

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

California Endangered Species Act



Petition Evaluation for Southern Resident Killer Whale (*Orcinus orca*)

Report to the California Fish and Game Commission
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TABLE OF CONTENTS

List of Figures	iii
List of Abbreviations, Acronyms, and Terms	iii
Executive Summary.....	iv
1 Introduction.....	1
1.1 Petition Evaluation Overview.....	1
1.2 CESA Petition History	2
1.3 Federal Status	2
1.4 Additional Species Status Designations.....	3
1.4.1 Washington Conservation List	3
1.4.2 Oregon Endangered Species Act	3
1.4.3 Canadian Species at Risk Act.....	3
2 Species Description and Taxonomy	4
2.1 Species Description	4
2.2 Species Taxonomy	4
2.3 Population Structure and Genetics	4
2.4 Similar Taxa.....	5
3 Summary of Petition Components	5
3.1 Life History	5
3.2 Range and Distribution	6
3.3 Habitat	8
3.4 Abundance and Population Trend	9
3.5 Threats	9
3.6 Existing Management.....	11
3.7 Future Management	12
3.8 Availability and Sources of Information	13
4 Other Relevant Information Available to the Department.....	14
5 Sufficiency of Scientific Information and Recommendation to the Commission	14
Acknowledgements	15
Literature Cited	15

LIST OF FIGURES

Figure 1. Historical range of SRKW provided from petition in subsection 5.2, pg. 11 (From Wiles 2004).....	7
Figure 2. Current coastal distribution of SRKW (yellow shading) from petition in subsection 5.2, pg. 12 (From Raincoast Conservation Foundation).	8

LIST OF ABBREVIATIONS, ACRONYMS, AND TERMS

CESA – California Endangered Species Act
CITES - Convention on International Trade in Endangered Species of Wild Fauna and Flora
Commission – California Fish and Game Commission
Department – California Department of Fish and Wildlife
DDT – Dichlorodiphenyltrichloroethane
DPS – Distinct Population Segment
ESA – Federal Endangered Species Act
HBCDD – Hexabromocyclododecane
MMPA – Marine Mammal Protection Act
NEPA – National Environmental Policy Act
NMFS – National Marine Fisheries Service
NOAA – National Oceanic and Atmospheric Administration
OESA – Oregon Endangered Species Act
PBDE – Polybrominated Diphenyl Ether
PCB – Polychlorinated biphenyl
PFAS – Per and Polyfluoroalkyl substances
SARA – Canadian Species at Risk Act
SRKW – Southern Resident Killer Whale

EXECUTIVE SUMMARY

This petition evaluation for Southern Resident killer whale (*Orcinus orca*; SRKW) has been prepared by the California Department of Fish and Wildlife (Department) in response to the petition to list Southern Resident killer whale as endangered under the California Endangered Species Act (CESA). The petition was received by the California Fish and Game Commission (Commission) November 25th, 2025, and referred to the Department on December 5th, 2025. The purpose of this petition evaluation is to provide a recommendation to the Commission on whether the petition provides sufficient information to indicate the petitioned action may be warranted.

SRKW is a distinct population segment of Northeastern Pacific killer whale with a near-coastal distribution ranging from Central California to Southeast Alaska. Unlike the mammal-eating Biggs (transient) killer whale, SRKW feed primarily on fishes, with a large portion of the diet made up of Chinook Salmon and to a lesser degree other salmon and groundfish species. The overall SRKW population is made up of three distinct pods including the J, K, and L pods, with presence in California waters documented for the K and L pods.

The Department has determined that the petition addresses each of the required petition components listed in Fish and Game Code section 2072.3 and California Code of Regulations, title 14, section 670.1, subdivision (d)(1):

- Life history
- Range
- Distribution
- Detailed distribution map
- Kind of habitat necessary for survival
- Abundance
- Population trend
- Factors affecting the ability to survive and reproduce
- Degree and immediacy of threat
- Impact of existing management efforts
- Suggestions for future management
- Availability and sources of information

In completing its petition evaluation, the Department considered the information in the petition and other relevant information the Department possesses. Based upon the information contained in the petition and other relevant information, the Department has determined that there is sufficient scientific information to indicate that the petitioned action to list Southern Resident killer whale as endangered under CESA

satisfies the “may be warranted” legal standard (Fish & G. Code § 2073.5). However, Fish and Game Code section 4500 and the federal Marine Mammal Protection Act (MMPA) (16 U.S.C., § 1379(a)) raise significant questions regarding this petition. The MMPA prohibits states from regulating take of marine mammals unless the Secretary of Commerce has transferred authority for the conservation and management of a species to the state (16 U.S.C., § 1379(a)). Fish and Game Code section 4500(b) states: “At such time as federal laws or regulations permit the state to assume jurisdiction over marine mammals, the commission may adopt regulations governing marine mammals and the taking thereof.” The Secretary of Commerce has not transferred authority for the conservation or management of SRKW to California. The Department recommends accepting this petition if the Commission determines it is authorized to do so in light of Fish and Game Code section 4500(b).

1 INTRODUCTION

1.1 Petition Evaluation Overview

This petition evaluation serves as the basis for the California Department of Fish and Wildlife's (Department) recommendation to the California Fish and Game Commission (Commission) on whether the petition to list Southern Resident killer whale (*Orcinus orca*; SRKW) as endangered under the California Endangered Species Act (CESA) should be accepted and considered. The recommendation is based on the sufficiency of scientific information in the petition, as well as other relevant information that was reviewed by the Department during the evaluation period.

A petition to list a species under CESA must include "information regarding the population trend, range, distribution, abundance, and life history of a species, the factors affecting the ability of the population to survive and reproduce, the degree and immediacy of the threat, the impact of existing management efforts, suggestions for future management, and the availability and sources of information. The petition shall also include information regarding the kind of habitat necessary for species survival, a detailed distribution map, and any other factors that the petitioner deems relevant" (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)).

Once a petition is submitted to the Commission, the Department has 90 days (120 days with extension) to prepare a petition evaluation that assesses each of the petition components and make a recommendation to the Commission as to whether there is sufficient scientific information to indicate that the petitioned action to list the species under CESA may be warranted (Fish & G. Code, § 2073.5, subs. (a) through (b)). Once completed by the Department, the petition evaluation is delivered to the Commission and placed on the agenda for receipt at the next available meeting of the Commission. At that time, the petition evaluation will be made available to the public for a 30-day public comment period prior to the Commission taking any action on the petition. The Commission then considers the petition, the Department's petition evaluation and recommendation, written comments received, and oral testimony, and will then make a finding at the next available meeting of the Commission as to whether the petition provides "sufficient information to indicate that the petitioned action may be warranted" (Fish & G. Code, § 2074.2, subd. (e)(2)). The standard for accepting a petition for consideration and assessing sufficiency of information is addressed in *Center for Biological Diversity v. California Fish and Game Commission* (2008) 166 Cal.App.4th 597.

If the Commission determines that the petitioned action may be warranted, the species becomes a candidate for CESA listing and proceeds to the status review stage of the CESA listing process. The Department then prepares a peer-reviewed report that advises

the Commission on whether the petitioned action is warranted, based upon the best scientific information available (Fish & G. Code, § 2074.6). Finally, the Commission determines whether the petitioned action to list the species as threatened or endangered is warranted, based on the Department's status review and other information in the administrative record (Fish & G. Code, § 2075.5).

1.2 CESA Petition History

On November 25th, 2025, the Orca Conservancy submitted a petition to the Commission to list Southern Resident killer whale as endangered under CESA. On December 4th, 2025, the Commission referred the petition to the Department for evaluation. At its meeting on December 10th, 2025, the Commission officially acknowledged receipt of the petition. At its meeting on February 11th, 2026, the Commission granted the Department's request for a 30-day extension of the period to review the petition and prepare this petition evaluation.

1.3 Federal Status

The SRKW distinct population segment (DPS) was listed as endangered by the National Oceanic and Atmospheric Administration (NOAA) Fisheries under the Federal Endangered Species Act (ESA; 16 U.S.C. § 1531 et seq.) on November 18th, 2005 (50 CFR Part 224). As a federally listed species, SRKW are afforded protection from federal actions that jeopardize the continued existence of the species. The ESA also restricts the "take" of SRKW, with take defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The original petition for listing was submitted by the Center for Biological Diversity and 11 co-petitioners on May 2nd, 2001. Since this time, NOAA has conducted 5-Year Status Reviews in 2010, 2016, and most recently in 2021. The most recent status review (2021) reaffirmed that the species continues to face a high risk of extinction and should remain listed as endangered.

SRKW are also protected under the Marine Mammal Protection Act (MMPA; 16 U.S.C. § 1361 et seq.), enacted in 1972. Much like the ESA, the MMPA regulates the "take" of marine mammals, including SRKW, with take defined as "harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill" (16 U.S.C. 1362 Sec. 3). Unlike the ESA, the primary objective of the MMPA is to maintain the health and stability of the marine ecosystem. Notably, the MMPA states that, "no State may enforce, or attempt to enforce, any State law or regulation relating to the taking of any species (which term for purposes of this section includes any population stock) of marine mammal within the State unless the Secretary has transferred authority for the conservation and management of that species to the State" (16 U.S.C. 1379 Sec. 109). As of March 12, 2026, the Secretary of the

Department of Commerce has not transferred authority of SRKW to the State of California.

1.4 Additional Species Status Designations

1.4.1 Washington Conservation List

Killer whales, including SRKW, were listed as “state endangered” under the state’s list of threatened and endangered species by the Washington Fish and Wildlife Commission on April 3rd, 2004. State endangered is defined as, “a species native to the State of Washington that is seriously threatened with extinction throughout all or a significant portion of its range within the state.” Washington law (RCW 77.120.120) restricts the take of endangered species, including SRKW, with take defined as hunting, fishing for, possessing, maliciously harassing, or killing endangered fish or wildlife. Killer whales are also identified as a *Species of Greatest Conservation Need* under the State Wildlife Action Plan and as a *Priority Species* under the Washington Department of Fish and Wildlife’s Priority Habitat and Species Program. Washington affords protection to SRKW through vessel approach regulations (RCW 77.15.740). The Secretary of Commerce has not delegated MMPA take authority for SRKW to the state of Washington.

1.4.2 Oregon Endangered Species Act

The Oregon Fish and Wildlife commission listed Southern Resident Orcas (also known as Southern Resident Killer Whales) as endangered in February 2024 after receiving a petition from the Center for Biological Diversity, Defenders of Wildlife, and Whale and Dolphin Conservation in February 2023. Listing under the Oregon Endangered Species Act (OESA) affords listed species certain protections and conservation measures, as well as take prohibitions, except for when a species is also listed under the federal ESA. As a federally listed species, take of SRKW is not regulated under the OESA. Given this limitation, listing under OESA is focused on studying and addressing environmental threats, including pollutants, vessel traffic, and prey availability. The Secretary of Commerce has not delegated MMPA take authority to the state of Oregon.

1.4.3 Canadian Species at Risk Act

SRKW was listed as endangered under the Canadian Species at Risk Act (SARA) at the Act’s proclamation in 2003. Since listing, SRKW has been reaffirmed as endangered under SARA in 2009 and 2024. The SARA is Canada’s closest equivalent to the ESA, with the primary goal of preventing the extinction of Canadian indigenous species, subspecies, and distinct populations.

2 SPECIES DESCRIPTION AND TAXONOMY

CESA defines the “species” eligible for listing to include “species or subspecies” (Fish & G. Code, §§ 2062, 2067, 2068) [and courts have held that the term “species or subspecies” includes “evolutionarily significant units” (Central Coast Forest Assn. v. Fish & Game Com. (2018) 18 Cal.App.5th 1191, 1236, citing Cal. Forestry Assn., *infra*, 156 Cal.App.4th at pp. 1542, 1549)].

2.1 Species Description

The petition describes SRKW as having distinctive black and white markings, a tall triangular dorsal fin, and stable pigmentation patterns (NMFS 2008). Adult males reach 8-9 m in length and adult females reach 6-7 m in length. The petition states that the species is distributed from Central California to Southeast Alaska (Bigg 1982, Ford et al. 2000, NMFS 2008) and moves seasonally between core summer habitats in the inland Salish Sea and winter and spring ranges along the California, Oregon, and Washington coasts (Hanson et al. 2013, Bliss et al. 2024).

2.2 Species Taxonomy

The petition describes the taxonomy of SRKW as belonging to the order Cetacea, suborder Odontoceti, family Delphinidae (dolphins), genus *Orcinus*, and species *orca*. The petition also states that proposals have been made to revive the subspecies designation *Orcinus orca ater* for SRKW, however, no taxonomic authority currently recognizes this name.

2.3 Population Structure and Genetics

The petition describes killer whales generally as a single species but with several genetically, morphologically, behaviorally, and dietarily distinct ecotypes (Ford et al. 2000, Hoelzel et al. 2007, NMFS 2008). Of these ecotypes, SRKW are considered “resident” killer whales and are recognized as a DPS due to evolutionary separation from other killer whale populations. The petition also states that within the SRKW DPS there are currently three distinct pods (social groups), including the J, K, and L pods.

The petition discusses the genetic distinctness of SRKW as determined through mtDNA and nuclear microsatellite analysis (Hoelzel et al. 2007, Parsons et al. 2013), as well as modeling that suggest divergence from Northern Resident killer whales approximately 700,000 years ago (Foote et al. 2011). The petition also states that there is extreme inbreeding and low heterozygosity within the SRKW population (Kardos et al. 2023).

2.4 Similar Taxa

The petition describes other ecotypes of killer whale, including transient (Biggs) and offshore ecotypes, which while within the same species, are genetically and socially isolated. All three ecotypes co-occur along the U.S. West Coast but have not been observed to interbreed (Hoelzel et al. 2007).

3 SUMMARY OF PETITION COMPONENTS

Pursuant to Fish and Game Code section 2072.3 and California Code of Regulations, title 14, section 670.1, subdivision (d)(1), the Department evaluated whether the petition contained information on each of the following petition components:

- Life history;
- Range;
- Distribution;
- Detailed distribution map;
- Kind of habitat necessary for survival;
- Abundance;
- Population trend;
- Factors affecting the ability to survive and reproduce;
- Degree and immediacy of threat;
- Impact of existing management efforts;
- Suggestions for future management; and
- Availability and sources of information.

The Department did not receive new information from the public during the petition evaluation period (Fish & G. Code, § 2073.4). Pursuant to Fish and Game Code section 2073.5, the Department evaluated the petition to determine whether there is sufficient information to indicate that the petitioned action may be warranted. A summary of the relevant information from the petition for each of the petition components is presented below. The Department has grouped similar components together and renamed components to create a more cohesive and readable document.

3.1 Life History

This section summarizes the information in the petition regarding the species' life history (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). The petition discusses several aspects of the Life History of SRKW under subsection 5.4: *Population Structure and Demography* (pg. 10), section 5.5: *Social Structure and Cultural Ecology* (pg. 11), and subsection 5.6: *Prey Specialization on Chinook Salmon* (pg. 11-12).

In subsection 5.4, the petition discusses the pod structure and current demographics of the SRKW population. The SRKW population is made up of three distinct pods (J, K, L) that range in number of individuals and habitat use. The petition states that the J pod remains in inland Washington waters year-round, the K pod is the most wide-ranging and regularly ventures into California waters, and the L pod is the largest and seasonally uses coastal and outer-shelf habitats, including foraging excursions into California waters.

Next, in subsection 5.5, the petition discusses the social structure and communication dynamics of SRKW. The petition describes the social and matrilineal nature of SRKW, in which the population is organized into stable family groups with distinct learned vocal dialects and foraging behavior. Females may live to be over 80 years old and post-reproductive females are important for pod leadership, social cohesion, and for locating prey.

Finally, in subsection 5.6, the petition describes the diet of SRKW and its reliance on Chinook salmon, and to a lesser (seasonal) extent on Coho and chum salmon, as prey sources. The petition states that California-origin Chinook stocks are an important food source for SRKW during winter and spring. The petition identifies the Klamath, Eel, Russian, and Sacramento-San Joaquin watersheds as important to SRKW for producing Chinook salmon as prey.

3.2 Range and Distribution

This section summarizes the information in the petition regarding the species' range and distribution and provides a detailed distribution map (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). A species' range for the purposes of CESA and this petition evaluation is the species' range within California (Cal. Forestry Assn. v. Cal. Fish and Game Com. (2007) 156 Cal.App.4th 1535, 1551). Range describes the general geographical area in which a species occurs. Distribution describes the actual sites where individuals and populations of the species occur within the species' range.

The first map provided in the petition (Figure 1; subsection 5.2: *Species Distribution*, pg. 12) shows the historical range of the species, while the second map (Figure 2; subsection 5.2: *Species Distribution*, pg. 13) is a closer approximation of the current distribution (as critical habitat designated by NOAA). The petition also includes text descriptions of the historical range and current coastal distribution of SRKW in subsections 5.1: *Historical and Current Distribution* (pg. 11) and 7.1: *Coastal Distribution in California* (pg. 22-23). In these descriptions, the petition states that the historical range of SRKW is Central California to Southeast Alaska, but that the current range is reduced. The petition also states that SRKW core summer habitat is in the Salish Sea, and winter and spring habitats are generally along the coast from

Washington to California, with documented SRKW detections along the Northern California Coast (Crescent City to Cape Mendocino) and in the Monterey Bay region.



Figure 1. Historical range of SRKW provided from petition in subsection 5.2, pg. 11 (From Wiles 2004).



Figure 2. Current coastal distribution of SRKW (yellow shading) from petition in subsection 5.2, pg. 12 (From Raincoast Conservation Foundation).

3.3 Habitat

This section summarizes the information in the petition regarding the kind of habitat necessary for species survival (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1,

subd. (d)(1)). The petition includes a description of SRKW habitat in California waters in subsection 7.2: *Habitat Characteristics* (pg. 23-24) as 1-35 km from shore, at depths less than 200 m, and along persistent ocean fronts and river plume boundaries. It also notes that SRKW preferentially select habitat based on prey (e.g., Chinook salmon) availability, oceanographic productivity, and areas where echolocation is most effective.

The petition draws attention to specific habitats that meet the above criteria in subsection 7.3: *Critical Foraging Areas in California* (pg. 24). These habitats include Monterey Bay, Point Reyes/Farallon Islands, Fort Bragg/Cape Mendocino, and Klamath/Crescent city and are primarily identified due to the presence of high densities of Chinook salmon and/or past incidents of SRKW detection.

3.4 Abundance and Population Trend

This section summarizes the information in the petition regarding the species' abundance and population trend (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). The petition addresses SRKW abundance and trends in section 6: *Population Status and Trend* (pg. 17-21). Subsection 6.2: *Current Census Data* (pg. 18-19) describes the current abundance of the population (74 individuals) as determined by the Center for Whale Research census, with additional breakdown of the size of each individual pod. Further, the petition describes the recent age structure of the population.

The petition includes a trend analysis of SRKW abundance from 1974 to 2024 in subsection 6.5: *Population Trend Analysis* (pg. 20). The included figure shows three data points and a nearly linear decline for the total population size as well as for reproductive females. Although the Department possesses population trend information that differs from that contained in the petition, for purposes of this petition evaluation the Department will assume the population information in the petition is correct.

The petition also describes population decline pre-census (subsection 6.1: *Historical Population Decline*, pg. 18), including a major decline in the 1960s and 1970s driven by removals of whales for marine park attractions. The petition states that approximately one third (47 individuals) of the presumed population (~140 individuals) was either killed or captured during this time period.

3.5 Threats

This section summarizes the information in the petition regarding the factors affecting the ability of the species to survive and reproduce, and the degree and immediacy of threats (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). The petition discusses threats to SRKW primarily in Section 8: *Factors Affecting the Species' Continued Existence* (pg. 21-29), although threats are also discussed in sections 2, 4, 5,

6, and 7. The petition outlines threats from prey limitation, contaminant exposure, vessel noise and disturbance, oil-spill and pollution risk, climate change and ecosystem variability, forestry practices, watershed practices, water diversions, disease and parasitism, and the cumulative and synergistic effects of these threats.

Regarding prey limitation, the petition states that Chinook salmon are SRKW's primary prey and have declined in both abundance and body size coast wide. The petition then presents that this decline in food quantity and quality has been linked to malnutrition in SRKW. The petition states that the resulting malnutrition leads to reproductive failure and decreased survival, meaning that much of the population viability can be attributed to prey limitation, specifically Chinook salmon.

Given the effects of prey limitation on the SRKW population, the petition links many of the identified threats to SRKW through their effects on Chinook salmon. For example, it identifies reduced snowpack and drought under climate change as limiting factors for Chinook productivity in Central Valley and Klamath Rivers. Likewise, it presents dams, water diversions, land use (timber, roads, and agriculture), herbicides/pesticides, and changes to sediment transport as major limiting factors for salmon spawning, rearing, and outmigration. The petition discusses the Klamath River dam removals as a potential benefit for Chinook abundance (and thus SRKW); however, it also states that the benefits from this action are unlikely to be realized for a decade or more and may be offset by reduced production at Nimbus Fish Hatchery in 2025.

The petition discusses the threats to SRKW from vessel noise and disturbance through reduced prey detection range and resulting decreasing in foraging success. The petition cites research that noise levels in shipping lanes in the San Francisco and Monterey Bays are chronically elevated due to ship traffic, reducing the effectiveness of echolocation and resulting foraging efficiency.

Next, the petition presents threats to SRKW from oil spills. Oil spills represent a risk of respiratory and dermal damage, potentially resulting in death. The petition references modeling that indicates that an oil spill in SKRW habitat could result in the death of 20-40 individual whales, and that the conditions for this type of spill exists through Monterey Bay, Point Reyes, and the Golden Gate due to tanker and container ship traffic.

The petition also discusses negative immune and reproductive effects from other environmental contaminants, including the bioaccumulation of Polychlorinated biphenyls (PCBs), Dichlorodiphenyltrichloroethane (DDT), per and polyfluoroalkyl substances (PFAS), and Hexabromocyclododecane (HBCDD) chemicals in SRKW. It ties the effects of these chemicals on immune function to increased levels of parasitism and skin lesions in SRKW. The petition states that greater than 90 percent of SRKW are

infected with parasitic nematodes, and greater than 95 percent exhibit grey-patch disease.

3.6 Existing Management

This section summarizes the information in the petition regarding the impact of existing management efforts on the species (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). The petition addresses current management in Section 9: *Existing Protections and Their Limitations* (pg. 29-33). The petition describes federal protections under the ESA, MMPA, and National Environmental Policy Act (NEPA), state protections in Washington and Oregon, international protections within Canada, and protections governed by international treaties and guidance. The presented protections include prohibitions on take and/or harm, production of recovery plans, environmental review for impactful projects, vessel distance and speed requirements, habitat protections, and prohibitions on trade.

The petition discusses the 2005 listing of SRKW under the ESA, which prohibits take and mandates adoption of a recovery plan. The petition lists several limitations of the ESA listing, including a shortcoming of the ESA in addressing prey availability, a lack of Section 7 consultation authority over state-managed projects, and limited enforcement in California waters. The petition states that these shortcomings have resulted in unfunded or delayed actions from the recovery plan and insufficient protection from vessel noise or proximity due to regulations that only cover Washington waters.

The petition goes on to describe the protections afforded by the MMPA, which prohibits the harassment or killing (take) of marine mammals (including SRKW) and requires incidental take authorization in some instances. The petition identifies the focus on take prohibitions and the lack of mechanisms to address issues concerning prey availability or pollutants as a limitation of the MMPA.

Similar to the ESA and MMPA, the petition identifies limitations concerning the protection afforded to SRKW by NEPA. The petition states that although NEPA requires environmental review of federal projects, it lacks adequate protections in that it cannot require mitigation for indirect stressors that cause underwater noise (vessel traffic) or reduced salmon prey availability.

The petition then discusses the protections afforded by the states of Washington and Oregon, as well as the limitations of those protections. The petition states that in Washington SRKW were listed as endangered in 2004, an Orca Recovery Task Force was formed in 2018, and the state currently has distance and speed requirements for vessels within Puget Sound and in the vicinity of the San Juan Islands. Oregon listed SRKW as endangered in 2024, allowing for special considerations in coastal planning.

The petition identifies limitations with these state protections due to jurisdictional boundaries and a lack of regulatory authority over fisheries.

Next, the petition outlines current management and protections in Canada under the SARA. SARA regulates harm of SRKW, requires the development of a recovery strategy, requires the designation of critical habitat, and protects critical habitat. The petition states that Canada has also implemented vessel restrictions and Chinook fishery restrictions to reduce noise and improve prey supply, respectively. Despite these protections, the petition lists several issues including continued population decline, insufficient vessel noise regulation, inadequate prey supply, and coastal industrial development. The petition also discusses the jurisdictional limitations of Canadian laws to Canadian waters, which limits their effectiveness when SRKW are in southern habitats.

Finally, the petition outlines SRKW protections afforded under international treaties, namely the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). CITES lists killer whales on Appendix II, which regulates the trade of animals or animal parts. The petition states that despite this protection, CITES does not offer any habitat, fisheries, or vessel-management authority.

The petition does not discuss the protections for SRKW contained in the California Fish and Game Code. California state law prohibits the take of marine mammals except in accordance with federal laws (FGC Section 4500), and the California Orca Protection Act restricts holding orcas in captivity, as provided (FGC Section 4502.5).

3.7 Future Management

This section summarizes the information in the petition regarding suggestions for future management (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). The petition presents suggestions for future management in Section 10: *Recommended Management Actions and Recovery Measures* (pg. 33-36). The proposed management actions focus on increased prey (Chinook salmon) production, reduction in vessel noise, contaminant and water quality management, oil-spill and pollution preparedness, increased research and monitoring, increased public awareness and outreach, and increased interagency coordination.

In subsection 10.1: *Prey Recovery and Salmon Restoration*, the petition lists recommendations to consider SRKW prey needs when planning instream flows, to support large-scale habitat restoration in Northern California rivers, and to ensure that salmon hatcheries meet their production goals. The petition also suggests that wild salmon stocks be recovered in Central Valley rivers and that effects of forestry be considered in the context of SRKW. The petition lists multiple state and federal agencies that would require engagement to meet these management recommendations.

In subsection 10.2: *Vessel Noise and Disturbance Reduction*, the petition lists several recommendations to limit the effects of vessel noise on SRKW. These recommendations include vessel approach and speed standards of 300 yards and no faster than 7 knots within 0.5 miles of detected SRKWs, quiet transit corridors through the Monterey Bay and Point Reyes shipping approaches, and incentivizing low noise vessels. As with the recommendations in subsection 10.1, the petition lists several state and federal agencies that would be necessary collaborators to implement these management recommendations.

In subsections 10.3: *Contaminant and Water-Quality Management* and 10.4: *Oil-Spill and Pollution Preparedness*, the petition lists several management actions related to chemicals present or potentially present in California inland and coastal waters. The petition calls for clean-up of PCBs, DDT, and Polybrominated Diphenyl Ethers (PBDEs) in the San Francisco and north coast estuaries, monitoring of PFAS and 6PPD-quinone in stormwater runoff, and coordination with state agencies to adopt protective water quality standards. The petition also suggests that SRKW be specifically included in the California Oil Spill Contingency Plan and that oil spill response exercises be conducted in the vicinity of Monterey Bay, Point Reyes, and the San Francisco shipping corridors.

In subsections 10.5: *Research and Monitoring*, 10.6: *Public Awareness and Outreach*, and 10.7: *Interagency Coordination*, the petition discusses CDFW led and collaborative efforts that would benefit SRKW. For example, the petition mentions establishing SRKW monitoring programs, public data portals, public displays, and an interagency task force to support SRKW management. The petition lists a wide range of state and federal agencies, as well as tribes and universities, that should be included in this work.

3.8 Availability and Sources of Information

This section summarizes the information in the petition regarding availability and sources of information (Fish & G. Code, § 2072.3; Cal. Code Regs., tit. 14, § 670.1, subd. (d)(1)). The petition provides a list of 81 references in Section 13: *References Cited* (pg. 41-49), including 64 scientific or technical publications and 17 agency or tribal references. The petition also includes reference to legal code sections from 14 acts, rules, or executive order as well as three instances of case law. The references listed in section 13 were provided to the Department by the Petitioner through the Commission, however, full citations and associated documents were not provided for the in-text citations “Center for Whale Research 2024” and “Parsons et al. 2013.”

4 OTHER RELEVANT INFORMATION AVAILABLE TO THE DEPARTMENT

Pursuant to Fish and Game Code section 2073.5, the Department also evaluates petitions in relation to other relevant information the Department possesses or receives. The Department has not been able to locate other relevant information currently in its possession for SRKW.

If the Commission accepts the petition for consideration, all reasonable attempts will be made by the Department to notify affected and interested parties and to solicit data and comments on the petitioned action (Fish & G. Code, § 2074.4). At that time, the Department will commence a review of the status of the species and produce a written peer-reviewed report, based upon the best scientific information available to the Department, which indicates whether the petitioned action is warranted (Fish & G. Code, § 2074.6).

5 SUFFICIENCY OF SCIENTIFIC INFORMATION AND RECOMMENDATION TO THE COMMISSION

The Department evaluated the petition components set forth in Fish and Game Code section 2072.3 and California Code of Regulations, title 14, section 670.1, subdivision (d)(1) for sufficiency of information pursuant to Fish and Game Code section 2073.5. Based upon the information contained in the petition and other relevant information, the Department has determined that there is sufficient scientific information to indicate that the petitioned action to list Southern Resident killer whale as endangered under CESA satisfies the “may be warranted” legal standard (Fish & G. Code § 2073.5). However, Fish and Game Code section 4500 and the federal Marine Mammal Protection Act (MMPA) (16 U.S.C., § 1379(a)) raise significant questions regarding this petition. The MMPA prohibits states from regulating take of marine mammals unless the Secretary of Commerce has transferred authority for the conservation and management of a species to the state (16 U.S.C., § 1379(a)). Fish and Game Code section 4500(b) states: “At such time as federal laws or regulations permit the state to assume jurisdiction over marine mammals, the commission may adopt regulations governing marine mammals and the taking thereof.” The Secretary of Commerce has not transferred authority for the conservation or management of SRKW to California. The Department recommends accepting this petition if the Commission determines it is authorized to do so in light of Fish and Game Code section 4500(b). If the Commission accepts the petition for further consideration, the Department will commence a review of the status of the species at that time pursuant to Fish and Game Code section 2074.6 and California Code of Regulations, title 14, section 670.1, subdivision (f).

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