

## FINDING OF NO SIGNIFICANT IMPACT

### FEDERAL AVIATION ADMINISTRATION ENVIRONMENTAL RESORATION at the NORTH DUTCH ISLAND STATION, ALASKA

#### A. Introduction

The Federal Aviation Administration (FAA) will demolish buildings containing asbestos and lead-based paint, test for and excavate, as applicable, petroleum-contaminated soil, and remove miscellaneous debris at the former station at North Dutch Island in Prince William Sound. The FAA station was abandoned many years ago and is a remnant of the former air navigation communication site. Some wood debris will be burned on site. Asbestos in structures, materials with high lead concentrations, and debris will be taken off site to a licensed landfill. Asbestos will be removed from the structures prior to demolition in accordance with Occupation Safety and Health Administration guidelines on preparation, handling and disposal. Any hazardous waste and petroleum-contaminated soil found on site will be taken to a hazardous material disposal site.

#### B. Statement of Environmental Significance of the Proposed Action

After careful and thorough consideration of the facts contained herein and in the attached environmental assessment, the undersigned finds the Federal cleanup action with access alternative 3 is consistent with existing national environmental policies and objectives as set forth in Section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and that the action will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102(2)(c) of NEPA. An environmental impact statement is therefore not necessary for the cleanup activities. Additionally, the FAA bases this finding on the following:

#### C. Reasons for the Finding

1. Fish and wildlife habitat will not be adversely affected by the environmental cleanup.
2. The cleanup will not affect threatened or endangered species.
3. No cultural properties protected under the National Historic Preservation Act will be adversely affected.
4. The removal of abandoned and unneeded buildings, hazardous wastes, contaminated soils, and debris will eliminate environmental and safety hazards.
5. The project is consistent with the Coastal Zone Management Act.

APPROVED

DISAPPROVED

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Bradley Platt, Manager  
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Date



**Federal Aviation Administration  
Environmental Restoration at the  
North Dutch Island Station, Alaska**

**Environmental Assessment**

**1.0 PURPOSE AND NEED FOR PROPOSED ACTION**

The Federal Aviation Administration (FAA), formerly the Civil Aeronautics Administration (CAA), proposes to demolish structures, remove debris and hazardous wastes, and remediate contaminated soils as necessary at their abandoned facility on North Dutch Island, Alaska (figure 1). The CAA's former North Dutch Island communication station operated in the 1940s and/or 1950s. The island is roughly 35 acres and is heavily wooded. It is within the Chugach National Forest and is 32 miles east of Whittier in Prince William Sound and northeast of Perry Island

The FAA station at North Dutch Island was formerly an air navigation communication station.

**2.0 PROPOSED PROJECT DESCRIPTION**

Activities include cleanup of old structures, bulk fuel storage tanks (FST), wreckage, hazardous wastes, and remediation of contaminated soils at the abandoned facility at North Dutch Island (figure 1). This action would require the reopening of an old road to access the proposed project site and would include brush grubbing, cutting mainly pole-sized trees, and use of gravel to fill in uneven and damp terrain.

**2.1 General Tasks**

The following general tasks would be performed:

- Remove asbestos-containing materials (ACM) from structures as needed in accordance with OSHA guidelines on preparation, handling, and disposal,
- Demolish structures and remove solid waste for transport to an approved landfill,
- Burn wood products on site. All ash would be removed. If practical, ash would be sampled for lead content. Ash with lead above Toxicity Characteristic Leaching Procedure (TCLP) standards, which is 5.0 parts per million (ppm), would be disposed of according to Resource Conservation and Recovery Act regulations,
- Excavate lead-contaminated soils as needed. Excavated soils would be placed into supersacks for transport to a hazardous waste facility, and
- Excavate petroleum-contaminated soils (PCS), if found, to Alaska Department of Environmental Conservation (ADEC) cleanup standards for disposal at an approved disposal site.

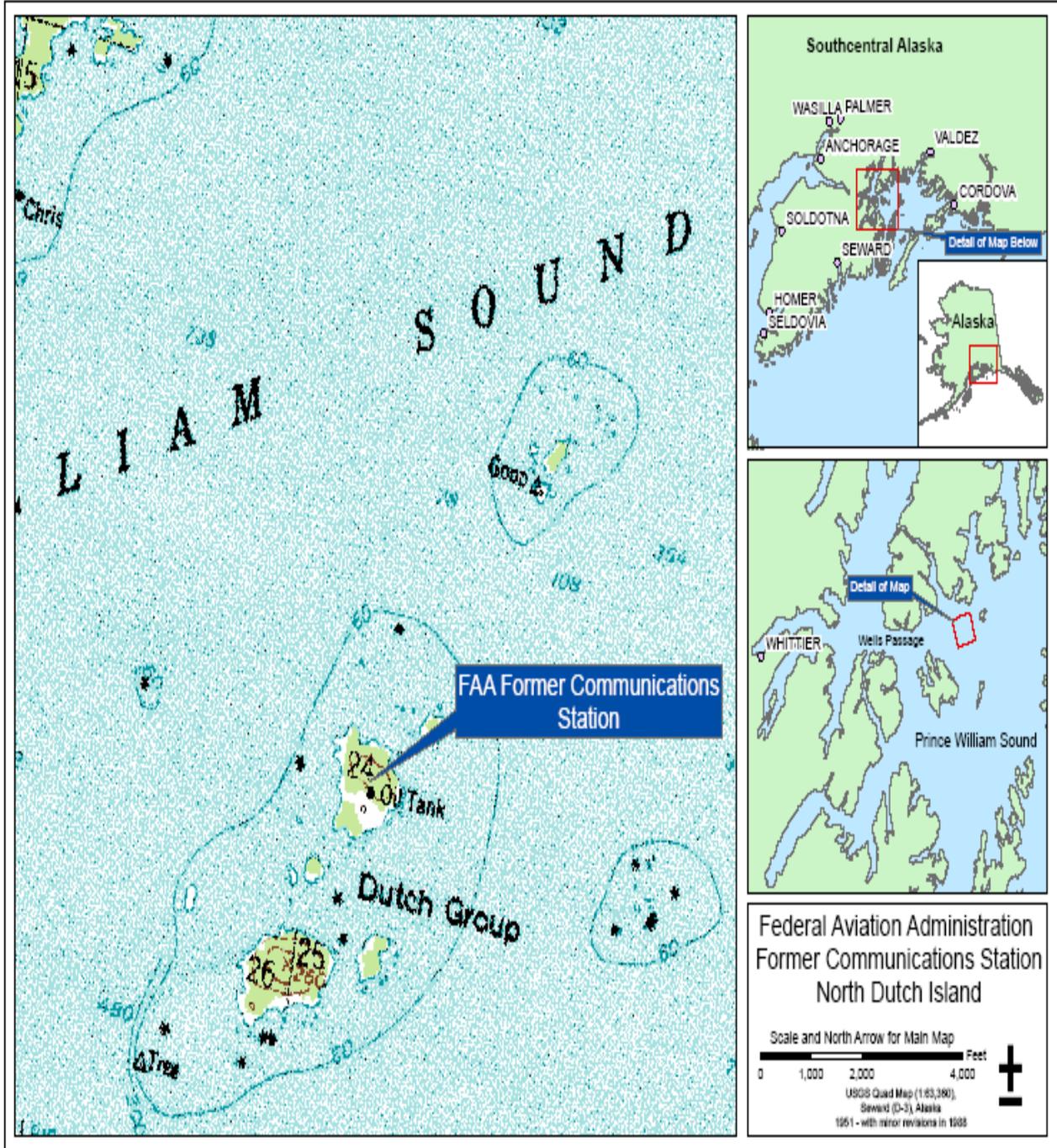


Figure 1. Location and Vicinity Map

## **2.2 Specific Tasks**

The following specific tasks at the following locations are listed:

Infrastructure consists of:

- Quarters/electronics building
- Water cistern
- Two 5,000-gallon aboveground fuel tanks and associated pipeline
- Remnants of boardwalk plank road
- Remnants of pumphouse building

Former CAA infrastructure is near the island's center and west side. A former wooden road ran between the two locations. Only a small amount of debris was observed throughout the site, but the terrain is rough and the area is covered in heavy brush. The beach landing area is located at 60° 45.907' and 147° 48.392'.

### **2.2.1 West Side**

A gravel beach on the west side is assumed to be the location of the CAA's barge landing area. In the forest near the beach are the remains of the former powerhouse, tank cradle, and three small collapsed buildings. There is also a pond with little vegetation growing around it. The powerhouse walls are 6 feet in height and constructed of concrete. The building was about 15 feet by 25 feet. Buried 3-inch-diameter steel piping is exposed in front of the building.

The area around the powerhouse includes three collapsed buildings (each about 15 feet by 15 feet), a wooden FST cradle (6 feet by 12 feet), a wooden utilidor (2 feet by 2 feet by 2 feet and approximately 20 feet in length), two pressure tanks, two rusted drums, and several wooden posts. A pond about 10 feet wide and 30 feet long contains algae but is barren around the pond's edges. One rusted drum is in the pond.

Two rows of parallel creosoted wooden posts remain from the elevated wooden road that ran from the beach area to the center of the island. The road extended about 600 feet inland and allowed access over a wetland area. The remaining posts are about 2 feet above ground surface (ags) and a few (about 12) of the 12-inch by 12-inch crosspieces also exist on the posts. The two rows of posts are about 10 feet apart, and each set of posts is about 50 feet apart. The posts would be cut off at the ground surface.

### **2.2.2 Center Island**

The main building on the island was the combination communications/quarters house. It is a two-story house that is partially collapsed. Adjacent to the house is a tank cradle and a septic crib. Behind the house is a cistern, catch basin, and water pumphouse. To the side of the house are an electrical transformer, two large fuel tanks, and a concrete tank pad. One tank remains upright

and the other has fallen over onto its side.

The house is built on a wooden piling foundation with a crawl space and is about 25 feet by 52 feet. There is ACM covered ductwork in the crawl space and first floor along with a furnace that contains ACM. The first and second floors contain vinyl asbestos tile (VAT) that is in poor condition. The aboveground tank's wooden cradle is 5 feet above ground and consists of wooden pilings. The septic system's or crib's cover is 5 feet by 5 feet and is flush with the ground surface and is partially grown over. There are about eight upright 6-inch by 6-inch wooden posts around the house (about 8 feet tall) and also some scattered cable. About 1 cubic yard of concrete was observed in the area in the form of pads.

The cistern has 9-inch-thick concrete walls about 9 feet above ground surface and 6 feet below the ground surface. Some wood debris is inside the cistern. The pumphouse is assumed to contain white lead-based paint, and a water tank is inside under the former floor. Water depth is greater than 5 feet. The catch basin is about 30 feet by 30 feet on wooden pilings about 1 to 2 feet above ground surface. The basin looks like a roof with tarpaper and tar. It is also partially collapsed. No ACM is associated with the cistern. The cistern would be collapsed in on its self.

The electrical transformer has a capacity of 10 gallons. It is tipped over on its side and is empty. There is no stressed vegetation or bare spots around it. Soil under the transformer tested negative for PCB's.

The large steel aboveground fuel storage tanks (ASTs) are 12 feet in diameter and 20 feet tall. Both are empty, the #1 tank has fallen over onto its side, and a large stained area is at the end of the tank. AST #1 formerly rested on a concrete pad about 12 feet by 12 feet and 1 foot thick. A trench surrounds the ASTs on at least one side. A 4-inch-diameter steel pipeline extends from the #1 AST toward the cistern area.

AST #2 rests on a foundation of 1-foot-diameter creosoted logs laid down in corduroy fashion. No staining is present at this tank. Terrain in this area is rough and the brush is thick.

### **2.2.3 Assumptions**

1. Concrete slabs do not need to be removed, but the concrete cistern needs to be collapsed.
2. Quarters/electronics building needs to be abated and burned.
3. Approximately 40 cubic yards of metal debris needs to be removed (including 300 feet of cable),
4. West beach is used for island access; 150 feet by 10 feet temporary road is constructed to access south beach (cutting approximately 3 trees). Up to 300-foot by 10-foot temporary road is constructed from south beach to project area (cutting minimal trees). Temporary roads will be removed at completion of project.

5. Floating work camp will be used.

## 2.2.4 North Dutch Station Cleanup Access Alternatives

**Access Alternative 1: Landing on the west beach and accessing cleanup site through the old-planked road trail.** Access to the cleanup site would require reopening the trail where a planked road existed back in the late 1940s (figure 2). The topography is uneven and completely covered with Sitka spruce secondary growth; the piles that supported the road are still in place. This alternative would require clearing and grubbing about 4,400 square feet of secondary Sitka spruce forest mixed with brush (figure 3) and temporarily filling the area with about 160 cubic yard of gravel. Due to the uneven topography, filter fabric may not work under these conditions. Mid-sized trees may need to be removed under this alternative. The gravel source has not been determined with certainty; a potential site, however, would be the west beach, which would help to prevent the introduction of noxious weeds onto the island. Any fill would be removed after cleanup activities are completed. A Nationwide permit under the Clean Water Act is applicable to this action to excavate gravel along the west side beach to be used for fill if the excavation goes below the Mean High Water level (MHW).

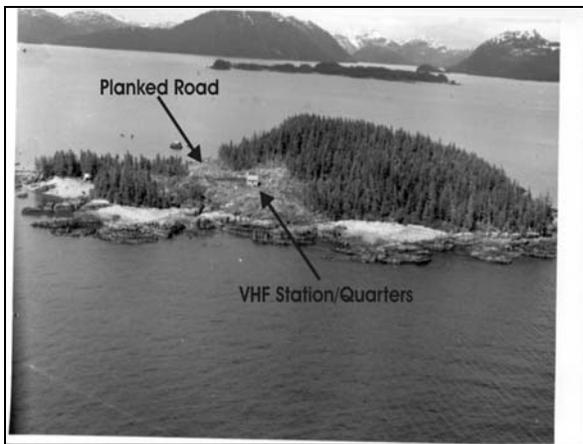


Figure 2: Planked road constructed during the late 40's.



Figure 3: Alternative 1. Accessing the cleanup site by reopening old planked road area. This area is currently covered by secondary growth of Sitka spruce forest.

**Alternative 2: Landing at the south beach and accessing cleanup site through wet meadow.** Under this alternative, the cleanup site would be accessed through a narrow beach on the south side of the island. It would require opening a path through alder brush and secondary Sitka spruce vegetation (first 100 feet) and wet meadow (last 200 feet) (figure 4). Because of the sparse forest cover in the first 100 feet, this alternative would require removing few, if any, pole-sized Sitka spruce trees (5 to 9 inches DBH<sup>1</sup>). Tall vegetation would be cleared and grubbed, and wet meadow would be covered with gravel or filter fabric to allow the passing of heavy

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<sup>1</sup> DBH: Diameter at Breast Height

equipment. The gravel fill or filter fabric would be temporary and removed after cleanup activities were completed. As in the previous alternative, the gravel site has not been determined. The west beach has been proposed as potential gravel borrow site due to its low risk of introducing noxious weeds to the island. If the 300-foot trail was filled with gravel, it would require about 120 cubic yards of temporary fill and could require a wetland nation wide permit if the gravel excavation reached below MHW. The south beach is quite narrow and bounded by two rock outcrops, with several large boulders dispersed along the beach. This alternative has limitations because south beach, where the barge landing would be set, may possess safety risks because the beach is narrow and is surrounded by rock outcrops, making barge maneuvering and landing difficult.



Figure 4. Alternative 2. Accessing the cleanup site from the south beach. First 100 feet with alder and pole-sized Sitka spruce trees; about 200 feet is a wet meadow.



Figure 5. First 100 feet with pole-sized Sitka spruce trees and sparse alder brush.



Figure 6. Wet meadow; a length of about 200 feet would be filled with gravel or geo-tech mat.

**Alternative 3: Landing on the west beach and accessing cleanup site through wet meadow.**

This alternative combines the previous two alternatives to decrease the number of cut trees and to avoid safety concerns raised in alternative 2.

In this alternative the barge landing would be established on the west beach. An interim trail of about 150 feet would connect to the south beach, and a trail of about 300 feet would be opened from the south beach to the cleanup site (figure 7). Opening the 150-foot trail would require removing about 4 to 5 mid-sized Sitka spruce trees. Due to the uneven terrain, this trail would be filled with gravel as the geotech mat is not as versatile in tussock topography. This would require at least 60 cubic yards of gravel.

The trail from the south beach to the cleanup site would require removing about 100 feet of mainly alder brush and few, if any, pole-sized Sitka spruces. No tall vegetation would be removed in the last 200-feet of the trail transect because it is a wet meadow. The 300-foot trail would be temporarily covered with filter fabric to allow the passing of heavy equipment. If filter fabric does not work and the trail needs to be filled with gravel, it would require about 125 cubic yards, for a total of 185 cubic yards of gravel.



Figure 7. Alternative 3. Barge landing would be on the west beach. Access to the cleanup site would require opening about 150 feet of trail to south beach. From the south beach to the cleanup site, it would require removing about 100 feet of alder brush and pole-sized Sitka spruce trees and covering about 200 feet of wet meadow.

### 3.0 ALTERNATIVES TO THE PROPOSED ACTION

#### 3.1 No Action

Under the no-action alternative, existing structures, debris, and hazardous wastes at the former FAA stations would continue to deteriorate. FAA would be liable for the deteriorated buildings and their associated safety concerns and releases of environmental contaminants and hazards.

### 4.0 AFFECTED ENVIRONMENT

#### 4.1 North Dutch Island

##### 4.1.1 Location

The CAA's former North Dutch Island communication station operated in the 1940s and/or 1950s. It is within the Chugach National Forest and is 32 miles east of Whittier in Prince William Sound and northeast of Perry Island.

Former CAA infrastructure is near the island's center and west side. A former wooden road ran between the two locations. Only a small amount of debris was observed throughout the site, but terrain is rough and the area is covered in heavy brush.

##### 4.1.2 Vegetation

Western hemlock-Sitka spruce forest is the dominant plant community in the North Dutch Island terrain. The coastal western hemlock-Sitka spruce forest is a mixture of three plant communities: true forest, grass-sedge meadows, and muskeg. The true forest is a cool, moist rain forest. Tree species are western hemlock, Sitka spruce, western red cedar, Alaska cedar, and lodge pole pine. Forest understory includes alders and willows, as well as shrubs (salmonberry, Pacific red elder, devil's club, huckleberry, and currant), and many varieties of ferns and herbs. Grass-sedge meadows usually are in lower elevations along the coast. Vegetation consists of grasses, sedges, and other herbaceous vegetation. The Forest Service keeps a sensitive plant list for which population viability is a concern on National Forest System lands. The Forest Service manages sensitive species and their habitats to prevent the species from becoming threatened or endangered because of Forest Service management actions. A sensitive-plant survey was conducted for this structural debris cleanup project assessment.

Most vegetation clearing would take place under alternative 1, which proposes to open a belt of about 4,400 square feet along the old planked road. That would require the removal of a small portion of sand dune vegetation that includes beach rye (*Leymus mollis* ssp. *mollis*), vetch (*Lathyrus maritimus*), creeping alkali grass (*Puccinellia phryganode*), alder (*Alnus* sp.), brush, and several mid-sized Sitka spruce trees (figure 7 and figure 9).



Figure 8: Sand dune and intertidal zone in west beach.



Figure 9: Old planked road covered with alder brush and secondary growth of Sitka spruce.

Alternative 2 would require the removal of 300 feet of vegetation. Alternative 3 would also require clearing about 300 feet of vegetation in addition to about 150 feet of brush vegetation along a land knob between the west and south beaches (figure 10). Although vegetation removal would be sparse under canopy vegetation and suppressed Sitka trees, the removal of about 4 to 5 mid-sized Sitka spruce trees also would be required.

The vicinity of the cleanup area is mainly a grassy meadow with sparse patches of conifers. Dominant species include salmonberry (*Rubus spectabilis*), cow parsnip (*Heracleum lanatum*), chocolate lily (*Fritillaria camschatcensis*), fireweed (*epilobium angustifolium*), lupine (*lupinus sp.*), baneberry (*actaea rubra*), and beach strawberry (*Fragaria chiloensis*) (Hultén, E. 1968) (figure 11). Grasses such as beach rye and various *Poa* species may be found in the grassy meadow as well.



Figure 10: Land extension between west and south beaches.



Figure 11: Vicinity of cleanup area.

### 4.1.3 Wetlands

A small portion of a wet grassy meadow would be temporary filled with gravel or filter fabric for use as access to the cleanup site in all access alternatives.

### 4.1.4 Threatened and Endangered Plant Species (TES):

The list of TES plants and candidate species for the Chugach National Forest was reviewed and the area was surveyed during the field trip of May 22, 2007. The survey was done along the potential accessing routes and in the vicinity of the cleanup site.

At the time of the survey, species of concern were not found in the area of concern. Adjacent wetlands were not surveyed in detail as it is expected that the project would not directly impact those areas.

**Table 1: Sensitive Plant Species surveyed for at the cleanup site and accessing routes.**

| Species of Concern                            | Community with potential habitat | May 12 <sup>th</sup> Survey results |
|---|----------------------------------|-------------------------------------|
| <i>Arnica lessingii</i> spp. <i>norbergii</i> | Wet meadow/open Sitka forest     | Not observed                        |
| <i>Ligusticum calderi</i>                     | Wet meadow                       | Not observed                        |
| <i>Bothrychium tunux</i>                      | Sand dune                        | Not observed                        |
| <i>B. yaaxudakeit</i>                         | Sand dune                        | Not observed                        |
| <i>Puccinellia glabra</i>                     | Sand dune                        | Not observed                        |
| <i>P. kamtschatica</i>                        | Sand dune                        | Not observed                        |
| <i>Romanzoffia unalaschcensis</i>             | Sitka spruce forest edges        | Not observed                        |

### 4.1.5 Fish and Wildlife

There are no anadromous streams on North Dutch Island; therefore, no direct impact on fisheries is expected from this action. At the barge landing site there would be temporary impacts caused by constructing the barge landing and by loading and unloading heavy equipment and debris. Any turbidity and fish passage impacts would only be temporary and would be limited.

**Essential Fish Habitat.** Species of salmon are present in marine waters as well as species of ground fish habitat for Dungeness crab, tanner crab, shrimp and Pacific herring. The project was evaluated as required for effects to essential fish habitat under the Magnuson-Stevens Fishery Conservation and Management Act. The action would have no effect.

The intertidal zone habitat is composed of cobble and bolder substrate and supports rockweed and green algae. The rocks are also covered with mussel, barnacle, and periwinkle. The forest and fringe areas of the island have limited habitat for fur bearers and rodents such as martin, mink, and red squirrel. The area supports and has been known to have haul-outs for sea otters, sea lions, and harbor seals.

Several species of whale listed as threatened or endangered occur in marine waters in southeast Alaska. These species are blue, Sei, fin, northern right, sperm, and humpback. Gray whale is no

longer on the endangered species list. The most common species in the area would be humpback and gray whales.

**Migratory Bird Habitat.** Secondary Sitka spruce forest provides nesting, perching, and feeding habitat for a large number of bird species, including northern goshawks, bald eagles, and several passerine species. The area has an overall general distribution of ducks and geese. The Peale's peregrine falcon breeds from the Aleutian Islands, east and southward through Southeast Alaska, to the Queen Charlotte Islands of British Columbia. Peale's peregrine falcons nest on cliffs from 65 to 900 feet in height along the outer coast of the Gulf of Alaska (USDA Forest Service 1997b). Nest distribution is closely associated with large seabird colonies located on the outer coasts or nearby islands. There are documented seabird colonies in the Dutch Island group of islands including black oyster catchers, glaucous-winged gull, arctic tern, pigeon guillemot, and tufted puffin.

#### **4.1.6 Cultural Resources**

Excerpts from the 2007 North Dutch Island archeological report are presented here.

##### **Dutch Group Cultural History**

###### **Pre-contact Period:**

In the entire Prince William Sound region, only two large-scale excavations have taken place to date. All other work in the region has been limited to surveys and testing. The earliest known occupation in Prince William Sound is called the Uqciuvit phase, which dates to between 4,400 and 3,300 years before present (BP). Very little is known about these people, but it seems clear that they hunted sea mammals, used red ochre, and were familiar with slate grinding (Yarborough and Yarborough 1998).

During the Neo-glacial interval (3,200-2,500 BP), portions of the sound were abandoned. At Uqciuvit, there is a gap in the occupational sequence that corresponds with this period. Palugvik was first occupied and Uqciuvit was reoccupied approximately 2,250-2,350 BP by the people of the Palugvik phase. Change from the early to late Palugvik phase occurred approximately 1,900 BP. The development of the conifer forest in the last 2,000 years probably contributed to this. A shift in the abundance of fire cracked rock, the presence and absence of some artifact types, and changes in the popularity of certain artifact forms distinguish the early and late Palugvik, although there is very little difference between the material cultures of the two periods (Yarborough and Yarborough 1998).

The late prehistoric into the early historic periods were part of the Chugach phase. This phase shows continuity with the late Palugvik, although no new artifact forms were apparently added to the assemblage. The separation of the two phases is somewhat arbitrary, but correlates with the change from the Kachemak to Kodiak Island phases to the west. This correspondence is based on dating and the artifact typology at Uqciuvit (Yarborough and Yarborough 1998).

Similarly, the early Palugvik appears to be roughly contemporaneous with Kachemak III on the Alaska Peninsula. Some of the standard late Kachemak implements, like boulder spalls and notched pebbles, were rare or absent at the earliest sites such as Palugvik. Although much of the Palugvik assemblage had a generalized appearance, similarities between Palugvik and late Kachemak were seen in styles of slate points, fish hooks, labrets, and stone lamps (Clark 1984a; de Laguna 1956).

Prince William Sound was the home of the Chugach Eskimo, the Eyak, and was occasionally visited by Athabascan and Tlingit groups. The Chugach Range and the mountains of the Kenai Peninsula formed a natural boundary between the Chugach and the Dena'ina Athabascan of Cook Inlet and other Athabascan groups in the interior (de Laguna 1990). The Pacific Eskimo, including the Chugach, are a discrete cultural, linguistic, and historical entity. Aspects of their culture, however, were similar to that of their non-Eskimo neighbors. Settlement was limited to the coast, although occasionally, a salmon fishing camp was located a few miles inland on a river. The economy was mainly littoral and maritime, following the zones of greatest economic opportunity (Clark 1984b). Chugach village sites were typically located on the shore near protected waters. Temporary camps were made at fish streams during salmon runs. Sea otter hunters made temporary camps on the exposed outer shores of Montague and Hinchinbrook islands (de Laguna 1956: 11).

At the extreme southeastern edge of the sound, the Chugach were in contact with the Eyak Indians. Eyak territory encompassed a thin coastal strip of land that extended from Cordova Bay, just inside the eastern edge of Prince William Sound, to Martin River, and included the Copper River valley as far up as Childs and Miles glaciers (de Laguna 1956; Birket-Smith and de Laguna 1938). Although there is good ethnographic information on the Eyak, there is compelling evidence that they only recently arrived in the sound (de Laguna 1990).

Yakutat Tlingit traditions recount ancient Eyak and Athabaskan migrations eastward from the Copper River and a northward movement of Tlingit who intermarried with the Eyak. Over time, the Chugach were driven out of their traditional holdings by the expanding Tlingit-Eyak. This continued into the Russian Period (de Laguna 1990).

### **Russian Period:**

The first European to make contact with the Chugach was Captain James Cook in 1778. A flood of explorers, traders, and hunters soon followed him, and Prince William Sound soon became a major center for the fur trade (de Laguna 1956). In 1793 the Lebedev-Lastochkin Company established a post in Nuchek Bay on the southwest coast of Hinchinbrook Island, which became the most important village to the Chugach and Eyak in historic times. The post location was shifted to a second site in 1799 or 1800 (de Laguna 1990). It was called Konstantinovskaia Fort and consisted of a palisade, several gun emplacements, a large house for the commandant, a barracks for company men, and a kazhim for the Aleut workers (Khlebnikov 1994). Nuchek was not established until after the Russian trading post began operating. Khlebnikov (1994) reported there were 12 Russians, one "Creole," three Aleuts, and 24 Chugach living in the fort in the 1820's. He also reported that people gathered at the fort for trading between March and May (Khlebnikov 1994).

Nuchek functioned as a fur-collecting repository for the greater Prince William Sound region. Although the Chugach were the principle clients, more distant groups such as the Ahtna, Eyak, and Yakutat Tlingit also came to the station to trade. The Alaska Commercial Company took over the station at Nuchek sometime in the early 1870's. It continued to operate until 1907 (Ketz 1978).

Prior to the Gold Rush, the Ahtna traveled to Nuchek about three times a year, using moose hide boats to travel down the Copper River. These were abandoned when they arrived at Prince William Sound. At Nuchek, they bartered for guns, beads, and kettles, as well as Eyak and Chugach products. They returned to the interior via overland routes (Hanable and Workman 1974).

### **American Period:**

In late March 1885, Lieutenant Henry T. Allen's Alaskan Expedition left Nuchek for the mouth of the Copper River. He did not specifically note the Dutch Group. Records of the Alaska Commercial Company showed that after peaking in the mid-1880's, the fur business in the lower Copper River region went into gradual decline through the 1890's. Along with this decline, the station at Nuchek lost importance. In 1906, the Russian Orthodox priest was transferred to Tatitlek (Ketz 1978). Nuchek was finally abandoned in the winter of 1929-30, when the leader, Chimowitski, died and his family moved to Cordova. In 1930, de Laguna excavated at five different locations in the village but did not find any buildings or features (de Laguna 1956:12).

According to U.S. Forest Service (USFS) records, a fox farm operated on North Dutch Island in the first few decades of the twentieth century. The family running the farm reportedly lived on the south end of the island, where they also built pens and runs for the foxes. USFS archaeologist Heather Hall stated that a cast iron stove remained near the site.

The U.S. Army built a port and railroad terminal at Whittier during World War II. The port and railroad were used to transport fuel and supplies to Anchorage and other locations beginning in 1943. Five years later, the military began a construction boom in the community by constructing facilities for enlisted troops and families entering Alaska. Whittier remained an active Army facility until 1960. Today, the economy is primarily aimed at tourism. The Alaska Marine Highway has a terminal in the community, small cruise ships occasionally dock there, and there are many tours and fishing charters in Prince William Sound.

The CAA's North Dutch Island VHF facility (SEW-00489) was established in 1943 and decommissioned in 1958, when the White Alice Communication System was launched. The North Dutch Island VHF facility is not included in the *Programmatic Agreement Between the Federal Aviation Administration (FAA) and the Alaska State Historic Preservation Officer (SHPO) Regarding the Demolition and Decommissioning of the FAA Stations in Alaska (PA)*. At the time the PA was developed, the facility was among several that were not well-known. The PA will be formally amended to include this facility.

### **Cultural Resources Reported in the Area:**

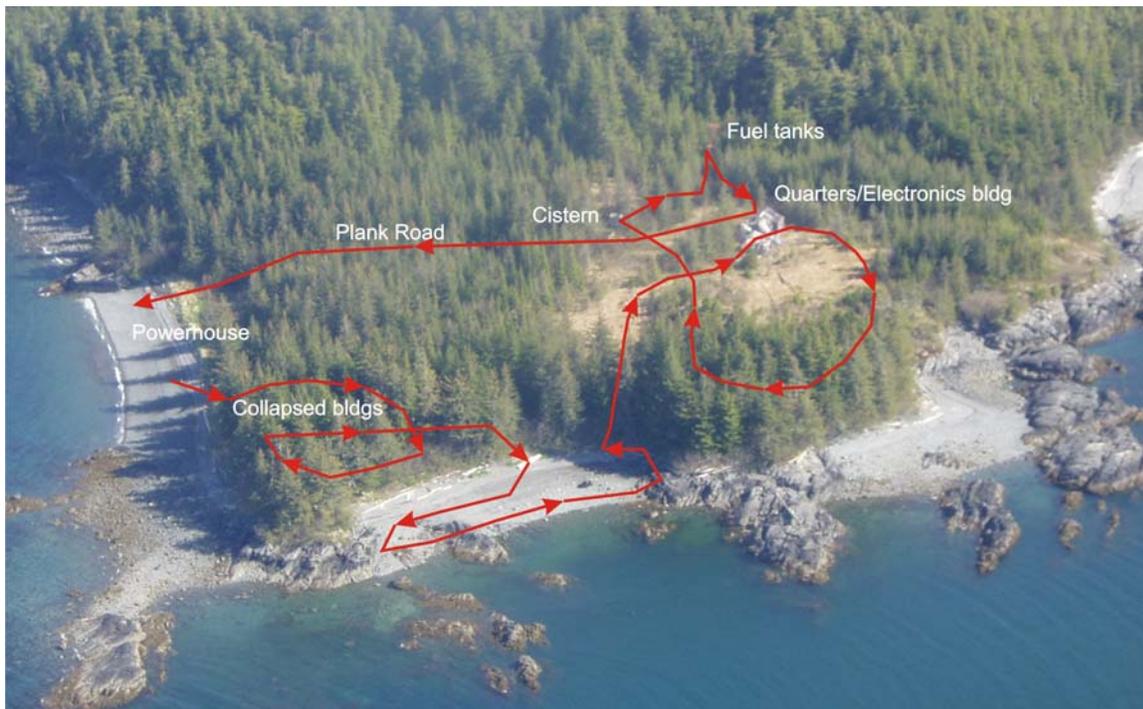
The Alaska Heritage Resources Survey (AHRS) was consulted before going into the field to locate recorded cultural properties. Linda Finn Yarborough and Heather Hall (USFS archaeologists) were also consulted for information on cultural properties on North Dutch Island.

A note on the AHRS maps indicates that there are culturally modified trees on the north end of the island. USFS archaeologist Heather Hall stated there were culturally modified trees, remains of the fox farm, and depressions on the south end of the island. The Corps/FAA archaeological survey did not relocate these features.

The AHRS includes one cultural resource on the island – SEW-00489. The database erroneously associates the structures with resource procurement. The structures were reported by archaeologists in 1989, during archaeological reconnaissance for the *Exxon Valdez* oil spill response.

### **2007 Survey Results:**

A pedestrian survey was conducted within the area of potential effect. Those areas with the highest probability of containing cultural resources were closely examined (figure 12). The survey consisted of a visual inspection of the ground surface and exposed soils, erosional faces, and road cuts within the area of potential effect. All were examined for shell or bone deposits, charcoal, wood, and lithic materials.



**Figure 12. Survey route and FAA features.**

The survey began on the west beach, where the team was dropped off by floatplane (figure 3). The archaeologists examined the beach and associated beach ridge. No cultural material was

observed. They walked into the woods and examined two collapsed structures and associated remains. The structures were approximately 15 feet by 15 feet (figure 13). The structures were wood frame with shiplap siding, which is consistent with CAA construction of the 1940s. Pilings that had been cut off near ground level were observed in the area and may have served as a parking or storage area along the plank road. There was an assortment of debris in the area of the collapsed buildings, including pressurized gas containers, a picnic table, and unidentifiable machine parts.



**Figure 13. Collapsed structures.**

The archaeologists examined the south beach and associated beach ridge. The south beach ridge was not as pronounced, indicating that this beach is less dynamic than the west beach. There were a few pieces of machinery on the beach that could not be identified. There is a slight rise and small rocky outcropping between the two beaches where a short trail would be placed. This area was examined and no cultural material was observed. They then walked up an overgrown road toward the clearing where the quarters/electronics building is located (figure 14). An FAA employee indicated that in past visits, USFS archaeologists informed him that the remains of a fox farm were somewhere to the east of this road.



**Figure 14. Overgrown road that will serve as an access road from the south beach.**

After approximately 100 feet, the road ends at a clearing (figure 15). Several small utility poles and anchors are in the clearing. There is a low hill to the east and the partially collapsed quarters/electronics building sits at the northeast edge of the clearing (figure 16). The two-story quarters/electronics building is a wood frame structure on pilings with a crawl space and is about 25 feet by 52 feet and has cedar shake siding. The exposed support beams inside the building are marked with the “C.A.A. Morrison Knudsen” shipping label that was placed on all CAA pre-fabricated buildings shipped to Alaska (figure 17). There is a wooden tank cradle adjacent to the northwest wall of the building. There is also a septic crib near the building. The septic system or crib cover is 5 feet by 5 feet, is flush with the ground surface, and is partially grown over. There are about eight upright 6-inch by 6-inch wooden posts around the house (about 8 feet tall) and scattered cable.



**Figure 15. Clearing.**



**Figure 16. The quarters/electronics building.**



**Figure 17. CAA pre-fabricated buildings were marked by the manufacturer before shipping. "Site-R-H85" was the designation for Dutch Group.**

North of the quarters/electronics building and just inside the forest edge are a concrete cistern, catch basin, and pumphouse (figure 18). The cistern walls are 9 inches thick and about 9 feet above and 6 feet below the ground surface. Some wood debris is inside the cistern. The collapsed pumphouse is wood frame with shiplap siding, and there is a water tank under the floor. The catch basin is about 30 feet by 30 feet on wooden pilings about 1 to 2 feet above the ground surface. The partially collapsed basin looks like a roof sitting on the ground and is covered with tarpaper.

There are two 10,000-gallon aboveground fuel storage tanks just northeast of the pumphouse (figure 19). Reportedly, during the 1964 Good Friday Earthquake, one tank fell on its side, spilling contents onto the ground. The large steel tanks are 12 feet in diameter and 20 feet tall. One tank rested on concrete pads about 12 feet by 12 feet and 1 foot thick. A 4-inch-diameter steel pipeline extends from one tank toward the cistern area. The second tank was placed on creosoted logs laid down in corduroy fashion.



**Figure 18. Left: Collapsed pump house. Right: concrete cistern.**



Figure 19. One of two 10,000 gallon storage tanks.

South of the quarters/electronics building, there is a small un-vegetated rise with the base of a large pole and aluminum anchors. It was between this rise and the south beach where USFS archaeologists informed the FAA that there was a cast iron stove and remains of the fox farm that preceded the CAA VHF facility. Corps archaeologists walked through the area. The terrain was uneven and the vegetation was primarily large Sitka spruce trees. The ground was covered in mosses and lichens. No culturally modified trees, surface features, or cultural material was observed.

The crew then followed the remains of the plank road from the clearing west to the west beach. The road is now marked by two rows of parallel creosoted wooden posts (figure 20). The road extended about 600 feet inland and allowed access over a wetland area. The two rows of posts are about 10 feet apart and each set of posts is about 50 feet apart. The posts are about 2 feet above ground surface and in some places the 12-inch crosspieces still remain (figure 21).



Figure 20. Creosote posts from plank road.



Figure 21. Creosote posts and cross pieces from plank road.

The remains of the powerhouse, a tank cradle, and a wooden platform are located near where the plank road meets the west beach. The 15 by 25-foot powerhouse walls are concrete and 6 feet high (figure 22). Three-inch steel piping was in the ground along the west wall of the building.



Figure 22. Remains of the powerhouse.

During the archaeological survey, cultural remains only associated with the CAA facility were encountered within the area of potential effect. Examination of the soils from cut banks, beach deposits, and exposed surfaces were examined. Historic photographs (figures 23-27) from the construction and operation of the facility illustrate that the area was heavily disturbed during construction. The entire area was cleared of vegetation and the ground surrounding the buildings was graded.



Figure 23. Overview of North Dutch Island VHF facility, looking west, 1948 (courtesy FAA).



Figure 24. Plank road leading from west beach to quarters/electronics building, 1948. An addition to quarters/electronics building is under construction (courtesy FAA).



Figure 25. Plank road leading from west beach to quarters/electronics building, 1948 (courtesy FAA).



Figure 26. Engine Generator and jeep garage, 1948 (courtesy FAA).



Figure 27 "Two Yak huts near the engine generator used for the construction crew, December 11, 1948" (courtesy FAA).

## 5.0 ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION AND ALTERNATIVES

### 5.1 No-Action Alternative.

The deterioration of the structures is a safety and environmental hazard. Debris would continue to be scattered on land and in the water. Current land owners would like the deteriorating structures and contamination removed so that future land use is not hindered. FAA would continue to be liable for the former stations.

## 5.2 Proposed Action

### 5.2.1 General.

The access route would be as described in alternative 3.

Minor temporary increases in noise from the operation of heavy equipment are anticipated. The demolition, soil cleanup, and debris removal work would concentrate activities in disturbed areas where development has taken place. Demolition activities would temporarily affect the ground surface because of the use of heavy equipment. A limited amount of vegetation clearing is necessary to access the structures for removal. Bird and other wildlife would be disturbed and shifted to adjacent areas. Temporary impacts to air quality would result from the operation of heavy equipment and the burning of wood debris. Given the remote location from a population center and that the weathered wood and brush have no petroleum-based material or other materials that give off black smoke, an Alaska Department of Environmental Conservation open burn permit is not necessary. Construction crews would be housed on a vessel. There would be no effect to cultural properties.

### 5.2.2 Specific Impact Categories

#### North Dutch Island

**Vegetation and Wetlands.** The amount of vegetation removed would depend on the alternative that is selected. Alternative 3 is preferred.

Access route alternative 1 would have the most vegetation area cleared and has the largest gravel fill requirements. Access route alternative 2, using Geo mat, requires the lowest amount of vegetation clearing and has no gravel filling requirements. Access route alternative 3 would use gravel in the area of uneven terrain (land knob) and filter fabric from the south beach to the cleanup site. It would require only 60 cubic yards of fill and not as much area would be cleared as in alternative 1. Even though access route alternative 2 represents the best option in terms of area cleared, it has potential safety issues with the barge landing due to the narrow south beach and scattered boulder patches.

**Table 2: Impacts caused by each access route alternative.**

| Access Route Alternative               | Aprox. Area Cleaned | Aprox. Gravel Fill | Vegetation Type                |
|--|---------------------|--------------------|--------------------------------|
| Alternative 1 (gravel)                 | 4,400 square feet   | 160 cubic yards    | Sitka Spruce/shrub             |
| Alternative 2 (gravel)                 | 1,100 square feet   | 120 cubic yards    | Sitka Spruce/ wet meadow/shrub |
| Alternative 2(Geo mat)                 | 1,100 square feet   | 0 cubic yards      | Sitka Spruce/ wet meadow/shrub |
| Alternative 3 (gravel only)            | 2,750 square feet   | 185 cubic yards    | Sitka Spruce/ wet meadow/shrub |
| Alternative 3 (gravel + Filter fabric) | 2,750 square feet   | 60 cubic yards     | Sitka Spruce/ wet meadow/shrub |

Access route alternative 3, using gravel in the first 150 feet of trail and filter fabric from south beach to the cleanup site, is the best option because it would use less gravel fill than the other alternatives, and it addresses safety concerns associated with the barge landing.

Meadow vegetation and salmonberry thickets in the vicinity of the cleanup area would be trampled causing the temporary displacement of passerine bird nesting and perching habitat. No noxious weeds or non-native species were at the site during the field trip. Regardless of the alternative chosen, a potential negative impact of this cleanup action on vegetation is the potential to introduce noxious weeds and non-native species when bringing in heavy machinery. To avoid such problems, any equipment would be cleaned before arriving at the site.

Wetlands would be temporarily filled under this action, and the fill removed as excess would no longer be needed. No changes in its values and functions would be expected as a consequence of this action. The use of filter fabric would allow for the rapid recovery of the vegetation; therefore, the impacts are negligible and localized.

**Fish and Wildlife.** No direct impact on fish habitat is expected from this action. At the barge landing site, there would be temporary disturbances caused by loading and unloading heavy equipment. Any turbidity impacts would only be temporary. The gravel extraction for the temporary fill may impact a small portion of the intertidal zone. No essential fish habitat would be affected.

Gravel would be extracted in the higher intertidal and can be authorized by a Nationwide permit #38 that allows work in waters of the U.S. when the action pertains to the removal of hazardous wastes. The pre-notification stipulation is being satisfied by the public review of this environmental assessment. Coordination with Corps Regulatory is contained in correspondence appendix.

Small mammals would be affected within the cleared vegetation zones. Large mammals would be displaced temporarily from the area during construction. Marine mammals would not be affected.

**Migratory Bird Habitat.** The cleanup project would have negligible effects on migratory bird habitat, because of its low and localized scale. Only a relatively small area of secondary Sitka spruce forest would be removed. This vegetation community is abundant in the region. The proposed site has been previously disturbed and the dominant vegetation communities are at various succession stages. Access to the cleanup site would require removing some secondary growth vegetation, especially trees with small DBH (diameter breast height). Cutting tall trees with DBH larger than 5 feet in diameter is not anticipated but would be avoided to the extent possible to prevent potential nesting habitat damage for Northern goshawks and bald eagles. The removal of meadow vegetation and salmonberry thickets would temporarily displace passerine bird nesting and perching habitat. This impact would be only temporary and would be mitigated by promoting the establishment of new vegetation. Mitigation measures would include the scarification of the road to loosen compacted gravel and soil and the overlay of previously

grubbed vegetation debris on top of the scarified road. To avoid disturbing nesting birds, vegetation clearing could occur prior or after the nesting season (1 May through July 15).

Bald eagle nests would not be affected. Protective buffer zones around nests would be observed if any nests are active near the project site. Buffer zones recommended by the U.S. Fish and Wildlife Service (USFWS) are 330 feet around eagle nest trees. No loud and disturbing cleanup activity, heavy equipment use, or burning should take place within the buffer zone during the bald eagle nesting season (March 1 through August 31). The cleanup projects would not affect subsistence or commercial hunting or fishing.

**Threatened and Endangered Species.** There would be no effect to any species or their habitats as a result of the cleanup project.

### **Cultural Resources.**

**Determination of Eligibility and Assessment of Effect.** The North Dutch Island VHF facility (SEW-00489) is a typical example of Civil Aeronautics Authority (CAA) facilities described by Paul Chattey (1999), which were documented and mitigated under the PA. The remaining structures were prefabricated by Morrison and Knudsen, and then shipped to Alaska.

Construction of the North Dutch Island VHF facility began in 1943 and changes were made to the facility until it was closed in 1958, as VHF was replaced by more advanced technology such as the White Alice communication system (Dave Hanneman, FAA, personal communication 2007). North Dutch Island was not included in Chattey's evaluation nor is the North Dutch Island VHF facility included in the PA. The buildings and layout of the North Dutch Island facility are consistent with FAA stations documented by Chattey and the facility is within the period of significance. Chattey found that some of FAA stations around Alaska are eligible for the National Register of Historic Places under both Criteria A (events) and Criteria C (construction). Chattey stated that the period of significance for the CAA was between 1940 and 1958, when air navigation facilities were constructed for safety, and radio towers were built to assist in communications within and outside the territory. There would no effect to cultural resources in the project area. However, to ensure that no cultural properties are inadvertently disturbed, an archeologist would monitor construction activities.

In considering the North Dutch Island VHF facility for eligibility for the National Register of Historic Places, the Corps finds that the station is lacking in several aspects of integrity. The facility remains in same general area in which it was constructed (location). The site has retained basic features that are expressive of its design. The spatial layout of the buildings in relation to each other is apparent as is basic configuration and proportions (design). The site retains its basic physical appearance within the environment (setting). Not enough equipment or structures are standing or present at the site to convey its association with its significance to the CAA to a passerby. For example, until the last few years, the facility was erroneously associated with resource extraction rather than CAA activity. The towers, antennae, and navigation equipment have been removed. All buildings have partly or completely collapsed (association). The property does not retain sufficient key materials to indicate preferences and types of technologies

afforded to the builder at that time in history (materials). The buildings and structures at this site were constructed from standard architectural plans that the CAA used throughout the state. It is not a special example of skill or craft for this time (workmanship).

Due to a lack of integrity, the North Dutch Island VHF facility does not convey its association with these significant events. In general, the CAA structures and buildings had a distinctive appearance and most stations had identical buildings. Of the structures in the area of potential effect, the combination quarters and VHF transmitter building, engine/generator, and pump house were structure types mitigated under the PA. The North Dutch Island VHF facility is not eligible for the National Register of Historic Places.

No surface or subsurface evidence of pre-CAA occupation was observed within the area of potential effect. The USFS has expressed concern that subsurface deposits and culturally modified trees reported on the island will be affected by the removal of the facility. An archaeological monitor will be present during ground-disturbing activity.

The Corps recommends that an archeologist qualified under the Secretary of Interior's Standards and Guidelines (FR Vol. 48, No. 190, pp. 44738 - 44739) monitor construction activities and that a comprehensive monitoring plan be followed throughout the duration of the project. If potentially significant cultural material is discovered, construction will be suspended and the Alaska State Historic Preservation Officer office will be consulted. Provided an archaeological monitor is present, there will be no historic properties affected by the proposed undertaking.

**Coastal Zone Management Program.** The North Dutch Island cleanup project as proposed in alternative 3 would be consistent with the provisions of the Coastal Zone Management Program to the fullest extent practical.

**Section 4(f) of the Department of Transportation (DOT) Act.** The 4(f) section of the DOT Act requires consideration of publicly owned parklands, recreational areas, wildlife and waterfowl refuges, and historic sites in an environmental assessment. The North Dutch Island is being considered by the U.S. Forest Service as a wilderness area; therefore, the debris cleanup and the attention to environmental recovery would be consistent with refuge plans, and the maximum cleanup as practical would be conducted.

## **6.0 CONCLUSION**

The North Dutch Island FAA station demolition, debris removal, and soil cleanup action would not have a significant effect on the human or natural environment; therefore, an environmental impact statement will not be prepared.

## 7.0 AGENCIES AND PERSONS CONTACTED

A scoping letter describing the project was sent in October 2006 to State and Federal agencies. Preliminary scoping was conducted with agencies responsible for threatened and endangered species and natural resources. A determination of eligibility under NHPA was sent to the SHPO. Correspondence is in Appendix A.

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## **CORRESPONDENCE APPENDIX**

