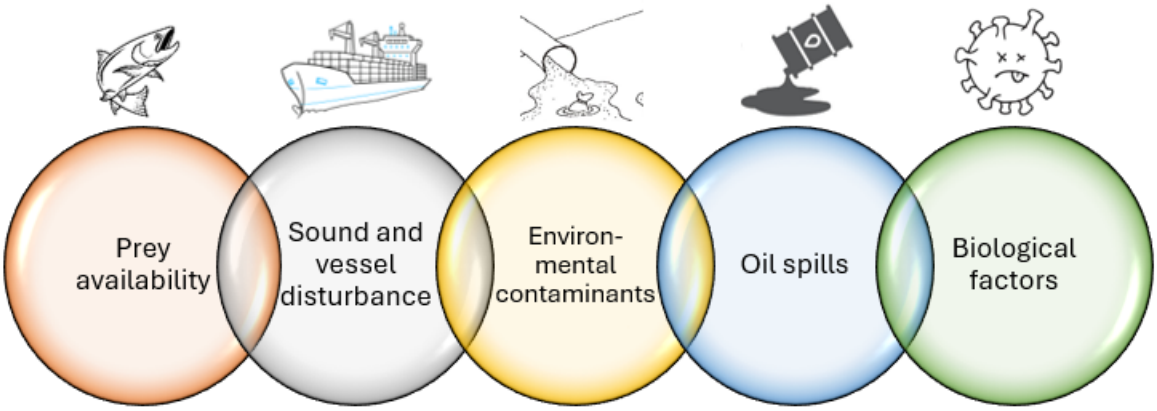


Figure 6. Key threats to the Southern Resident Orcas

Sound and vessel disturbance - Noise from vessel traffic, dredging/drilling, construction activities, and ocean energy developments can potentially interfere with the SROs' ability to communicate with each other and forage efficiently. Commercial shipping, ferry operations, whale watching, and recreational boating traffic have expanded within the northeastern Pacific region in recent decades. Vessel noise may mask or prevent the perception of vocalizations made by orcas, interfering with communications essential for maintaining social structure and cohesion. SROs respond to close-range vessel encounters with short-term behavioral changes, including increased swimming speed, less directed swimming paths, and decreased foraging.

The development of marine renewable energy projects off the Oregon Coast is currently being investigated, with planning underway to test wave energy devices at a facility located 2 or 6 nautical miles off the coast near Newport, Oregon, and possible commercial development of offshore wind facilities 18 miles off the southern Oregon coast. The installation or operation of ocean energy infrastructure may produce sound at levels exceeding ambient conditions, which could have a range of effects on marine mammals.

Environmental contaminants - Contaminants known as persistent organic pollutants (POPs), consisting of organochlorines such as polychlorinated biphenyls (PCBs), dichlorodiphenyltrichloroethane (DDT), and polybrominated diphenyl ethers (PBDEs), are considered one of the greatest contaminant risks to SROs because they are slow to degrade in the environment and accumulate in the orcas' bodies over time. Even though many types of POPs have been banned in the United States and Canada, they continue to persist in the environment and are still manufactured in other countries. Contaminants can be

transported to the eastern North Pacific by ocean currents and through the atmosphere. POPs bioaccumulate in top marine predators such as orcas through their consumption of contaminated prey. High levels of POPs have been detected in Chinook salmon from Puget Sound and the lower Columbia River, likely due to large urban and industrial areas near those waterbodies. The Southern Residents have been exposed to POPs for several decades, and modeling suggests that it may take up to 60 years for PCB concentrations in the Southern Residents to decline to levels considered harmless to marine mammals.

Attention has also been focused recently on chemicals known as "contaminants of emerging concern" (CECs). CECs are found in common household products such as pharmaceuticals and personal care products, but are also produced in industrial processes. CECs can be challenging to treat in wastewater and are discharged into waterbodies through effluent from treatment plants. CECs have been detected in SROs, but the effects of these chemicals on marine mammals remain largely unknown (ODFW, 2024).

Oil spills - The likelihood of a significant oil spill in the northeastern Pacific region is low; however, if one were to occur, the impacts could be severe for orcas and other coastal organisms. Inhalation of vapors at the water's surface and ingestion of polycyclic aromatic hydrocarbons (PAHs) during feeding are the most likely pathways of exposure for orcas. Marine mammals acutely exposed to PAHs can experience lung diseases, liver disorders, neurological damage, and reproductive failure. Oil spills can also significantly affect prey populations that the SROs depend upon.

Biological factors - The SROs' small population size makes the community vulnerable to catastrophic events, such as oil spills and disease outbreaks, and can exacerbate the effects of acute and chronic stressors. The relatively high degree of inbreeding within the Southern Resident population suggests that inbreeding depression is likely a factor that is inhibiting the population's recovery. Studies also documented poor body condition in a significant proportion of SROs and found that orcas in poor condition were much more likely to die than those in a more robust condition.

Recent population viability analyses indicate that prey availability is the single most crucial factor affecting the population growth of SROs. Sound and vessel disturbance had the second greatest effect on population dynamics, followed by contaminants. However, cumulative effects, which include interactions between the primary threats, determine the overall trajectory of population growth (ODFW, 2024).

International Protective Measures

Global efforts to protect and rescue killer whales (orcas) are addressed in two key international agreements:

- The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, 1973).

Killer whales were placed on the CITES Appendix II in 1979, which requires all international shipments of the species to be accompanied by an export permit issued by the proper management authority of the country of origin. The United States joined and ratified this Convention on January 14, 1974.

- The United Nations Convention on the Conservation of Migratory Species of Wild Animals (1979).

In 2002, killer whales were added to Appendix II of the Convention. This designation is given to migratory species that "have an unfavorable conservation status and require international agreements for their conservation and management, as well as those which have a conservation status which would significantly benefit from the international cooperation that could be achieved by an international agreement" (Article IV of the Convention).

The International Union for Conservation of Nature (Reeves et al., 2017) lists killer whales as "data deficient" or species of "Lower Risk/Conservation Dependent" on its Red List.

Federal Protective Measures

The National Marine Fisheries Service (NMFS) designated the SROs as depleted under the Marine Mammal Protection Act in 2003 (68 FR 31980). In 2005, NMFS listed the SROs' distinct population segment (DPS) as endangered under the U.S. Endangered Species Act (ESA) (70 FR 69903) and produced a Southern Resident killer whale recovery plan in 2008 (NMFS, 2008). NMFS reviews the status of the SROs DPS every five years, and in its most recent review in 2021, concluded that the DPS should remain listed as endangered (NMFS 2021b; ODFW, 2024).

The NMFS recovery plan emphasizes that recovery of the SRO's DPS is a long-term effort that necessitates cooperation and coordination among West Coast communities, spanning from California to British Columbia, involving federal and State agencies, Tribes, non-profit organizations, industries, the academic community, and concerned citizens.

State Protective Measures

In 2004, *the State of Washington* added SROs to its list of endangered species (WSR 04-05-110). The Washington Department of Fish and Wildlife reviewed orcas' status in 2023 and

recommended that this type of killer whale remain listed as endangered in the state due to serious concerns with the Southern Resident population (Stocking, 2023).

The Government of Canada, through the Committee on the Status of Endangered Wildlife in Canada, designated SROs as endangered species in 2001, and they are listed in Schedule 1 of the Species at Risk Act (SARA) (S.C. 2002, c. 29).

In February 2024, *the Oregon Fish and Wildlife Commission* voted to amend OAR 635-100-0125 to list SROs as endangered under the Oregon Endangered Species Act. At the time of listing, the Commission also adopted survival guidelines for the species (OAR 635-7100-0138), as required by statute. These rule changes affect decisions made on state-owned or managed lands, including leased lands or where the state holds a recorded easement, and include state waters ("state lands"). In June 2024, the Commission determined that three state agencies - Oregon Department of Fish and Wildlife (ODFW), Oregon Department of State Lands (ODSL, proprietary component), and Oregon Parks and Recreation Department (OPRD) - own or manage lands where SROs or their habitat are found and that the agencies can play a role in SROs' conservation. Each of these agencies must determine the role its land will serve in SROs' conservation (ORS 496.182(8)(a)(B); OAR 635-100-0140(6)).

In March 2025, the Commission also determined that five state non-land-owning or managing agencies - Oregon Department of Environmental Quality (ODEQ), Oregon Department of Land Conservation and Development (ODLCD), Oregon State Marine Board (OSMB), Oregon State Police (OSP, Fish and Wildlife Division), and ODSL (non-proprietary component) - have a role to play in SROs' conservation. These agencies need to provide the Commission with written documentation of their agency's role and the actions they can take to support SROs' conservation efforts. Strategies and management plans of the land-owning and non-land-owning agencies will be an essential part of Oregon's conservation efforts.

ODSL Role in Conservation of Southern Resident Orcas

ODSL Mission, Statutory Obligations and Policies

As the State Land Board's administrative agency, the Oregon Department of State Lands (ODSL) manages school lands, oversees and protects waterways and wetlands of the State through superior stewardship and service, and it is the state partner for South Slough National Estuarine Research Reserve.

ODSL stewardship, service, and responsibilities are guided by the following Oregon Revised Statutes (ORS), Oregon Administrative Rules (OAR), and policies:

- ORS 273 - State Lands Generally,
- ORS 274 - Submersible and Submerged Lands,
- ORS 541 - Oregon Plan for Salmon and Watersheds,
- ORS 758 - Authority to Construct Lines and Facilities,
- ORS 196 - State Waters and Ocean Resources; Wetlands; Removal and Fill,
- OAR 141-083 - Rules for Granting Easements for Fiber Optic and Other Cables on State-Owned Submerged and Submersible Land Within the Territorial Sea,
- OAR 141-085 - Administrative Rules Governing the Issuance and Enforcement of Removal-Fill Authorizations Within Waters of Oregon Including Wetlands,
- OAR 141-102 - Oregon Essential Indigenous Anadromous Salmonid Habitat (ESH),
- OAR 141-122 - Rules for Granting Easements on Trust Lands,
- OAR 141-123 - Rules for Granting Easements on Non-Trust Lands,
- OAR 141-125 - Administrative Rules for Authorizing Special Uses on State-Owned Land,
- OAR 141-140 - Rules Governing the Placement of Ocean Energy Conversion Devices On, In or Over State-Owned Land Within the Territorial Sea,
- Statewide Planning Goal 19, and
- Oregon Territorial Sea Plan.

State Land Covered by the Plan and the Agency Role

This ESMP covers Oregon's territorial sea under ODSL jurisdiction, which includes the waters and seabed extending three geographical miles seaward from the coastline of the Pacific Ocean (ORS 196.405(6)). The ESMP also includes submersible and submerged lands within the territorial sea as defined in ORS 274.

In this area, ODSL holds both proprietary (ownership) and non-proprietary (regulatory) authority, issuing leases, authorizations (e.g., easement and special use authorization), and removal-fill permits for project development activities.

These lands and ODSL services are presented in Figure 7.

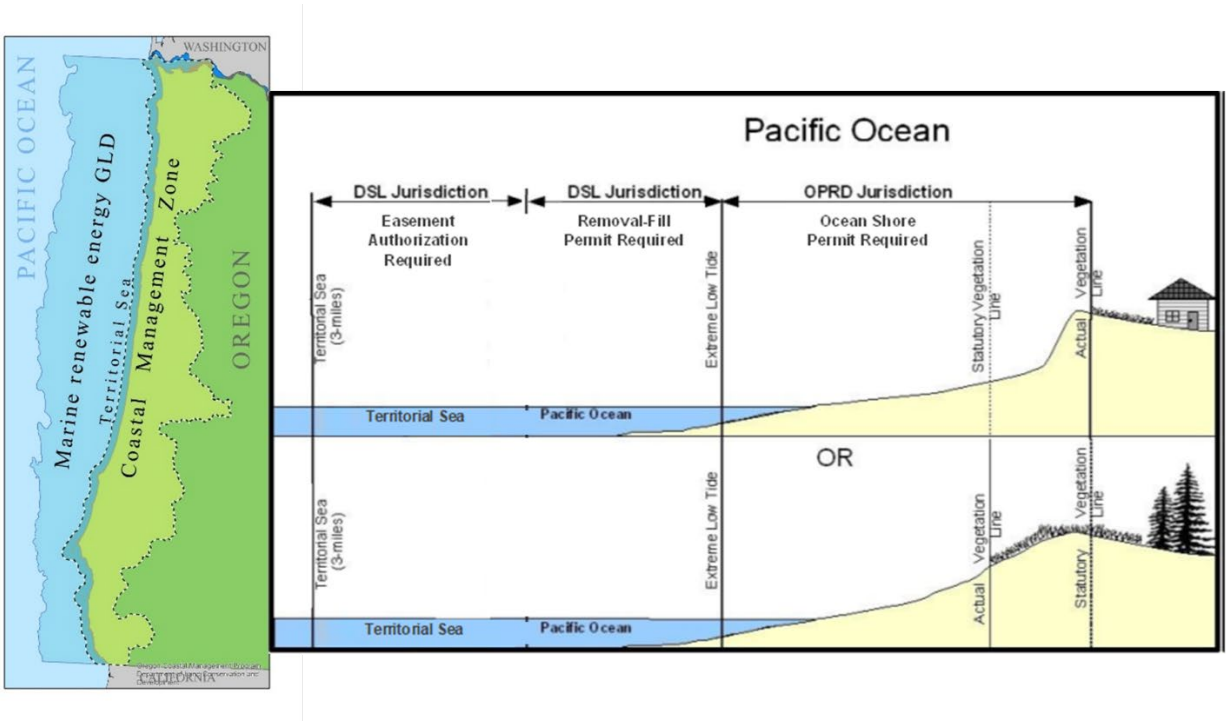


Figure 7. Oregon's territorial sea and ODSL jurisdiction (ODLCD)

Oregon Administrative Rules (OAR) related to Endangered Species Management Plans (OAR 635-100-0140) require that agencies determine the role the state land it owns or manages will serve in the conservation of the SROs. This role may include, but is not limited to, conservation, contribution toward conservation, or take avoidance.

Considering ODSL statutory requirements and policies, the social and economic impacts of SROs' conservation on the state, SROs' conservation needs, the purpose of the agency's lands, the roles that lands other than state lands may play in SROs' conservation, and the biological aspects of SROs management identified by the Oregon Department of Fish and Wildlife (ODFW) in its SROs biological assessment, ODSL defines the role its lands play in SROs' conservation as "contributing to conservation."

ODSL can maintain and implement essential actions that contribute to the conservation of SROs through the agency's proprietary and non-proprietary management and practices.

ODSL will also do "take avoidance" actions, where it is appropriate (e.g., requiring cable installation activity to happen only in those months when SROs are unlikely to travel through the territorial sea corridor along the Oregon coast).

Agency Proprietary Practice

DSL is the owner of certain lands, including most submersible and submerged lands within the territorial sea and navigable bays. As a landowner, per statute and rule, there are certain activities DSL may not enter into a contract to allow. DSL cannot grant permission for the following activities:

- Exploration for Minerals on State-Owned Submersible and Submerged Lands Within the Territorial Sea and Navigable Bays (ORS 274.610),
- Removal of kelp or other seaweed for commercial purposes on state-owned land. (OAR 141-125-0110 (14)),
- Exploration, development, or production of oil, gas, or sulfur is prohibited in the territorial sea (2010 Note to ORS 274.710).

ODSL management actions and contribution to the conservation and recovery of the SROs population will be implemented through the following proprietary practices:

Leases and Authorizations

Any person who wants to develop a project and place renewable energy facilities and undersea infrastructure in the territorial sea (e.g., offshore wind platforms, fiber optic and power cables, water, gas, hydrogen pipelines and other utilities, structures or equipment) will obtain a lease or authorization from ODSL. Easement authorization requires approval by the State Land Board. Specific actions during the authorization process for SROs include:

- Application form for authorization requires the inclusion of any state, federal-listed, or candidate endangered species on the project site.
- All applications are circulated to various local, state, federal agencies, and other interested parties to coordinate project review and permits.
- Environmental impact assessment and mitigation measures for construction, installation, and the project's decommissioning must be included in the application package.
- The applicant is recommended to hold public informational hearings to obtain public comments about the project activity and its impact on species, the marine environment, and coastal communities.

- The application process includes a technical review phase where ODSL staff ensure that the proposed project and use conform to and are allowed by local, state, and federal laws, including statewide Planning Goal 19 and the Territorial Sea Plan (TSP).
- The application for easement authorization needs to be approved by the State Land Board (composed of the Governor, Secretary of State, and State Treasurer). This allows additional public comments and testimony during the State Land Board meeting.
- ODSL requires the decommissioning of the seafloor infrastructure at the end of its lifecycle and recovering the area for further habitat.

Joint Agency Review Team under the TSP Parts 4 and 5

The Territorial Sea Plan Part 4 (Uses of the Seafloor) and Part 5 (Use of the Territorial Sea for the Development of Renewable Energy Facilities or Other Related Structures, Equipment or Facilities) require ODSL to convene the Joint Agency Review Team (JART) to facilitate coordination and communication between state agencies in the early stages of project planning, and between representatives of other affected jurisdictions throughout the pre-application and application process for easements and permits in the state territorial sea.

ODSL will invite ODFW, OPRD, including SHPO, ODEQ, ODLCD, the Oregon Department of Geology and Mineral Industries, and other agencies with regulatory or planning authority or advisory expertise to the JART pre-application and application meetings. These meetings will assess the impact of project activities on SROs and develop appropriate mitigation actions.

TSP Parts 4 and 5 require mitigation actions in the following order of priority:

1) Avoiding the impact altogether by not taking a certain development action or parts of that action.
2) Minimizing impacts by limiting the degree, magnitude, or timing of the development action and its implementation.
3) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
4) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the development action and by monitoring and taking appropriate corrective measures, and
5) Compensating for the impact. Either monetary compensation or by replacing or providing comparable substitute resources or environments.

TSP Parts 4 and 5 also require the applicant to provide the Resource and Use Inventory and Effects Evaluation during the JART pre-application and application meetings to make a final decision by the regulatory agencies regarding easements and permits.

In the written evaluation, the applicant should include the biological and ecological effects on marine habitats and the species that these habitats support.

For the SROs conservation and recovery, factors to consider include, but are not limited to:

- The time frames/periods over which the effects will occur,
- The maintenance of ecosystem structure, biological productivity, and biological diversity,
- Vulnerability of the SROs population and their habitat to the proposed actions,
- The probability of exposure of SROs and habitats to adverse effects from construction, operating, or decommissioning procedures, or accidents.

Agency Non-Proprietary (Removal-Fill) Practice

As it was indicated in the Background section of this Plan, prey availability is the most crucial factor affecting the SROs' population growth. Research found that during summer and early fall (June-November), SROs feed almost exclusively on salmonids (~96% by prey type), with Chinook salmon accounting for 65–72% of the salmonids taken (ODFW, 2024; Ford et al., 1998; Ford & Ellis, 2006). SROs prefer Chinook salmon due to their relatively large size and high fat content, which provides a high energy return for them (Ford & Ellis, 2006).

ODSL management actions can contribute to the conservation and recovery of the SROs population by addressing prey availability, noise disturbance, environmental contaminants, oil spills, and their cumulative effects through the following non-proprietary practices:

Removal-Fill Permits

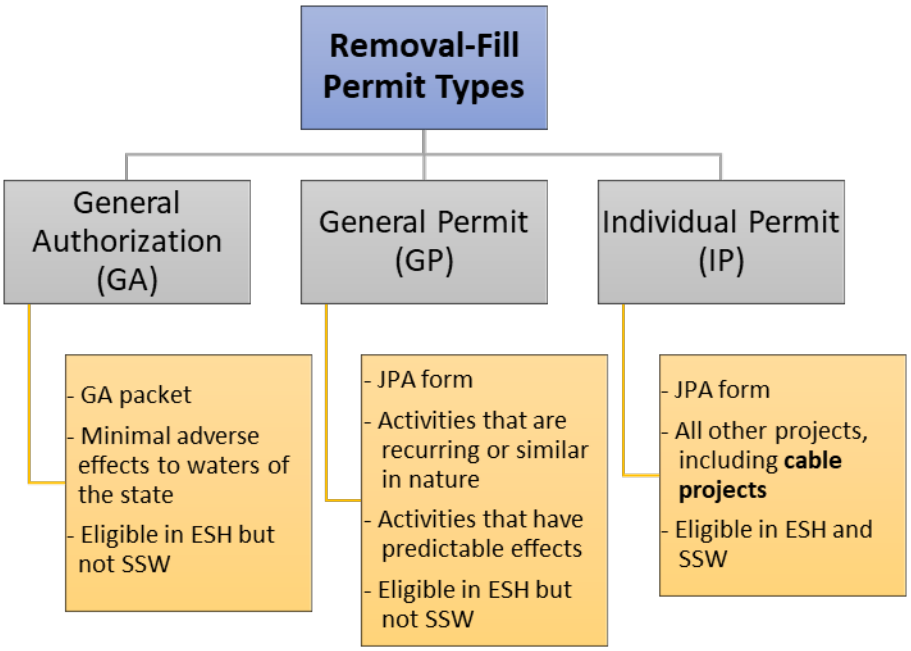
Project activity in waters of this state, including submersible and submerged lands within the territorial sea, that moves materials in water, such as grading or dredging, may require a removal-fill permit from ODSL.

ODSL issues different types of removal-fill permits for the following projects (Figure 8):

- Projects that add, remove, or move more than 50 cubic yards of material in most waters.
- Any amount of removal or fill in the territorial sea that is related to an ocean renewable energy facility requires a permit.

- Projects that add, remove, or move any amount of material in streams designated as Essential Salmonid Habitat, Oregon State Scenic Waterways and adjacent lands within a quarter mile of the waterway, and designated mitigation sites.

As noted above, a removal-fill permit is often required to remove or fill materials in streams, side channels, and adjacent wetlands that have been mapped as Essential Salmonid Habitat (ESH). The ESH designation protects the streams where salmonid species lay eggs and where young fish grow before traveling to the ocean. Chum, sockeye, Chinook, and coho salmon are all sensitive, threatened, or endangered salmonid species whose habitat may be designated as essential and form the main diet for SROs.



Notes: ESH - Essential Salmonid Habitat; SSW - State Scenic Waterways; JPA – Joint Permit Application

Figure 8. Types of Removal-Fill Permits (ODSL)

Specific actions during the removal-fill permits process include:

- Removal-fill application form requires the inclusion of state or federally-listed species on the project site as well as stating if the project site is within designated or proposed critical habitat.
- ODSL requires construction, installation, and the project's decommissioning to be held during the in-water period established by ODFW, unless otherwise approved by ODFW.
- For an Ocean Renewable Energy Facility, ODSL will only authorize a removal-fill activity that complies with the criteria established in the TSP. Permit applications for any activities in the territorial sea must provide an evaluation of the resources and an effects determination of the project on those resources, as required by the TSP. A removal-fill specialist or coordinator will be part of JART pre-application and application meetings to assist in making a final decision.

- For projects outside of the TSP JART requirements, ODSL encourages a pre-application meeting with ODEQ, U.S. Army Corps of Engineers, and other regulatory agencies for large, complex, or controversial projects. The principle underlying the pre-application matrix is that stream or wetland projects that are complex, controversial, or have significant impacts need early involvement by state and federal regulatory and resource management agencies. During such meetings, offered monthly, prospective applicants have one hour to meet with multiple state and federal partners simultaneously to discuss pre-submitted project information and receive feedback in preparation for submitting a permit application. ODSL designed a pre-application meeting screening matrix (Figure 9) and a matrix user's guide to help applicants navigate the requirements. One of the goals of the agencies is that projects should do no lasting harm to aquatic habitat on-site, upstream, or downstream, and that short- and long-term negative impacts will be avoided where possible, minimized to the greatest extent, and mitigated where necessary. Each agency or service has its own regulatory authorities and responsibilities, and those authorities will drive final permit decisions.

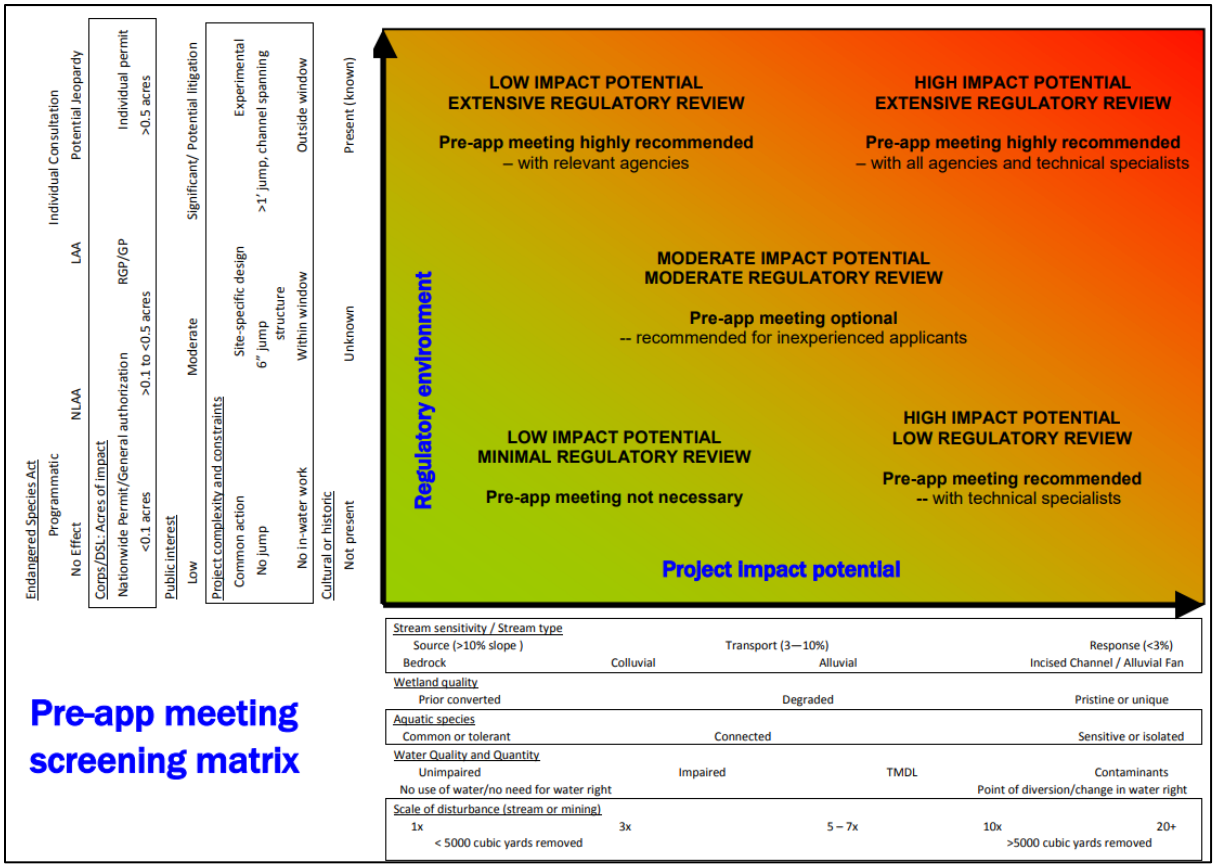


Figure 9. The pre-application meeting screening matrix (ODSL)

- ODSL maintains Oregon's official Essential Salmonid Habitat (ESH) map. The map utilizes scientific data from the ODFW to identify areas critical for salmonids to thrive, which require a permit to remove or fill any material. The ESH map is updated annually, as long as new or updated habitat data are available. Before the update, ODSL seeks input from the Tribes and also holds a public comment period on proposed changes. In addition, anyone can propose map edits through the ESH Review Request Form on the ODSL website at any time of the year. Proposed edits should correct map inaccuracies – for example, if the mapping does not accurately reflect current on-the-ground conditions, or if a new barrier has been introduced that prevents fish from reaching an area. Proposed edits, if accepted after review by ODFW, would be included in the next annual map update.

- Applications for individual permits and general permits established by rule are circulated to various local, state, federal agencies, and other interested parties to coordinate project review and permits. Comments received can inform changes to project design and inform DSL permit conditions.

Adaptive Management Strategy

ODSL Process for Plan Development and Approval

ODSL Planning and Policy Unit's staff developed a draft Southern Resident Orca Endangered Species Management Plan (ESMP) as requested by the Oregon Fish and Wildlife Commission in June 2024 (proprietary component) and in March 2025 (non-proprietary component). A draft ESMP was reviewed by a removal-fill specialist and operational program management. Finally, the ODSL director reviewed and approved the SROs ESMP. This ESMP will be presented to the State Land Board as an informational item.

Monitoring, Evaluation, and Review

ODSL will monitor and implement this ESMP through the requirements for authorizations and removal-fill permit processes described. The number of authorizations by type, and removal-fill permits by type, including how many were issued in ESH streams, are reported annually by fiscal year in DSL's Aquatic Resource Management (ARM) Annual Report, which is presented to the State Land Board and published on DSL's website.

ODSL will ensure that the JART pre-application and application meetings under the Territorial Sea Plan Parts 4 and 5 consider the potential effects on SROs' communication, navigation, and foraging when planning projects in SROs' critical habitat off the Oregon Coast.

ODSL will review this ESMP as needed in case of any significant changes to SROs population status or their conservation needs under the international, federal, and state laws and requirements by the Oregon Fish and Wildlife Commission; changes in ODSL's ability to contribute to SROs conservation and recovery; changes in the agency's jurisdiction and management responsibility; significant changes to ocean conditions and food chain for SROs due to climate change, natural or anthropogenic catastrophic events; and updates in the Oregon Territorial Sea Plan.

ODSL Coordination with the Other Agencies and Efforts

ODSL acknowledges that different directives and goals for other state-owning land agencies will result in individual Endangered Species Management Plans unique to each agency.

ODSL manages submersible and submerged lands within the territorial sea, where SROs could be observed and travel off the Oregon coast. ODSL also contributes to the conservation of salmonids, which are the primary dietary source for SROs. The agency will coordinate its efforts with various stakeholders through the proprietary authorizations and removal-fill permits processes, JART pre-application and application meetings under the

TSP Parts 4 and 5, participation in ODFW events and working groups as resources allow, and aligning the agency's efforts with the federal recovery plan for SROs.

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