

Conservation and Management of Pacific Walrus in a Warming Arctic



Pacific Walrus and the Endangered Species Act

Listing process and history:

2008: Petition to list under the ESA

2010: Information gathering and analysis of threats

2017: Decision listing is “not warranted”

2018-2021: Court challenges and appeals

2022: Remanded to FWS?



Species Status Assessment

Analysis Objectives:

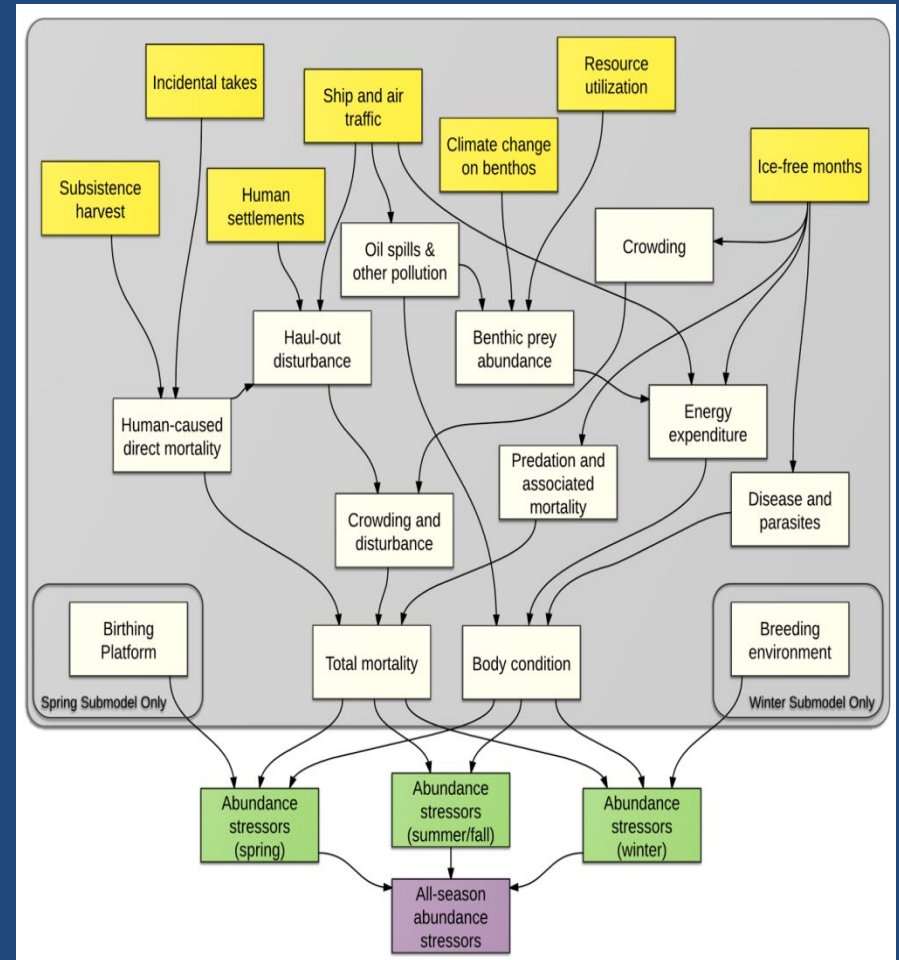
- Collect/summarize best available information on population stressors
- Project stressors forward in time (3 generations)
- Evaluate how the stressors are likely to interact and their cumulative effect on the population over time



Species Status Assessment

Major findings:

- Current conditions: population relatively large and robust, abundance stressors relatively low.
- Abundance stressors are expected to increase into the future.
- There is considerable uncertainty regarding population responses
- **Management actions have the potential to influence future population changes**



Commercial fisheries interactions

Rate of mortality and significant injury:

US fisheries: BSAI flatfish trawl fishery

0.6 ± 0.89 per year (2015-2019)

Russian fisheries: Pollock trawl fisheries

Anecdotal reports - Rate unknown

Synopsis: Direct interactions and mortality rates appear to be low. Interactions are expected to increase as commercial fisheries move north

Future outlook

- Northern range shift
- Increased dependence on haulouts
 - Less offshore feeding opportunities
 - Greater energetic costs associated with feeding
 - Increased disturbances and mortality at coastal haulouts

We expect a population decline - the timing and magnitude of the decline is unknown

Adapting to climate change

Management priorities:

- Protect important habitats (Disturbance mitigation)
- Ensure harvests remain sustainable
- Mitigate impacts of commercial activities
- Establish and support management structures and conservation partnerships

Goal: Mitigate disturbances



Outreach



U.S. Fish & Wildlife Service

How to avoid disturbance of Pacific walrus in Bristol Bay *Guidelines for Mariners*

In Bristol Bay during the months of March through December, walrus may be encountered in the water and resting on shore at Round and Hagemeyer Islands, Cape Peirce, Newenham, Seniavin, Greig and Cinder River. Round Island is part of the Walrus Islands State Game Sanctuary and there are state regulations specific to that area mariners should follow. The guidelines provided here do not supersede or amend the state's regulations for Round Island.

The Marine Mammal Protection Act (MMPA) prohibits the take of all marine mammal species in U.S. waters. Take is defined as "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." Harassment is defined under the MMPA as "any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild; or has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering." Take is further defined by regulation to include feeding or attempting to feed a marine mammal in the wild. Some exceptions are made for authorized scientific research and subsistence hunting by Alaska Natives.

Disturbance

Marine mammals swimming or hauled out on land, rock or ice are sensitive to boats, and human presence. Noises, smells, and sights may elicit a flight reaction. Trampling deaths associated with haulout disturbance are among the largest known sources of natural mortality for walrus. Frequent or prolonged disturbances may even result in long-term haulout abandonment. Your vessel may not be the only one that day that has interacted with a particular group of walrus, please be aware that increasing levels of disturbance may occur with each successive interaction.



Pacific walrus fleeing a terrestrial haulout in response to human induced disturbance.

Signs of Disturbance

Signs of disturbance to animals hauled out on the beach may include any of the following behaviors (generally listed in increasing intensity of disturbance):

- Several individuals raising their heads simultaneously
- Increased vocalizations
- Increased interactions among individuals in the herd
- Aggressive behavior by animals towards the disturbance. Movement towards the water
- Hurried entry into the water

Much of the disturbance that impacts marine mammals in the water is related to underwater sound produced by a vessel's engines and propellers. Cautiously move away from the animals if you observe any of the following behaviors:

- Rapid changes in direction or swimming speed
- Erratic swimming patterns
- Grouping up and "head bobbing" to investigate the source of the disturbance
- Escape tactics such as prolonged diving, underwater exhalation, underwater course changes, or rapid swimming at the surface
- Females attempting to shield a calf with her body or by her movements

Guidelines for Vessel Operation

Note that state waters (0 - 3 nautical miles) around Round Island, within the Walrus Islands State Game Sanctuary are closed to all access without prior authorization under state regulations.

The following should be observed for all other Bristol Bay haulouts:



Walrus mortality due to disturbance

- Vessels less than 50 feet in length should remain at least 0.5 nautical miles away from a walrus haulout.
- Vessels 50 feet or more but less than 100 feet in length should remain at least one nautical mile away from a walrus haulout.
- Vessels 100 feet or more in length should remain at least three nautical miles away from a walrus haulout.
- All vessels should refrain from anchoring or conducting tendering or fishing operations within three nautical miles of a walrus haulout.
- Reduce noise levels near haulouts. Avoid sudden changes in engine noise, using loud speakers, loud deck equipment or other operations that

produce noise when in the vicinity of walrus haulouts.

- Avoid excessive speed or sudden changes in speed or direction when approaching or departing walrus haulout areas. Vessels traveling in a predictable manner appear to be less disturbing to swimming walrus.

Mariners should take every precaution to avoid harassment of concentrations of walrus in the water. Harassment or pursuit of marine mammals is prohibited by under the Marine Mammal Protection Act. Never attempt to herd, chase, or separate groups of walrus.

- Reduce speed and maintain a minimum 0.5 nautical mile exclusion zone around feeding walrus.

To report incidences of disturbance or harassment contact:
U.S. Fish and Wildlife Service, Alaska
Division of Law Enforcement
1011 E. Tudor Road
Anchorage Alaska 99503-6199
Toll free: 1-800-858-7621

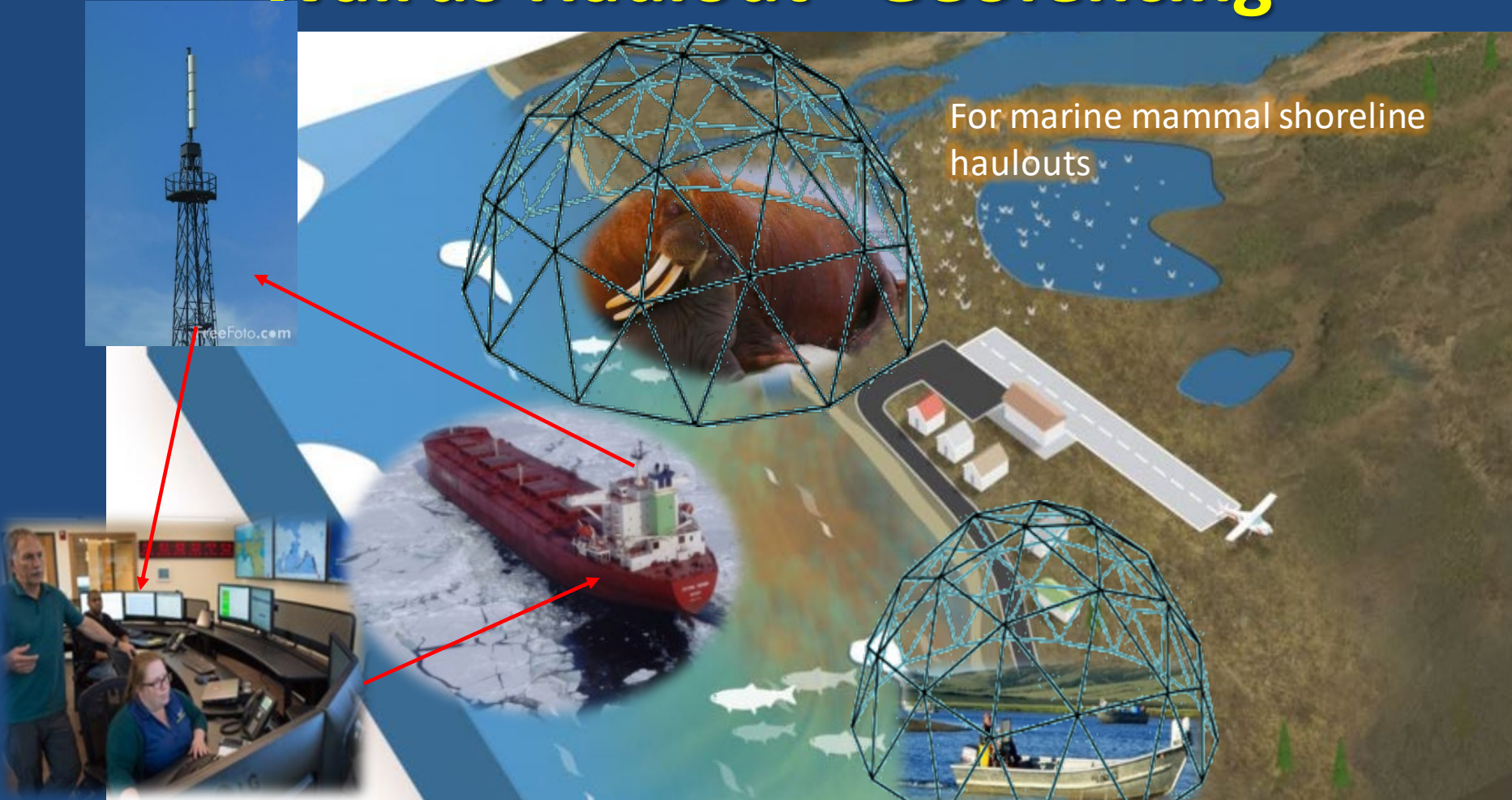
- Don't operate your vessel in such a way as to separate members of a group of walrus from other members of the group.
- When weather conditions require, such as when visibility drops, vessels should adjust speed accordingly to avoid the likelihood of injury to walrus.

For more information about walrus, contact U.S. Fish and Wildlife Service, Alaska
Marine Mammals Management Field Office
1011 E. Tudor Road, MS-341
Anchorage, Alaska 99503
907/786 3800 or 800/362 5148

May 2021

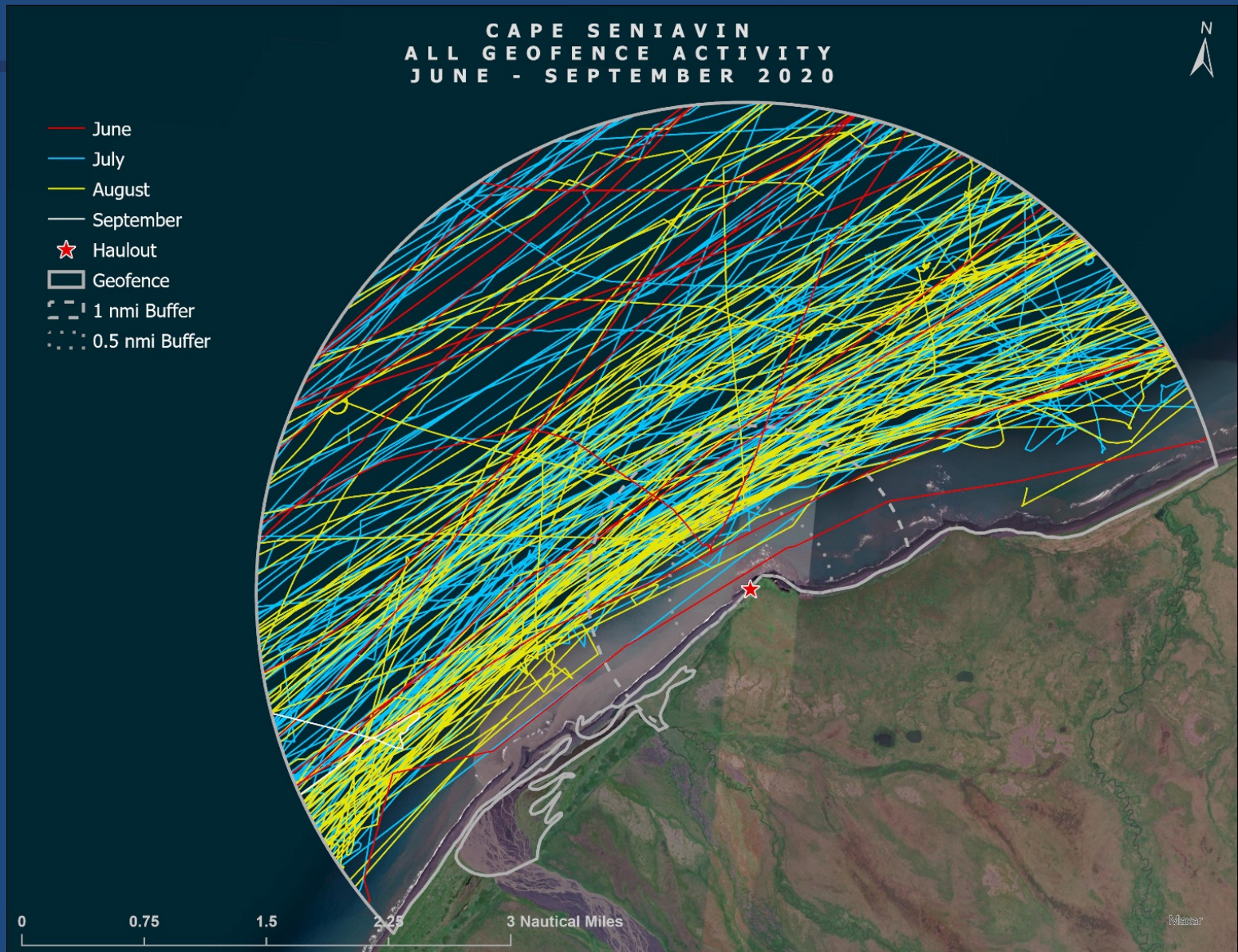
Walrus Haulout “Geofencing”

For marine mammal shoreline haulouts



- **GPS-based virtual perimeter for vessel using Automatic Identification System (AIS).**
- **It creates temporary, virtual fences to minimize impacts to species and communities and promote safe vessel transit.**

Geofence results: Cape Seniavin



- Vessel disturbances are common, particularly in commercial fishing areas: e.g. Cape Seniavin on the Alaska Peninsula



Targeted outreach from geofence results:

- 2020 Geofence results indicated specific user groups to target for outreach
- Outreach to commercial fishermen:
 - Coordination with seafood processors to distribute materials to fleet
 - Coordination with fishing “gear” groups: email newsletters
 - Article in June edition of Pacific Fishing Magazine

PACIFIC FISHING
THE BUSINESS MAGAZINE FOR FISHERMEN

Alaska fishermen, please mind the walrus!

The U.S. Fish and Wildlife Service is asking Alaska fishermen for their help this season in protecting Pacific walrus from disturbance at coastal haulouts.

“Pacific walrus may be encountered from March to December throughout Bristol Bay and the Alaska Peninsula,” the agency says in a letter to fishermen.

Walrus can panic when startled by unexpected smells, sights,

The letter to fishermen, with maps of significant haulouts, is posted at tinyurl.com/njy5mmn9.

The service also has prepared a fact sheet titled “How to avoid disturbance of Pacific walrus in Bristol Bay,” posted at tinyurl.com/dnjduhnz.

— Wesley Loy

The U.S. Fish and Wildlife Service and Qayassiq Walrus Commission Work to Minimize Marine Vessel Disturbance at Bristol Bay Pacific Walrus Haulouts

The Pacific walrus represents a critical cultural and subsistence resource for the people of the Bristol Bay region. The Qayassiq Walrus Commission (QWC) and U.S. Fish and Wildlife Service (USFWS) co-manage walrus in Bristol Bay. Walrus are extremely susceptible to human-caused disturbances, particularly when hauled out on shore. They often panic when startled, causing them to stampede to the safety of the water, trampling and injuring or killing smaller animals. There is a large amount of marine vessel traffic associated with commercial fishing, shipping, subsistence and recreation activities near some haulouts in Bristol Bay; close approaches by vessels introduces significant risk of causing a disturbance.



The U.S. Fish and Wildlife Service has partnered with Marine Exchange of Alaska on a Geofencing project which uses Automatic Identification System (AIS) technology to assess and monitor maritime activity near coastal walrus haulouts across Alaska. In 2020, AIS-equipped vessel traffic was high near walrus haulouts in Bristol Bay and along the Alaska Peninsula, particularly where haulouts overlap with commercial salmon seine and driftnet fisheries in the Area M and Ugashik districts. Our results from Cape Seniav in are shown below. With the exception of subsistence harvest by Alaska Natives, disturbance (Take) of marine mammals is prohibited under the Marine Mammal Protection Act. Therefore, intentional or accidental disturbance of a walrus haulout by human activity (such as by a vessel) constitutes an illegal take.

The QWC is proud to take an active role in walrus conservation and management including harvest management at Qayassiq (Round Island) and will continue to promote subsistence use of walrus as well as haulout protection into the future. The QWC has successfully managed the subsistence harvest at Round Island since reinstatement in the mid-1990s. This is a testament to the hard work and dedication of the of Bristol Bay people. We as Alaska Natives are moving forward and will continue to do so with our Ancestors guiding us along the way to make positive changes around our world. The Qayassiq Walrus Commission strives to assume a larger role in the co-management and conservation of Walrus in Bristol Bay.

The USFWS and QWC are coordinating education and outreach efforts to reduce disturbances of resting walrus. We are also working with the National Oceanic and Atmospheric Administration to update navigation charts

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- Outreach to commercial shipping companies with vessels detected within geofences
- Joint outreach with Qayassiq Walrus Commission in Bristol Bay Native Association newsletter

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1011 East Tudor Road, MS 151
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Questions?

