



Environmental Resources Section

Public Notice

Alaska District
U.S. Army Corps of Engineers

Date 15 Feb 2022 Identification No. ER-PN-22-001
Please refer to the identification number when replying.

The U.S. Army Corps of Engineers (Corps) has prepared an environmental assessment (EA) and draft Finding of No Significant Impact (FONSI) for the following project:

**Removal Actions and Investigations
Chernofski Harbor Supply and Storage
Formerly Used Defense Site (F10AK0013)
Unalaska Island, Alaska**

The Corps' proposed actions are authorized under the Department of Defense (DOD) Environmental Restoration Program – Formerly Used Defense Sites (DERP-FUDS), which provides the means to clean up waste materials, contaminated soil, and unsafe structures and debris from areas formerly used by the DOD.

The proposed project and potential environmental impacts are described in the enclosed EA and draft FONSI, which is available for public review and comment for 30 days from the date of this notice. It may also be viewed on the Alaska District's website at: www.poa.usace.army.mil. Click on the Reports and Studies button, look under Documents Available for Public Review, and then click on the Environmental Cleanup link.

To obtain a printed copy, please send a request via email to: Christopher.B.Floyd@usace.army.mil or send a request to the address below. The FONSI will be signed upon review of comments received and resolution of significant concerns. Please submit comments regarding the proposed action to the above email or to the following address:

U.S. Army Corps of Engineers, Alaska District
ATTN: CEPOA-PM-C-ER
P.O. Box 6898
Joint Base Elmendorf-Richardson, Alaska 99506-0898

For information on the proposed project, please contact Chris Floyd of the Environmental Resources Section at the above email or Corps postal address.

Sincerely,

Michael R. Salyer

Michael R. Salyer
Chief, Environmental Resources Section



US Army Corps of Engineers
Alaska District

Environmental Assessment and Finding of No Significant Impact

Removal Actions and Investigations Chernofski Harbor Supply and Storage Formerly Used Defense Site (F10AK0013) Unalaska Island, Alaska



February 2022

FINDING OF NO SIGNIFICANT IMPACT

Chernofski Harbor Supply and Storage Formerly Used Defense Site (F10AK0013) Unalaska Island, Alaska

I. In accordance with the National Environmental Policy Act, I have reviewed and evaluated the documents concerning planned environmental cleanup activities at Chernofski Harbor, Alaska:

As part of my evaluation, I have considered:

- a. Existing resources and the No Action Alternative.
- b. Impacts to existing resources from the Preferred Alternative.

II. The possible consequences of these alternatives have been studied for physical, environmental, cultural, and social effects. My evaluation of significant factors has contributed to my finding:

- a. No significant impacts to federally listed endangered or threatened species are anticipated.
- b. No significant impacts are anticipated to natural resources, including fish and wildlife. There would be no appreciable degradation to the physical environment (e.g., water quality and air quality) as a result of the proposed activities.
- c. The proposed work will have an adverse effect on historic properties, which will be resolved per an amended Memorandum of Agreement executed under Section 106 of the National Historic Preservation Act.
- d. The No Action Alternative was evaluated and determined to be unacceptable, as the U.S. Army Corps of Engineers is authorized and responsible for implementing the cleanup of Former Used Defense Sites (FUDS) under the applicable State and Federal statutes and regulations.

III. Based on the evaluation and disclosure of impacts contained within the Environmental Assessment, I find no unresolved significant impacts to the human environment are likely to occur as a result of the proposed action. Therefore, an Environmental Impact Statement will not be prepared prior to proceeding with the proposed environmental cleanup actions at Chernofski Harbor, Alaska.

DAMON A. DELAROSA
COL, EN
Commander, Alaska District
U.S. Army Corps of Engineers

Date

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Environmental Assessment
Chernofski Harbor Supply and Storage
Formerly Used Defense Site (F10AK0013)
Unalaska Island, Alaska

1.0 PURPOSE AND NEED

1.1 Introduction

The U.S. Army Corps of Engineers (USACE) prepared this environmental assessment (EA) under the National Environmental Policy Act (NEPA) to address the investigation, excavation, and removal of containerized waste and associated contaminated soil at Chernofski Harbor, Alaska (Figure 1). The USACE' proposed actions are authorized under the Department of Defense's (DOD) Defense Environmental Restoration Program – Formerly Used Defense Sites (DERP-FUDS)(10 U.S.C. 2701 et seq.), which provides authorization to clean up waste materials, contaminated soil, and unsafe structures and debris from areas that were under the jurisdiction of the Department of Defense and owned by, leased by, or otherwise possessed by the United States that were transferred

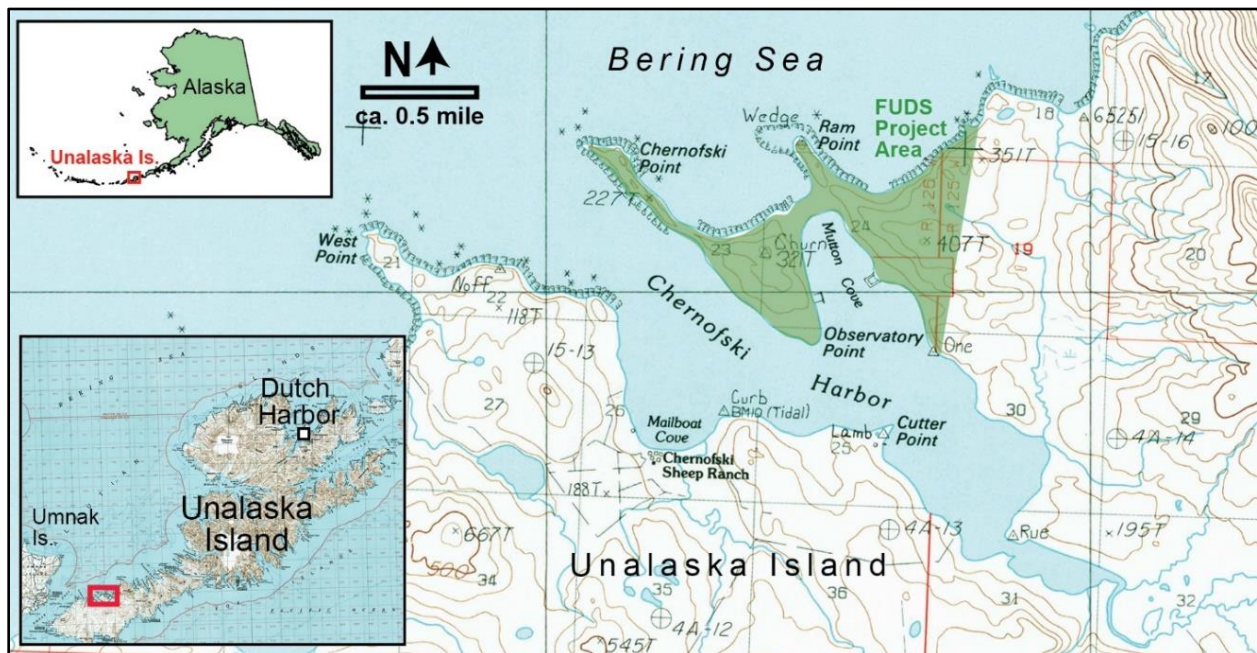


Figure 1. Location and vicinity of the Federal project (in green) at Chernofski Harbor.

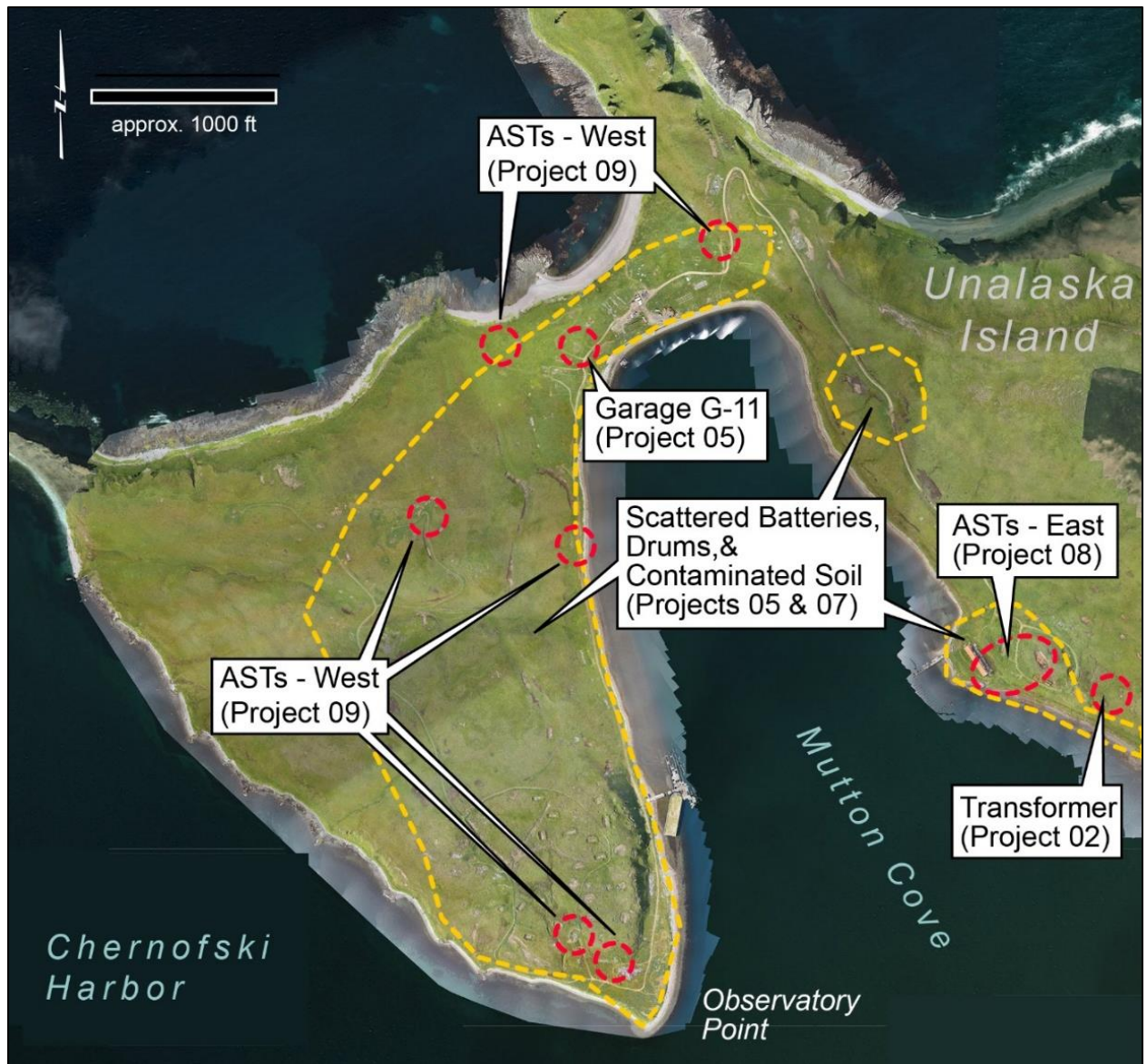


Figure 2. Locations of CON/HTRW sites at Mutton Cove in Chernofski Harbor FUDS targeted for removal actions (positions approximate; the red dotted lines denote major contaminant sources, the yellow dotted lines denote areas of scattered debris and contamination).

from DoD control prior to 17 October 1986. Most FUDS projects follow Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) processes, which would not include preparation of an EA under NEPA. However, the proposed activities involve the excavation and removal of containerized waste and petroleum products, both of which fall outside the purview of CERCLA.

The proposed activities include removal actions at the following Containerized Hazardous, Toxic, and Radioactive Waste (CON/HTRW) sites (Figure 2), conducted in accordance with State of Alaska regulations and guidance (i.e., non-CERCLA).

- Project 02 (Transformers at Mutton Cove)
- Project 05 (Mutton Cove Grease Pit, Batteries, Paint)
- Project 07 (55-Gallon Drums at Mutton Cove)
- Project 08 (Mutton Cove ASTs – East)
- Project 09 (Mutton Cove ASTs – West)

Concurrent removal actions are also planned at the following Hazardous, Toxic, and Radioactive Waste (HTRW) sites, conducted under applicable requirements of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA):

- Project 03 (Chernofski Harbor Contaminated Soil)
- Project 04 (Mutton Cove Contaminated Soils)
- Project 06 (Chernofski Harbor Landfill)

As noted, the activities planned for the CERCLA sites are not subject to the NEPA, and do not require the preparation of an EA. However, the CERCLA and non-CERCLA sites at Chernofski Harbor are interspersed and in proximity to one another; the CERCLA sites are mentioned here to avoid confusion with other project documents with regards to the scope of planned activities.

1.2 Project Site Description and History

Chernofski Harbor is a remote, natural deep-water harbor located on Unalaska Island approximately 54 miles southwest of Unalaska/Dutch Harbor. The harbor is located on the northern shoreline of the western portion of Unalaska Island in the Aleutian Island chain. Mutton Cove is within Chernofski Harbor, located at latitude 53.41 North, longitude 167.52 West.

Chernofski Harbor, with over 20 known prehistoric sites, is thought to have been one of the most populous areas in the Aleutians at various points in time. Of those 20 sites, eight are in the Mutton Cove area. Chernofski Village in Mutton Cove was occupied for more than two thousand years prior to Russian contact. Chernofski Village continued to be a viable permanent settlement until much of the population was lost during the influenza pandemic of 1919. The survivors relocated to the villages of Kashega and Unalaska, and completely abandoned the village in 1928.

In 1919, the Umnak Livestock Company started a sheep ranch in Chernofski Harbor at Mailboat Cove. The ranch continues to operate seasonally.

In December 1942, the U.S. Army began construction of Fort Glenn on nearby Umnak Island. Chernofski Harbor, the nearest natural harbor on the west end of Unalaska Island, was constructed as Fort Glenn's transshipment point. In January 1942, Chernofski Harbor was officially established as part of the Fort Mears military installation on Amaknak Island and, in June 1942, it became an official sub-post of Fort Glenn. To support Fort Glenn's operations, a main pier (72 feet by 402 feet), three barge landing areas, a repair dock, and several support buildings and infrastructure were constructed. The core cantonment area of Chernofski Harbor was located along the perimeter of Mutton Cove.

By 1945, Chernofski Harbor was no longer needed for the war effort, and the military vacated the site. A total of 66,415 acres of the former Chernofski site were relinquished to the U.S. Department of the Interior, Bureau of Land Management (DOI/BLM) on 14 July 1949, with the remaining 2,885 acres being relinquished to the DOI/BLM on 9 November 1955 (USACE 2020).

In 1985, the USACE conducted a Site Investigation (SI) and inventory of Chernofski Harbor. The project team inspected and examined site facilities that included: standing and collapsed wood-frame buildings, Quonset huts, docks and piles, fuel tanks, utility and communication poles, a barge-way, and a variety of other debris. A 1998 site investigation found areas of soil contaminated with fuels, fuel-constituent compounds, PCBs, and metals. The contamination was evaluated further by the USACE in 2017, followed by a 2019 CON/HTRW partial removal action that targeted aboveground metal fuel tanks, transformers and PCB-contaminated soil, drums, batteries and lead-contaminated soil, and paint cans. Additional data collection was conducted to delineate fuel contamination and a variety of locations. As part of the same effort, HTRW site inspections were conducted with sampling at a landfill, several locations with CERCLA contaminants, and multiple former building locations where the building's past use suggested a potential for environmental contamination (USACE 2020). Contaminated soil and containerized waste remaining at the Chernofski Harbor site are the focus of the planned 2022 activities.

1.3 Project Need

The 2019 site investigation at Chernofski Harbor identified remaining containerized wastes and chemical contamination of soil that, unless removed from the site, will eventually cause more widespread contamination of the environment, including potential impacts on the marine environment. The USACE is pursuing remedial actions at the Chernofski FUDS under its DERP-FUDS authority and State of Alaska environmental regulations.

2.0 ALTERNATIVES AND PROPOSED ACTION

2.1 No-Action Alternative

The no-action alternative would avoid the short-term disruptions to the local environment that would be caused by the removal of containerized wastes and excavation of soil. However, under the no-action alternative, the waste products and contaminated soil would remain in place. This would potentially allow the migration of chemical contaminants to adjacent wetland and marine habitat.

2.2 Removal Action Alternative

Excavation of contaminated soil and removal of contaminant sources is the only action alternative presented in this EA. The USACE' experience with environmental cleanup projects in Alaska has shown that *in situ* remediation or natural attenuation strategies tend not to be practicable or economically feasible at small, remote contaminated sites due to cold temperatures and the high costs of maintenance and monitoring. In such situations, direct removal and treatment of contaminated soil is generally the fastest, surest, and most economical means of eliminating or reducing environmental contamination.

The removal action alternative to remove containerized wastes and associated contaminated soil is the preferred alternative. The project scope (USACE 2021b) includes the following tasks:

Project 02 (Transformers at Mutton Cove):

- Locate Transformer 12
- Assuming the transformer is found, collect samples below/adjacent to the transformer to determine if contaminated soil exists, optimally during the site visit.
- Remove the transformer and associated contaminated soil that may exist during the removal action.

Project 05 (Mutton Cove Grease Pit, Batteries, Paint):

- Conduct a removal action at the grease pit at Garage G-11 site to remove petroleum-contaminated soil.
- Conduct investigations to evaluate groundwater contamination.
- Conduct additional inspection for batteries at locations where there is an elevated likelihood that battery use and charging may have occurred.
- Remove batteries and associated contaminated soil.

Project 07 (55-Gallon Drums at Mutton Cove):

- Conduct soil removal actions at those drum locations where contaminated soil was identified during prior investigations.
- Conduct reporting and close out Project 07.
- If additional drum remnants are found during future work, document the locations. Additional drum investigation and removal actions, if any, would be conducted under a different or new project.

Project 08 (Mutton Cove ASTs – East):

- Remove buried fuel piping remaining at the site.
- Conduct additional investigations to evaluate impacts to groundwater and to obtain additional information needed to evaluate groundwater as a possible drinking water source and decide action levels.

Project 09 (Mutton Cove ASTs – West):

- Remove fuel-contaminated soil at multiple upland tank sites.
- Remove USTs and conduct site assessments.
- Conduct additional investigation to evaluate groundwater as a possible drinking water source and decide action levels.

2.3 Preferred Alternative

The removal action alternative to remove containerized wastes and contaminated soil is the preferred alternative.

2.4 General Work Practices and Environmental Protection

As shown on Figure 2, the planned activities would occur across much of the former military site. Physical tasks would generally include:

- Gathering, packing for safe transport, and properly disposing of drums, batteries, and other debris.
- Excavating, containerizing, and properly disposing of contaminated soil.
- Collecting surface and subsurface soil samples.
- Installing groundwater monitoring wells and collecting groundwater samples.

Several vehicles and construction machines would be used at the site:

- Excavators (small and medium)
- Loader
- Rubber-tracked hauler (e.g., Marooka®)
- Drill rig (most likely a small, direct-push rig, e.g. Geoprobe Systems®)

- Skid steer
- Utility task vehicles (UTVs)

Most field work is expected to occur between early May and early October 2022. Large equipment would be transported and dropped off at Mutton Cove by a barge or landing craft, and picked up when work is complete. The landing point will likely be the broad, protected beach at the head of Mutton Cove. The contractor will likely set up camp onshore to lodge the field crew. A site visit by USACE and contractor personnel was conducted in September 2021 to identify appropriate camp and staging area locations, transport some equipment to the project site, and to begin initial work.

Excavations will be backfilled with uncontaminated material from a borrow site at the head of Mutton Cove, with permission of the landowner, Tanadgusix Corporation of Saint Paul Island. The backfilled areas would not be seeded for revegetation, to avoid the potential introduction of invasive species.

The contractor is required to prepare an Environmental Protection Plan (EPP) detailing measures to avoid and minimize environmental impacts. The EPP will include (but is not limited to):

- A list of Federal, State, and local laws, regulations, and permits concerning environmental protection, pollution control, and pollution abatement that are applicable to the contractor's proposed operations and the requirements imposed by those laws, regulations, and permits.
- Plan showing measures for marking the limits of use areas and locations of all proposed sampling, excavations, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials.
- Methods for protection of features to be preserved within authorized work areas, as applicable (trees, shrubs, grasses and ground cover, landscape features, air and water quality, fish and wildlife, soil, and historical, archaeological, and cultural resources).
- Methods of protecting surface water and groundwater during construction activities, including storm water management and storm water pollution prevention plans. The contractor would be required to assume that the removal actions, when combined, exceed one acre, and prepare a Storm Water Pollution Prevention Plan (SWPPP) for the project.

- Daily inspections of vehicles, fuel containers, and other potential contaminant sources for leaks, and maintenance of spill-response equipment and materials in accordance to the project accident prevention plan (appended to the work plan).
- Watching for possible ground-nesting birds near the work sites and following EPP procedures to protect any nests discovered.
- Implementing rat prevention and control measures to avoid transporting rats into the project areas, or spreading the existing Unalaska Island rat population.

The contractor will also prepare a Waste Management Plan detailing how wastes will be managed both onsite and offsite. As appropriate and as applicable, this plan shall include any wastewater generated, pumped, or collected as part of any field activities. The plan shall propose facilities to be used for treatment, storage, and/or disposal; shall identify whether transfer facilities are to be used; and how the wastes will be tracked to ultimate disposal.

Specific avoidance and minimization measures for protected species are detailed in Section 4.2.6.

3.0 AFFECTED ENVIRONMENT

3.1 Community and Land Use

The project area is essentially uninhabited; a handful of people are present at Chernofski Harbor each summer to tend the remaining herd of sheep. Currently, the Tanadgusix Corporation of Saint Paul Island owns most of the land around Mutton Cove; other landowners include the Orthodox Church of America, the Aleut Corporation, and Mrs. Cora Holmes (Eldridge 2021). The nearest permanent communities are Unalaska/Dutch harbor (54 miles to the northeast) and Nikolski on Umnak Island (63 miles to the west).

Much of western Unalaska Island is part of the Alaska Maritime National Wildlife Refuge, administered by the U.S. Fish and Wildlife Service (USFWS). However, the project area shown in Figure 1 is excluded from Refuge lands.

3.2 Climate

Unalaska Island is within the subpolar oceanic climate zone, characterized by persistently overcast skies, moderated temperatures, high winds, and frequent storms. Winter squalls produce wind gusts in excess of 120 mph. During the summer, extensive fog forms over the Bering Sea and North Pacific. Average temperatures range from

20 to 60 F. Total precipitation is 64 inches annually, with an average accumulated snowfall of 100 inches, which however tends to melt soon after falling (ADCCED 2021).

3.3 Topography, Soils, and Hydrology

The geology of Unalaska Island is predominantly volcanic. The project site shares the rolling, treeless terrain characteristic of lower-elevation coastal areas of the island (Figure 3). Soils are expected to be relatively shallow organics and marine sediments overlaying basalt or other volcanic material. No streams or ponds appear to be present at the project site. A few small streams and seasonal drainages flow into Chernofski Harbor.



Figure 3. A view from high ground east of Mutton Cove, looking westward, and showing typical vegetation and terrain (July 2017).

3.4 Air Quality and Noise

The remote and uninhabited west coast of Unalaska Island presumably enjoys excellent air quality because of the absence of pollutant emission sources and persistent winds from the adjacent ocean. Aircraft, ships, and ground vehicles occasionally operating at the island would be the only emission sources, along with generators and stoves for temporary camps. Large volcanic eruptions along the Aleutian Islands may conceivably influence air quality. There is no established ambient air quality monitoring program at Unalaska Island, however, and little existing data to compare with the National Ambient Air Quality Standards (NAAQS) established under the Clean Air Act (CAA). These air quality standards include concentration limits on the “criteria pollutants” carbon

monoxide, ozone, sulfur dioxide, nitrogen oxides, lead, and particulate matter. The island is not in a CAA “non-attainment” area, and the “conformity determination” requirements of the CAA would not apply to the proposed project at this time.

No specific noise data exist for Unalaska Island, but man-made background noise would consist solely of that generated by passing ship, boat, and aircraft traffic.

3.5 Habitat and Wildlife

Vegetation in the area surrounding Chernofski Bay is largely treeless maritime tundra, consisting of grasses, forbs, mosses, and lichens (Figure 3). Woody vegetation is limited to dwarf shrubs, such as willow and blueberry.

The marine shoreline adjacent to the project area show a very narrow splash-zone, with little debris present and heavy terrestrial vegetation growing down to the presumptive high-tide line. This suggests a very sheltered, low-energy intertidal habitat.

Roughly one hundred species of birds can be found on Unalaska Island, depending on the season. Several Asiatic species, such as brambling and Eurasian widgeon, have been sighted as casual and accidental visitors to the island, in addition to North American passerine, waterfowl, raptor, and seabird species (USFWS 2016). The USFWS seabird colony database notes populations of pigeon guillemot and several species of cormorant within Chernofski Harbor, and breeding colonies of glaucous-winged gulls, tufted puffins, and cormorants nearby along the outer coastline (Seabirds.net 2021).

Native terrestrial mammals present on Unalaska Island are limited to a few species of shrew, vole, and ground squirrel (Peterson 1967). Introduced mammals include mice, rats, foxes, and livestock such as horses and cattle. Several hundred sheep remain in the vicinity of Chernofski Harbor. Feral cattle and horses are known to range in the lower-elevation lands of southwest Unalaska Island, and may be seen at Chernofski Harbor. Marine mammals found in coastal waters include Steller sea lion, northern sea otter, northern fur seal, harbor and spotted seal, and a variety of whale, porpoise, and dolphin species.

3.6 Protected Species

3.6.1 Endangered Species Act

Jurisdiction under the Endangered Species Act (ESA) of 1973 is divided by species between the USFWS and the NMFS. Through informal consultation with the USFWS and the NMFS (NMFS 2019, NMFS 2021a), the USACE has identified the ESA-listed

species that may be present in the project area or the presumptive route of project vessel traffic (Table 1).

Western DPS Steller Sea Lions

The Steller sea lion was listed as a threatened species under the ESA on November 26, 1990 (55 FR 49204). In 1997, NMFS reclassified Steller sea lions into two DPSs based on genetic studies and other information (62 FR 24345); at that time the eastern DPS was listed as threatened and the western DPS was listed as endangered. On November 4, 2013, the eastern DPS was removed

Table 1. ESA Species Potentially Present in the Project Area.

Species	Population	Status	Agency Jurisdiction
Steller sea lion, <i>Eumetopias jubatus</i>	Western DPS	Endangered	NMFS
Humpback whale, <i>Megaptera novaeangliae</i>	W. Pacific DPS	Endangered	NMFS
	Mexico DPS	Threatened	NMFS
N. Pacific right whale, <i>Eubalaena japonica</i>	All	Endangered	NMFS
Sperm whale, <i>Physeter macrocephalus</i>	All	Endangered	NMFS
Fin whale, <i>Balaenoptera physalus</i>	All	Endangered	NMFS
Blue Whale, <i>Balaenoptera musculus</i>	All	Endangered	NMFS
Western N. Pacific gray whale, <i>Eschrichtius robustus</i>	All	Endangered	NMFS
Beluga whale, <i>Delphinapterus leucas</i>	Cook Inlet DPS	Endangered	NMFS
Northern sea otter, <i>Enhydra lutris kenyoni</i>	S.W. Alaska DPS	Threatened	USFWS
Steller's eider, <i>Polysticta stelleri</i>	All	Threatened	USFWS
Short tailed albatross, <i>Phoebastria albatrus</i>	All	Endangered	USFWS

DPS: Distinct Population Segment

NMFS designated critical habitat for Steller sea lions on August 27, 1993 (58 FR 45269). Designated critical habitat includes the following areas, as described at 50 CFR §226.202:

1. Terrestrial zones that extend 3,000 feet (0.9 km) landward from each major haulout and major rookery;

2. Air zones that extend 3,000 feet (0.9 km) above the terrestrial zone of each major haulout and major rookery in Alaska;
3. Aquatic zones that extend 3,000 feet (0.9 km) seaward of each major haulout and major rookery in Alaska that is east of 144° W longitude [not applicable to Aleutians FUDS projects];
4. Aquatic zones that extend 20 nm (37 km) seaward of each major haulout and major rookery in Alaska that is west of 144° W longitude; and
5. Three special aquatic foraging areas: the Shelikof Strait area, the Bogoslof area, and the Seguam Pass area, as specified at 50 CFR §226.202(c).

The marine waters within and offshore of Chernofski Harbor fall within the Bogoslof Foraging Area, and within the 20-nautical mile aquatic zones of several major haulouts, but there are no major haulouts, rookeries, or other Steller sea lion use areas in the vicinity of Chernofski Harbor (Figure 4; NMFS 2019). The nearest known Steller sea lion haulouts are listed in Table 2 below.

With no haulouts or rookeries present within or near Chernofski Harbor, it is presumably used by Steller sea lions mainly as a foraging area. Steller sea lions in the Aleutian Islands feed primarily on Atka mackerel, rockfish, sand lance, octopus, and other species available year around, but will adjust their foraging patterns to exploit locally and seasonally abundant species such as salmon and cod (NMFS 2008).

Table 2. Nearest Steller sea lion haulouts to Chernofski Harbor.

Haulout Name	Critical Habitat Status	Distance from Chernofski Harbor	Latitude/ Longitude
Umnak/Cape Idak	Other known haulout	13 miles NW	N53.52/W167.79
Emerald Island	Major haulout	16 miles SW	N53.29/W167.86
Polivnoi Rock	Major haulout	20 miles SW	N53.27/W167.97
Unalaska/Spray Cape	Major haulout	21 miles NE	N53.61/W167.17

Great Whales

Humpback, sperm, fin, blue, Western North Pacific gray, and Northern Pacific right whales are far-ranging species and would be encountered only incidentally by the project vessels. Of these species, only the Northern Pacific right whale has designated critical habitat in the form of two large offshore areas of the Bering Sea and Gulf of Alaska designated in 78 FR 19000, roughly 150 miles to the east of Chernofski Harbor (Figure 11). Recent guidance from the NMFS on humpback whales (NMFS 2016) discusses the three DPS of humpback whales that occur in Alaskan waters: the

Western North Pacific DPS (an endangered species under the ESA), the Mexico DPS (a threatened species), and the Hawaii DPS (not listed under the ESA). Whales from

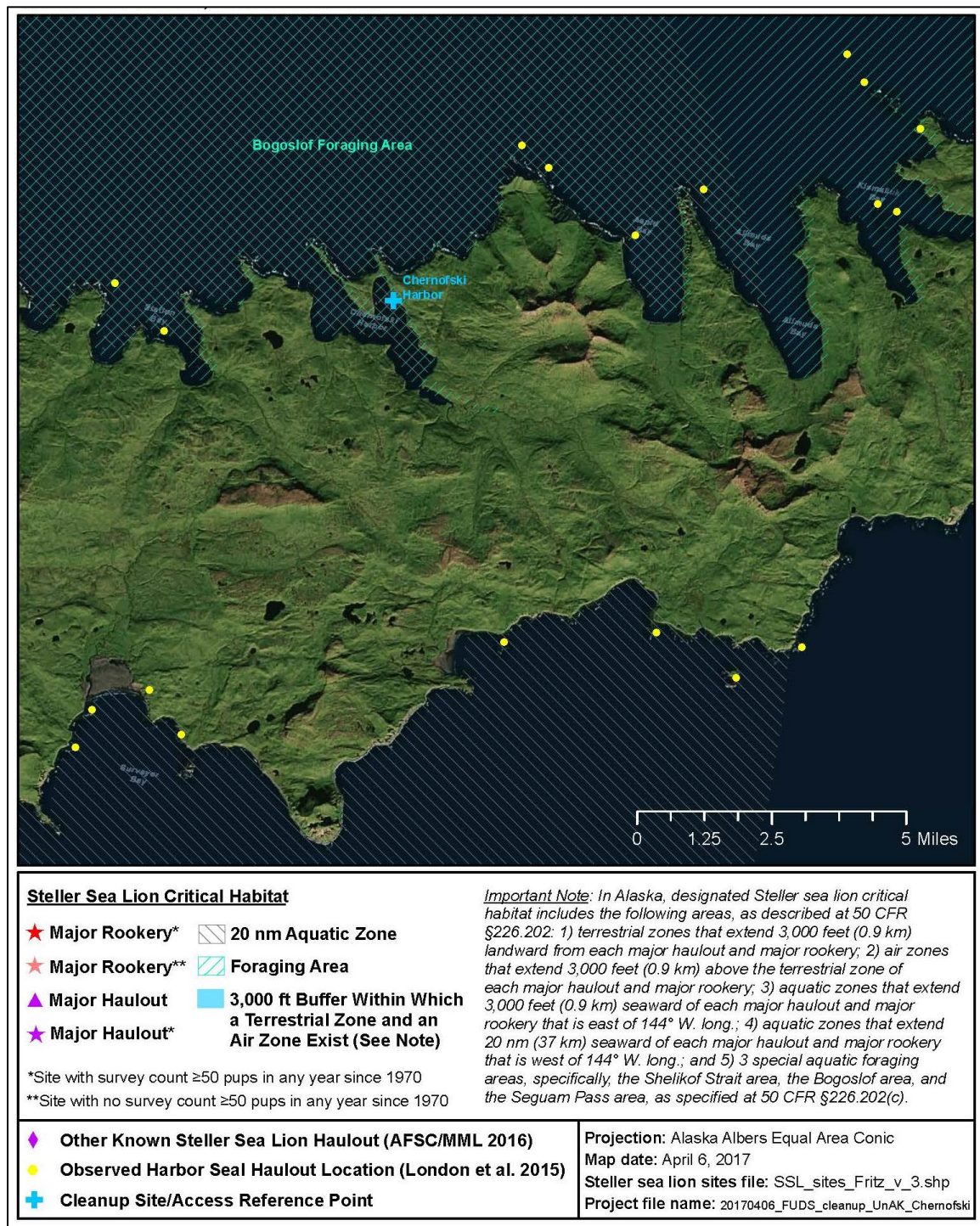


Figure 4. Steller sea lion critical habitat in the vicinity of Chernofski Harbor (NMFS 2019).

these three DPSs overlap to some extent on feeding grounds off Alaska. An individual humpback whale encountered in Aleutian waters has an 86.5 percent probability from being from the unlisted Hawaii DPS, an 11.1 percent chance of being from the threatened Mexico DPS, and a 4.4 percent chance of being from the endangered Western North Pacific DPS.

Cook Inlet Beluga Whales

This species would be encountered by ocean vessels sailing to or from Cook Inlet, and are considered by the NMFS to be within the action area of this project. NMFS began conducting comprehensive and systematic aerial surveys of Cook Inlet belugas in 1993. These surveys documented a decline in beluga abundance from 653 whales in 1994 to 347 whales in 1998. Despite cooperative efforts between NMFS and Alaska Native subsistence users, which dramatically reduced subsistence hunts, abundance data collected since 1999 indicate that the population has not increased, and the lack of population growth led the NMFS to list the Cook Inlet beluga whale as endangered under the ESA on October 22, 2008 (73 FR 62919; NMFS 2019).

NMFS designated critical habitat for the Cook Inlet beluga whale in 2011 (76 FR 20180). Critical habitat for this species is divided into two areas (Figure 5). Area 1 is the spring-through-autumn concentration area in northern Cook Inlet, and is important for calving and foraging. Area 2 consists of known fall and winter use dispersed through a larger area of Cook Inlet (NMFS 2019).

Northern Sea Otter

In Alaska there are three stocks of northern sea otters—the Southwest stock, the Southcentral stock, and the Southeast stock. The Southwest stock, which includes otters in the Aleutian Archipelago, the Alaska Peninsula, and Kodiak Island, and was listed as threatened under the ESA by the USFWS in 2005.

Northern sea otter critical habitat designated by the USFWS includes coastal Bay of Islands waters. The critical habitat final rule also identified four primary constituent elements (PCEs) for sea otter habitat:

1. Shallow, rocky areas where marine predators are less likely to forage, which are waters less than 2 meters (6.6 ft) in depth.
2. Near-shore waters that may provide protection or escape from marine predators, which are those within 100 meters (328.1 ft) from the mean high tide line.
3. Kelp forests that provide protection from marine predators, which occur in waters less than 20 meters (65.6 ft) in depth.

4. Prey resources within the areas identified by PCEs 1, 2, and 3 that are present in sufficient quantity and quality to support the energetic requirements of the species.

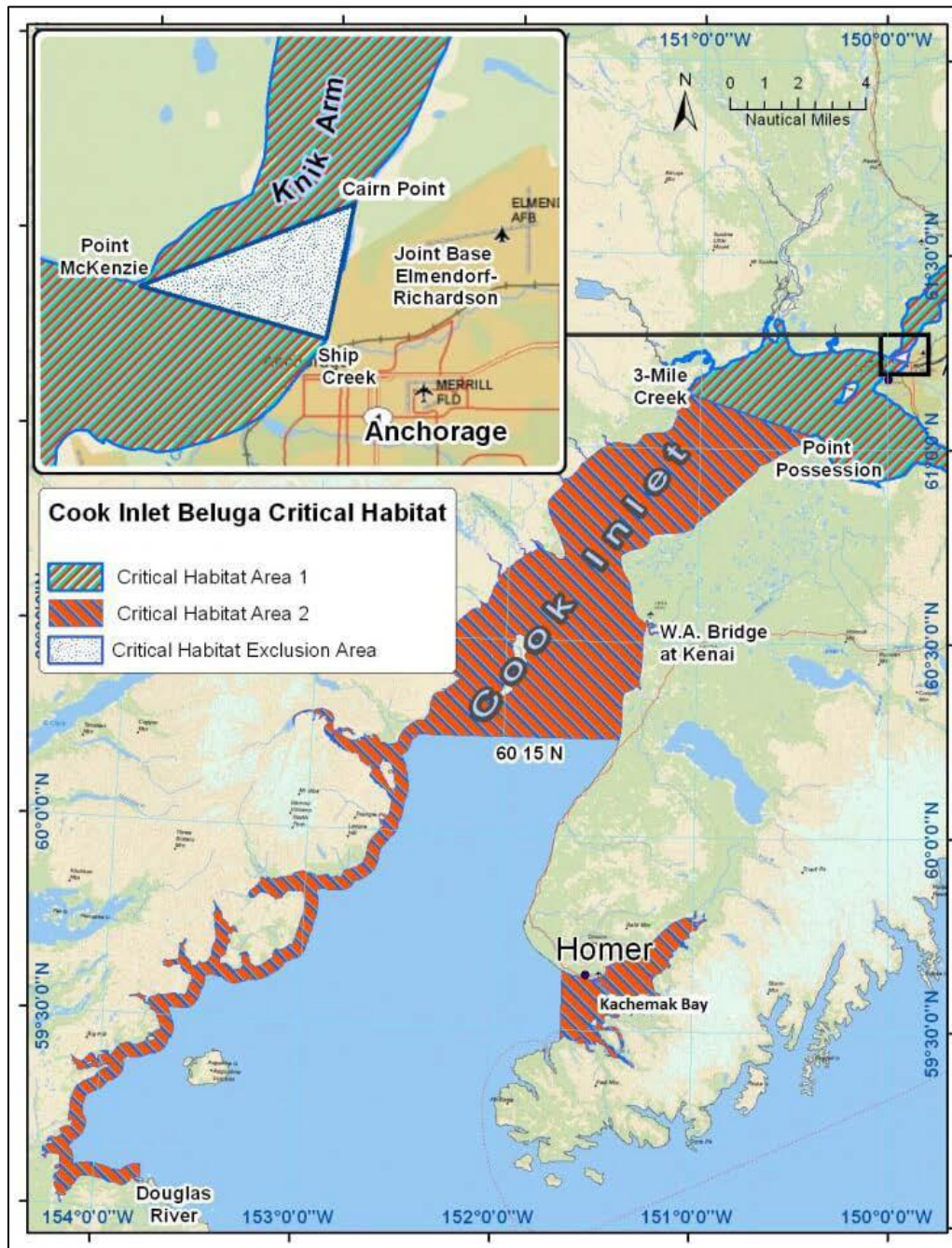


Figure 5. Designated Cook Inlet beluga critical habitat (NMFS 2019).

Steller's Eider

This species of sea duck winters in coastal waters along the Aleutian Islands and Alaska Peninsula, but nests in northeastern Siberia and limited areas of mainland Alaska and would not be present at Unalaska Island during the spring-summer project activities.

Short-tailed Albatross

Short-tailed albatrosses breed on several small islands off the coast of Japan, but range across much of the North Pacific Ocean as adults and sub-adults. In the marine environment, the species tends to concentrate in regions along the break of the continental shelf, where upwelling and high primary productivity result in zones of abundant food resources, namely squid and pelagic fishes. The short-tailed albatross may be found in near-shore waters but commonly only where such up-wellings occur near the coast. No critical habitat is currently designated for this species (USFWS 2008).

3.6.2 Marine Mammals Protection Act

The MMPA provides protection for all whales, dolphins, porpoises, seals, sea lions, and sea otters, regardless of a species' listing under the ESA. The NMFS ESA/MMPA mapper website (NMFS 2017c) identifies harbor seal, northern fur seal, ribbon seal, Dall's porpoise, harbor porpoise, killer whale, Minke whale, Pacific white-sided dolphin, Baird's beaked whale, and Stejneger's beaked whales as non-ESA marine mammals that potentially may be found within or offshore Chernofski Harbor.

3.6.3 Migratory Bird Treaty Act

Except for the state-managed ptarmigan and grouse species, all native birds in Alaska (including active nests, eggs, and nestlings) are protected under the Federal Migratory Bird Treaty Act (MBTA; USFWS 2009).

3.6.4 Bald and Golden Eagle Protection Act

This Act prohibits takings such as killing eagles or destroying nests, as well as regulates human activity or construction that may interfere with eagles' normal breeding, feeding, or sheltering habits (USFWS 2011). In the absence of trees, bald eagles in the Aleutian Islands typically nest at the tops of sea-stacks or cliffs (Byrd & Williams 2008), both of which exist near the project site. No bald eagle nests were noted by field personnel during the 2017 SI, although bald eagles may be seen foraging anywhere along the Unalaska Island coast.

3.6.5 Anadromous Streams and Essential Fish Habitat

The Alaska Department of Fish and Game (ADFG) identifies in its Anadromous Waters Catalog (AWC; ADFG 2021) two anadromous streams flowing into Chernofski Harbor (Figure 6). Coho and pink salmon reportedly spawn in these streams. The FUDS project area is well away from and in a different watershed than the cataloged anadromous streams.

The marine waters in and near Chernofski Harbor are within areas designated by the NMFS under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) as essential fish habitat (EFH) for all five species of Pacific salmon (Chinook, coho, sockeye, chum, and pink salmon) and numerous Bering Sea groundfish species such as northern rockfish, rock sole, sculpin, walleye pollack, skate, and squid.

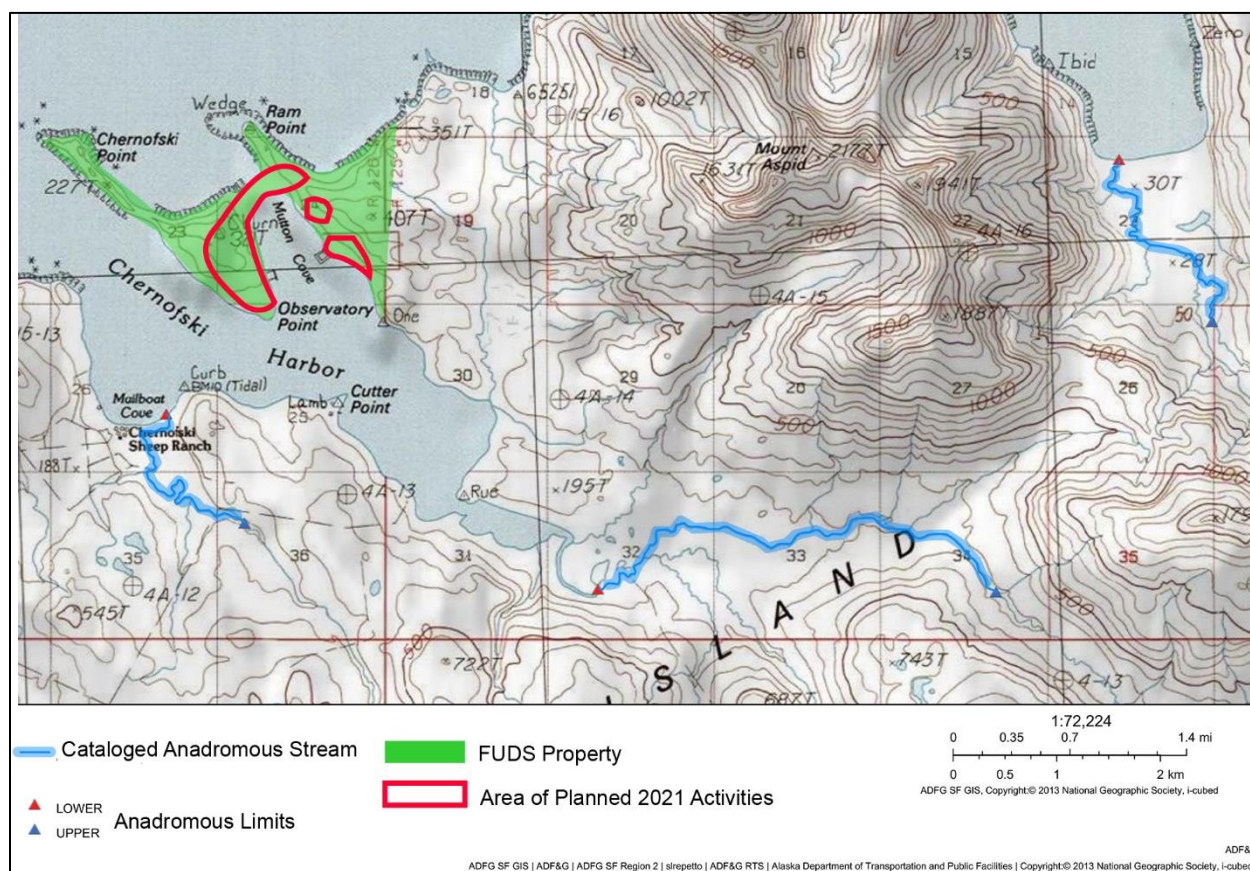


Figure 6. Anadromous streams near Chernofski Harbor (ADFG 2021).

3.7 Special Aquatic Sites

Special aquatic sites, identified as part of the Clean Water Act, are waters of the U.S. possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally

recognized as significantly influencing or positively contributing to the general environmental health or vitality of the entire ecosystem of a region. The following ecosystems are considered to be special aquatic sites:

- Wetlands
- Coral reefs
- Sanctuaries and refuges
- Mudflats
- Vegetated shallows
- Riffle and pool complexes (in freshwater streams)

The project area has not been delineated for wetlands, but the vegetated areas at the project site are presumed to be wetlands, based on similar delineated habitat elsewhere in the Aleutian Islands.

3.8 Cultural and Historic Resources

The proposed activities have a large Area of Potential Effect (APE) for cultural resources. Comparison of proposed investigation and removal action locations with the Alaska Heritage Resources Survey (AHRs) indicates that the APE encompasses 32 historic properties and is in the general vicinity of 18 other cultural resources. There are eight precontact sites in the Mutton Cove area, including the multicomponent Chernofski Village Site (UNL-00034), the largest archaeological site in the region and possibly one of the largest sites in the Aleutian Islands. The UNL-00034 site designation encompasses both the historic village that was occupied until 1928 and the ancient village area, which is comprised of a large midden mound with semisubterranean house depressions. Radiocarbon dates produced from an archaeological excavation conducted in 2019 suggest that the Chernofski Village Site was inhabited for more than three thousand years. In addition to the multiple Unanga⁸ cultural resources, the numerous former structures and other features of the WWII-era military operations at Chernofski Harbor are considered to be historic properties.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 No-Action Alternative

The no-action alternative would avoid the short-term disruptions to the local environment that would be caused by the operation of heavy equipment and excavation of soil. However, the contaminated soil and waste materials would remain in place, where it will continue to present a physical hazard and potentially allow the migration of chemical contaminants to the nearby environment.

4.2 Action Alternative (Preferred)

Under the preferred alternative, contaminated soils and waste materials would be removed from the site as described in Section 2.4. The potential environmental consequences are discussed in the sections below.

Within each resource category, the magnitude of the effects upon that resource are evaluated using these criteria (where relevant) and best professional judgment, and tiered as follows (Doub 2014):

- Minor: effects are not detectable or are so minor that they would neither destabilize nor noticeably alter any important attribute of the resource.
- Moderate: effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource.
- Major: Environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

4.2.1 Effects on Community and Land Use

The project site and surrounding areas are uninhabited, except for the seasonal sheep workers described in Section 3.1. The cleanup of waste and contaminated soil would make the project site somewhat more safe for people and human activities, but the FUDS remediation project does not include the demolition and removal of the large, deteriorating former military structures at the site, and is therefore unlikely to directly encourage further development of the area.

The magnitude of effects of the proposed activities on community and land use would be minor.

4.2.2 Effects on Climate

The proposed activities would be too limited in physical scope or duration to have any discernable effect on climate; the magnitude of effects would be minor.

4.2.3 Effects on Topography, Soils, and Hydrology

The small areas of excavation and backfill will not significantly alter the area topography or patterns of overland water flow in the area; the magnitude of effects would be minor.

4.2.4 Effects on Air Quality and Noise

Air quality may be affected during the project period from the use of construction equipment, vehicles, vessels, and generators. The USACE assesses that any increase in pollutant emissions caused by the project would be transient, highly localized, and would dissipate entirely at the completion of the project. The area is not in a CAA “non-

attainment” area, and the conformity determination requirements of the CAA would not apply to the proposed project at this time. The magnitude of effects on air quality would be minor.

The project activities would likely generate airborne noise higher than ambient levels for the project area, which may be noticeable to wildlife or any people in the area. Any disturbances would be short-lived and sporadic. The magnitude of effects from increased airborne noise would be, at worst, moderate.

4.2.5 Effects on Habitat and Wildlife

The planned activities would be highly localized in their impacts and affect an area already altered by the former military construction and past cleanup efforts. The activities would have little effect on local wildlife and no long-term negative impact on their habitat. The project sites are surrounded by areas of similar, higher-quality habitat, and any wildlife displaced from the project area by noise and activity should be able to quickly resume their natural behavior. Ground-nesting birds are likely to be the most vulnerable animal species at the site. The destruction of active nests, eggs, or nestlings is a violation of the Migratory Bird Treaty Act (MBTA), and the field workers will need to check project areas for nests or evidence of nests (e.g., adult birds acting agitated but staying in the immediate area; distraction displays such as wing-dragging).

The magnitude of effects of project activities on habitat and wildlife would be moderate.

4.2.6 Effects on Protected Species

4.2.6.1 Effects on Endangered and Threatened Species

All ESA-listed species that may be found in the project “action area” would be expected to be present in the marine environment, whether marine mammals or migratory birds. The action area is defined in the ESA regulations (50 CFR 402.02) as the area within which all direct and indirect effects of the project will occur. The action area is distinct from and larger than the project footprint because some elements of the project may affect listed species some distance from the project footprint. The action area, therefore, extends out to a point where no measurable effects from the project are expected to occur.

For this proposed action, the major potential adverse effects to marine species would be:

- Underwater noise and disturbance.
- Physical strikes by water vessels.

Noise and Disturbance

For marine mammals, the distance that potentially disturbing sounds can carry underwater are an important component of the action area. Since 1997, the National Marine Fisheries Service (NMFS) has used generic sound exposure thresholds to determine whether an activity produces underwater sounds that might result in impacts to marine mammals (70 FR 1871). NMFS recently developed comprehensive guidance on sound levels likely to cause injury to marine mammals through onset of permanent and temporary threshold shifts (PTS and TTS; Level A harassment) (81 FR 51693). NMFS is in the process of developing guidance for behavioral disruption (Level B harassment). However, until such guidance is available, NMFS uses the following conservative thresholds of underwater sound pressure levels expressed in root mean square (rms), from broadband sounds that cause behavioral disturbance, and referred to as Level B harassment under section 3(18)(A)(ii) of the Marine Mammal Protection Act (MMPA):

- impulsive sound: 160 dB re 1 $\mu\text{Pa}_{\text{rms}}$
- continuous sound: 120 dB re 1 $\mu\text{Pa}_{\text{rms}}$

In addition, NMFS uses a threshold of 100 dB re 20 $\mu\text{Pa}_{\text{rms}}$ for in-air sounds that cause Level B behavioral disturbance to non-harbor seal pinnipeds.

NMFS defines the action area for these projects to include the project cleanup site, and the vessel transit route between Anchorage and the project cleanup landing site, bounded by a 2 kilometer (km) (1 nautical mile [nm]) buffer on each side of the route. For the buffers around vessel routes, we relied on empirical measurements of vessel noise from Cook Inlet (Blackwell and Greene 2003), which suggest that received sound levels associated with project vessels would be expected to decline to 120 dB re 1 $\mu\text{Pa}_{\text{rms}}$ within 2 km of the source.

Although the exact routes of project vessels cannot be precisely specified, as they are based on sea conditions at the time of passage, we assume that the vessels will follow standard commercial shipping routes, depicted in Figures 7, 8, and 9 (NMFS 2019).

The standard commercial shipping routes through Cook Inlet travel through Cook Inlet beluga whale critical habitat. Once leaving Cook Inlet, it is likely that a large portion of the route will be within Steller sea lion critical habitat and will pass numerous Steller sea lion haulouts and rookeries. The vessels will likely travel through the Shelikof Strait Steller sea lion designated special foraging area. Although the vessels are less likely to travel east and south of Kodiak Island, if weather conditions necessitate that the vessels takes this route, it is possible that the vessels would transit through the Gulf of Alaska

portion of North Pacific right whale critical habitat. If the vessels travel along typical shipping routes through Unimak Pass and travel north of the Aleutian Islands, the transit route would likely be through the Bogoslof and Seguam Pass designated Steller sea lion special foraging areas (NMFS 2019).

Vessel Strikes

The probability and severity of strike events depends on the frequency, speed, and route of the marine vessels, as well as the distribution of marine mammals in the area. An analysis of ship strikes in Alaskan waters (Neilson et al. 2012) found that whale mortalities are more likely when large vessels travel at speeds greater than 12 knots. Another study (Vanderlaan and Taggart 2007) used observations to develop a model of the probability of lethal injury based upon vessel speed, projecting that the chance of lethal injury to a whale struck by a vessel is approximately 80 % at vessel speeds over

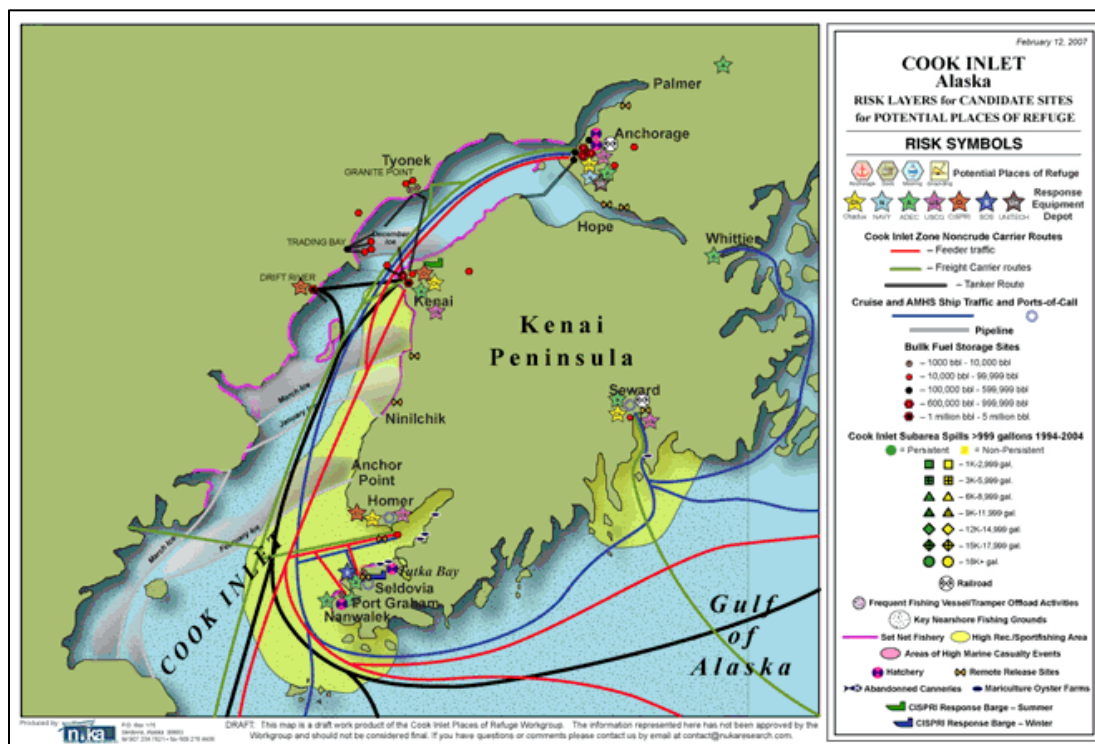


Figure 7. Map showing typical feeder traffic, tanker, and freight carrier routes through Cook Inlet.

15 knots, but approximately 20% at 8.6 knots. The relatively low speed of a typical ocean-going barge and tug (typically no more than 9 knots), together with a barge's blunt prow and shallow draft, make it far less likely to strike and inflict injury upon a marine mammal than larger, faster ocean-going vessels such as cruise ships and cargo ships. The limited maneuverability and long stopping-distance of a barge and tug would

make it difficult for the vessels to avoid an observed marine mammal, and in many circumstances, unsafe for them to attempt to do so. Conversely, however, the vessels' low speed and consistent course would enable marine mammals to avoid the path of the barge and tug well before there was a danger of collision.

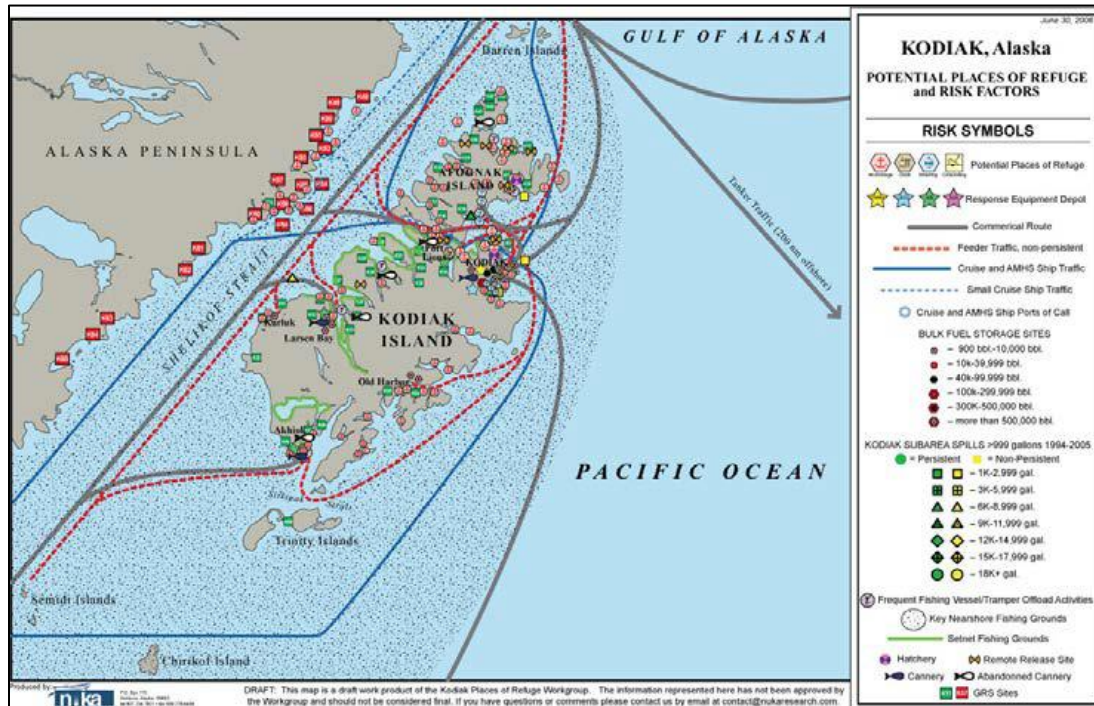


Figure 8. Map showing commercial shipping routes (gray lines), feeder traffic (dashed red lines) and cruise ship and Alaska Marine Highway System (AMHS) traffic (blue lines) through Shelikof Strait (NMFS 2019).

The following avoidance and minimization measures will be followed to reduce the risk of adverse effects on endangered and threatened species (NMFS 2019).

Vessel Transit

1. Consistent with safe navigation, project vessels will avoid travelling within 3 nm of any of Steller sea lion rookeries or major haulouts (to reduce the risks of disturbance of Steller sea lions and collision with protected species).
2. If travel within 3 nm of major rookeries or major haulouts is unavoidable, vessels will reduce speed to 9 knots (10 miles per hour [mph]) or less while within 3 nm of those locations.
3. Vessels and barges will not allow tow lines to remain in the water, and no trash or other debris will be thrown overboard, thereby reducing the potential for marine mammal entanglement.

4. The transit route for the vessels will avoid known Steller sea lion biologically important areas and designated critical habitat to the extent practicable.

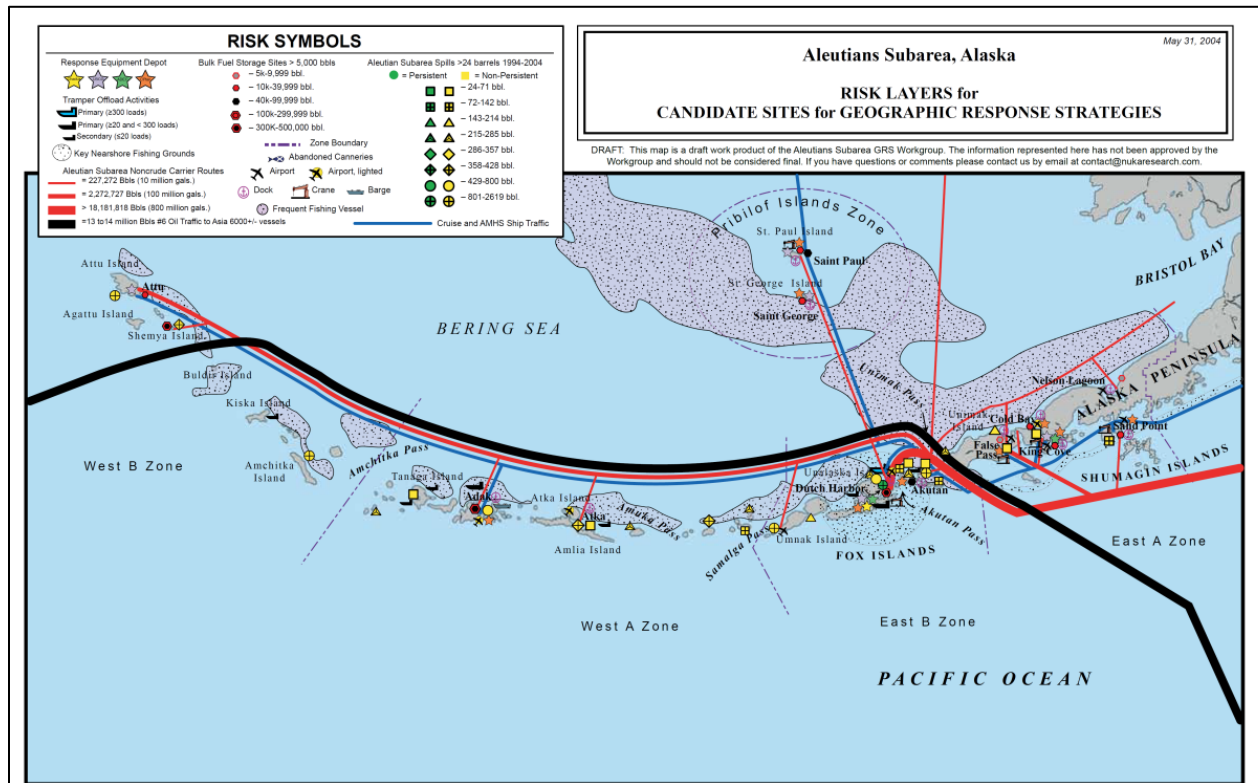


Figure 9. Map showing vessel transit routes for tankers (red and black lines), cruise ships, and the AMHS ferry (blue line).

6. Vessels may not be operated in such a way as to separate members of a group of marine mammals from other members of the group.
7. If a vessel approaches within 1.6 km (1 mi) of observed whales, except in emergency situations, the vessel operator will take reasonable precautions to avoid potential interaction with the whales by taking one or more of the following actions, as appropriate:
 - a. Steering around the whale(s) if possible.
 - b. Reducing vessel speed to less than 5 knots (9 km/hour) and avoiding changes in direction and speed within 300 m (1000 ft) of the whale(s).
 - c. Checking the waters immediately adjacent to the vessel(s) to ensure that no whales will be injured when the propellers are engaged.
8. Consistent with NMFS marine mammal viewing guidelines (<https://alaskafisheries.noaa.gov/pr/mm-viewing-guide>), operators of vessel

should, at all times, avoid approaching marine mammals within 100 m (100 yards) of whales to avoid whale disturbance.

9. Vessels should take reasonable steps to alert other vessels in the vicinity of whale(s), and report any stranded, dead, or injured listed whale or pinniped to the Alaska Marine Mammal Stranding Hotline at 877-925-7773.
10. When transiting through Cook Inlet, project vessels will maintain a distance of at least 1.5 miles from the mean lower low water (MLLW) line of the Susitna Delta (MLLW line between the Little Susitna River and Beluga River; see Figure 5 below).
11. Vessels will avoid transit within North Pacific right whale critical habitat (Figure 11) to the extent practicable. If transit within North Pacific right whale critical habitat cannot be avoided:
 - a. Vessel operators must reduce speed to 10 knots (kts) (19 km/hour) and exercise caution while within North Pacific right whale critical habitat.
 - b. Vessels will maneuver to keep at least 800 m (875 yards) away from any observed North Pacific right whale, and avoid approaching whales head-on (consistent with vessel safety).
 - c. Vessels transiting through North Pacific right whale critical habitat must have Protected Species Observers (PSOs) actively engaged in sighting marine mammals. PSO requirements and procedures are presented in Enclosure 1 to this letter.
 - d. A PSO is not required if vessels reduce speed to 5 kts while within North Pacific right whale critical habitat.

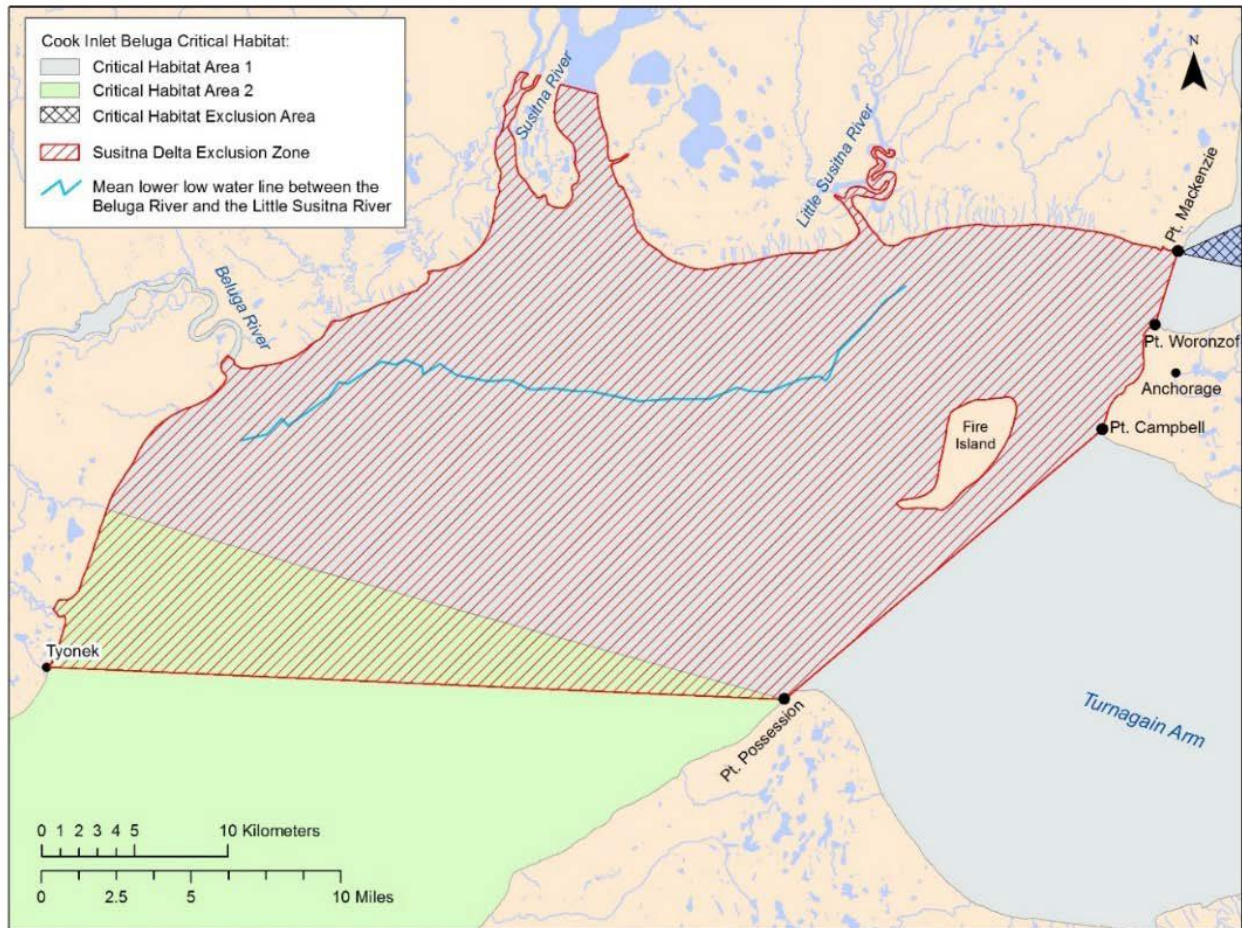


Figure 10. Susitna Delta Exclusion Zone, showing MLLW line between the Beluga and Little Susitna Rivers.

12. Although take is not authorized, if a listed marine mammal is taken (e.g., struck by a vessel), it must be reported to NMFS within 24 hours. The following will be included when reporting take of a listed species:
 - a. Number of listed animals taken.
 - b. The date, time, and location of the take.
 - c. The cause of the take (e.g., vessel strike).
 - d. The time the animal(s) was first observed and last seen.
 - e. Mitigation measures implemented prior to and after the animal was taken.
 - f. Contact information for PSO, if any, at the time of the collision, ship's Pilot at the time of the collision, or ship's Captain.

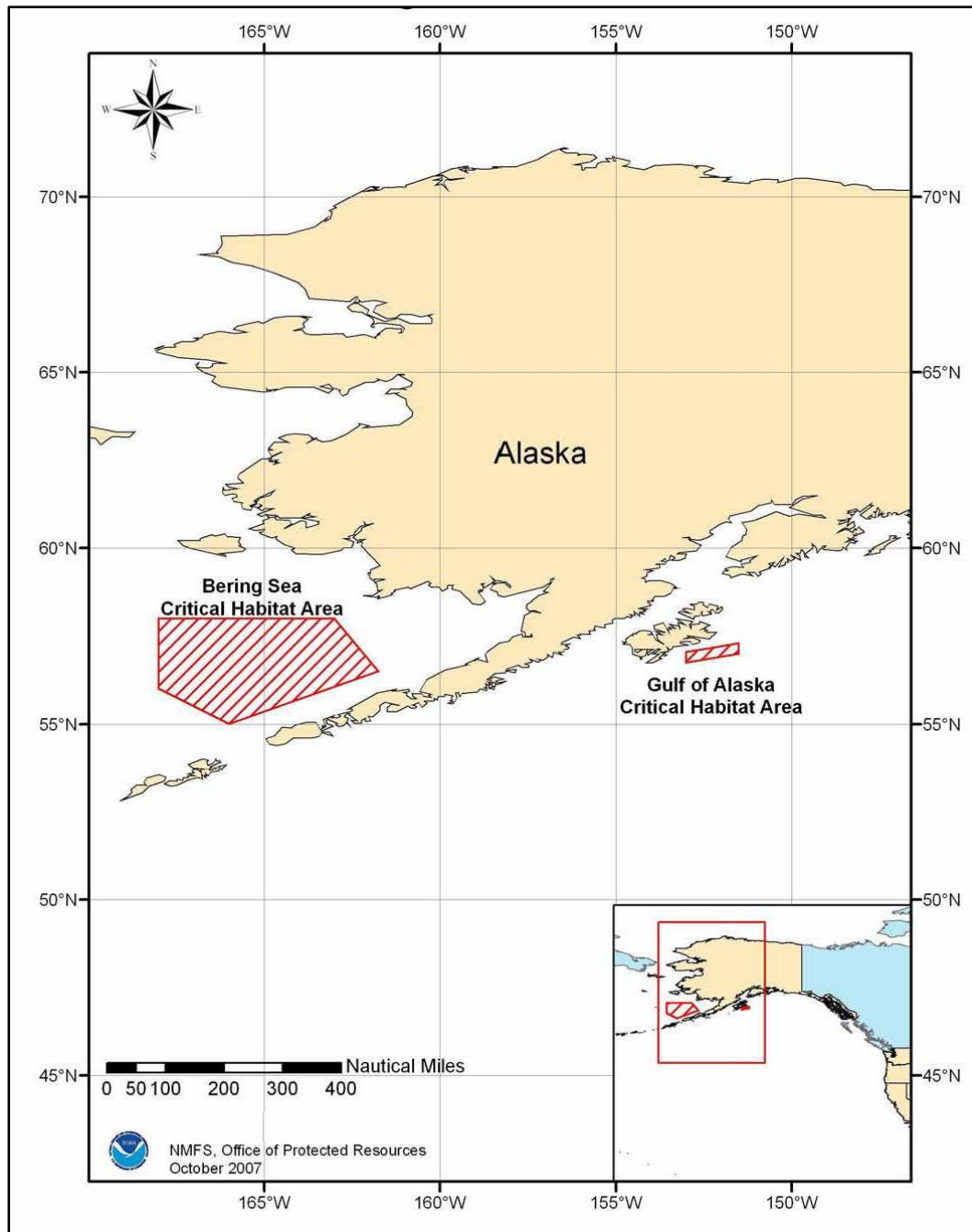


Figure 11. North Pacific right whale critical habitat areas.

13. Small, maneuverable watercraft such as skiffs have a greater risk of harming or disturbing sea otters and other small, nearshore marine mammals than large, slow-moving vessels. If skiffs are used during the Chernofski Harbor project, the USACE will require its contractors to adopt USFWS guidance for small craft operators, as presented in the USFWS 2009 "Skiff Operation Guidance to Avoid Disturbing Sea Otters":

- a. While operating skiffs in near-shore areas, scan the water surface ahead of the boat vigilantly for otters. In choppy water conditions sea otters are difficult to spot. If you are boating with another person, place them in the bow to help search. You may encounter otters as individuals, a mother and a pup, or rafts of 10 or more.
- b. When you see an otter(s), alter your course and slow down to avoid disturbance and collision. Once you have spotted an otter(s), you should not assume that the otter(s) will dive and get out of the way. Even if they are alert, capable, and do dive, your action of knowingly staying your course would be considered harassment.
- c. Do not operate a skiff at any rate of speed heading directly at the otter(s). A good rule of thumb is that your buffer should be great enough that there is ample room for the otter(s) to swim away without startling them. It is your responsibility to minimize the stimulus and threat of a loud boat approaching quickly.
- d. The more otters you see, the wider the berth you need to give. Also, do not pass between otters, but rather go around the outside perimeter, plus add a buffer.

With the avoidance and minimization steps outlined above, the USACE determines that the project activities may affect, but are not likely to adversely affect the following ESA-listed species or any designated critical habitat:

- Steller sea lions (Western DPS)
- Humpback whales (Western Pacific and Mexico DPSs)
- North Pacific right whales
- Western North Pacific gray whales
- Fin whales
- Blue whales
- Sperm whales
- Beluga whales (Cook Inlet DPS)
- Northern sea otter (Southwest Alaska DPS).

The USACE received concurrence with these determinations from the NMFS for this project site in 2019, and from the USFWS in 2018. Both the NMFS and the USFWS will receive a copy of this EA for review, and be notified of the actions at Chernofski Bay in 2022.

The USACE assesses the probability of the project vessels encountering, let alone affecting, the rare and widely dispersed short-tailed albatross to be very low. The USACE determines that the project activities will have no effect on short-tailed albatross.

The USACE determines that the project will have no effect on Steller's eiders, as they are not expected to be present during the summer.

Overall, the magnitude of effects of project activities on endangered and threatened species would be minor to moderate.

4.2.6.2 Effects on Marine Mammals

The anticipated effects on cetaceans or pinnipeds not listed under the ESA (section 3.9.2.2), are expected to be the same as described above for the ESA-listed marine mammals. The same avoidance and minimization measures as described in Section 2.6.3 would apply for any whales, porpoises, dolphins, sea lions, or seals.

The USACE determines that the action will not result in a taking under the Marine Mammal Protection Act. The magnitude of effects of project activities would be minor to moderate.

4.2.6.3 Effects on Migratory Birds

The USACE determines that the proposed activities are unlikely to result in the killing of a migratory bird, or destruction of an active nest. The magnitude of effects of project activities on migratory birds would be minor.

4.2.6.4 Effects on Eagles

Nesting eagles are not expected at the project site, especially not in the low-relief, treeless terrain bordering Chernofski Bay. A few transient adult bald eagles may be seen from the project area, but the USACE anticipates a very low risk of a taking under the Bald and Golden Eagle Protection Act. The magnitude of effects of project activities would be minor.

4.2.7 Effects on Essential Fish Habitat and Anadromous Streams

The USACE determines that the proposed activity will not alter or adversely affect marine or freshwater EFH, with the adoption of the mitigatory measures detailed in Section 2.4. The magnitude of effects of project activities would be minor.

4.2.8. Effects on Special Aquatic Sites

The project areas (Figure 2) have not been delineated for jurisdictional wetlands, but wetlands are presumed to be present. Much of the area to be excavated to remove contaminated soils consists of fill placed during construction of the facilities, which would not be wetlands. Where backfill is placed in excavations that have extended into wetlands, that fill would constitute a discharge under Section 404 of the Clean Water Act (CWA; see Section 5.1).

The removal of chemical contaminants from the project site is a remedial action in its own right that benefits the overall environment, and the USACE does not intend to

mitigate for or attempt to restore the small, discontinuous areas of wetlands that may be lost in the course of the project excavation and backfilling activities.

The magnitude of effect of project activities on special aquatic sites would be minor.

4.2.9 Effects on Cultural and Historic Resources

The proposed removal action described in this EA will impact the Chernofski Harbor World War II Historic District (UNL-00235) and 21 of its contributing properties, the Chernofski Village Site (UNL-00034), and UNL-00160. The USACE determined that this project will have an adverse effect on historic properties on 6 January 2021, and the Alaska State Historic Preservation Officer (SHPO) concurred on 5 March 2021 (USACE 2021a, SHPO 2021).

Per Section 106 of the National Historic Preservation Act, the USACE found that the proposed removal actions described in this EA would exceed the level of adverse effect identified during previous consultation and resolved in a 2018 *Memorandum of Agreement among the U.S. Army Corps of Engineers, Alaska State Historic Preservation Officer, Tanadgusix Corporation, Cora Holmes, and the Russian Diocese of Alaska regarding FUDS Removal Actions at Chernofski Harbor, Unalaska Island* (USACE et al. 2018). The 2018 Memorandum of Agreement (MOA) was amended in consultation with multiple signatories, invited signatories, and concurring parties to identify appropriate mitigation measures to resolve this project's adverse effects. The Amended MOA was executed in November 2021 (USACE et al. 2021).

The magnitude of effect of project activities on cultural resources has the potential to be major; however, these adverse effects will be resolved through the Amended MOA (USACE et al. 2021).

4.2.10 Effects on Environmental Justice and Protection of Children

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations was issued in 1994. The purpose of the order is to avoid disproportionate adverse environmental, economic, social, or health effects from federal activities on minority and low-income populations.

The USACE anticipates no disproportionate adverse effects on minority or low-income populations, as no definable population exists in the project areas.

On April 21, 1997, Executive Order 13045, Protection of Children from Environmental Health and Safety Risks, was issued to identify and assess environmental health and safety risks that may disproportionately affect children.

There are no children in the project area. The USACE anticipates no disproportionate health or safety risks to children as a result of the agency's preferred alternative.

5.0 REGULATORY COMPLIANCE AND AGENCY COORDINATION

5.1 Compliance with Laws and Regulations

National Environmental Policy Act. This EA and unsigned Finding of No Significant Impact (FONSI) were prepared using information gathered during iterations of this project, and the most recent correspondence with state and federal resource agencies. Per the NEPA process and USACE regulations and guidance, the EA and unsigned FONSI are subject to a public review period. If requested, a public meeting may be held to discuss project alternatives and ask for public views and opinions.

Clean Water Act. Where backfill is placed in excavations that have extended into wetlands, that fill would constitute a discharge under Section 404 of the Clean Water Act (CWA). The USACE, which is the enforcement authority for Section 404, does not issue itself CWA permits for its activities. However, the USACE incorporates by reference (in accordance with 40 CFR 1502.21) the analyses under NEPA and CWA Section 404(b)(i) performed for the issuance of Nationwide Permit No. 38, "Cleanup of Hazardous and Toxic Waste": "Specific activities required to effect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority." The State of Alaska certified the full list of Nationwide Permits (NWP) issued by the USACE in 2021 so no separate Section 401 Certificate of Reasonable Assurance is required for the Chernofski Bay, which falls within the scope and intent of NWP No. 38. The Pre-Construction Notification (PCN) required under General Condition 31 to this NWP does not apply to this project, as the USACE is adopting the analysis behind the NWP and not the permit itself.

Endangered Species Act. The USACE initiated informal consultation for the Chernofski FUDS project under the ESA in 2017, with both the NMFS (USACE 2017a) and the USFWS (USACE 2017b). The agencies responded with letters concurring with the USACE determinations of "may affect but not likely to adversely affect" on ESA-listed species, as discussed in Section 4.2.6.1 above (NMFS 2017; USFWS 2017)

Magnuson-Stevens Fisheries Conservation and Management Act. The USACE has reviewed information on EFH in the project area, and has made the determination that the planned activities would have no adverse effect on EFH. No further coordination is required, but NMFS Habitat Division will have the opportunity to review this EA.

National Historic Preservation Act. Impacts to historic properties caused by the on-going environmental cleanup at Chernofski Harbor, and measures to mitigate those impacts, were identified in the 2018 MOA (USACE et al. 2018). However, the proposed removal action described in this EA would exceed the level of adverse effect identified during earlier consultation. An additional 21 historic properties which contribute to the significance of the Chernofski Harbor World War II Historic District are expected to be impacted by the proposed undertaking. Additionally, the proposed undertaking is expected to have an adverse effect on UNL-00160. The USACE informed the SHPO of this determination of adverse effect in a letter dated 6 January 2021, and the SHPO concurred with the USACE in a letter dated 5 March 2021. Consequently, an Amended MOA (USACE, *et al* 2021) has been executed to identify appropriate mitigation measures to resolve the adverse effects.

Executive Order 13175, Consultation and Coordination with Indian Tribal Governments. E.O. 13175 requirements are not explicitly relevant to this project, as other regulatory venues have been used to address Alaska Native interests and concerns. The USACE has pursued extensive consultation with two Federally recognized Tribes (Aleut Community of St. Paul Island, Qawalangin Tribe of Unalaska), two ANCSA village corporations (Tanadgusix Corporation, Ounalashka Corporation), and two ANCSA regional corporations (Aleut Corporation, Aleutian Pribilof Islands Association) under Section 106 of the NHPA. In addition, the USACE has obtained rights-of-entry from the Tanadgusix Corporation landowners.

Coastal Zone Management Act. Alaska withdrew from the voluntary National Coastal Zone Management Program on July 1, 2011. Within the State of Alaska, the Federal consistency requirements under the Coastal Zone Management Act do not apply to federal agencies, those seeking forms of federal authorization, and state and local government entities applying for federal assistance.

A checklist of project compliance with relevant Federal, state, and local statutes and regulations is shown in Table 3.

6.0 CONCLUSION

The completed Environmental Assessment supports the conclusion that the proposed action does not constitute a major federal action significantly affecting the quality of the human and natural environment. An environmental impact statement (EIS) is therefore not necessary for the agency's preferred alternative, and the prepared Finding of No Significant Impact (FONSI) may be signed.

Table 3. Environmental Compliance Checklist

Law	Compliance
Federal	
Clean Air Act	Fully Compliant
Clean Water Act	Fully Compliant
Coastal Zone Management Act	Not Applicable
Endangered Species Act	Fully Compliant
Estuary Protection Act	Fully Compliant
Federal Water Project Recreation Act	Fully Compliant
Fish & Wildlife Coordination Act	Not Applicable
National Environmental Policy Act	Partially Compliant*
Land and Water Conservation Fund Act	Fully Compliant
Marine Protection, Research & Sanctuaries Act	Not Applicable
National Historic Preservation Act	Fully Compliant
River and Harbors Act	Fully Compliant
Magnuson-Stevens Fishery Conservation & Management Act	Fully Compliant
Marine Mammal Protection Act	Fully Compliant
Bald Eagle Protection Act	Fully Compliant
Watershed Protection and Flood Preservation Act	Fully Compliant
Wild & Scenic Rivers Act	Not Applicable
Executive Order 11593, Protection of Cultural Environment	Fully Compliant
Executive Order 11988, Flood Plain Management	Fully Compliant
Executive Order 11990, Protection of Wetlands	Fully Compliant
Executive Order 12898, Environmental Justice	Fully Compliant
Executive Order 13045, Protection of Children	Fully Compliant
Executive Order 13175, Consultation and Coordination with Indian Tribal Governments	Fully Compliant
State & Local	
State Water Quality Certification	Fully Compliant
Alaska Statute 16.20.500 Critical Habitat Areas	Fully Compliant
Alaska Coastal Management Program	Not Applicable

*Full compliance will be attained upon the signing of the FONSI

7.0 DOCUMENT PREPARATION

This Environmental Assessment was prepared by Chris Floyd and Kelly Eldridge of the Environmental Resources Section, Alaska District, U.S Army USACE of Engineers.

8.0 REFERENCES

- Alaska Department of Commerce, Community, and Economic Development (ADCCED). 2021. Community Database Online website:
<https://www.commerce.alaska.gov/dcra/DCRAExternal/community>
- Alaska Department of Fish and Game (ADFG). 2021. Anadromous Fish Distribution Database: <http://www.sf.adfg.state.ak.us/SARR/AWC/index.cfm/FA/maps.interactive>.
- Alaska Office of History and Archaeology (AOHA). Letter dated 5 March 2021, subject: Continued FUDS Actions and Chernofski Harbor, Unalaska.
- Byrd, Vernon and Williams, Jeffrey. 2008. Distribution and Status of Bald Eagles in the Aleutian Islands. USFWS.
- Doub, J. P. 2014. Uses of Tiered Significance Levels in NEPA Documents [unpublished capstone paper]. Duke University.
- National Marine Fisheries Service (NMFS). 2019. Letter of Concurrence for proposed FUDS 2019 Cleanup activities in the Aleutian Islands (NMFS # AKRO-2019-00405). 8 May 2019.
- National Marine Fisheries Service (NMFS). 2021a. ESA/MMPA Mapper website:
<http://alaskafisheries.noaa.gov/mapping/esa/>.
- NMFS. 2021b. National Essential Fish Habitat Mapper:
<http://www.habitat.noaa.gov/protection/efh/efhmapper/index.html>
- NMFS. 2008. *Recovery Plan for the Steller Sea Lion*, Eastern and Western Distinct Population Segments (*Eumetopias jubatus*), Revision, National Marine Fisheries Service, National Oceanic and Atmospheric Administration. March 2008.
- Neilson, Janet, *et al.* 2012. Summary of Reported Whale-Vessel Collisions in Alaska Waters, *Journal of Marine Biology*, Vol. 2012, Article ID 106282. October 2012.
- Peterson, Richard S. 1967. The Land Mammals of Unalaska Island: Present Status and Zoogeography. *Journal of Mammology*, Feb. 1967, Vol. 48, No. 1, pp. 119-129.
- Seabirds.net. 2021. North Pacific Seabird Data Portal website:
<http://axiom.seabirds.net/portal.php>
- State Historic Preservation Officer (SHPO). 2021. Letter to USACE dated 5 March 2021, subject: Continued FUDS Actions at Chernofski Harbor, Unalaska. File No. 3130-1R COE-E / 2021-00013.

USACE. 2017a. Letter to NMFS (Balogh) dated 26 April 2017, subject: USACE determination letter under ESA.

USACE. 2017b. Letter to USFWS (Cooper) dated 28 April 2017, subject: USACE determination letter under ESA.

U.S. Army Corps of Engineers (USACE). 2021a. Letter to SHPO dated 6 January 2021, subject: Determination of effect, removal actions and investigations at Chernofski Harbor Supply and Storage, Formerly Used Defense Site (F10AK0013).

USACE. 2021b. Statement of Work, Removal Actions and Investigations, Chernofski Harbor Supply and Storage, Formerly Used Defense Site (F10AK0013). March 2021.

USACE, et al. 2021. *Amendment to Memorandum of Agreement among the U.S. Army Corps of Engineers, Alaska State Historic Preservation Officer, Tanadgusix Corporation, Cora Holmes, and Russian Diocese of Alaska, Regarding FUDS Removal Actions at Chernofski Harbor, Unalaska Island, Alaska*. Executed August 2021.

USACE, et al. 2018. *Memorandum of Agreement among the U.S. Army Corps of Engineers, Alaska State Historic Preservation Officer, Tanadgusix Corporation, Cora Holmes, and Russian Diocese of Alaska, Regarding FUDS Removal Actions at Chernofski Harbor, Unalaska Island, Alaska*. Executed July 2018.

U.S. Fish and Wildlife Service (USFWS). 2017. Letter dated 15 May 2017, subject: Aleutian Islands site clean-up (Consultation 2017-I-0181).

USFWS. 2009. ADVISORY: Recommended Time Periods for Avoiding Vegetation Clearing in Alaska in order to Protect Migratory Birds.

Vanderlaan, A. S., and C. T. Taggart. 2007. Vessel collisions with whales: The probability of lethal injury based on vessel speed. *Marine Mammal Science* 23:144-156.