Elim Subsistence Harbor Study
Appendix G: Correspondence

Elim, Alaska

September 2020

U.S. Army Corps of Engineers
Alaska District

Appendix G – Correspondence
Table of Contents

1. Correspondence: Endangered Species Act, Section 7 & Fish and Wildlife Coordination Act
   1.1. Email to USFWS from USACE: Preliminary ESA Species List (20 March 2019)
   1.2. Email to NMFS from USACE: Preliminary ESA Species List (20 March 2019)
   1.3. Email to USACE from NMFS: Preliminary ESA Species List (20 March 2019)
   1.4. Email to USACE from USFWS: Preliminary ESA Species List (21 March 2019)
   1.5. Letter to USFWS from USACE: ESA Effects Determination (18 November 2019)
   1.6. Email to USFWS from USACE: Coordination Act Report Participation (19 November 2019)
   1.7. Email to USACE from USFWS: Coordination Act Report Participation (19 November 2019)
   1.8. Letter to USACE from USFWS: Concurrence on ESA Effects Determination (17 December 2019)
   1.9. Email to USFWS from USACE: Coordination Act Report Participation (5 February 2020)
   1.10. Letter to USACE from USFWS: Decline Coordination Act Report Participation (19 February 2020)

2. Correspondence: Magnuson-Stevens Act Essential Fish Habitat
   2.1. Letter to NMFS from USACE: Essential Fish Habitat Assessment (7 January 2020)
   2.2. Letter to USACE from NMFS: Essential Fish Habitat Conservation Recommendations (5 February 2020)
   2.3. Email to USACE from NMFS: Essential Fish Habitat Conservation Recommendations (12 March 2020)
   2.4. Email to NMFS from USACE: Essential Fish Habitat Conservation Recommendations (9 April 2020)

3. Correspondence: National Historic Preservation Act, Section 106
   3.1. Letter to SHPO: Notification of Feasibility Study (31 October 2018)
   3.2. Letter to SHPO: Historic Properties Effects Determination (18 February 2020)
   3.3. Transmittal Letter to Native Village of Elim: Historic Properties Effects Determination (18 February 2020)
   3.4. Transmittal Letter to City of Elim: Historic Properties Effects Determination (18 February 2020)
   3.5. Transmittal Letter to Elim Native Corporation: Historic Properties Effects Determination (18 February 2020)
   3.6. Transmittal Letter to Kawerak, Incorporated: Historic Properties Effects Determination (18 February 2020)
   3.7. Transmittal Letter to Bering Straits Native Corporation: Historic Properties Effects Determination (18 February 2020)
   3.8. Letter to USACE: SHPO Concurrence on Historic Properties Effects Determination (20 March 2020)

4. Correspondence: Clean Water Act, Section 401
   4.1. Email to EPA/ADEC from USACE: Tier I Exclusion Proposal (3 January 2020)
   4.2. Email to USACE from ADEC: Tier I Exclusion Proposal (10 January 2020)
   4.3. Email to USACE from EPA: Tier I Exclusion Proposal (29 January 2020)
   4.4. Letter to USACE from ADEC: Certificate of Reasonable Assurance (26 June 2020)

5. Correspondence: National Environmental Policy Act
   5.1. Notification of Availability for Public Comment: Draft Integrated Feasibility Report & Environmental Assessment (28 April 2020)

6. Correspondence: Water Resources Development Act, Section 203(c)
   6.1. Letter to USFWS from USACE: Notification of Feasibility Study (22 June 2020)
   6.2. Letter to BIA from USACE: Notification of Feasibility Study (22 June 2020)
   6.3. Letter to USGS from USACE: Notification of Feasibility Study (22 June 2020)
   6.4. Letter to BLM from USACE: Notification of Feasibility Study (22 June 2020)

7. Correspondence: USACE Policy Waiver
   7.1. Memorandum for the Commanding General: ESA & MMPA Policy Exception (05 October 2020)

8. Correspondence: Aids to Navigation
   8.1. Email from USCG regarding Aids to Navigation (03 June 2020)

9. Correspondence: Non-Federal Sponsor Financial Self Certification
   9.1. Non-Federal Sponsor Self-Certification (29 September 2020)

10. Correspondence: Non-Federal Sponsor and Stakeholder Correspondence
   10.1. Non-Federal Sponsor LOI(03 February 2016)
   10.2. District Letter to Native Village of Elim (23 October 2018)
   10.3. District Letter to Native Village of Elim (29 August 2019)
   10.4. District Letter to Kawerak (23 October 2018)
   10.5. District Letter to Kawerak (29 August 2019)
   10.6. Federal Cost Share Agreement (23 March 2018)
   10.7. 1002 Letter Elim (23 October 2018)
   10.8. 1002 Letter Elim (29 August 2019)
   10.9. 1002 Letter Kawerak (23 October 2018)
   10.10. 1002 Letter Kawerak (29 August 2019)
   10.11. Elim Agreement Distribution Letter (23 March 2018)
   10.12. Elim Government to Government Consultation Request Letter (12 November 2020, received 03 December 2020)
   10.13. Native Village of Elim Financial Self-Certification Letter (22 December 2020)

11. Public Comments
   11.1. EPA Comments
   11.2. USFWS Comments
   11.3. Elim Comments

Correspondence:
Endangered Species Act, Section 7 & Fish and Wildlife Coordination Act

From:	Floyd, Christopher B CIV USARMY CEPOA (US)
To:	"Henszey, Bob"
Cc:	Amal Ajmi
Subject:	ESA species list - USACE Elim Subsistence Harbor project
Date:	Wednesday, March 20, 2019 12:28:00 PM
Attachments:	SPEI CH and Elim.jpg fig Elim project sites.jpg

Hello -
The Corps is studying potential small boat harbor and/or barge landing options for the village of Elim, in eastern Norton Sound.
We don't have design alternatives yet, but have narrowed down the project site alternatives enough to develop a list of ESA-listed species in the area.
It is essentially the same as the list for the "Port of Nome" project:

- Steller's eider.
- Spectacled eider.
- Polar bear.

We will also be evaluating along an Anchorage-Nome-Elim barge route:
- Northern sea otter.
- Short tailed albatross.

MMPA species under USFWS jurisdiction:
- Pacific walrus.

> Please confirm or amend this list <

As you can see from the attached figures, the proposed project areas are just outside of designated critical habitat for spectacled eiders. A presumptive project barge route cuts across a small portion of the CH polygon. My understanding is that the actual concentration area for molting eiders within the designated CH is well to the south of Elim, more to the west of Unalakleet, and that they are seldom seen along the north coast off of Elim.

Thank you,
Chris Floyd
Environmental Resources Section
Alaska District
US Army Corps of Engineers
907-753-2700

From: Floyd, Christopher B CIV USARMY CEPOA (US)
To: Greg Balogh - NOAA Federal
Subject: ESA preliminary species list - USACE Elim Subsistence Harbor project
Date: Wednesday, March 20, 2019 12:54:00 PM
Attachments: fig Elim project sites for NMFS.jpg

Hi Greg -
The Corps is studying potential small boat harbor and/or barge landing options for the village of Elim.
Elim is located in northeastern Norton Sound, about 93 miles east of Nome, at roughly N64.62, W162.22.
We don't have design alternatives yet, but have narrowed down the project site alternatives enough to develop a preliminary list of ESA-listed species in the project area.
It is essentially the same as the list for the "Port of Nome" project:

ESA species:
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Ringed seal
Fin whale
Humpback whale (Mexico & Western No Pacific DPSs)
No Pacific right whale
Bowhead whale

MMPA species:
Spotted seal
Ribbon seal
Harbor porpoise
Beluga whale
Killer whale
Gray whale
Minke whale
Sei whale
Stejneger's beaked whale

The Corps will be evaluating project impacts at the project construction site, and also along a presumptive project vessel route from Anchorage to Nome to Elim.
We would like input from NOAA Protected Resources on the completeness of these lists, and to begin informal consultation on potential project impacts.

Thank you,
Chris Floyd
Environmental Resources Section
Alaska District
US Army Corps of Engineers
907-753-2700

From: Greg Balogh - NOAA Federal
To: Floyd, Christopher B CIV USARMY CEPOA (US)
Subject: [Non-DoD Source] Re: ESA preliminary species list - USACE Elim Subsistence Harbor project
Date: Wednesday, March 20, 2019 2:04:09 PM

List looks good, Chris. I assume that when you asked about beginning informal consultation, you meant it in the casual sense of "let's keep talking", in which case, I say "sure thing". If you meant it in the official "ESA S7, our LOC is due in 30 days" sense, we would obviously need more project details first.

On Wed, Mar 20, 2019 at 12:55 PM Floyd, Christopher B CIV USARMY CEPOA (US) <Christopher.B.Floyd@usace.army.mil <mailto:Christopher.B.Floyd@usace.army.mil> > wrote:

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Environmental Resources Section
Alaska District
US Army Corps of Engineers
907-753-2700

--

Greg Balogh

AKR PRD ANC Field Office Supervisor
NOAA Fisheries
222 W 7th Ave Rm 552, Box 43
Anchorage, AK 99513
907-271-3023 (w)
907-306-1895 (c)

To report a stranded or entangled marine mammal, contact the Stranding Network at 1-877-925-7773 <tel:(877)%20925-7773>

From:	Amal Ajmi
To:	Floyd, Christopher B CIV USARMY CEPOA (US)
Cc:	Ted Swem
Subject:	[Non-DoD Source] RE: [EXTERNAL] ESA species list - USACE Elim Subsistence Harbor project
Date:	Thursday, March 21, 2019 9:54:01 AM

Good Morning Mr. Floyd. The U.S. Fish and Wildlife Service confirms the list of ESA Species and Critical Habitat.
On October 4, 2017, the Service determined the Pacific walrus (Odobenus rosmarus divergens) does not warrant listing as threatened or endangered under the Endangered Species Act (82 FR 46618). Because walrus can occur in the action area; a small possibility exists the project would encounter individuals hauled out on land. Walruses are sensitive to disturbances when hauled out on land and when feeding in important habitat areas. We encourage the Corps to contact the Service's Marine Mammals Management (MMM) Office to develop an appropriate mitigation plan to minimize potential effects on walrus.
Mr. Floyd, with respect, while I am happy to assist you, Ted Swem is the ESA Consultation Branch Chief. All communications should be initiated with him. Please feel free to cc me if you like. Thank you.

Amal Ajmi
Fish & Wildlife Biologist
Planning and Consultation
US Fish & Wildlife Service
101 12th Ave, Room 110
Fairbanks, AK 99701
907-456-0324 (Office)
907-456-0208 (Fax)
amal_ajmi@fws.gov
"You haven't seen a tree until you've seen it's shadow from the sky".
Amelia Earhart

-----Original Message-----
From: Floyd, Christopher B CIV USARMY CEPOA (US)
<Christopher.B.Floyd@usace.army.mil>
Sent: Wednesday, March 20, 2019 12:28 PM
To: Henszey, Bob <bob_henszey@fws.gov>
Cc: Amal Ajmi <amal_ajmi@fws.gov>
Subject: [EXTERNAL] ESA species list - USACE Elim Subsistence Harbor project

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Thank you,
Chris Floyd
Environmental Resources Section
Alaska District
US Army Corps of Engineers
907-753-2700

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

November 18, 2019

Ted Swem
Endangered Species Branch Chief
US Fish & Wildlife Service
101 12th Ave, Room 110
Fairbanks, AK 99701

Dear Mr. Swem:

The U.S. Army Corps of Engineers Alaska District (USACE) is preparing an environmental assessment (EA) for the proposed "Elim Tribal Partnership" project, which evaluates several proposed alternatives for constructing a small boat harbor and freight barge access at Elim, Alaska (Figures 1 and 2). The purpose of this letter is to:

- provide an update on construction alternatives that are under consideration;
- present the USACE evaluation of the potential effects of these alternatives on species protected under the Endangered Species Act (ESA);
- and to request concurrence with our determination that the project may affect, but not adversely affect, endangered or threatened species under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS).

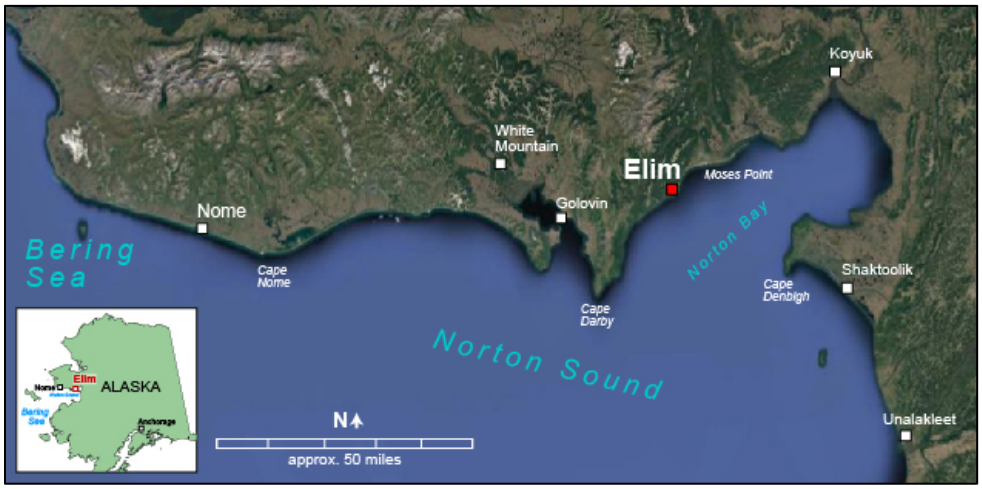

Figure 1. Elim location and vicinity.

Figure 2. Proposed project site at Elim.

1. Project Description

The USACE is currently evaluating four proposed construction alternatives (Alternatives 2 through 5; Figures 3-1 through 3-4; Alternative 1 is the mandatory “no action” alternative) to identify the most useful, cost-effective, and least environmentally-damaging project.

The sea floor in the vicinity of Elim is flat and sandy, but ridges of bedrock are believed to lie under the surface. At this stage of project planning, the USACE assumes that all the alternatives will require some amount of mechanical rock-breaking using an excavator with a hydraulic “ripping” attachment, along with more typical mechanical dredging techniques. Alternative 5 could potentially require a limited amount of subsurface blasting to break up bedrock at depth; the extent and location of any such blasting is Not known at this stage of planning and thus cannot be evaluated.

The dredged material is expected to be sand, gravel, and broken rock. There is no history of significant pollutant releases along the Elim shoreline. Wave action continues to redistribute the nearshore sediments; the dredging of sand and rock materials are expected to be free of chemical contamination. The dredged material would most likely be disposed of in Norton Bay to the southeast of Elim.

Because of the anticipated shallow bedrock, the proposed small sheet pile dock included in Alternatives 3, 4, and 5 will most likely be a closed or open-cell design, requiring minimal driving of the sheet pile into the substrate.

Alternative 2 (Figure 3-1). Two rubble mound breakwaters would provide a mooring basin approximately 3.9 acres with a required dredged depth of -8.0 feet Mean Lower Low Water (MLLW) with a maximum pay depth of -10.0 feet MLLW. The west breakwater would be 985 feet long and the east breakwater 457 feet long. The entrance channel and turning basin would also have a required dredged depth of -8.0 feet MLLW with a maximum pay depth of -10.0 feet MLLW. Local service facilities needed would include a single boat launch, uplands with an area of 3.2 acres for parking and turn-around at the boat launch, and a road connecting the uplands to Front St. to the harbor uplands. The road would be approximately 0.15 miles and relatively flat.

Alternative 2 would require a total of roughly 47,000 cubic yards of construction dredging, followed by about 10,000 cubic yards of maintenance dredging at estimated intervals of 10 years.

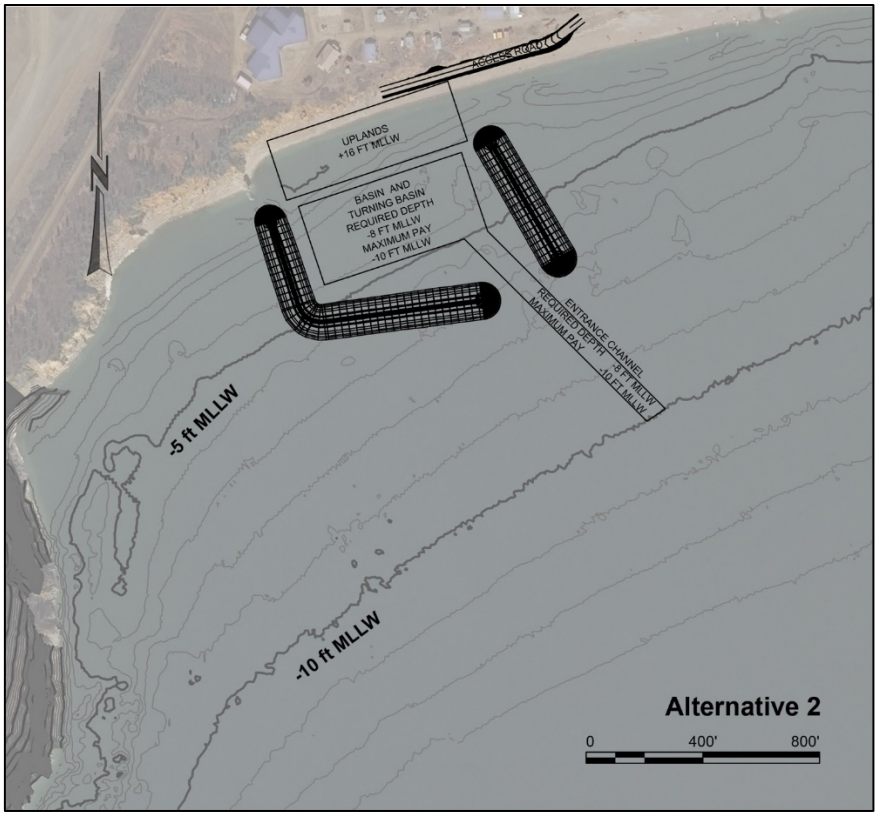

Figure 3-1. Alternative 2 layout.

Alternative 3 (Figure 3-2). Two rubble mound breakwaters would provide a mooring basin approximately 4.6 acres with a required dredged depth of -8.0 feet MLLW with a maximum pay depth of -10.0 feet MLLW. The west breakwater would be 1,068 feet long and the east breakwater 463 feet long. The entrance channel, tender dock access, and turning basin would also have a required dredged depth of -9.0 feet MLLW with a maximum pay depth of -11.0 feet MLLW. Local service facilities required would include a single boat launch, uplands with an area of 3.9 acres for parking and turn-around at the boat launch, a tender dock, and a road connecting the uplands to Front St. to the harbor uplands. The road would be approximately 0.15 miles and relatively flat. Construction of the tender dock would require about 200 linear feet of sheet pile.

Alternative 3 would require a total of roughly 53,000 cubic yards of construction dredging, followed by about 20,000 cubic yards of maintenance dredging at estimated intervals of 15 years.

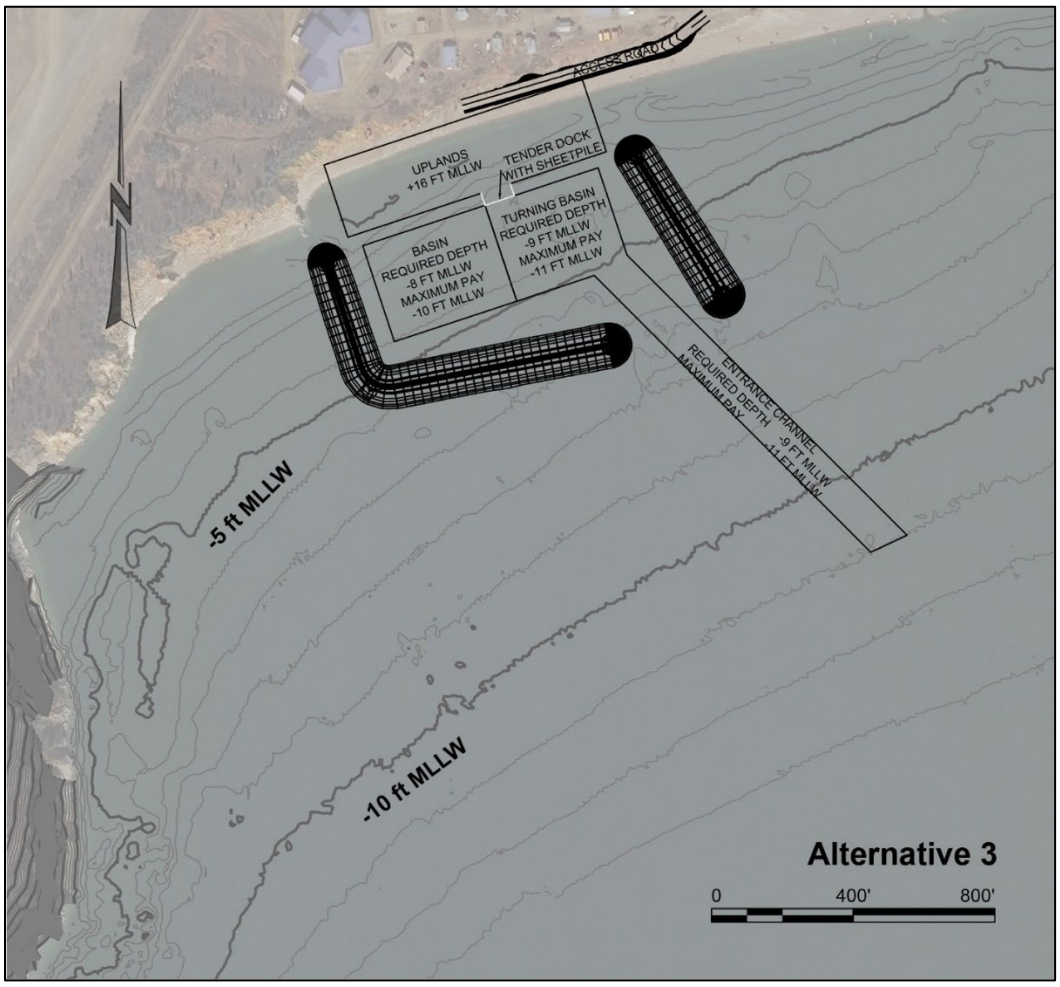

Figure 3-2. Alternative 3 layout.

Alternative 4 (Figure 3-3). Two rubble mound breakwaters would provide a mooring basin approximately 5.1 acres with a required dredged depth of -9.0 feet MLLW with a maximum pay depth of -11.0 feet MLLW. The west breakwater would be 1,099 feet long and the east breakwater 463 feet long. The entrance channel, tender dock access, and turning basin would also have a required dredged depth of -9.0 feet MLLW with a maximum pay depth of -11.0 feet MLLW. Local service facilities required would include a single boat launch, uplands with an area of 3.9 acres for parking and turn-around at the boat launch, a tender dock, and a road connecting the uplands to Front St. to the harbor uplands. The road would be approximately 0.15 miles and relatively flat. Construction of the tender dock would require about 200 linear feet of sheet pile.

Alternative 4 would require a total of roughly 73,000 cubic yards of construction dredging, followed by about 20,000 cubic yards of maintenance dredging at estimated intervals of 15 years.

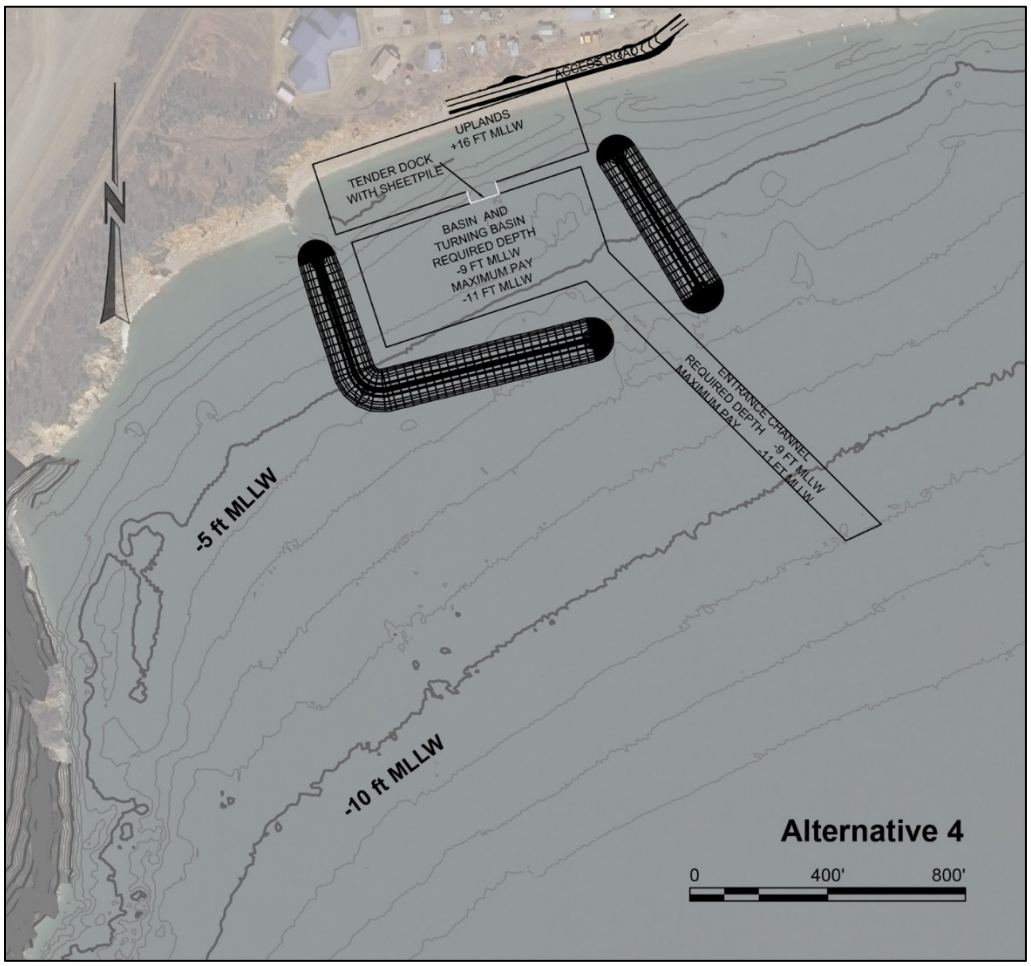

Figure 3-3. Alternative 4 layout.

Alternative 5 (Figure 3-4). Two rubble mound breakwaters would provide a mooring basin approximately 6.2 acres with a required dredged depth of -9.0 feet MLLW with a maximum pay depth of -11.0 feet MLLW. The west breakwater would be 1,082 feet long and the east breakwater 468 feet long. The entrance channel, tender dock access, barge landing access, and turning basin would have a required dredged depth of -12.0 feet MLLW with a maximum pay depth of -14.0 feet MLLW. Local service facilities required would include an extension to the fuel header located on Elim Beach, a single boat launch, uplands with an area of 3.9 acres for parking and turn-around at the boat launch, a tender dock, a barge landing, two mooring points, and a road connecting the uplands to Front St. to the harbor uplands. The road would be approximately 0.15 miles and relatively flat. Construction of the tender dock would require about 200 linear feet of sheet pile, and two moorage points (pilings) would be installed in the uplands adjacent to the barge landing.

Alternative 5 would require a total of roughly 159,000 cubic yards of construction dredging, followed by about 75,000 cubic yards of maintenance dredging at estimated intervals of 20 years.

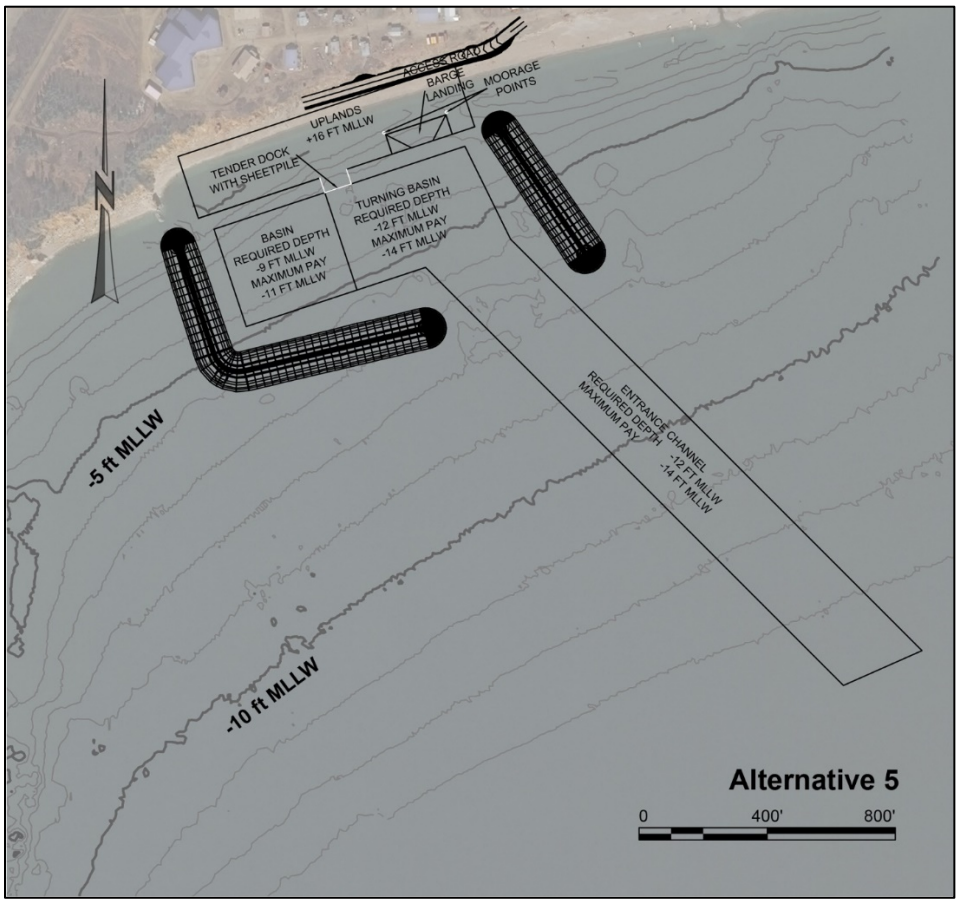

Figure 3-4. Alternative 5 layout.

2. Current Coordination

The USACE provided the USFWS Fairbanks Field Office with a provisional list of ESA species potentially within the project area, in an email dated 20 March 2019. The USFWS concurred with that list in an email dated 21 March 2019.

3. Potentially Affected Species

Based on discussions with the USFWS and queries on the USFWS's Information for Planning and Conservation (IPaC) website, the following species are identified as ESA-listed species under USFWS jurisdiction that may be affected by project activities:

- Polar bear (*Ursus maritimus*) – Threatened.
- Spectacled eider (*Somateria fischeri*) – Threatened.
- Steller's eider (*Polysticta stelleri*) – Threatened.
- Northern sea otter (*Enhyra lutris kenyonii*), Southwest Alaska Distinct Population Segment (DPS) – Threatened.
- Short-tailed albatross (*Phoebastria albatrus*) – Endangered.

The USACE has also evaluated project effects on ESA-listed species along a possible route of project vessels transiting between Anchorage and Elim (Figure 4). The base image of Figure 4 is a screen-shot from MarineTraffic.com showing the transit lines (dark blue) of all 2017 tugboat traffic within that view. The yellow dotted line traces a "most traveled" direct route from Anchorage to Nome to Elim, passing through Cook Inlet, hugging the protected south coast of the Alaska Peninsula, then turning north into the Bering Sea at Unimak Pass.

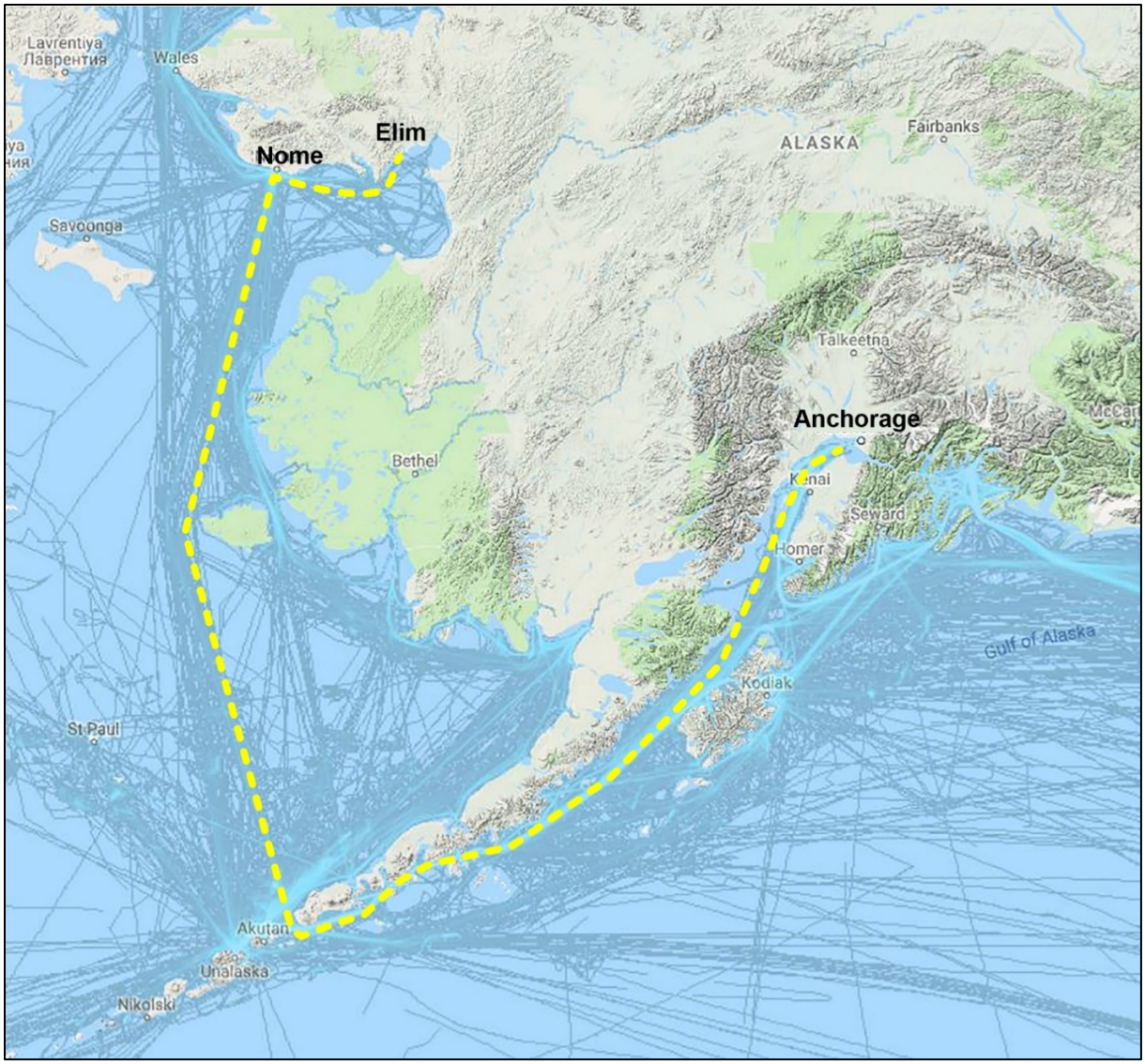

Figure 4. Presumptive route of a barge in support of construction at Elim.

3.1 Polar Bear

The polar bear is a maritime carnivore dependent on arctic sea ice and the associated assemblage of sea mammals. As a result of the observed and anticipated changes to its sea ice habitat in the United States, the polar bear is listed as a threatened species throughout its range (73 FR 28212). Marine Mammal Protection Act (MMPA) protects the polar bear. Polar bears are widely distributed throughout the arctic, with a worldwide population estimated at 20,000 to 25,000. Sea ice provides polar bears with a platform for hunting and feeding, breeding, and denning. The most productive hunting for ice seals, the polar bear's primary prey, is along ice edges and open leads, so polar bears tend to migrate seasonally with the sea ice edge as it advances in the autumn and retreats in spring (USFWS 2015).

The USFWS designated critical habitat for polar bears under the ESA in 2010 (75 FR 76086, USFWS 2010). Critical habitat (CH) is the geographic area that contains habitat features essential for the conservation of a threatened or endangered species and which may require special management considerations or protections. For polar bears, the designated CH includes three habitat units: barrier islands, sea ice, and terrestrial denning habitat. Coastal barrier islands and spits off the Alaska coast provide areas free from human disturbance and are important for denning, resting, and migration along the coast. Polar bears regularly use barrier islands to move along the Alaska coast as they traverse across the open water, ice, and shallow sand bars between the islands (USFWS 2010). Designated barrier island CH includes a 1-mile buffer zone to minimize disturbances to polar bears.

The geographical extent of the sea ice CH unit reaches from the Beaufort Sea to south of St. Lawrence Island in the Bering Sea and includes all of Norton Sound. Polar bears depend on sea ice to hunt and feed on seals, as habitat to seek mates, breed, and sometimes den, and as a vehicle to make long-distance movements. They show a preference for certain sea-ice stages and features, such as stable shore-fast ice, moving ice, and floe ice edges.

Polar bears move throughout the year along with the changing distribution of sea ice and seals, their primary food source. Sea ice disappears from the Bering Sea and Norton Sound in the summer, and polar bears that occupy these areas move as much as 600 miles to stay with the retreating pack ice (USFWS 2010, USFWS 2015).

Most pregnant female polar bears excavate dens in the fall to early winter period and give birth during midwinter. Females and cubs emerge from their dens in March and April, when the cubs are about three months old (USFWS 2015).

The only CH unit appearing at Elim is ‘sea ice’. The nearest ‘barrier island’ CH exists within Golovnin Bay, roughly 30 miles northwest of Elim, and at Moses Point, about 8 miles east of Elim. There is no terrestrial denning habitat identified along the Norton Sound coast.

While polar bears may be present near Elim, population studies suggest that typical polar bear winter foraging and denning ranges do not extend far into Norton Sound and Elim is well east of the margin of those ranges (Figure 5; Smith *et al.*, 2017). The presence of a polar bear at Elim during a given year would, therefore, be very uncommon. The likelihood of a polar bear appearing near Elim would be highest when dense sea ice is present in Norton Sound, roughly November through May, and minimal

when sea ice is absent. Rarely, a polar bear may be stranded on the Norton Sound coast when the sea ice retreats in the spring (ADFG 2012).

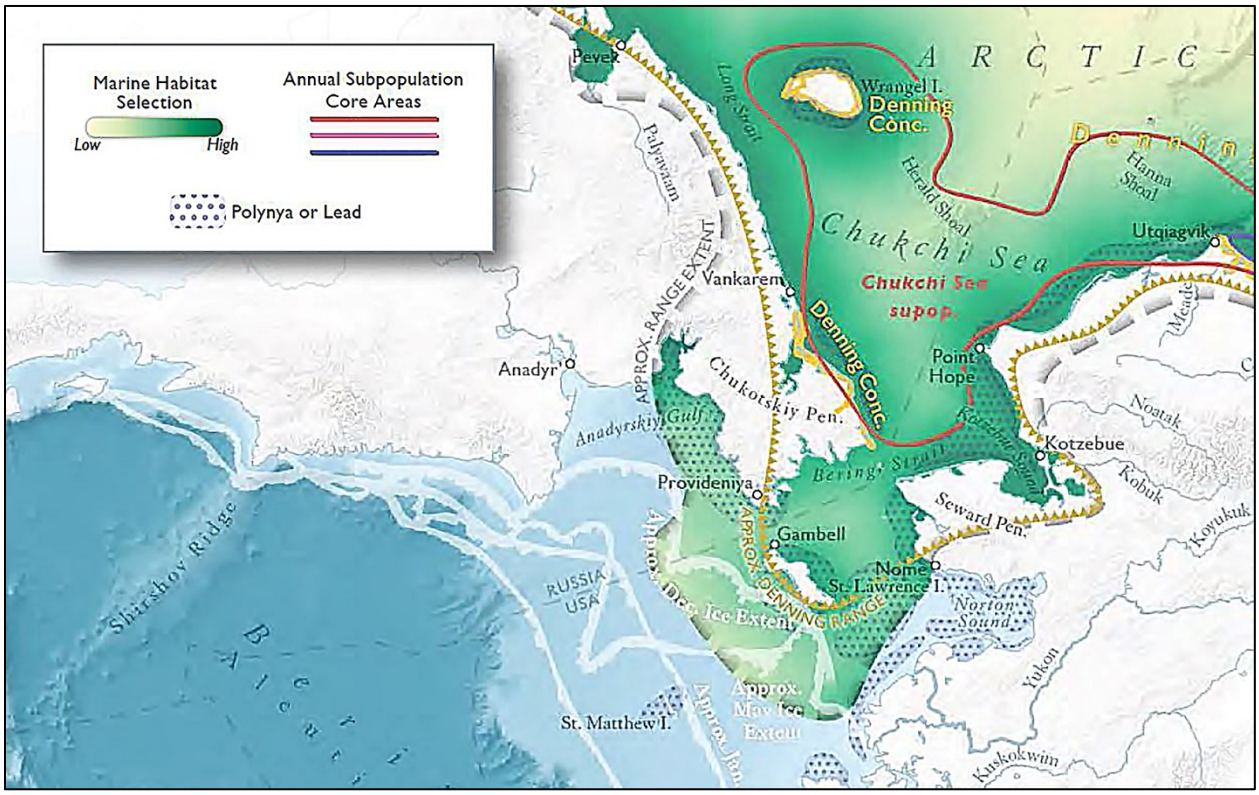

Figure 5. Extent of polar bear winter migration and denning ranges (adapted from Smith et al., 2017).

The vast majority of project construction or study activities would occur when ice is absent from the Elim area, therefore, when a polar bear is least likely to be present near Elim. Geotechnical studies needed before construction might be conducted in late winter from sea ice beyond the existing causeway. Rock quarrying in support of the project could occur in winter at the Cape Nome quarry site. This established quarry is relatively close to the designated barrier island CH fronting Safety Sound, but outside of the 1-mile no-disturbance zone associated with that CH. It is possible that the new rubble mound breakwaters at Elim may have a small, localized effect on the formation of shore-fast ice at Nome, and therefore on the local winter distribution of seals and other polar bear prey species.

3.2 Spectacled Eider

Spectacled eiders are large sea ducks that spend most of their life cycle in the arctic environment. They were listed as a threatened species throughout their range in 1993 based on indications of steep declines in the Alaska-breeding populations.

From November through March or April, spectacled eiders remain in open sea, polynyas, or open leads in the sea ice of the northern Bering Sea; the availability of sea ice as a resting platform is believed to be important for energy conservation. As open water becomes available in spring, breeding pairs move to nesting areas on wet coastal tundra along the Arctic Ocean coast, or along the Bering Sea coast of the Yukon-Kuskokwim Delta (Figure 6). Males return to the marine environment after incubation begins. Females move to molting areas in July if unsuccessful at nesting, or in August through September if successful. Spectacled eiders molt in several discrete areas of shallow coastal water during late summer and fall. Spectacled eiders generally depart all molting sites in late October to early November, migrating offshore in the Chukchi and Bering Seas to a single wintering area in openings in the pack ice of the central Bering Sea south/southwest of St. Lawrence Island (Figure 6).

Figure 6. Spectacled eider use areas and migration patterns (USFWS 2015).

Critical habitat designated for spectacled eiders consists of wintering habitat in the Bering Sea south of St. Lawrence Island, nesting habitat along the coast of the Yukon-Kuskokwim Delta, and molting areas in eastern Norton Sound, and Ledyard Bay on the Chukchi Sea coast (Figure 7). The closest CH unit to Elim is the Eastern Norton Sound Unit (also known as “Unit 3”), an autumn molting concentration area (Figures 7 and 8).

The northern boundary of this CH unit is defined by a line between the mouth of Quiktalik Creek and Point Dexter (Figures 2 and 8), and the western boundary is a line extending south from Cape Darby. Elim lies outside of this CH unit, but project vessels traveling to and from Elim would cross through a portion of the CH unit (Figure 8). However, a recent study (Sexon et al., 2016) of spectacled eider distribution within this CH unit suggests that the birds concentrate in areas roughly 20 miles or more to the south of Elim and away from likely project vessel transit routes (Figure 9).

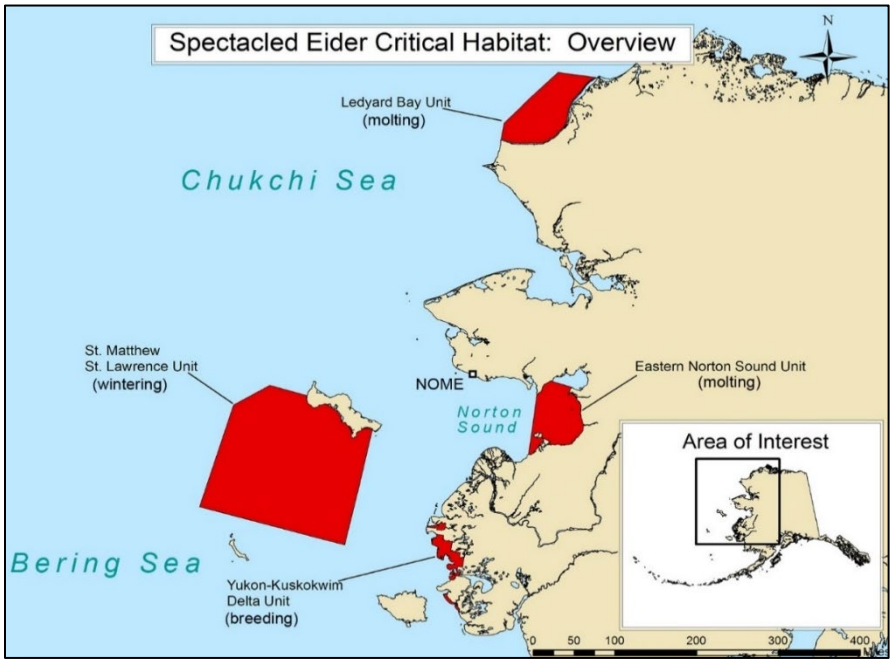

Figure 7. Spectacled eider critical habitat units (adapted from USFWS 2013).

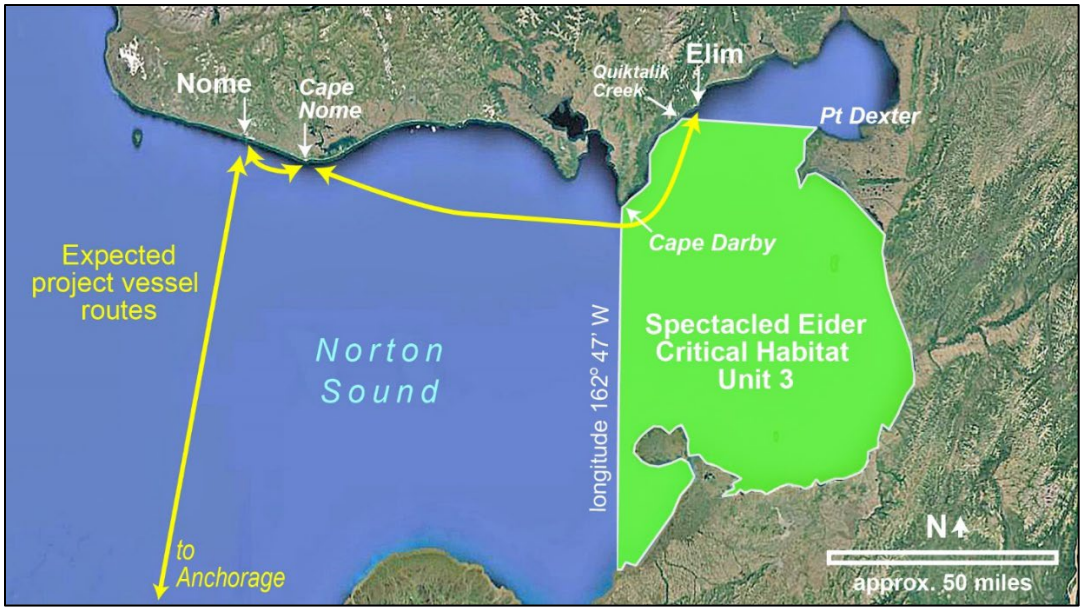

Figure 8. Relationship of Norton Sound spectacled eider CH to expected project vessel routes.

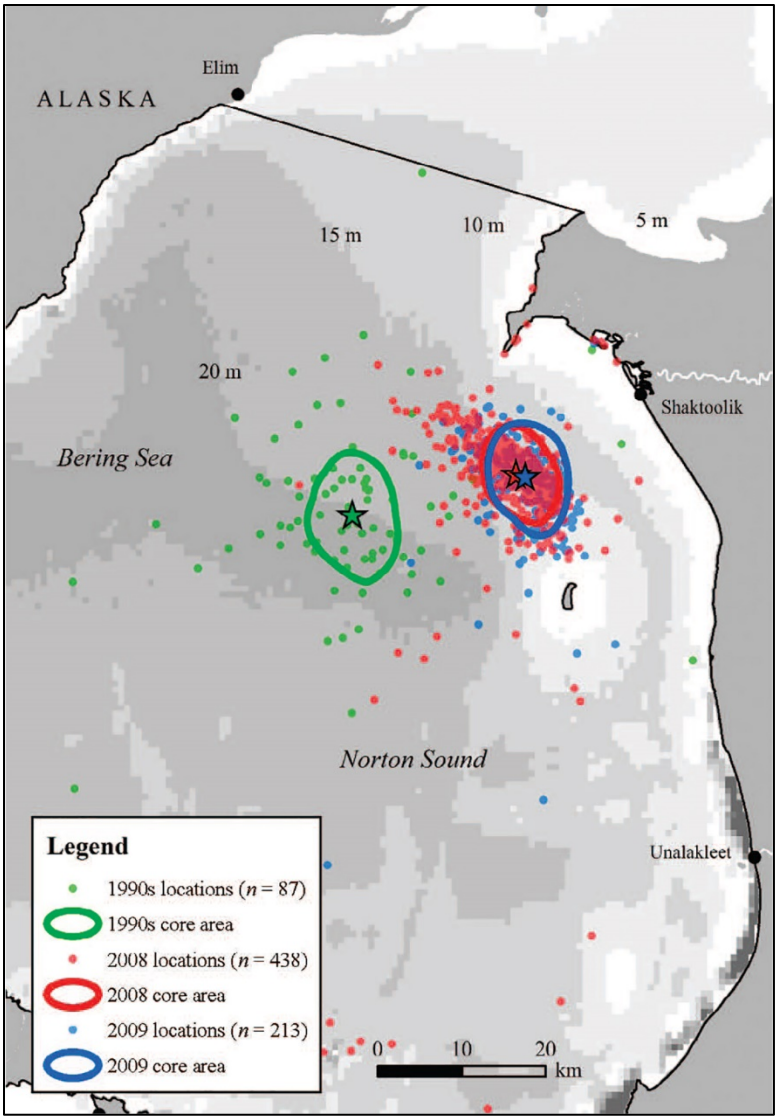

Figure 9. Distribution of spectacled eider sightings within eastern Norton Sound (from Sexon et al., 2016)

The waters immediately offshore of Elim or the north Norton Sound coastline do not appear to be a high-use area for spectacled eiders, even during the autumn molting period when they are most abundant in Norton Sound.

3.3 Steller's Eider

The Steller's eider is a sea duck that has both Atlantic and Pacific populations. The Pacific population consists of both a Russia-breeding population (which nests along the Russian eastern arctic coastal plain) and an Alaska-breeding population. The Alaska-breeding population of the Steller's eider was listed as threatened in July 1997 based on substantial contraction of the species' breeding range in Alaska, overall reduced numbers breeding in Alaska, and vulnerability of the Alaska-breeding population to extinction (USFWS 2015).

Most of the Pacific population winters in the Aleutian Islands and along the Alaska Peninsula then migrates along the Bristol Bay coast towards arctic nesting grounds in the spring. Steller's eiders arrive in small flocks of breeding pairs on the Alaskan arctic coastal plain (ACP) in early June and in similar habitat along the arctic coast of Russia (Figure 10). Nesting on the ACP is concentrated in tundra wetlands near Utqiagvik and occurs at lower densities elsewhere on the ACP. Hatching occurs from mid-July through early August. After rearing is complete, both the Russia- and Alaska-breeding populations depart for molting areas in southwest Alaska (such as Izembek Lagoon), where they remain for about 3 weeks. Following the molt, the Pacific-wintering Steller's eiders disperse throughout the Aleutian Islands, the Alaska Peninsula, and the western Gulf of Alaska (USFWS 2015).

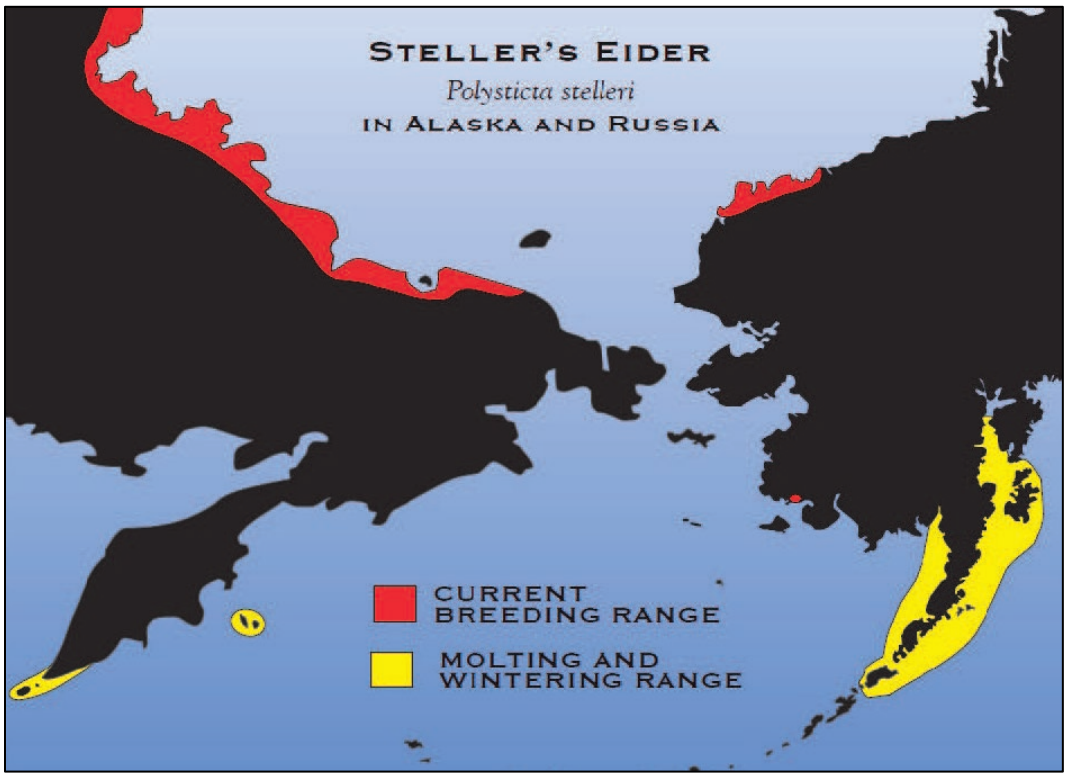

Figure 10. Breeding and wintering range of Steller's eider (USFWS 2013).

Critical habitat designated for Steller's eiders consists of breeding areas along the Bering Sea coast of the Yukon-Kuskokwim Delta, and molting areas along the north coast of the Alaska Peninsula (Figure 11).

As with spectacled eiders, no identified concentration areas or CH for Steller's eiders are in the vicinity of the project area; any Steller's eiders near Nome would likely be transients migrating between breeding, molting, and wintering areas.

Project potential impacts on Steller's eiders would be limited to disturbance of migrating birds that may pass close to Elim while construction is underway. Eiders attempting to settle and rest in nearby wetlands or nearshore waters might be displaced by construction noise and movement, but large areas of similar, disturbance-free habitat are readily available near the project site.

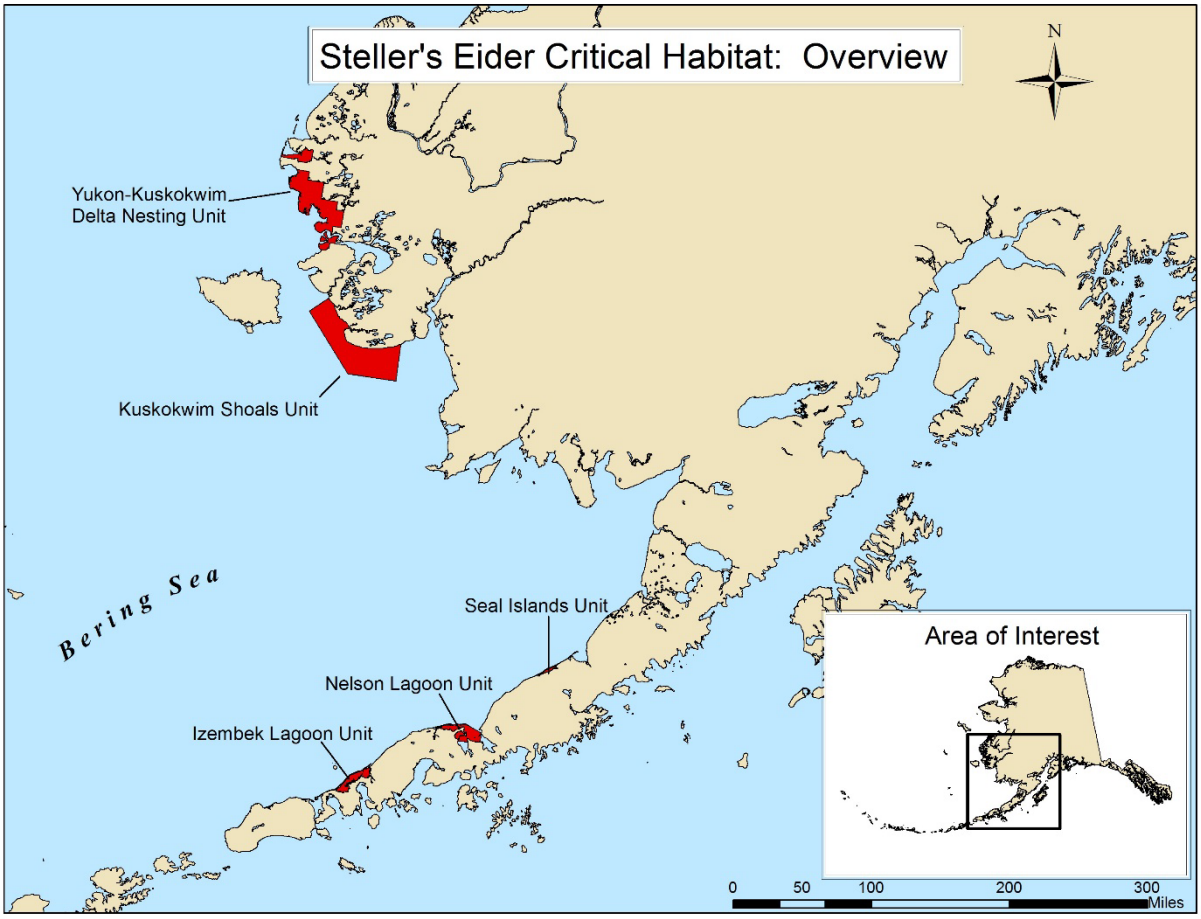

Figure 11. Steller's eider critical habitat (USFWS 2013).

3.4 Northern Sea Otter

Northern sea otters are found throughout the Aleutian Islands, along both the Bering Sea and Gulf of Alaska coasts of the Alaska Peninsula, and along much of the Alaska mainland Pacific coast. Figure 12 shows the critical habitat units designated for the threatened Southwest Alaska Distinct Population Segment (DPS); project vessels would pass sea otter habitat for a portion of their route along the Alaska Peninsula. Northern sea otters are primarily nearshore animals; the CH description (USFWS 2013) includes as a primary constituent element (PCE), "Nearshore waters that may provide protection or escape from marine predators, which are those within 100 m (328.1 feet) from the mean high tide line." A project vessel in transit between Anchorage and Elim is unlikely to pass within 100 meters from shore intentionally.

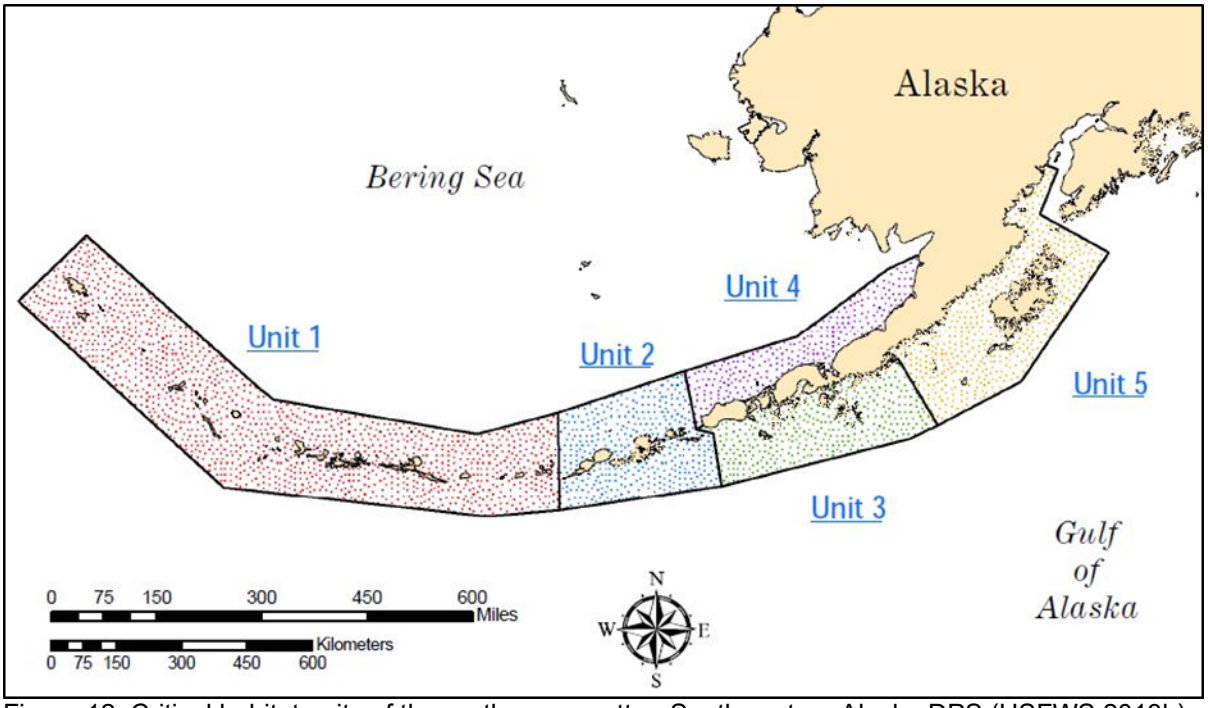

Figure 12. Critical habitat units of the northern sea otter, Southwestern Alaska DPS (USFWS 2013b)

3.5 Short-Tailed Albatross

Short-tailed albatross range across much of the North Pacific Ocean as adults and sub-adults, but tend to concentrate along the continental shelf edges of the Gulf of Alaska and Aleutian Basin, where upwelling and high primary productivity result in abundant food resources (Figure 13). Their only known breeding range is an isolated group of small islands off the coast of Japan. There is no ESA-designated critical habitat for this species (USFWS 2008). Project-related vessels traveling between Anchorage and Elim could travel close to areas where short-tailed albatross concentrate to feed. There is no designated CH for this species.

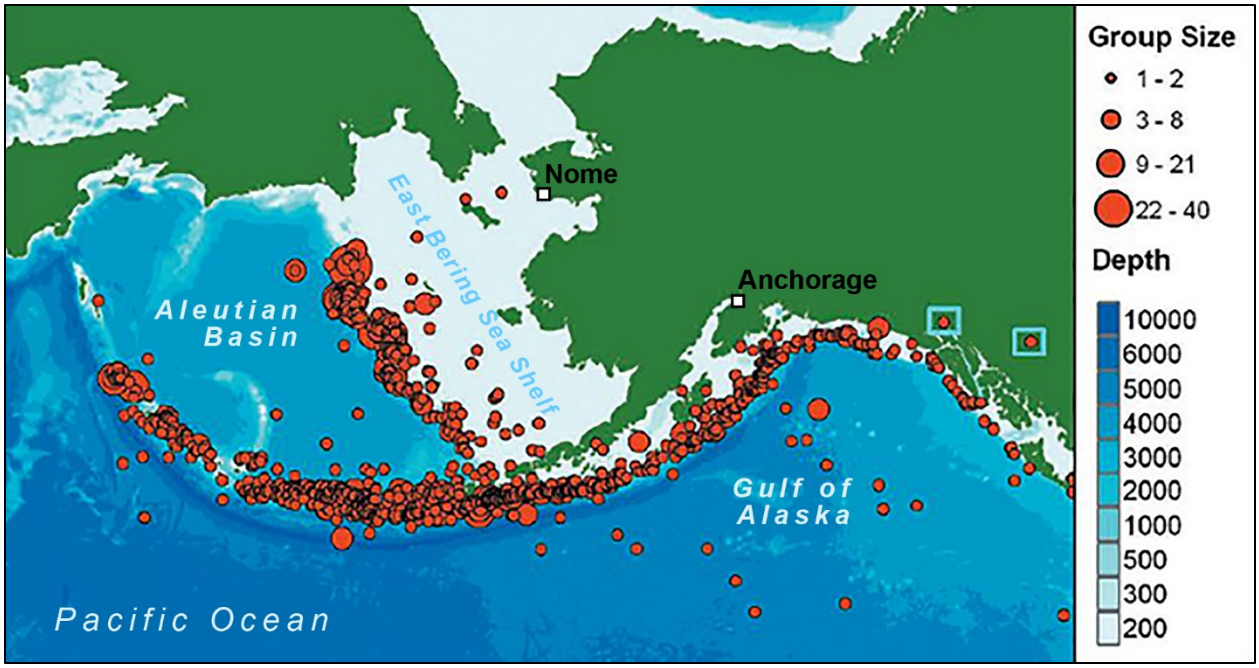

Figure 13. Opportunistic sightings of short-tailed albatross compiled 1944-2004 (adapted from USFWS 2008).

4. Summary

The proposed project areas are toward the outer limit of polar bear range, and any winter use of the Norton Sound coast by polar bears would coincide minimally with the expected May through November construction season. Winter construction or survey activities have the potential to encounter or disturb polar bears traveling on sea ice or the shoreline, with the likely result being that the bears are displaced to similar habitat nearby. Construction activities will be centered at the Port of Nome, a busy sea port and industrial area with no useful polar bear habitat. The finished project may have a long-term, but small and localized effect on the formation of shore-fast ice at Nome, and therefore on the local winter distribution of seals and other polar bear prey species, but no discernable long-term effect on sea ice CH is anticipated. No denning CH will be disturbed by project activities or the finished project.

Steller's and spectacled eiders would be present in the proposed project areas only as they migrate between breeding, molting, and winter concentration areas. Project potential impacts on eiders would be limited to disturbance of migrating birds that may pass close to Nome while construction is underway. Eiders attempting to settle and rest in nearby wetlands or nearshore waters might be displaced by construction noise and movement. The finished project will have no long-term effect on these species. No CH for Steller's or spectacled eiders would be affected.

Project vessels traveling between Anchorage and Nome would be following a well-traveled tug-and-barge route along the Alaska Peninsula (Figure 4) and will pass Northern sea otter habitat, but are unlikely to enter sea otter habitat or interact with sea otters. Slow-moving, shallow-draft barges would present little risk of a ship-strike to any otters that might venture into the shipping channel. The project vessels would be a small, incremental increase in the heavy non-federal vessel traffic that travels that route, and would have no short-term or long-term effect on Northern sea otter CH.

Short-tailed albatross are at significant risk from commercial fishing activities, through entanglement in nets and other fishing gear, but there is little evidence that they are adversely affected by general ship traffic (USFWS 2008). A project vessel is very unlikely to encounter, much less adversely affect, this rare and widely dispersed species.

Avoidance and Minimization Measures

- A Polar Bear Safety and Interaction Plan will be prepared by the Corps or its contractor for any winter activity that may be pursued on sea ice beyond the existing outer harbor.

- The contractor will prepare an Environmental Protection Plan, which will include an Oil Spill Prevention and Control Plan, and a plan for minimizing the spread of invasive species.

Determinations

The Corps determines that the proposed project may affect, but are not likely to adversely affect the following ESA-listed species:

- Polar bear
- Spectacled eider
- Steller's eider

The Corps requests concurrence from the USFWS on these determinations.
The Corps does not anticipate any impacts to critical habitat for those species.

The Corps determines that the proposed project will have no effect on the following ESA-listed species or their critical habitat:

- Northern sea otter
- Short-tailed albatross

We welcome any conservation recommendations the USFWS may have to offer for these or other species in our project area. The Corps does not propose any mitigation measures for transient spectacled or Steller's eiders at this time.

For more information about the project, please contact Mr. Chris Floyd at (907) 753-2700 or via email at Christopher.B.Floyd@usace.army.mil.

Sincerely,

Michael L. Salyer
Chief, Environmental Resources Section

References

Alaska Department of Fish and Game (ADFG). 2012. Alaska's Nome Area Wildlife Viewing Guide, Exploring the Nome Roadways.

Sexson, Matthew G., Greg A. Breed, Margaret R. Peterson, & Abby N. Powell. 2016. Shifts in the Distribution of molting Spectacled Eiders (*Somateria fischeri*) indicate ecosystem change in the Arctic. The Condor 118(3):463-476. August 2016.

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USFWS. 2008. Short-tailed Albatross Recovery Plan. September 2008.

USFWS. 2001. Final Determination of Critical Habitat for the Spectacled Eider, Federal Register Vol. 66, No. 25. 6 February 2001.

From: Floyd, Christopher B CIV USARMY CEPOA (USA)
To: bob_henszey@fws.gov
Subject: USACE "Elim Tribal Partnership" project - FWCA? (UNCLASSIFIED)
Date: Tuesday, November 19, 2019 11:12:00 AM
Attachments: Port of Nome Project - USFWS FWCA Respons.pdf
Elim det letter to USFWS 18Nov2019.pdf

CLASSIFICATION: UNCLASSIFIED

Hi Bob -
The USACE has been studying this project for a while, but there has only been a preliminary design available since last month.
As the best summary of the project info I have at this point, I've attached a copy of the ESA determination letter I just sent to Ted and Amal.

When you've had a chance to look over the information, please let me know what level of Fish & Wildlife Coordination Act (FWCA) participation the USFWS wishes to pursue for this project.

If the USFWS will not be preparing a CAR, it would be very helpful for us to receive a letter stating so, similar to the letter your office prepared for the "Port of Nome" project (copy also attached).

Thank you,
Chris Floyd
Environmental Resources Section
Alaska District
US Army Corps of Engineers
907-753-2700
CLASSIFICATION: UNCLASSIFIED
CLASSIFICATION: UNCLASSIFIED

From: Henszey, Bob
To: Floyd, Christopher B CIV USARMY CEPOA (USA)
Cc: Amal Ajmi
Subject: [Non-DoD Source] Re: [EXTERNAL] USACE "Elim Tribal Partnership" project - FWCA? (UNCLASSIFIED)
Date: Tuesday, November 19, 2019 11:47:13 AM

Hi Chris,
I looked at the ESA letter yesterday when Amal called this to my attention. She is looking into some potential ESA questions, but from my initial brief review I don't think we will need a full CAR for this project. Most of the affected resources (other than eiders) appear to be marine. Do you know if NMFS plans to engage in reviewing this project? NMFS has more focused authorities to address anadromous fish issues than the FWS. I'll let you know what we decide after Amal gets a chance to consider the ESA issues.
Thanks for asking,
Bob

_____
Branch Chief
Conservation Planning Assistance
US Fish & Wildlife Service
101 12th Avenue, Room 110
Fairbanks, AK 99701
Phone: 907-456-0323, Fax: 907-456-0208
Bob_Henszey@fws.gov <mailto:Bob_Henszey@fws.gov>

"Water Always Wins," Dr. Who 2009.11.15

On Tue, Nov 19, 2019 at 11:19 AM Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil <mailto:Christopher.B.Floyd@usace.army.mil> > wrote:

> CLASSIFICATION: UNCLASSIFIED
>
> Hi Bob -
> The USACE has been studying this project for a while, but there has only been a preliminary design available since last month.
> As the best summary of the project info I have at this point, I've attached a copy of the ESA determination letter I just sent to Ted and Amal.
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> Thank you,
> Chris Floyd
> Environmental Resources Section
> Alaska District
> US Army Corps of Engineers
> 907-753-2700
> CLASSIFICATION: UNCLASSIFIED
> CLASSIFICATION: UNCLASSIFIED

United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE
Fairbanks Fish and Wildlife Field Office
101 12th Avenue, Room 110
Fairbanks, Alaska 99701

December 17, 2019

Christopher Floyd
Environmental Resources Section
Alaska District
US Army Corps of Engineers

Re: Section 7 Endangered Species Act determination for the Elim Tribal Partnership Project.

Dear Mr. Floyd:

This letter is in response to your request for concurrence on your determination of effects of the proposed action to endangered and threatened species pursuant to section 7 of the Endangered Species Act (ESA) of 1973, as amended. The U.S. Fish and Wildlife Service (Service) has reviewed the proposed action to determine if it would adversely affect listed species under our jurisdiction. The proposed action is within the range of three species listed as threatened under the ESA: spectacled eiders [*Somateria fischeri*], Alaska-breeding Steller's eiders [*Polysticta stelleri*], and polar bears [*Ursus maritimus*], and within or near critical habitat designated for spectacled eiders (Unit 3, the Norton Sound Critical Habitat Unit [NSCHU]), and polar bears (Unit 1, Sea Ice).

THE PROPOSED ACTION

Based on information provided, we understand the USACE is proposing the Elim Tribal Partnership (Elim) action, which would result in constructing two breakwaters, and dredging between the breakwaters to provide a mooring basin for barges. Increases in vessel traffic to and from Elim are anticipated to result from the proposed action.

THE ACTION AREA

The action area includes the shallow marine environment in the immediate vicinity of Elim, and adjacent waters, and shipping routes affected by proposed action-related vessel traffic within the Norton Sound Region (Figures 1 and 2).

EFFECTS OF THE ACTION ON LISTED SPECIES

Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects

of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action.

Effects to listed eiders and critical habitat
The Service listed the spectacled eider as threatened on May 10, 1993 (58 FR 27474), and the Alaska-breeding population of the Steller's eider as threatened on June 11, 1997 (62 FR 31748). Both species migrate through the Norton Sound region during fall and spring, and neither species nests in the action area. Potential mechanisms by which the action could affect spectacled or Steller's eiders include collisions with structures, fuel spills, and disturbance.

The Service designated critical habitat for spectacled eiders on March 8, 2001 (66 FR 9145 – 9185). One of five units designated, Norton Sound (Unit 3), occurs in marine waters of eastern Norton Sound, where thousands of spectacled eiders molt in late summer, including many or most of the females that nest on the Yukon-Kuskokwim Delta. Physical and biological features[1] (PBFs) of critical habitat in Norton Sound include marine waters > 5 and ≤ 25 m in depth (16 and 82 ft., respectively) along with associated marine aquatic flora and fauna in the water column, and the underlying marine benthic community. Molting flocks of spectacled eiders occur primarily in the NSCHU between June and October (Petersen et al. 1999, Sexson et al. 2014). A potential mechanism by which the proposed action could affect critical habitat is through accidental fuel spills.

Listed eiders: Eiders migrating through the region or engaged in small-scale, local movements could conceivably collide with action-related infrastructure. Eiders generally fly low (< 10 m [32 ft.]), putting them at risk of striking even relatively low objects in their path. However, because we expect listed eiders to occur in the Action Area only infrequently and in low numbers, we anticipate the likelihood of mortality from collisions with action-related infrastructure would be low. Additionally, we expect eiders migrating through the region to remain well offshore, thereby avoiding nearshore structures (Johnson and Richardson 1982; Petersen et al. 1999).

Accidental fuel spills during barging operations would likely be limited to small spills originating from vessels during fuel transfers at Elim. Although listed eiders could rest and feed in the vicinity of Elim, we believe any spill and resulting disturbance-related clean-up effort would result in eiders moving away to a perceived safe distance. Therefore, we expect fuel spills to have insignificant effects.

Vessel traffic through the action area could disturb resting and feeding listed eiders. Telemetry data indicate spectacled eiders concentrate in a core area within the NSCHU (Sexson et al. 2016) (Figure 3). During molt, spectacled eiders are flightless and could be more sensitive to disturbance, and have higher energetic needs than during other non-breeding periods. Vessels traveling within the NSCHU could encounter flocks of molting spectacled eiders, and temporarily disturb them (i.e., interrupt natural behaviors). If molting eiders are disturbed repeatedly, or for long periods such that birds must cease

[1] Previously called "primary constituent elements".

feeding or expend energy to distance themselves from disturbance, fitness could be affected.

Since 2003, the U.S. Coast Guard (USCG) has posted the Local Notice to Mariners regarding the NSCHU. Vessels are advised to remain outside the core molting area between 1 August and 31 October to avoid disturbing large flocks of molting spectacled eiders (Figure 4). Maintaining slow vessel speeds (≤ 10 knots), and diverting the vessel if eiders are encountered, reduce the probability that spectacled eider flocks will be disturbed. Additionally, vessels associated with this action will only traverse a small portion of the NSCHU north of the core area; thus, the potential for encounters causing disturbance would be low. Further, the infrequent encounters that might occur would be brief, allowing disturbed eiders to quickly resume normal behavior after encounters end. Thus, we anticipate that these short-term disturbances would have insignificant effects on molting spectacled eiders. Therefore, we expect that vessel operations would have insignificant impacts to migrating and staging eiders.

NSCHU: Although barges associated with the proposed action would follow established marine transit routes that ordinarily avoid critical habitat, because the marine transit route passes through eastern Norton Sound, barges could conceivably encounter molting spectacled eiders during transit. However, given the slow speed of barges (≤ 10 knots), molting spectacled eiders would likely respond to vessels by moving to a perceived safe distance. In addition, given the size of the Norton Sound critical habitat unit and the small number of vessels that would operate at any one time, we do not anticipate barge traffic would appreciably affect spectacled eider access to, or use of, eastern Norton Sound such that the function and conservation value of the Norton Sound critical habitat unit for spectacled eiders would be reduced.

Accidental fuel spills during barging operations would likely be limited to small spills originating from vessels during fuel transfers. The core molting habitat in eastern Norton Sound is tens of kilometers away. Therefore, it is unlikely that any oil from small fueling spills would be carried into the core area of designated critical habitat, and we do not anticipate adverse impacts to spectacled eider critical habitat from small infrequent fueling spills.

Effects on polar bears and critical habitat

The Service listed the polar bear as a threatened species under the ESA on May 15, 2008 (73 FR 28212). Polar bears can be found in the Norton Sound region, although their density is low in the action area. Denning on the Alaskan coast has declined by 15% while denning on the western Chukchi Sea coast increased by 15% between two time periods, 1986 – 1995 and 2008 – 2013 (Rode et al. 2015). This study is consistent with traditional and local ecological knowledge (TEK) that reported in the past 10 years, dens have only been observed at the village of Point Lay and to the north, whereas historically some denning was observed south of Point Lay (Voorhees et al. 2014).

The Service designated critical habitat for polar bears on November 24, 2010 (75 FR 76086). The proposed action would occur within Unit 1 (sea ice) of designated polar bear critical habitat. Sea ice critical habitat serves as a platform for hunting, feeding, traveling, resting, and also (to a limited extent) denning.

Polar bear: Transient (non-denning) bears entering the action area could be disturbed by the presence of humans or equipment noise. However, we expect the effects of disturbance would be minor and temporary because transient bears would be able to move away from human presence or disturbance.

Female polar bears only very infrequently den on sea ice or in terrestrial habitat along the Alaskan Chukchi Sea coast region. Further, denning polar bears have not been observed south of Point Lay in over 10 years (Voorhees et al. 2014), therefore, denning near Elim would be extremely unlikely, and impacts to denning polar bears would be discountable.

Critical habitat: The vast majority of action-related construction or study activities would occur when ice is absent from the vicinity of Elim and impacts to critical habitat are unlikely to occur. Therefore because any impacts to the characteristics of critical habitat that support hunting, feeding, traveling, resting, and denning polar bears would likely be minor and temporary, the Service concludes temporary impacts to critical habitat associated with the proposed construction activities would not appreciably diminish the value of sea ice for the survival and recovery of polar bears.

CONCLUSION

The proposed action could conceivably present a minor collision risk to listed eiders moving through the action area. However, due to low densities of these species in the action area, we expect the effects of collision risk to be insignificant. Fuel spills are expected to be small and infrequent, and centered at the proposed Elim mooring site; therefore, we do not anticipate adverse impacts to listed eiders or to the NSCHU. The proposed action could also temporarily disturb listed eiders or polar bears; however, due to low densities of these species, we expect encounters would be unlikely. Therefore, the Service concurs the proposed action is not likely to adversely affect listed eiders, polar bears or designated critical habitat. Preparation of a Biological Assessment or further consultation under section 7 of the ESA is not necessary at this time.

Thank you for your cooperation in meeting our joint responsibilities under the Act. If you need further assistance, please contact Amal Ajmi at (907) 456-0324.

Sincerely,

Acting for:
Ted Swem
Consultation Branch Chief

Literature Cited

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Petersen, M., W.W. Larned, and D.C. Douglas. 1999. At-sea distribution of spectacled eiders: a 120-year-old mystery resolved. The Auk 116(4):1009–1020.

Rode K.D., R.R. Wilson, E.V. Regehr, M. St. Martin, D.C. Douglas, and J. Olson. 2015. Increased Land Use by Chukchi Sea Polar Bears in Relation to Changing Sea Ice Conditions. PLoS ONE 10(11):e0142213. https://doi.org/10.1371/journal.pone.0142213

Voorhees H, Sparks R, Huntington HP, Rode KD (2014) Traditional knowledge of polar bears (Ursus maritimus) in Northwestern Alaska. Arctic 67(4): 523-536.

Figure 1. Elim proposed project site.

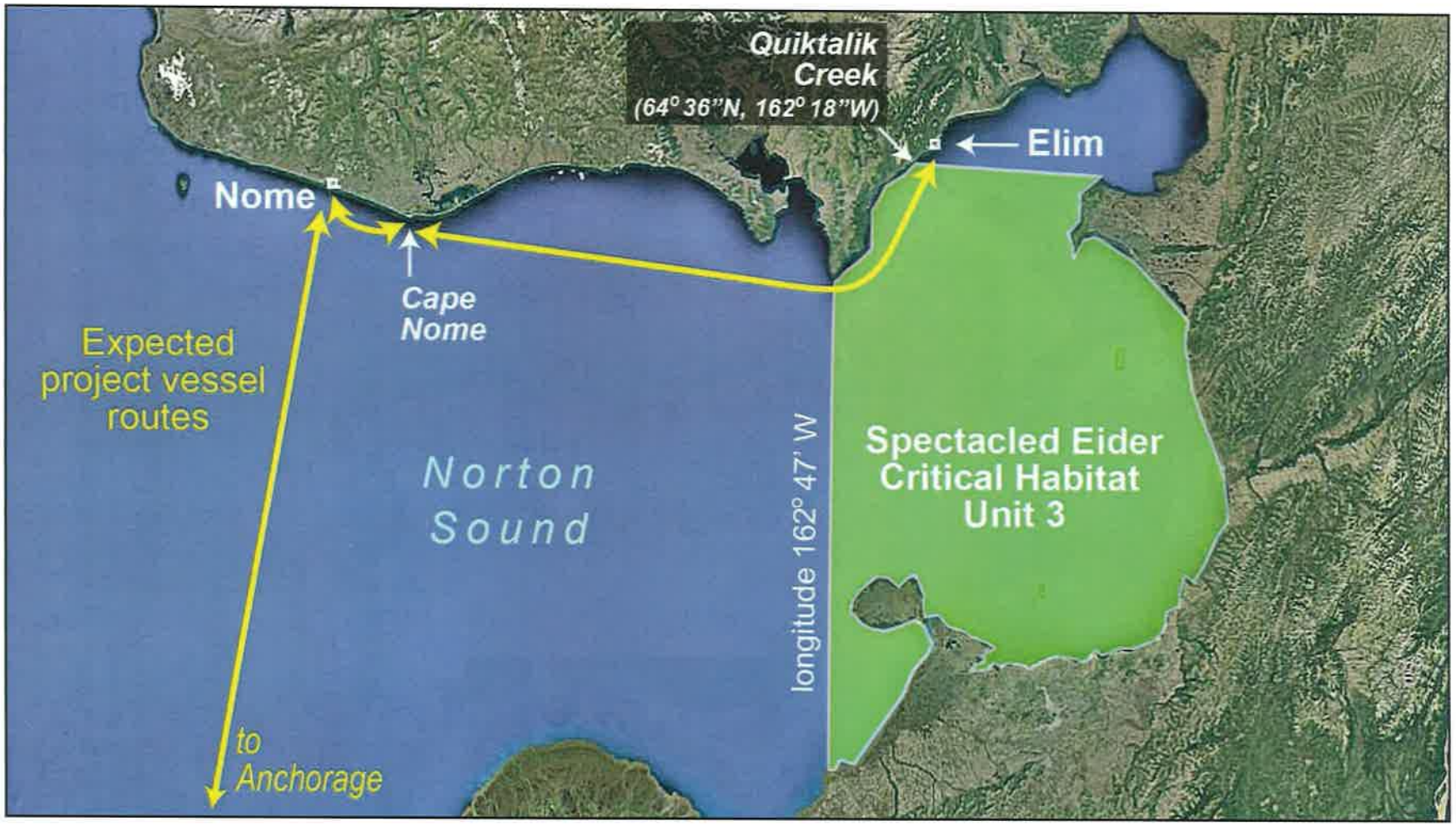

Figure 2. Location of shipping route from Norton Sound Critical Habitat.

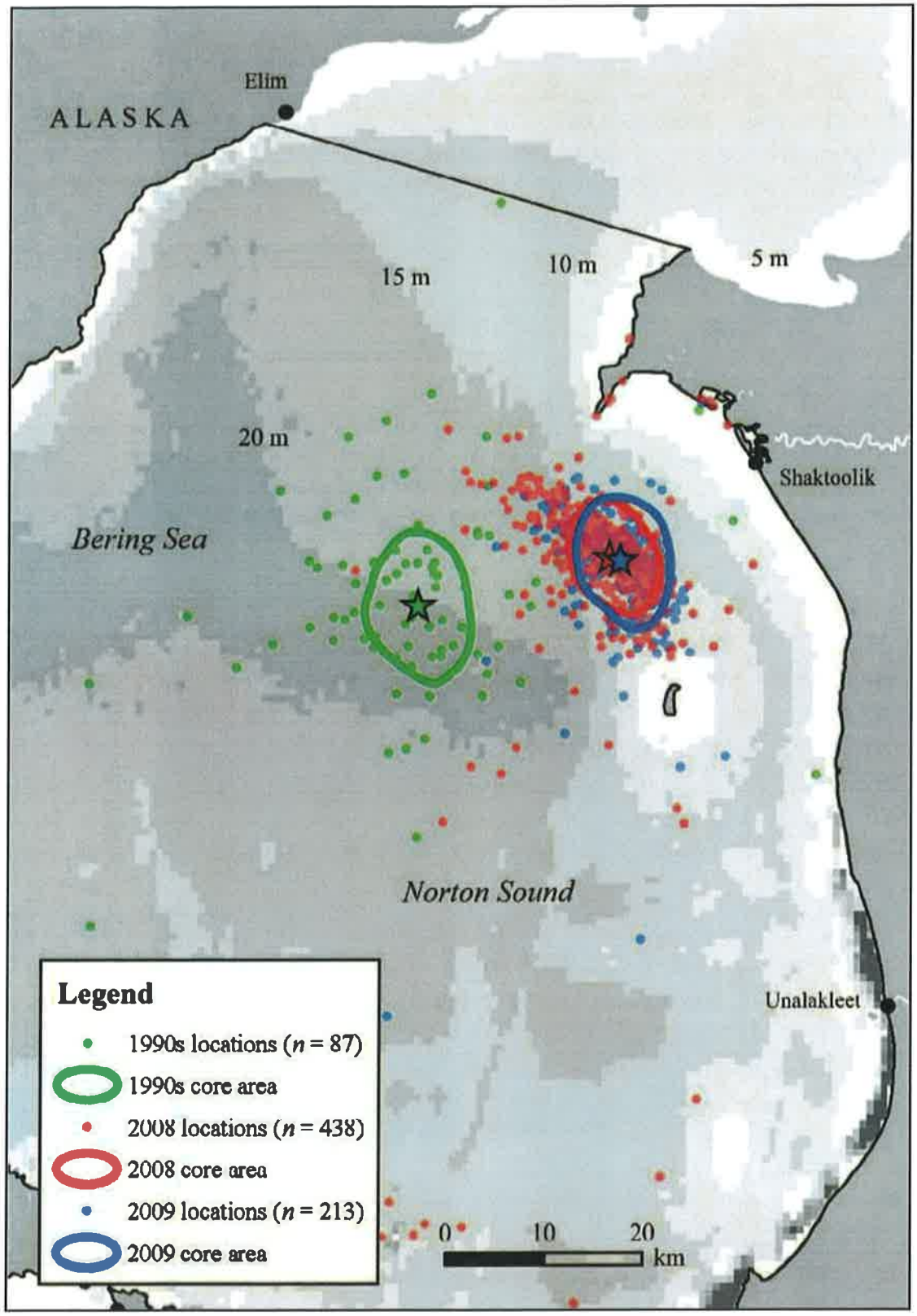

Figure 3. Distribution of spectacled eider sightings within eastern Norton Sound (from Sexon et al., 2016)

Figure 4. Proximity of vessel traffic to core molting area.

From:	Floyd, Christopher B CIV USARMY CEPOA (USA)
To:	Henszey, Bob
Cc:	Amal Ajmi
Subject:	RE: [Non-DoD Source] Re: [EXTERNAL] USACE "Elim Tribal Partnership" project - FWCA? (UNCLASSIFIED)
Date:	Wednesday, February 5, 2020 3:26:00 PM

Hi Bob -
I will be completing the draft EA for the Elim project in the next week or so.
I was wondering if you had made a final decision on whether your office would be preparing a CAR for this project?

Thanks
Chris Floyd

-----Original Message-----
From: Henszey, Bob [mailto:bob_henszey@fws.gov]
Sent: Tuesday, November 19, 2019 11:46 AM
To: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>
Cc: Amal Ajmi <amal_ajmi@fws.gov>
Subject: [Non-DoD Source] Re: [EXTERNAL] USACE "Elim Tribal Partnership" project - FWCA? (UNCLASSIFIED)

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Phone: 907-456-0323, Fax: 907-456-0208
Bob_Henszey@fws.gov <mailto:Bob_Henszey@fws.gov>

"Water Always Wins," Dr. Who 2009.11.15

On Tue, Nov 19, 2019 at 11:19 AM Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil <mailto:Christopher.B.Floyd@usace.army.mil> > wrote:

CLASSIFICATION: UNCLASSIFIED

Hi Bob -
The USACE has been studying this project for a while, but there has only been a preliminary design available since last month.
As the best summary of the project info I have at this point, I've attached a copy of the ESA determination letter I just sent to Ted and Amal.

When you've had a chance to look over the information, please let me know what level of Fish & Wildlife Coordination Act (FWCA) participation the USFWS wishes to pursue for this project.

If the USFWS will not be preparing a CAR, it would be very helpful for us to receive a letter stating so, similar to the letter your office prepared for the "Port of Nome" project (copy also attached).

Thank you,
Chris Floyd
Environmental Resources Section
Alaska District
US Army Corps of Engineers
907-753-2700
CLASSIFICATION: UNCLASSIFIED
CLASSIFICATION: UNCLASSIFIED

United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE
Fairbanks Fish and Wildlife Conservation Office
101 12th Avenue, Room 110
Fairbanks, Alaska 99701
February 19, 2020

Chris Floyd
U.S. Army Corps of Engineers, Alaska District,
P.O. Box 6898
Joint Base Elmendorf-Richardson, Alaska 99506-0898

Re: Elim Small Boat Harbor

Dear Mr. Floyd:

The U.S. Fish and Wildlife Service (Service) has reviewed the USACE material sent to our office in December 2019, and the additional information submitted via email on 7 February 2020 for constructing a small boat harbor and freight barge access at Elim, Alaska. Based on the information provided, we understand the USACE is proposing to construct two breakwaters, and then dredge between the breakwaters to provide a mooring basin for barges. Increases in vessel traffic to and from Elim are anticipated to result from the proposed action.

Potentially Affected Fish and Wildlife Trust Resources: The Service's trust resources are natural resources we have been entrusted to protect for the benefit of the American people. Within the proposed project area these resources could include species listed as threatened or endangered under the Endangered Species Act and their designated critical habitat, migratory birds (including bald and golden eagles), certain marine mammals, inter-jurisdictional fish, wetland habitats used by these species, and lands managed by the Service (e.g., national wildlife refuges).

Threatened and Endangered Species: The purpose of the Endangered Species Act (ESA) is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend are conserved. Projects that may affect listed species or designated critical habitat should be evaluated under procedures of the ESA to ensure that those authorizing, funding, and conducting the projects remain in compliance with the ESA. In this case, ESA-listed species and/or designated critical habitat occur within the project area, and we understand consultation has been completed.

Pacific walrus: On October 4, 2017, the Service determined the Pacific walrus (*Odobenus rosmarus divergens*) does not warrant listing as threatened or endangered under the Endangered Species Act (82 FR 46618). Walrus can occur in the action area, so a small possibility exists the project would encounter walrus swimming offshore or encounter individuals hauled-out on land. We encourage the USACE to contact the Service's Marine Mammals Management Office to develop an appropriate mitigation plan to minimize potential effects on walrus.

Comments and Voluntary Recommendations: The Service appreciates the USACE's early coordination for this proposed project. We offer the following recommendations to help minimize the proposed project's impacts on fish and wildlife habitat.

Migratory Birds: The Service appreciates any voluntary mitigation measures intended to avoid and minimize adverse impacts to migratory birds and their habitats. Migratory bird nests, eggs, or nestlings could be destroyed if road work is conducted during the spring and summer breeding season, which is generally May10 through July 20[1] at the proposed site. A common mitigation measure to help minimize impacts to nesting birds is to avoid land disturbing activities (e.g., clearing, excavation, gravel fill, brush hogging, etc.) during the breeding season. However, we also support project proponents finding other ways to minimize impacts to migratory birds.

Migrating birds are at risk of collision with objects in their path, particularly when visibility is impaired during darkness or inclement weather, such as rain, drizzle, or fog (Weir 1976). The incidence of bird strikes appears to rise when objects are illuminated with constant diffuse light, and the tendency for birds to be drawn to diffuse light appears to increase during rainy or foggy weather (Service, unpublished). Therefore, the Service recommends incorporating design features into a facility lighting plan (including shielding to reduce outward radiating light, light color choice and flash frequency [Weir 1976]) and powerline placement to decrease the potential for bird strikes.

Invasive Species: The Service encourages implementing Best Management Practices (BMPs) for minimizing the introduction and transport of invasive species into and out of the project area. This project could increase vessel traffic at Elim from ports with rat populations that could increase the risk of a "rat spill" on the Seward Peninsula. Cliff and ground nesting birds are vulnerable to predation by rodents. Nonnative rats are highly effective predators that can decimate local populations of nesting seabirds, as well as waterfowl and shorebirds. The Service recommends taking steps to prevent the introduction and spread of rats. Please find helpful BMPs (see Johnson 2008), attached separately for reference.

Information for other species that can become invasive in the Bering Sea area can be found at: https://accs.uaa.alaska.edu/invasive-species/bering-sea-marine-invasives/. The Service would be happy to work with the USACE to develop invasive species BMPs. For more assistance please contact our office.

Hazardous Material Spills: Unintentional releases of hazardous materials, including fuels and lubricants from construction equipment and vessels into marine waters could be a risk during construction and operations, and impact wildlife in Norton Sound. Due to the adverse impacts spills could cause to the environment, the Service encourages the USACE to develop a Spill Prevention, Control, and Countermeasure (SPCC) Plan once design plans are finalized. The purpose of the plan is to help prevent a discharge of oil and hazardous materials into navigable waters or adjoining shorelines. The SPCC should include an Emergency Response Plans (ERP) in the case of an accidental release during project construction and operation. More information

[1] Raptors may nest two or more months earlier than other birds. Black scoter are known to nest through August 10th.

on SPCC can be found at: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations.

Conclusion: After reviewing the information provided, we have no further concerns. The Service has no objections to the project as proposed; therefore, there is no need for a Fish and Wildlife Coordination Act investigation and subsequent report. However, should the proposed project undergo any significant changes in the design, siting, or management, please contact our office.

These comments are submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended: 16 U.S.C. 661 et seq.), the Alaska National Interest Lands Conservation Act (Section 101 (a)(c), 102 (1) and Section 302(5)(B)), the Migratory Bird Treaty Act (40 Stat. 755, as amended; 16 U.S.C. 703 et seq.), and the National Invasive Species Act of 1996 [P.L.104-332], as amended (NISA); and constitute the report of the Department of the Interior. These comments are also for use in your determination of 404 (b)(1) guidelines compliance (40 CFR 230), and in your public interest review (33 CFR 320.4) relating to protection of fish and wildlife resources.

We appreciate this opportunity for comment, and we would be happy to discuss our comments and recommendations with you. Should the project plans change, we would appreciate an opportunity to review the changes. Please contact Amal Ajmi at 907-456-0324 or amal_ajmi@fws.gov should you have any questions concerning these comments.

Sincerely,

Robert J. Henszey
Branch Chief
Conservation Planning Assistance

Attachment: Johnson (2008);
Land Disturbance Timing Recommendations (2017)

ecc: Kimberly Klein, MMM, USFWS

Literature Cited:

Lensink, C.J., and T. C. Rothe. 1986. Value of Alaskan wetlands for waterfowl. Unpublished. Report, U. S. Fish and Wildlife Service, Anchorage, AK 60pp.

Smith, M. A., M. S. Goldman, E. J. Knight, and J. J. Warrenchuk. 2017. Ecological Atlas of the Bering, Chukchi, and Beaufort Seas. 2nd edition. Audubon Alaska, Anchorage, AK.

Weir, R.D. 1976. Annotated bibliography of bird kills at man-made obstacles: a review of the state-of-the-art an

Correspondence:
Magnuson-Stevens Act Essential Fish Habitat

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

Mr. Matt Eagleton
Regional Essential Fish Habitat Coordinator
Habitat Conservation Division
National Marine Fisheries Service – Alaska Region
222 W 7th Ave, Room 552
Anchorage, AK, 99513

7 January 2020

Dear Mr. Eagleton,

Attached please find an Essential Fish Habitat (EFH) Assessment for the U.S. Army Corps of Engineers (USACE) "Elim Tribal Partnership" project at Elim, Alaska. The Corps requests a review of this document and recommendations on EFH conservation from the National Marine Fisheries Service (NMFS). The USACE has determined that the project will not adversely affect EFH for Pacific salmon.

The USACE looks forward to working with the NMFS on this project. Please contact Chris Floyd at Christopher.B.Floyd@usace.army.mil, or by telephone at (907) 753-2700 if you need additional information.

Sincerely,

Michael R. Salyer
Chief, Environmental Resources Section

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

February 5, 2020

Colonel Phillip J. Borders
U.S. Army Corps of Engineers
P.O. Box 6898
JBER, Alaska, 99506-0898

Re: Essential Fish Habitat Assessment for Elim Small Boat Harbor

Dear Colonel Borders:

The National Marine Fisheries Service (NMFS) has reviewed the U.S. Army Corps of Engineers' (USACE) Essential Fish Habitat (EFH) Assessment for the proposed small boat harbor in Elim, Alaska. The purpose of the project is to provide the community of Elim with moorage for vessels and other marine transport infrastructure, such as a sheltered barge landing site and/or a tender dock. The USACE is currently evaluating four construction alternatives to identify the most useful, cost-effective, and least environmentally-damaging project. USACE assumes all the alternatives will require some amount of mechanical rock-breaking using an excavator with a hydraulic "ripping" attachment, along with more typical mechanical dredging techniques. The dredged material is expected to be sand, gravel, and broken rock. There is no history of significant pollutant releases along the Elim shorelines. The dredged material would most likely be disposed of in Norton Bay to the southeast of Elim and will likely be redistributed fairly quickly by natural forces, such as storm surge. Because of the shallow bedrock in the area, a small sheet pile dock is included in three of the four alternatives and thus, will require minimal driving of the sheet pile into the substrate. The different alternatives vary primarily in size: construction dredging amounts range from 47,000 cubic yards (CY) to 159,000 CY and maintenance dredging amounts range from 10,000 CY at an interval of 10 years to 75,000 CY at an interval of 20 years.

Nearshore marine waters in the vicinity of Elim include EFH for all five species of Pacific salmon. There are no anadromous rivers in the project area and the proposed harbor location is not designated as EFH for other species of groundfish or crab.

Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires federal agencies to consult with NMFS on all actions that may adversely affect EFH. NMFS is required to make EFH Conservation Recommendations, which may include measures to avoid, minimize, mitigate, or otherwise offset adverse effects. NMFS concludes any impacts will be avoided, minimized, or offset should the following Conservation Recommendations be followed.

EFH Conservation Recommendations
In accordance with Section 305(b)(4)(A) of the MSA, NMFS makes the following EFH Conservation Recommendations:

1. Piles should be driven with a vibratory hammer to the extent practicable. Pile driving can generate intense underwater sound pressure waves that can disrupt migration and injure or kill fish. Vibratory hammers produce less intense sounds than impact hammers (NMFS 2005). If an impact hammer is required because of substrate type or the need for seismic stability, piles should be driven as deep as possible with a vibratory hammer before the impact hammer is used.
2. In-water blasting should be avoided unless it is the only practicable method for setting piles in bedrock. In-water blasting produces intense underwater sound pressure waves that can kill or injure fish. NMFS strongly encourages the use of drilling techniques or other mechanical means for setting piles in bedrock. If underwater blasting must be used, mitigation measures (e.g. stemming) should be employed to contain the explosive energy within the bedrock to the greatest extent possible. Because potentially harmful sound pressure waves are attenuated more rapidly in shallow water than in deep water (Rogers and Cox 1988), blasts should be conducted during the lowest tide level practical.
3. Include an Oil Spill Prevention and Control Plan, and a plan for minimizing the spread of invasive species, in the Environmental Protection Plan.
4. Ensure rock for rubble mound construction will be free of contaminants and invasive species.

Further, under Section 305(b)(4)(B) of the MSA, the Federal action agency is required to respond to NMFS EFH Conservation Recommendations in writing within 30 days. If your response is inconsistent with our recommendations, please explain the reasons for not following our recommendations, including the scientific justification for any disagreements over the anticipated effects of the proposed action and the measures needed to avoid, minimize, mitigate, or offset such effects (50 CFR 600.920(k)). NMFS wishes to be informed when the USACE selects a preferred alternative in order to assess the need for further EFH consultation. We look forward to working with you as the project proceeds. If you have any questions regarding this consultation, please contact Seanbob Kelly at seanbob.kelly@noaa.gov or (907) 271-5195 or Lydia Ames at lydia.ames@noaa.gov or (907) 271-5002.

Sincerely,

for James W. Balsiger
Administrator, Alaska Region

CC:
Robert J. Henszey, Ph.D - USFWS - bob_henszey@fws.gov
Amal Ajmi - USFWS - amal_ajmi@fws.gov
Christopher Putnam - USFWS - christopher_putnam@fws.gov
Colette Cairnes - NMFS - colette.cairns@noaa.gov
Greg Balogh - NMFS - greg.balogh@noaa.gov
Bridgette Lohrman - EPA - lohrman.bridgette@epa.gov

Betsy McCracken - EPA - mccracken.betsy@epa.gov
Erik Peterson - EPA - Peterson.Erik@epa.gov
Angela Hunt - ADEC Division of Water - angela.hunt@alaska.gov
Jim Menard - ADFG - jim.menard@alaska.gov
Tony Gorn - ADFG Fish and Game coordinator - tony.gorn@alaska.gov
Austin Ahmusuk - Kawerak Inc. Marine Advocate - aahmasuk@kawerak.org
Julie Raymond-Yakoubian - Kawerak inc. Program Director - juliery@kawerak.org
Gay Sheffield - Nome Port Commission - ggsheffield@alaska.edu
Charlie Lean - Nome Port Commission - charlie@nsedc.com
David Williams - CEPOA project manager - David.P.Williams@usace.army.mil

References

National Marine Fisheries Service (NMFS). 2005. Final Environmental Impact Statement, Essential Fish Habitat Identification and Conservation in Alaska, Vol. 2, Appendix G; National Marine Fisheries Service, Department of Commerce. April, 2005.

Rogers, P.H. and M. Cox. 1988. Underwater sound as a biological stimulus. pp. 131-149. In Sensory biology of aquatic animals. Atema, J, R.R. Fay, A.N. Popper, and W.N. Tavolga, eds. Springer-Verlag. New York.

From: Seanbob Kelly - NOAA Federal
To: Floyd, Christopher B CIV USARMY CEPOA (USA)
Subject: [Non-DoD Source] Fwd: Essential Fish Habitat Assessment for Elim Small Boat Harbor
Date: Thursday, March 12, 2020 9:21:34 AM
Attachments: Elim Harbor EFH Letter_Final.pdf

Here is the signed copy
Seanbob Kelly

NOAA/NMFS Alaska Region Habitat Division
222 West 7th Ave, Box 43, Room 552
Anchorage, Alaska 99513

Office (907) 271-5195

---------- Forwarded message ---------
From: Barb Lake - NOAA Federal <barb.lake@noaa.gov <mailto:barb.lake@noaa.gov> >
Date: Wed, Feb 5, 2020 at 9:16 AM
Subject: Essential Fish Habitat Assessment for Elim Small Boat Harbor
To: <bob_henszey@fws.gov <mailto:bob_henszey@fws.gov> >, <amal_ajmi@fws.gov <mailto:amal_ajmi@fws.gov> >, <christopher_putnam@fws.gov <mailto:christopher_putnam@fws.gov> >, <lohrman.bridgette@epa.gov <mailto:lohrman.bridgette@epa.gov> >, <mccracken.betsy@epa.gov <mailto:mccracken.betsy@epa.gov> >, <peterson.erik@epa.gov <mailto:peterson.erik@epa.gov> >, <angela.hunt@alaska.gov <mailto:angela.hunt@alaska.gov> >, <jim.menard@alaska.gov <mailto:jim.menard@alaska.gov> >, <tony.gorn@alaska.gov <mailto:tony.gorn@alaska.gov> >, <aahmasuk@kawerak.org <mailto:aahmasuk@kawerak.org> >, <juliery@kawerak.org <mailto:juliery@kawerak.org> >, Gay Sheffield <ggsheffield@alaska.edu <mailto:ggsheffield@alaska.edu> >, <charlie@nsedc.com <mailto:charlie@nsedc.com> >, <david.p.williams@usace.army.mil <mailto:david.p.williams@usace.army.mil> >
Cc: Colette Cairns - NOAA Federal <colette.cairns@noaa.gov <mailto:colette.cairns@noaa.gov> >, Greg Balogh - NOAA Federal <greg.balogh@noaa.gov <mailto:greg.balogh@noaa.gov> >, Seanbob Kelly - NOAA Federal <seanbob.kelly@noaa.gov <mailto:seanbob.kelly@noaa.gov> >, Lydia Ames - NOAA Federal <lydia.ames@noaa.gov <mailto:lydia.ames@noaa.gov> >, Gretchen Harrington - NOAA Federal <gretchen.harrington@noaa.gov <mailto:gretchen.harrington@noaa.gov> >

Please see the attached Essential Fish Habitat Assessment for Elim Small Boat Harbor.

--

Barb Lake

United States Department of Commerce

National Oceanographic and Atmospheric Administration

National Marine Fisheries Service - Alaska Region

Protected Resources & Habitat Conservation Divisions

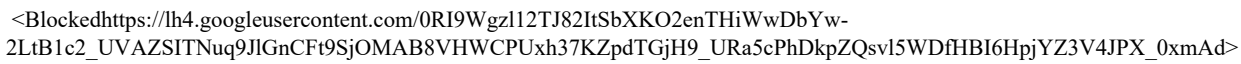
709 West 9th St.

P.O. Box 21668

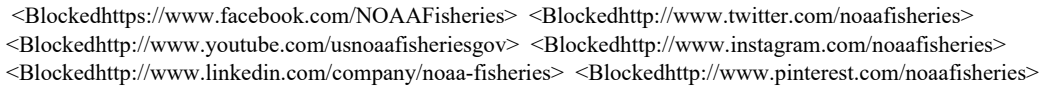
Juneau, AK 99802-1668

Barb.Lake@NOAA.gov <mailto:barb.lake@noaa.gov>

907-586-7236



Blockedwww.fisheries.noaa.gov <Blockedhttp://www.fisheries.noaa.gov/>



To report an injured, stranded, entangled, or dead marine mammal contact the Statewide 24-Hour Stranding Hotline at 1-877-925-7773 or 877-9-AKR-PRD Blockedhttps://www.fisheries.noaa.gov/alaska/marine-life-distress/alaska-marine-mammal-stranding-network

From: Floyd, Christopher B CIV USARMY CEPOA (USA)
To: "Seanbob Kelly - NOAA Federal"
Cc: "Lydia Ames - NOAA Federal"
Subject: RE: USACE "Elim Tribal Partnership" - acknowledgment of EFH conservation recommendations
Date: Thursday, April 9, 2020 7:34:00 PM

Dear Seanbob -
Thank you for the letter from NMFS dated 5 Feb 2020 (received at our office 12 Mar 2020) re: Essential Fish Habitat Assessment for Elim Small Boat Harbor.

The USACE appreciates the EHF conservations recommendations that NMFS has provided; we intend to implement them to the extent practicable, and incorporate the avoidance and minimization measures into our study documents.

Thank you,

Chris Floyd, Biologist
Environmental Resources Section
Civil Works Project Management Branch
Alaska District
US Army Corps of Engineers

Correspondence:
National Historic Preservation Act, Section 106

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

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

OCT 3 1 2018

Dear Ms. Bittner,

The Alaska District, U.S. Army Corps of Engineers (USACE), is conducting a study to determine the feasibility of constructing a small boat harbor near Elim in Norton Bay. The USACE is currently reviewing four potential locations for boat harbor placement. These locations are Moses Point (Sections 22 and 23, T9S, R17W, Kateel River Meridian, USGS Quad Solomon C1), Iron Creek (Sections 35 and 36, T9S, R17W and 18W, Kateel River Meridian, USGS Quad Solomon C1), Elim beach (Sections 15 and 21, T10S, R18W, Kateel River Meridian, USGS Quad Solomon C1), and Airport (Elim) Point (S21, T9S, R18W, Kateel River Meridian, USGS Quad Solomon C1).

Figure 1. Project area overview.

Formal section 106 consultation will be initiated as project planning progresses. 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.

Sincerely,

Forrest J. Kranda
Archaeologist
Environmental Resources Section

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

February 18, 2020

CEPOA-PM-C-ER

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

Dear Ms. Bittner,

The U.S. Army Corps of Engineers, Alaska District (USACE) Civil Works Branch is conducting a feasibility study on the construction of a small boat harbor in Elim, Alaska (Sections 15 and 21, T10S, R18W, USGS Quad Solomon C1, Kateel River Meridian; Figure 1). This study is being conducted in partnership with the Native Village of Elim and Kawerak, Incorporated. In compliance with Section 106 of the National Historic Preservation Act of 1966, the purpose of this letter is to notify you of a proposed Federal undertaking [36 CFR § 800.3(c)(3)] and to seek your concurrence on an assessment of effect [36 CFR § 800.4(d)(1)].

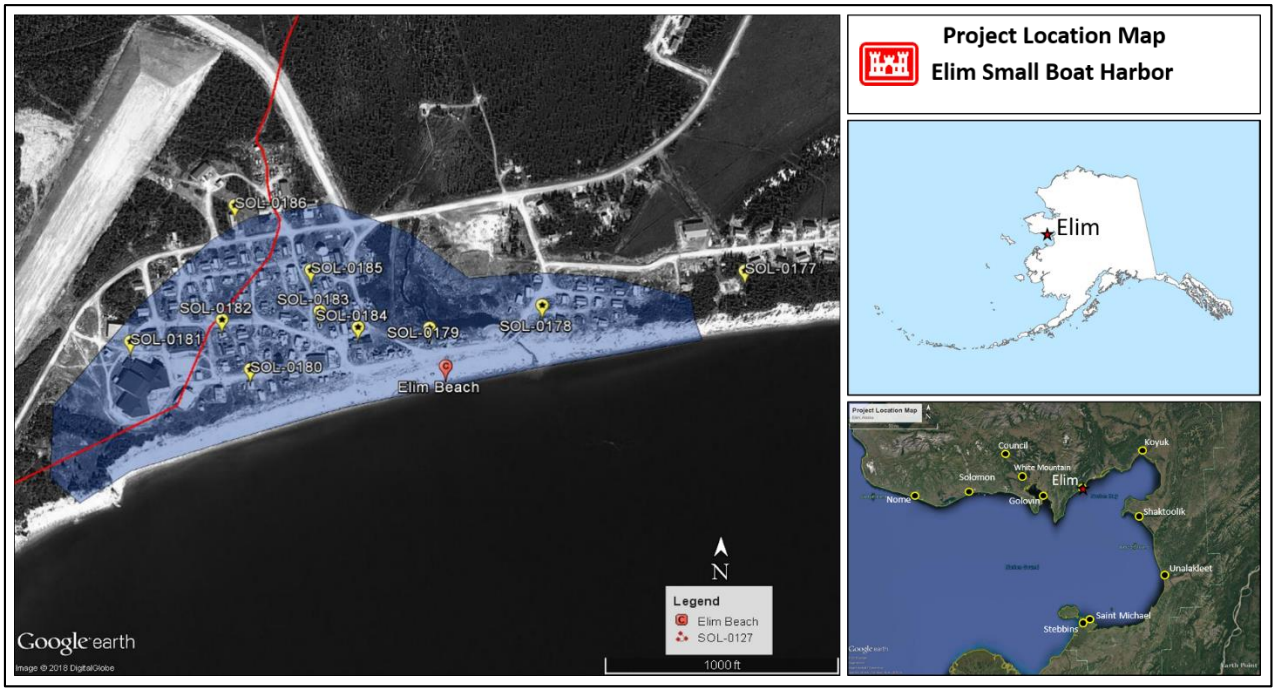


Figure 1. Elim Small Boat Harbor project location map.

Authority

This undertaking is being conducted under Section 203, Tribal Partnership Program, of the Water Resources Development Act (WRDA) of 2000 as amended by Section 1031(a) of the Water Resources Reform and Development Act of 2014 (WRRDA 2014), and Section 1121 of the Water Infrastructure Improvements for the Nation Act of 2016 (WIIIN/WRDA 2016). These statutes provide authority for the USACE, in cooperation with Federally-recognized Tribes and other Federal agencies, to study and determine the feasibility of carrying out projects that will substantially benefit Federally-recognized Tribes.

Purpose and Need

The community of Elim has no navigation improvements; presently, incoming barges wait for high tide and discharge fuel via a floating line to a 2-inch pipeline header on the beach west of Elim Creek. Dry goods are unloaded from barges onto the beach east of Elim Creek (Figure 2). In addition to tidal impacts, beach access changes depending on the location of shifting sand bars. Currently, both subsistence and commercial fishing vessels are either beached in front of the community or 9 miles away at Moses Point beach. Lack of moorage adversely impacts the subsistence and commercial fishing fleet; if left unattended during a storm, vessels are often swamped or damaged. The USACE and its partners have identified a tentatively selected plan (TSP) to construct a small boat harbor at Elim's beach in order to improve navigation and moorage for the community.

Figure 2. Barge unloading cargo onto Elim Beach in 2018.

Historic Context

People began to migrate into eastern Beringia, modern-day Alaska, during the Pleistocene. The earliest known archaeological sites in Alaska are concentrated in the Tanana River basin, and date to approximately 14,000 years ago. The earliest known archaeological site on the Seward Peninsula is Trail Creek Caves (BEN-00001), which dates to approximately 10,000 years ago (Goebel and Potter 2016). Artifacts from this site were used to help define the American Paleoarctic tradition (Anderson 1984; Dixon 2013). The earliest-known archaeological site in the vicinity of Elim is Iyatayet (NOB-00002), the type site of both the Denbigh Flint Complex and the Norton tradition. Iyatayet is located on Cape Denbigh, approximately 25 miles southeast of Elim across Norton Bay. The oldest occupations at this multicomponent site date to about 4,000 years ago; however, the site was periodically occupied until about 500 years ago (Tremayne et al. 2018). Multiple archaeological sites in the region demonstrate that the shores of Norton Sound have been continuously occupied for the past 2,000 years.

Norton Sound was first visited by European explorers in 1778, when James Cook sailed into the sound. This was followed by Joseph Billings in 1791 and Otto von Kotzebue in 1816 (Bockstoce 1979). In 1822, the Russian-American Company established a trading post at Saint Michael, approximately 80 miles south of Elim across Norton Sound. Encroachment of outsiders into the region impacted local communities in multiple ways, including the migration of individuals from further north into the area in order to take advantage of trade opportunities, and a decrease in area population due to multiple epidemics. The 1867 Treaty of Cession transferred Russian possession of the Alaska Territory to the United States. The late 1800s saw a further influx of outsiders into Norton Sound, with the establishment of multiple missions in the area and the discovery of gold near Nome (Ray 1975; Ganley 1995; Phillips-Chan 2019; Raymond-Yakoubian 2019).

In 1913, the Golovin Evangelical Covenant mission was relocated to what is now the City of Elim. The Covenant mission and children's home was established at this new location by Reverend Ludwig Evald Ost and his wife Ruth Ost, who called it the Elim Mission Roadhouse. The name "Elim" was chosen by Reverend Ost for its biblical associations. In 1917, 350,000 acres of land around Elim were set aside in an Executive Order and designated the Norton Bay Reservation for use by the U.S. Bureau of Education and the inhabitants of Elim (Raymond-Yakoubian 2019). In 1929, under pressure from mining lobbyists, 50,000 acres were removed from the reserve via another Executive Order. The City of Elim was incorporated in 1970. When the Alaska Native Claims Settlement Act (ANCSA) was passed in 1971, Elim chose the "opt-out" option through section 19b of ANCSA. In lieu of other ANCSA benefits, Elim gained title to 298,000 acres of the former reserve (Case and Voluck 2002; Raymond-Yakoubian 2019).

Project Description

The tentatively selected plan (TSP) is to build a harbor at the beach located south of Elim (Figure 3). The harbor will be sized to accommodate one 160 foot (ft) barge and associated 86 ft tug, two fish/crab tenders, and 50 vessels varying in size from 18 – 32 ft in length. Docks will consist of two removable floating docks, each approximately 245 ft long with two 50 ft-long gangways. An 87 ft-long tender dock would also be installed, as will a single small boat launch. Two rubblemound breakwaters will provide a mooring basin of approximately 6.2 acres. The west breakwater will be 819 ft long and the east breakwater will be 418 ft long. The breakwaters will be constructed of rock from the established commercial quarry at Cape Nome. A 0.15 mile-long access road running parallel to the beach, connecting Front Street with a 3.9 acre upland turn-around and parking space, will also be constructed. No staging area is expected for the rock as it will be placed into the water directly from the barge; however, some equipment will likely be staged along Front Street and the beach.

The required dredge depth of the mooring basin will be -9.0 ft Mean Lower Low Water (MLLW) with a maximum pay depth of -11.0 ft MLLW. The entrance channel and turning basin will require a dredge depth of -8.0 ft MLLW with a maximum pay depth of -10.0 ft MLLW. The material at Elim Beach consists of poor to well-graded gravel with sand, cobbles, boulders, weathered bedrock, and bedrock outcroppings. A combination of mechanical dredging and heavy ripping, drilling, or blasting will be required to remove material from the proposed entrance channel and mooring basin. Dredged materials will be placed in-water approximately 2 miles southeast of the project area (Figure 4).

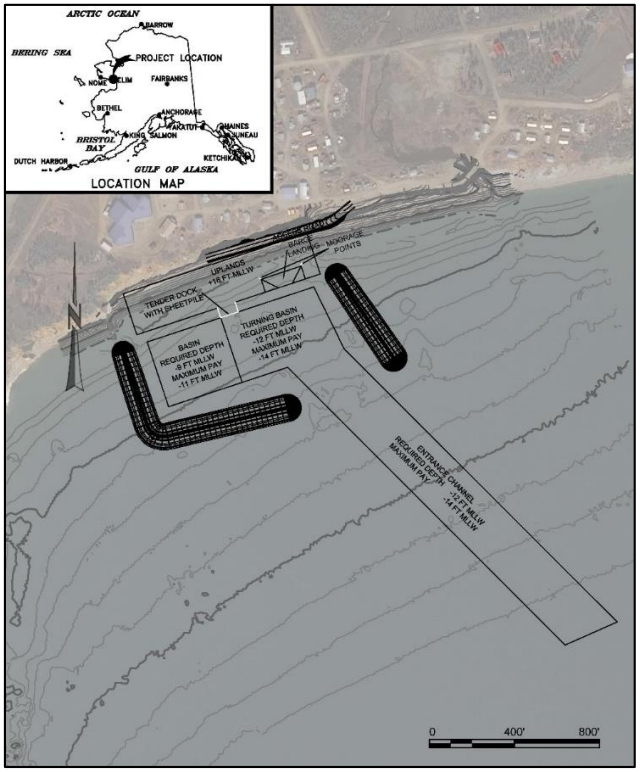


Figure 3. Elim Small Boat Harbor TSP.

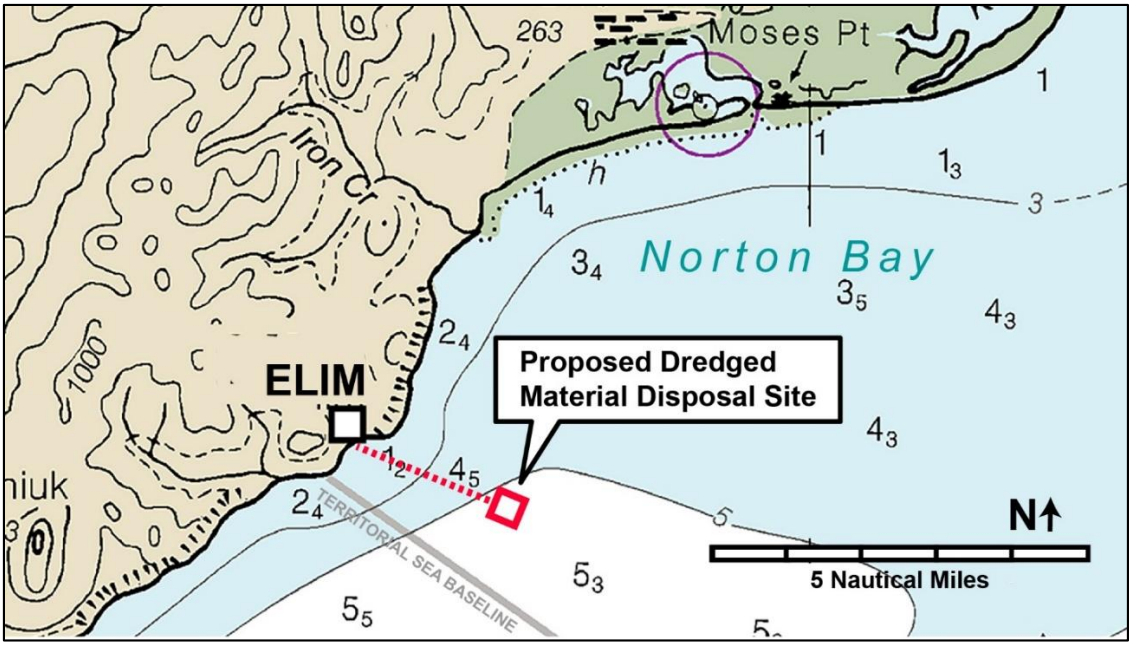


Figure 4. Location of proposed dredged material disposal site.

Area of Potential Effect and Assessment of Effect

The Area of Potential Effect (APE) for the proposed Federal undertaking includes the beach on the south side of Elim, the waters in front of the beach, and the waters of the disposal area for the dredged materials (Figure 5). The APE is approximately 45 acres and occurs mostly in water.

Figure 5. APE (blue) in relation to known cultural resources on the AHRS (pink).

The Alaska Heritage Resources Survey (AHRS) database documents twelve known cultural resources within the vicinity of Elim. The AHRS identifies Elim itself as the historic village of *Nuviakchak* (Table 1). A search of the shows no known wrecks or obstructions within the vicinity of the Elim Beach project location. A search of both the Bureau of Ocean and Energy Management's (BOEM) database and the National Oceanic and Atmospheric Admiration's (NOAA) Wrecks and Obstructions database showed no known shipwrecks or other obstructions within the APE (BOEM 2011; NOAA 2018).

Table 1. Known cultural resources within general vicinity of Area of Potential Effect (APE).

AHRS No.	Site Name	NRHP Status	In APE
SOL-00038	Nuviakchak (Elim)	Unevaluated	**YES**
SOL-00127	Unalakleet-Nome Trail	Eligible	No
SOL-00177	Cabin 1	Unevaluated	No
SOL-00178	Cabin 2	Unevaluated	No
SOL-00179	Outbuilding 1	Unevaluated	No
SOL-00180	Cabin 3	Unevaluated	No
SOL-00181	Old High School	Unevaluated	No
SOL-00182	Dog House	Unevaluated	No
SOL-00183	Cabin 4	Unevaluated	No
SOL-00184	U.S. Post Office	Unevaluated	No
SOL-00185	Cabin 5	Unevaluated	No
SOL-00186	Meeting House	Unevaluated	No

There have been at least six cultural resources surveys conducted in the Elim area. In 2002, the Army National Guard (ARNG) conducted a study on the Elim ARNG Armory in preparation for potential future undertakings at the facility (Morris and Ream 2002). No historic properties were identified during the survey (ARNG 2002). In 2004, the Alaska Native Tribal Health Consortium (ANTHC) coordinated service line replacements to ten homes in Elim. The 2004 undertaking received concurrence from the SHPO that the project would not affect historic properties due to the lack of ground disturbance (ANTHC 2004). In 2006, the ANTHC coordinated service connection replacements for 30 homes in Elim. The undertaking, which entailed replacing existing subsurface service connections, also received concurrence from the SHPO that the project would not affect any historic properties (ANTHC 2006). In 2014, Walking Dog Archaeology conducted a survey of Elim in preparation for a Kawerak Transportation Project to rehabilitate the major roads and parking in the community. All major roadways and the beach were surveyed. Pipkin (2014) reported negative findings on all walked roadways and along the beach.

In 2016, GCI Communications Corporation (GCI) conducted an archaeological and architectural survey of Elim as a part of the TERRA Terrestrial Backbone Telecommunications System Project. Results of the inventory and survey included recommendations of eligibility for listing in the National Register of Historic Places for the village of *Nuviakchak* (SOL-00038) and ten buildings in Elim (GCI 2016). The status of these structures is listed as pending on the associated AHRS Cards, and the SHPO did not concur with the eligibility of SOL-00038 due to insufficient documentation of

eligibility under Criteria A or C (AHRS 2019). In 2018, a USACE archaeologist surveyed the four potential boat harbor locations: Moses Point, Iron Creek, Elim Beach, and Airport Point. No cultural resources were identified during the survey.

According to the AHRS, the eligibility of SOL-00038 for listing in the NRHP is still pending. For the purposes of the proposed Federal undertaking, the USACE will assume that SOL-00038 is eligible for listing in the National Register of Historic Places. Given the history of occupation at the site, there is potential for unknown subsurface cultural resources within the community footprint. The proposed small boat harbor would impact approximately 4 acres of uplands along the beach, and 41 acres of Norton Sound. The beach area has historically been subject to active erosion and weathering; major storm surges in 2004 and 2005 damaged the bridge and septic lines above the beach, as well as the fuel headers and six subsistence cabins. In addition to natural events, the area has been impacted construction, fueling operations, barge landings, boat launchings, materials storage, and other community events. In April 2019, the USACE met with community members in Elim to consult on the presence of cultural resources. No one was aware of any subsurface cultural resources along the beach; therefore, the likelihood of impacting subsurface cultural resources associated with SOL-00038 within the APE is low. As there are no known in-water cultural resources in the vicinity of Elim, in-water construction, dredging, and dredged materials placement is not expected to impact any cultural resources.

Conclusion

The APE of the proposed Federal undertaking falls within the boundaries of SOL-00038, the historic village of Elim. Consultation with community members did not identify any cultural resources concerns within the APE. And, due to the history of impacts to the Elim Beach from storm surges, construction, barge landings, and other activities, it is unlikely that unknown subsurface cultural resources would be impacted by the placement of the small boat harbor along the beach. Following 36 CFR § 800.6(b), the USACE seeks your concurrence on the determination that the proposed undertaking will result in **no adverse effect** on historic properties. If you have any questions about this project, please contact Kelly Eldridge by phone at 907-753-2672, or by email at kelly.a.eldridge@usace.army.mil.

Sincerely,

Kelly A. Eldridge
Archaeologist
Environmental Resources Section

cc:
Robert Keith, President, Native Village of Elim

Charles Saccheus, Sr., Mayor, City of Elim
Eric Daniels, Sr., President, Elim Native Corporation
Julie Raymond-Yakoubian, Social Science Program Director, Kawerak, Inc.
Gail R. Schubert, President and CEO, Bering Straits Native Corporation

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

February 18, 2020

CEPOA-PM-C-ER

Robert Keith
President
Native Village of Elim
P.O. Box 39070
Elim, AK 99739

Dear Mr. Keith:

The U.S. Army Corps of Engineers (USACE), under the Civil Works Program, is conducting a feasibility study on the construction of a small boat harbor in Elim, Alaska. The feasibility study is being conducted in partnership with the Native Village of Elim and Kawerak, Inc. In compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 [36 CFR § 800.2(a)(4)], the purpose of this letter is to notify your organization of a Federal undertaking and to invite consultation on an assessment of effect.

You are receiving this letter because the Native Village of Elim is a sponsor of the project and interested in cultural resources within the general project area. A letter addressed to the Alaska State Historic Preservation Officer (SHPO), which assesses the proposed undertaking, is enclosed. It describes the present state of identification and evaluation of cultural resources in the area and the impact that the proposed undertaking may have on those resources. Per Section 101(b)(3) of the NHPA, the SHPO advises and assists Federal agencies in carrying out their Section 106 responsibilities. The SHPO cooperates with agencies, local governments, organizations, and individuals to ensure that historic properties in Alaska are taken into consideration at all levels of Federal planning and development. Per 36 CFR § 800.3(c)(4), the SHPO has 30 days to respond to the USACE's notification; within this time period, we invite you to bring any cultural resources concerns or information to our attention.

If you have questions or concerns about this project, or would like to share information with us, please email me at kelly.a.eldridge@usace.army.mil or call at 907-753-2672.

Sincerely,

Kelly A. Eldridge
Archaeologist
Environmental Resources Section

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

February 18, 2020

CEPOA-PM-C-ER

Charles Saccheus, Sr.
Mayor
City of Elim
P.O. Box 39070
Elim, AK 99739

Dear Mr. Saccheus,

The U.S. Army Corps of Engineers (USACE), under the Civil Works Program, is conducting a feasibility study on the construction of a small boat harbor in Elim, Alaska. The feasibility study is being conducted in partnership with the Native Village of Elim and Kawerak, Inc. In compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 [36 CFR § 800.2(a)(4)], the purpose of this letter is to notify your organization of a Federal undertaking and to invite your consultation on an assessment of effect.

You are receiving this letter because we believe that the City of Elim may have an interest in cultural resources in the general project area. A letter addressed to the Alaska State Historic Preservation Officer (SHPO), which assesses the proposed undertaking, is enclosed. It describes the present state of identification and evaluation of cultural resources in the area and the impact that the proposed undertaking may have on those resources. Per Section 101(b)(3) of the NHPA, the SHPO advises and assists Federal agencies in carrying out their Section 106 responsibilities. The SHPO cooperates with agencies, local governments, organizations, and individuals to ensure that historic properties in Alaska are taken into consideration at all levels of Federal planning and development. Per 36 CFR § 800.3(c)(4), the SHPO has 30 days to respond to the USACE's notification; within this time period, we invite you to bring any cultural resources concerns or information to our attention.

If you have questions or concerns about this project, or would like to share information with us, please email me at kelly.a.eldridge@usace.army.mil or call at 907-753-2672.

Sincerely,

Kelly A. Eldridge
Archaeologist
Environmental Resources Section

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

February 18, 2020

CEPOA-PM-C-ER

Eric Daniels, Sr.
President
Elim Native Corporation
P.O. Box 39010
Elim, AK 99739

Dear Mr. Daniels,

The U.S. Army Corps of Engineers (USACE), under the Civil Works Program, is conducting a feasibility study on the construction of a small boat harbor in Elim, Alaska. The feasibility study is being conducted in partnership with the Native Village of Elim and Kawerak, Inc. In compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 [36 CFR § 800.2(a)(4)], the purpose of this letter is to notify your organization of a Federal undertaking and to invite consultation on an assessment of effect.

You are receiving this letter because we believe that the Elim Native Corporation may have an interest in cultural resources in the general project area. A letter addressed to the Alaska State Historic Preservation Officer (SHPO), which assesses the proposed undertaking, is enclosed. It describes the present state of identification and evaluation of cultural resources in the area and the impact that the proposed undertaking may have on those resources. Per Section 101(b)(3) of the NHPA, the SHPO advises and assists Federal agencies in carrying out their Section 106 responsibilities. The SHPO cooperates with agencies, local governments, organizations, and individuals to ensure that historic properties in Alaska are taken into consideration at all levels of Federal planning and development. Per 36 CFR § 800.3(c)(4), the SHPO has 30 days to respond to the USACE's notification; within this time period, we invite you to bring any cultural resources concerns or information to our attention.

If you have questions or concerns about this project, or would like to share information with us, please email me at kelly.a.eldridge@usace.army.mil or call at 907-753-2672.

Sincerely,

Kelly A. Eldridge
Archaeologist
Environmental Resources Section

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

February 18, 2020

CEPOA-PM-C-ER

Julie Raymond-Yakoubian
Social Science Program Director
Kawerak, Inc.
P.O. Box 948
Nome, AK 99762

Dear Dr. Raymond-Yakoubian,

The U.S. Army Corps of Engineers (USACE), under the Civil Works Program, is conducting a feasibility study on the construction of a small boat harbor in Elim, Alaska. The feasibility study is being conducted in partnership with the Native Village of Elim and Kawerak, Inc. In compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 [36 CFR § 800.2(a)(4)], the purpose of this letter is to notify your organization of a Federal undertaking and to invite consultation on an assessment of effect.

You are receiving this letter because Kawerak, Inc. is a sponsor of the project and interested in cultural resources within the general project area. A letter addressed to the Alaska State Historic Preservation Officer (SHPO), which assesses the proposed undertaking, is enclosed. It describes the present state of identification and evaluation of cultural resources in the area and the impact that the proposed undertaking may have on those resources. Per Section 101(b)(3) of the NHPA, the SHPO advises and assists Federal agencies in carrying out their Section 106 responsibilities. The SHPO cooperates with agencies, local governments, organizations, and individuals to ensure that historic properties in Alaska are taken into consideration at all levels of Federal planning and development. Per 36 CFR § 800.3(c)(4), the SHPO has 30 days to respond to the USACE's notification; within this time period, we invite you to bring any cultural resources concerns or information to our attention.

If you have questions or concerns about this project, or would like to share information with us, please email me at kelly.a.eldridge@usace.army.mil or call at 907-753-2672.

Sincerely,

Kelly A. Eldridge
Archaeologist
Environmental Resources Section

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

February 18, 2020

CEPOA-PM-C-ER

Gail R. Schubert
President and CEO
Bering Straits Native Corporation
3301 C Street, Suite 400
Anchorage, AK 99503

Dear Ms. Schubert:

The U.S. Army Corps of Engineers (USACE), under the Civil Works Program, is conducting a feasibility study on the construction of a small boat harbor in Elim, Alaska. The feasibility study is being conducted in partnership with the Native Village of Elim and Kawerak, Inc. In compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 [36 CFR § 800.2(a)(4)], the purpose of this letter is to notify your organization of a Federal undertaking and to invite consultation on an assessment of effect.

You are receiving this letter because we believe that the Bering Straits Native Corporation may have an interest in cultural resources in the general project area. A letter addressed to the Alaska State Historic Preservation Officer (SHPO), which assesses the proposed undertaking, is enclosed. It describes the present state of identification and evaluation of cultural resources in the area and the impact that the proposed undertaking may have on those resources. Per Section 101(b)(3) of the NHPA, the SHPO advises and assists Federal agencies in carrying out their Section 106 responsibilities. The SHPO cooperates with agencies, local governments, organizations, and individuals to ensure that historic properties in Alaska are taken into consideration at all levels of Federal planning and development. Per 36 CFR § 800.3(c)(4), the SHPO has 30 days to respond to the USACE's notification; within this time period, we invite you to bring any cultural resources concerns or information to our attention.

If you have questions or concerns about this project, or would like to share information with us, please email me at kelly.a.eldridge@usace.army.mil or call at 907-753-2672.

Sincerely,

Kelly A. Eldridge
Archaeologist
Environmental Resources Section

3130-1R CDE-E

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

February 18, 2020

CEPOA-PM-C-ER

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

Dear Ms. Bittner,

The U.S. Army Corps of Engineers, Alaska District (USACE) Civil Works Branch is conducting a feasibility study on the construction of a small boat harbor in Elim, Alaska (Sections 15 and 21, T10S, R18W, USGS Quad Solomon C1, Kateel River Meridian; Figure 1). This study is being conducted in partnership with the Native Village of Elim and Kawerak, Incorporated. In compliance with Section 106 of the National Historic Preservation Act of 1966, the purpose of this letter is to notify you of a proposed Federal undertaking [36 CFR § 800.3(c)(3)] and to seek your concurrence on an assessment of effect [36 CFR § 800.4(d)(1)].

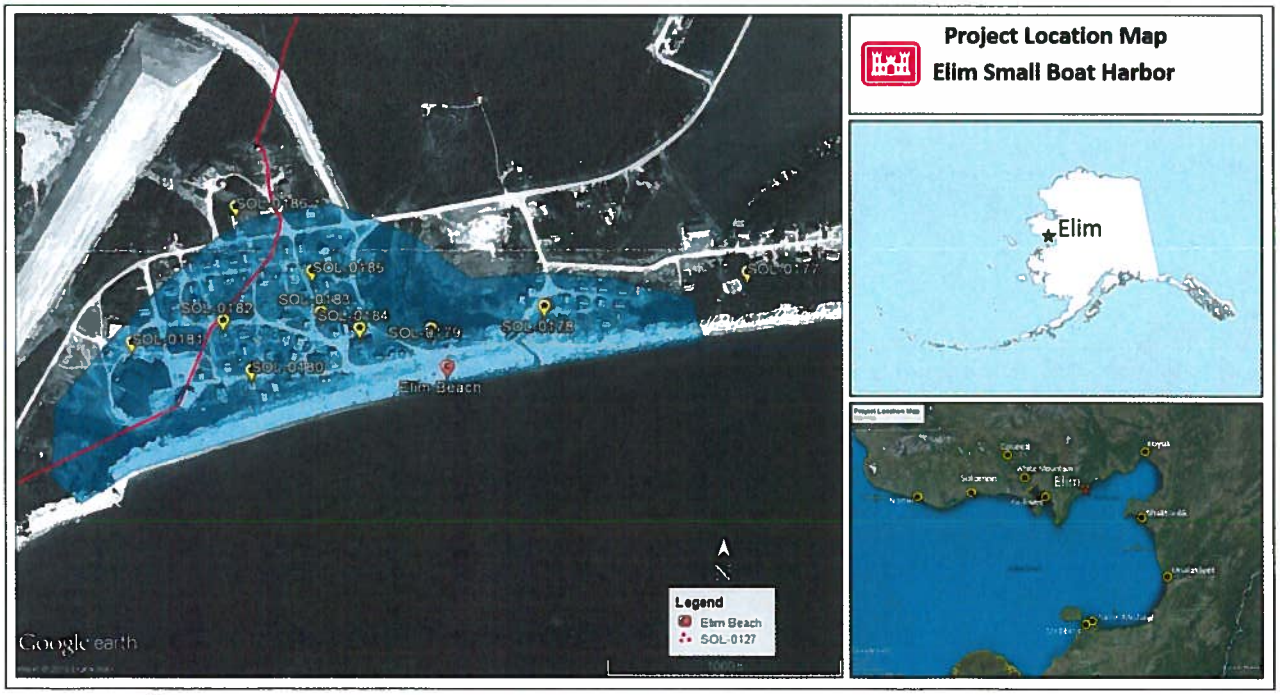


Figure 1. Elim Small Boat Harbor project location map.

2020-00221

Authority

This undertaking is being conducted under Section 203, Tribal Partnership Program, of the Water Resources Development Act (WRDA) of 2000 as amended by Section 1031(a) of the Water Resources Reform and Development Act of 2014 (WRRDA 2014), and Section 1121 of the Water Infrastructure Improvements for the Nation Act of 2016 (WIIIN/WRDA 2016). These statutes provide authority for the USACE, in cooperation with Federally-recognized Tribes and other Federal agencies, to study and determine the feasibility of carrying out projects that will substantially benefit Federally-recognized Tribes.

Purpose and Need

The community of Elim has no navigation improvements; presently, incoming barges wait for high tide and discharge fuel via a floating line to a 2-inch pipeline header on the beach west of Elim Creek. Dry goods are unloaded from barges onto the beach east of Elim Creek (Figure 2). In addition to tidal impacts, beach access changes depending on the location of shifting sand bars. Currently, both subsistence and commercial fishing vessels are either beached in front of the community or 9 miles away at Moses Point beach. Lack of moorage adversely impacts the subsistence and commercial fishing fleet; if left unattended during a storm, vessels are often swamped or damaged. The USACE and its partners have identified a tentatively selected plan (TSP) to construct a small boat harbor at Elim's beach in order to improve navigation and moorage for the community.

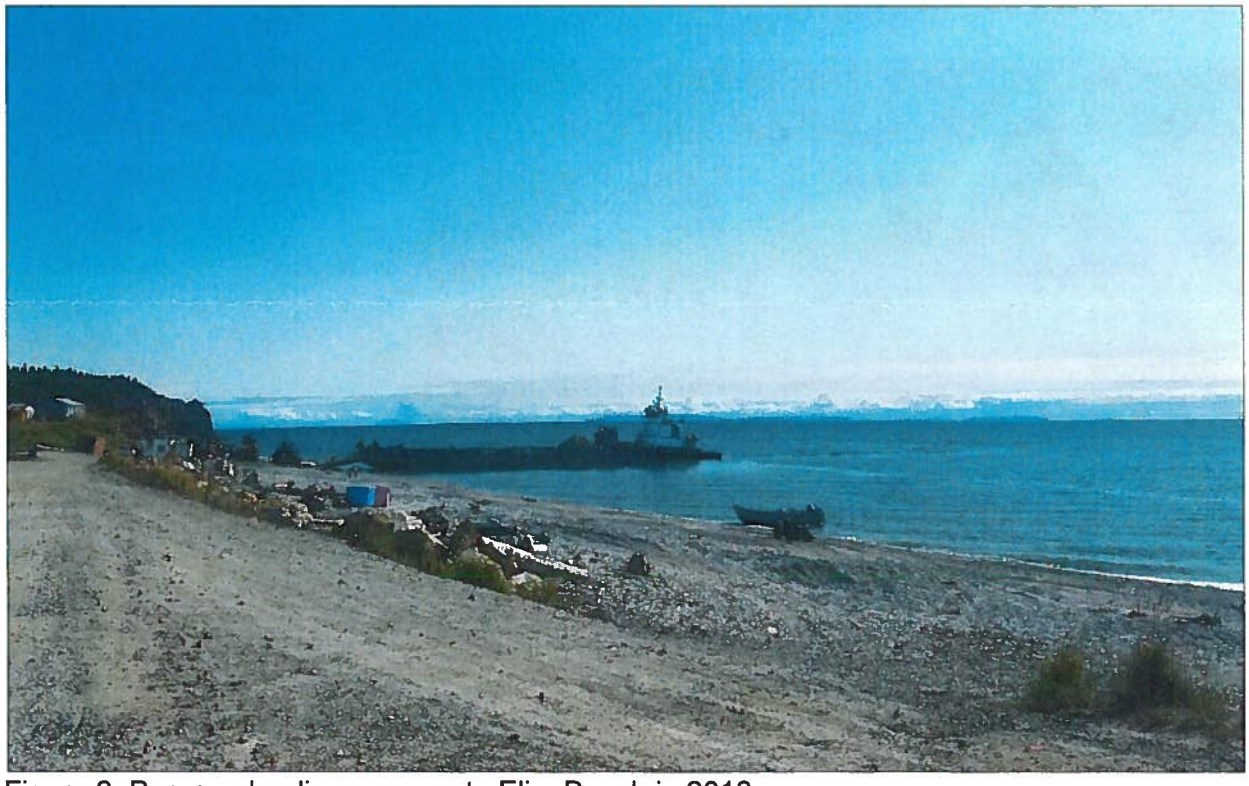


Figure 2. Barge unloading cargo onto Elim Beach in 2018.

Historic Context

People began to migrate into eastern Beringia, modern-day Alaska, during the Pleistocene. The earliest known archaeological sites in Alaska are concentrated in the Tanana River basin, and date to approximately 14,000 years ago. The earliest known archaeological site on the Seward Peninsula is Trail Creek Caves (BEN-00001), which dates to approximately 10,000 years ago (Goebel and Potter 2016). Artifacts from this site were used to help define the American Paleoarctic tradition (Anderson 1984; Dixon 2013). The earliest-known archaeological site in the vicinity of Elim is Iyatayet (NOB-00002), the type site of both the Denbigh Flint Complex and the Norton tradition. Iyatayet is located on Cape Denbigh, approximately 25 miles southeast of Elim across Norton Bay. The oldest occupations at this multicomponent site date to about 4,000 years ago; however, the site was periodically occupied until about 500 years ago (Tremayne et al. 2018). Multiple archaeological sites in the region demonstrate that the shores of Norton Sound have been continuously occupied for the past 2,000 years.

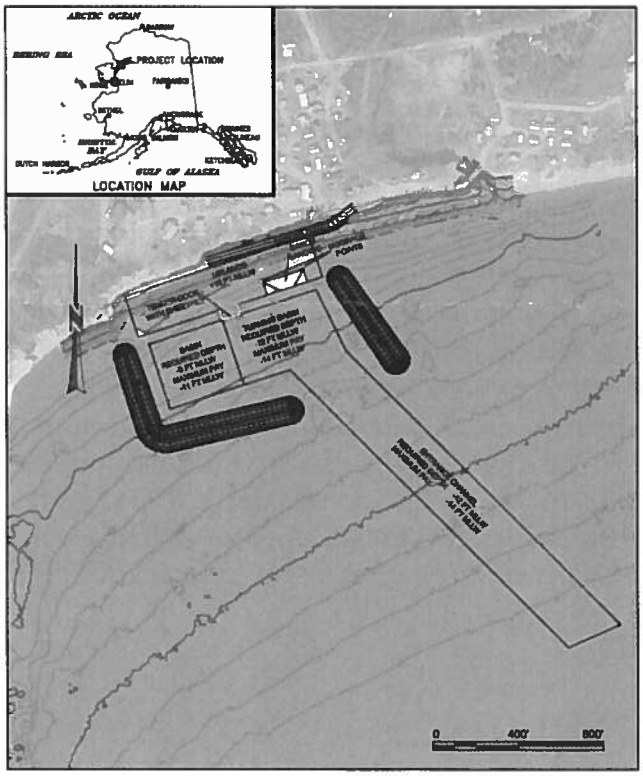
Norton Sound was first visited by European explorers in 1778, when James Cook sailed into the sound. This was followed by Joseph Billings in 1791 and Otto von Kotzebue in 1816 (Bockstoce 1979). In 1822, the Russian-American Company established a trading post at Saint Michael, approximately 80 miles south of Elim across Norton Sound. Encroachment of outsiders into the region impacted local communities in multiple ways, including the migration of individuals from further north into the area in order to take advantage of trade opportunities, and a decrease in area population due to multiple epidemics. The 1867 Treaty of Cession transferred Russian possession of the Alaska Territory to the United States. The late 1800s saw a further influx of outsiders into Norton Sound, with the establishment of multiple missions in the area and the discovery of gold near Nome (Ray 1975; Ganley 1995; Phillips-Chan 2019; Raymond-Yakoubian 2019).

In 1913, the Golovin Evangelical Covenant mission was relocated to what is now the City of Elim. The Covenant mission and children's home was established at this new location by Reverend Ludwig Evald Ost and his wife Ruth Ost, who called it the Elim Mission Roadhouse. The name "Elim" was chosen by Reverend Ost for its biblical associations. In 1917, 350,000 acres of land around Elim were set aside in an Executive Order and designated the Norton Bay Reservation for use by the U.S. Bureau of Education and the inhabitants of Elim (Raymond-Yakoubian 2019). In 1929, under pressure from mining lobbyists, 50,000 acres were removed from the reserve via another Executive Order. The City of Elim was incorporated in 1970. When the Alaska Native Claims Settlement Act (ANCSA) was passed in 1971, Elim chose the "opt-out" option through section 19b of ANCSA. In lieu of other ANCSA benefits, Elim gained title to 298,000 acres of the former reserve (Case and Voluck 2002; Raymond-Yakoubian 2019).

Project Description

The tentatively selected plan (TSP) is to build a harbor at the beach located south of Elim (Figure 3). The harbor will be sized to accommodate one 160 foot (ft) barge and associated 86 ft tug, two fish/crab tenders, and 50 vessels varying in size from 18 – 32 ft in length. Docks will consist of two removable floating docks, each approximately 245 ft long with two 50 ft-long gangways. An 87 ft-long tender dock would also be installed, as will a single small boat launch. Two rubblemound breakwaters will provide a mooring basin of approximately 6.2 acres. The west breakwater will be 819 ft long and the east breakwater will be 418 ft long. The breakwaters will be constructed of rock from the established commercial quarry at Cape Nome. A 0.15 mile-long access road running parallel to the beach, connecting Front Street with a 3.9 acre upland turn-around and parking space, will also be constructed. No staging area is expected for the rock as it will be placed into the water directly from the barge; however, some equipment will likely be staged along Front Street and the beach.

The required dredge depth of the mooring basin will be -9.0 ft Mean Lower Low Water (MLLW) with a maximum pay depth of -11.0 ft MLLW. The entrance channel and turning basin will require a dredge depth of -8.0 ft MLLW with a maximum pay depth of -10.0 ft MLLW. The material at Elim Beach consists of poor to well-graded gravel with sand, cobbles, boulders, weathered bedrock, and bedrock outcroppings. A combination of mechanical dredging and heavy ripping, drilling, or blasting will be required to remove material from the proposed entrance channel and mooring basin. Dredged materials will be placed in-water approximately 2 miles southeast of the project area (Figure 4).



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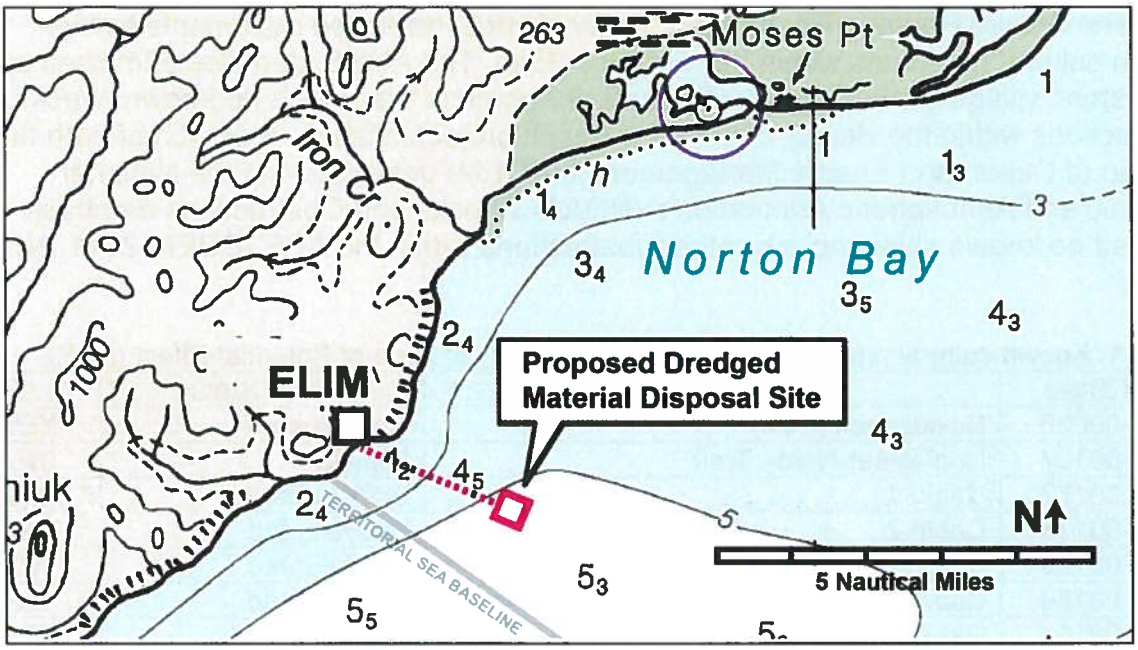

Figure 4. Location of proposed dredged material disposal site.

Area of Potential Effect and Assessment of Effect

The Area of Potential Effect (APE) for the proposed Federal undertaking includes the beach on the south side of Elim, the waters in front of the beach, and the waters of the disposal area for the dredged materials (Figure 5). The APE is approximately 45 acres and occurs mostly in water.


Figure 5. APE (blue) in relation to known cultural resources on the AHRS (pink).

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Table 1. Known cultural resources within general vicinity of Area of Potential Effect (APE).

AHRS No.	Site Name	NRHP Status	In APE
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SOL-00186	Meeting House	Unevaluated	No

There have been at least six cultural resources surveys conducted in the Elim area. In 2002, the Army National Guard (ARNG) conducted a study on the Elim ARNG Armory in preparation for potential future undertakings at the facility (Morris and Ream 2002). No historic properties were identified during the survey (ARNG 2002). In 2004, the Alaska Native Tribal Health Consortium (ANTHC) coordinated service line replacements to ten homes in Elim. The 2004 undertaking received concurrence from the SHPO that the project would not affect historic properties due to the lack of ground disturbance (ANTHC 2004). In 2006, the ANTHC coordinated service connection replacements for 30 homes in Elim. The undertaking, which entailed replacing existing subsurface service connections, also received concurrence from the SHPO that the project would not affect any historic properties (ANTHC 2006). In 2014, Walking Dog Archaeology conducted a survey of Elim in preparation for a Kawerak Transportation Project to rehabilitate the major roads and parking in the community. All major roadways and the beach were surveyed. Pipkin (2014) reported negative findings on all walked roadways and along the beach.

In 2016, GCI Communications Corporation (GCI) conducted an archaeological and architectural survey of Elim as a part of the TERRA Terrestrial Backbone Telecommunications System Project. Results of the inventory and survey included recommendations of eligibility for listing in the National Register of Historic Places for the village of *Nuviakchak* (SOL-00038) and ten buildings in Elim (GCI 2016). The status of these structures is listed as pending on the associated AHRS Cards, and the SHPO did not concur with the eligibility of SOL-00038 due to insufficient documentation of

eligibility under Criteria A or C (AHRS 2019). In 2018, a USACE archaeologist surveyed the four potential boat harbor locations: Moses Point, Iron Creek, Elim Beach, and Airport Point. No cultural resources were identified during the survey.

According to the AHRS, the eligibility of SOL-00038 for listing in the NRHP is still pending. For the purposes of the proposed Federal undertaking, the USACE will assume that SOL-00038 is eligible for listing in the National Register of Historic Places. Given the history of occupation at the site, there is potential for unknown subsurface cultural resources within the community footprint. The proposed small boat harbor would impact approximately 4 acres of uplands along the beach, and 41 acres of Norton Sound. The beach area has historically been subject to active erosion and weathering; major storm surges in 2004 and 2005 damaged the bridge and septic lines above the beach, as well as the fuel headers and six subsistence cabins. In addition to natural events, the area has been impacted construction, fueling operations, barge landings, boat launchings, materials storage, and other community events. In April 2019, the USACE met with community members in Elim to consult on the presence of cultural resources. No one was aware of any subsurface cultural resources along the beach; therefore, the likelihood of impacting subsurface cultural resources associated with SOL-00038 within the APE is low. As there are no known in-water cultural resources in the vicinity of Elim, in-water construction, dredging, and dredged materials placement is not expected to impact any cultural resources.

Conclusion

The APE of the proposed Federal undertaking falls within the boundaries of SOL-00038, the historic village of Elim. Consultation with community members did not identify any cultural resources concerns within the APE. And, due to the history of impacts to the Elim Beach from storm surges, construction, barge landings, and other activities, it is unlikely that unknown subsurface cultural resources would be impacted by the placement of the small boat harbor along the beach. Following 36 CFR § 800.6(b), the USACE seeks your concurrence on the determination that the proposed undertaking will result in **no adverse effect** on historic properties. If you have any questions about this project, please contact Kelly Eldridge by phone at 907-753-2672, or by email at kelly.a.eldridge@usace.army.mil.

Sincerely,

Kelly A. Eldridge
Archaeologist
Environmental Resources Section

No Historic Properties Adversely Affected
Alaska State Historic Preservation Officer
Date: 3.20.20 File No.: 3130-1CCOE 2020-00221
Please review: 36 CFR 800.13 / A.S. 41.35.070(d)

cc:
Robert Keith, President, Native Village of Elim

Charles Saccheus, Sr., Mayor, City of Elim
Eric Daniels, Sr., President, Elim Native Corporation
Julie Raymond-Yakoubian, Social Science Program Director, Kawerak, Inc.
Gail R. Schubert, President and CEO, Bering Straits Native Corporation

References

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Correspondence:
Clean Water Act, Section 401

From: Floyd, Christopher B CIV USARMY CEPOA (USA)
To: mccracken.betsy@epa.gov; james.rypkema@alaska.gov
Cc: lohrman.bridgette@epa.gov; angela.hunt@alaska.gov
Subject: RE: USACE "Elim Tribal Partnership" - WQ info dump - CONTAMINATED SITES INFO
Date: Friday, January 3, 2020 2:29:00 PM
Attachments: ADEC CS report AVEC tank farm.pdf
ADEC CS report Elim school.pdf
ADEC ConSites map.png

Looks like there are *two* documented contaminated sites at the Elim town site.
The former tank farm site (blue triangle on the attached map) was never cleaned up, but is known from a small area of surface staining.
The "Problems/Comments" section at the beginning of the AVEC report states that the ASTs are still on site, but the report later says the tanks were removed by AVEC in 2013.
The current tank farm is located out of the town center, towards the west end of the airfield.

The Elim School site (yellow triangle on the map) was a diesel spill discovered when ground was broken for the new school building. A cleanup was performed, but some diesel contamination remains in deep bedrock fissures.

There is no evidence or reports of chemical contamination from these sites migrating into the marine environment. Any contaminated groundwater seepage or surface water run-off would be conspicuous as it reached the exposed bedrock and sand of the beach. The local residents are extremely sensitive to environmental contamination issues, and would have brought any known contaminant migration to our attention during our numerous meetings with them. Any chemical contamination that may have entered the dredging prism in the past would be very unlikely to have been retained in the coarse sediments.

Thanks,
Chris Floyd

-----Original Message-----
From: Floyd, Christopher B CIV USARMY CEPOA (USA)
Sent: Friday, January 3, 2020 11:27 AM
To: mccracken.betsy@epa.gov; james.rypkema@alaska.gov
Cc: lohrman.bridgette@epa.gov; angela.hunt@alaska.gov
Subject: USACE "Elim Tribal Partnership" - WQ info dump - GEOTECH INFO

Following up on the email from yesterday, I've attached an excerpt from the project draft geotechnical report.
The USACE sampled 7 test-pits along Elim Beach in October 2018.
The samples were all over 90% sands and gravels, with a maximum of 2.4% fines (in the "Summary of Laboratory Test Results" table at the end of the attached PDF, only samples 1-1 through 1-8 were collected from Elim Beach; the remainder were from alternate sites at Iron Creek and Moses Point, several miles away).
These geotech samples were collected for hydraulics and hydrology analyses, so our engineers apparently thought the beach material was sufficiently representative of offshore sediments.

Thanks,
Chris Floyd

-----Original Message-----
From: Floyd, Christopher B CIV USARMY CEPOA (USA)
Sent: Thursday, January 2, 2020 3:43 PM
To: mccracken.betsy@epa.gov; james.rypkema@alaska.gov
Cc: lohrman.bridgette@epa.gov; angela.hunt@alaska.gov
Subject: USACE "Elim Tribal Partnership" - WQ info dump

So, the USACE just finished a revised feasibility report for the "Port of Nome Modifications" project, which has

taken up much of my attention the last few months.
Hard on that project's heels is the feasibility study for "Elim Tribal Partnership", a new-construction small multi-purpose harbor for the Village of Elim.
The attached "info dump" is a collection of maps, figures, and project descriptions I've raked together from various draft and incomplete documents, in the interest of getting potential Clean Water Act issues out in front you as soon as possible.

The current USACE plan is to NOT perform geotechnical coring or chemical sampling of the dredging prism prior to construction, due in part to the relatively small size of the project, and the very high cost of mobilizing drilling equipment to this location. The proposed project is just offshore of an exposed, unimproved sand and gravel beach at Elim. Geophysics and video surveys performed last summer suggest that the seafloor geology consists of 3 feet or less of unconsolidated sand underlain by shallow ridges of limestone bedrock.

The USACE believes that this project site is a good candidate for a Tier 1 exclusion from chemical testing:
a. A review of site histories shows little cause to believe that the dredged material may be contaminated. The ADEC Contaminated Sites database lists only a former tank farm site near the developed center of Elim, about 150 yards north of the Elim Beach shoreline, and 300 yards west of Elim Creek. The site is small, perhaps 130 feet by 100 feet. State records of the site discuss small areas of surface soil staining; there is no evidence of contamination having migrated from the former tank farm site. We have found no reports of releases at the beach itself, or from the fuel header located on a bluff overlooking the project site. A significant leak or spill from the header would be quickly obvious to the residents.
b. The site is "subject to strong current and/or tidal energy".
c. The dredged materials are expected to be sand, and crushed rock from hydraulic ripping of bedrock ridges. I believe we may have particle-size analyses of beach material collected last year.
d. The USACE has not yet selected a dredged material disposal site, but it is probable that there are areas of seafloor nearby with a material composition very similar to that of the project site. The project site and any disposal site will be within Inland Waters (just barely; see Figure 2 of the attached).

Thank you,
Chris Floyd, Biologist
Environmental Resources Section
Civil Works Project Management Branch
Alaska District
US Army Corps of Engineers
907-753-2700

From: Rypkema, James (DEC)
To: Floyd, Christopher B CIV USARMY CEPOA (USA); McCracken, Betsy W.
Cc: Lohrman, Bridgette; Hunt, Angela M (DEC)
Subject: [Non-DoD Source] RE: USACE "Elim Tribal Partnership" - WQ info dump
Date: Friday, January 10, 2020 4:07:41 PM

Chris,
I have no objection to your Tier 1 approach.

Jim Rypkema
Program Manager, Storm Water & Wetlands
Wastewater Discharge Authorization Program
Div of Water, Alaska Dept of Environmental Conservation
555 Cordova St; Anchorage, AK 99501-2617
(907) 334-2288 direct; (907) 301-1836 cell
james.rypkema@alaska.gov
Blockedhttp://dec.alaska.gov/water/wastewater/stormwater
Blockedhttp://dec.alaska.gov/water/wastewater/wetlands

-----Original Message-----
From: Floyd, Christopher B CIV USARMY CEPOA (USA) [mailto:Christopher.B.Floyd@usace.army.mil]
Sent: Friday, January 10, 2020 12:12 PM
To: McCracken, Betsy W. <mccracken.betsy@epa.gov>; Rypkema, James (DEC) <james.rypkema@alaska.gov>
Cc: Lohrman, Bridgette <lohrman.bridgette@epa.gov>; Hunt, Angela M (DEC) <angela.hunt@alaska.gov>
Subject: RE: USACE "Elim Tribal Partnership" - WQ info dump

Hi Betsy -
The full draft Geotechnical Report is about 93 MB; I will need to upload it somewhere for you to access.

The main intent of my 2 January email was to float the idea that the proposed dredging and dredged material disposal at Elim may qualify for a Tier I exclusion from chemical testing, re the Clean Water Act.

We are in the midst of preparing an integrated EA and Feasibility Report for this project, which will cover all the considerations you propose below.
We have submitted an EFH Assessment to NMFS Habitat, concluded ESA informal consultation with the USFWS, and are preparing a draft Biological Assessment under the ESA for the NMFS.
The Native Village of Elim, and Kawerak, Inc., are the "non-federal sponsors" for this project; they originally requested the USACE studies, and have been closely involved in project scoping.

Iron Creek and Moses Point were at one time alternative locations considered for this project, but were dropped as alternatives in part because of the more substantial biological resources in those locations.

The coastline near Elim consists of alternating sandy beaches and rocky headlands, which inhibits the sort of long-distance littoral sediment transport you see at Nome. Storm surges may carry large loads of sediment into Elim Beach, or may wash it away; the local residents talk about entire clamming beds being relocated that way. The proposed breakwaters will dissipate some wave energy within the shallow cove in front of Elim, but are not expected to have any effect on sediment transport beyond the two headlands defining the cove.

We have not yet identified or evaluated a dredged material disposal site. Discharging into deeper water is usually has less impact, but "deeper" in Norton Bay means only about 30 feet, as compared to 10 feet or less. We are assuming that the seabed in open Norton Bay off of Elim is the same sort of mobile, unconsolidated sand we saw closer to Elim; we can verify this with an underwater camera, but not until May or June. We are open to other

dredged material placement possibilities, including beneficial use.

Thanks,
Chris Floyd

-----Original Message-----
From: McCracken, Betsy W. [mailto:mccracken.betsy@epa.gov]
Sent: Wednesday, January 8, 2020 12:19 PM
To: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>; james.rypkema@alaska.gov
Cc: Lohrman, Bridgette <lohrman.bridgette@epa.gov>; angela.hunt@alaska.gov
Subject: [Non-DoD Source] RE: USACE "Elim Tribal Partnership" - WQ info dump

Hi Chris,

I appreciate the "take-home message" regarding the predominance of sandy substrate in the proposed project area.

As I continued to review the materials provided, a few more questions/considerations for the Elim Harbor project came to mind:

Will you please send over the complete Geotechnical Report, as opposed to the excerpt from the report?

Iron Creek (AWC # 333-30-10520) appears to be down the shore line in the general vicinity the proposed project site; and the "summary" indicates juvenile salmonids in the project area. Iron Creek supports spawning and migrating Pink and Chum Salmon. We will want to understand how the project may impact these resources, and proposed mitigation to avoid and minimize potential impacts (for example, water quality impacts from blasting and dredging). Will juvenile or adult fish migration pathways be interrupted? What is the timeline for the proposed work?

Has the COE investigated the use of the area by marine mammals? The literature reports, at a minimum, that there may be seals in the area that feed off herring within the pressure ridge that develops across Norton Sound between Moses Point and Dexter Point. We will want to understand this dynamic as it relates to potential project impacts.

Have there been any recent wave action/storm surge/circulation studies completed to help understand how the shoreline may be affected from the construction of the two proposed breakwaters (e.g., shoreline erosion)? While the breakwaters may protect the shoreline immediately behind them, we want to understand the potential to alter or displace impacts along the adjacent shoreline. Sandy substrate is also highly erodible. The west coast of Alaska, in particular, is increasingly experiencing coastal erosion with wave fetch and coastal flooding increasing with climate change. There is a 2008 Baseline Coastal Erosion Assessment for Elim found at: BlockedBlockedhttps://www.poa.usace.army.mil/Portals/34/docs/civilworks/BEA/Elim_Final%20Report.pdf That was the most recent I found. Maybe it has been updated and I didn't find it?

The maps indicate that this project is along the shoreline of the Norton Bay Native Reservation. To what extent has the COE consulted with the Village of Elim on this project?

Is there any available sediment sampling, or other information available related to the proposed dredge material disposal site?
The "Elim WQ Info Dump...." document states that the likely disposal site "would likely be in relatively deep (30 feet or more) waters found roughly a mile to the southeast of Elim, but east of the Territorial Sea baseline" (i.e., "inland waters"; Figure 2)- but is not indicated on Figure 2.

Thanks very much for the coordination,
Betsy

Betsy McCracken
U. S. Environmental Protection Agency

Water Division/Regional Administrators Division
222 W. 7th Avenue
Anchorage, Alaska
99513
Work: (907) 271-1206
Cell: (907) 360-3553

-----Original Message-----
From: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>
Sent: Monday, January 6, 2020 9:56 AM
To: McCracken, Betsy W. <mccracken.betsy@epa.gov>; james.rypkema@alaska.gov
Cc: Lohrman, Bridgette <lohrman.bridgette@epa.gov>; angela.hunt@alaska.gov
Subject: RE: USACE "Elim Tribal Partnership" - WQ info dump

Thanks, Betsy
The broken purple line in Figure 6 denotes (highly conceptualized and approximated) areas of "High-relief rocky habitat; extensive marine growth" as logged from viewings of our underwater videos.
I used the term "extensive marine growth" to describe the dense growth of multiple species of marine algae, sponges, bryozoans, anemones, and other marine invertebrates found on high-relief rock (e.g., bottom two photos in Figure 7), as opposed to the minimal growth on low-relief rock surfaces (e.g., the upper-right photo in Figure 7).

The transects K>L and M>N were run near "Airport Point" when that was still a potential project location. The Airport Point alternatives have since been dropped from consideration (primarily because they would require extensive cutting and blasting of the uplands to create access to a harbor there).

The project EA will describe the marine growth in more detail. The take-home from my info dump is that the currently proposed project site (Figure 4) is predominantly in an area of sandy benthic substrate.

Chris Floyd

-----Original Message-----
From: McCracken, Betsy W. [mailto:mccracken.betsy@epa.gov]
Sent: Monday, January 6, 2020 9:20 AM
To: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>; james.rypkema@alaska.gov
Cc: Lohrman, Bridgette <lohrman.bridgette@epa.gov>; angela.hunt@alaska.gov
Subject: [Non-DoD Source] RE: USACE "Elim Tribal Partnership" - WQ info dump

Hi Chris,

Thank you for sending over the information on the Elim Harbor project. I have three immediate questions for you regarding the "Elim WQ Info Dump 2January 2020" pdf.:

1) On page 5, of the WQ info. Document, what does the broken purple line represent? What is meant by "extensive marine growth"?
2) Is the COE proposing any mitigation for the project?

I will take a look at the geotechnical report and the chemical contaminants materials as well.

Thank you,
Betsy

Betsy McCracken
U. S. Environmental Protection Agency
Water Division/Regional Administrators Division

222 W. 7th Avenue
Anchorage, Alaska
99513
Work: (907) 271-1206
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Sent: Thursday, January 2, 2020 3:43 PM
To: McCracken, Betsy W. <mccracken.betsy@epa.gov>; james.rypkema@alaska.gov
Cc: Lohrman, Bridgette <lohrman.bridgette@epa.gov>; angela.hunt@alaska.gov
Subject: USACE "Elim Tribal Partnership" - WQ info dump

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Hard on that project's heels is the feasibility study for "Elim Tribal Partnership", a new-construction small multi-purpose harbor for the Village of Elim.
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The current USACE plan is to NOT perform geotechnical coring or chemical sampling of the dredging prism prior to construction, due in part to the relatively small size of the project, and the very high cost of mobilizing drilling equipment to this location. The proposed project is just offshore of an exposed, unimproved sand and gravel beach at Elim. Geophysics and video surveys performed last summer suggest that the seafloor geology consists of 3 feet or less of unconsolidated sand underlain by shallow ridges of limestone bedrock.

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a. A review of site histories shows little cause to believe that the dredged material may be contaminated. The ADEC Contaminated Sites database lists only a former tank farm site near the developed center of Elim, about 150 yards north of the Elim Beach shoreline, and 300 yards west of Elim Creek. The site is small, perhaps 130 feet by 100 feet. State records of the site discuss small areas of surface soil staining; there is no evidence of contamination having migrated from the former tank farm site. We have found no reports of releases at the beach itself, or from the fuel header located on a bluff overlooking the project site. A significant leak or spill from the header would be quickly obvious to the residents.
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d. The USACE has not yet selected a dredged material disposal site, but it is probable that there are areas of seafloor nearby with a material composition very similar to that of the project site. The project site and any disposal site will be within Inland Waters (just barely; see Figure 2 of the attached).

Thank you,
Chris Floyd, Biologist
Environmental Resources Section
Civil Works Project Management Branch
Alaska District
US Army Corps of Engineers
907-753-2700

From: McCracken, Betsy W.
To: Floyd, Christopher B CIV USARMY CEPOA (USA)
Cc: Lohrman, Bridgette
Subject: [Non-DoD Source] RE: USACE "Elim Tribal Partnership"
Date: Wednesday, January 29, 2020 2:47:19 PM

Hi Chris,

As follow up to the Elim Harbor project, EPA has the following recommendations as a result of our further review of available project materials:

Based on the information provided and where the USACE is in this process, stating that no additional evaluation of the dredged material is premature. A full Tier 1 evaluation has not yet occurred. The EPA recommends collecting additional information to support the Tier 1 conclusion that no chemical testing would be needed.

The proposed action by the USACE is a significant new work construction action that will generate a large volume of dredged material, 160,000 cy, from an area that has not been dredged before. Besides the visual observations of the seafloor, the USACE should include in their analysis representative sediment samples of the dredge prism. The USACE sampling of the 7 test pits onshore only captured sediment from 2.4 inches to 1.3 feet beneath the surface. This sampling is not sufficient to characterize the material that will be dredged. The dredge prism may be as deep as 6 to 9 feet in the nearshore area, thus, visual indication of the seafloor substrate type is not sufficient to characterize the material at depth. The EPA expects the USACE would need to collect these physical data for this project to determine: 1) project cost estimates; 2) construction operation sequences; 3) information for biological evaluations under the Endangered Species Act; 4) appropriate disposal area for consolidated and unconsolidated material, amongst other needs.

In addition, there are known sources, and potential sources, of contaminants nearby, i.e. sewer outfall, former tank farm site, Elim school site. Given this information, EPA does not support concluding the Tier 1 evaluation process is completed. The USACE should consider the data from the physical evaluation of the dredge prism from representative samples in their analysis to discuss the presence of consolidated versus unconsolidated material, proportion of fine-grained versus coarse-grained material, and potential presence of mineral deposits present in higher levels and how these factors would or would not relate to potential contaminant concerns.

Please let us know if you have any questions or would like to have a call to discuss this project further.

Thank you very much,

Betsy

Betsy McCracken
U. S. Environmental Protection Agency
Water Division/Regional Administrators Division
222 W. 7th Avenue
Anchorage, Alaska
99513
Work: (907) 271-1206
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Sent: Wednesday, January 8, 2020 12:19 PM
To: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>;

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Subject: RE: USACE "Elim Tribal Partnership" - WQ info dump

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Betsy

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From: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>
Sent: Monday, January 6, 2020 9:56 AM
To: McCracken, Betsy W. <mccracken.betsy@epa.gov>; james.rypkema@alaska.gov
Cc: Lohrman, Bridgette <lohrman.bridgette@epa.gov>; angela.hunt@alaska.gov
Subject: RE: USACE "Elim Tribal Partnership" - WQ info dump

Thanks, Betsy
The broken purple line in Figure 6 denotes (highly conceptualized and approximated) areas of "High-relief rocky habitat; extensive marine growth" as logged from viewings of our underwater videos.
I used the term "extensive marine growth" to describe the dense growth of multiple species of marine algae, sponges, bryozoans, anemones, and other marine invertebrates found on high-relief rock (e.g., bottom two photos in Figure 7), as opposed to the minimal growth on low-relief rock surfaces (e.g., the upper-right photo in Figure 7).

The transects K>L and M>N were run near "Airport Point" when that was still a potential project location. The Airport Point alternatives have since been dropped from consideration (primarily because they would require extensive cutting and blasting of the uplands to create access to a harbor there).

The project EA will describe the marine growth in more detail. The take-home from my info dump is that the currently proposed project site (Figure 4) is predominantly in an area of sandy benthic substrate.

Chris Floyd

-----Original Message-----
From: McCracken, Betsy W. [mailto:mccracken.betsy@epa.gov]
Sent: Monday, January 6, 2020 9:20 AM
To: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>; james.rypkema@alaska.gov
Cc: Lohrman, Bridgette <lohrman.bridgette@epa.gov>; angela.hunt@alaska.gov
Subject: [Non-DoD Source] RE: USACE "Elim Tribal Partnership" - WQ info dump

Hi Chris,

Thank you for sending over the information on the Elim Harbor project. I have three immediate questions for you regarding the "Elim WQ Info Dump 2January 2020" pdf.:

1) On page 5, of the WQ info. Document, what does the broken purple line represent? What is meant by "extensive marine growth"?
2) Is the COE proposing any mitigation for the project?

I will take a look at the geotechnical report and the chemical contaminants materials as well.

Thank you,
Betsy

Betsy McCracken
U. S. Environmental Protection Agency
Water Division/Regional Administrators Division
222 W. 7th Avenue
Anchorage, Alaska
99513
Work: (907) 271-1206
Cell: (907) 360-3553

-----Original Message-----
From: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>

Sent: Thursday, January 2, 2020 3:43 PM
To: McCracken, Betsy W. <mccracken.betsy@epa.gov>; james.rypkema@alaska.gov
Cc: Lohrman, Bridgette <lohrman.bridgette@epa.gov>; angela.hunt@alaska.gov
Subject: USACE "Elim Tribal Partnership" - WQ info dump

So, the USACE just finished a revised feasibility report for the "Port of Nome Modifications" project, which has taken up much of my attention the last few months.
Hard on that project's heels is the feasibility study for "Elim Tribal Partnership", a new-construction small multi-purpose harbor for the Village of Elim.
The attached "info dump" is a collection of maps, figures, and project descriptions I've raked together from various draft and incomplete documents, in the interest of getting potential Clean Water Act issues out in front you as soon as possible.

The current USACE plan is to NOT perform geotechnical coring or chemical sampling of the dredging prism prior to construction, due in part to the relatively small size of the project, and the very high cost of mobilizing drilling equipment to this location. The proposed project is just offshore of an exposed, unimproved sand and gravel beach at Elim. Geophysics and video surveys performed last summer suggest that the seafloor geology consists of 3 feet or less of unconsolidated sand underlain by shallow ridges of limestone bedrock.

The USACE believes that this project site is a good candidate for a Tier 1 exclusion from chemical testing:
a. A review of site histories shows little cause to believe that the dredged material may be contaminated. The ADEC Contaminated Sites database lists only a former tank farm site near the developed center of Elim, about 150 yards north of the Elim Beach shoreline, and 300 yards west of Elim Creek. The site is small, perhaps 130 feet by 100 feet. State records of the site discuss small areas of surface soil staining; there is no evidence of contamination having migrated from the former tank farm site. We have found no reports of releases at the beach itself, or from the fuel header located on a bluff overlooking the project site. A significant leak or spill from the header would be quickly obvious to the residents.
b. The site is "subject to strong current and/or tidal energy".
c. The dredged materials are expected to be sand, and crushed rock from hydraulic ripping of bedrock ridges. I believe we may have particle-size analyses of beach material collected last year.
d. The USACE has not yet selected a dredged material disposal site, but it is probable that there are areas of seafloor nearby with a material composition very similar to that of the project site. The project site and any disposal site will be within Inland Waters (just barely; see Figure 2 of the attached).

Thank you,
Chris Floyd, Biologist
Environmental Resources Section
Civil Works Project Management Branch
Alaska District
US Army Corps of Engineers
907-753-2700

THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Environmental Conservation
DIVISION OF WATER
Wastewater Discharge Authorization Program

555 Cordova Street
Anchorage, Alaska 99501-2617
Main: 907.269.6285
Fax: 907.334.2415
www.dec.alaska.gov/water/wwdp

June 26, 2020

U.S. Army Corps of Engineers, Alaska District
Attn: CEPOA-PM-C, Cynthia Upah
P.O. Box 6898
JBER, Alaska 99506-0898

Re: USACE, Elim Navigational Improvement Project
ER-PN-20-002, Norton Sound

Dear Ms. Upah:

In accordance with Section 401 of the Federal Clean Water Act of 1977 and provisions of the Alaska Water Quality Standards, the Department of Environmental Conservation (DEC) is issuing the enclosed Certificate of Reasonable Assurance for placement of dredged and/or fill material in waters of the U.S., including wetlands and streams, associated with construction of a multi-purpose harbor in Elim, Alaska.

DEC regulations provide that any person who disagrees with this decision may request an informal review by the Division Director in accordance with 18 AAC 15.185 or an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340. An informal review request must be delivered to the Director, Division of Water, 555 Cordova Street, Anchorage, AK 99501, within 20 days of the permit decision. Visit http://dec.alaska.gov/commish/review-guidance/ for information on Administrative Appeals of Department decisions.

An adjudicatory hearing request must be delivered to the Commissioner of the Department of Environmental Conservation, PO Box 111800, Juneau, AK 99811-1800; Location: 410 Willoughby Avenue, Suite 303, Juneau within 30 days of the permit decision. If a hearing is not requested within 30 days, the right to appeal is waived.

By copy of this letter we are advising the U.S. Army Corps of Engineers of our actions and enclosing a copy of the certification for their use.

Sincerely,

James Rypkema
Program Manager, Storm Water and Wetlands

Enclosure: 401 Certificate of Reasonable Assurance

cc: (with encl.)
David Williams, USACE, Anchorage
Chris Floyd, USACE, Anchorage
Audra Brase, ADF&G/Habitat, Fairbanks
Fairbanks USFWS Field Office
Matt LaCroix, EPA, AK Operations

STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CERTIFICATE OF REASONABLE ASSURANCE

In accordance with Section 401 of the Federal Clean Water Act (CWA) and the Alaska Water Quality Standards (18 AAC 70), a Certificate of Reasonable Assurance, is issued to USACE, Alaska District, CEPOA-PM-C (Attn: Cynthia Upah), at P.O. Box 6898, JBER, Alaska 99056-0898 for placement of dredged and/or fill material in waters of the U.S. including wetlands and streams in association with the construction of a multi-purpose harbor in Elim, Alaska. The USACE AK District circulated a Draft Finding of No Significant Impact during the Public Notice period for the product.

The purpose of the project is to increase the safe accessibility of marine navigation to the community of Elim, Alaska. The need for the project is to reduce hazards to provide better safe navigation of subsistence vessels, fuel barges, cargo vessels, and a limited commercial fleet, all of which are critical to the long term viability of the mixed subsistence-cash economy in Elim.

The proposed project would consist of a harbor sized to accommodate one 160 feet barge and associated 86 feet tug, two tenders, and 50 vessels varying in size from 18 feet to 32 feet. The plan would also include an 87-foot tender dock. Two rubble-mound breakwaters would provide a turning basin and a mooring basin with a combined area of approximately 6.2 acres with a turning basin dredge depth of -12.0 feet MLLW with two feet of allowable over dredge and the mooring basin dredge depth of -9.0 feet MLLW with two feet of allowable over dredge. The west breakwater would be approximately 1,082 feet long and the east breakwater approximately 468 feet long. The entrance channel, tender dock access, barge landing access, and turning basin would have a dredging depth of -12.0 feet MLLW with two feet of allowable over dredge, and the mooring basin would have a dredge depth of -9.0 feet MLLW with two feet of allowable over dredge.

Local service facilities required would include an extension to the fuel header located on Elim Beach, a single boat launch, uplands with an area of approximately 4.0 acres for parking and turn-around at the boat launch, boat storage, a tender dock, a barge landing, two mooring points, and an 800 foot long, relatively flat, gravel road connecting Front St. to the harbor uplands.

An estimated 89,692 cubic yards of various grades of rock material would be used to build the breakwaters while 117,327 cubic yards of fill and rock would be placed to create the uplands. Amored stone and other large rock would likely come from the established quarry at Cape Nome, while fill material may be obtained from local borrow sources. Fill material for the uplands may be taken from the construction dredged material if that material is determined to be suitable.

An estimated 159,000 cubic yards of material would be dredged from the seafloor during construction. The dredged material is expected to consist primarily of sand and crushed rock. The USACE determined that the dredged material is most likely to be free from chemical, biological, or other pollutants and is not planning to perform chemical characterization of the dredged materials per 40 CFR 230.60. Dredged material not used as fill in project construction would be discharged at an open-water disposal site. The proposed disposal site is a square, 2,000 feet on a side, located approximately two nautical miles south/southeast of the project site, in waters at least 30 feet deep. The seafloor at the disposal site is presumed to be flat and mostly sandy. Dredged material discharged in the disposal area are expected to be rapidly redistributed by natural forces. The dredged material disposal

coordinates are shown in Table 1 below. The USACE estimates that maintenance dredging of the completed project will require removal of 80,000 cubic yards of accumulated sediment every 15 years.

Table 1: Proposed Disposal Coordinates

Dredged Material Disposal Coordinates		
	Latitude (NAD83)	Longitude (NAD83)
Northwest	64.6065	-162.1856
Northeast	64.6065	-162.1726
Southeast	64.6011	-162.1726
Southwest	64.6011	-162.1856

A state issued water quality certification is required under Section 401 because the proposed activity will be authorized by a U.S. Army Corps of Engineers permit (ER-PN-20-002) and a discharge of pollutants to waters of the U.S. located in the State of Alaska may result from the proposed activity. Public notice of the application for this certification was given as required by 18 AAC 15.180 in the Corps Public Notice ER-PN-20-002 posted from April 28 to May 28, 2020.

The proposed activity is located within Section 15 and 22, T. 10 S., R. 18 W., Kateel River Meridian; Latitude 64.6150 N., Longitude -162.2604 W; in Elim, Alaska.

The Department of Environmental Conservation (DEC) reviewed the application and certifies that there is reasonable assurance that the proposed activity, as well as any discharge which may result, will comply with applicable provisions of Section 401 of the CWA and the Alaska Water Quality Standards, 18 AAC 70, provided that the following additional measures are adhered to.

1. Reasonable precautions and controls must be used to prevent incidental and accidental discharge of petroleum products or other hazardous substances. Fuel storage and handling activities for equipment must be sited and conducted so there is no petroleum contamination of the ground, subsurface, or surface waterbodies.
2. During construction, spill response equipment and supplies such as sorbent pads shall be available and used immediately to contain and cleanup oil, fuel, hydraulic fluid, antifreeze, or other pollutant spills. Any spill amount must be reported in accordance with Discharge Notification and Reporting Requirements (AS 46.03.755 and 18 AAC 75 Article 3). The applicant must contact by telephone the DEC Area Response Team for Northern Alaska at (907) 451-2121 during work hours or 1-800-478-9300 after hours. Also, the applicant must contact by telephone the National Response Center at 1-800-424-8802.
3. Runoff discharged to surface water (including wetlands) from a construction site disturbing one or more acres must be covered under Alaska's General Permit for Storm Water Discharges from Large and Small Construction Activities in Alaska (AKR100000). This permit requires a Storm Water Pollution Prevention Plan (SWPPP). For projects that disturb more than five acres, this SWPPP must also be submitted to DEC (William Ashton, 907-269-6283) prior to construction.
4. Construction equipment shall not be operated below the ordinary high-water mark if equipment is leaking fuel, oil, hydraulic fluid, or any other hazardous material. Equipment shall be inspected and recorded in a log daily for leaks. If leaks are found, the equipment shall not be used and pulled from service until the leak is repaired.

5. Natural drainage patterns shall be maintained, to the extent practicable, without introducing ponding or drying.
6. Excavated or fill material, including overburden, shall be placed so that it is stable, meaning after placement the material does not show signs of excessive erosion. Indicators of excess erosion include: gullying, head cutting, caving, block slippage, material sloughing, etc. The material must be contained with siltation best management practices (BMPs) to preclude reentry into any waters of the U.S., which includes wetlands.
7. Include the following BMPs to handle storm water and total storm water volume discharges as they apply to the site:
   a. Divert storm water from off-site around the site so that it does not flow onto the project site and cause erosion of exposed soils;
   b. Slow down or contain storm water that may collect and concentrate within a site and cause erosion of exposed soils;
   c. Place velocity dissipation devices (e.g., check dams, sediment traps, or riprap) along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters.
8. Fill material (including dredge material) must be clean sand, gravel or rock, free from petroleum products and toxic contaminants in toxic amounts.
9. All dredging shall be conducted to minimize the amount of dredge material and suspended sediments that enter the Norton Sound. Appropriate Best Management Practices (BMPs) will be employed to minimize sediment loss and turbidity generation during dredging. BMPs may include, but are not limited to, the following:
   - Eliminating multiple bites while the bucket is on the seafloor
   - No stockpiling of dredged material on the seafloor
   - No seafloor leveling
   - Slowing the velocity (i.e., increasing the cycle time) of the ascending loaded clamshell bucket through the water column
   - Pausing the dredge bucket near the bottom while descending and near the water line while ascending
   - Placing filter material over the barge scuppers to clear return water
   - If dewatering runoff is discharged from the barge, silts must be removed prior to direct or indirect discharge to Norton Sound.
10. DEC may notify the permittee of additional discharge monitoring requirements. Any such notice will state the reasons for the requested monitoring, locations, and parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

11. DEC reserves the right to modify, ament or revoke this certification if DEC determines that, due to changes in relevant circumstances – including without limitation, changes in project activities, the characteristics of the receiving water bodies, or state water quality standards (WQS) – there is no longer reasonable assurance of compliance with WQS or other appropriate requirements of state law.

12. This certification expires five (5) years after the date the certification is signed. If your project is not completed by then and work under U.S. Army Corps of Engineers Permit will continue, you must submit an application for renewal of this certification no later than 30 days before the expiration date (18 AAC 15.100).

Date: June 26, 2020

James Rypkema, Program Manager
Storm Water and Wetlands

Correspondence:
National Environmental Policy Act

US Army Corps of Engineers®

Civil Project Management Branch

Public Notice

Date: 28 April 2020. Identification No.: ER-PN-20-002.
Please refer to the identification number when replying.

The U.S. Army Corps of Engineers, Alaska District (USACE), has prepared a Draft Integrated Feasibility Report and Supplemental Environmental Assessment for the following project:

Elim Navigation Improvement Project
Elim, Alaska

The proposed project and initial analysis of potential environmental impacts are described in the draft report. The report evaluates five structural alternatives, as well as the no-action alternative, proposed to provide navigational infrastructure at Elim. The recommended plan provides for a barge landing and dock dredged to 12 feet below mean lower low water (MLLW) and a boat launch and mooring area dredged to 9 feet below MLLW, protected by rubble mound breakwaters. An entrance channel would be dredged to 12 feet below MLLW. About 160,000 cubic yards of seabed material would be dredged, and disposed of offshore.

The public and agency comment period on the draft report extends for 30 days from the date of this Public Notice. The report may be viewed on the Alaska District's website at: www.poa.usace.army.mil . Click on the *Reports and Studies* button on the right-hand sidebar, look under *Documents Available for Public Review*, the click on the *Civil Works* link.

Comments on the draft report may be submitted in writing to the postal address below, or by email to Project Manager David Williams at David.P.Williams@usace.army.mil.

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

STATE OF ALASKA WATER QUALITY CERTIFICATION

Notice is hereby given that the USACE will be reapplying for State Water Quality certification from the Alaska Department of Environmental Conservation (ADEC). ADEC may certify there is a reasonable assurance this proposed action and any discharge that might result will comply with the Clean Water Act, Alaska Water Quality Standards, and other applicable State laws. ADEC's certification may authorize a mixing zone and/or a short-term variance under 18 AAC 70. ADEC may also deny or waive certification. Any person desiring to comment on the project with respect to Water Quality Certification may submit written comments to the address below or

to the email address dec-401cert@alaska.gov within 30 days of the date of this Public Notice. Mailed comments must be postmarked on or before the last day of the public comment period.

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WDAP/401 CERTIFICATION
555 CORDOVA STREET
ANCHORAGE, AK 99501-2617
PHONE: 907-269-2711 | EMAIL: dec-401cert@alaska.gov

For information on the proposed project, please contact Mr. David Williams, Project Manager, at David.P.Williams or 907-753-5621.

Very Respectfully,

Cynthia Upah
Acting Chief, Civil Works Branch

Correspondence:
Water Resources Development Act, Section 203(c)

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

JUN 22 2020

Alaska Native Affairs Specialist, Ms. Crystal Leonetti
U.S. Fish and Wildlife Service
1011 E. Tudor Road
Anchorage, AK 99503

Dear Ms. Leonetti:

In accordance with Section 203(c) of the Water Resources Development Act (WRDA) of 2000 as amended (33 USC 2269), I am writing to inform you that the U.S. Army Corps of Engineers (USACE), Alaska District has released a draft study considering the development of navigation improvements at Elim, Alaska for public and technical review and is responding to comments. Current information about the Elim Study is attached for your convenience.

Section 203 of WRDA 2000 describes the Tribal Partnership Program (TPP). It requires the USACE to consult with the Secretary of the Interior to avoid conflicts, duplications of effort, or unanticipated adverse effects on Indian tribes. This TPP study is being conducted in partnership with the Native Village of Elim and Kawerak, Inc. I invite you to review the enclosed information and evaluate whether you believe the activities proposed in this study require integration with any activities performed by your office.

If you would like to consult further concerning this Section 203 study or wish to make any recommendations, please contact my Project Manager David Williams at (907) 753-5621 or via email at david.p.williams@usace.army.mil.

Sincerely,

David R. Hibner
Colonel, U.S. Army
Commanding

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

JUN 22 2020

Alaska Regional Director, Mr. Eugene Peltola, Jr.
Alaska Region Regional Office
Indian Affairs
3601 C Street Suite 1200
Anchorage, AK 99503-5947

Dear Mr. Peltola:

In accordance with Section 203(c) of the Water Resources Development Act (WRDA) of 2000 as amended (33 USC 2269), I am writing to inform you that the U.S. Army Corps of Engineers (USACE), Alaska District has released a draft study considering the development of navigation improvements at Elim, Alaska for public and technical review and is responding to comments. Current information about the Elim Study is attached for your convenience.

Section 203 of WRDA 2000 describes the Tribal Partnership Program (TPP). It requires the USACE to consult with the Secretary of the Interior to avoid conflicts, duplications of effort, or unanticipated adverse effects on Indian tribes. This TPP study is being conducted in partnership with the Native Village of Elim and Kawerak, Inc. I invite you to review the enclosed information and evaluate whether you believe the activities proposed in this study require integration with any activities performed by your office.

If you would like to consult further concerning this Section 203 study or wish to make any recommendations, please contact my Project Manager David Williams at (907) 753-5621 or via email at david.p.williams@usace.army.mil.

Sincerely,

David R. Hibner
Colonel, U.S. Army
Commanding

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

JUN 22 2020

Alaska Climate Adaption Science Center, Center Director, Stephen Gray, Ph.D.
USGS Alaska Climate Adaption Science Center
4210 University Drive
Anchorage, AK 99508

Dear Dr. Gray:

In accordance with Section 203(c) of the Water Resources Development Act (WRDA) of 2000 as amended (33 USC 2269), I am writing to inform you that the U.S. Army Corps of Engineers (USACE), Alaska District has released a draft study considering the development of navigation improvements at Elim, Alaska for public and technical review and is responding to comments. Current information about the Elim Study is attached for your convenience.

Section 203 of WRDA 2000 describes the Tribal Partnership Program (TPP). It requires the USACE to consult with the Secretary of the Interior to avoid conflicts, duplications of effort, or unanticipated adverse effects on Indian tribes. This TPP study is being conducted in partnership with the Native Village of Elim and Kawerak, Inc. I invite you to review the enclosed information and evaluate whether you believe the activities proposed in this study require integration with any activities performed by your office.

If you would like to consult further concerning this Section 203 study or wish to make any recommendations, please contact my Project Manager David Williams at (907) 753-5621 or via email at david.p.williams@usace.army.mil.

Sincerely,

David R. Hibner
Colonel, U.S. Army
Commanding

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

JUN 22 2020

Alaska State Director, Mr. Chad Padgett
BLM Alaska State Office
222 W. 7th Avenue # 13
Anchorage, AK 99513

Dear Mr. Padgett:

In accordance with Section 203(c) of the Water Resources Development Act (WRDA) of 2000 as amended (33 USC 2269), I am writing to inform you that the U.S. Army Corps of Engineers (USACE), Alaska District has released a draft study considering the development of navigation improvements at Elim, Alaska for public and technical review and is responding to comments. Current information about the Elim Study is attached for your convenience.

Section 203 of WRDA 2000 describes the Tribal Partnership Program (TPP). It requires the USACE to consult with the Secretary of the Interior to avoid conflicts, duplications of effort, or unanticipated adverse effects on Indian tribes. This TPP study is being conducted in partnership with the Native Village of Elim and Kawerak, Inc. I invite you to review the enclosed information and evaluate whether you believe the activities proposed in this study require integration with any activities performed by your office.

If you would like to consult further concerning this Section 203 study or wish to make any recommendations, please contact my Project Manager David Williams at (907) 753-5621 or via email at david.p.williams@usace.army.mil.

Sincerely,

David R. Hibner
Colonel, U.S. Army
Commanding

Correspondence:
USACE Policy Waiver

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON, DC 20310-0108

SACW 5 October 2020

MEMORANDUM FOR THE COMMANDING GENERAL, U.S. ARMY CORPS OF ENGINEERS

SUBJECT: Elim Subsistence Harbor Integrated Feasibility Study and Environmental Assessment, Elim, Alaska, Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA) Policy Exception Request

1. Reference memorandum, CECW-POD, 15 Sep 20, subject: Policy Exception Request for the Elim Subsistence Harbor Integrated Feasibility Study and Environmental Assessment, Elim, Alaska, Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA) Compliance.

2. I am responding to your memorandum requesting a waiver to the policy requirement to complete ESA Section 7 consultation prior to completion of the feasibility study for the Elim Harbor, Alaska project.

3. My staff has reviewed the memorandum and recommendations by the Alaska District and Pacific Ocean Division, and the assessment by Corps Headquarters. I approve the requested policy waiver for Elim Harbor. Completing the Elim Harbor ESA consultation in Pre-Construction Engineering and Design will allow the Corps to develop the necessary information to inform the services of impacts to marine mammals, while avoiding unnecessary costs and time during the feasibility study.

4. If there are any questions, your staff may contact Mr. Douglas Gorecki, Project Planning and Review, at (202) 761-0028.

R.D. JAMES
Assistant Secretary of the Army
(Civil Works)

Correspondence:
Aids to Navigation

From:	Seris, David M CIV
To:	Kloster, Rebecca E CIV USARMY CEPOA (USA)
Cc:	Hejduk, Philip B CIV USARMY CEPOA (USA); Epps, Lewis N CIV USARMY CEPOA (USA)
Subject:	RE: Elim Alaska Navigation Improvements - Conceptual Level Design
Date:	Wednesday, June 03, 2020 2:46:27 PM

Hi Rebecca:

Thanks for sending this along.

The breakwaters should be pretty straightforward, most likely we would look to install a light on each one, and we would ask that your final plans include a 10' x 10' poured concrete pad to put the ATON tower on.

As for a set of range lights, it looks like there are already buildings in the area of where we would need to place the towers. It might be possible to install instead just a third light somewhere on the northern edge of the upland area that would be filled in, close to where the existing beach line is, in a location that is aligned with the centerline of the dredged channel.

The combination of those three lights would serve the same purpose that a range would. So a barge coming in the channel will see all three lights, and if the distance between them is equal then you know you are in the middle of the channel.

I'd estimate the cost for all three aids at $50,000.

Thanks for reaching out.

Dave Seris
CGD17(dpw)
(907) 463-2267

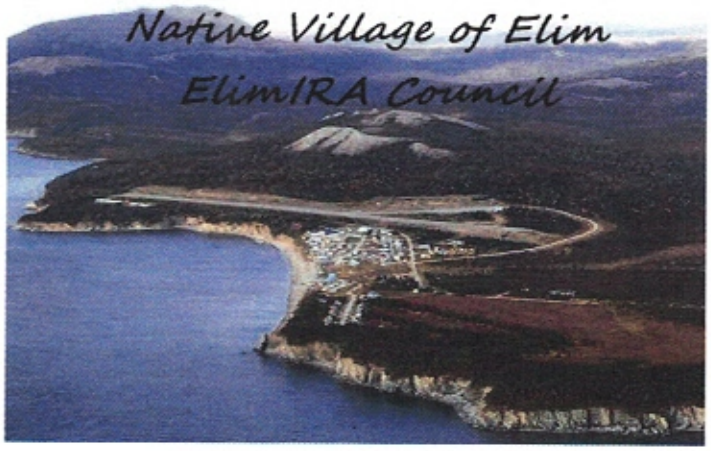
-----Original Message-----
From: Kloster, Rebecca E CIV USARMY CEPOA (USA) <Rebecca.E.Kloster@usace.army.mil>
Sent: Wednesday, June 3, 2020 1:16 PM
To: Seris, David M CIV <David.M.Seris@uscg.mil>
Cc: Hejduk, Philip B CIV USARMY CEPOA (USA) <Philip.B.Hejduk@usace.army.mil>; Epps, Lewis N CIV USARMY CEPOA (USA) <Lewis.N.Epps@usace.army.mil>
Subject: Elim Alaska Navigation Improvements - Conceptual Level Design

Dave,

As a follow-up to our phone conversation, attached is the conceptual level design for proposed navigation improvements at Elim, Alaska. It includes two breakwaters and an entrance channel (dredge approach channel) that extends approximately 1000 ft offshore of the ends of the breakwaters.

Thank you,
Rebecca Kloster, PE
USACE Alaska District
rebecca.e.kloster@usace.army.mil
907-753-5615

Correspondence:
Non-Federal Sponsor Financial Self Cetification



Non- Federal Sponsors

Self Certification of Financial Capability

For Agreements

I, Do hereby certify that I am the Comptroller / Covid 19 director of the Native Village of Elim IRA Council; that I am aware of the financial obligations of the Native Village of Elim IRA Council ("Non-Federal Sponsor") for the Small boat harbor in the Norton Bay at Elim, Alaska; and that the Non-Federal Sponsor has the financial capability to satisfy the Non-Federal Sponsor's obligations under the Agreement for the study and construction of Norton Bay Elim Alaska small boat harbor.

In Witness Whereof, I have made and executed this certification this 29 day of September, 2020.

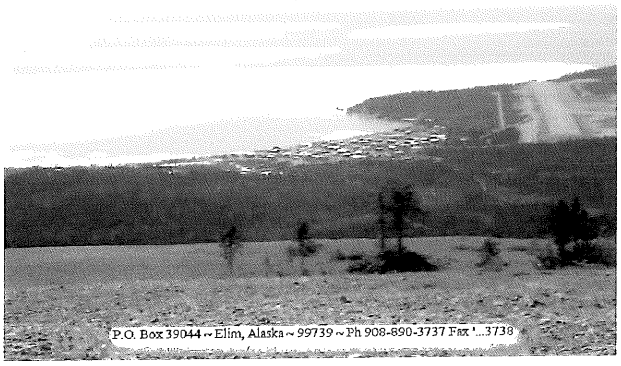
By: Edward [illegible]

Title: Comptroller / Covid 19 director

Date: 9/29/2020

Correspondence:
Non-Federal Sponsor and Stakeholder Correspondence

Native Village of Elim
Elim IRA Council



February 3, 2016

Thareth Casey
U. S. Army Corps of Engineers, Alaska District
ATTN: PM-C-PM
P.O. Box 6898
JBER, AK 99506-6898

Dear Ms. Casey:

The Elim IRA Council at its regular meeting 02/02/16 authorized the President (via motion made and passed) expressing its willingness and ability to participate as the Sponsor for Elim Harbor Project in partnership with the U.S. Army Corps of Engineers (USACE), to cooperatively investigate the development of a boat harbor in Elim, Alaska under the Tribal Partnership Program. The Governing body of the Native Village of Elim, the Elim IRA Council, understands that a study cannot be initiated unless it is selected as a new start study with associated allocation of Federal funds provided through the annual Congressional appropriations process. If selected, we intend to sign a Feasibility Cost Sharing Agreement (FCSA) to initiate the study with USACE.

It is our understanding the FCSA targets completion of the feasibility study within 3 years at a total cost of no more than $3 million. After signing the FCSA, a Project Management Plan will be developed and agreed upon by the Elim IRA Council and USACE. The study will be conducted and managed by USACE. The cost-sharing for the study is based on a 50% contribution by the Federal government, with the communities 50% contribution provided in cash or by a portion or all of the contribution provided through in-kind non-monetary services.

Elim IRA Council is aware that this letter constitutes an expression of intent to initiate a study partnership under the Tribal Partnership Program and may leverage the data and information acquired under in the Elim Boat Harbor project through the CAP 107 program. We understand that work on the study cannot commence until it is included in the Administration's budget request, funds are

appropriated by the Congress, and an FCSA is signed. It is understood that we or USACE may opt to discontinue the study at any time after the FCSA is signed but will commit to work together as partners from the scoping phase, and subsequent decision points throughout the feasibility study, on providing the necessary support to risk-informed decision making. If it is determined that additional time or funding is necessary to support the decisions to be made in order to complete the study, our agency will work with USACE to determine the appropriate course of action.

If you require additional information, please contact: Robert A Keith, Elim IRA Council President at 907-890-3737 or angelraq.keith@gmail.com.

Robert A Keith, Elim IRA Council President

cc Elim IRA Council
City of Elim City Council
Elim Native Corporation Board of Directors

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

OCT 2 3 2018

District Commander

Honorable Robert Keith
President, Native Village of Elim
P.O. Box 39070
Elim, Alaska 99739

Dear President Keith:

Thank you for your sponsorship. I appreciate the support and continuing cooperation that you have given to the Elim Subsistence Harbor Study. The USACE team values the close working relationship that has been established and looks forward to making timely progress on the study. In accordance with Section 1002 of WRRDA 2014, I am updating you on the status and schedule of the following milestones for this project.

a. Release of draft feasibility study for public comment and concurrent review: January 6, 2020

b. Alaska District submits final feasibility report: October 28, 2020

c. Major Support Command transmittal of final feasibility report: November 11, 2020

d. Senior Review (Headquarters): January 6, 2021

d. Signed Director's Report: March 12, 2021

If I can be of further assistance, please do not hesitate to contact me directly. For specific information about this project, please contact the project manager, Mr. David Williams, at (907) 753-5621 or via email at david.p.williams@usace.army.mil.

Sincerely,

Phillip J. Borders
Colonel, U.S. Army
District Commander

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

AUG 29 2019

Acting District Commander

Honorable Robert Keith
President, Native Village of Elim
P.O. Box 39070
Elim, Alaska 99739

Dear President Keith:

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Sincerely,

Penny M. Bloedel
Lieutenant Colonel, U.S. Army
Acting District Commander

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

OCT 2 3 2018

District Commander

Ms. Melanie Bahnke
President, Kawerak, Inc.
P.O. Box 948
Nome, Alaska 99762

Dear President Bahnke:

Thank you for your sponsorship. I appreciate the support and continuing cooperation that you have given to the Elim Subsistence Harbor Study. The USACE team values the close working relationship that has been established and looks forward to making timely progress on the study. In accordance with Section 1002 of WRRDA 2014, I am updating you on the status and schedule of the following milestones for this project.

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Sincerely,

Phillip J. Borders
Colonel, U.S. Army
District Commander

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

Acting District Commander

AUG 29 2019

Ms. Melanie Bahnke
President, Kawerak, Inc.
P.O. Box 948
Nome, Alaska 99762

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Sincerely,

Penny M. Bloedel
Lieutenant Colonel, U.S. Army
Acting District Commander

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, ALASKA
P.O. BOX 6898
JOINT BASE ELMENDORF/RICHARDSON, ALASKA 99506-6898

REPLY TO ATTENTION OF: Civil Project Management Branch

Dear President Keith and President Bahnke:

The "Agreement between the Department of the Army and Native Village of Elim and Kawerak, Inc. for the Elim Subsistence Harbor Study" has been executed as of March 23, 2018. Enclosed please find two originals of the agreement (two for the Native Village of Elim and two for Kawerak, Inc.) The initial work, up to $455,000, will be performed at 100% Federal cost. The remaining work will be at a 50% Federal/50% Local Sponsors' cost share. The work expected for the rest of 2018 is expected to be within the initial $455,000 portion.

The Alaska District has identified a team to work on this study, and will be funding that team to review the existing data, identify potential concerns and options based upon existing data. After this, we would like to have a planning charrette with you to identify the work needed to complete the study, items that you would like to perform for in-kind credit (if any), and develop a schedule using the Corps' SMART Planning process. (The SMART acronym refers to 'Specific, Measureable, Attainable, Risk-Informed, and Timely' planning actions to identify the best actions for Federal investment.) This exercise will include the District Project Delivery Team, some of the Vertical Team (HQ), the local sponsors, other stakeholders, and State agency members. The intent is to reduce the work required to perform the study, while maintaining critical thinking on the reasons for eliminating certain measures or alternatives. Our thought is that Nome would be the best place for this work, to make sure the local people have the least travel costs. If the ice is out at the time of the charrette, a visit to Elim by the Vertical Team may be valuable for the site specifics to be visualized by them.

Please let me know what time period would be good for your involvement in the charrette, specifically in the May/June time frame.

Please call me at (907)753-5621, or email me at david.p.williams@usace.army.mil, if you have any questions.

Enclosure:

Agreement - 2

Sincerely,

David Williams P.E.
Project Manager

AGREEMENT
BETWEEN
THE DEPARTMENT OF THE ARMY
AND
NATIVE VILLAGE OF ELIM
AND
KAWERAK, INC.

FOR THE
ELIM SUBSISTENCE HARBOR STUDY

THIS AGREEMENT is entered into this 23rd day of March, 2018, by and between the Department of the Army (hereinafter the "Government"), represented by the U.S. Army Engineer, Alaska District (hereinafter the "District Engineer"), and the Native Village of Elim (a Federally-recognized tribe) represented by their president; and Kawerak, Inc. (a non-profit corporation) represented by their President; (hereinafter the "Non-Federal Sponsors").

WITNESSETH, THAT:

WHEREAS, Section 203 of the Water Resources Development Act of 2000 (33 U.S.C. 2269), as amended, authorizes a study of navigation improvements at Elim, Alaska, that will substantially benefit the Federally recognized Indian tribe of the Native Village of Elim; and

WHEREAS, Kawerak, Inc. is an organization that is incorporated under the applicable laws of the State of Alaska as a non-profit organization, exempt from paying Federal income taxes under Section 501 of the Internal Revenue Code (26 U.S.C. 501); and

WHEREAS, by letter dated June 7, 2017, the Native Village of Elim, the affected local government has consented to Kawerak, Inc., serving as a Non-Federal Sponsors for the Study; and

WHEREAS, Section 203(d) of the Water Resources Development Act of 2000 (33 U.S.C. 2269), as amended, specifies the cost-sharing requirements; and

WHEREAS, the Government and the Non-Federal Sponsors have the full authority and capability to perform in accordance with the terms of this Agreement.

NOW, THEREFORE, the parties agree as follows:

ARTICLE I - DEFINITIONS

A. The term "Study" means the activities and tasks required to identify and evaluate alternatives and the preparation of a decision document that, as appropriate, recommends a coordinated and implementable solution for Navigational Improvements at Elim, Alaska.

B. The term "shared study costs" means all costs incurred by the Government and Non-Federal Sponsors after the effective date of this Agreement that are directly related to performance of the Study and cost shared in accordance with the terms of this Agreement. The term includes, but is not necessarily limited to, the Government's costs for preparing the PMP; for plan formulation and evaluation, including costs for economic, engineering, real estate, and environmental analyses; for preparation of a floodplain management plan if undertaken as part of the Study; for preparing and processing the decision document; for supervision and administration; for Agency Technical Review and other review processes required by the Government; and for response to any required Independent External Peer Review; and the Non-Federal Sponsors' creditable costs for in-kind contributions, if any. The term does not include any costs for dispute resolution; participation in the Study Coordination Team; audits; an Independent External Peer Review panel, if required; or for negotiating this Agreement. It also does not include any costs funded at full Federal expense based on the waiver of non-Federal cost sharing in accordance with Article II.J.

C. The term "PMP" means the project management plan, and any modifications thereto, developed in consultation with the Non-Federal Sponsors, that specifies the scope, cost, and schedule for Study activities and tasks, including the Non-Federal Sponsors' in-kind contributions, and that guides the performance of the Study.

D. The term "in-kind contributions" means those planning activities (including data collection and other services) that are integral to the Study and would otherwise have been undertaken by the Government for the Study and that are identified in the PMP and performed or provided by the Non-Federal Sponsors after the effective date of this Agreement and in accordance with the PMP.

E. The term "maximum Federal study cost" means the $1,500,000 Federal cost limit for the Study, unless the Government has approved a higher amount.

F. The term "fiscal year" means one year beginning on October 1st and ending on September 30th of the following year.

ARTICLE II - OBLIGATIONS OF THE PARTIES

A. In accordance with Federal laws, regulations, and policies, the Government shall conduct the Study using funds appropriated by the Congress and funds provided by the Non-Federal Sponsors. The Non-Federal Sponsors shall perform or provide any in-kind contributions in accordance with applicable Federal laws, regulations, and policies.

B. The Non-Federal Sponsors shall contribute 50 percent of shared study costs in accordance with the provisions of this paragraph and provide required funds in accordance with Article III.

1. As soon as practicable after completion of the PMP, and after considering the cost sharing waiver in accordance with Article II.J. and the estimated amount of credit for in-kind contributions, if any, that will be afforded in accordance with paragraph C. of this Article, the Government shall provide the Non-Federal Sponsors with a written estimate of the amount of funds required from the Non-Federal Sponsors for the remainder of the initial fiscal year of the Study. No later than 15 calendar days after such notification, the Non-Federal Sponsors shall provide the full amount of such funds to the Government.

2. No later than August 1st prior to each subsequent fiscal year of the Study, the Government shall provide the Non-Federal Sponsors with a written estimate of the amount of funds required from the Non-Federal Sponsors during that fiscal year to meet its cost share. No later than September 1st prior to that fiscal year, the Non-Federal Sponsors shall provide the full amount of such required funds to the Government.

C. The Government shall include in shared study costs and credit towards the Non-Federal Sponsors' share of such costs, the costs, documented to the satisfaction of the Government, that the Non-Federal Sponsors incur in providing or performing in-kind contributions, including associated supervision and administration. Such costs shall be subject to audit in accordance with Article VI to determine reasonableness, allocability, and allowability, and crediting shall be in accordance with the following procedures, requirements, and limitations:

1. As in-kind contributions are completed and no later than 60 calendar day after such completion, the Non-Federal Sponsors shall provide the Government appropriate documentation, including invoices and certification of specific payments to contractors, suppliers, and the Non-Federal Sponsors' employees. Failure to provide such documentation in a timely manner may result in denial of credit. The amount of credit afforded for in-kind contributions shall not exceed the Non-Federal Sponsors' share of shared study costs.

2. No credit shall be afforded for interest charges, or any adjustment to reflect changes in price levels between the time the in-kind contributions are completed and credit is afforded; for the value of in-kind contributions obtained at no cost to the Non-Federal Sponsors; for any items provided or performed prior to completion of the

PMP; or for costs that exceed the Government's estimate of the cost for such item if it had been performed by the Government.

D. To the extent practicable and in accordance with Federal laws, regulations, and policies, the Government shall afford the Non-Federal Sponsors the opportunity to review and comment on solicitations for contracts prior to the Government's issuance of such solicitations; proposed contract modifications, including change orders; and contract claims prior to resolution thereof. Ultimately, the contents of solicitations, award of contracts, execution of contract modifications, and resolution of contract claims shall be exclusively within the control of the Government.

E. The Non-Federal Sponsors shall not use Federal Program funds to meet any of their obligations under this Agreement unless the Federal agency providing the funds verifies in writing that the funds are authorized to be used for the Study. Federal program funds are those funds provided by a Federal agency, plus any non-Federal contribution required as a matching share therefor.

F. Except as provided in paragraph C. of this Article, the Non-Federal Sponsors shall not be entitled to any credit or reimbursement for costs they incur in performing their responsibilities under this Agreement.

G. In carrying out their obligations under this Agreement, the Non-Federal Sponsors shall comply with all the requirements of applicable Federal laws and implementing regulations, including, but not limited to: Title VI of the Civil Rights Act of 1964 (P.L. 88-352), as amended (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto; the Age Discrimination Act of 1975 (42 U.S.C. 6102); and the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Army Regulation 600-7 issued pursuant thereto.

H. If Independent External Peer Review (IEPR) is required for the Study, the Government shall conduct such review in accordance with Federal laws, regulations, and policies. The Government's costs for an IEPR panel shall not be included in shared study costs or the maximum Federal study cost.

I. In addition to the ongoing, regular discussions of the parties in the delivery of the Study, the Government and the Non-Federal Sponsors may establish a Study Coordination Team to discuss significant issues or actions. The Government's costs for participation on the Study Coordination Team shall not be included in shared study costs, but shall be included in calculating the maximum Federal study cost. The Non-Federal Sponsors' costs for participation on the Study Coordination Team shall not be included in shared study costs and shall be paid solely by the Non-Federal Sponsors without reimbursement or credit by the Government.

J. Pursuant to Section 1156 of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2310), the Government shall waive up to $455,000 in non-Federal cost sharing of the Study. The amount of the waiver shall not be

included in shared study costs, but shall be included in calculating the maximum Federal study cost.

ARTICLE III - PAYMENT OF FUNDS

A. As of the effective date of this Agreement, shared study costs are projected to be $2,090,000, with the Government's share of such costs projected to be $1,045,000.00 and the Non-Federal Sponsors' share of such costs projected to be $1,045,000.00. These amounts are estimates only that are subject to adjustment by the Government and are not to be construed as the total financial responsibilities of the Government and the Non-Federal Sponsors.

B. The Government shall provide the Non-Federal Sponsors with quarterly reports setting forth the estimated shared study costs and the Government's and Non-Federal Sponsors' estimated shares of such costs; costs incurred by the Government, using both Federal and Non-Federal Sponsors funds, to date; the amount of funds provided by the Non-Federal Sponsors to date; the estimated amount of any creditable in-kind contributions; costs funded at full Federal expense based on the waiver of non-Federal cost sharing in accordance with Article II.J.; and the estimated remaining cost of the Study.

C. The Non-Federal Sponsors shall provide to the Government required funds by delivering a check payable to "FAO, USAED, Alaska (J4)" to the District Engineer, or verifying to the satisfaction of the Government that the Non-Federal Sponsors have deposited such required funds in an escrow or other account acceptable to the Government, with interest accruing to the Non-Federal Sponsors, or by providing an Electronic Funds Transfer of such required funds in accordance with procedures established by the Government.

D. The Government shall draw from the funds provided by the Non-Federal Sponsors to cover the non-Federal share of shared study costs as those costs are incurred. If the Government determines at any time that additional funds are needed from the Non-Federal Sponsors to cover the Non-Federal Sponsors' required share of shared study costs, the Government shall provide the Non-Federal Sponsors with written notice of the amount of additional funds required. Within 60 calendar days of such notice, the Non-Federal Sponsors shall provide the Government with the full amount of such additional funds.

E. Upon conclusion of the Study and resolution of all relevant claims and appeals, the Government shall conduct a final accounting and furnish the Non-Federal Sponsors with the written results of such final accounting. Should the final accounting determine that additional funds are required from the Non-Federal Sponsors, the Non-Federal Sponsors, within 60 calendar days of written notice from the Government, shall provide the Government with the full amount of such additional funds. Should the final accounting determine that the Non-Federal Sponsors have provided funds in excess of

their required amount, the Government shall refund the excess amount, subject to the availability of funds. Such final accounting does not limit the Non-Federal Sponsors' responsibility to pay their share of shared study costs, including contract claims or any other liability that may become known after the final accounting.

ARTICLE IV - TERMINATION OR SUSPENSION

A. Upon 30 calendar days written notice to the other party, either party may elect at any time, without penalty, to suspend or terminate future performance of the Study. Furthermore, unless an extension is approved by the Assistant Secretary of the Army (Civil Works), the Study will be terminated if a Report of the Chief of Engineers, or, if applicable, a Report of the Director of Civil Works, is not signed for the Study within 3 years after the effective date of this Agreement.

B. In the event of termination, the parties shall conclude their activities relating to the Study. To provide for this eventuality, the Government may reserve a percentage of available funds as a contingency to pay the costs of termination, including any costs of resolution of contract claims, and resolution of contract modifications.

C. Any suspension or termination shall not relieve the parties of liability for any obligation incurred. Any delinquent payment owed by the Non-Federal Sponsors pursuant to this Agreement shall be charged interest at a rate, to be determined by the Secretary of the Treasury, equal to 150 per centum of the average bond equivalent rate of the 13 week Treasury bills auctioned immediately prior to the date on which such payment became delinquent, or auctioned immediately prior to the beginning of each additional 3 month period if the period of delinquency exceeds 3 months.

ARTICLE V - DISPUTE RESOLUTION

As a condition precedent to a party bringing any suit for breach of this Agreement, that party must first notify the other party in writing of the nature of the purported breach and seek in good faith to resolve the dispute through negotiation. If the parties cannot resolve the dispute through negotiation, they may agree to a mutually acceptable method of non-binding alternative dispute resolution with a qualified third party acceptable to the parties. Each party shall pay an equal share of any costs for the services provided by such a third party as such costs are incurred. The existence of a dispute shall not excuse the parties from performance pursuant to this Agreement.

ARTICLE VI - MAINTENANCE OF RECORDS AND AUDIT

A. The parties shall develop procedures for the maintenance by the Non-Federal Sponsor of books, records, documents, or other evidence pertaining to costs and expenses for a minimum of three years after the final accounting. The Non-Federal Sponsors shall

assure that such materials are reasonably available for examination, audit, or reproduction by the Government.

B. The Government may conduct, or arrange for the conduct of, audits of the Study. Government audits shall be conducted in accordance with applicable Government cost principles and regulations. The Government's costs of audits for the Study shall not be included in shared study costs, but shall be included in calculating the maximum Federal study cost.

C. To the extent permitted under applicable Federal laws and regulations, the Government shall allow the Non-Federal Sponsors to inspect books, records, documents, or other evidence pertaining to costs and expenses maintained by the Government, or at the request of the Non-Federal Sponsors, provide to the Non-Federal Sponsors or independent auditors any such information necessary to enable an audit of the Non-Federal Sponsors' activities under this Agreement. The costs of non-Federal audits shall be paid solely by the Non-Federal Sponsors without reimbursement or credit by the Government.

ARTICLE VII - RELATIONSHIP OF PARTIES

In the exercise of their respective rights and obligations under this Agreement, the Government and the Non-Federal Sponsors each act in an independent capacity, and neither is to be considered the officer, agent, or employee of the other. Neither party shall provide, without the consent of the other party, any contractor with a release that waives or purports to waive any rights a party may have to seek relief or redress against that contractor.

ARTICLE VIII - NOTICES

A. Any notice, request, demand, or other communication required or permitted to be given under this Agreement shall be deemed to have been duly given if in writing and delivered personally or mailed by certified mail, with return receipt, as follows:

If to the Non-Federal Sponsors:

President, Native Village of Elim
P.O. BOX 39070
Elim, AK 99739
and,

President, Kawerak, Inc.
P.O. Box 948
Nome, Alaska 99762.

If to the Government:

Commander, Alaska District U.S. Army Corps of Engineers
P.O. BOX 6898
Joint Base Elmendorf Richardson, AK 99506-0898

B. A party may change the recipient or address for such communications by giving written notice to the other party in the manner provided in this Article.

ARTICLE IX - CONFIDENTIALITY

To the extent permitted by the laws governing each party, the parties agree to maintain the confidentiality of exchanged information when requested to do so by the providing party.

ARTICLE X - THIRD PARTY RIGHTS, BENEFITS, OR LIABILITIES

Nothing in this Agreement is intended, nor may be construed, to create any rights, confer any benefits, or relieve any liability, of any kind whatsoever in any third person not a party to this Agreement.

ARTICLE XI – JOINT AND SEVERAL RESPONSIBILITY OF THE NON-FEDERAL SPONSORS

The obligations and responsibilities of the Non-Federal Sponsors shall be joint and several, such that each Non-Federal Sponsor shall be liable for the whole performance of the obligations and responsibilities of the Non-Federal Sponsors under the terms and provisions of this Agreement. The Government may demand the whole performance of said obligations and responsibilities from any of the entities designated herein as one of the Non-Federal Sponsors.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, which shall become effective upon the date it is signed by the District Engineer.

DEPARTMENT OF THE ARMY

BY: _____
Michael S. Brooks
Colonel, U.S. Army

District Engineer

DATE: 23 MAR 18

NATIVE VILLAGE OF ELIM

BY: Robert A Keith
Robert Keith
President

DATE: 03/08/2016

KAWERAK, INC.

BY: M Bahnke
Melanie Bahnke
President, Kawerak, Inc.

DATE: 3.19.18

CERTIFICATE OF AUTHORITY

I, John Bioff, do hereby certify that I am the principal legal officer for the Native Village of Elim on this matter, that the Native Village of Elim is a legally constituted public body with full authority and legal capability to perform the terms of the Agreement between the Department of the Army and the **Native Village of Elim and Kawerak, Inc.** in connection with Elim Subsistence Harbor Study, and to pay damages, if necessary, in the event of the failure to perform in accordance with the terms of this Agreement, as required by Section 221 of Public Law 91-611, as amended (42 U.S.C. Section 1962d-5b), and that the persons who have executed this Agreement on behalf of the Native Village of Elim have acted within their statutory authority.

IN WITNESS WHEREOF, I have made and executed this certification this 19th day of March 2018

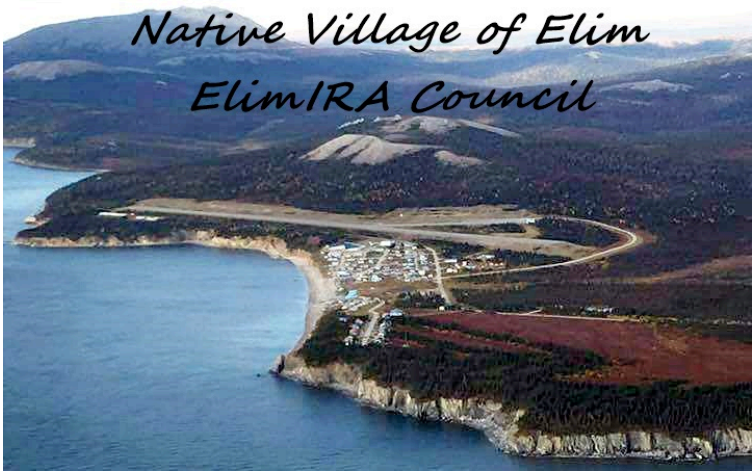
John Bioff
General Counsel, Kawerak, Inc.

CERTIFICATE OF AUTHORITY

I, John Bioff, do hereby certify that I am the General Counsel of Kawerak, Inc.; that Kawerak, Inc. is a legally constituted non-profit entity incorporated under the applicable laws of the State of Alaska as a non-profit organization, exempt from paying Federal income taxes under Section 501 of the Internal Revenue Code (26 U.S.C. 501); that Kawerak, Inc. has the full authority and legal capability to perform the terms of the Agreement between the Department of the Army and the Native Village of Elim and Kawerak, Inc. in connection with Elim Subsistence Harbor Study, and to pay damages, if necessary, in the event of the failure to perform in accordance with the terms of this Agreement, as required by Section 221 of Public Law 91-611, as amended (42 U.S.C. Section 1962d-5b); and that the persons who have executed this Agreement on behalf of Kawerak, Inc. have acted within their corporate authority.

IN WITNESS WHEREOF, I have made and executed this certification this 19th day of March 2018.

John Bioff
General Counsel, Kawerak, Inc.



DT: 11/12/2020

TO: Kendall Campbell, Alaska District Tribal Liaison

FR: Robert A Keith, President, Elim IRA Council

RE: Tribal Consultation

This letter constitutes a formal request for tribal consultation with USACE and Native Village of Elim, Elim IRA Council. The Elim IRA Council is the governing body of the Native Village of Elim which is a Federally recognized Tribe. Please list Robert A Keith, President as the contact person for this project.

The Elim Subsistence Harbor Feasibility Study that is close to being submitted to congress and represents a lot of time a work by both USACE and our community. Thank you for your consideration of our request.

Sincerely,

Robert A Keith

Email angelraq.keith@gmail.com Phone 907-890-3737, fax "…3738

Email Cc: David P Williams PE Project Manager

Cynthia Cabrera, KTP Director Kawerak

Elim IRA Council

NON-FEDERAL SPONSOR'S
SELF-CERTIFICATION OF FINANCIAL CAPABILITY
FOR DECISION DOCUMENTS

I, Eugenia E. Jemewouk, do hereby certify that I am the Chief Financial Officer [OR TITLE OF EQUIVALENT OFFICIAL] of the [NATIVE VILLAGE OF ELIM] (the "Non-Federal Sponsor"); that I am aware of the financial obligations of the Non-Federal Sponsor for the [ELIM SUBSISTENCE HARBOR]; and that the Non-Federal Sponsor will have the financial capability to satisfy the Non-Federal Sponsor's obligations for that project. I understand that the Government's acceptance of this self-certification shall not be construed as obligating either the Government or the Non-Federal Sponsor to implement a project.

Eugenia E. Jemewouk — 12-22-2020

Eugenia E. Jemewouk
Tribal Coordinator
Native Village of Elim

DATE:

IN WITNESS WHEREOF, I have made and executed this certification this 22nd day of December, 2020.

BY: Eugenia E. Jemewouk

TITLE: Tribal Coordinator

DATE: December 22, 2020

Postmaster/Notary Public
Per USPS ASK

Notary Public

This assignment was subscribed and sworn to before me on this 22nd day of December 2020 at Elim, AK 99739.

ELIM, ALASKA DEC 22 2020 USPS 99739-9998

Signature of Notary

My commission expires: 10/04/2025

Seal

Correspondence:
Public Comments

From: Floyd, Christopher B CIV USARMY CEPOA (USA)
To: Hejduk, Philip B CIV USARMY CEPOA (USA); Williams, David P CIV USARMY CEPOA (USA)
Cc: Salyer, Michael R CIV USARMY CEPOA (USA)
Subject: Elim - EPA comments on the draft IFR/EA
Date: Monday, June 15, 2020 9:34:25 AM

The 12 June email from the EPA (below) provides their comments on the Elim draft IFR/EA.

The email string below captures my interactions with the EPA since the draft IFR/EA was released for public/agency review.

Chris F

-----Original Message-----
From: McCracken, Betsy W. [mailto:mccracken.betsy@epa.gov]
Sent: Friday, June 12, 2020 5:35 PM
To: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>
Cc: Hunt, Angela M (DEC) <angela.hunt@alaska.gov>; Lohrman, Bridgette <lohrman.bridgette@epa.gov>; Salyer, Michael R CIV USARMY CEPOA (USA) <Michael.R.Salyer@usace.army.mil>
Subject: [Non-DoD Source] RE: USACE - draft IFR/EA for "Elim Navigation Improvement Project" available

Hi Chris,

Thank you for the detailed response to our questions and comments related to the information in the USACE draft Integrated Feasibility Report/EA. Given where the USACE is in your process, we are providing these two comments as placeholders until the USACE collects additional information.

1. Re: DREDGE PRISM. We do not have further comments at this time regarding testing of the dredge prism. As the USACE has stated, geotechnical boring data will be collected from the dredge prism, "....the plan is to perform a geotech investigation (soil coring and ground-truthing of the geophysical survey data) during the pre-construction engineering and design (PED) phase in the future." Please provide those results to EPA when those data are collected. If the dredge prism material is greater than 20% fine-grained material, further analysis may be required.

2. Re: DISPOSAL SITE. The USACE has identified a disposal site in shallow water, ~30 feet. Based on the USACE information to date, some portion of the dredged material will be consolidated material. Once the volume and type of consolidated material is known from the additional data collection by the USACE, please re-engage EPA to discuss management of the material at the disposal site. Based on the EPA Region's experience with managing dredged material disposal sites with the USACE Portland District, the District conducts an analysis to ensure that adverse impacts to wave amplification does not occur. Impacting wave height or other parameters may adversely impact navigation safety. The Portland District has used a conservative measure of mound height to ensure navigation safety. In general, the District keeps a mound height to less than 10% of the water depth. In this scenario, a rough estimate would have the dredged material accumulate no more than 3-feet off the seafloor. Once the USACE is able to describe the material with greater specificity, please provide that information and the District's analysis of potential impacts to wave amplification in the context of the volumes of the different types of materials that will be at the disposal site, the impacts to the seafloor, and any impacts to navigation.

Thank you very much. We look forward to continuing to work with the District on the Elim Harbor project.

Betsy

Betsy McCracken
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-----Original Message-----
From: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>
Sent: Thursday, June 11, 2020 1:48 PM
To: McCracken, Betsy W. <mccracken.betsy@epa.gov>
Cc: Hunt, Angela M (DEC) <angela.hunt@alaska.gov>; Lohrman, Bridgette <lohrman.bridgette@epa.gov>; Salyer, Michael R CIV USARMY CEPOA (USA) <Michael.R.Salyer@usace.army.mil>
Subject: RE: USACE - draft IFR/EA for "Elim Navigation Improvement Project" available

Hi Betsy -
I wanted to clarify whether the comments you emailed on 28 May 2020 (below) were the EPA's formal review comments on the USACE draft Integrated Feasibility Report/EA, or if we can expect something further from the EPA.

Thanks,
Chris Floyd

-----Original Message-----
From: Floyd, Christopher B CIV USARMY CEPOA (USA)
Sent: Tuesday, June 2, 2020 7:20 PM
To: McCracken, Betsy W. <mccracken.betsy@epa.gov>
Cc: Hunt, Angela M (DEC) <angela.hunt@alaska.gov>; Lohrman, Bridgette <lohrman.bridgette@epa.gov>; Salyer, Michael R CIV USARMY CEPOA (USA) <Michael.R.Salyer@usace.army.mil>
Subject: RE: USACE - draft IFR/EA for "Elim Navigation Improvement Project" available

Hi Betsy -

1) The Corps' current understanding of the Elim dredging prism composition is assembled from:
- geotechnical info gathered from intertidal test pits in 2018 (IFR/EA Appendix B, Annex A).
- preliminary geophysical data of the project area gathered in 2019 (Appendix B, Annex B).
- Underwater video of the project area benthic surface collected in 2019 (described on pages numbered 28-30 of the main IFR/EA pdf).

(a) USACE geotechnical engineers collected and analyzed Elim beach material for sediment transport modeling, believing it to be reasonably similar to the offshore surface sediments.
The pertinent geotech data is from test pits TP-01 through TP-07 (field numbers ELIM 1-1 thru ELIM 8-1) along the beach at Elim (map is on PDF page 25 of Appendix B).
The geotech laboratory results start on PDF page 46.
The material Is better described as a variable mix of coarse, medium, and fine sands, with some gravel and very little silt or clay.
The 2018 "Sediment Evaluation Framework for the Pacific Northwest" offers ">80% of the bulk sediment retained in a No. 230 sieve" (section 3.5.3) as a threshold for material that may be too coarse to retain chemical contaminants.
The laboratory particle size analyses of the Elim beach material (Appendix B; PDF pages 48-56) show no sample passing more than 2.4% through a #200 sieve (i.e, 97.6% retention by a #200 sieve).

(b) The geophysical report starts on PDF page 120 of Appendix B. While the geophysical data were not entirely conclusive, the report suggests that the offshore material consists of 3 to 7 feet of "loose to medium dense" sand, silt, or gravel, overlying a thicker layer of "dense/consolidated sediments or weathered rock", with bedrock underneath starting about -20 to -30 feet MLLW.

(c) The underwater video images of the subtidal surface sediments show almost exclusively sand, worked into ripples by wave action. The beach material sampled may contain more gravel than the subtidal sediment because of rock fragments weathered from exposed bedrock along the beach, or natural size-sorting may push larger particles below and finer particles to the surface as the subtidal sediment is moved around.

2) There is little direct information on the benthic energetics in Norton Bay, as opposed to Norton Sound.
(a) Stephen Jewett of UAF discusses storm-induced benthic disruption offshore of Nome (i), and describes a regularly-monitored site at a depth of 18.6 meters (61 feet) that changed substrate types several times during his studies, which he attributes to storms. Nelson (ii) describes the significant periodic mobilization of sand in southern Norton Sound, and states, "The major storms increase the average 10-m water depth in southern Norton Sound as much as 5m and cause fluctuations in pore pressure from wave cyclic loading that may liquefy the upper 2 to 3 m of sediment."

(b) Elim and Norton Bay in general are probably not exposed to the magnitude of storm surges as observed near Nome, but on the other hand the seabed depths in question are much shallower. The proposed dredged material disposal site is in only 30 feet of water, at 2 nautical miles off shore. We know that Elim is hit periodically with severe storm surges (Appendix C - Hydraulics and Hydrology Appendix), as are Moses Point, Koyuk, Shaktoolik, and Unalakleet at the head of Norton Bay. We know the sediments of Norton Bay are predominantly silt and sand discharged by the Koyuk and several other large rivers at the head of the bay. It stands to reason that benthic sediments at the proposed disposal site experience periodic disturbance from storm surge.

(i) Stephen C. Jewett. 2013. Mining- and Storm-Induced Benthic Disturbances in Norton Sound, Alaska. 2013 Curaçao AAUS/ESDP Joint International Symposium.
(ii) C. Hans Nelson. 1982. Modern Shallow-Water Graded Sand Layers from Storm Surges, Bering Shelf: A Mimic of Bouma Sequences and Turbidite Systems. Journal of Sedimentary Petrology, Vol. 52, No. 2. June 1982.

3) The exemption from testing in 40 CFR 230.61 is based on the physical nature of the dredged material, and the presence of "high current or wave energy".
As described in part 1) above, our best information is that the dredging prism consists of sand, gravel, and rock. The CWA does not appear to define "high wave energy". However, the near-shore wave environment at Elim is such that USACE is studying the construction of rubble mound breakwaters to protect a barge landing, a dock, and small moorage area.

Please also note that the footprint of the dredging prism begins in the subtidal zone roughly 200 feet seaward of MLLW (Figure 7 of the IFR/EA), along an undeveloped, exposed coastline. For the contaminated sites reported on shore to have impacted the dredging prism, the contaminants (primarily petroleum hydrocarbons) would have had to migrate across the beach to the shoreline unnoticed, then swim 200 feet offshore against the waves, then dive down through 2-5 feet of seawater, infiltrate into the sandy bottom, and accumulate there.

Thank you,
Chris Floyd

-----Original Message-----
From: McCracken, Betsy W. [mailto:mccracken.betsy@epa.gov]
Sent: Thursday, May 28, 2020 5:43 PM
To: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>
Cc: Hunt, Angela M (DEC) <angela.hunt@alaska.gov>; Lohrman, Bridgette <lohrman.bridgette@epa.gov>
Subject: [Non-DoD Source] RE: USACE - draft IFR/EA for "Elim Navigation Improvement Project" available

Hi Chris,

Thank you for sending over the Elim Harbor EA and Public Notice. I took a look at the Elim Harbor EA and have a couple of comments/questions:

1) On .pdf page 109 (page 126 of the EA), it states "Contaminated Sediment. Construction dredging would disturb a

seabed of coarse sand, gravel, and weathered bedrock; this material is very unlikely to contain contaminants or deleterious substances. Chemical analysis of the dredged material is not planned at this time." Where can we find the data that supports the assertion that the material is coarse sand and gravel?

2) On .pdf page 115, Figure 35 (page 98 of the EA). What scientific documentation is the COE using to provide support for the text in the EA that the ".....sandy benthic sediments in Norton Bay are highly mobile and frequently displaced by storm surge; dredged material discharged in the disposal area would probably be redistributed fairly quickly by natural forces". Is there a data reference report that provides support for this statement and describes bottom currents in the proposed disposal area (i.e.., NOAA data or UAF data report)?

3) On .pdf page 153 (page 136 of the EA), 8.6.5 Incomplete or Unavailable Information, the EA states that, "Information that would be required before construction of the Tentatively Selected Plan, but which has been unavailable during Feasibility Phase, includes the following:

-Project-specific geotechnical information.
-Project-specific physical characterization of the material to be dredged.
-Refinement of the location of the proposed dredged material disposal area through soundings and underwater imagery.
-Quantitative surveys of marine mammal presence within the project area".

In lieu of the "incomplete or unavailable information" as described above, it is not clear what data was used to support the COE's determination for the Tier 1 exemption criteria for chemical testing that is referenced below in the COE's April 29, 2020 email. Can you please provide that to us?

Thank you,

Betsy
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-----Original Message-----
From: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>
Sent: Wednesday, April 29, 2020 7:22 PM
To: McCracken, Betsy W. <mccracken.betsy@epa.gov>
Subject: RE: USACE - draft IFR/EA for "Elim Navigation Improvement Project" available

Hi Betsy -
There was a geophysical survey done last summer, that I believe is discussed in the H&H appendix, and summarized in the main report. The survey indicated that the offshore sediment consists of a thin layer of mobile sand overlaying very dense material (probably weathered bedrock), with competent bedrock underneath.
At one point the project manager said there would be no geotechnical investigation until construction, but now I understand the plan is to perform a geotech investigation (soil coring and ground-truthing of the geophysical survey data) during the pre-construction engineering and design (PED) phase in the future.

No chemical sampling is planned because the site meets the Tier I exemption criteria, and because it is likely to be impossible to get a representative sample of the dredging prism for chemical analysis (are we going to fill a sampling jar with rock chips?).

Thanks,
Chris Floyd

-----Original Message-----
From: McCracken, Betsy W. [mailto:mccracken.betsy@epa.gov]
Sent: Wednesday, April 29, 2020 4:02 PM
To: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>
Subject: [Non-DoD Source] RE: USACE - draft IFR/EA for "Elim Navigation Improvement Project" available

Chris,

Taking a quick look at the EA/Feasibility report for Elim Harbor just now. The report indicates that there is no plan for chemical characterization of the proposed project's dredge prism. Has there been any physical characterization of the material by the COE? Is there a boring report or some evidence of sediment characterization for this dredging project?

Thank you,
Betsy

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-----Original Message-----
From: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>
Sent: Tuesday, April 28, 2020 3:12 PM
To: McCracken, Betsy W. <mccracken.betsy@epa.gov>
Cc: Peterson, Erik <Peterson.Erik@epa.gov>; Lohrman, Bridgette <lohrman.bridgette@epa.gov>
Subject: USACE - draft IFR/EA for "Elim Navigation Improvement Project" available

Hello -
The Alaska District U.S. Army Corps of Engineers has made its draft Integrated Feasibility Report/Environmental Assessment (IFR/EA) on the Elim Navigation Improvement Project available for agency and public review.
The attached public notice provides information on how to view the document and submit comments.
The review period ends on 28 May 2020.

Thank you,
Chris Floyd, Biologist
Environmental Resources Section
Civil Works Project Management Branch
Alaska District
US Army Corps of Engineers
907-753-2700

From: Ajmi, Amal R [mailto:amal_ajmi@fws.gov]
Sent: Thursday, May 7, 2020 3:58 PM
To: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>
Cc: Henszey, Bob <bob_henszey@fws.gov>
Subject: [Non-DoD Source] RE: [EXTERNAL] USACE - draft IFR/EA for "Elim Navigation Improvement Project" available

Good afternoon Mr. Floyd,

The USFWS has completed a review of the Draft Elim IFR EA, and would like to provide the following comments.

1. Page 35, Table 3. Steller's eider, Polysticta stelleri, are not all listed as Threatened. Only the Alaska breeding population (as stated later on page 39). Please revise.

2. Page 49, First line. The reference to Section 3.5. Section 3.5 is Subsistence Use, not the natural history of the remaining marine mammals; for example, [Harbor porpoise (Phocoena phocoena), and Killer whale (Orca orca)]. Also, Harbor seal (Phoca vitulina) range and presence are not discussed in the document. The harbor seal, is a widespread species in Alaska along the coast extending from Dixon Entrance north to Kuskokwim Bay and west throughout the Aleutian Islands. Please consider revising.

3. Page 49, 11th line. The reference to Section 3.2.1.4. There is more information about bird species most likely found in the area in the subsistence section than in Section 3.2.1.4. Colonial nesting seabirds may also include gulls and kittiwakes. Records also indicate a number of peregrine falcon cliff sites in proximity to Elim and to the west along the coast. We recommend updating Section 3.2.1.4 with a table of bird species. Seabirds most likely in the area can be found by reviewing various sites, including: https://aknhp.uaa.alaska.edu/apps/wildlife/ https://aknhp.uaa.alaska.edu/apps/wildlife/ , https://netapp.audubon.org/iba/Reports/1028 https://netapp.audubon.org/iba/Reports/1028 , https://netapp.audubon.org/iba/Reports/1068 https://netapp.audubon.org/iba/Reports/1068 , and Environmentally Sensitive Maps available at: https://response.restoration.noaa.gov/resources/environmental-sensitivity-index-esi-maps, https://response.restoration.noaa.gov/resources/environmental-sensitivity-index-esi-maps . We have attached the ESI map that covers Elim. The USACE may also consider the fish and marine mammal information provided in the document.

4. The Service would like to reiterate migrating birds are at risk of collision with objects in their path, particularly when visibility is impaired during darkness or inclement weather, such as rain, drizzle, or fog (Schwitters 2015, Weir 1976). The incidence of bird strikes appears to rise when objects are illuminated with constant diffuse light, and the tendency for birds to be drawn to diffuse light appears to increase during rainy or foggy weather (Service, unpublished). Therefore, the Service recommends incorporating design features into a facility lighting plan (including shielding to reduce outward radiating light, light color choice and flash frequency [Weir 1976]) and powerline placement to decrease the potential for bird strikes. The Service is willing to work with the USACE, or a subsequent party, to develop a lighting plan that provides an environment for both safety in the harbor and birds while in flight.

Thank you for the opportunity to comment. Please contact me with any questions. Regards,

Schwitters, M.T. 2015. Bird species found at Shemya Island, Alaska 1999-2010. U.S. Fish and Wildlife Service Report. AMNWR 2015/01. Homer, Alaska

Weir, R.D. 1976. Annotated bibliography of bird kills at man-made obstacles: a review of the state-of-the-art and solutions. Department of Fisheries and the Environment Environmental Management Service Canadian Wildlife Service, Ontario Region. 85 pp.

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“You haven’t seen a tree until you’ve seen it’s shadow from the sky”. Amelia Earhart

-----Original Message-----
From: Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil>
Sent: Tuesday, April 28, 2020 3:08 PM
To: Henszey, Bob <bob_henszey@fws.gov>; Ajmi, Amal R <amal_ajmi@fws.gov>
Subject: [EXTERNAL] USACE - draft IFR/EA for "Elim Navigation Improvement Project" available

Hello -
The Alaska District U.S. Army Corps of Engineers has made its draft Feasibility Report/Environmental Assessment (IFR/EA) on the Elim Navigation Improvement Project available for agency and public review.
The attached public notice provides information on how to view the document and submit comments. The review period ends on 28 May 2020.

Thank you,
Chris Floyd, Biologist
Environmental Resources Section
Civil Works Project Management Branch
Alaska District
US Army Corps of Engineers
907-753-2700

ENVIRONMENTAL SENSITIVITY INDEX MAP

64°45'00" 162°30'00" 64°45'00"

GOLOVNIN LAGOON

GOLOVNIN BAY

NORTON BAY

NORTON SOUND

White Mountain

Iknutak Mtn

Rocky Point

Cape Darby

Golovin Mission

Mt Kwiniuk

South Spit

Shelter

Kachauik River

Eagle Creek

Kachauik Creek

McKinley Creek

Portage Creek

Kwiniuk Creek

Quiniuk Creek

WINTER TRAIL

PORTAGE

MOUNTAINS

AMNWR

CRITICAL HABITAT BOUNDARY

SPECTACLED EIDER CRITICAL HABITAT
MOLTING IN NORTON SOUND AND NORTON BAY

CH
87 3

PRESENT IN NORTON SOUND
AND NORTON BAY

137 43 80 80

PRESENT IN NEARSHORE AREAS

81 19 19 19
13 15

64°00'00" 163°30'00" 162°30'00" 64°00'00"

SHORELINE HABITATS (ESI)

- 1A EXPOSED ROCKY SHORES
  1B EXPOSED, SOLID MAN–MADE STRUCTURES
- 2A EXPOSED WAVE–CUT PLATFORMS IN BEDROCK, MUD, OR CLAY
  2B EXPOSED SCARPS AND STEEP SLOPES IN CLAY
- 3A FINE– TO MEDIUM–GRAINED SAND BEACHES
  3B SCARPS AND STEEP SLOPES IN SAND
- 3C TUNDRA CLIFFS
  4 COARSE–GRAINED SAND BEACHES
- 5 MIXED SAND AND GRAVEL BEACHES
- 6A GRAVEL BEACHES
- 6B RIPRAP
- 7 EXPOSED TIDAL FLATS
- 8A SHELTERED ROCKY SHORES AND SHELTERED SCARPS IN MUD AND CLAY
- 8B SHELTERED, SOLID MAN–MADE STRUCTURES
- 8C SHELTERED RIPRAP
  8E PEAT SHORELINES
- 9A SHELTERED TIDAL FLATS
  9B SHELTERED, VEGETATED LOW BANKS
- 10A SALT– AND BRACKISH–WATER MARSHES
- 10D SCRUB–SHRUB WETLANDS
- 10E INUNDATED, LOW–LYING TUNDRA

N W E S

SCALE 1:250000

4 3 2 1 0 2 4 KILOMETERS

4 3 2 1 0 2 4 MILES

Not For Navigation
Published: May 2002

Published at Seattle, Washington
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Hazardous Materials Response Division

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

Northwest Arctic, AK **ESI-23**

NW ARCTIC, AK - ESIMAP 23

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Pre-nest	Nesting	Post-nest	
64	Canada goose			1000s								X	X				-	-	AUG-SEP	-
81	Common eider			HIGH									X	X			-	-	SEP-OCT	-
85	American wigeon			100s								X	X				-	-	AUG-SEP	-
	Brant			1000s				X	X	X							MAY-JUL	-	-	-
	Canada goose			1000s								X	X				-	-	AUG-SEP	-
	Dunlin			1000s				X	X	X							MAY-JUN	JUN-JUL	-	-
	Dunlin			10000s							X	X	X				-	-	JUL-SEP	-
	Greater scaup			1000s								X	X				-	-	-	-
	Sandhill crane			1000s				X	X	X							-	MAY-JUL	-	-
	Semipalmated sandpiper			1000s				X	X	X							MAY-JUN	JUN-JUL	-	-
	Semipalmated sandpiper			10000s							X	X	X				-	-	JUL-SEP	-
	Tundra swan			1000s								X	X	X			-	-	-	-
	Western sandpiper			1000s				X	X	X							MAY-JUN	JUN-JUL	-	-
	Western sandpiper			10000s							X	X	X				-	-	JUL-SEP	-
87	Spectacled eider	S/F	C/T	4030								X	X	X			-	-	-	-
264	Glaucous gull			20				X	X	X	X	X	X	X			APR-MAY	JUN-JUL	AUG-OCT	-
	Horned puffin			10				X	X	X	X	X	X	X			APR-MAY	JUN-JUL	AUG-OCT	-
	Pelagic cormorant			12				X	X	X	X	X	X	X			APR-MAY	JUN-JUL	AUG-OCT	-
265	Glaucous gull			12				X	X	X	X	X	X	X			APR-MAY	JUN-JUL	AUG-OCT	-
	Horned puffin			68				X	X	X	X	X	X	X			APR-MAY	JUN-JUL	AUG-OCT	-
	Pelagic cormorant			416				X	X	X	X	X	X	X			APR-MAY	JUN-JUL	AUG-OCT	-
	Tufted puffin			4				X	X	X	X	X	X	X			APR-MAY	JUN-JUL	AUG-OCT	-
266	Glaucous gull			290				X	X	X	X	X	X	X			APR-MAY	JUN-JUL	AUG-OCT	-
	Horned puffin			575				X	X	X	X	X	X	X			APR-MAY	JUN-JUL	AUG-OCT	-
	Pelagic cormorant			448				X	X	X	X	X	X	X			APR-MAY	JUN-JUL	AUG-OCT	-
	Tufted puffin			52				X	X	X	X	X	X	X			APR-MAY	JUN-JUL	AUG-OCT	-
269	Aleutian tern			30				X	X	X	X	X	X	X			APR-MAY	JUN-JUL	AUG-OCT	-
312	American peregrine falcon	S	C					X	X	X	X	X	X				-	APR-SEP	-	-
314	Arctic peregrine falcon	S	C					X	X	X	X	X	X				-	APR-SEP	-	-

FISH:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
4	Pacific herring							X	X	X	X	X	X				MAY-JUN	MAY-JUL	MAY-JUL	JUN-JUL	APR-SEP
19	Chinook salmon								X	X	X						-	-	-	MAY-JUL	JUN-JUL
	Chum salmon (dog)								X	X	X	X					-	-	-	MAY-JUL	JUN-AUG
	Coho salmon (silver)								X	X	X	X					-	-	-	MAY-JUL	AUG-AUG
	Dolly varden								X	X	X	X	X	X			-	-	-	MAY-JUL	AUG-OCT
	Pink salmon (humpy)								X	X	X						-	-	MAY-JUL	MAY-JUL	JUN-JUL
	Rainbow smelt				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Saffron cod				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Starry flounder									X	X	X					-	-	-	JUN-AUG	JUN-AUG
20	Pacific herring							X	X	X	X	X	X				MAY-JUN	MAY-JUL	MAY-JUL	JUN-JUL	APR-SEP
55	Capelin									X	X	X					JUN-JUN	JUN-JUL	JUN-AUG	-	JUN-AUG
57	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Whitefish				X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-DEC	DEC-JUN	JAN-DEC	JAN-DEC
137	Pacific halibut										X	X	X	X			-	-	-	-	JUL-OCT
146	Pacific herring							X	X	X	X	X	X				MAY-JUN	MAY-JUL	MAY-JUL	JUN-JUL	APR-SEP
	Whitefish			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
162	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	JUL-DEC	DEC-JUL	JAN-DEC	JUL-AUG
	Chum salmon (dog)				X	X	X	X	X		X	X	X	X	X	X	JUL-SEP	JUL-DEC	DEC-MAY	MAY-MAY	JUL-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	AUG-DEC	DEC-JUN	JAN-DEC	AUG-SEP
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	JUL-DEC	DEC-JUN	MAY-JUN	JUL-AUG
163	Chum salmon (dog)				X	X	X	X	X		X	X	X	X	X	X	JUL-SEP	JUL-DEC	DEC-MAY	MAY-MAY	JUL-SEP
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	JUL-DEC	DEC-JUN	MAY-JUN	JUL-AUG
164	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	JUL-DEC	DEC-JUN	MAY-JUN	JUL-AUG
167	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	JUL-DEC	DEC-JUL	JAN-DEC	JUL-AUG
	Chum salmon (dog)				X	X	X	X	X		X	X	X	X	X	X	JUL-SEP	JUL-DEC	DEC-MAY	MAY-MAY	JUL-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	AUG-DEC	DEC-JUN	JAN-DEC	AUG-SEP
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	JUL-DEC	DEC-JUN	MAY-JUN	JUL-AUG
	Whitefish				X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-DEC	DEC-JUN	JAN-DEC	JAN-DEC
177	Chum salmon (dog)				X	X	X	X	X		X	X	X	X	X	X	JUL-SEP	JUL-DEC	DEC-MAY	MAY-MAY	JUL-SEP
178	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	JUL-DEC	DEC-JUL	JAN-DEC	JUL-AUG
186	Chum salmon (dog)				X	X	X	X	X		X	X	X	X	X	X	JUL-SEP	JUL-DEC	DEC-MAY	MAY-MAY	JUL-SEP
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	JUL-DEC	DEC-JUN	MAY-JUN	JUL-AUG
189	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	JUL-DEC	DEC-JUL	JAN-DEC	JUL-AUG
	Chum salmon (dog)				X	X	X	X	X		X	X	X	X	X	X	JUL-SEP	JUL-DEC	DEC-MAY	MAY-MAY	JUL-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	AUG-DEC	DEC-JUN	JAN-DEC	AUG-SEP
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	JUL-DEC	DEC-JUN	MAY-JUN	JUL-AUG
	Sheefish				X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Whitefish				X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-DEC	DEC-JUN	JAN-DEC	JAN-DEC
193	Chum salmon (dog)				X	X	X	X	X		X	X	X	X	X	X	JUL-SEP	JUL-DEC	DEC-MAY	MAY-MAY	JUL-SEP
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Whitefish				X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-DEC	DEC-JUN	JAN-DEC	JAN-DEC

INVERTEBRATE:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawn/Mate	Eggs	Larvae	Juveniles	Adults
19	Alaska razor clam				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Butter clam				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Crenulate astarte				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Helmet crab				X	X	X	X	X	X				X	X		-	-	-	-	-
	Pinkneck clam				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Siberia softshell clam				X	X	X	X	X	X	X	X	X		X	X	-	-	-	-	-
	Softshell clam				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
43	Red king crab			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	FEB-APR	JAN-DEC	FEB-JUN	JAN-DEC	JAN-DEC

NW ARCTIC, AK - ESIMAP 23 (cont.)

BIOLOGICAL RESOURCES: (cont.)

MARINE MAMMAL:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting
6	Spotted seal			HIGH						X	X	X	X	X	X		-	-	-	-
13	Ringed seal				X	X	X	X	X	X			X	X	X		-	-	MAR-MAY	MAR-JUN
15	Beluga whale									X	X	X	X	X			-	JUN-AUG	-	-
80	Bearded seal				X	X	X	X	X	X					X	X	-	-	-	-
	Gray whale								X	X	X	X	X	X	X		-	-	-	-
	Spotted seal									X	X	X	X	X	X		-	-	-	-
	Walrus			HIGH				X	X								-	-	-	-
147	Spotted seal			HIGH						X	X	X	X	X	X		-	-	-	-
	Walrus								X	X			X	X			-	-	-	-
148	Beluga whale			HIGH						X	X	X	X	X	X		-	JUN-AUG	-	-

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HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Owner	Contact	Phone
3	SPECTACLED EIDER CRITICAL HABITAT		US FISH & WILDLIFE SERVICE	907/271-2781

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.

From: robert keith
To: Williams, David P CIV USARMY CEPOA (USA)
Subject: [Non-DoD Source] Alt 5
Date: Friday, May 22, 2020 12:09:41 PM
Attachments: feasibility study.pdf

Reviewing Alt 5 regarding the impacts on Elim beach erosion I drew some lines on the provided Alt 5 map. This plan I think would have a positive impact on Elim beach front. During the 2005 storm surge the City was moving gravel during the storm to protect the houses along Beach from road. I drew a line between the breakwaters parallel to the beach to get a idea of where the sand will go during southwest storms, and I drew a dotted line from the east break water southwest to the beach. I am not an expert on fluid dynamics but this would appear to me to be a great positive impact on reducing erosion on Elim Beach.
l

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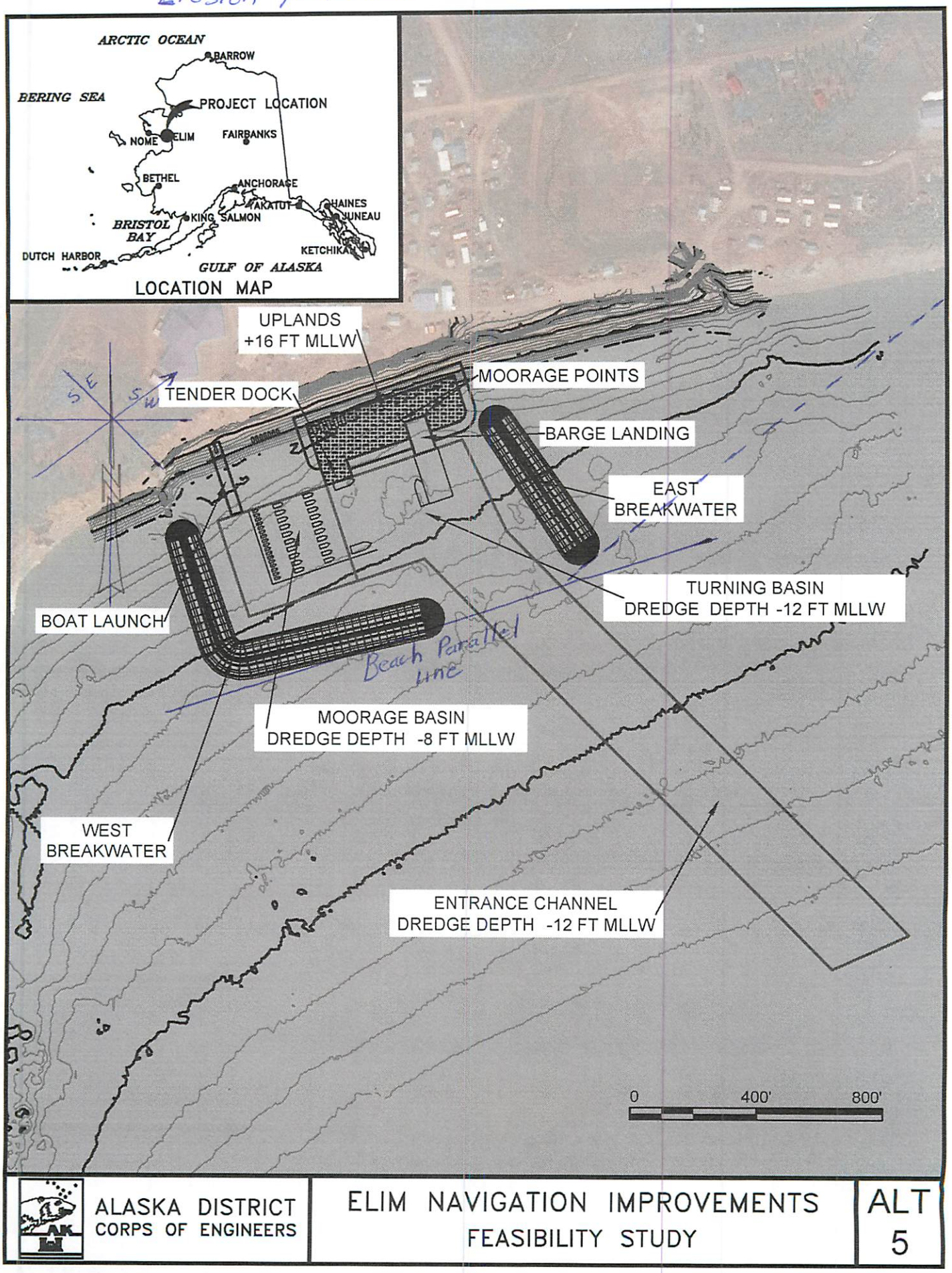
907 890 3737 wk

Erosion protection



ALASKA DISTRICT
CORPS OF ENGINEERS

ELIM NAVIGATION IMPROVEMENTS
FEASIBILITY STUDY

ALT
5