

**NOAA**  
**FISHERIES**

Office of Protected  
Resources

A “stranding” occurs when a marine mammal is either:

- Dead, whether found on the beach or floating in the water;
- Alive, on a beach, but unable to return to the water;
- Alive, on a beach, and in need of apparent medical attention; or
- Alive, in the water, and unable to return to its natural habitat without assistance.

For additional details, please refer to the 2019 Marine Mammal Strandings Overview: United States.

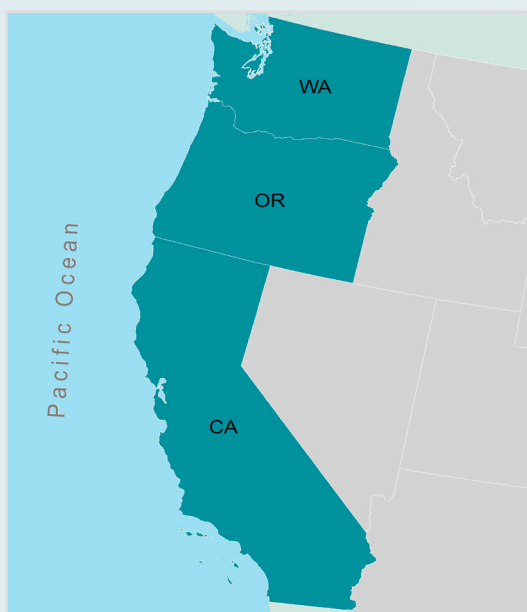
All images were taken prior to the COVID-19 pandemic.

**Photo (top):** In 2019, NOAA Fisheries declared an Unusual Mortality Event for gray whales, following elevated gray whale strandings along the west coast of North America from Mexico through Alaska. Photo: Jim Rice/Oregon State University.



## 2019 Marine Mammal Strandings Overview: West Coast Region

The U.S. Marine Mammal Stranding Response Network comprises more than 120 organizations that provide first response capabilities for cetaceans (whales, dolphins, and porpoises) and pinnipeds (seals and sea lions) that are sick, injured, in distress, in peril, or dead. These responses are authorized and overseen by NOAA Fisheries’ Marine Mammal Health and Stranding Response Program under the Marine Mammal Protection Act.



**Figure WCR-1:** Map of NOAA Fisheries West Coast Region (WCR).

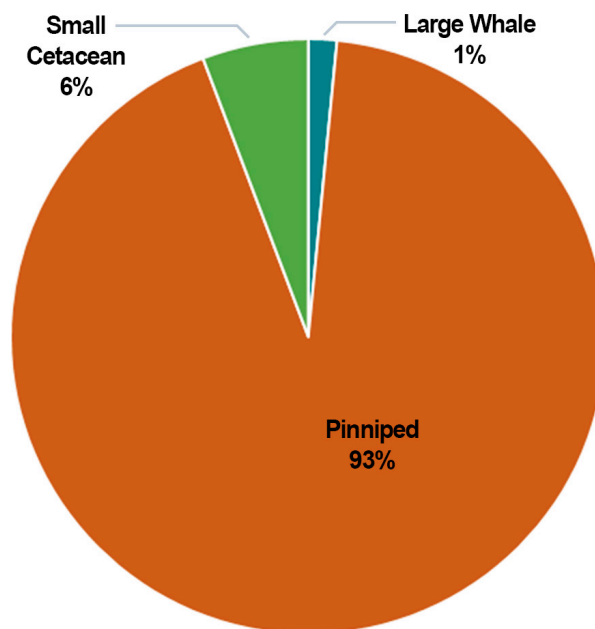
### West Coast Region

The NOAA Fisheries West Coast Region stretches from Mexico to Canada and includes three coastal states (California, Oregon, and Washington). This region encompasses approximately 7,863 miles<sup>1</sup> of coastline and covers a range of diverse environments (Figure WCR-1). The region contains several major cities (Los Angeles, San Francisco, Portland, and Seattle), busy ports and high vessel traffic areas, in addition to a well-visited coastline. The 4,154 total confirmed marine mammal strandings in the West Coast Region in 2019 is similar to its 13-year (2006–2018) average ( $n=4,019 \pm 1,341$ ).

<sup>1</sup> <https://coast.noaa.gov/data/docs/states/shorelines.pdf>

## What Types of Marine Mammals Strand in the West Coast Region?

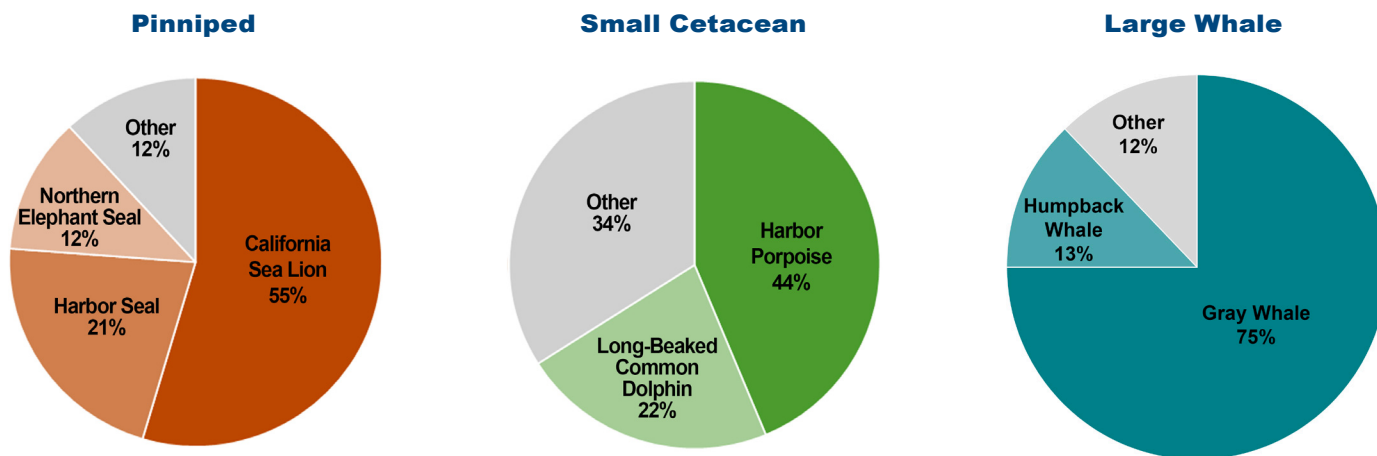
Forty-three different species of marine mammals can be found in the waters of the U.S. West Coast, and the majority of stranding reports involve pinnipeds (Figure WCR-2). Unlike some parts of the United States, this region has both seal and sea lion species. Common pinniped species include the California sea lion (*Zalophus californianus*), harbor seal (*Phoca vitulina*), and northern elephant seal (*Mirounga angustirostris*) (Table WCR-1 and Figure WCR-3). Small cetacean species such as the harbor porpoise (*Phocoena phocoena*), long-beaked common dolphin (*Delphinus capensis*), short-beaked common dolphin (*Delphinus delphis*), and striped dolphin (*Stenella coeruleoalba*) also strand, although in much lower numbers. The region also has many large whale species including gray (*Eschrichtius robustus*), humpback (*Megaptera novaeangliae*), fin (*Balaenoptera physalus*), blue (*Balaenoptera musculus*), and sperm (*Physeter macrocephalus*) whales.



**Figure WCR-2:** West Coast Region marine mammal strandings, 2019 (n=4,154, including n=7 unknown cetaceans not shown).

**Table WCR-1:** Five most frequently stranded marine mammal species in the West Coast Region, 2019.

Species	Confirmed Stranding Reports 2019	13-Year Average $\pm$ Standard Deviation <sup>2</sup> (2006-2018)
California Sea Lion	2,074	2,308 $\pm$ 1,158
Harbor Seal	820	724 $\pm$ 119
Northern Elephant Seal	455	435 $\pm$ 93
Guadalupe Fur Seal	208	45 $\pm$ 37
Steller Sea Lion	109	93 $\pm$ 17



**Figure WCR-3:** West Coast Region marine mammal strandings, by species, 2019 (n=4,154). Pinniped (n=3,799), small cetacean (n=247), large whale (n=101), and unknown cetacean (n=7, not shown).

<sup>2</sup> A standard deviation is a measure used to quantify the amount of variation within a set of values.



# Species in the Spotlight



## Southern Resident Killer Whale<sup>3</sup> (*Orcinus orca*)

Southern resident killer whales are an endangered population, and one of NOAA Fisheries' "Species in the Spotlight." The population has shown ongoing decline in recent years, with only 77 individuals remaining.<sup>4</sup> During the spring, summer, and fall, the range of Southern Resident killer whales includes coastal and inland waters of Washington State and the transboundary waters between the United States and Canada. This distribution is tied to the movements of the various runs of Chinook and other salmon. Despite increased management and recovery efforts (in both the United States and Canada), the Southern Resident killer whale population faces many threats, including depleted prey, disturbance from vessels and sound, and high levels of contaminants (contaminant sources may include contaminated prey, wastewater treatment plants, sewer outfalls, and pesticides).

**In 2019, there were no Southern Resident killer whales reported as stranded to the National Stranding Network.** For more information on the Species in the Spotlight initiative, please visit:

<https://www.fisheries.noaa.gov/national/endangered-species-conservation/species-spotlight-action-plan-accomplishments>

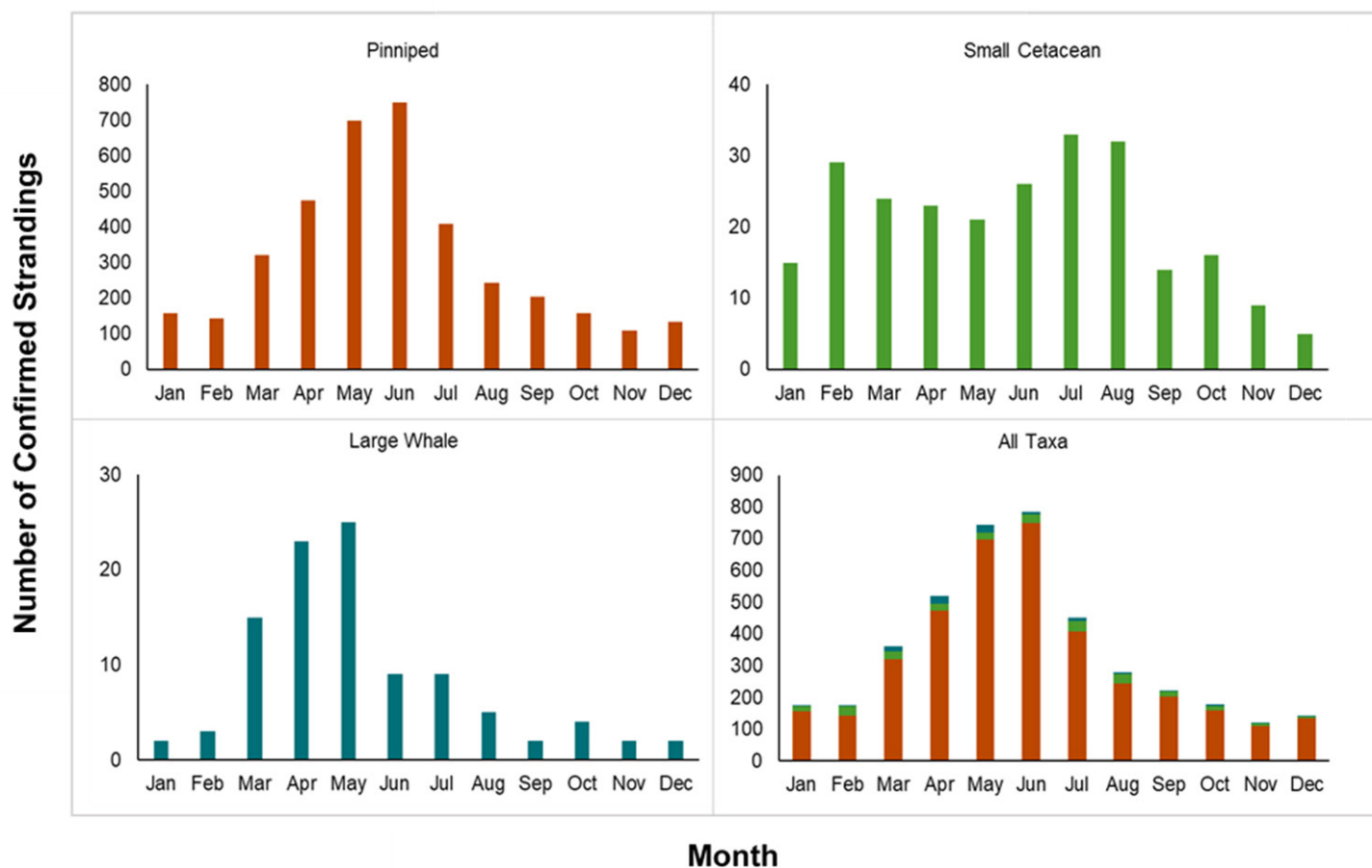


**Photo (above):** Guadalupe fur seals are released with satellite and flipper tags following successful rehabilitation at The Marine Mammal Center. Photo: The Marine Mammal Center.

<sup>3</sup> Species illustrations throughout this report are not to scale relative to each other.

<sup>4</sup> [https://media.fisheries.noaa.gov/dam-migration/southern\\_resident\\_killer\\_whale\\_2018\\_final\\_sar.pdf](https://media.fisheries.noaa.gov/dam-migration/southern_resident_killer_whale_2018_final_sar.pdf)

### Marine Mammal Strandings by Month in the West Coast Region, 2019



**Figure WCR-4:** Seasonality of marine mammal strandings in the West Coast Region, 2019. Note: Scale on the Y-axis varies relative to the number of confirmed strandings for each taxon.

## When Did Marine Mammals in the West Coast Region Strand in 2019?

In 2019, pinniped strandings followed seasonal patterns with California sea lions peaking in May and June, and harbor seals between April and September (Figure WCR-4). These periods coincide with pupping seasons, and the majority of animals reported to the Stranding Network were pups and juveniles. Causes of strandings typically included malnutrition, disease, separation from attending females, and human interaction. Malnutrition sometimes resulted from newly weaned pups not effectively foraging for food. The Stranding Network also responded to cetacean strandings year-round, with most reports occurring in the summer months. Harbor porpoise stranded during, or right after, calving season (July and August), while gray whale strandings peaked in April and May as the animals migrated north from their breeding lagoons in Mexico to summer feeding grounds in Alaska.

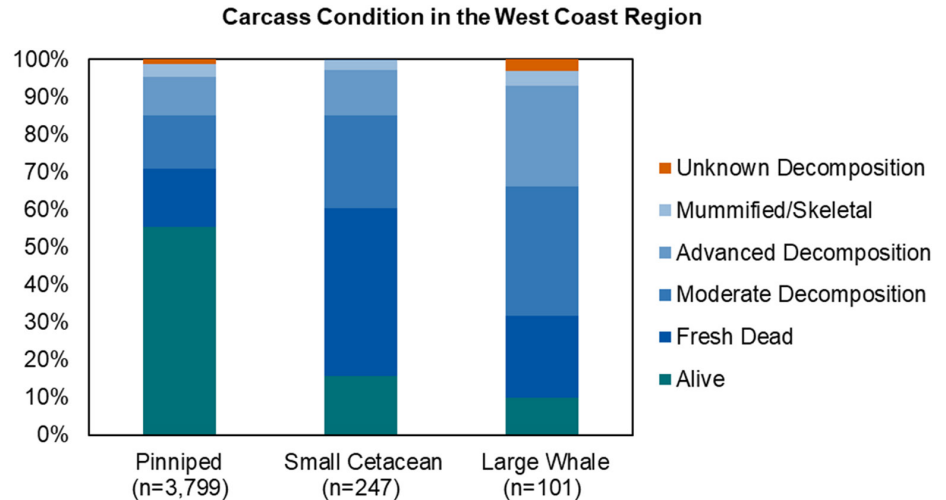


**Photo (left):** A gray whale found dead off Point Reyes National Seashore in northern California. Photo: Barbie Halaska/The Marine Mammal Center.



## Are Marine Mammals in the West Coast Region Stranding Alive or Dead?

Roughly half (52 percent) of stranded pinnipeds documented by the West Coast Stranding Network in 2019 involved live animals (Figure WCR-5). Due to the high stranding rates of pups and yearlings, the network has developed differing response and rehabilitation capacities throughout the region. Because more live-stranded animals are reported in California, the California network has developed more rehabilitation capacity compared to Washington and Oregon. Along the West Coast there are 11 facilities authorized for rehabilitation under a stranding agreement, and available to provide clinical care to a number of sick or injured marine mammals. Of the 1,885 animals transferred to rehabilitation facilities in 2019 (pinniped=1,874, small cetacean=11), 61 percent (n=1,150) were released.



**Figure WCR-5:** The condition of stranded marine mammals on initial observation in the West Coast Region, 2019.



**Photo (above):** Trained network responders collect data from a dead stranded Steller sea lion at Fort Worden, Washington. Photo: Port Townsend Marine Science Center.

## What Types of Unusual Mortality Events Were Occurring in the West Coast Region?



One Unusual Mortality Event (UME) was declared in the West Coast Region in 2019:

### West Coast Gray Whale UME



**First Declared:** 2019

**Number of new cases in 2019:** 216 (U.S. = 122, Canada = 11, and Mexico = 83)

**Primary Causes and Findings:** The preliminary cause of the gray whale UME is undetermined, although mortalities have been linked to killer whale predation, entanglements and vessel strikes, and poor body condition (in some whales) possibly resulting from ecosystem changes in Arctic feeding areas

**Locations of Cases:** Pacific Ocean (Alaska–Mexico)

**Protected Status:** Not listed as threatened or endangered under the Endangered Species Act

In 2019, there was also one ongoing (previously declared) UME investigation in the West Coast Region for Guadalupe fur seals.

### Guadalupe Fur Seal UME



**First Declared:** 2015

**Status in 2018:** Ongoing in California, and expanded to include strandings in Washington and Oregon

**Number of new cases in 2019:** 207

**Total number of cases (2015–2019 combined):** 489

**Primary Causes and Findings:** Ecological factors, primarily reduced or changed prey availability due to ocean heat events. Most seals that stranded were weaned pups and juveniles (less than 2 years old), and showed signs of malnutrition

**Locations of Cases:** Pacific Ocean (California, Oregon, and Washington)

**Protected Status:** Listed as threatened under the Endangered Species Act (throughout its range)

More information about UMEs is available at:

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-unusual-mortality-events>



# What Can Members of the Public Do?



Release of a satellite tagged California sea lion "Buzzi" following successful rehabilitation at the Pacific Marine Mammal Center. Tagging released animals provides data invaluable for post-release monitoring and research. Photo: Atlantic Marine Conservation Society/Pacific Marine Mammal Center.



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OFFICIAL BUSINESS

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## West Coast Regional 24/7 Hotline

The Marine Mammal Health and Stranding Response Program relies on reports of stranded marine mammals by the public. If you come across a stranded marine mammal, please report it to your West Coast regional 24/7 hotline.

**Hotline: (866) 767-6114**

## Report a Stranding

When reporting a stranded marine mammal, please include the following information:

- Date
- Location of stranding (including latitude and longitude)
- Number of animals
- Condition of the animal (alive or dead)
- Species (if known)

Photos or videos (note that [regulations apply](#) to certain species and areas) can also provide valuable information to Network responders. Only trained and permitted responders should approach or pick up a stranded marine mammal. You can also download the Dolphin & Whale 911 Stranding App in the Apple Store to help report a stranding.

***Only trained and permitted responders should approach or pick up a stranded marine mammal.***

## Get Involved

The National Stranding Network relies on government, private, and public support to conduct its vital work to save animals in distress and understand causes of injuries and mortalities. You can make a difference by contacting your local Stranding Network (list available at: <https://www.fisheries.noaa.gov/report>) to see how you can get involved.

*Only confirmed stranding activities involving species under the jurisdiction of NOAA Fisheries (cetaceans and pinnipeds, except walrus) are included in this report. All data were obtained and analyzed from the NOAA Fisheries' National Marine Mammal Stranding Database, and have been verified. Any duplicate events, and entries of entangled large whales, were removed from the analyses. All data and information described within this report are correct as of May 3, 2021 (when the data query of the National Stranding Database was performed). All photographs were taken under Stranding Agreement, MMPA Section 109(h) authority, or NOAA Fisheries research permits.*