

The Cook Inlet Beluga Whale:

A Population in Decline

Cook Inlet belugas are an isolated, endangered population of whales. They live year-round in the muddy waters of Cook Inlet, Alaska, and swim up silty glacial rivers in search of food. They are genetically different from other beluga whales found in Alaska, or anywhere else in the world. Historically a valuable part of the regional Alaska Native subsistence diet, they have not been hunted since 2005 due to their drastic population decline. Despite recovery efforts the 10-year (2008-2018) population trend is declining 2.3% per year. Once so abundant that white whales were visible 'as far as the eye could see,' sightings are less frequent. The public is encouraged to report all beluga sightings to provide scientists with clues to help solve the mystery of their lack of recovery.

Potential Threats to Recovery

- HIGH**
 - Catastrophic events (natural disasters, chemical spills, mass strandings)
 - Cumulative effects of multiple stressors
 - Noise (ship traffic, construction projects, oil & gas activities, airplanes)
- MED**
 - Disease agents (pathogens, parasites, harmful algal blooms)
 - Habitat loss or degradation
 - Reduction in prey (overfishing, climate change)
 - Unauthorized take (entanglement, vessel strikes, poaching, harassment)
- LOW**
 - Pollution (sewage, runoff, discharge, dumping)
 - Predation

Climate change is expected to affect the listed threats

Research

Sound Science

Listening to whales using sound recording instruments anchored in and near river mouths helps detect where and when belugas feed, and human-caused noise that may displace whales.

Prey Tell

By collecting and analyzing water samples in areas where belugas feed, environmental DNA (eDNA) may tell us which fish species belugas are eating

Aquariums are Scientific Gems

New methods are tested before working with wild whales like hearing levels or assessing reactions to tracking devices, noise, or drones. Measuring food consumption and energy expenditure provide insight into how much food whales need. Sampling hormones provide insight on stress levels and reproductive status.

Live Whale Sampling

Skin and blubber samples are used to estimate age, identify individual whales, determine parent-offspring relationships, reproductive status, and contaminant loads.

Dead Whale Tales

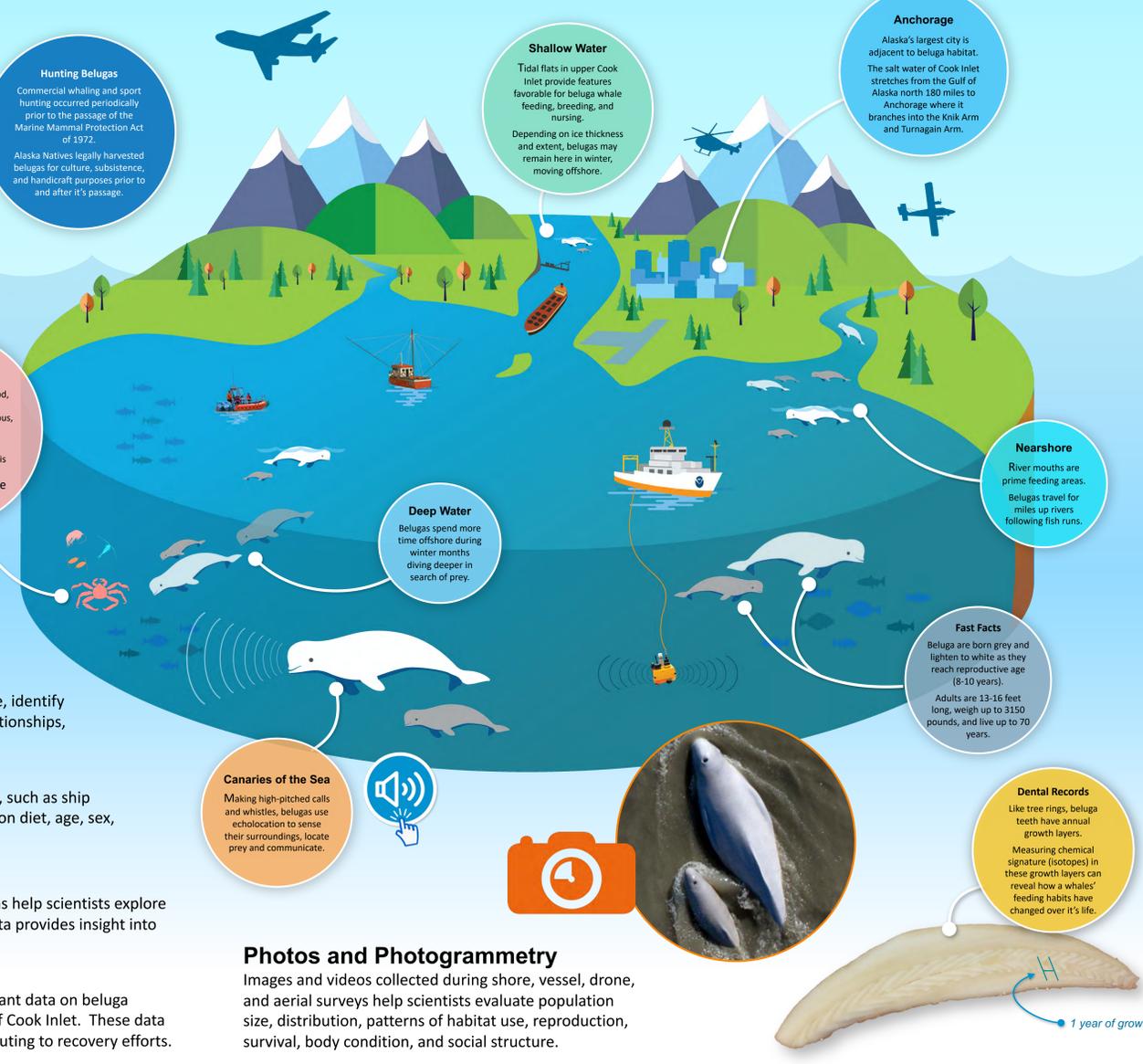
Necropsies may reveal disease, human interaction, such as ship strikes, or contaminant exposure and information on diet, age, sex, and reproductive status.

All in the Family

Information from other, healthy beluga populations help scientists explore factors that might be limiting recovery. Genetic data provides insight into the social structure within a beluga population.

Citizen Science

Members of the public volunteer to collect important data on beluga distribution and habitat use in nearshore waters of Cook Inlet. These data are shared with researchers and scientists, contributing to recovery efforts.



How to Help

Report all beluga whale sightings

See a live whale?

Tell us at www.cookinletbelugas.com

Provide photos to contribute to research on habitat use, social structures, and reproduction.

See a stranded, injured or dead whale?

Call the NOAA Fisheries Alaska 24-hour hotline:

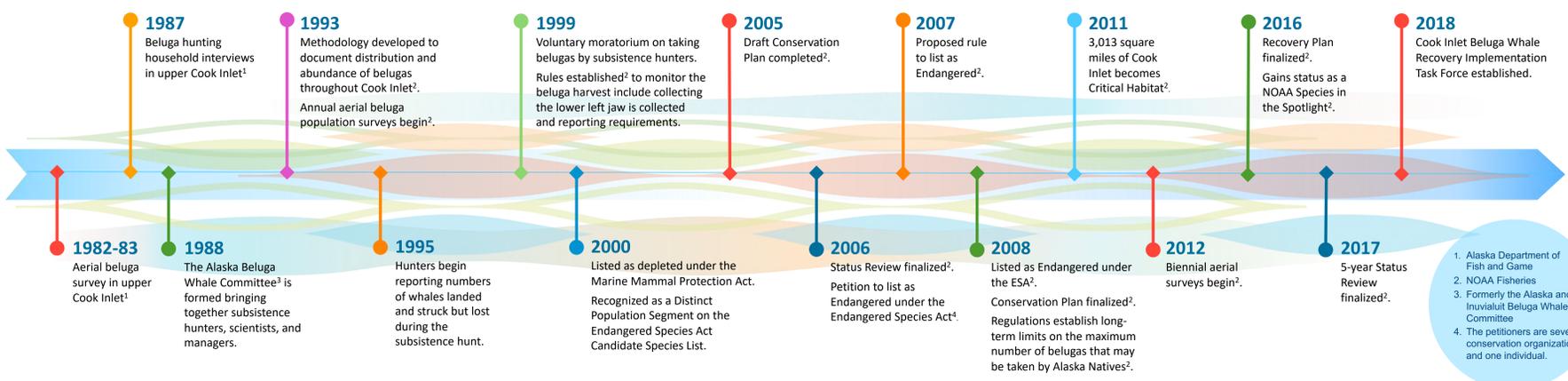
1-877-925-7773

Learn about outreach events and community whale monitoring programs:

www.facebook.com/BelugasCount
www.facebook.com/AlaskaBMP



Cook Inlet Beluga Recovery Timeline



1. Alaska Department of Fish and Game
2. NOAA Fisheries
3. Formerly the Alaska and Inuvialuit Beluga Whale Committee
4. The petitioners are several conservation organizations and one individual.

Working Together to Recover Cook Inlet Belugas

The primary role of the Committees of the Task Force is to engage the expertise of researchers, managers, communicators, and various other stakeholders to advise NOAA Fisheries and the State of Alaska, Department of Fish and Game on specific topics or issues relating to Cook Inlet beluga whale recovery.

- Research Committee:** understanding and monitoring the Cook Inlet beluga population.
- Habitat and Threats Management:** assessing, preventing, mitigating or abating threats to the population's recovery.
- Outreach Committee:** garnering public support through improved outreach and education.



- NOAA Fisheries
- Beluga Whale Alliance
- Alaska Department of Fish and Game
- Alaska SeaLife Center
- Joint Base Elmendorf Richardson
- The Cook Inlet Beluga Whale Photo-ID Project
- Defenders of Wildlife
- Anchorage Water and Waste Utility
- Marine Mammal Commission
- University of Washington
- Tyonek Native Corporation
- HilCorp Alaska LLC.