



Civil Works Branch

# Public Notice

Alaska District  
U.S. Army Corps of Engineers

Date 26 Dec 2018 Identification No. ER-19-25  
Please refer to the identification number when replying.

U.S. Army Corps of Engineers (Corps) has prepared an environmental assessment (EA) and finding of no significant impact (FONSI) titled:

**CON/HTRW Removal Action – 2019  
Cape Yakak Aircraft Warning Service (AWS) Station  
Adak Island, Alaska  
F10AK004002 & F10AK004003**

The Corps' proposed actions are authorized under the Department of Defense (DOD) Environmental Restoration Program - Formerly Used Defense Sites (DERP-FUDS) Program, 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 15 days from the date of this notice. It may also be viewed on the Alaska District's website at: [www.poa.usace.army.mil](http://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: [Joseph.E.Sparaga@usace.army.mil](mailto:Joseph.E.Sparaga@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-EN-CW-ER  
P.O. Box 6898  
Joint Base Elmendorf-Richardson, Alaska 99506-0898

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

Sincerely,

for 

Michael R. Salyer  
Chief, Environmental Resources Section



**US Army Corps  
of Engineers**

Alaska District

# **Environmental Assessment and Finding of No Significant Impact**

**CON/HTRW Removal Action - 2019**

## **Cape Yakak Aircraft Warning Service (AWS) Station**

Adak Island, Alaska

F10AK004002 & F10AK004003

**Formerly Used Defense Sites Program**



**December 2018**

**Environmental Assessment**



## **FINDING OF NO SIGNIFICANT IMPACT**

In accordance with the National Environmental Policy Act of 1969, as amended, the U.S. Army Corps of Engineers, Alaska District (Corps) has assessed the environmental effects of the following action:

**CON/HTRW Removal Action  
Cape Yakak Aircraft Warning Service (AWS) Station  
Adak Island, Alaska**

This action has been evaluated for its effects on several significant resources, including fish and wildlife, wetlands, threatened or endangered species, marine resources, and cultural resources. No significant short-term or long-term adverse effects were identified.

This Corps action complies with the National Historic Preservation Act, the Endangered Species Act, the Clean Water Act, the Magnuson-Stevens Fishery Conservation and Management Act, and the National Environmental Policy Act. The completed environmental assessment supports the conclusion that the action does not constitute a major Federal action significantly affecting the quality of the human and natural environment. An environmental impact statement is therefore not necessary for the removal action at Adak Island.

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Phillip J. Borders  
Colonel, Corps of Engineers  
District Commander

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Date

## **1.0 PURPOSE AND NEED OF REMEDIAL ACTION**

### **1.1 Introduction**

The U.S. Army Corps of Engineers (Corps) prepared this environmental assessment (EA) under the National Environmental Policy Act (NEPA) to address the removal of containerized waste, hazardous debris, and contaminated soil at the Cape Yakak Aircraft Warning Service (AWS) Station and the Cape Yakak Radio Station Inland Area, both of which are former military facilities on Adak Island, Alaska. The Corps' proposed actions are authorized under the Department of Defense (DOD): Defense Environmental Restoration Program – Formerly Used Defense Sites (DERP-FUDS). The DERP\_FUDS program provides the means to clean up waste materials, contaminated soil, and unsafe structures and debris from areas formerly used by the DOD. 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 project involves the excavation and removal of containerized waste and petroleum products, both of which fall outside the purview of CERCLA.

### **1.2 Site Description and History**

The Cape Yakak RS cantonment area is located on the Yakak Peninsula on the southwestern edge of Adak Island, on the southern coast, at approximately 51.603733°N, -176.942987°W (Figure 1). The Inland Area is located 5 miles directly north of the AWS.

The focus of this proposed cleanup action is the remains of a former radar and communications station at Cape Yakak, which was part of the Aircraft Warning System (AWS) for the northern Pacific. These facilities were operational from 1942-1945 and included SCR-588 radio detection and ranging (RADAR or radar) equipment, very-high frequency (VHF) radio equipment, buildings for operations and quarters, generators, and fuel storage (USCE 1999).

The Corps have conducted a number of site visits to Cape Yakak. In 1993, the Corps and the contractor Ecology and Environment, Inc. (E&E) performed investigations. The purpose of the investigation was to evaluate the debris and identify contaminated areas that might be present. The investigators discovered two separate areas, which they identified as the Radar Detector Area (also referred to as the Radar Area) and the Inland Area.

In 1998 the Corps returned to Cape Yakak to fill data gaps at the site and to document specific chemical contamination. In particular, further samples were needed to determine whether or not polychlorinated biphenyl (PCB) contamination associated with the former radar equipment was present, and to identify the waxy substance identified in the 55 gallon drums. In addition to PCBs and fuels, soil samples were analyzed for metals, pesticides, semi-volatile organic compounds (SVOCs) and volatile organic compounds (VOCs) to include benzene, toluene, ethylbenzene, and xylenes (BTEX).

In 2015, personnel from the United States Fish and Wildlife Service (USFWS) and Alaska Department of Environmental Conservation (ADEC) conducted a site visit to Cape Yakak. The purpose of the visit was to inspect the site and document observed or potential sources of environmental contamination. The visit was limited to the Radar Area only. The Inland Area was not visited. The two-person team visited features that were identified from the Corps 1998

investigation. The team noted a strong petroleum odor emanating from the area of the drum piles, and recommended future sampling. The Radar Detector Area concrete foundation was found to be similar to prior visits. The team stated that PCBs and heavy metals are commonly associated with the radar facilities and an investigation is warranted. Other features at the site were identified to include debris, pipes, and utility poles.

In 2017 Corps personnel conducted site visits at the Cape Yakak AWS and the Cape Yakak Inland Site. The Inland Site identified three separate drum groups, which have rusted into consisting of only drum rings. Surface samples were collected, and after testing did not appear to be higher than naturally occurring concentrations. At the Cape Yakak Radar Site a number of different features including several different groups of 55 gallon drums, above-ground storage tanks (ASTs), a Radar Tower, water source tanks, and ground contaminated with paint, grease, and lead. This investigation determined that the contaminants of potential concern (COPC) included diesel range organics (DRO), residual range organics (RRO), lead, 1-methylnaphthalene and 4-chloroaniline (commonly used in the production of pesticides) in soil which were identified above screening criteria). Arsenic was also detect at the project sites at a concentrating exceeding ADEC Human Health cleanup levels.



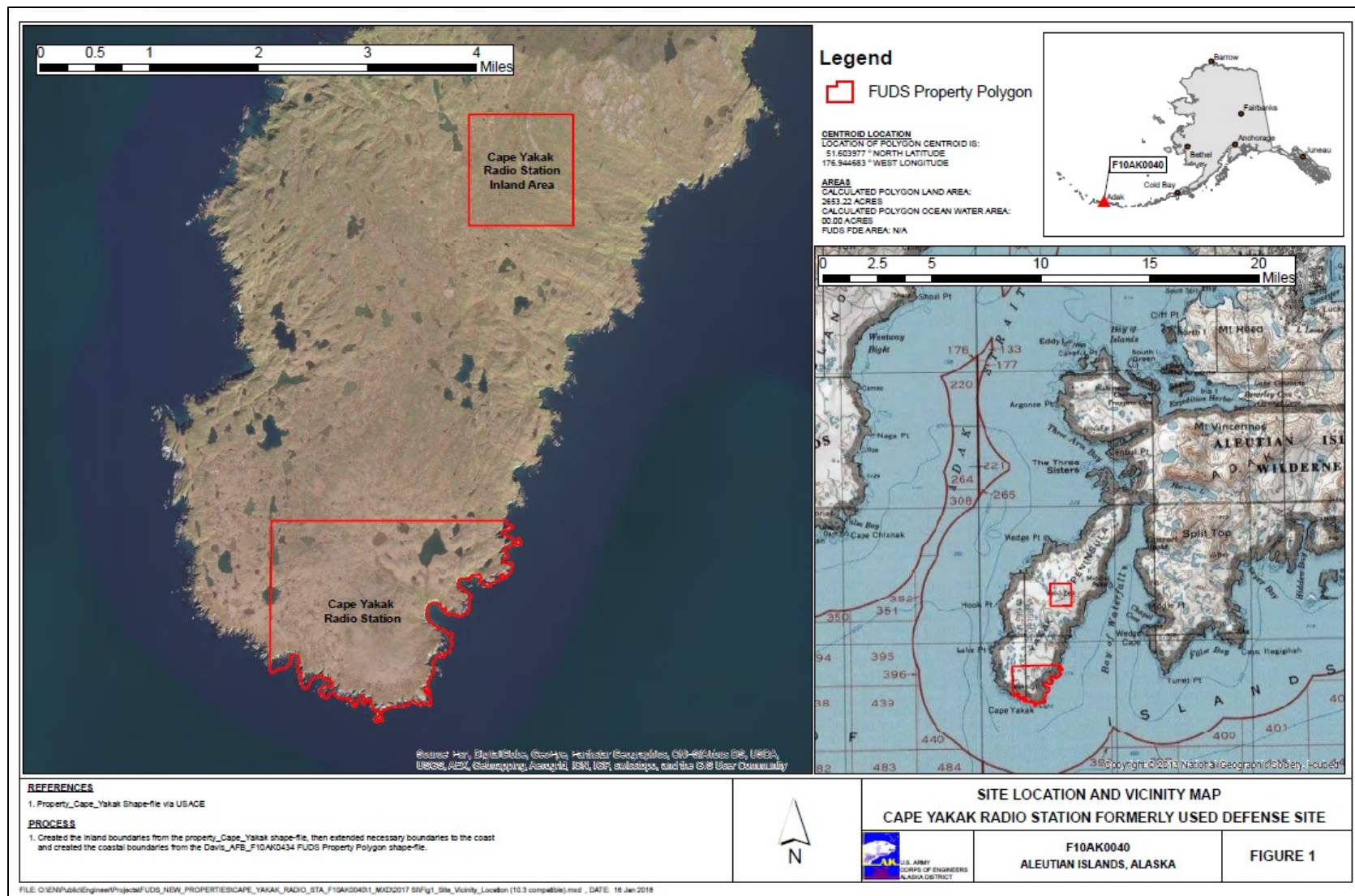


Figure 1. Location of project areas on the Cape Yakak Peninsula on Adak Island.

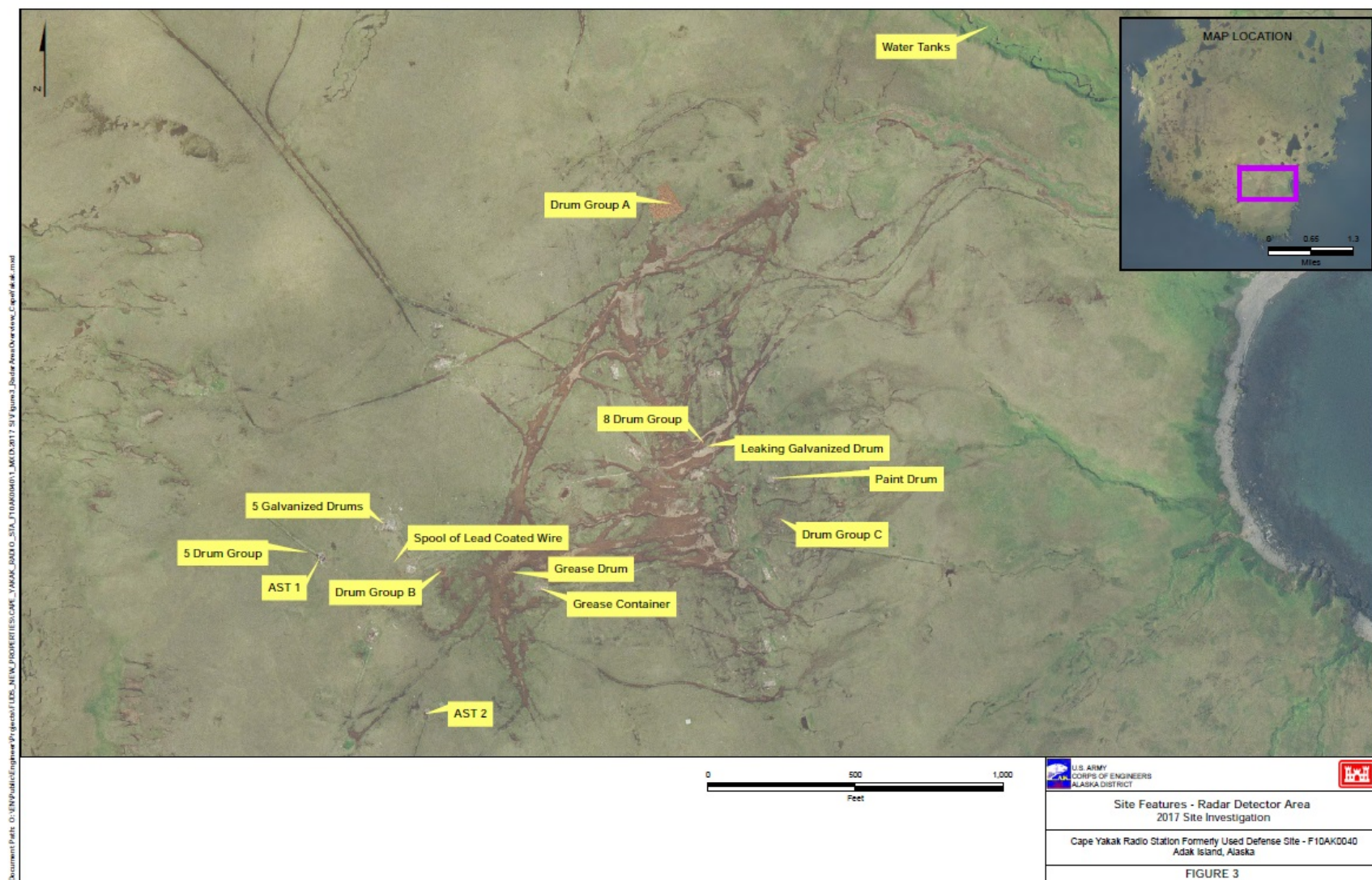


Figure 2. Features of the Cape Yakak Radio Station that have been identified by previous surveys.





Figure 3. Drum Group A, consisting of contaminated soils and 55 gallon drums near the northern section of the Radar Site area. The size of the area can be seen by the Corps personnel on the far side of the feature.



Figure 4. A partially sunken AST, located on the previous map as AST 2. The picture includes the extensive erosion which is present throughout the site.

### **1.3 Need for Action**

The 2017 site investigation identified chemical contamination of the soil, as well as containerized wastes that, unless removed from the site, will eventually be released into the environment and cause additional contamination. Multiple investigations have identified significant contaminated areas for removal, including:

- Lead shielded cable discovered during field activities and associated pooled molten lead and associated impacted soil.
- Two cans of paint discovered during field activities and associated impacted soil. One of the cans of painted contained 64,000 mg/kg of lead.
- A small grease container discovered during field activities located in a building footprint and associated stained soil.
- Two 55 gallon grease drums located in an erosion channel and associated contaminated soil.
- Galvanized drum containing product and associated contaminated soil in the 12 ft by 12 ft building footprint.
- Galvanized drum associated with the Cape Yakak Detector Area drum group containing product and associated contaminated soil.

## **2.0 ALTERNATIVES**

### **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 Corps' 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.

### **2.3 Preferred Alternative**

The removal action alternative to remove containerized wastes and contaminated soil is the preferred alternative. The project scope (USACE 2018) includes the following tasks:

- Corps personnel and contractors will do a preliminary trip to the Cape Yakak RS to determine exact details on how to access different sections of the site, as well as how to access the Inland Site. Specifically, to identify an appropriate low-impact route to the inland site, and how the proposed cleanup can be conducted.
- The contractor shall mobilize the necessary materials, supplies, equipment, temporary facilities, and personnel to the Cape Yakak RS and Inland Site to complete the field effort. The site can be accessed from a steep World War II road that goes from the bridge throughout the site. There is also an inland road that winds between the Radio Station and the Inland Site which the contractors will utilize for access. Vehicles used to transport required cleanup equipment and contaminated soils and other waste will be light ATV with low impact tracks or low pressure tires. Limited improvement to the road between the beach and site may be constructed.
- The contractor will aim to remove all containerized sources of future contamination (batteries, paint cans with contents or former lumps of cans), lead coated cable, POL drums/containers with contents, and transformers. They will also remove all drums without contents, and incidental contaminated soil.
- The contractor shall empty, remove, and properly dispose of a number of above ground storage tanks at the project site. There are two 300 gallon ASTs, which will be removed. There also will be a galvanized drum containing unidentified liquids, likely contaminants, in a 12 ft by 12 ft building footprint. There is also a galvanized drum containing product within a drum group. There are also three square ASTs in the Radar Area that will be removed.
- The contractor shall excavate, recover, and properly dispose of up to 10 tons of drums and drum debris encountered at the project site including scattered drums in the immediate area. Impacted drum carcasses/debris include items that are significantly impacted by petroleum products. Some drums may still contain liquids that could cause further contamination; the contractor shall be prepared to characterize and recover any drum contents generated during this effort for proper transport/disposal offsite.
- The contractor shall remove and properly dispose of a lead shielded cable and an associated pooled molten lead.
- For the Inland Site the contractor will follow the historic road with minimal impact, using ATV with tracks or soft tires, and clean up identified drum sites and take soil samples to test for contamination.

### **3.0 AFFECTED ENVIRONMENT**

#### **3.1 Community**

The nearest human community to the project site is the City of Adak, roughly 22 miles away on the opposite side of Adak Island, on the grounds of the former Adak Naval Air Station. The air

station ceased operations in 1997, and the Aleut Corporation acquired Adak's facilities under a land transfer agreement with the Department of the Interior and the U.S. Navy. The City of Adak incorporated in 2001. The 2010 census population of Adak was 326, although the number of residents present may vary greatly. No roads connect the project site with the inhabited area of Adak Island (ADCCED 2018).

### **3.2 Current Land Use**

The project area is uninhabited. Most of the Radar Station is on land managed by the USFWS as part of the Alaska Maritime National Wildlife Refuge (Refuge) and designated as a Wilderness Area, although a small parcel of land next to the bay has been conveyed to the Aleut Corporation. Vehicular traffic, including ATVs, is forbidden on all Refuge lands on Adak; however, all Refuge lands on Adak are open to caribou hunting (USFWS 2013).

### **3.3 Climate**

Adak is within the sub-polar 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 tends to melt soon after falling (ADCCED 2018).

### **3.4 Topography, Soils, and Hydrology**

The geology and Adak Island is predominantly volcanic. The project site shares the gently rolling, treeless terrain characteristic of the southern portion of the island. Soils are expected to be relatively shallow organics and marine sediments overlaying basalt or other volcanic material. Streams and standing water is present directly east of the project site, but are not present within the project site.

### **3.5 Air Quality and Noise**

The remote and uninhabited south coast of Adak Island presumably enjoys excellent air quality because of the near-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 on Adak Island. There is no established ambient air quality monitoring program at Adak 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 Adak Island, but man-made background noise would consist solely of that generated by passing ship, boat, and aircraft traffic.



### 3.6 Habitat and Wildlife

Vegetation in the area surrounding Cape Yakak is largely maritime tundra, with meadows occurring in sheltered valleys and heaths on more exposed slopes. Grasses, forbs, mosses, and lichens are abundant. Woody vegetation is limited to dwarf shrubs, such as willow and blueberry. The project site is on a small peninsula with low, rolling terrain to abrupt drop-offs at the shoreline.

Photographs of the Cape Yakak Radar cantonment area shows areas of heavy beach grass and facultative wetland forbs (e.g., lupine), not far from areas of standing water and obligate wetland vegetation (e.g., cottongrass), suggesting a mix of wetland soils with coarser, more well-drained soils.

Photographs of the marine shoreline adjacent to the project area show a broad splash-zone, with rock debris present from tidal forces. Terrestrial vegetation grows thick above the high-tide line with steep banks before dropping into the tide-zone. The bay is opened to storms and takes high-intensity storms directly into its bay.

Roughly two hundred species of birds can be found at Adak 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 breeding populations of tufted puffin, glaucous-winged gull, pigeon guillemot, and several species of cormorant at Cape Yakak (Seabirds.net 2018).

There are no native terrestrial mammals on Adak Island. Caribou from mainland Alaska were introduced to the island in 1958 and 1959 to provide a food supply and hunting opportunities. The original 23 caribou had increased in population to approximately 2,900 animals by 2012. The caribou range over most of the island, including the Cape Yakak area (Ricca, *et al*, 2014). Norway rats, probably introduced during World War II, are known to have a breeding population on Adak Island, but have been trapped in the Bay of Islands areas (Fritz 2007).

Marine mammals found in coastal waters include Steller sea lion, northern sea otters, northern fur seal, harbor and spotted seal, and a variety of whale, porpoise, and dolphin species.

### 3.7 Protected Species

Endangered Species Act. Table 1 below summarizes the species protected under the Endangered Species Act, under the jurisdiction of either the National Marine Fisheries Service (NMFS) or the USFWS that are identified as potentially being in the project activity area, including the marine waters of the Bay of Waterfalls. This list was created using NMFS and USFWS on-line resources (NMFS 20018a; USFWS 2018) and from informal consultation conducted recently for multiple Aleutian Island sites (NMFS 2017; USFWS 2015).

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, <b><i>Balaenoptera physalus</i></b>	All	Endangered	NMFS
Blue Whale, <b><i>Balaenoptera musculus</i></b>	All	Endangered	NMFS
Western No. Pacific Gray Whale, <i>Eschrichtius robustus</i>	All	Endangered	NMFS
Northern sea otter, <i>Enhydra lutris kenyoni</i>	S.W. Alaska DPS	Threatened	USFWS
Stellers eider, <i>Polysticta stelleri</i>	All	Threatened	USFWS
Short tailed albatross, <i>Phoebastria albatrus</i>	All	Endangered	USFWS

Figure 5, provided by the NMFS (NMFS 2017), shows a known Steller sea lion use area at Cape Yakak, roughly 2 miles away from the project site, and just outside the Bay of Waterfalls. The nearest designated critical habitat area for Steller sea lions is the Lake Point rookery, roughly 3 miles straight-line-distance northwest of the project area.

With no rookeries present with the Bay of Waterfalls, 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 round, but will adjust their foraging patterns to exploit locally and seasonally abundant species such as salmon and cod (NMFS 2008).

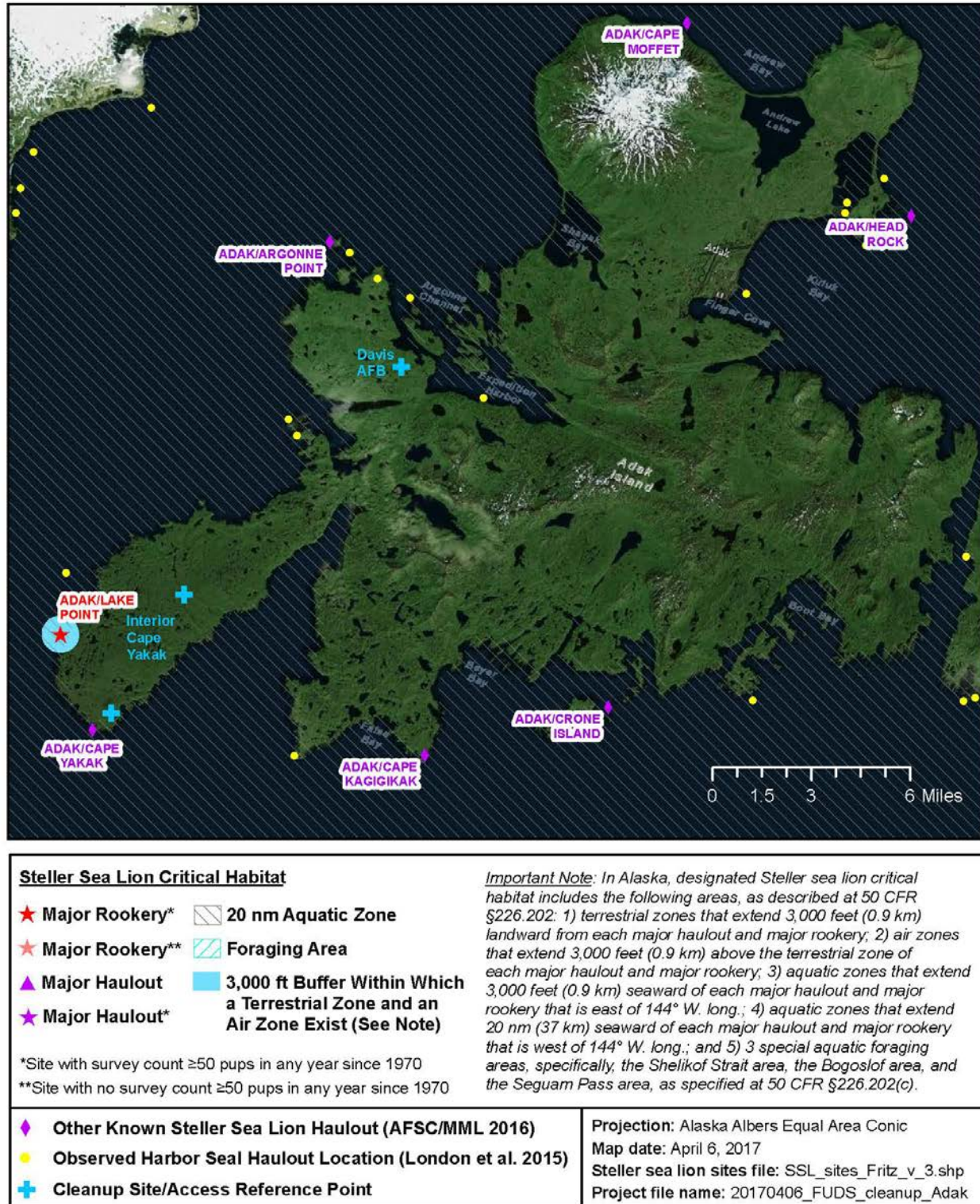


Figure 5. Map of the known Steller Sea Lion habitats on Adak Island.

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 off-shore areas of the Bering Sea and the Gulf of Alaska designated in 78 FR 19000, roughly 500 miles to the east of Adak Island. Recent guidance from the NMFS on humpback whales (NMFS 2016) discusses the three distinct population segments (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 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.

Northern sea otter critical habitat designated by the USFWS (USFWS 2009) includes coastal Bay of Waterfall 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.

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 upwelling occur near the coast. No critical habitat is currently designated for this species (USFWS 2008).

Steller's eiders may winter in coastal waters surrounding Adak Island, but nest in northeastern Siberia and limited areas of mainland Alaska, and would not be present at Adak Island during the spring-summer project activities.

The Aleutian shield fern (*Polystichum aleuticum*) is Alaska's only endangered plant, and the only known existing populations are found on Adak Island, on Mount Reed at elevations of roughly 1,100 to 1,700 feet above sea level. These populations are within roughly 17 miles directly northeast of the project site, but in a very different habitat: The Aleutian shield fern appears to require exposed, weathered rock outcroppings, rooting in crevices and thinly-soiled ledges. In an abundance of caution, the Cape Yakak Radar Site has been examined during previous site visits for the presence of Aleutian shield fern or suitable habitat, but none has been found in the maritime tundra setting of the project site. This species will not be considered further in this document.



Marine Mammal 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 offshore Adak Island.

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 eagle's normal breeding, feeding, or sheltering habits (USFWS 2011). Neither bald nor golden eagles are expected to be present at or near the project site, except possibly as transient individuals. In the absence of trees, bald eagles in the Aleutian Islands typically nest at the tops of sea-stacks or cliffs, neither of which exist at the project site (Byrd & Williams 2008).

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

### **3.7 Wetlands**

In the absence of wetlands delineation, the entire project area will be regarded as probable jurisdictional wetlands.

### **3.8 Anadromous Streams and Essential Fish Habitat**

The Alaska Department of Fish and Game (ADFG) identifies in its Anadromous Waters Catalog (AWG; ADFG 2018) approximately five anadromous waterways within 10 miles of the project area. Two known anadromous waterways are on the western side of the Yakak Peninsula, as well as three known anadromous waterways are across the Bay of Waterfalls near the head of the bay. All of these streams are unnamed and no bodies of water have been linked to the spawning habitats. None of these anadromous waters are within or adjacent the project area.

The marine waters of Bay of Islands are within areas designated by the NMFS under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) as essential fish habitat (EFH) for northern rockfish, rock sole, sculpin, walleye Pollack, skate, squid, chum salmon, pink salmon, coho salmon, sockeye salmon, and chinook salmon. The waters around Adak Island are also within the NMFS-designated Aleutian Islands Habitat Conservation Area, which restricts certain types of commercial fishing (NMFS 2018b).

### **3.9 Cultural and Historic Resources**

Corps' archaeologists have examined the project site (USACE 2018) and searched the Alaska Heritage Resources Survey (AHRS) database, and determined that two cultural resource sites exist within the project area of potential effect (APE; Eldridge 2018). Consultation between the State Historic Preservation Officer (SHPO) and the Corps in 2018 resulted in a determination that the Cape Yakak Aircraft Warning System (AWS) Station Inland Area (ADK-306) was not eligible for the NRHP. However, the Cape Yakak AWS Station Radar Detector Area (ADK-307) was eligible for the NRHP.

Near the World War II sites is a prehistoric site, located between the beach access area and the project site. The Cape Yakak Village Site (ADK-036), is located on a sloping ridge overlooking a rocky beach at an unnamed bight by the Bay of Waterfalls. The archaeological site was located in 1989 during a survey conducted under the Alaska Native Claims Settlement Act (ANCSA) 14(h)(1) application areas. The site includes 39 “Mixed Aleut and WWII cultural features in a disturbed area immediately southwest of the drainage” (BIA 1992). Corps’ archaeologists identified the site, but based on time constraints and weather conditions were unable to map or test the site. This site has not been evaluated for the NRHP.

## **4.0 ENVIRONMENTAL CONSEQUENCES OF ALTERNATIVES**

### **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 Preferred Alternative**

Under the preferred alternative, contaminated soils and waste materials would be removed from the site to the extent practicable. The potential environmental consequences are described below.

#### **4.2.1 Effects on Community and Land Use**

The project site and surrounding areas of Adak Island are uninhabited, and are expected to stay that way in the foreseeable future. The proposed activities will neither encourage nor inhibit future development on Adak Island. The project is being closely coordinated with the Refuge.

#### **4.2.2 Effects on Topography, Soils, and Hydrology**

The small areas of excavation will not significantly alter the area topography or patterns of overland water flow in the area. Since the excavations will not be backfilled, but only contoured to blend with the surrounding land to avoid entrapment hazards, highly localized changes in topography and hydrology may remain after the project is completed, such as shallow depressions that may become small ponds.

#### **4.2.3 Effects on Air Quality and Noise**

Air quality may be affected during the project period from the use of heavy equipment, construction vehicles, and generators. The Corps 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 project sites are not near any residences. The noise generated by project activities will be comparable to low-level construction noise and should not disrupted human activity.

#### **4.2.4 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, highly-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).

#### **4.2.5 Effects on Protected Species**

The principle threats to marine mammals in general consist of:

- Ship strikes
- Direct impacts from human fishing (e.g. entanglement in fishing gear)
- Indirect impacts from human fishing (e.g. competition for food resources)
- Contaminants and pollutants
- Habitat degradation caused by human activities and disturbance
- Hunting and predation (pertaining mostly to Steller sea lions)

The project's main potential adverse effect on marine mammals would be ship strikes as project vessels travel to Adak Island and back, and as the land craft shuttles equipment and material between the barge and the shore. While ship strikes on whales are an issue of increasing concern (Neilson et al. 2012; Jensen & Silber 2004), the relatively low speed of an ocean-going barge or landing craft, together with a barge's blunt prow and shallow draft, make it far less likely to strike and inflict injury upon a whale than larger, faster ocean-going vessels such as cruise ships and cargo ships.

To minimize the potential effects of vessel movement on protected marine mammals, the Corps proposes:

- Project vessels will be limited to a speed of 8 knots, or the slowest speed above 8 knots consistent with safe navigation, when within the confines of the Bay of Waterfalls or within 3 nautical miles of any of the Steller sea lion haulouts described above to reduce the risk of collisions with protected species. The project vessels are not expected to approach any Steller sea lion rookeries.

Small, maneuverable watercraft such as skiffs have a greater risk of harming or disturbing sea otters and other small marine mammals than large, slow-moving vessels. If skiffs are used during the Adak Island project, the Corps 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":

- 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 pup, or rafts of 10 or more
- 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.
- 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.
- 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.
- It is illegal to pursue or chase sea otters. Do not single out or surround an otter(s).

Leaks and releases of fuel and other chemical products from the project vessels also have the potential to cause adverse effects. The Corps will be removing potentially harmful materials from Adak Island, including lead residue and petroleum products. These materials will be sealed into salvage drums and impermeable polymer “Supersacks” before being transported from the island and carefully secured aboard the barge for transportation to proper disposal facilities. The Corps has conducted the transfer of containerized waste material from shore to transport vessels at numerous cleanup sites without incident, and considers the risk of a release of these materials into the marine environment to be very low.

With the avoidance and minimization steps outlined above, the Corps 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
- Northern sea otter (Southwest Alaska DPS).

The Corps requested concurrence from the USFWS and NMFS for this project in October 2018. To this date the Corps have received concurrence with this determination from the USFWS in



November 2018, however concurrence with the NMFS is still pending. Both the NMFS and the USFWS will receive a copy of this EA for review, and be notified of the actions at the Cape Yakak AWS Station in 2019.

The Corps determines that the project activities are unlikely to result in the taking of an animal protected under the Marine Mammal Protection Act.

The Corps has assessed the probability of project vessels encountering and affecting the rare and widely-dispersed short-tailed albatross to be very low. The Corps determines that the project activities will have no effect on short-tailed albatross.

Nesting eagles are not expected at the project site, especially not in the low-relief, treeless terrain bordering the Bay of Waterfalls where project activities will be taking place. A few transient adult bald eagles may be seen from the project area, but the Corps anticipates a very low risk of a taking under the Bald and Golden Eagle Protection Act.

Nesting birds are likely to be the most vulnerable terrestrial animal species at the site. The destruction of active nests, eggs, or nestlings is a violation of the Migratory Bird Treaty Act (MBTA). The U.S. Fish and Wildlife Service advises that the period 1 May through 15 July should be considered the nesting window for birds nestling in shrub or open habitat in the Aleutian Islands (USFWS 2009) and that any brush-clearing activities should be scheduled for prior to or after this window. The project activities may overlap this nesting window; however, the activities will be focused in limited areas already heavily impacted by human activity and providing less than ideal nesting habitat. The contractors will be instructed to watch for signs of ground-nesting birds, but the Corps considers the risk of a taking under the MBTA to be low.

#### **4.2.6 Effects on Wetlands**

Where native soils are removed in the course of removing contamination and debris, wetlands will necessarily be impacted. However, no backfilling of excavations or creation of new pads or roads is planned, so no discharge to wetlands under Section 404 of the Clean Water Act will occur. The wetlands affected by project activities will be those already heavily impacted by chemical contamination and debris; the removal action will protect and improve the surrounding wetland habitat by removing contamination and physical obstructions and hazards.

#### **4.2.7 Effects on Anadromous Streams and Essential Fish Habitat**

The project would not require entry into or alteration of water bodies, including anadromous streams. Best management practices such as silt fencing or other appropriate sediment control would be employed to minimize the risk of runoff reaching streams during excavation. The intent of the project is to remove sources of contamination from the environment, which should have a net positive effect on local fish habitat.

The project will not adversely affect EFH. The only project activity occurring in the local marine environment is the landing of transport barges or landing craft, which will have a negligible impact on EFH. The pre-packaging of waste materials on shore will minimize the risk of discharging contaminants into the marine environment, and the contractor spill prevention plan will address potential releases of fuel or other chemicals from the project vessels.

#### **4.2.8 Effects on Cultural Resources**

The proposed actions of the project will be in the locality of two historic properties which are known on the AHRs. However, the Corps' archaeologists have determined that only one structure was eligible in the Cape Yakak AWS Station, and the proposed cleanup will not have any impact on the tower. The construction of an access road from the beach to the site will pass through a known prehistoric village site, but by using the World War II era road and an archaeologist present to monitor during the construction, the Corps' believes it can mitigate any damages.

The Corps have determined that the proposed activity will have no adverse impact on historic properties, with the provision that an archaeological monitor be present on site for activities regarding the construction and removal of the access path following the military access route.

#### **4.2.9 Effects on Coastal Zone Management**

Alaska withdrew from the voluntary National Coastal Zone Management program (<http://coastalmanagement.noaa.gov/programs/czm.html>) 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.

#### **4.2.10 Effects on Environmental Justice**

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires Federal agencies to identify and address any disproportionately high and adverse human health effects of its programs and activities on minority and low-income populations.

The express purpose of the proposed project is to reduce future risks to human health and welfare in the region by removing contaminants and physical risks from the environment. The Corps does not anticipate adverse impacts from this project to the human population.

#### **4.2.11 Cumulative Effects**

Federal law (40 CFR 651.16) requires that NEPA documents assess cumulative effects, which are the impact on the environment resulting from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.

The proposed project would have the ultimate net effect of removing a large mass of chemical contamination from the environment. The immediate incremental impacts of air pollutants and noise from construction machinery would be short duration and would not contribute to long-term cumulative effects. Given the current restricted public access to the land and its ownership by the USFWS, the restoration of the site would not be expected to encourage development of the area.

## **5.0 PERMITS AND AUTHORIZATIONS**

This continuing project would require no resource permits and few authorizations. The Corps has been closely coordinating its proposed activities with the USFWS Alaska Maritime Wildlife Refuge. The USFWS and the NMFS will receive copies of this EA for review; ESA coordination with those agencies will be renewed as necessary when more specific details on the proposed activities are available from the Corps' contractor.

## **6.0 CONCLUSION**

The continued environmental cleanup efforts at Adak Island, as discussed in this document, would have some minor, largely controllable short-term impacts, but in the long term would help improve the overall quality of the human environment. This assessment supports the conclusion that the proposed project does not constitute a major Federal action significantly affecting the quality of the human environment; therefore, a finding of no significant impact will be prepared.

## **7.0 PREPARERS OF THIS DOCUMENT**

This Environmental Assessment was prepared by Joseph Sparaga of the Environmental Resources Section, Alaska District, U.S. Army Corps of Engineers. The Corps of Engineers Project Manager is Jeremy Craner.

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