

NMFS Alaska Region 2024 Section 6 Research Priorities

Cook Inlet Distinct Population Segment (DPS) Beluga Whale

ACTION: Protect Habitats that Support Foraging or Reproduction of Cook Inlet Beluga Whales

Examples of activities the State could undertake:

- Pursue actions that would protect Cook Inlet beluga whale habitats important for feeding or reproduction in particular rivers that support large populations of salmon or eulachon.
- Conduct on-water monitoring and education/outreach efforts in partnership with the NMFS Office of Law Enforcement to mitigate harassment and other negative effects to belugas in Cook Inlet.
- Combine outreach efforts with permitting and licensing (also true for action below)
- Work with local chambers of commerce and state and local tourism boards to increase outreach to Alaska citizens and tourists.

ACTION: Ensure Healthy and Plentiful Prey are Available

Examples of activities the State could undertake:

- Improve our understanding of the prey available to belugas. Summarize all historic and contemporary records on presence, seasonality, trends, and abundance of prey species. Summarize trends in sport, subsistence, and commercial harvest of all fish species in all major rivers in Cook Inlet.
- Update and, in some cases, initiate stock assessments of all eulachon runs in Cook Inlet.
- Update and, in some cases, initiate stock assessments of other key prey items (e.g., flounder).
- Collect salmon escapement data in upper Cook Inlet (Beluga River, Knik/Matanuska River, Little Susitna River, Susitna River), excluding the Kenai River (already monitored by ADFG) and Eagle River (already monitored by JBER).

Western DPS (WDPS) Steller Sea Lion

ACTION: Develop and implement management actions that reduce or eliminate threats

Examples of activities that the State could undertake:

- Develop an ESA Section 10 Habitat Conservation Plan to ensure that take resulting from State fisheries is authorized and reported.
- Develop partnerships with Alaska Native Organizations (ANOs) to start or renew biosampling and scat collection programs to collect, analyze, and/or archive (e.g., Museum of the North, National Marine Mammal Tissue Bank) samples for contaminants, harmful algal toxins, microplastics, and prey identification. Work together with ANO youth and other Alaska youth to share data collection and sampling procedures.
- Conduct research and/or monitoring to evaluate the currently unknown incidental and intentional take of WDPS Steller sea lions in State fisheries.
- Evaluate potential effects on WDPS Steller sea lion foraging efficiency in both the breeding and non-breeding season by evaluating the effects of fishing on the temporal and spatial distribution and abundance of primary prey.
- Reduce illegal shooting by developing and promoting the use of effective non-lethal deterrents in collaboration with commercial, subsistence, and recreational fisheries, ANOs, and coastal communities.
- Renew Steller sea lion branding program. Brand pups in areas of WDPS Steller sea lion (e.g., Prince William Sound, Gulf of Alaska, northern Southeast Alaska) occurrence and continue annual vital/reproductive rate surveys at rookeries and haulouts to monitor Steller sea lion survival, especially in response to recent marine heatwaves and the changing climate.
- Collect new Steller sea lion genetic samples and process archived genetic samples to better

inform management actions regarding the presence of WDPS Steller sea lions east of 144 degrees W. longitude.

- Collect data on Steller sea lion incidence of entanglement, including identifying entanglement materials causing injury to sea lions; respond to and disentangle Steller sea lions; monitor post-release survival through satellite telemetry.

ACTION: Research and monitoring to support management of Steller sea lions

Examples of activities that the State could undertake:

- Conduct additional telemetry research on the foraging habitat use of Steller sea lions in the central and western Aleutian Islands to inform management decisions.
- Conduct research in the central and western Aleutian Islands to determine the impacts of predation on WDPS Steller sea lions to determine if predation is limiting recovery in these areas of population decline.
- Install remote cameras, collect images, and analyze data from remote Steller sea lion rookeries and haulouts, especially those in the northern WDPS Steller sea lion range (e.g., St. Lawrence Is., Cape Newenham) that are not surveyed annually.

Arctic Ringed Seal and Beringia DPS Bearded Seal

ACTION: Research and monitoring to support management of ringed and/or bearded seals

Examples of activities that the State could undertake:

- Develop a statewide strategy to estimate the number of ringed seals and bearded seals removed for subsistence annually in Alaska and to quantify interannual variability and trends.
- Conduct research to investigate the health and status of ringed and/or bearded seals in Alaska, including behavioral and demographic responses to changes in sea ice, on-ice snow cover, and other associated environmental variables.

North Pacific Right Whale

ACTION: Identify and characterize habitat used by North Pacific right whale populations

Examples of activities the State could undertake:

- Deploy passive acoustic recorders and oceanographic monitors (e.g., temperature, salinity) in the eastern and southeastern Gulf of Alaska, where there has been little monitoring effort but historically was right whale habitat, and is an area that may serve as a migratory corridor for the species.
 - Analyze acoustic and oceanographic data from these recorders and monitors to refine knowledge of the spatial and temporal occurrence of right whales in the GOA and better understand what oceanographic conditions overlap with right whale presence.

ACTION: Increase awareness and reporting of North Pacific right whales by the fishing industry

Examples of activities the State could undertake:

- Conduct outreach with fishers in the Bering Sea and Gulf of Alaska fisheries to improve identification and reporting of North Pacific right whale sightings to NMFS.
 - Reports from fishers have provided valuable information on locations of North Pacific right whales in Alaska and California during winter and early spring. If provided with the right information, fishers can be an important source of right whale sighting data.

Sunflower Sea Star

ACTION: Increase understanding of population abundance, trends, and recruitment

Examples of activities the State could undertake

- Establish long-term monitoring sites and protocols, particularly in areas with existing

pre-pandemic baseline data.

ACTION: Examine patterns in occurrence and extent of sea star wasting syndrome in Alaska

Examples of activities the State could undertake

- Monitor the occurrence and extent of sea star wasting syndrome, and examine population recovery as related to the occurrence of SSWS

ACTION: Increase understanding of effects of handling/relocation of sea stars

Examples of activities the State could undertake

- Examine survival and health of sunflower sea stars caught as bycatch and/or transported for the purpose of increasing survival rate