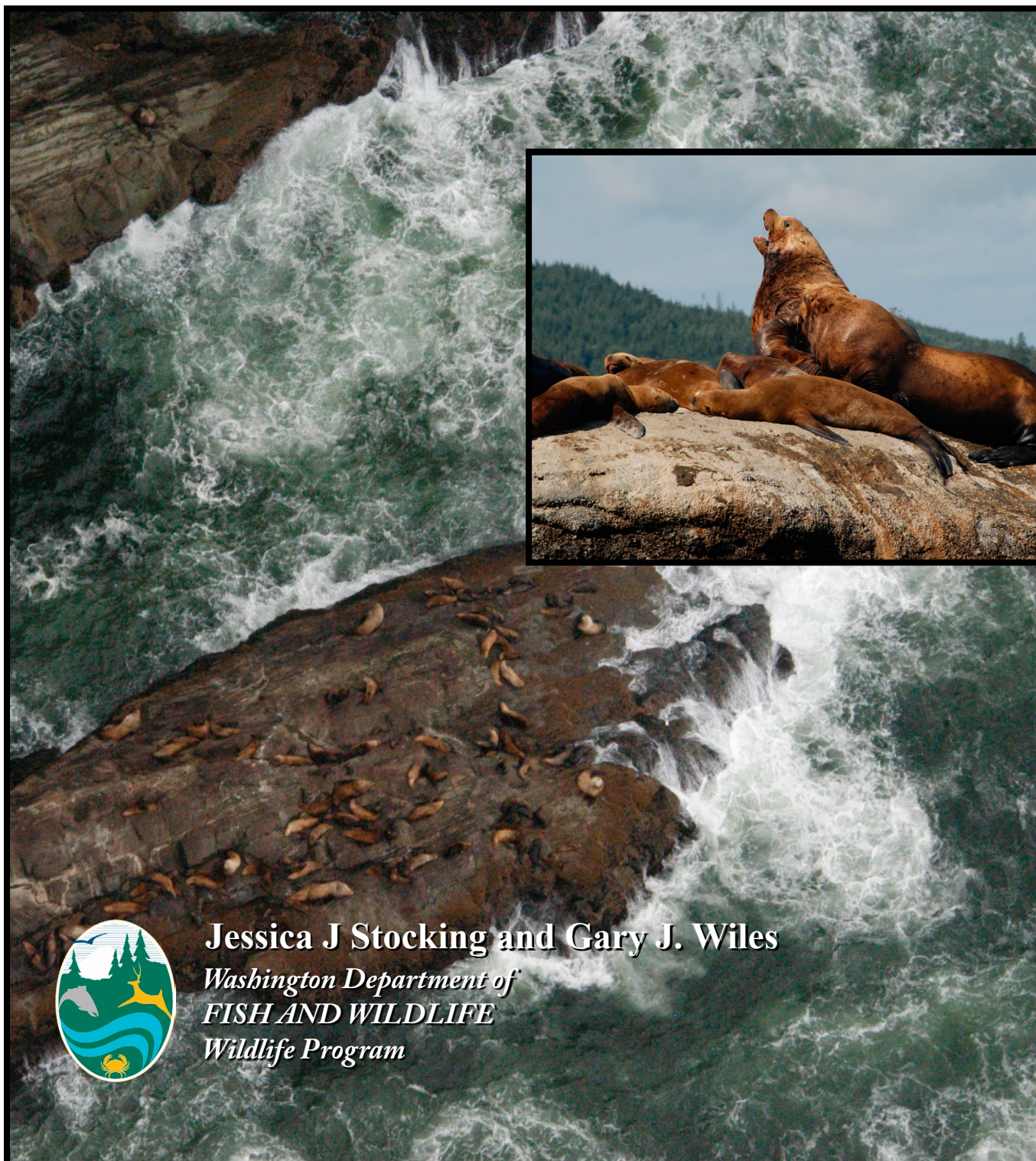


# Periodic Status Review for the Steller Sea Lion



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FISH AND WILDLIFE  
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The Washington Department of Fish and Wildlife maintains a list of endangered, threatened, and sensitive species (Washington Administrative Codes 220-610-010 and 220-200-100). In 1990, the Washington Wildlife Commission adopted listing procedures developed by a group of citizens, interest groups, and state and federal agencies (Washington Administrative Code 220-610-110). The procedures include how species listings will be initiated, criteria for listing and delisting, a requirement for public review, the development of recovery or management plans, and the periodic review of listed species.

The Washington Department of Fish and Wildlife is directed to conduct reviews of each endangered, threatened, or sensitive wildlife species at least every five years after the date of its listing by the Washington Fish and Wildlife Commission. The periodic status reviews are designed to include an update of the species status report to determine whether the status of the species warrants its current listing status or deserves reclassification. The agency notifies the general public and specific parties who have expressed their interest to the Department of the periodic status review at least one year prior to the five-year period so that they may submit new scientific data to be included in the review. The agency notifies the public of its recommendation at least 30 days prior to presenting the findings to the Fish and Wildlife Commission. In addition, if the agency determines that new information suggests that the classification of a species should be changed from its present state, the agency prepares documents to determine the environmental consequences of adopting the recommendations pursuant to requirements of the State Environmental Policy Act.

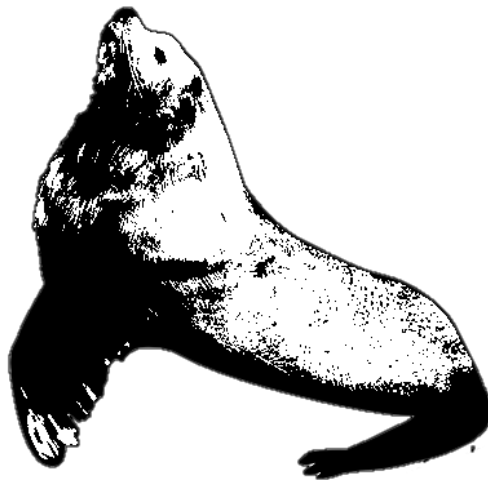
The draft periodic status review for the Steller Sea Lion was reviewed by species experts and biologists from state, tribal, and federal agencies. It is available for a 90-day public comment period from 15 April–14 July 2021. Comments received were considered during the preparation of the final periodic status review. The Department presented the results of this periodic status review to the Fish and Wildlife Commission for action at a meeting in August 2021.

**This report should be cited as:**

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*Cover photos by Steve Jeffries.*

# Washington State Periodic Status Review for the Steller Sea Lion



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## EXECUTIVE SUMMARY

The Steller sea lion (*Eumetopias jubatus*) was delisted from state threatened status in 2015. This document reviews the post-delisting status of the Steller sea lion in Washington, as required in WAC 220-610-110.

Steller sea lions are dietary generalists that prey on a broad variety of fish and cephalopods, including both benthic and pelagic species. They move long distances to track abundant prey, resulting in patchy seasonal distributions. Haulouts for resting and rookeries for breeding and pupping are typically located on islands and offshore rocks and often used year after year. Many adult females do not breed annually, resulting in lower productivity than most other pinnipeds.

Steller sea lions in Washington belong to the eastern distinct population segment (DPS), one of two DPSs comprising the species. The eastern DPS ranges along the west coast of North America from Southeast Alaska to central California (i.e., east of 144°W longitude) and has been steadily increasing in Washington and range-wide. From 1987 to 2017, non-pup counts and pup counts in the eastern DPS increased at average annual rates of 3.22% and 4.25%, respectively, with the overall population growing from an estimated 18,313 animals in 1979 to at least 71,562 animals in 2019. Steller sea lion abundance in Washington has also grown, with numbers of non-pups at four sites surveyed during summer increasing at an average rate of 9.12% from 1987-2017 and year-round surveys during 2010-2018 estimating a 7.9% increase. Small but increasing numbers of pups have been born at several sites since 1992, with a recently established rookery complex producing more than 200 pups in 2020.

Steller sea lions experience several stressors associated with climate change effects and anthropogenic activities. Recently, increasing numbers of Steller sea lions have travelled up the Columbia River to forage on prey concentrated at the Bonneville Dam. This shift has resulted in a request to NOAA Fisheries by state and tribal managers for authority to lethally remove animals at the dam to protect imperiled salmon stocks. Based on sustained population growth and the lack of significant threats, it seems likely that Steller sea lion numbers in Washington will continue to increase for the foreseeable future. For that reason, WDFW recommends that the Washington Fish and Wildlife Commission maintain the delisted status of Steller sea lions in Washington.

## INTRODUCTION

The Steller sea lion (*Eumetopias jubatus*), also known as the northern sea lion or Steller’s sea lion, is one of two sea lion species found in Washington. The species was federally listed as threatened in 1990 due to observed declines in overall abundance, especially in Alaska. Since that time, the population has been split into two distinct population segments (DPSs), based on little genetic exchange and disparate population trajectories. Washington’s population includes part of the eastern DPS, which continues to show steady growth and was delisted by the Washington Fish and Wildlife Commission in 2015.

This document updates the 2015 [Washington State Periodic Status Review for the Steller Sea Lion](#) (Wiles 2015), as per WAC 220-610-110. Much of the information contained in the 2015 report has not changed since publication and is substantially condensed for this version. For a broader review of species background and habitat requirements, refer to Wiles (2015). Additionally, this update is intended to review information pertinent to Washington State classification and does not serve as a comprehensive status or literature review for the species. Included are updates to population status and identified threats, primarily focused on the eastern DPS and specifically Washington where possible.

## DESCRIPTION AND LEGAL STATUS

Steller sea lions are one of the largest pinniped species and are substantially larger than California sea lions (*Zalophus californianus*), which also occur in Washington. Descriptions of both species appear in Shirihai and Jarrett (2006), Jefferson et al. (2015) and Wynne (2015). The Steller sea lion was listed as threatened both federally and in Washington in 1993 (WDW 1993). The National Marine Fisheries Service (NMFS) divided the species into two DPSs (see below) in 1997, reclassifying the western DPS as endangered. The eastern DPS of Steller sea lions was federally delisted in 2013 (NMFS 2013), while the western DPS remains classified



Figure 1. Steller sea lions (*Eumetopias jubatus*). Photo: WDFW.

as endangered under the federal Endangered Species Act (ESA). Both DPSs receive protection under the federal 1972 Marine Mammal Protection Act (MMPA). The species was delisted in Washington in response to information presented in Wiles (2015). It is classified as “protected wildlife” under state law (Appendix A; WAC 220-200-100), with haulouts recognized as a priority area under the state’s Priority Habitat and Species program.

Steller sea lions are the only species in the genus *Eumetopias* and belong to the order Carnivora, suborder Caniformia, and family Otariidae (Committee on Taxonomy 2019). Two subspecies are recognized, which correspond with the two DPSs recognized under the federal ESA (Phillips et al. 2009, Committee on Taxonomy 2019). *Eumetopias j. monteriensis*, also known as eastern Steller sea lion or Loughlin’s northern sea lion, comprises the eastern DPS, whereas *E. j. jubatus*, which has the common name of western Steller sea lion, comprises the western DPS.

## DISTRIBUTION

The species typically occurs in coastal to outer continental shelf waters of the North Pacific Ocean, extending from northern Japan and the Korean peninsula to eastern Siberia, the Aleutian Islands, and southward along western North America to central California (Burkanov and Loughlin 2005, Pitcher et al. 2007, Muto et al. 2019). The Bering Strait represents the northernmost extent of its distribution. The eastern DPS occurs east of 144°W longitude (i.e., from Southeast Alaska to central California, including Washington), while the western DPS ranges west of 144°W from south-central Alaska to northeastern Asia.

In Washington, Steller sea lions occur mainly along the outer coast from the Columbia River to Cape Flattery (Jeffries et al. 2000). Smaller numbers use the Strait of Juan de Fuca, San Juan Islands, and Puget Sound south to the Nisqually River mouth in Thurston and Pierce counties (Steiger and Calambokidis 1986; WDFW, unpubl. data). The species also travels up the Columbia River as far as Bonneville Dam, with animals increasingly concentrated at the dam in the last decade (Tidwell et al. 2020; see Natural History and Management Activities).

## NATURAL HISTORY

**Habitat requirements.** Steller sea lions occupy two types of onshore sites: rookeries and haulouts. Both are distributed throughout the species' range, and most sites are used year after year. Rookeries are defined as sites occupied from May to August where breeding and pupping occur and >50 pups are born annually (Pitcher et al. 2007, NMFS 2008). Haulouts are used as resting sites year-round or seasonally. A haulout site may also be a rookery in the breeding range. Both types of sites are preferentially located on islands and offshore rocks with exposed rocky shorelines and wave-cut platforms, with sand, gravel, or cobble beaches, riprap, sheltered rocky shores, and sea ice used to a lesser extent (Call and Loughlin 2005, Ban and Trites 2007). Haulouts also occur on human-made structures such as jetties, breakwaters, navigational aids, docks, and log booms.

Animals generally travel and forage within 60 km of land in water depths of less than 400 m, but may occasionally venture several hundred kilometers offshore and occur beyond the continental shelf (Bonnell et al. 1992, Merrick and Loughlin 1997, Loughlin et al. 2003). Steller sea lions sometimes congregate in estuaries and river mouths to feed on runs of salmon and eulachon (Bigg 1985, Bigg et al. 1990). Animals also enter rivers in pursuit of prey (Jameson and Kenyon 1977, Roffe and Mate 1984). This type of visitation usually occurs in the lower stretches of rivers (e.g., Roffe and Mate 1984, DFOC 2011), but in recent years, increasing numbers of animals (a maximum of 89 individuals in 2011) have traveled as far as 235 km up the Columbia River to reach foraging sites at Bonneville Dam (Tidwell et al. 2020).

**Diet and foraging.** Steller sea lions are dietary generalists that prey on a broad variety of fish and cephalopods, including both benthic and pelagic species (Trites et al. 2007, NMFS 2008, Tollit et al. 2017). See Wiles (2015) for summary of diet studies in Washington.

**Home range and movements.** Although Steller sea lions do not make large migrations, individuals can move long distances outside of the breeding season in response to variable prey concentrations, resulting in patchy seasonal patterns of abundance (Muto et al. 2019). Most adults and young begin dispersing away from the immediate vicinity of rookeries in August after the breeding season (Merrick et al. 1988, Merrick and Loughlin 1997, Raum-Suryan et al. 2002, Scordino 2006). Adult females and pups usually remain within 500 km of their natal rookeries; juveniles (males 1-5 years old, females 1-3 years old) travel somewhat more widely; and males are more likely to travel >500 km (Raum-Suryan et al. 2002, 2004, Scordino 2006, Jemison et al. 2013, 2018). A one-way movement of about 3,500 km by an adult

male is the longest known distance traveled by the species (Jemison et al. 2013). Animals often use numerous haulouts during their movements.

Some movement of animals occurs between the eastern and western DPSs (Raum-Suryan et al. 2002, 2004, Scordino 2006, Gelatt et al. 2007, Pitcher et al. 2007, AFSC 2011, Jemison et al. 2013, O’Corry-Crowe et al. 2014). Eastern-born sea lions observed in the west are almost all males, many of which breed with western females (Jemison et al. 2013; Fritz et al. 2016). In contrast, western-born sea lions that move east are almost all females and juvenile males (Jemison et al. 2013). Rehberg et al. (2018) found that 52% of immature sea lions captured in Glacier Bay, Southeast Alaska, had maternal origins in the western DPS rather than the local eastern DPS. One animal from the western DPS has been recorded in Washington (Jemison et al. 2013). Animals in Alaska demonstrate wider dispersion from rookeries with slower growth and lower survival (Jemison et al. 2018).

**Reproduction and survival.** Breeding and pupping occur at rookeries where mature males vigorously defend territories and compete for females. Males reach sexual maturity at 3-8 years of age and are capable of holding territories at rookeries by 9-11 years of age (Calkins and Pitcher 1982). Females become sexually mature at 3-6 years of age and may continue reproducing until their early 20s (Mathisen et al. 1962, Pitcher and Calkins 1981). Many adult females do not breed annually, which results in the species exhibiting lower productivity than most other pinnipeds (Pitcher et al. 1998).

Steller sea lions are relatively long-lived, with a maximum life span of about 30 years in females and 20 years in males (Calkins and Pitcher 1982). Survival probability of territorial males in Southeast Alaska was 0.20 higher than non-territorial males (Hastings et al. 2018). A large sample of animals branded as pups in southern Oregon and northern California had lower initial survival (averaging 0.46 for females and 0.44 for males) than elsewhere in the range but among the highest for yearlings (0.85 for females and 0.81 for males); survival was also highly variable between rookeries (Wright et al. 2017). Steller sea lion pups die from a variety of causes including drowning, starvation caused by separation from the mother, disease, parasitism, predation, trampling by larger animals, and aggression by other sea lions (Orr and Poulter 1967, Sandegren 1976, Merrick et al. 1997, Maniscalco et al. 2002, 2006). Natural causes of death in older animals are starvation, disease, and predation by killer whales (*Orcinus orca*) and sharks.

## POPULATION AND HABITAT STATUS

**Eastern DPS.** Pup counts in all regions of the eastern DPS are increasing. Eighty percent of Steller sea lion pup production occurs in British Columbia and Southeast Alaska, where total pup production on rookeries has increased five-fold since 1960 and breeding sites have increased from four to 12 (Muto et al. 2019). The eastern DPS non-pup count in 2017 was estimated 58,699 (95% CI 50,312-68,052) and pup count was 18,450 (95% CI 15,030-22,253; Muto et al. 2019). While those estimates do not account for animals at sea and cannot be considered true population estimates, they represent the most comprehensive collection of data for the population. Analysis of annual trends of the stock from 1987 to 2017 indicates a range-wide increase of 4.25% per year (95% CI 3.77-4.72%) based on pup counts and 3.22% (95% CI 2.82-3.65%) from non-pup counts (Muto et al. 2019). Range-wide surveys were planned for 2021 but have been postponed due to restrictions associated with the COVID-19 virus.

**Washington.** Washington’s Steller sea lion population has an estimated annual growth rate of 9.12% (95% CI 6.06-11.96%), based on non-pup counts during 1987-2017 (Muto et al. 2019). Allyn and Scordino (2020) found the annual growth rate at four haulout complexes along the northern outer coast to be 7.9% (95% CI 4.7-11.1%) between 2010-2018. Steller sea lions appear to be increasing in overall abundance at Puget Sound haulout sites and exhibiting more spatial clustering (J. Evenson, pers. comm.). In recent years, a rookery was established at Carroll Island-Sea Lion Rock Complex and a few pups are also born at the Bodeltch Islands, both off the outer coast (Wiles 2015). The number of pups born at these



sites has increased from 47 pups in 2013 and 60 pups in 2014 (Wiles 2015) to at least 259 pups in 2019 (P. Gearin, pers. comm) and more than 200 pups in 2020 (J. Scordino, pers. comm.).

**Western DPS.** The western DPS in Alaska was estimated to include 41,782 (95% CI 37,370-46,822) non-pups and 11,842 (95% CI 10,659-13,238) pups in 2018, with annual population growth rates of 2.05% (95% CI 1.46-2.66%) and 1.52% (95% CI 0.94-2.08%), respectively, between 2002 and 2018 (Sweeny et al. 2018). There is some evidence that the eastern Gulf of Alaska subregion of the western DPS may be recovering, with projected full recovery in 45 years (Maniscalco et al. 2015). However, there are pronounced regional differences in population trend, showing decreasing success toward the western portion of the range (Muto et al. 2019).

## FACTORS AFFECTING CONTINUED EXISTENCE

The eastern DPS of Steller sea lions has been adversely impacted by a wide range of natural and human factors since the 1800s. One possible indication of acute or population-level stressors is the annual number of strandings, monitored by NMFS's West Coast Regional Office. Steller sea lion stranding numbers in Oregon and Washington were extremely low between 1990 and 2005 (Warlick et al. 2018), after which they increased briefly but have since remained fairly constant through 2019 (K. Wilkinson, pers. comm.). Categories of known or potential threats are summarized below, with particular attention given to conditions in Washington. Although none of these factors appears to be currently preventing recovery of the population, all should continue to be monitored in the future and managed to minimize their impacts whenever possible.

**Climate change.** Global climate change is predicted to be the largest threat to most species of marine mammals in the coming decades (Kovacs et al. 2012) because of its capacity to alter marine ecosystems through changes in ocean temperatures, currents, stratification, nutrient cycling, increased acidification, higher sea levels, and increased occurrence of unusual and extreme environmental conditions such as strong El Niño events (NRC 2008, 2010, Hoegh-Guldberg and Bruno 2010, Doney et al. 2012). Although not well studied, several likely impacts to Steller sea lions include (1) the alteration of marine food webs through changes in coastal upwelling patterns, warmer water temperatures, ocean acidification, changes in prey availability (Sigler et al. 2017), and changes in other ecological processes; (2) rising sea level, which may submerge or change wave energy levels at some traditional rookeries and haulouts; and (3) increased exposure to novel diseases and parasites.

Given the ongoing size increase in the eastern DPS, the effects of climate change on the population are probably relatively minor at present, except perhaps in California (NMFS 2013). However, impacts are expected to expand in the future as climate change progresses and restructures food webs and species interactions.

**Human disturbance.** Steller sea lions at haulouts and rookeries are susceptible to disturbance by boats (including kayaks), aircraft, people on foot, construction, fishing and shellfishing activities, and research (DFOC 2011, NMFS 2013). These types of disturbance can cause sea lions to temporarily abandon haulouts and rookeries for periods of several hours to several weeks, and in severe cases have led to permanent site abandonment (Johnson et al. 1989, Brown 1997, Wilson et al. 2012). Nevertheless, animals often habituate to some forms of ongoing human activity and will occupy haulouts in areas of high vessel traffic, marinas, and naval bases (DFOC 2011).

**Incidental take/entanglement in fishing or aquaculture gear.** The primary known causes of mortality and serious injury for adults in the eastern DPS during 2013-2017 were entanglements and hooking related to fishing gear (Delean et al. 2020). Warlick et al. (2018) found that 15% of Steller sea lion strandings in Washington and Oregon attributed to human interactions between 1991-2016 were caused

by fisheries. Estimated total mean annual mortality and serious injury (MSI) incidental to all fisheries between 2013 and 2017 was 58 animals for the eastern DPS (Muto et al. 2019), an increase from 14 reported fisheries mean annual MSI from 2010-2013 (Jannot et al. 2016). It should be noted that as the population increases, the rate of entanglement will likely increase, absent changes to the fishery.

On the north coast of Washington from 2010-2018, entanglements of Steller sea lions had no seasonal pattern and primarily affected adults (77% of incidents; Allyn and Scordino, 2020). Packing bands (67.5%) and salmon flashers (13.6%) were responsible for the majority of active, identifiable entanglements (Allyn and Scordino 2020). Observer-based and survey data represent minimum impacts, as not all fisheries are monitored and not all stranded animals are found. However, even in areas of regular entanglements with human-discarded materials, the eastern DPS continues to grow annually.

***Subsistence harvest.*** Data for Alaska subsistence harvest of the eastern DPS have been limited in the past two decades, with a mean annual mortality from harvest activities of 11 animals, which is likely an underestimate (Muto et al. 2019). Subsistence harvest in Canada is unquantified but presumed to be small (Muto et al. 2019). The western DPS experiences an estimated annual successful harvest of 137 in U.S. waters, with little data on harvest outside of Alaska (Muto et al. 2019).

***Environmental contaminants.*** Like other marine mammals, Steller sea lions are susceptible to a variety of environmental contaminants that bioaccumulate upward through marine food webs to high-level predators. These substances include organochlorines (e.g., polychlorinated biphenyls [PCBs], dioxins, DDT and its derivatives, various other pesticides and herbicides), polybrominated diphenyl ethers (PBDEs), heavy metals (e.g., mercury, copper, selenium, zinc), and other pollutants (O’Shea 1999, O’Hara and O’Shea 2001, Barron et al. 2003, Alava et al. 2012). Alava et al. (2012) found PCB levels above thresholds associated with immunotoxicity in harbor seals, but noted that the applicability of published reference and threshold values for PBDEs are limited. Current evidence indicates that exposure to toxic pollutants does not threaten the overall eastern DPS (NMFS 2008, 2013). However, there is potential that elevated concentrations of some chemicals have played a role in preventing the recovery of Steller sea lions in southern and central California, the most industrialized region inhabited by the species (Sydeman and Jarman 1998, Blasius and Goodmanlowe 2008).

***Oil spills.*** Steller sea lions can be exposed to spilled oil at sea, at haulouts and rookeries, or through contaminated prey, with impacts varying by size of the spill, location, type of oil, time of year, and other factors. The risk of impact from oil spills in Washington and across the range will likely continue to increase in coming decades due to increased shipping traffic and pipeline construction. Shipping routes for major ports in Seattle, Tacoma, and Vancouver, B.C., as well as several major oil refineries and the third largest naval base in the U.S., all traverse waters used by Steller sea lions in Washington.

***Disease and parasites.*** Exposure to novel diseases and parasites is an emerging concern for many marine mammal populations, including Steller sea lions (DFOC 2011, NMFS 2013). Exposure can occur through a number of processes expected to increase in the future, including climate change and related changes in ocean conditions; runoff from terrestrial sources such as stormwater, sewage outflow, and agriculture, which can introduce pathogens from terrestrial mammals; and release of rehabilitated marine mammals back into the wild.

***Harmful algal blooms.*** Also known as “red tides,” algal blooms result from rapid, temporary increases in local populations of particular dinoflagellates, protists, or other phytoplankton leading to toxicosis that can be lethal to marine mammals. Harmful algal blooms have increased globally in recent decades and while their underlying causes are complex and incompletely understood, some laboratory experiments predict further increased occurrence with climate change (Anderson 1997, Peperzak 2003, Lewitus et al. 2012). Scientists have recently made predictive modeling of algal blooms publicly available (MacCready et al. 2018), but the applicability of this to managing marine mammal exposure is currently unclear.

While exposure to algal toxins may depend on what they eat, Steller sea lions are exposed to algal toxins even outside of bloom events in northern coastal Washington (Akmajian et al. 2017). California sea lions are highly susceptible to domoic acid poisoning, and associated strandings have been a regular occurrence since the late 1990s in California (Scholin et al. 2000, Bejarano et al. 2008). To date, similar mortality events have not yet been observed in Steller sea lions.

***Mortality from scientific research.*** With the continued positive trend of the eastern DPS throughout most of its range, we anticipate that increased predation on fish of commercial and recreational value could result in more research of the population, accompanied by elevated risk of research-related mortality. However, as the population increases, age-specific survival data may be less useful, minimizing the highly invasive practice of branding pups. The impact of research activity is monitored by NMFS under the MMPA and is likely to be minimal, regardless.

***Lethal removal to benefit ESA-listed salmonids.*** In recent years, the focus in Washington has shifted from management for Steller sea lion recovery to management of the population with respect to its impact on salmonids. Steller sea lions were first documented using the Bonneville Dam tailrace as a foraging site in 2003 and have since increased in number (Tidwell et al. 2020). The dam concentrates several threatened or endangered salmonid stocks and other anadromous fish, exposing them to increased predation and undermining conservation efforts elsewhere in the river system. After non-lethal deterrence proved ineffective, WDFW and partners were granted authority to lethally remove California sea lions, but not Steller sea lions, at Bonneville Dam beginning in 2008. Tidwell et al. (2020) documented that predation of salmonids by Steller sea lions at the dam has exceeded that of California sea lions each year since 2017. In 2019, WDFW, along with other state and tribal co-managers, filed an MMPA 120(f) application (FR Doc. 2019-18751) to conduct lethal removals of Steller sea lions (in addition to California sea lions) in the mainstem of the Columbia River and select tributaries, and removal of adult males began in October of 2020. Effects of the removals will continue to be monitored and evaluated by co-managers.

***Other intentional killing.*** The NMFS West Coast Region stranding network received reports of 59 animals with gunshot wounds during 2013-2017 (Muto et al. 2019). In a study of strandings in Washington and Oregon from 1991-2016, gunshot wounds were the source of 74% of all strandings attributed to human interactions (Warlick et al. 2018). Data for human-related strandings in British Columbia are not available (Muto et al. 2019).

## MANAGEMENT ACTIVITIES

Surveys for Steller sea lions are conducted every three years, and efforts to coordinate survey timing throughout the range are ongoing. NMFS generates estimates of the U.S. abundance of Steller sea lions of both DPSs (e.g. Muto et al. 2019).

Various federal laws (ESA, MMPA, Canada's Marine Mammal Regulations from the Fisheries Act), management practices (Statement of Canadian Practice with respect to the Mitigation of Seismic Sound in the Marine Environment), and marine mammal viewing guidelines for boaters (Be Whale Wise) have helped to reduce disturbance of the species. Establishment of coastal national wildlife refuges, national parks, marine sanctuaries, and other protected areas has resulted in restrictions on human access to many of the sites used by Steller sea lions, especially in Washington. Most of the islands and rocks used as haulouts by Steller sea lions in the state are part of the Flattery Rocks, Quillayute Needles, Copalis, or San Juan Islands National Wildlife Refuges operated by the U.S. Fish and Wildlife Service. Upland portions of these sites are closed to human visitation to protect wildlife and other resources, and the U.S. Fish and Wildlife Service has implemented a voluntary buffer zone where visitors should stay at least 180 m (600 ft) offshore to avoid disturbing wildlife. Many haulouts are also included in the Washington

Islands and San Juan Islands wilderness areas. Waters surrounding the outer coastal haulouts are managed as part of the Olympic Coast National Marine Sanctuary administered by the National Oceanic and Atmospheric Administration.

NMFS coordinates responses to strandings of marine mammals through the West Coast Marine Mammal Stranding Network, which is comprised of cooperating scientific investigators, institutions, organizations, and state and federal agencies. Cascadia Research, WDFW, and other collaborators sample or necropsy many of these animals to determine cause of death, animal condition and health, and other traits. State and federal agencies, industry, and other stakeholders continue their efforts to prevent oil spills from occurring in Washington, including improved regulations in the U.S. and Canada. In 2010, a rescue tug was permanently deployed at Neah Bay, reducing the threat of spills associated with impaired vessels and barges in haulout and rookery habitat along a portion of the outer coast. Improved regulations have been enacted in both the U.S. and Canada to minimize the risk of accidental spills. Finally, pelagic fisheries for sardines and anchovies off the U.S. west coast are managed by the Pacific Fishery Management Council with a priority of maintaining ecosystem functions, primarily as a food source for marine mammals, seabirds, salmon, and other predators (PFMC 2011).

## **CONCLUSIONS AND RECOMMENDATION**

In Washington, year-round counts of non-pups at four sites used for trend analysis increased at an average annual rate of 7.9% between 2010 and 2018, while summer counts estimated an increase of 9.12%. Increased numbers of pups have been born in the state since 1992 with a new rookery established in recent years. Based on sustained population growth and the lack of significant threats, it seems likely that Steller sea lion numbers in Washington will continue to increase for the foreseeable future. Additionally, the recent increase in pup production in Washington suggests that the state could support more recognized rookeries in the future. The eastern DPS of Steller sea lions is adversely impacted by several known or potential human-related factors, but none of these have prevented recovery of the population during the past few decades. WDFW recommends that the Washington Fish and Wildlife Commission maintain the delisted status of Steller sea lions in Washington. The species will remain classified as “protected wildlife” under state law (Appendix A; WAC 220-200-100) and will continue to receive protections under the federal Marine Mammal Protection Act.

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# WASHINGTON STATE STATUS REPORTS, PERIODIC STATUS REVIEWS, RECOVERY PLANS, AND CONSERVATION PLANS

## Periodic Status Reviews

2021	Greater Sage-grouse
2021	Gray Whale
2021	Humpback Whale
2020	Mazama Pocket Gopher
2019	Tufted Puffin
2019	Oregon Silverspot
2018	Grizzly Bear
2018	Sea Otter
2018	Pygmy Rabbit
2017	Fisher
2017	Blue, Fin, Sei, North Pacific Right, and Sperm Whales
2017	Woodland Caribou
2017	Sandhill Crane
2017	Western Pond Turtle
2017	Green and Loggerhead Sea Turtles
2017	Leatherback Sea Turtle
2016	American White Pelican
2016	Canada Lynx
2016	Marbled Murrelet
2016	Peregrine Falcon
2016	Bald Eagle
2016	Taylor's Checkerspot
2016	Columbian White-tailed Deer
2016	Streaked Horned Lark
2016	Killer Whale
2016	Western Gray Squirrel
2016	Northern Spotted Owl
2016	Greater Sage-grouse
2016	Snowy Plover
2015	Steller Sea Lion

## Conservation Plans

2013	Bats
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## Recent Status Reports

2021	Oregon Vesper Sparrow
2019	Pinto Abalone
2017	Yellow-billed Cuckoo
2015	Tufted Puffin
2007	Bald Eagle
2005	Mazama Pocket Gopher, Streaked Horned Lark, and Taylor's Checkerspot
2005	Aleutian Canada Goose
1999	Northern Leopard Frog
1999	Mardon Skipper
1999	Olympic Mudminnow
1998	Margined Sculpin
1998	Pygmy Whitefish
1997	Gray Whale
1997	Olive Ridley Sea Turtle
1997	Oregon Spotted Frog

## Recovery Plans

2020	Mazama Pocket Gopher
2019	Tufted Puffin
2012	Columbian Sharp-tailed Grouse
2011	Gray Wolf
2011	Pygmy Rabbit: Addendum
2007	Western Gray Squirrel
2006	Fisher
2004	Sea Otter
2004	Greater Sage-Grouse
2003	Pygmy Rabbit: Addendum
2002	Sandhill Crane
2001	Lynx
1999	Western Pond Turtle
1996	Ferruginous Hawk
1995	Pygmy Rabbit
1995	Snowy Plover

Status reports and plans are available on the WDFW website at:  
<http://wdfw.wa.gov/publications/search.php>



