



**US Army Corps  
of Engineers**

-Alaska District

---

**Appendix F:  
Environmental**

---

## **Unalaska (Dutch Harbor) Channels**

### **Unalaska, Alaska**



**February 1, 2019**

**Appendix F: 404(b)(1) and Environmental Correspondence**

**Unalaska (Dutch Harbor) Channels**

**EVALUATION UNDER  
SECTION 404(b) (1) CLEAN WATER ACT 40 CFR PART 230  
Unalaska (Dutch Harbor) Deep Draft Navigation Improvements  
Unalaska, Alaska**

**I. Project Description**

The proposed project would deepen the existing navigation channel at Dutch Harbor in Unalaska, Alaska. Dredging the shallow bar at the entrance of Iliuliuk Bay at Dutch Harbor would improve navigation efficiency to the area by allowing deeper draft vessels to safely pass over the bar in place of existing inefficiencies of lightering goods, waiting for appropriate tides to enter the bay, or adjusting cargo and fuel loads to reduce draft. Furthermore, a deepened bar would allow for Dutch Harbor to properly and effectively serve as Potential Place of Refuge.

Navigation improvements include the initial dredging to depths of -58' MLLW (Mean Lower Low Water) comprising of 182,000 cubic yards (cy) and covering 437,000 square feet. Maintenance dredging, to be performed at year 25, will comprise of 16,000 cy and covering 437,000 square feet. Disposal will be a proposed site on the east side of the mouth of Iliuliuk Bay with a 110' depth. The channel is expected to be 400 ft. in length and 600 ft. in width.

The proposed project description and considered alternatives are described in-depth, and are contained in the accompanying Draft Integrated Feasibility Report/Environmental Assessment (FR/EA).

**II. Factual Determinations**

**A. Physical Substrate Determinations**

Dutch Harbor and Iliuliuk Bay are products of a glacially-deposited recessional moraine with the bay being submerged due to sea level rise. Local coastlines are sparsely vegetated, boulder beaches, and near vertical cliffs. The Iliuliuk bar is a dense structure, requiring the use of blasting during dredging, and material within the bar is expected to consist of consolidated, unsorted, and unstratified heterogeneous mixture of clay, silt, sand, gravel, cobbles, and boulders. Disposal site alternatives consist coarse sands or gravel with shell litter and little vegetation. The proposed disposal site has a mixture of coarse sand and gravel with shell litter.

**B. Water Circulation, Fluctuations, and Salinity Determinations**

The project area within Iliuliuk Bay is an area of mixed semi-diurnal tides, with two unequal high tides and two unequal low tides each lunar day. Tidal parameters at Iliuliuk Bay are closest to those determined by NOAA for Station 9462620 – Unalaska (53° 52.8' N, 166° 32.2' W). The tidal parameters in Table 1 were determined by NOAA using data from the period May 7, 1955 to present (NOAA, 2017). A range of salinity ranged from 32 to 21 PSU was present through the seasons according to a 2017 marine biota study of Iliuliuk Bay conducted by USACE (Neff, 2018). A maximum flood current velocity of 1.6 knots and a maximum ebb current velocity of

Utilizing the aforementioned tools, marine sediments at USACE's project location, as proposed, are free of anthropogenic influence, and are not expected to differ in background constituent elements between material excavation and placement sites. Therefore, USACE concludes that the sediments comprising the dredge prism are suitable for unconfined open water disposal

#### **E. Aquatic Ecosystems and Organism Determinations**

The proposed work would destroy or displace benthic and infaunal organisms within and immediately adjacent to the dredge prism, blasting sites, and material placement sites. At the blasting sites, dredge prism, and disposal sites, non-motile and slow moving organisms (crabs, shrimp, echinoderms, and other invertebrates) could be crushed by excavation actions or smothered by the dredged material itself. Most groundfish and other highly motile organisms would be expected to avoid the area until turbidity levels returned to near normal conditions. Benthic infaunal organisms, crustaceans, groundfish, and other marine life forms would be expected to rapidly colonize the newly exposed sediments at the disposal placement site once work had been completed. Furthermore, other organisms may be attracted to the hard surface vertical structures of the disposal zone. Based on the low level of effects observed in similar USACE projects in regards to blasting, the potential effects and fatalities for the proposed blasting in Dutch Harbor are expected to be minimal.

#### **F. Proposed Disposal Site Determinations**

A total of five alternative disposal sites were investigated with trawls and underwater video. Sites were eliminated due to productive rock sole sites, sea pen colonies, and distance. The selected disposal site at the east side of the mouth of Iliuliuk Bay is the closest site with a similar substrate to the dredging footprint. Being a glacial moraine, the dredged material has a greater diversity of sediment sizes than the any of the disposal site alternatives. These sediment sizes range from coarse sand to boulders. As such, there are no disposal site alternatives that would match the materials at the dredge site. However, this material is expected to increase habitat complexity in an otherwise uniform area and increase the diversity of fish and invertebrates in the area of the disposal site.

Because sediments associated with this project, as proposed, and are free of anthropogenic contamination the proposed action would comply with applicable water quality standards and would have no appreciable detrimental effects on municipal and private water supplies, recreational or commercial fisheries, water related recreation, Essential Fish Habitat, marine mammals, or aesthetics.

#### **G. Determination of Cumulative and Secondary Effects on the Aquatic Ecosystem**

USACE's project, as proposed, seeks to deepen the channel and dispose of dredged material into the waters of Iliuliuk Bay. The bar area is currently an area of low productivity and will likely remain so after dredging since similar physical conditions will remain. The disposal area will change in terms of substrate composition to an area composed a wide array of sizes ranging from gravel to boulders. The disposal area will also transition from a flat area of coarse sand waves to

quality. However, the same construction methods would have been required and the shallow project depths would not have accomplished the project goals given the design vessel. In short, the impacts would have been slightly reduced, but the project objectives would not have been met. The action, as proposed, is the least damaging practicable alternative after taking into consideration cost, existing technology, maintaining the localized coastal sediment budget, and logistics in light of the overall project purpose.

### **C. Compliance with Applicable State Water Quality Standards**

The proposed project would not be expected to have an appreciable adverse effect on water supplies, recreation, growth and propagation of fish, shellfish and other aquatic life, or wildlife. It would not be expected to introduce petroleum hydrocarbons, radioactive materials, residues, or other pollutants into the waters of Iliuliuk Bay. A temporary increase in turbidity would result from in-water activities. The project would comply with State water quality standards. Adherence to water quality standards would be monitored.

### **D. Compliance with Applicable Toxic Effluent Standards or Prohibition Under Section 307 of the Clean Water Act**

No toxic effluents that would affect water quality parameters are associated with the proposed project. Therefore, the project complies with toxic effluent standards of Section 307 of the Clean Water Act.

### **E. Compliance with Endangered Species Act of 1973**

USACE has been coordinating with, and shall engage NMFS in formal consultation while its application for Incidental Harassment Authorization under the Marine Mammal Protection Act is being considered. Dredging and placement activities associated with the project have the potential to disrupt natural behavior patterns of marine mammals.

### **F. Evaluation of Extent of Degradation of the Waters of the United States**

There are no municipal or private water supplies in the area that could be negatively affected by the proposed project. Commercial interests would benefit from navigation improvements. There would be no significant adverse impacts to plankton, fish, shellfish, wildlife, and/or special aquatic sites.



THE STATE  
of **ALASKA**  
GOVERNOR BILL WALKER

Department of Natural Resources

DIVISION OF PARKS & OUTDOOR RECREATION  
Office of History & Archaeology

550 West 7<sup>th</sup> Ave., Suite 1310  
Anchorage, Alaska 99501-3565  
Mon: 907.269.8721  
<http://dnr.alaska.gov/parks/oha>

March 6, 2018

File No.: 3130-1R COE / 2018-00165

Kelly A. Eldridge  
Archaeologist  
Environmental Resources Section  
U.S. Army Corps of Engineers - Alaska District  
PO Box 6898  
JBER, AK 99506-0898

Subject: Illiuliuk Bay Navigation Improvements Project

Dear Ms. Eldridge,

The Alaska State Historic Preservation Office received your initial correspondence (dated February 6, 2018) on February 7, 2018 and supplemental email on February 23, 2018 concerning the subject project. Following our review of the provided information, we concur with the finding of No Historic Properties Affected.

Our office appreciates the U.S. Army Corps of Engineers (USACE) coordination and consultation with the National Park Service concerning the Dutch Harbor Naval Operating Base and Fort Mears, U.S. Army National Historic Landmark (NHL). Our office had similar concerns that properties associated with the NHL could be affected by the proposed project, but feel that the USACE have completed a good faith effort to identify whether those properties are extant within the areas of potential effects.

As stipulated in 36 CFR 800.3, other consulting parties such as the local government and Tribes are required to be notified of the undertaking. Additional information provided by the local government, Tribes, or other consulting parties may cause our office to re-evaluate our comments and recommendations. Please note that our response does not end the 30-day review period provided to other consulting parties.

Should unidentified archaeological resources be discovered in the course of the project, work must be interrupted until the resources have been evaluated in terms of the National Register of Historic Places eligibility criteria (36 CFR 60.4), in consultation with our office.



**From:** [Spegon, Jennifer](#)  
**To:** [Rouse, Michael B CIV USARMY CEPOA \(US\)](#)  
**Cc:** [Kimberly Klein](#); [Douglass Cooper](#); [Catherine Yeargan](#)  
**Subject:** [Non-DoD Source] USA CE Fish And Wildlife Coordination Act Collaboration - Iliuliuk Bay Bar, Dutch Harbo  
**Date:** Thursday, August 16, 2018 10:47:08 AM

---

Dear Mr. Rouse:

Our records indicate the U.S. Army Corps of Engineers (Corps) is adequately coordinating with U.S. Fish and Wildlife Service (Service) on the subject project as required under the Fish and Wildlife Coordination Act and the National Environmental Policy Act.

I understand the Corps has worked with the Service in the past, and is currently collecting data to prepare for future consultations, on this project under the Endangered Species Act (ESA) and the Marine Mammal Protection Act (MMPA). As we discussed, when the Corps decides to pursue coverage under the MMPA, you will send an application or petition, and will be working with Kim Klein. When you're ready to initiate section 7 consultation under the ESA, you will send a request for consultation with supporting analysis to the Service's Anchorage office at: [ak\\_fisheries@fws.gov](mailto:ak_fisheries@fws.gov) <[mailto:ak\\_fisheries@fws.gov](mailto:ak_fisheries@fws.gov)> .

We look forward to continuing to work with you on this project. If you have questions about the MMPA, please contact Kim Klein at [kimberly\\_klein@fws.gov](mailto:kimberly_klein@fws.gov) <[mailto:Kimberly\\_Klein@fws.gov](mailto:Kimberly_Klein@fws.gov)> . If you have questions about the ESA as it relates to this project, please contact Catherine Yeargan at [catherine\\_yeargan@fws.gov](mailto:catherine_yeargan@fws.gov) <[mailto:Catherine\\_Yeargan@fws.gov](mailto:Catherine_Yeargan@fws.gov)> or me at the number below.

Thank you,

Jennifer Spegon

Jennifer Spegon  
Ecological Services  
Anchorage Fish and Wildlife Field Office  
U.S. Fish and Wildlife Service  
4700 BLM Rd  
Anchorage, AK 99507  
Phone: (907) 271-2768  
FAX: (907) 271-2786  
[jennifer\\_j\\_spegon@fws.gov](mailto:jennifer_j_spegon@fws.gov) <[mailto:jennifer\\_j\\_spegon@fws.gov](mailto:jennifer_j_spegon@fws.gov)>

<[mailto:jennifer\\_j\\_spegon@fws.gov](mailto:jennifer_j_spegon@fws.gov)>

**From:** Rouse, Michael B CIV USARMY CEPOA (US)  
**To:** "[douglass\\_cooper@fws.gov](mailto:douglass_cooper@fws.gov)"  
**Subject:** USACE Fish And Wildlife Coordination Act Collaboration - Iliuliuk Bay Bar, Dutch Harbor  
**Date:** Wednesday, January 10, 2018 11:06:00 AM

---

Good Morning Doug,

Per our most recent phone conversation, I informed you that USACE had not formally sought out collaboration under the FWCA for a navigational project at the mouth of Iliuliuk Bay, Dutch Harbor. Rather, USACE has been coordinating with members of the Anchorage Fish and Wildlife Service concerning Section 7 consultation under the Endangered Species Act, as well as to pursue an Incidental Harassment Authorization under the authority of the Marine Mammal Protection Act.

A uniform depth (42ft) bar at the head of Iliuliuk Bay, the entrance to Dutch harbor, precludes its utilization by a substantial portion of the global commercial shipping fleet. Preliminary planning meetings conducted with the Unalaska community in September of 2016 included USFWS and NMFS personnel teleconference participation. Dredging a portion of the Iliuliuk Bay bar was unanimously accepted as the solution to this identified problem.

Within approximately a month of the September meeting, USACE biologists collaborated with USFWS and NMFS personnel to identify critical data parameters and design biological surveys to be executed by USACE biologists. Over the following 14 months, USACE biologists conducted three focused avian and nearshore marine mammal surveys and four trawl and pot surveys of the bar area and offshore potential dredge material disposal areas. Geophysical investigations of the bar conducted during the same timeframe concluded that the material constituting bar was highly consolidated and displayed physical return signatures similar to those of solid rock. At that point, it was postulated that confined underwater blasting would be required to prepare the consolidated material for removal. Once the decision to pursue confined underwater blasting was codified, USACE scheduled coordination meetings with USFWS and NMFS personnel to seek guidance concerning future ESA and MMPA coordination.

At this point in USACE's project planning process, the tentative selection of a plan (dredging facilitated by confined underwater blasting), USACE believes that our historic level of coordination and perceived future coordination regarding this project are consistent with the precepts of the FWCA, and that absent the formal request for coordination in the form of a Coordination Act Report or Planning Aid Letter, an email recognizing this level of coordination should be sufficient for USACE's formal records.

I would be happy to answer any questions or requests for information that you may have regarding the aforementioned project.

Sincerely,

Mike Rouse  
Fisheries Biologist / NEPA Coordinator  
Alaska District US Army Corps of Engineers  
(907) 753-2743





DEPARTMENT OF THE ARMY  
ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
P.O. BOX 6898  
JOINT BASE ELMENDORF-RICHARDSON, AK 99506-0898

FEB 06 2018

Ms. Judith Bittner  
State Historic Preservation Officer  
Office of History and Archaeology  
550 West 7<sup>th</sup> Avenue, Suite 1310  
Anchorage, AK 99501-3565

Dear Ms. Bittner:

The U.S. Army Corps of Engineers (USACE) is planning to conduct navigation improvements in the form of dredging in an area of Iliuliuk Bay at Dutch Harbor, Unalaska Island, Alaska (Sections 27 and 30, T72S, R118W, USGS Quad Unalaska C-2, Seward Meridian; Figure 1). In compliance with Section 106 of the National Historic Preservation Act of 1966 [36 CFR § 800.2(a)(4)], the purpose of this letter is to notify you of a Federal undertaking and to seek your concurrence on an assessment of effect.

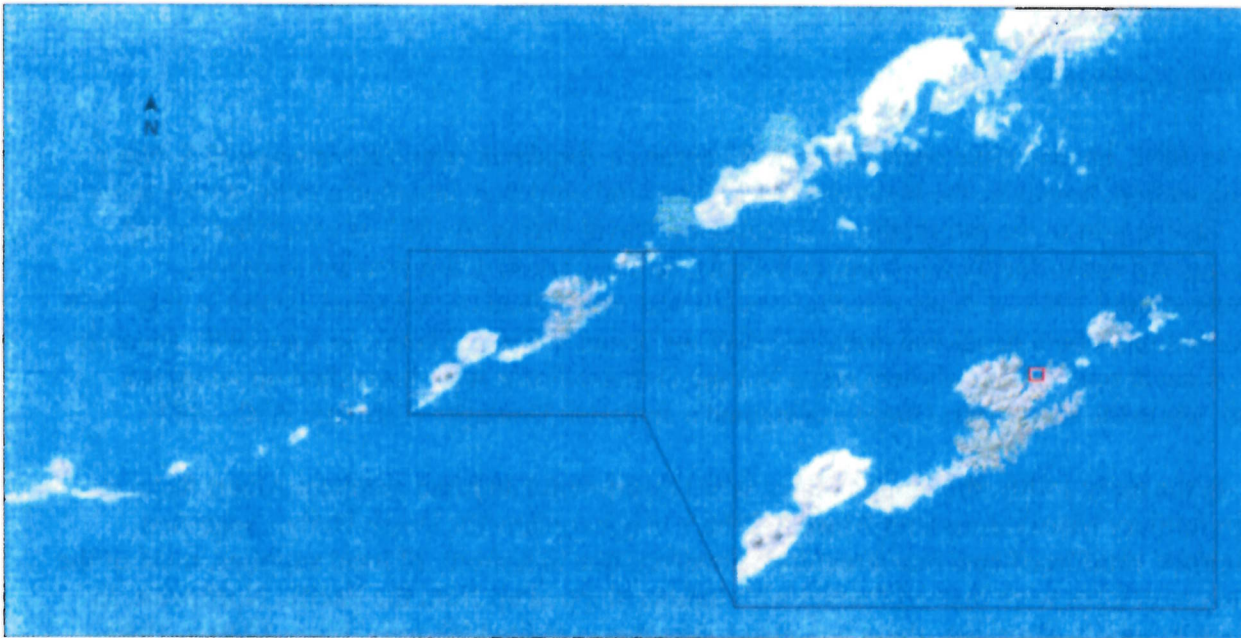


Figure 1. Location overview; project area in red rectangle.

## Context

The eastern Aleutian Islands have been continuously occupied by Unangan people since at least 9,000 years BP. The earliest known Unangan sites are found on Hog Island in Unalaska Bay, just west of Amaknak Island (Davis et al. 2016; Davis and Knecht 2010). Unalaska Island has over 150 known precontact village sites; there are multiple sites within Unalaska Bay (Corbett and Yarborough 2016). The earliest documented Russian contact with Unangax of the

*Ryujo* flew over Amaknak Island, dropping fourteen bombs on Fort Mears, destroying five buildings. On June 4, seventeen bombers and nine fighter planes again dropped bombs on the island, striking gun emplacements, fuel tanks, and the S. S. *Northwestern*, which was beached near the Dutch Harbor dock.

After the attack on Dutch Harbor, the ramp-up of military presence increased. The Mt. Ballyhoo Army Garrison, which later became Fort Schwatka, was constructed on Ulatka Head in 1942. Due to the lack of space available for expansion on Amaknak Island, the Army turned Fort Mears over to the Navy on August 11, 1942, in return for the construction of new facilities for the Army in Pyramid Valley and elsewhere nearby by Navy Seabees (Faulkner et al. 1987). On January 1, 1943, the Dutch Harbor Naval Operating Base was commissioned, adding to the naval air station the newly-constructed air operations building, antisubmarine net and boom depot, submarine base, and ship repair facility (Thompson 1984). In August 1944, Fort Mears was placed on housekeeping status. The naval submarine facility was decommissioned in 1945, and the Dutch Harbor Naval Operating Base was decommissioned in 1947. The remaining structures and lands associated with Fort Mears were sold in 1952 (Faulkner et al. 1987).

## **Project Description**

The Iliuliuk Bay Navigation Improvements project would involve dredging the ocean floor at the location of a shallow shoal at the entrance to Iliuliuk Bay. The natural depth of Dutch Harbor is over -75 feet mean lower low water (MLLW). However, the shoal, or bar, at the entrance to Iliuliuk Bay is only about -42 feet MMLW, which limits access to the port (Figure 2). A 2017 marine geophysical survey confirmed that the shoal is a Pleistocene-era submarine glacial moraine. A 600 foot-wide channel through the shoal will be dredged, likely by blasting the moraine followed by removal with a clamshell dredge, to a depth of up to -52 feet MLLW. The dredged materials will be placed upon split hopper barge for transport to an offshore disposal site in Unalaska Bay, northeast of the dredging site. There are five potential disposal areas selected that are reasonably close to the dredge area; the preferred disposal area is east of Ulatka Head (Figure 3). Any onshore staging necessary for the project will use extant industrial staging locations.

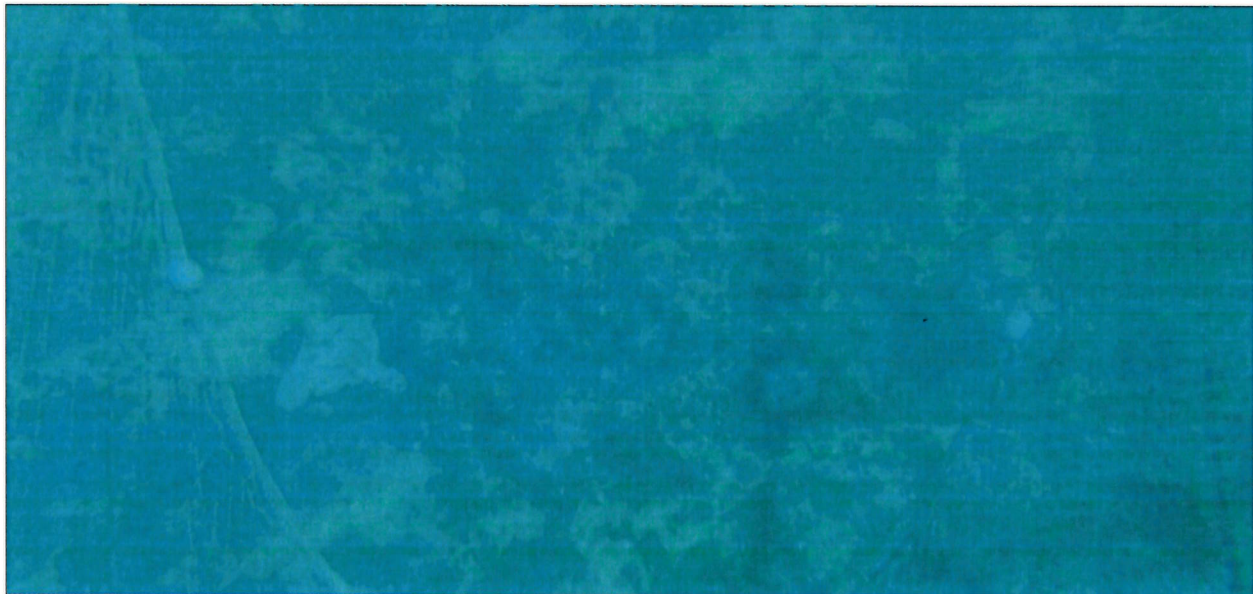


**Cultural Resources and Assessment of Effect**

There are multiple cultural resources in the vicinity of the project Area of Potential Effect (APE), but none are directly within the dredging or offshore disposal locations (Table 1). In 2017, biological trawl surveys were conducted in the APE and digitally recorded using a waterproof camera attached to the trawling net. These videos clearly showed a lack of cultural resources on the ocean floor within the APE (Figure 4).

**Table 1.** Sites identified in the general vicinity of the APE.

| AHRS No. | Site Name   | NRHP Status           |
|----------|---|-----------------------|
| UNL-055  | Tanaxtaxak  | Eligible              |
| UNL-092  | Summer Bay Site   | Eligible              |
| UNL-119  | Fort Schwatka   | Contributing property |
| UNL-120  | Dutch Harbor Naval Operating Base and Fort Mears, U.S. Army | NHL                   |
| UNL-208  | Summer Bay Flake Scatter                                    | No Determination      |
| UNL-314  | Humpy Cove Village  | No Determination      |
| UNL-332  | Summer Bay Bridge   | Eligible              |
| UNL-467  | WWII Quonset Hut, Elephant Steel Magazines                  | No Determination      |
| UNL-468  | WWII Bunker and Submarine Net Anchor                        | No Determination      |
| UNL-470  | WWII Bunker (Amaknak Spit)                                  | Eligible              |
| UNL-576  | Second Priest Rock, Ft. Brumback Searchlights #7 and #8     | Contributing property |
| UNL-582  | Quonset Barracks Foundation (Ft. Schwatka)                  | Contributing property |
| UNL-583  | Wooden Foundation (Ft. Schwatka)                            | Contributing property |



**Figure 4.** Still image from trawl survey recording of proposed dredge area (USACE 2017).

During World War II, submerged anti-submarine nets extended across the entrance to Dutch Harbor (Figure 5). The submarine net extended from Little Priest Rock on Unalaska Island to an anchor and bunker (UNL-468) located on the Tanaxtaxak site (UNL-055) on Amaknak Island. The net was intended to prevent Japanese submarines from entering the bay.

|                          |                 |      |                                |  |
|--------------------------|-----------------|------|--------------------------------|--|
| <i>Royal Fisher</i>      | Crabber         | 1972 | At Dutch Harbor                | Rammed and sunk by runaway barge             |
| <i>Sea Foam</i>          | Fishing vessel  | 1981 | Near Dutch Harbor (Summer Bay) | Ran aground and lost                         |
| <i>Kaiyo Maru No. 12</i> | Fish processor  | 1982 | 15 mi. north of Dutch Harbor   | Caught fire and sank                         |
| <i>Arctic Dreamer</i>    | Fishing vessel  | 1983 | 10 mi. north of Dutch Harbor   | Capsized and sank                            |
| <i>Comet</i>             | Halibut trawler | 1983 | 25 mi. north of Dutch Harbor   | Took on water, sank when engine room flooded |
| <i>Ocean Grace</i>       | Crabber         | 1983 | 22 mi. north of Dutch Harbor   | Capsized and sank                            |
| <i>Silver Clipper</i>    | Fishing vessel  | 1984 | 28 mi. NW of Dutch Harbor      | Sank after engine room flooded               |
| <i>Olympic</i>           | Crabber         | 1989 | North of Dutch Harbor          | Sank   |
| <i>Louise</i>            | Fishing vessel  | 1991 | Near Dutch Harbor              | Sank   |

## Conclusion

The proposed undertaking involves the dredging of a submarine glacial moraine in Iliuliuk Bay followed by disposal of dredged material in Unalaska Bay. There are no known shipwrecks or cultural resources inside the APE. Following 36 CFR § 800.4(d)(1), the USACE seeks your concurrence on the determination that this undertaking will result in **no historic properties affected**. If you have any questions about this project, please contact Forrest Kranda by phone at 907-753-2736, or by email at [forrest.j.kranda@usace.army.mil](mailto:forrest.j.kranda@usace.army.mil).

Sincerely,



Kelly A. Eldridge  
Archaeologist  
Environmental Resources Section

## Cc:

Cat Hazen, City Clerk, City of Unalaska  
Janis Krukoff, Director, Ounalashka Corporation  
Nicole Johnson, Tribal Administrator, Qawalangin Tribe of Unalaska  
Melvin Smith, Manager of Resource Development, Aleut Corporation  
Karen Pletnikoff, Environmental Program Manager, Aleutian Pribilof Islands Association  
Anthony Grande, Director of Planning, Unalaska Historical Commission  
Janet Clemens, Historian, National Park Service – Alaska Region

TYPED: Kranda/06 Dec 2017/x2672  
FILE:

Cat Hazen  
City Clerk  
City of Unalaska  
P.O. Box 610  
Unalaska, AK 99685

Janis Krukoff  
Director  
Ounalashka Corporation  
P.O. Box 149  
Unalaska, AK 99685

Nicole Johnson  
Tribal Administrator  
Qawalangin Tribe of Unalaska  
P.O. Box 334  
Unalaska, AK 99685

Melvin Smith  
Manager of Resource Development  
Aleut Corporation  
4000 Old Seward Hwy., Suite 300  
Anchorage, AK 99503

Karen Pletnikoff  
Environmental Program Manager  
Aleutian Pribilof Islands Association, Inc.  
1131 E. International Airport Rd.  
Anchorage, AK 99518

Anthony Grande  
Director of Planning  
Unalaska Historical Commission  
City of Unalaska  
P.O. Box 610  
Unalaska, AK 99685

Janet Clemens  
National Register Historian  
National Park Service – Alaska Region  
240 West 5<sup>th</sup> Avenue  
Anchorage, AK 99501



# United States Department of the Interior

## NATIONAL PARK SERVICE

Alaska Region  
240 West 5<sup>th</sup> Avenue, Room 114  
Anchorage, Alaska 99501

IN REPLY REFER TO:  
I.B. (AKRO-CR)

March 5, 2018

VIA ELECTRONIC MAIL – NO HARD COPY TO FOLLOW

Ms. Kelly A Eldridge  
Archaeologist  
Environmental Resources Section  
Alaska District, U.S. Army Corps of Engineers  
PO Box 6898  
Joint Base Elmendorf-Richardson, AK 99506-0898

Subject: Response to USACE Iliuliuk Bay Navigation Improvements Project

Dear Ms. Eldridge:

Thank you for your letter received February 6, 2018 and subsequent email dated February 23, 2018, regarding the navigation improvements in the form of dredging in an area of Iliuliuk Bay at Dutch Harbor, Unalaska Island, Alaska.

As you are aware, the National Park Service (NPS) administers the National Historic Landmark (NHL) program for the Secretary of the Interior. Federal agencies undertaking a project within a NHL must be in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. The above-referenced project is within and adjacent to the Dutch Harbor Naval Operating Base and Fort Mears, U.S. Army National Historic Landmark. The NPS serves as an interested party throughout the Section 106 process to ensure the integrity of this World War II significant NHL.

The project entails dredging of a submarine glacial moraine in Iliuliuk Bay followed by disposal of dredged material in Unalaska Bay. We understand that the geotechnical survey of the proposed dredge area did not detect any anomalies that would indicated potential submerged WWII related cultural resources, such as submarine cables, within the dredge area and that additional survey with a remote operated underwater vehicle will be used to ensure that no munitions or other hazards are present. Based on the information provided in the letter and the additional information provided via email, NPS concurs with your determination that the undertaking will have no effect on historic properties within the NHL.



However, if the scope of work changes or additional information comes to light, additional consultation may be required.

We appreciate the opportunity to consult on this project. If you have any questions on the NHL program or the NPS's role in the Section 106 process, please feel free to contact Valerie Gomez at 907-644-3467 or [valerie\\_gomez@nps.gov](mailto:valerie_gomez@nps.gov).

Sincerely,

A handwritten signature in cursive script that reads "Jennifer Pederson Weinberger".

Jennifer Pederson Weinberger  
Cultural Resources Program Manager

cc:

Valerie Gomez, AKR Historian ([valerie\\_gomez@nps.gov](mailto:valerie_gomez@nps.gov))

Janet Clemens, AKR Section 106 Coordinator ([janet\\_clemens@nps.gov](mailto:janet_clemens@nps.gov))

Mckenzie Johnson, Section 106 Reviewer, AK State Historic Preservation Office  
([mckenzie.johnson@alaska.gov](mailto:mckenzie.johnson@alaska.gov))