Port of Nome Modification Feasibility Study

Nome, Alaska

Appendix G: Correspondence

US Army Corps of Engineers
Alaska District

Appendix G
Table of Contents

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

Correspondence

NMFS Protected Resources Division

USFWS Fairbanks Field Office

From: Floyd, Christopher B CIV USARMY CEPOA (US)
To: Greg Balogh - NOAA Federal
Subject: Nome Harbor Modifications - preliminary species lists
Date: Wednesday, May 09, 2018 3:12:00 PM
Attachments: Port of Nome alt elements.jpg

Hi Greg -

The Corps has restarted a study of expanding the port facilities at Nome ("Nome Harbor Modifications")

Using the NOAA ESA/MMPA mapper, and talking to local biologists at a planning charrette in Nome last month, I've come up with preliminary lists of ESA and MMPA species under NOAA jurisdiction that may be present in the project area:

ESA species:
Steller sea lion (Western DPS)
Bearded seal (Beringia DPS)
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

We would like input from NOAA Protected Resources on the completeness of these lists, and to begin informal consultation on potential project impacts.

The construction alternatives under development, but are expected to include all or some of the following general features (see attached graphic): Extension of the existing causeway into deeper water; construction of a dock for larger vessels at the end of the causeway; dredging of a new, deeper entrance channel; deepening of portions of the existing outer harbor.
The intent of the project is to allow larger vessels to moor safely at Nome, so the completed project would presumably cause some change in the numbers and size of vessels transiting to and from Nome. A local biologist at the charrette suggested regarding an area extending from the Bering Strait through Norton Sound to Unalakleet as the area of potential impact to marine mammals.

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

From: Greg Balogh - NOAA Federal
To: Floyd, Christopher B CIV USARMY CEPOA (US); Jill Prewitt
Subject: [Non-DoD Source] Re: Nome Harbor Modifications - preliminary species lists
Date: Friday, May 11, 2018 9:37:36 AM

Hi Chris,

Your list looks complete to me as far as T&E species goes. Jill Prewitt can be your POC for this project. She can double-check your lists, especially for the MMPA species. We can talk more about the action area when we get a better understanding of the scope of the project. You'll have to fill me and Jill in on the justification that was given to you regarding inclusion of a route to Unalakleet, but exclusion of other waters, such as from Unalaska to Nome. Jill should be back in her office on Monday, I believe.

On Wed, May 9, 2018 at 3:12 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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Chris Floyd
Environmental Resources
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: Floyd, Christopher B CIV USARMY CEPOA (US)
To: "Amal Ajmi"
Cc: Bob Henszey
Subject: Port of Nome - ESA Sec 7 - USFWS species list confirmation
Date: Friday, May 25, 2018 11:02:00 AM

Amal -
We talked about this on Wednesday, but just to kick off my correspondence trail -

The Alaska District U.S. Army Corps of Engineers (Corps), through discussions with your office and online resources provided by the USFWS, has identified the following species protected under USFWS jurisdiction by the Endangered Species Act (ESA) whose ranges coincide with the 'Port of Nome Modifications' project area:
- Polar bear
- Steller's eider
- Spectacled eider

The following species is protected under USFWS jurisdiction by the Marine Mammal Protection Act (MMPA):
- Pacific walrus

The Corps requests that the USFWS confirm or modify this list, as part of the on-going ESA Section 7 informal consultation on this project.
As this project's feasibility study progresses, the Corps will prepare an ESA determination letter for the USFWS's review and concurrence.

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

From: Amal Ajmi
To: Floyd, Christopher B CIV USARMY CEPOA (US)
Cc: Bob Henszey; Ted Swem
Subject: [Non-DoD Source] RE: [EXTERNAL] Port of Nome - ESA Sec 7 - USFWS species list confirmation
Date: Tuesday, May 29, 2018 7:50:20 AM

Good Morning Chris, we confirm the species and their status. Am not sure if you are aware, please know confirmation of species and status is not considered consultation. We look forward to working with the USACE. In the mean time, if you need any assistance, please don't hesitate to call or email. Have a great day.

Regards,
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: Friday, May 25, 2018 11:03 AM
To: Amal Ajmi <amal_ajmi@fws.gov>
Cc: Bob Henszey <bob_henszey@fws.gov>
Subject: [EXTERNAL] Port of Nome - ESA Sec 7 - USFWS species list confirmation

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Thank you,
Chris Floyd
Environmental Resources
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
JOINT BASE ELMENDORF-RICHARDSON, AK 99506-0898

Amal Ajmi
Fish & Wildlife Biologist
US Fish & Wildlife Service
101 12th Ave, Room 110
Fairbanks, AK 99701

26 December 2018

Dear Ms. Ajmi:

The U.S. Army Corps of Engineers Alaska District (Corps) is preparing an environmental assessment (EA) for the proposed "Port of Nome Modifications" project, an expansion of the existing port and harbor facilities at Nome, Alaska (figures 1 and 2). The purpose of this letter is to:

- provide an update on construction alternatives that are under consideration;
- present the Corps' 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. Project location and vicinity (aerial imagery dated Aug 2017, Google Earth).

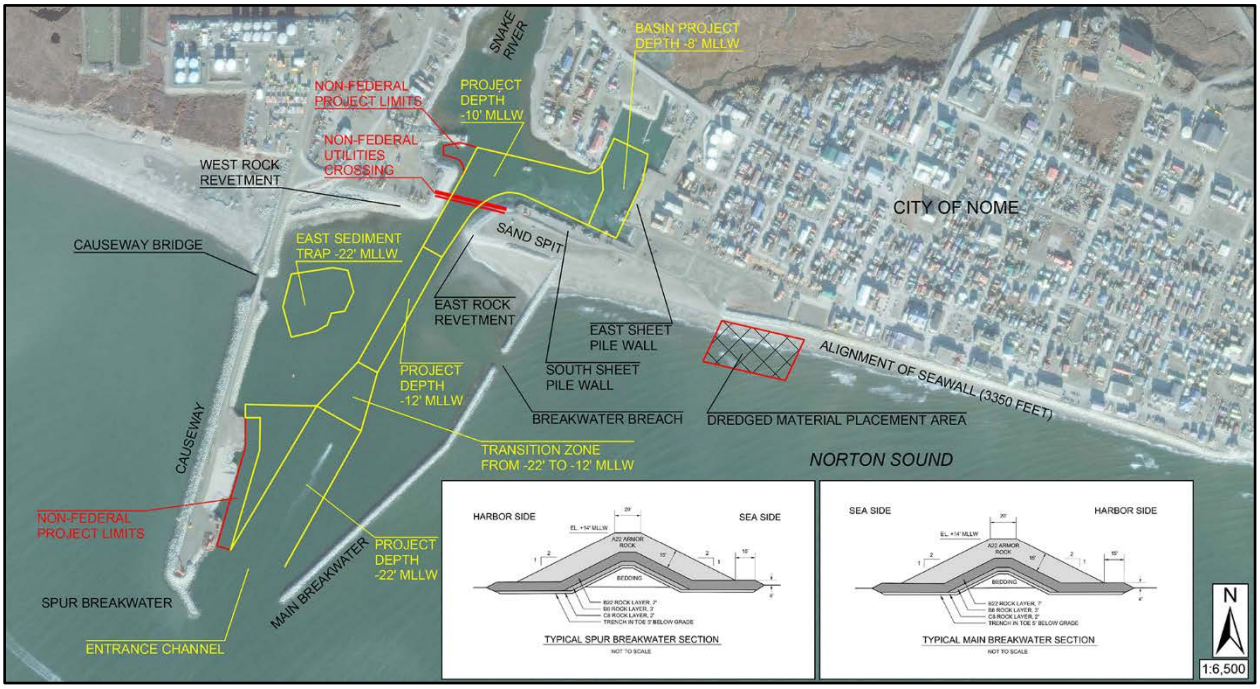

Figure 2. Layout of existing port facilities at Nome (adapted from USACE 2015).

Project Description

The Corps is currently studying six construction alternatives (Alternatives 3a, 3b, 3c, 4a, 8a, and 8b; figures 3-1 through 3-6) in an effort to identify the most useful, cost-effective, and least environmentally-damaging project. From an environmental perspective, the construction alternatives are all similar to one another, differing primarily in the extent, rather than type or location, of their impacts.

Each alternative includes several modification elements:

1. The existing west rubblemound causeway (figure 2) would be lengthened into an L-shaped structure extending into deeper water; the proposed extensions range from 2,340 to 3,937 linear feet (figures 3-1 to 3-6). One to three new concrete caisson docks would be added to the causeway extension. Alternatives 3a, 4a, 8a, and 8b also add a sheet pile dock to the existing causeway.

2. The existing east rubblemound breakwater (figure 2) would be:
   a. modified to a minor degree (Alternatives 3a and 3c); or
   b. removed, and a new rubblemound causeway constructed, tying into shore at the same location as the existing breakwater (Alternative 4a); or
   c. removed, and a new rubblemound causeway constructed, tying into shore about 600 feet to the east of the existing breakwater location (Alternatives 3b, 8a, and 8b). A new east causeway would include one or two concrete caisson docks.

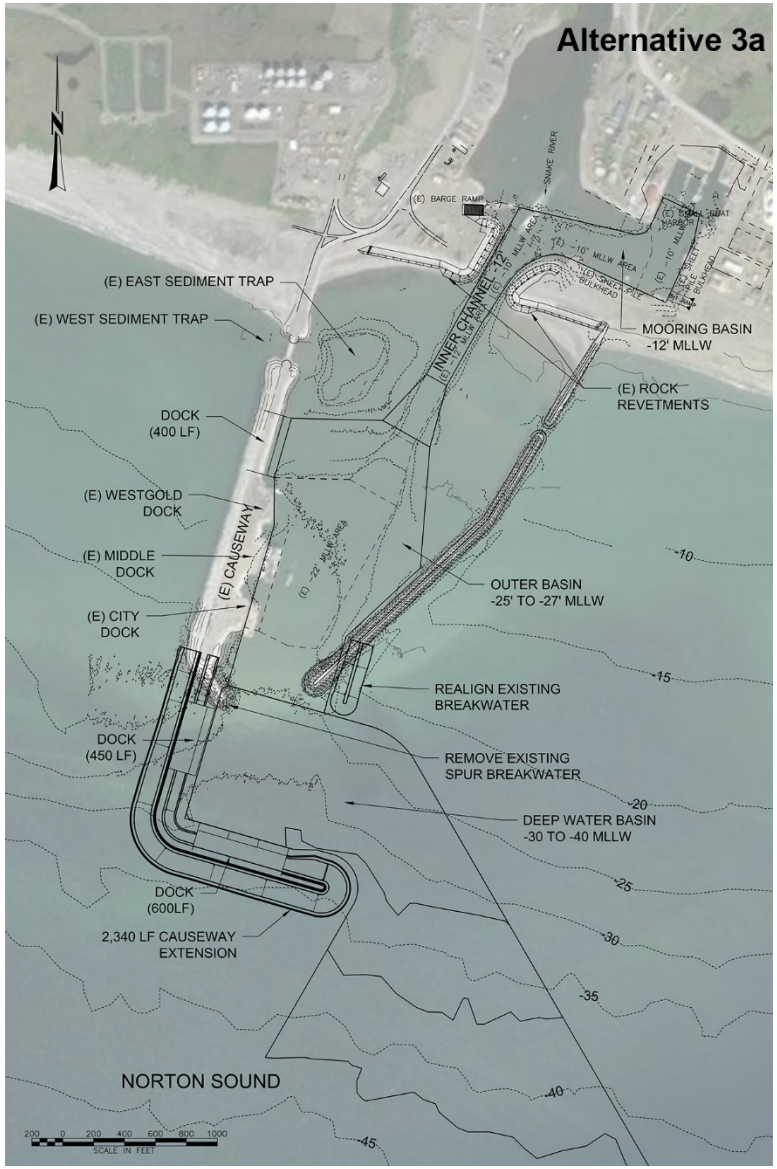

Figure 3-1. Alternative 3a

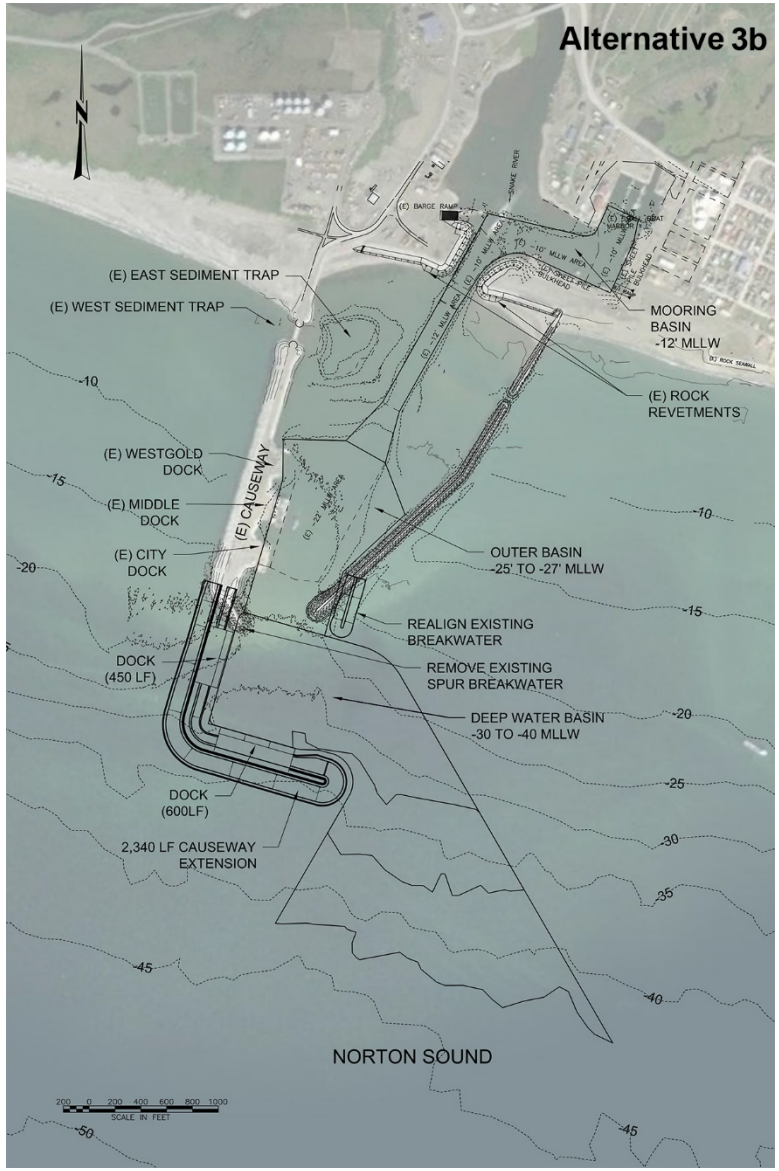

Figure 3-2. Alternative 3b

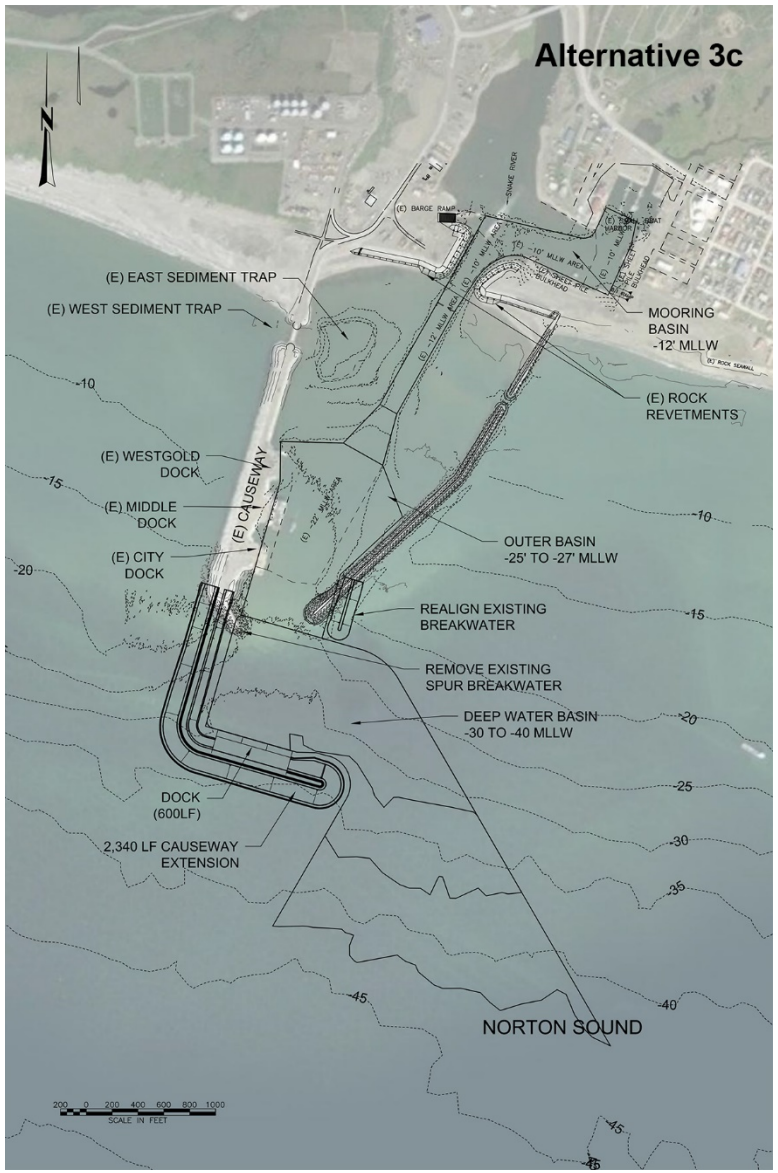

Figure 3-3. Alternative 3c

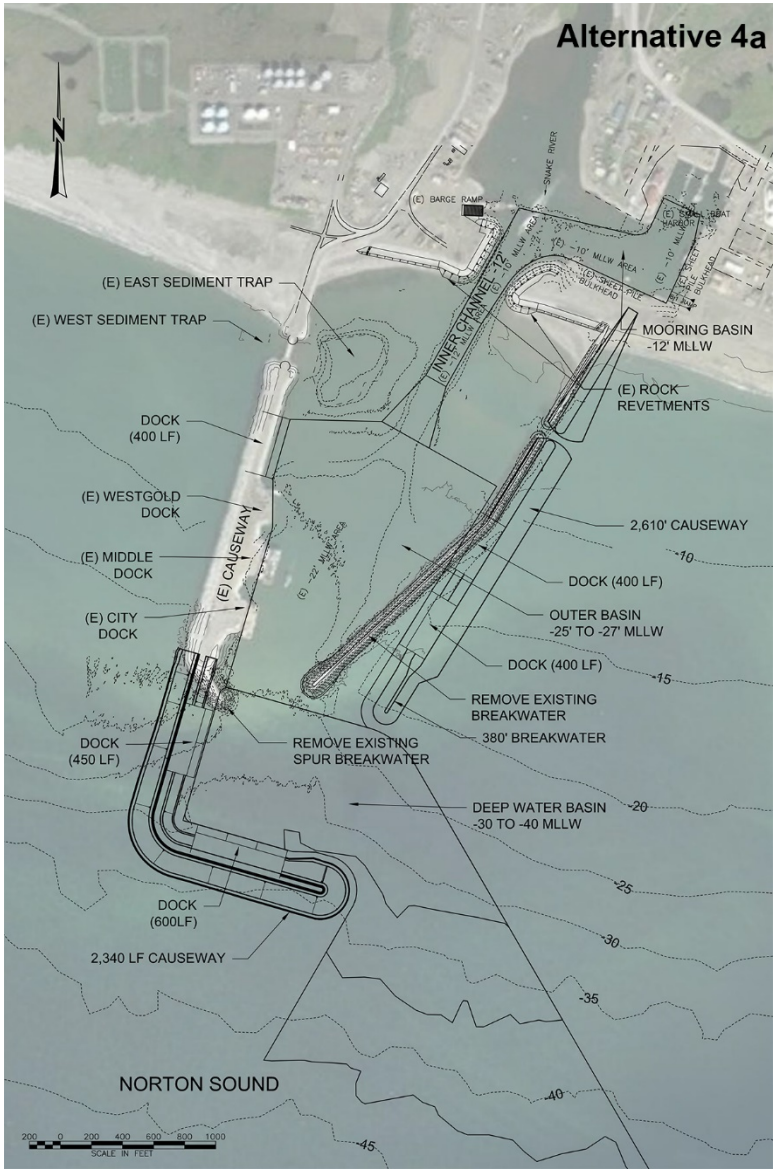

Figure 3-4. Alternative 4a

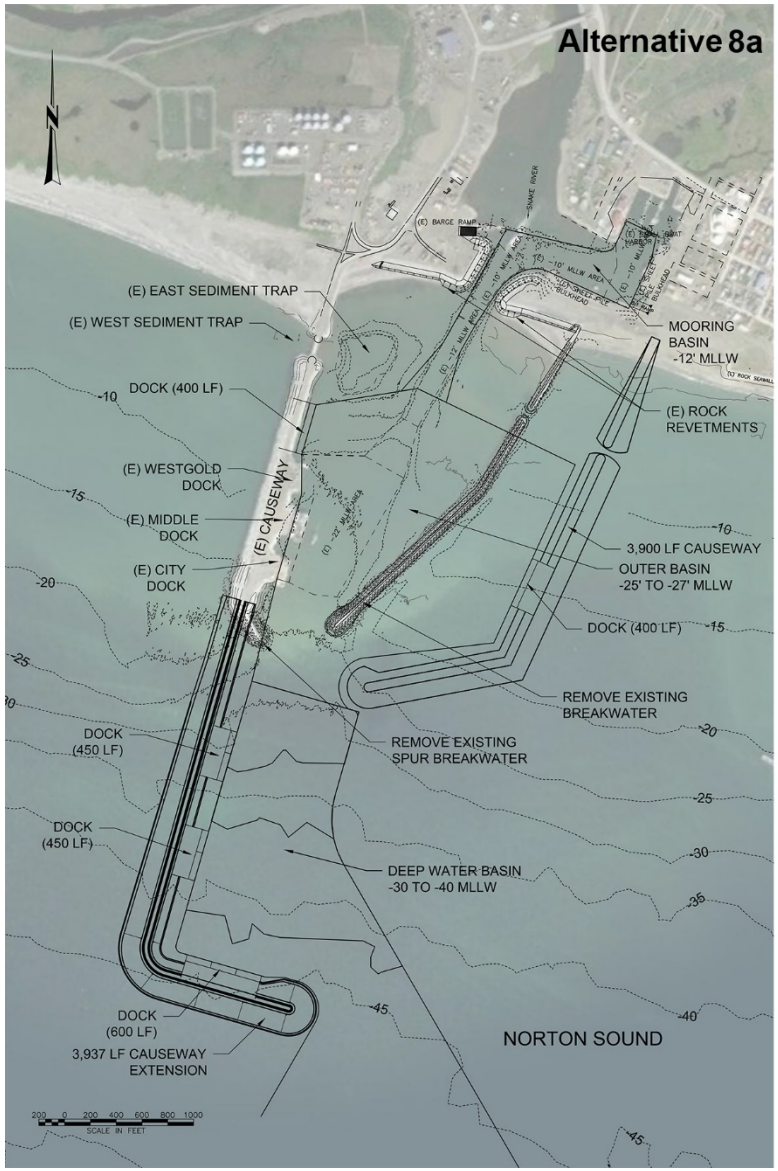

Figure 3-5. Alternative 8a

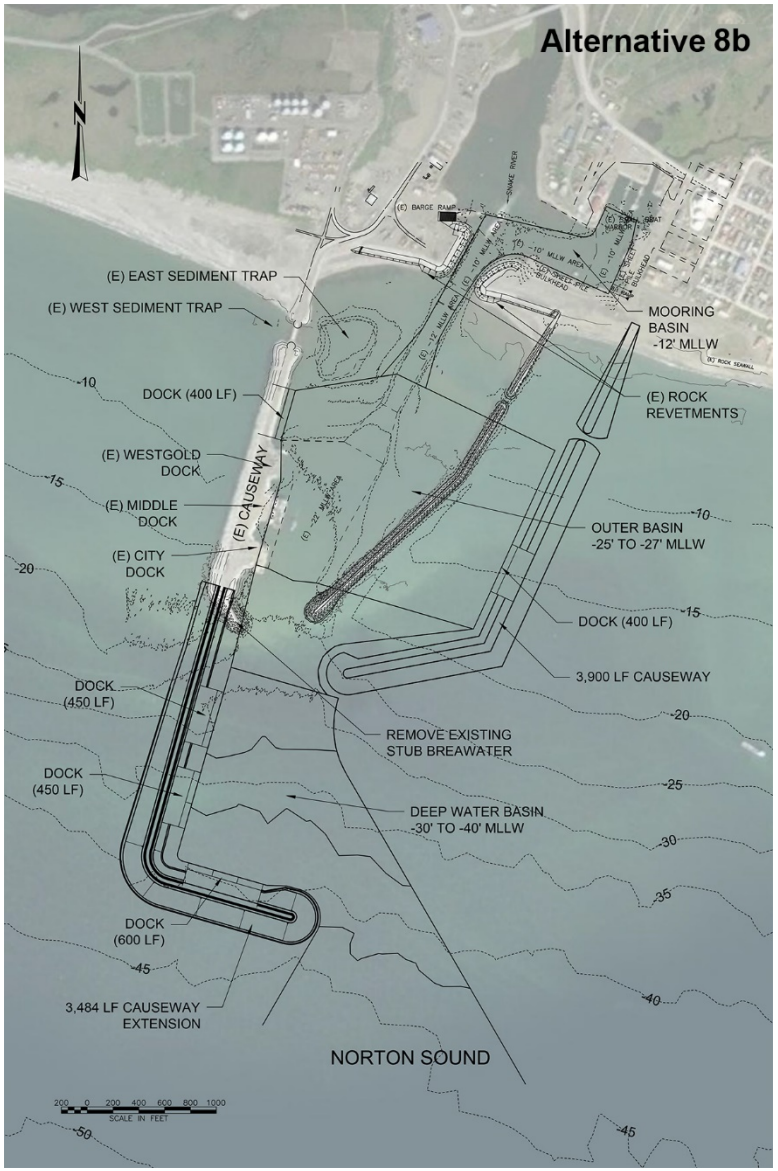

Figure 3-6. Alternative 8b

3. Several areas of sea floor would be deepened by dredging to allow passage of deeper-draft vessels:

a. a new deep water basin at the end of the extended causeway would be dredged to depths of 30 to 40 feet below mean lower low water (MLLW);

b. the existing outer basin would be deepened to 25–27 feet below MLLW, from the current depth of -22 feet MLLW;

c. the existing entrance channel and mooring basin would be deepened to -12 feet MLLW, from the current depth of -10 feet MLLW.

Project construction dredging will remove roughly 700,000 to 2,000,000 cubic yards of sea floor material, depending on the alternative and design depths selected. All material to be dredged will be sampled and analyzed for physical characteristics and chemical content prior to dredging. The current assumption is that most of this material, if found suitable, will be placed for beach nourishment along the base of the Nome seawall, as is currently done with the material from annual maintenance dredging at Nome (figure 2). Alternate disposal methods, such as confined disposal, may be necessary for material not suitable for beneficial placement.

Previous and Current Coordination

Similar modifications to the Nome port facilities were proposed as part of the Arctic Deep Draft studies in 2013-2015. The Corps pursued ESA Section 7 informal consultation with the USFWS Fairbanks Field Office at that time, requesting species lists and providing study status updates, but does not appear to have sought concurrence on determinations of effect at that time (USACE 2015).

Chris Floyd of the Corps (Alaska District Project Management-Civil Works Branch, Environmental Resources Section) met with Amal Ajmi and Bob Henszey of the USFWS Fairbanks Field Office, in Fairbanks on 23 May 2018. The purpose of this meeting was to discuss the new study for Port of Nome Modifications, and future coordination between the Corps and the USFWS under the ESA and the Fish & Wildlife Coordination Act (FWCA).

Affected Species and Evaluation of Effects

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 present in the project area; this list has been confirmed by the USFWS (USFWS 2018):

- Polar bear (*Ursus maritimus*) – Threatened
- Spectacled eider (*Somateria fischeri*) – Threatened
- Steller's eider (*Polysticta stelleri*) – Threatened

Polar Bear. The polar bear is a maritime carnivore dependent on arctic sea ice and the associated assemblage of sea mammals. It is listed as a threatened species throughout its

range (73 FR 28212), due to observed and anticipated changes to its sea ice habitat; in the United States, the polar bear is also protected under the Marine Mammal Protection Act (MMPA). 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).

Critical habitat for polar bears was designated by the USFWS 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. The only CH unit appearing at Nome itself is 'sea ice'. The nearest 'barrier island' CH exists at Safety Sound, roughly 17 miles southeast of Nome, and at Sledge Island, about 23 miles west of Nome (figure 4). No terrestrial denning habitat has been identified along the Norton Sound coast.

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. As mentioned above, polar bears depend on sea ice for a number of purposes, including as a platform from which to hunt and feed upon seals, as habitat on which to seek mates, breed, and sometimes den, and as a vehicle on which 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 must 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 occupying these areas move as much as 600 miles to stay with the retreating pack ice (USFWS 2010, USFWS 2015).

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 (figure 4).

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).

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

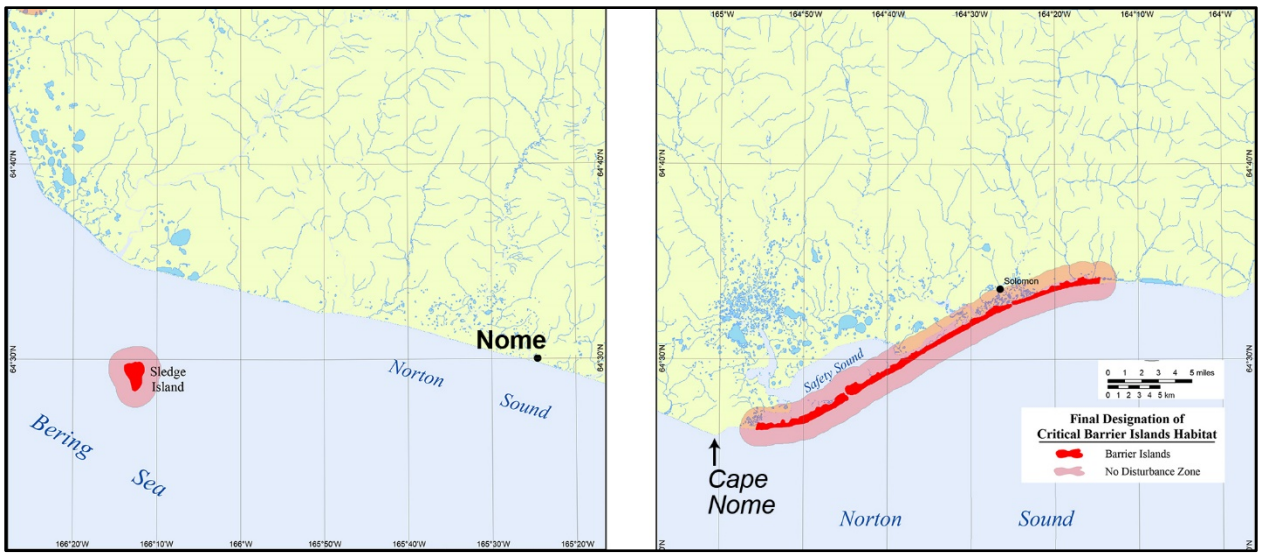

Figure 4. Barrier island polar bear CH identified near Nome (excerpted from maps provided at USFWS 2017).

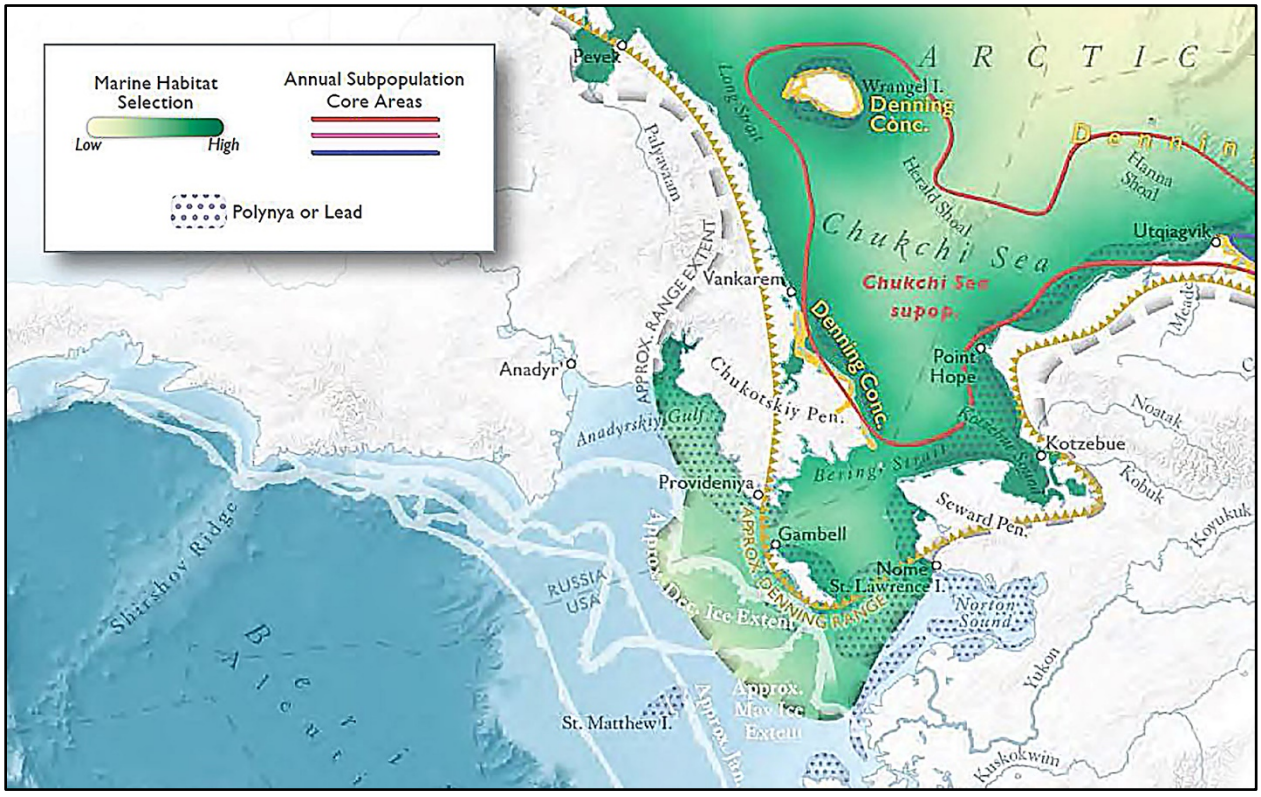

Figure 5. Extent of polar bear winter migration and denning ranges (adapted from Smith, *et al*, 2017).

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).

The great majority of project construction or study activities would occur when ice is absent from the Port of Nome area, and therefore when a polar bear is least likely to be present near Nome. Geotechnical studies needed prior to the start of 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 (figure 4), but outside of the 1-mile no-disturbance zone associated with that CH. A polar bear that found itself near Nome after sea ice has retreated in the spring would be in far more immediate danger from vehicles, hunters, and public safety officers than from construction of the proposed project. The project site is currently a busy sea port and industrial area, and both the construction disturbance and the finished project will be an incremental increase to the human activity and infrastructure that exist there now. It is possible that the extended causeway and altered breakwater 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.

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-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 pack ice of the central Bering Sea south/southwest of St. Lawrence Island (figure 6).

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).

None of the identified spectacled eider concentration areas or CH is in the vicinity of Nome; the closest CH unit, the Eastern Norton Sound Unit, is roughly 80 miles to the east. Spectacled eiders found near Nome would most likely be transients migrating between breeding, molting, and wintering areas.

Project potential impacts on spectacled 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

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

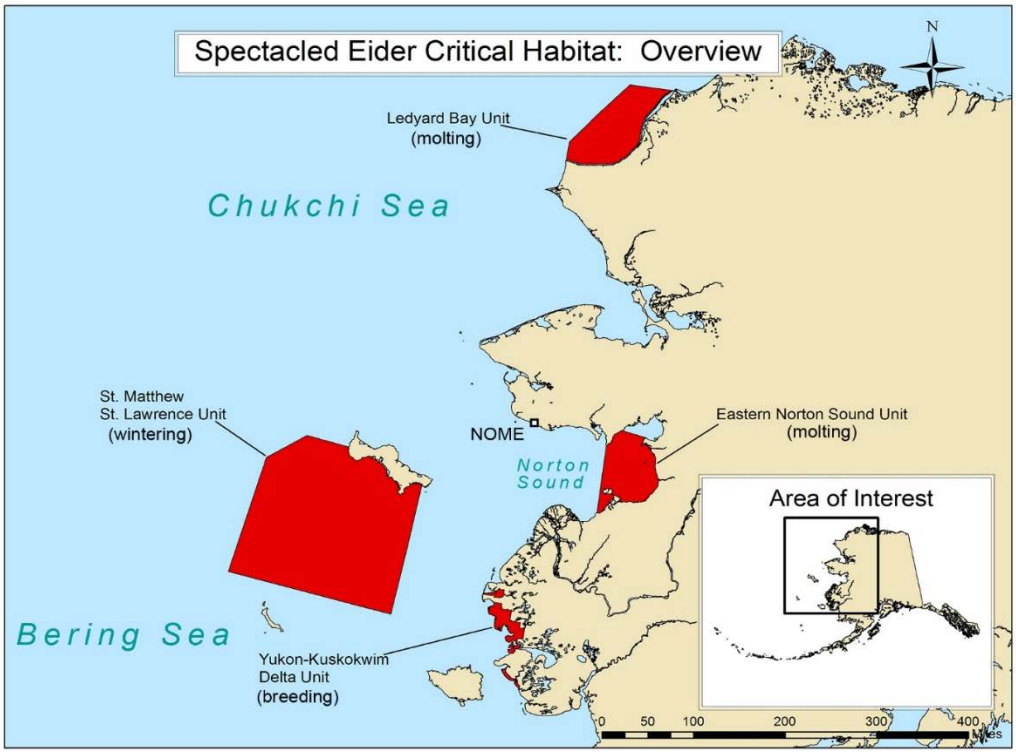

Figure 7. Spectacled eider critical habitat (adapted from USFWS 2013).

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 8). 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).

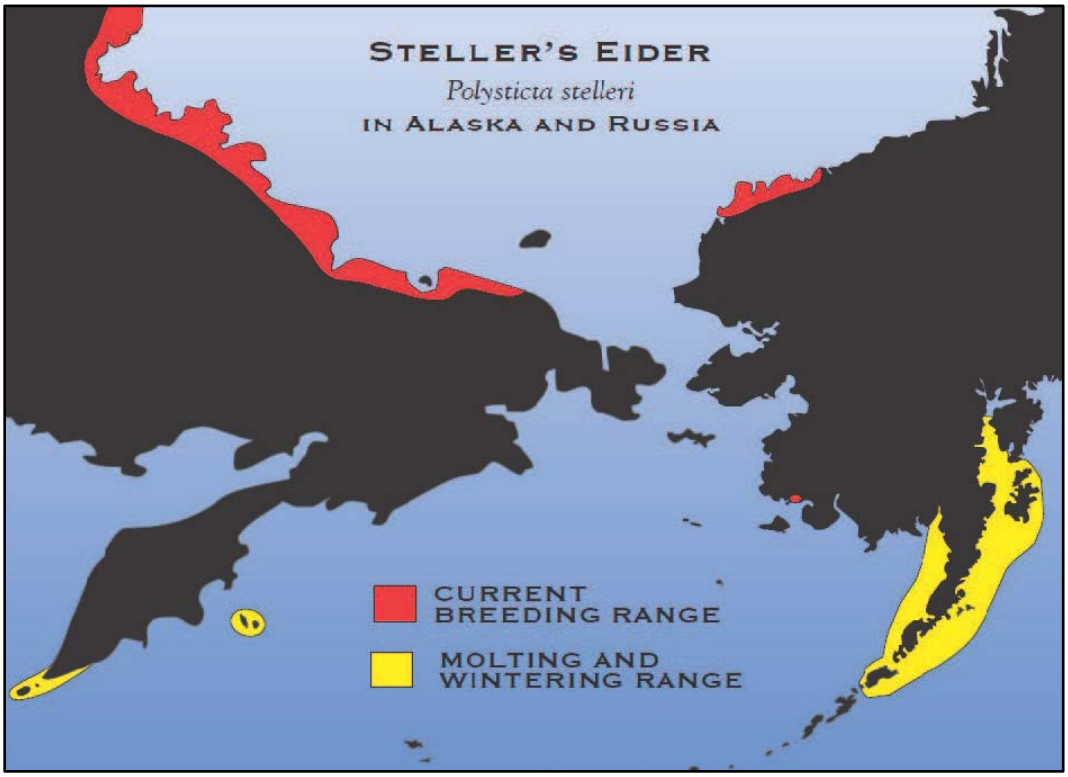

Figure 8. Breeding and wintering range of Steller's eider (USFWS 2013).

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 9).

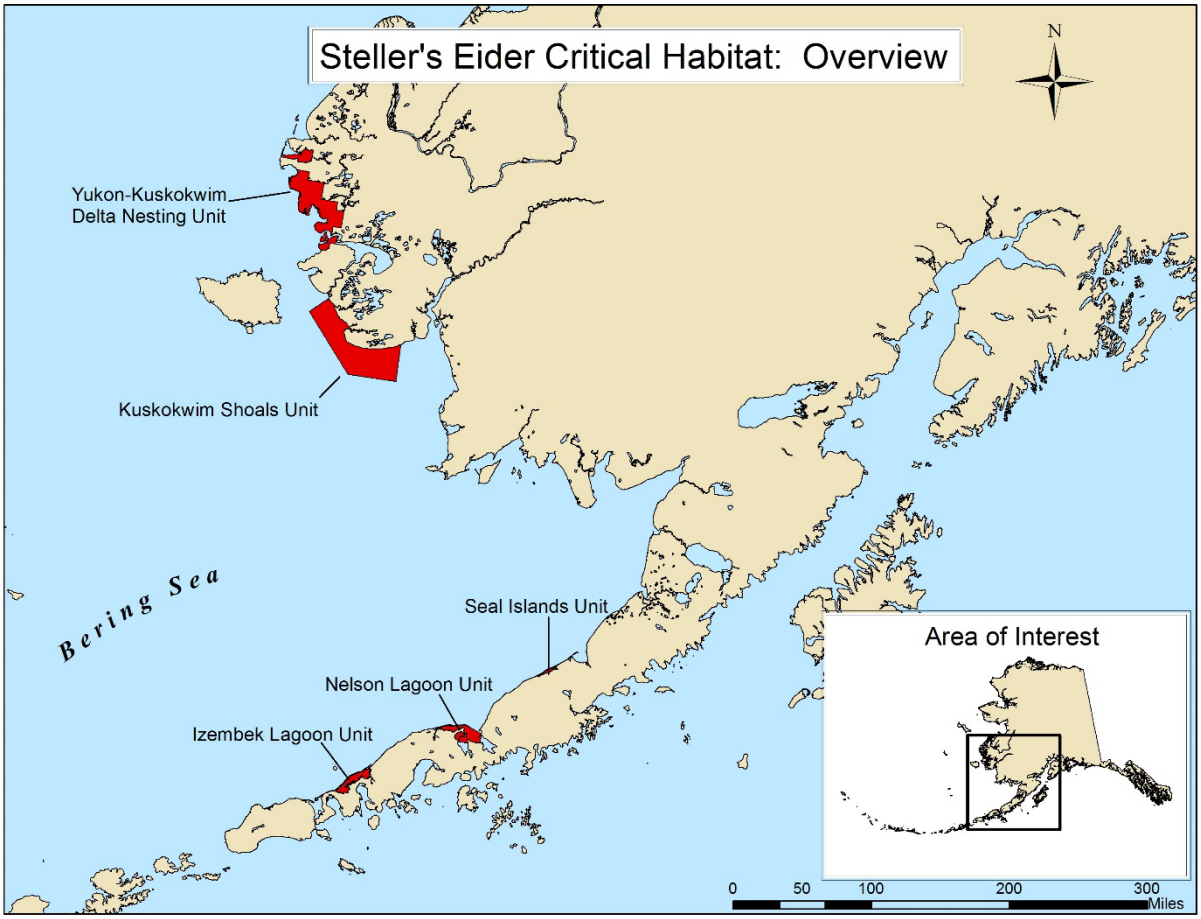

Figure 9. Steller's eider critical habitat (USFWS 2013).

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 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, but large areas of similar, disturbance-free habitat is readily available near the project site. The project site is currently a busy sea port and industrial area, and both the construction disturbance and the finished project will be an incremental increase to the human activity and infrastructure that exist there now.

Conclusion and Determinations

The Corps determines that the planned construction activities may affect, but are not likely to adversely affect the following ESA-listed species, or their critical habitat:

- Polar bears;
- Spectacled eiders;
- Steller's eiders.

The Corps requests concurrence from the USFWS on these determinations.

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

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,

for

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.

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.

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USFWS. 2010. Final Rule, Designation of Critical Habitat for the Polar Bear (*Ursus maritimus*) in the United States, 75 FR 76086. 7 December 2010.

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

Mr. Greg Balogh
Field Office Supervisor, Protected Resources Division
National Marine Fisheries Service
222 W 7th Ave, Room 552
Anchorage, AK, 99513

31 December 2018

Dear Mr. Balogh,

The U.S. Army Corps of Engineers Alaska District (Corps) is preparing an environmental assessment (EA) for the proposed "Port of Nome Modifications" project, an expansion of the existing port and harbor facilities at Nome, Alaska (figures 1 and 2). The purpose of this letter is to:

- provide an update on construction alternatives that are under consideration;
- present the Corps' 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 National Marine Fisheries Service (NMFS).

Figure 1. Project location and vicinity (aerial imagery dated Aug 2017, Google Earth).

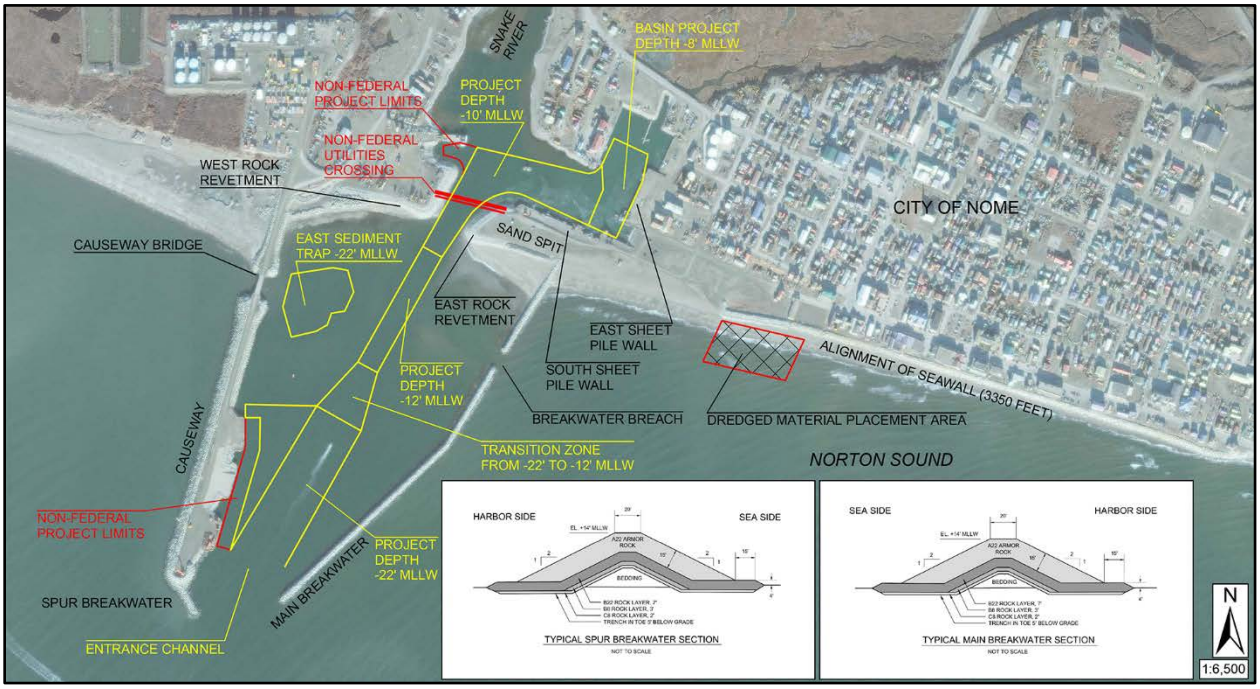

Figure 2. Layout of existing port facilities at Nome (adapted from USACE 2015).

1. Project Description

The Corps is currently studying six construction alternatives (Alternatives 3a, 3b, 3c, 4a, 8a, and 8b; figures 3-1 through 3-6) in an effort to identify the most useful, cost-effective, and least environmentally-damaging project. From an environmental perspective, the construction alternatives are all similar to one another, differing primarily in the extent, rather than type or location, of their impacts.

Each alternative includes several modification elements:

1. The existing west rubblemound causeway (figure 2) would be lengthened into an L-shaped structure extending into deeper water; the proposed extensions range from 2,340 to 3,937 linear feet (figures 3-1 to 3-6). One to three new concrete caisson docks would be added to the causeway extension. Alternatives 3a, 4a, 8a, and 8b also add a new sheet pile bulkhead dock to the existing causeway just south of the fish passage gap.

2. The existing east rubblemound breakwater (figure 2) would be:
   a. modified to a minor degree (Alternatives 3a and 3c); or
   b. removed, and a new rubblemound causeway constructed, tying into shore at the same location as the existing breakwater (Alternative 4a); or
   c. removed, and a new rubblemound causeway constructed, tying into shore about 600 feet to the east of the existing breakwater location (Alternatives 3b, 8a, and 8b). A new east causeway would include one or two concrete caisson docks.

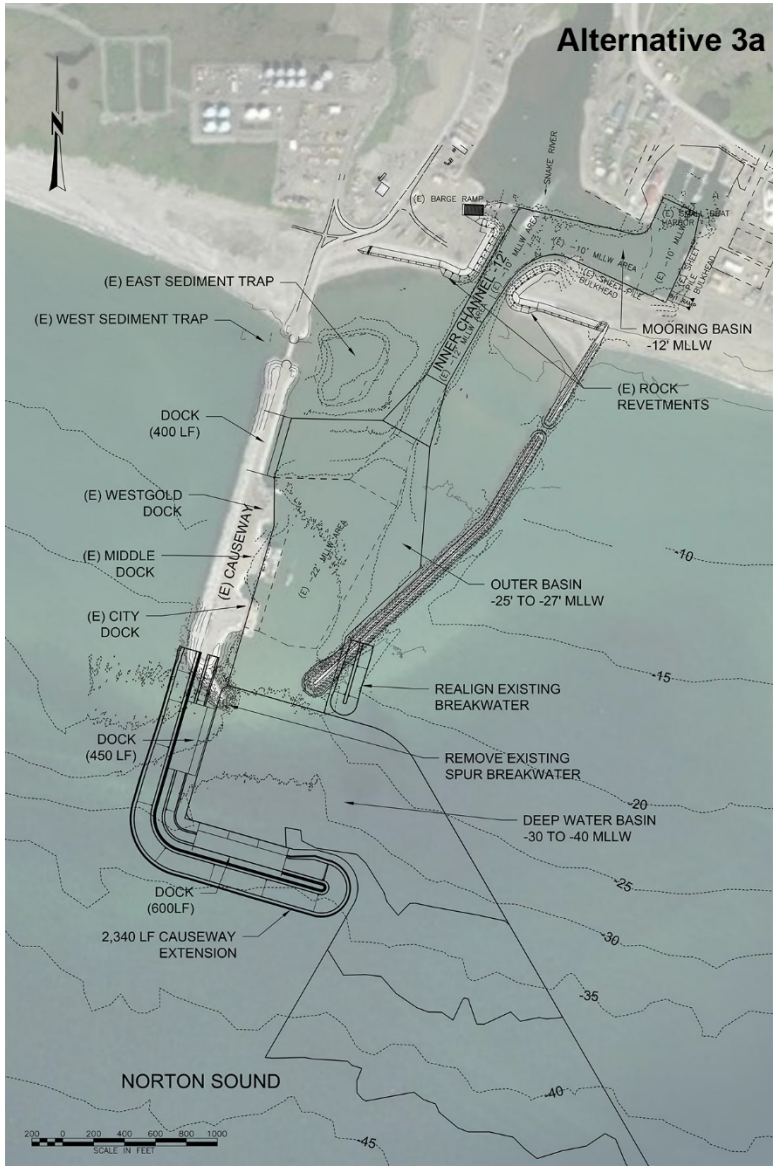

Figure 3-1. Alternative 3a

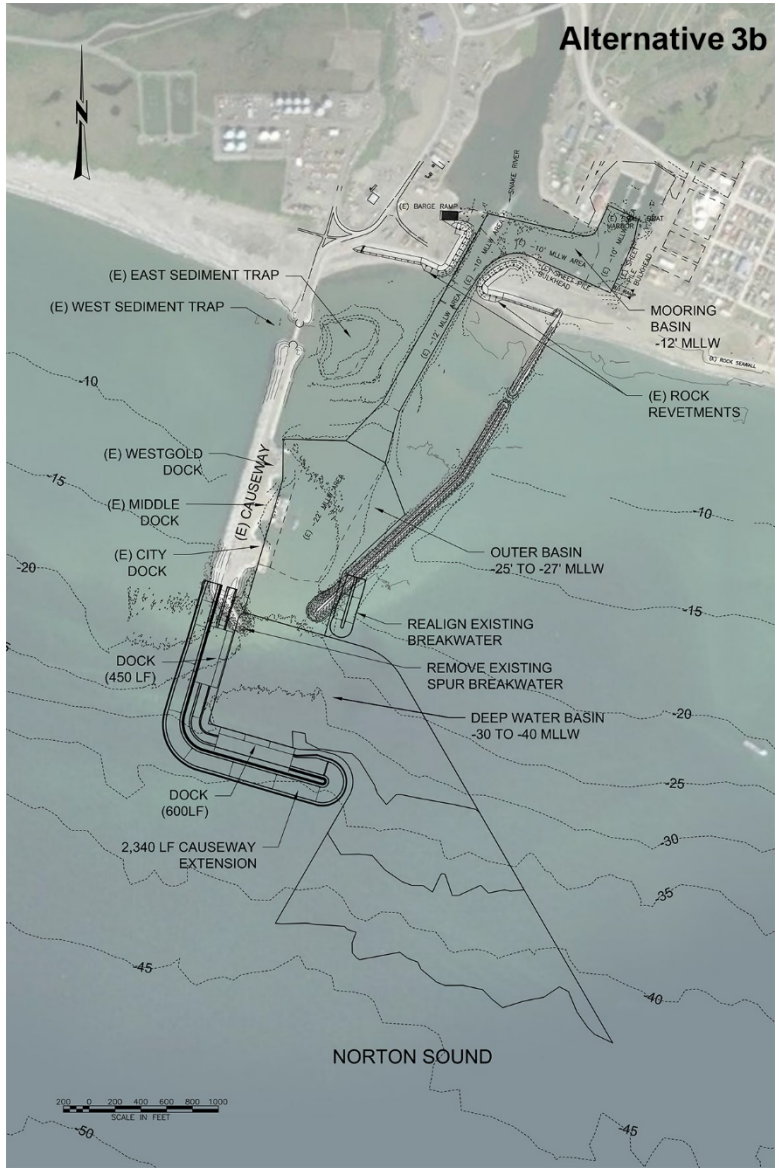

Figure 3-2. Alternative 3b

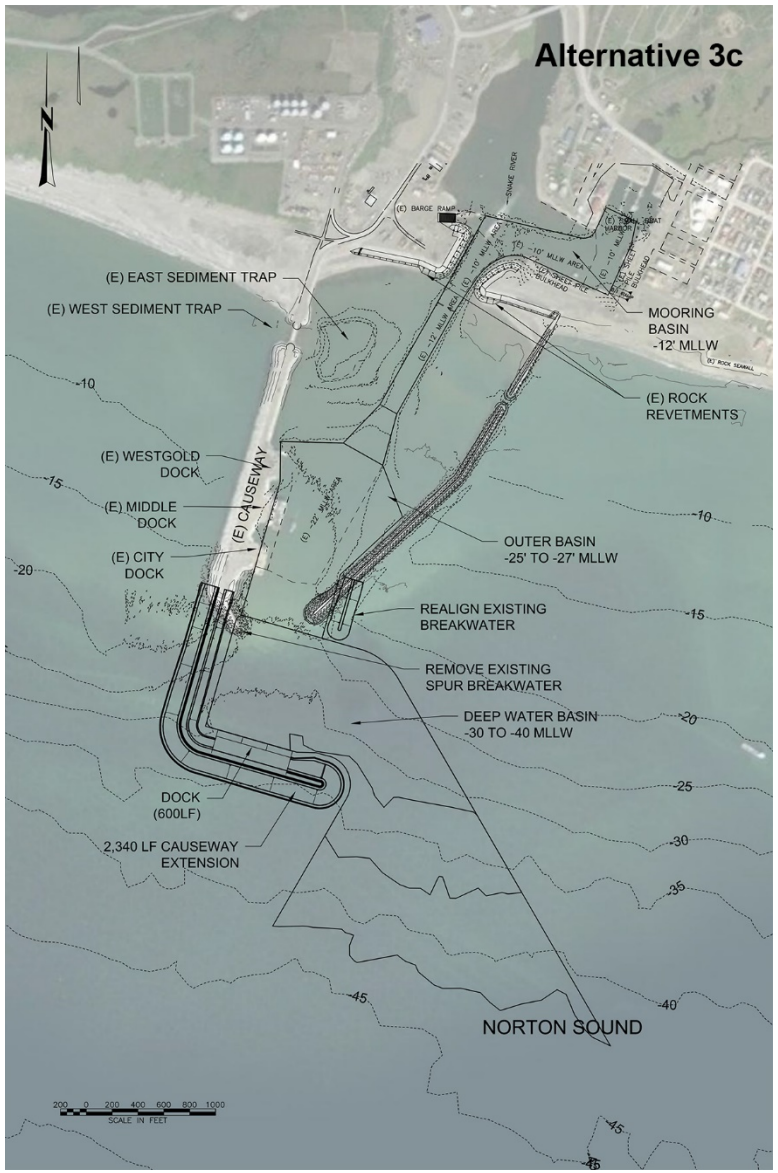

Figure 3-3. Alternative 3c

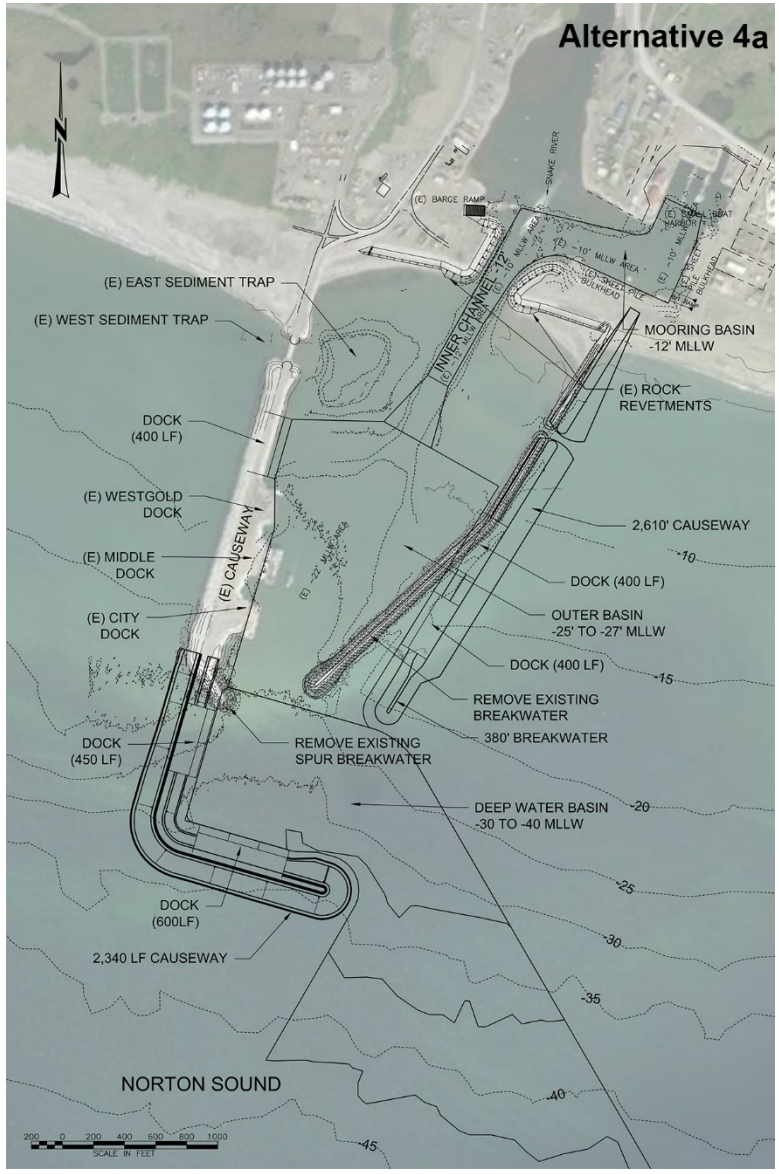

Figure 3-4. Alternative 4a

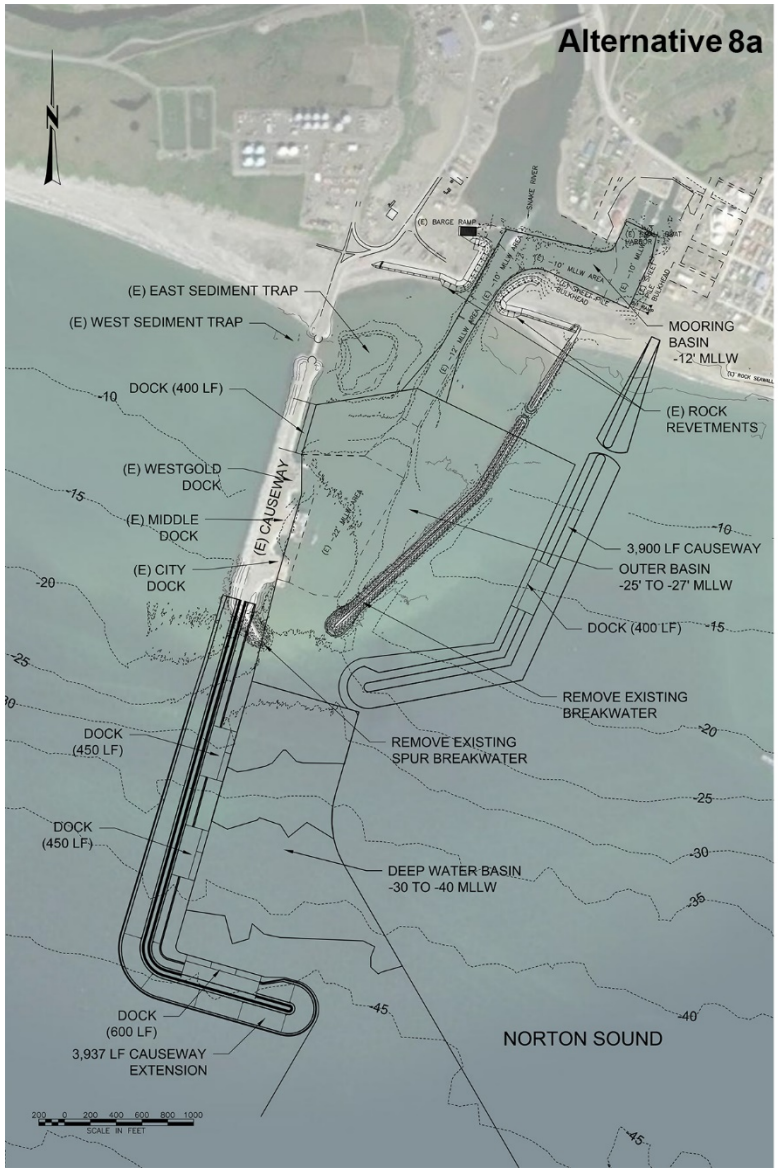

Figure 3-5. Alternative 8a

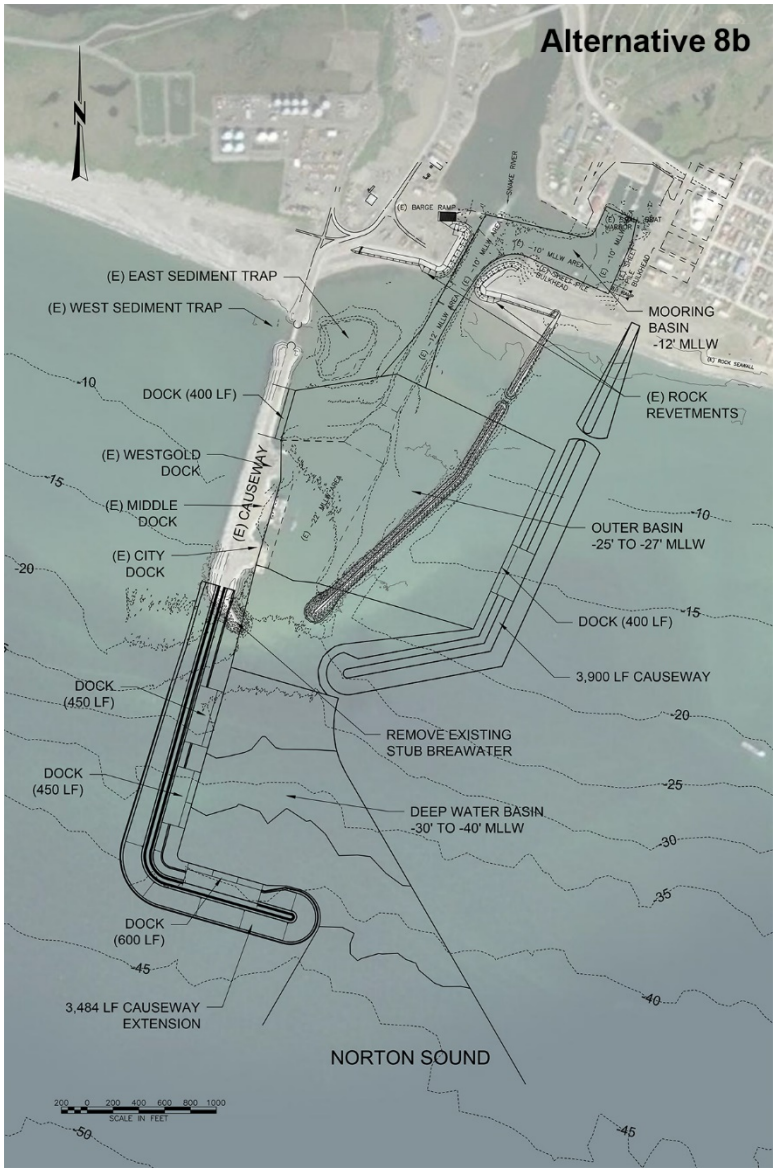

Figure 3-6. Alternative 8b

3. Several areas of sea floor would be deepened by dredging to allow passage of deeper-draft vessels:

a. a new deep water basin at the end of the extended causeway would be dredged to depths of 30 to 40 feet below mean lower low water (MLLW);

b. the existing outer basin would be deepened to 25–27 feet below MLLW, from the current depth of -22 feet MLLW;

c. the existing entrance channel and mooring basin would be deepened to -12 feet MLLW, from the current depth of -10 feet MLLW.

Project construction dredging will remove roughly 700,000 to 2,000,000 cubic yards of sea floor material, depending on the alternative and design depths selected. All material to be dredged will be sampled and analyzed for physical characteristics and chemical content prior to dredging. The current assumption is that most of this material, if found suitable, will be placed for beach nourishment along the base of the Nome seawall, as is currently done with the material from annual maintenance dredging at Nome (figure 2). Alternate disposal methods, such as confined disposal, may be necessary for material not suitable for beneficial placement.

2. Affected Species

Based on discussions with the NMFS and online information provided by the NMFS, the species listed in Table 1 are identified as ESA-listed species under NMFS jurisdiction that may be present in the project area, or along the route of project construction-related vessels traveling a presumptive route between Anchorage, AK, and Nome; this list is expanded from one confirmed by the NMFS (NMFS 2018).

2.1 Ringed Seal and Bearded Seal

Ringed seals and bearded seals are ice seals, and are most commonly associated with ice floes and pack ice. The bulk of ice seal populations tend to move southward or northward in close association with the seasonal advancing and retreating of sea ice. The ringed seal is found in the Northern Hemisphere with a circumpolar distribution ranging from 35°N to the North Pole. There is only one recognized stock of ringed seals in U.S. waters: the arctic stock.

Bearded seals are found in the Northern Hemisphere with a circumpolar distribution that does not extend farther north than 80°N and inhabit waters less than 650 feet (200 m) deep. The Alaska stock of bearded seal is the only stock found in U.S. waters.

Arctic ringed seals and Beringia DPS bearded seals were listed as endangered on December 28, 2012; but the District Court of Alaska issued a decision vacating the listing. In October 2016, the Ninth Circuit Court of Appeals found that in light of the NMFS's robust rulemaking process, and pursuant to a highly deferential standard of review, the NMFS's final rule listing the Beringia distinct population segment of bearded seals as threatened was not arbitrary or capricious, and its listing was supported by substantial evidence (Alaska Oil and Gas Association vs Pritzker, 2016). The NMFS has also appealed the District Court of Alaska's decision to vacate the listing of Arctic ringed seals; the court's decision is pending at the time of this analysis. Critical habitat

Table 1. ESA-listed species

Species	Listed Population	ESA Status
Steller sea lion, *Eumetopias jubatus*	Western DPS	Endangered
Ringed seal, *Pusa hisipida*	Arctic DPS	Threatened (under appeal)
Bearded seal, *Erignathus barbatus*	Beringia DPS	Threatened
Bowhead whale, *Balaena mysticetus*	All	Endangered
Humpback whale, *Megaptera novaeangliae*	W. Pacific DPS	Endangered
	Mexico DPS	Threatened
N. Pacific right whale, *Eubalaena japonica*	All	Endangered
Beluga whale, *Delphinapterus leucas*	Cook Inlet DPS	Endangered
Gray whale, *Eschrichtius robustus*	Western North Pacific	Endangered
Fin whale, *Balaenoptera physalus*	All	Endangered
Sperm whale, *Physeter macrocephalus*	All	Endangered
Blue whale, *Balaenoptera musculus*	All	Endangered

DPS: Distinct Population Segment

was proposed in conjunction with the listing of ringed seals in December 2014; the rule has not been finalized due to legal challenge to the listing of ringed seals as endangered (79 FR 73010).

Ringed seals are primarily associated with shore-fast ice, whereas other ice seals prefer moving ice. Near Nome, ringed seals are often seen using open water offshore from Cape Nome and Safety Sound in winter and spring. Most seals follow the ice pack north as it retreats in summer, but some remain in open water all summer (Oceana and Kawerak 2014).

Bearded seals are generally found in moving ice and areas of open water. They can be found in the Bering Strait region all year, although a large portion of the population migrates north into the Arctic Ocean during the summer and early fall. Many juveniles remain in the Bering Sea during summer, feeding in bays and estuaries. Like the ringed seals, bearded seals make use of the open water found near Cape Nome and Sledge Island in winter (Oceana and Kawerak 2014).

2.2 Steller Sea Lion

The Steller sea lion was listed as a threatened species under the ESA in November 1990 (55 FR 49204). In 1997, NMFS reclassified Steller sea lions into two DPSs based on genetic studies and other information (62 FR 24345); at that time, the eastern DPS was listed as threatened and the western DPS was listed as endangered (NMFS 2008).

Steller sea lions prefer the colder temperate to sub-arctic waters of the North Pacific Ocean. Haul outs and rookeries usually consist of beaches (gravel, rocky or sand), ledges, and rocky reefs. In the Bering Sea and Okhotsk Sea, sea lions may also haul out on sea ice, but this is considered atypical behavior. Critical habitat (CH) for Steller sea lions was designated in 1993 and is described in 50 CFR §226.202. Critical habitat in Alaska west of 144°W longitude consists of:

a) Aquatic zones that extend 20 nautical miles (nm), or 37 km, seaward of each major haul out and major rookery (as listed in Tables 1 and 2 to 50 CFR §226).
b) Terrestrial zones that extend 3,000 feet (0.9 km) landward from each major haul out and major rookery.
c) Air zones that extend 3,000 feet (0.9 km) above the terrestrial zone of each major haul out and major rookery in Alaska.
d) Three special aquatic foraging areas: the Shelikof Strait area, the Bogoslof area, and the Seguam Pass area, as specified at 50 CFR §226.202(c).

The great majority of designated CH sites for the Western DPS are along the Aleutian Islands and Alaska Peninsula; a project-related barge traveling from Anchorage to Nome would pass through the 20-nm aquatic zones of numerous CH haul outs and rookeries within Shelikof Strait and Unimak Pass, and also through the Shelikof Strait and Bogoslof special aquatic foraging areas. The nearest Steller sea lion CH to Nome is on the east shore of St. Lawrence Island, about 140 miles to the southwest. However, Steller sea lions, especially juveniles and non-breeding males, can range through waters far beyond their primary use areas. Steller sea lions are known to occasionally forage in Norton Sound and farther north, and have been seen hauled out in small numbers at Sledge Island, about 22 miles west of Nome (Oceana and Kawerak 2014). Observations suggest that Steller sea lions are becoming more common in the northern Bering Sea, adjusting their range perhaps in response to climate change-driven movement of pelagic fish prey species, such as Pacific cod, northward (Sheffield 2018).

2.3 Bowhead Whale

Bowhead whales are the most ice-adapted of large whales, living entirely within or near sea ice in the Arctic Ocean, Bering Sea, and Sea of Okhotsk. They are able to break through sea ice up to two feet thick to create breathing holes. Four distinct populations of bowheads are recognized worldwide; the only population found in U.S. waters is the Western Arctic stock, also known as the Bering-Chukchi-Beaufort stock. The United States listed all bowhead whales as endangered under the ESA in 1973 (NOAA 2018).

Western Arctic bowheads winter in the Bering Sea along the southern edge of pack ice or within polynyas. In March and April, most bowheads are thought to migrate along leads in the ice through the Chukchi Sea to summering areas in the Beaufort Sea. From August to October, they migrate back west to Point Barrow, and pass through the Bering Strait by November (ADFG 2008c).

Bowhead whales are most likely to found in the vicinity of Nome during the winter, as sea ice extends into Norton Sound. No CH has been established for this species.

2.4 Humpback Whale

Humpback whales were originally listed as endangered with the passage of the ESA in 1973. The NMFS has recently reviewed the listing status of humpback whales; guidance from the NMFS on humpback whales occurring in Alaskan waters (NMFS 2016a) discusses three DPS:

1. Western North Pacific DPS (ESA endangered);
2. Mexico DPS (ESA threatened); and
3. Hawaii DPS (not listed under the ESA).

Whales from these three DPSs overlap to some extent in feeding grounds off Alaska. An individual humpback whale encountered in the Bering Sea has an 86.5 percent probability of being from the unlisted Hawaii DPS, an 11.3 percent chance of being from the threatened Mexico DPS, and a 4.4 percent chance of being from the endangered Western North Pacific DPS (Table 2). No CH is designated in Alaskan waters for humpback whales.

Table 2. Humpback Whale DPS Distribution in Alaskan Waters

Summer Feeding Areas	Hawaii DPS (not listed)	Mexico DPS (threatened)	Western North Pacific DPS (endangered)
Aleutian Islands, Bering, Chukchi, and Beaufort Seas	86.5%	11.3%	4.4%
Gulf of Alaska	89.0%	10.5%	0.5%

The humpback whale is seasonally migratory, mating and calving in tropical and subtropical waters in winter, but spending summers feeding in temperate and subpolar seas. In Alaskan waters, humpbacks concentrate in southeast Alaska, Prince William Sound, lower Cook Inlet, and along the Aleutian Islands in summer. Some humpback whales summer in the Bering Sea, even venturing into the Chukchi Sea. In 2007, humpbacks were spotted in the Beaufort Sea east of Utqiagvik, suggesting a northward expansion of their summer feeding range (ADFG 2018a). Humpback whales are most likely to be in the vicinity of Nome during the summer and fall.

2.5 North Pacific Right Whale

The North Pacific right whale is among the rarest of the great whale species. It was originally listed as the “northern right whale” under the Endangered Species Conservation Act, and continued to be listed as endangered following the passage of the ESA in 1973. The listing was later divided into two separate endangered species: North Pacific right whales and North Atlantic right whales.

Two areas of CH were designated for North Pacific right whales in 2008 (73 FR 19000; figure 4). One of these is in the Gulf of Alaska south of Kodiak Island; the other is within Bristol Bay

north of the Alaska Peninsula and eastern Aleutian Islands. Either of these critical habitat areas could potentially be along the route of project-related shipping, although barges are more likely to travel the more direct route through the relatively sheltered waters of Shelikof Strait rather than run south of Kodiak Island.

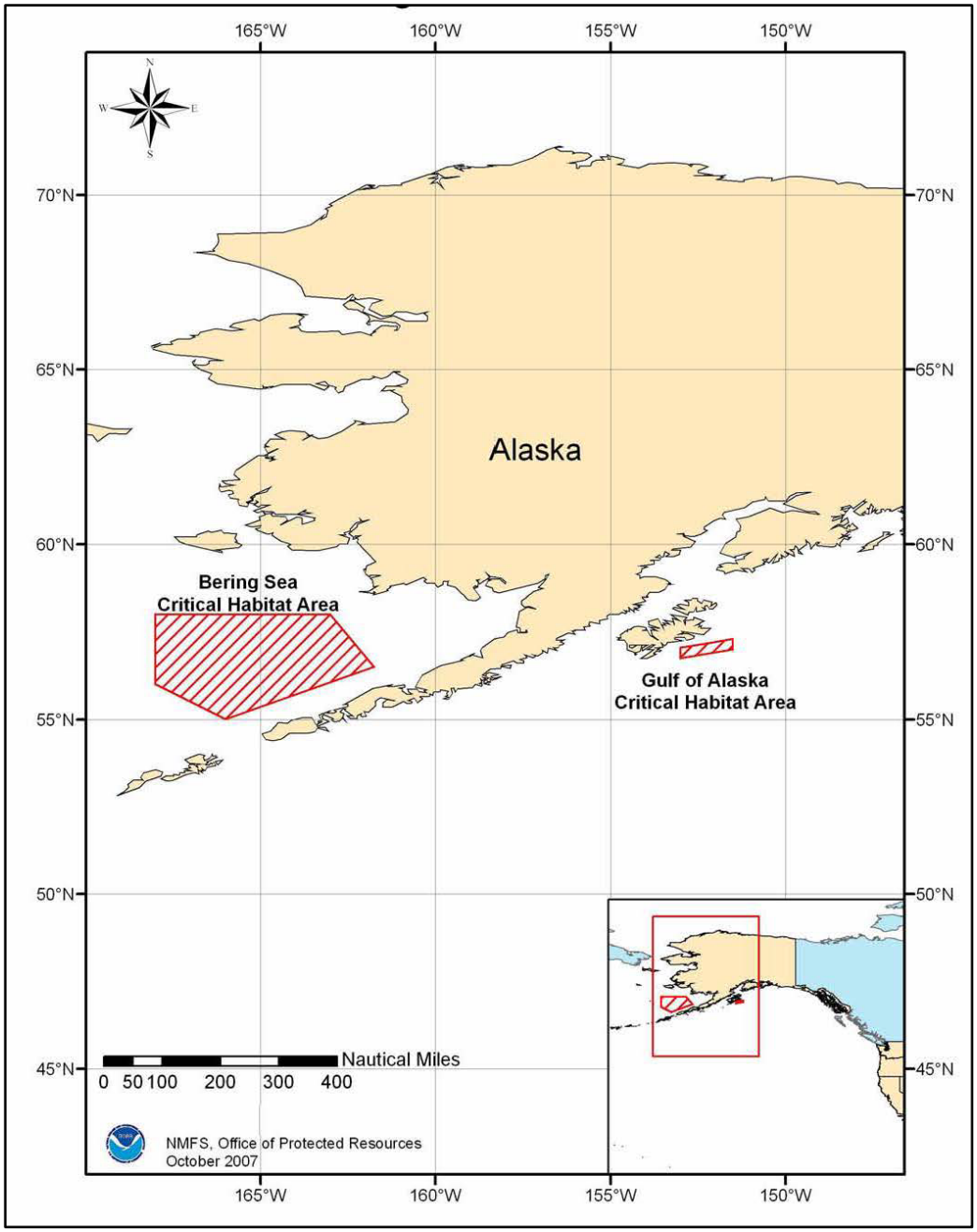

Figure 4. North Pacific Right Whale critical habitat.

North Pacific right whales are found from Baja California to the Bering Sea with the highest concentrations in the Bering Sea, Gulf of Alaska, Okhotsk Sea, Kuril Islands, and Kamchatka area. They are primarily found in coastal or shelf waters. Seasonal distribution of this species is

poorly understood (NMFS 2013). In the spring through the fall their movements follow the distribution of prey, primarily high densities of zooplankton. In the winter, pregnant females move to shallow waters in low latitudes to calve; the winter habitat of the rest of the population is unknown (ADFG 2018b). This species would most likely be present in the vicinity of Nome in the summer.

2.6 Western North Pacific Gray Whale

Gray whales occur in two isolated geographic distributions within the North Pacific Ocean: the Eastern North Pacific stock, found along the west coast of North America, and the Western North Pacific or "Korean" stock, found along the coast of eastern Asia. A small number of endangered Western North Pacific DPS of gray whales may make their way to the coastal waters of North America during the summer and autumn feeding season, mixing with the unlisted Eastern Pacific population (Moore and Weller 2013).

Most of the Eastern North Pacific stock spends the summer feeding in the northern Bering and Chukchi Seas, but gray whales have also been reported feeding along the Pacific coast during the summer, in waters off Southeast Alaska, British Columbia, Washington, Oregon, and California. In the fall, gray whales migrate from their summer feeding grounds, heading south along the coast of North America to spend the winter in their breeding and calving areas off the coast of Baja California, Mexico. Calves are born in shallow lagoons and bays from early January to mid-February. From mid-February to May, the Eastern North Pacific stock of gray whales can be seen migrating northward with newborn calves along the West Coast of the U.S. No critical habitat is designated for this species.

2.7 Beluga Whale

Beluga whales are small, toothed whales generally found in shallow coastal and estuarine waters The Cook Inlet DPS of beluga whales could be encountered anywhere in Cook Inlet year round, although they tend to concentrate at the northern end of Cook Inlet during the summer months, then disperse more widely through the inlet during autumn, winter, and spring (NMFS 2016b). Critical habitat designated for Cook Inlet belugas is accordingly divided into a CH Area 1 protecting the summer concentration area, and a CH Area 2 representing the broader coastal and estuarine habitat used in the rest of the year (figure 5).

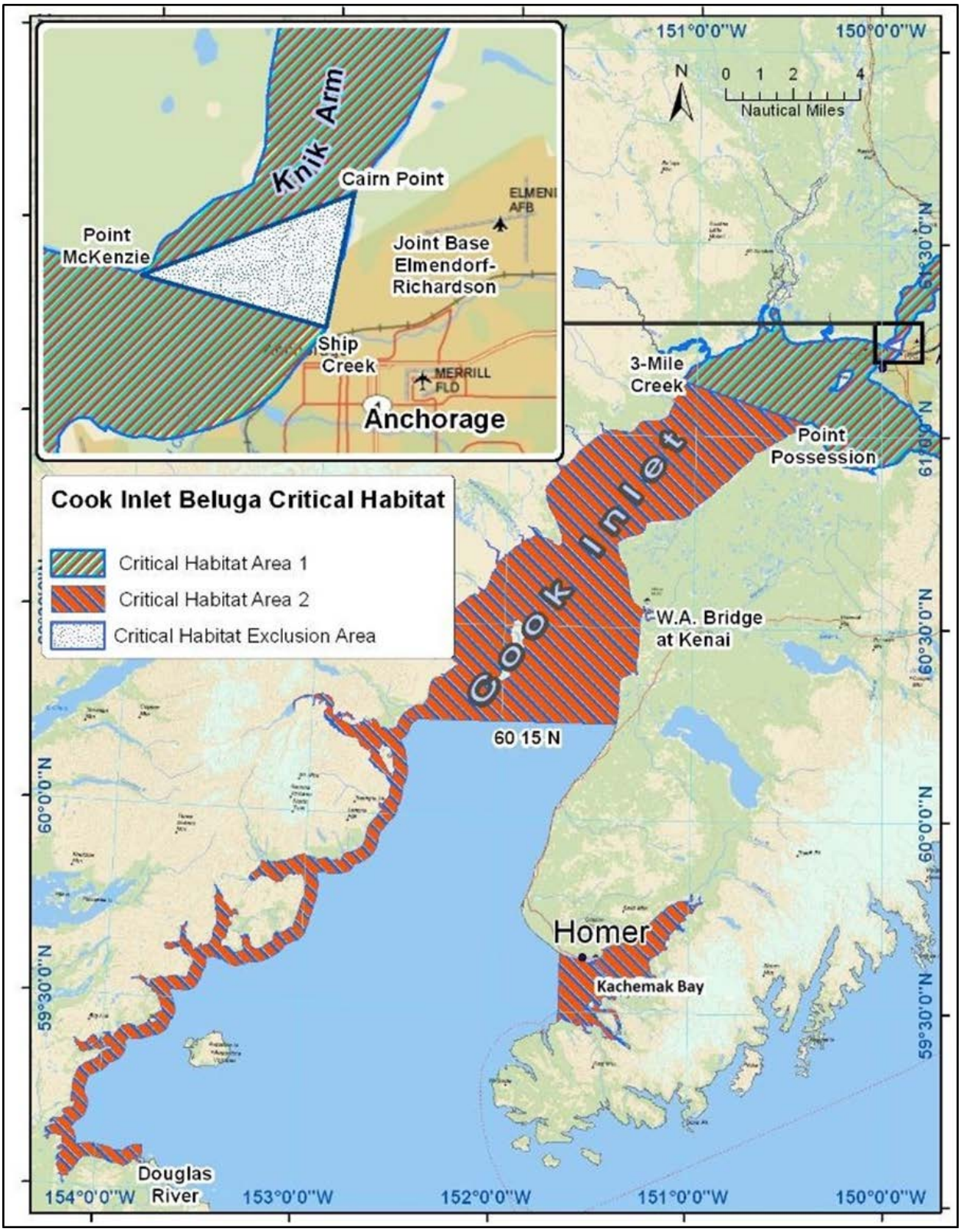

Figure 5. Critical Habitat for Cook Inlet Beluga Whales (NMFS 2016b).

2.8 Fin, Sperm, and Blue Whale

These great whales are deep-water oceanic species that range throughout the North Pacific Ocean and would be encountered only incidentally by project-related vessels. Fin whales are migratory, generally spending the spring and early summer in cold, high latitude feeding waters. Populations tend to return to low latitudes for the winter breeding season, though may remain in residence in their high latitude ranges if food resources remain plentiful. In the eastern Pacific, fin whales typically spend the winter off the central California coast and into the Gulf of Alaska. In summer, they migrate as far north as the Chukchi Sea (ADFG 2008).

Sperm whales generally venture no further north into the Bering Sea than about 62°N latitude, south of St. Lawrence Island, preferring to feed in the Gulf of Alaska and along the Aleutian Islands. There is no well-defined north-south migration of North Pacific sperm whales. The females and young remain in tropical and temperate waters year around, with males joining them in the breeding season, but ranging into higher latitudes to feed at other times (ADFG 2018c).

Blue whales in Alaskan waters are most likely to be found in the Gulf of Alaska and along the Aleutian Islands. They are thought to move into high-latitude waters in the spring, and spend winters in temperate or tropical areas, but little is known about population-wide movements (ADFG 2018d).

No CH has been designated for fin, sperm, or blue whales.

2.9 Non-Listed Marine Mammals

The Corps acknowledges that the following marine mammals, not currently listed under the ESA, may be present in the vicinity of the proposed project site (NMFS 2018). These species, as well as the ESA-listed species discussed above, are protected by the Marine Mammal Protection Act (MMPA), under NMFS jurisdiction:

- Spotted seal
- Ribbon seal
- Harbor porpoise
- Beluga whale (other than Cook Inlet DPS)
- Killer whale
- Gray whale (other than Western North Pacific DPS)
- Minke whale
- Sei whale
- Stejneger's beaked whale

3. Evaluation of Effects

As the proposed project may affect many of the species discussed above in similar ways, the evaluation of potential effects is organized here by type of effect, rather than individual species. The project may have short-term potential effects associated with construction, as well as long-term effects caused directly or indirectly by the finished project. None of the ESA-listed species in Table 1 are known to congregate at or preferentially use habitat in the project area. Any

project effects are likely to be on individual animals that are incidentally in the vicinity of construction activities or project-related vessel traffic.

Generally speaking, marine mammals face common threats from human activities:

- Vessel strikes
- Noise and disturbance
- Direct impacts from human fishing (e.g., entanglement in fishing gear)
- Indirect impacts from human fishing (e.g., competition for food resources)
- Contaminants and pollutants
- Habitat degradation caused by human activities
- Hunting and illegal killings

3.1 Short-Term Effects from Construction-Related Activities

The major in-water construction activities under all alternatives will consist of dredging material from the seabed to create and deepen navigation channels and basins, and placing rock for extended or new breakwaters/causeways. The main potential threats to marine mammals from these activities include noise and disturbance, vessel strikes, and release of pollutants. Virtually all construction work will be performed when ice is absent.

3.1.1 Noise and Disturbance: Since 1997, NMFS has used generic sound exposure thresholds to determine whether an activity produces underwater sounds that might result in impacts to marine mammals (70 FR 1871). The NMFS recently developed comprehensive guidance on sound levels likely to cause injury to marine mammals through onset of permanent and temporary threshold shifts (PTS and TTS; Level A harassment; 81 FR 51693). The NMFS is in the process of developing guidance for behavioral disruption (Level B harassment). However, until such guidance is available, NMFS uses the following conservative thresholds of underwater sound pressure levels (measured in micropascals, or µPa), expressed in root mean square (rms), from broadband sounds that cause behavioral disturbance, and referred to as Level B harassment under section 3(18)(A)(ii) of the MMPA.

Under the PTS/TTS Technical Guidance (NMFS 2016c), the NMFS uses the following thresholds for underwater sounds that cause injury, referred to as Level A harassment under section 3(18)(A)(i) of the MMPA. These acoustic thresholds are presented using dual metrics of cumulative sound exposure level (LE) and peak sound level (PK) for impulsive sounds and LE for non-impulsive sounds:

- impulsive sound: 160 dB re 1 μPa_{rms}
- continuous sound: 120 dB re 1μPa_{rms}

Table 3. Marine Mammal Hearing Groups and Level A Acoustic Thresholds

Hearing Group	Relevant ESA Species	Generalized Hearing Range	PTS Onset Acoustic Thresholds	
			Impulsive	Non-Impulsive
Low-Frequency Cetaceans (LF)	Humpback whale NP right whale NWP gray whale Blue whale Fin whale	0.007 to 35 kHz	$L_{pk,flat}$: 219 dB $L_{E,LF,24h}$: 183 dB	$L_{E,LF,24h}$: 199 dB
Mid-Frequency Cetaceans (MF)	Sperm whale Beluga whale	0.15 to 160 kHz	$L_{pk,flat}$: 230 dB $L_{E,MF,24h}$: 185 dB	$L_{E,MF,24h}$: 198 dB
High-Frequency Cetaceans (HF)	Porpoises	0.275 to 160 kHz	$L_{pk,flat}$: 202 dB $L_{E,HF,24h}$: 155 dB	$L_{E,MF,24h}$: 198 dB
Phocid Pinnipeds (PW)	Ringed seal Bearded seal Harbor seal Spotted seal	0.05 to 86 kHz	$L_{pk,flat}$: 218 dB $L_{E,PW,24h}$: 185 dB	$L_{E,PW,24h}$: 201 dB
Otariid Pinnipeds (OW)	Steller sea lion	0.06 to 39 kHz	$L_{pk,flat}$: 232 dB $L_{E,OW,24h}$: 203 dB	$L_{E,OW,24h}$: 219 dB

PTS: Permanent Threshold Shift: a permanent reduction in the ability to hear.
kHz: kilohertz (sound frequency)
dB: Decibels, unweighted (sound intensity)
L_{pk}: Peak sound level; "flat" = unweighted within the generalized hearing range.
L_E: Cumulative sound level; "24h" = 24-hour cumulative period.
LF, MF, HF, PW, OW: defined in "Hearing Group" column
(Adapted from NMFS 2016c)

For air-transmitted noise, NMFS uses the following threshold for in-air sound pressure levels from broadband sounds that cause Level B behavioral disturbance under section 3(18)(A)(ii) of the MMPA:

- 90 dB re 20µPa_{rms} for harbor seals
- 100 dB re 20µPa_{rms} for non-harbor seal pinnipeds

The major sources of noise and disturbance expected during construction of this project are:

- project-related vessels (tugboats, barges, and scows);
- dredging;
- placement of rock material; and,
- driving of sheet pile (under some alternatives).

Tugboats may generate significant underwater noise, especially when maneuvering or holding a barge in position against a dock or the shore. During a 2001 acoustic survey of Cook Inlet (Blackwell and Greene 2002), the highest level underwater broad-frequency noise recorded (149 decibels (dB) re 1µPa, at a distance of 102 meters) was generated by a tugboat docking a gravel barge. The same tug/barge combination generated a maximum level of 125 dB re 1µPa, at a distance of 190 meters, when in transit. The underwater noise level generated by a tugboat can vary greatly with the size/horsepower of the tugboat engine and whether noise-reducing features, such as propeller cowlings, are present. Diesel-powered tugs typically generate underwater noise at relatively low frequencies, roughly in the 0.02 to 1 kHz range (USACE 1998).

At 0.02 to 1 kHz, the typical frequency range of underwater noise generated by a tugboat engine (USACE 1998) places it at the lower end of the generalized hearing range of low frequency (LF) cetaceans, and below or at the very lower limit of the hearing range of other marine mammals (Table 3). The noise generated by the tugboat engine is assumed to be non-impulsive/continuous; no source of impulsive noise from the tug and barge is anticipated other than brief, incidental sounds from docking or landing. The 125 dB re 1µPa, at a distance of 190 meters, of a tug and barge in transit (Blackwell and Greene 2002) falls well below the Level A harassment (injury) acoustic thresholds for non-impulsive noise shown in Table 3, but slightly exceeds the 120 dB re 1μPa_{rms} default conservative threshold for a Level B disturbance from continuous noise. There is the potential for LF cetaceans within a few hundred meters of proposed action-related vessels in transit to experience a Level B disturbance (behavioral disruption) due to underwater noise; other marine mammals would likely be insufficiently sensitive to the low-frequency engine noise to experience a disturbance.

Air-transmitted noise levels generated by tugboat diesel engines are comparable to those of large construction equipment, generally 70 to 100 A-weighted decibels (dBA) within 50 feet of the engine (Navy 1987; USACE 2011; Dyer and Lundgard 1983). Thornton (1975) measured in-air barge noise at levels between 88 and 93 dBA in the aft deck of two barges. These levels fall below the level B disturbance threshold for pinnipeds (excluding harbor seals).

The project dredging is expected to be performed by a combination of hydraulic suction dredging, and mechanical dredging with clamshell bucket, with the dredged material placed by scows in waters offshore of the Nome seawall. A recent study by the Corps of Engineers (McQueen, *et al,* 2018) found that underwater dredging sounds are typically low-intensity (i.e., sound pressure levels of less than 190 dB re 1 µPa at 1 m) and non-impulsive, with frequencies below 1,000 kHz, and do not pose a significant risk of injury or mortality to aquatic organisms. The low frequency sounds produced by dredging are similar to that produced by commercial ship traffic, and overlap the hearing frequency ranges of most marine animals, potentially posing a risk of temporary threshold shifts, auditory masking, and behavior response in marine mammals. However, a review by the study of available field observations found that whales and seals generally had no adverse reactions or avoidance behavior near active dredging operations. Bowhead whales sometimes exhibited avoidance or altered feeding behavior in experiments that broadcast simulated dredging sounds underwater (Richardson, *et al*, 1990). A one-year field study evaluating avoidance behavior in harbor porpoises revealed that there may be short-term avoidance of areas near dredging activity; however, these effects were short-term and porpoises return to the areas after the dredging activity was completed (Diederichs, *et al*, 2010). In other observational studies, seals did not exhibit avoidance or altered behavior near dredging activities (Gilmartin 2003).

Placement of rock material for causeways and breakwaters likewise produces low-intensity underwater sound; armor stone is typically maneuvered carefully into place rather than allowed to drop, to avoid damaging the armor stone or displacing the core material underneath.

The rock material may be placed by excavators or other heavy equipment working from barges or from shore. The intensity of air-transmitted noise from on-land construction equipment is most often expressed in decibels weighted for the human-hearing frequency range ("A-weighted" decibels, or dBA), whereas water-transmitted noise intensity is generally expressed in unweighted decibels (dB). The A-weighting convention was developed for human health and safety, and emphasizes the frequencies between 1 kHz and 6.3 kHz to simulate the relative response of human hearing. Table 4 shows typical averaged maximum (L_{max}) or time-weighted (L_{eq}) noise intensity levels generated by shore-based heavy construction equipment, expressed as dBA measured at a distances of 50 feet or 10 meters (33 feet; USDOT 2006; DEFRA 2005).

Table 4. Typical Air-Transmitted Noise Levels of Land Construction Equipment

Equipment	Averaged measured L_{max} @ 50 ft (dBA)[a]	Measured L_{eq} @ 33 ft (dBA)[b]
Bulldozer	82	81-86
Dump Truck	76	79-87
Excavator	81	69-89
Front End Loader	79	68-82

a. USDOT 2006; b. DEFRA 2005.

Studies of the frequency ranges of construction machinery noise tend to measure sound pressure levels in a general range of 0.063 to 8 kHz (Roberts 2009; DEFRA 2005), but this may again represent an emphasis on human hearing, and not the full range of frequencies generated by the equipment.

Air-transmitted noise levels generated by tugboat diesel engines are comparable to those of large construction equipment, generally 70-100 dBA within 50 feet of the engine (Navy 1987; USACE 2011; Dyer & Lundgard 1983).

The transmission of land-generated air-transmitted noise into an adjacent waterbody is not well studied. The transfer of sound energy from air into water via sound waves striking the air/water interface at a shallow angle is generally understood to be poor (Zhang 2002); noise generated on land at an elevation not far above the surface of an adjacent water body will be to a significant degree reflected off of the water's surface, and not transmitted into the water. Sound energy can also be transmitted from ground-based sources into water via vibration. Vibration from non-impact construction machinery transmitted through the ground is typically very low frequency, in the 10-30 Hz (0.01-0.03 kHz) range (Roberts 2009).

Alternatives 3a, 4a, 8a, and 8b add a new sheet pile bulkhead dock to the existing causeway. The driving of the sheet pile for this feature has the potential to cause injurious noise to marine mammals. On the other hand, the location of the sheet pile installation is bounded on three sides by the nearby shoreline, and the rubblemound causeway and breakwater; this will substantially limit the propagation of harmful noise to the confines of the outer harbor. The shallow depth and limited extent of the outer harbor should allow effective visual monitoring for marine mammals during the installation of sheet pile.

3.1.2 Vessel Strikes: Project vessel activity during and in support of construction will likely consist of tugs, barges, and scows maneuvering around the immediate project area, transporting rock to project site from the quarry (presumably, the Cape Nome quarry), and transporting project equipment and supplies to Nome from a base port (presumably, Anchorage). The effects of proposed project vessels would be an incremental increase over the effects of very similar vessels that work out of Nome or travel between communities on the Gulf of Alaska and Bering Sea every year. The probability of strike events depends on the frequency, speed, and route of the marine vessels, as well as distribution of marine mammals in the area. An analysis of ship strikes in Alaskan waters (Neilson et al, 2012) found that whale mortalities are more likely when large vessels travel at speeds greater than 12 knots. Another study (Vanderlaan and Taggart 2007) used observations to develop a model of the probability of lethal injury based upon vessel speed, projecting that the chance of lethal injury to a whale struck by a vessel is approximately 80 percent at vessel speeds over 15 knots, but approximately 20 percent at 8.6 knots. The relatively low speed of a typical ocean-going barge and tug (typically no more than 9 knots), together with a barge's blunt prow and shallow draft, make it far less likely to strike and inflict injury upon a marine mammal than larger, faster ocean-going vessels such as cruise ships and cargo ships. The limited maneuverability and long stopping-distance of a barge and tug would make it difficult for the vessels to avoid an observed marine mammal, and in many circumstances unsafe for them to attempt to do so. Conversely, however, the vessels' low speed and consistent course would enable marine mammals to avoid the path of the barge and tug well before there was a danger of collision.

Project-related vessels en route between Anchorage and Nome would pass through the CH areas described above for North Pacific right whales and Cook Inlet beluga whales. The would also pass through the 20-nm nautical zone of numerous Steller sea lion rookeries and haul outs in the Gulf of Alaska, and through the Shelikof and Bogoslof Foraging Areas, but would not approach within 3 nm of any rookeries or haul outs.

3.1.3 Release of Contaminants: The increased vessel activity during project construction represents an increased risk of accidental leaks and improper discharges of fuel or other pollutants. Such releases may come from tugboats and survey vessels. Onshore discharges from land construction equipment could potentially also contaminate marine waters. Dredging of contaminated sediment in the inner harbor also has the potential to remobilize and spread pollutants.

3.2 Long-Term Effects of the Completed Project

The intent of the completed project is to relieve congestion in the Port of Nome, allow larger vessels to dock at Nome, and improve emergency response for marine spills and vessels in distress. The observed and anticipated increase in shipping through the Bering Strait has been a cause of considerable environmental concern in the region (Kawerak 2016). The proposed project is in part a response to the increasing Bering Strait shipping traffic, and the risks and opportunities it represents. An expanded Port of Nome is not expected, in of itself, to create a significant further increase in shipping traffic from the Arctic Ocean. The ability to berth larger ships is likely to attract only a handful of additional large ships through the Bering Strait each

year, primarily cruise ships and vessels in distress. An expanded Port of Nome is more likely to change the size and number of vessels traveling between Nome and other Alaskan ports, using established sea lanes. Larger vessels at Nome pose a risk of larger fuel spills and improper discharges; on the other hand, larger vessels may mean fewer vessel transits to deliver the same amount of goods. A specific aim of the port modification is to allow fuel tankers to moor while transferring fuel, and reduce the current risky practice of off-shore fuel transfers. A reduction in vessel congestion within the harbor during the busy ice-free season, and the improved and more orderly moorage that the project will allow, should reduce the risk of spills and improve enforcement of discharge regulations.

Another potential long-term effect of the finished project may be to provide a base for larger fishing and processing vessels. Such vessels would be able to exploit the changing Bering Sea and Arctic Ocean fisheries in new ways, and may have a negative and unpredictable impact on marine mammal prey species.

It is possible that the extended causeway and altered breakwater 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 ice-dependent species.

3.3 Proposed Avoidance and Minimization Measures

The NMFS has previously recommended the following general measures to minimize the risk and harm to protected marine species (ESA and MMPA):

- To reduce the risk of collisions with protected species, proposed action-related vessels will be limited to a speed of 8 knots, or the slowest speed above 8 knots consistent with safe navigation:
    - when within 3 nautical miles of any Steller sea lion haul outs or rookeries;
    - when transiting the North Pacific right whale CH areas; and
    - when transiting the Cook Inlet beluga whale CH areas.
- Vessel operators will strive not to approach within 100 yards of a marine mammal to the extent practicable, given navigational and safety constraints.
- The contractor performing the work will prepare an Oil Spill Prevention and Control Plan describing steps to avoid and mitigate releases of hazardous substances.

3.3.1 Cook Inlet Beluga Whales: The NMFS has recommended special conservation measures to minimize the impacts of vessel strikes on Cook Inlet beluga whales within their designated CH. Vessels should exercise special caution in the vicinity of the Susitna Delta to minimize the impacts of vessels within this seasonally vital Cook Inlet beluga whale habitat. The Susitna Delta Exclusion Zone (figure 6) is defined as the union of the areas defined by:

- a 10-mile (16 km) buffer of the Beluga River thalweg seaward of the mean lower low water (MLLW) line,
- a 10-mile (16 km) buffer of the Little Susitna River thalweg seaward of the MLLW line, and,

- a 10-mile (16 km) seaward buffer of the MLLW line between the Beluga River and Little Susitna River.
- The buffer extends landward along the thalweg buffers to include intertidal area up to mean higher high water (MHHW). The seaward boundary has been simplified so that it is defined by lines connecting readily discernable landmarks.

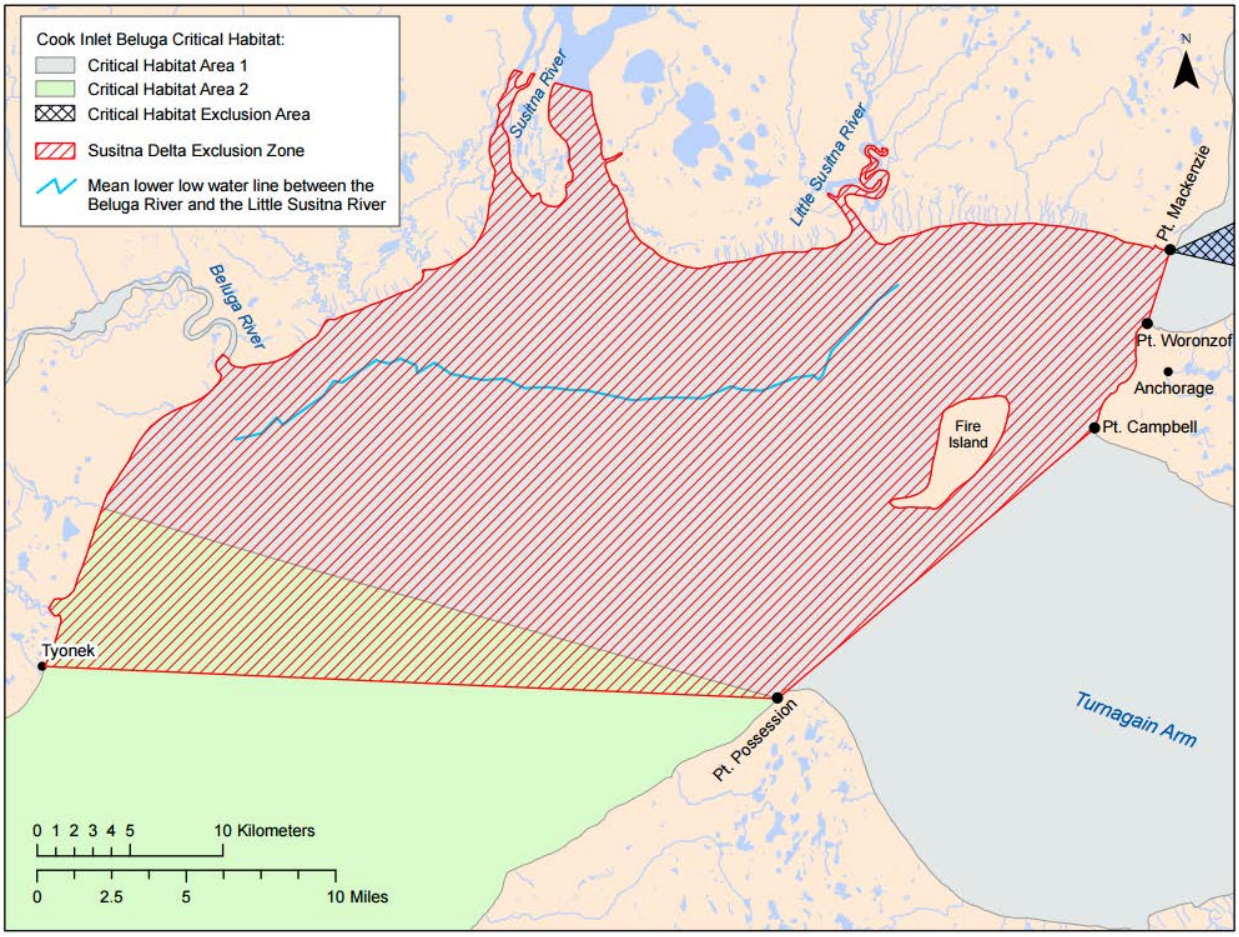

Figure 4. Boundaries of the Susitna Delta Exclusion Zone.

For vessels operating in the Susitna Delta Exclusion Zone, the following should be implemented:

- All vessels operating within the designated Susitna Delta area should maintain a speed below 4 knots. Crews must note the numbers, date, time, coordinates, and proximity to vessels of any belugas observed during operations, and report these observations to NMFS.
- Protected species observers (PSOs) must be in place to monitor for ESA-listed species prior to and during all vessel movements when vessels are under power (propellers spinning) within the Susitna Delta Exclusion Zone. PSOs are not required to be observing when vessels are not under power (in gear).

- PSOs must be located in a position that affords a view of all waters within a 100-meter radius of all vessels under power (in gear).
- Exercise special caution in the vicinity of the Susitna Delta to minimize the impacts of vessels within this seasonally vital Cook Inlet beluga whale habitat.
- Vessel operators must avoid moving their vessels when PSOs are unable to adequately observe the 100-meter zone around vessels under power (in gear) due to darkness, fog, or other conditions, unless necessary for ensuring human safety.
- If any vessels enter the Susitna Delta Exclusion Zone at any time, PSOs must record and email to NMFS: date, time, number, and geographic coordinates of ESA listed marine mammals observed during vessel movements, and descriptions of any deferred vessel movements or vessel re-directions.

3.3.3 North Pacific Right Whale**:** The vessel operator should avoid transits within designated North Pacific right whale CH (figure 4). If transit with North Pacific right whale CH cannot be avoided, NMFS recommends a route along the western boundary of the CH where historic and contemporary observations indicate that North Pacific right whales are not as concentrated as other areas in the CH. In addition, if transit with North Pacific right whale CH cannot be avoided, NMFS recommends that transit in right whale CH be limited to between September and March, a time of year right whales may be at lower numbers in the Bering Sea.

If transiting in North Pacific right whale CH, vessel operators are requested to exercise extreme caution and observe the 10-knot (18.52 km/h) vessel speed restriction. Operators transiting through North Pacific right whale CH should have trained Protected Species Observers (PSOs) actively engaged in sighting marine mammals. PSOs would increase vigilance and allow for reasonable and practicable actions to avoid collisions with North Pacific right whales. Operators will maneuver vessels to keep 800 meters away from any observed North Pacific right whales while within their designated CH, and avoid approaching whales head-on consistent with vessel safety. Vessels should take reasonable steps to alert other vessels in the vicinity of whale(s), and report of any dead or injured listed whales or pinnipeds.

4. Conclusion and Determinations

The Corps determines that the planned project may affect, but is not likely to adversely affect the following ESA-listed species, or their designated critical habitat:

- Steller sea lion (Western DPS)
- Ringed seal (Arctic DPS)
- Bearded seal (Beringia DPS)
- Bowhead whale
- Humpback whale (Western Pacific and Mexico DPSs)
- North Pacific right whale
- Beluga whale (Cook Inlet DPS)
- Gray whale (Western North Pacific DPS)

- Fin whale
- Sperm whale
- Blue whale

The Corps requests concurrence from the NMFS on these determinations, and welcomes any further conservation recommendations the NMFS may have to offer for these or other species in our project area.

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

Sincerely,

for

Michael L. Salyer
Chief, Environmental Resources Section

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ADFG. 2008b. Species Profile paper, Blue Whale.

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From: Jill Prewitt - NOAA Federal
To: Floyd, Christopher B CIV USARMY CEPOA (US)
Cc: Salyer, Michael R CIV USARMY CEPOA (US)
Subject: Re: [Non-DoD Source] Re: Port of Nome - ESA determination letter for NMFS
Date: Wednesday, February 20, 2019 2:42:33 PM
Attachments: Port of Nome Questions.docx

Hi Chris,

I've taken a look through the Port of Nome request for consultation and would like to request more information on the project before I can continue with the consultation. The questions are in the attached document.

Please let me know if you have any questions.

Thanks!
Jill

On Tue, Jan 29, 2019 at 9:53 AM Floyd, Christopher B CIV USARMY CEPOA (US) <Christopher.B.Floyd@usace.army.mil <mailto:Christopher.B.Floyd@usace.army.mil> > wrote:

Thanks, Jill -

-----Original Message-----
From: Jill Prewitt - NOAA Federal [mailto:jill.prewitt@noaa.gov <mailto:jill.prewitt@noaa.gov>]
Sent: Tuesday, January 29, 2019 9:19 AM
To: Floyd, Christopher B CIV USARMY CEPOA (US) <Christopher.B.Floyd@usace.army.mil <mailto:Christopher.B.Floyd@usace.army.mil> >; Greg Balogh - NOAA Federal <greg.balogh@noaa.gov <mailto:greg.balogh@noaa.gov> >
Subject: [Non-DoD Source] Re: Port of Nome - ESA determination letter for NMFS

Hi Chris,

We've received your request for ESA consultation, and due to the shutdown, we will consider it as received on January 28. Right now I will keep it on my assignment list, but this may change as we are re-evaluating the workloads after the shutdown. Greg or I will let you know if it gets re-assigned to a different biologist.

I also now have a NOAA email, so please use this email for future correspondence.

Thank you!
Jill

On Mon, Jan 28, 2019 at 11:32 AM Jill Prewitt <jsprewitt@gmail.com <mailto:jsprewitt@gmail.com> <mailto:jsprewitt@gmail.com > > > wrote:

---------- Forwarded message ---------
From: Floyd, Christopher B CIV USARMY CEPOA (US) <Christopher.B.Floyd@usace.army.mil <mailto:Christopher.B.Floyd@usace.army.mil> <mailto:Christopher.B.Floyd@usace.army.mil > > >
Date: Mon, Dec 31, 2018, 18:20
Subject: Port of Nome - ESA determination letter for NMFS
To: Jill Prewitt <jsprewitt@gmail.com <mailto:jsprewitt@gmail.com> <mailto:jsprewitt@gmail.com > > >, Greg Balogh - NOAA Federal <greg.balogh@noaa.gov <mailto:greg.balogh@noaa.gov>

<mailto:greg.balogh@noaa.gov > > >

Attached please find the US Army Corps of Engineers' ESA Section 7 determination letter for the "Port of Nome Modifications" project.

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

-----Original Message-----
From: Jill Prewitt [mailto:jsprewitt@gmail.com <mailto:jsprewitt@gmail.com>
<mailto:jsprewitt@gmail.com > >]
Sent: Friday, May 18, 2018 11:48 AM
To: Greg Balogh - NOAA Federal <greg.balogh@noaa.gov <mailto:greg.balogh@noaa.gov>
<mailto:greg.balogh@noaa.gov > > >
Cc: Floyd, Christopher B CIV USARMY CEPOA (US) <Christopher.B.Floyd@usace.army.mil
<mailto:Christopher.B.Floyd@usace.army.mil> <mailto:Christopher.B.Floyd@usace.army.mil > > >
Subject: [Non-DoD Source] Re: Nome Harbor Modifications - preliminary species lists

Hi Christopher

The ESA and MMPA species lists look complete for NMFS managed species. Can you send me the graphic that you mentioned in your May 9th email to Greg? It was not attached to the email I received.

Thanks,

Jill Prewitt

Contractor with Ocean Associates, Inc.
NOAA Fisheries
(907) 230-6098

On Fri, May 11, 2018 at 9:36 AM, Greg Balogh - NOAA Federal <greg.balogh@noaa.gov
<mailto:greg.balogh@noaa.gov> <mailto:greg.balogh@noaa.gov > > <mailto:greg.balogh@noaa.gov >
<mailto:greg.balogh@noaa.gov > > > > wrote:

Hi Chris,

Your list looks complete to me as far as T&E species goes. Jill Prewitt can be your POC for this project. She can double-check your lists, especially for the MMPA species. We can talk more about the action area when we get a better understanding of the scope of the project. You'll have to fill me and Jill in on the justification that was given to you regarding inclusion of a route to Unalakleet, but exclusion of other waters, such as from Unalaska to Nome.
Jill should be back in her office on Monday, I believe.

On Wed, May 9, 2018 at 3:12 PM, Floyd, Christopher B CIV USARMY CEPOA (US)
<Christopher.B.Floyd@usace.army.mil <mailto:Christopher.B.Floyd@usace.army.mil>
<mailto:Christopher.B.Floyd@usace.army.mil > > <mailto:Christopher.B.Floyd@usace.army.mil >

<mailto:Christopher.B.Floyd@usace.army.mil > > > > wrote:

Hi Greg -

The Corps has restarted a study of expanding the port facilities at Nome ("Nome Harbor Modifications")

Using the NOAA ESA/MMPA mapper, and talking to local biologists at a planning charrette in Nome last month, I've come up with preliminary lists of ESA and MMPA species under NOAA jurisdiction that may be present in the project area:

ESA species:
Steller sea lion (Western DPS)
Bearded seal (Beringia DPS)
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

We would like input from NOAA Protected Resources on the completeness of these lists, and to begin informal consultation on potential project impacts.

The construction alternatives under development, but are expected to include all or some of the following general features (see attached graphic): Extension of the existing causeway into deeper water; construction of a dock for larger vessels at the end of the causeway; dredging of a new, deeper entrance channel; deepening of portions of the existing outer harbor.

The intent of the project is to allow larger vessels to moor safely at Nome, so the completed project would presumably cause some change in the numbers and size of vessels transiting to and from Nome. A local biologist at the charrette suggested regarding an area extending from the Bering Strait through Norton Sound to Unalakleet as the area of potential impact to marine mammals.

Thank you,
Chris Floyd
Environmental Resources
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 <Blockedhttps://maps.google.com/?q=222+W+7th+Ave+Rm+552&entry=gmail&source=g> , 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>

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Jill Prewitt
Marine Mammal Specialist
NOAA Fisheries/Alaska Region/Protected Resources Division
(907) 271-5005

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Jill Prewitt
Marine Mammal Specialist
NOAA Fisheries/Alaska Region/Protected Resources Division
(907) 271-5005

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

Amal Ajmi
Fish & Wildlife Biologist
US Fish & Wildlife Service
101 12th Ave, Room 110
Fairbanks, AK 99701

28 February 2019

Dear Ms. Ajmi:

This letter is an update of one provided to your office dated 26 December 2018, and discussed with you by telephone on 15 February 2019.

The U.S. Army Corps of Engineers Alaska District (Corps) is preparing an environmental assessment (EA) for the proposed "Port of Nome Modifications" project, an expansion of the existing port and harbor facilities at Nome, Alaska (figures 1 and 2). The purpose of this letter is to:

- provide an update on construction alternatives that are under consideration;
- present the Corps' 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. Project location and vicinity (aerial imagery dated Aug 2017, Google Earth).

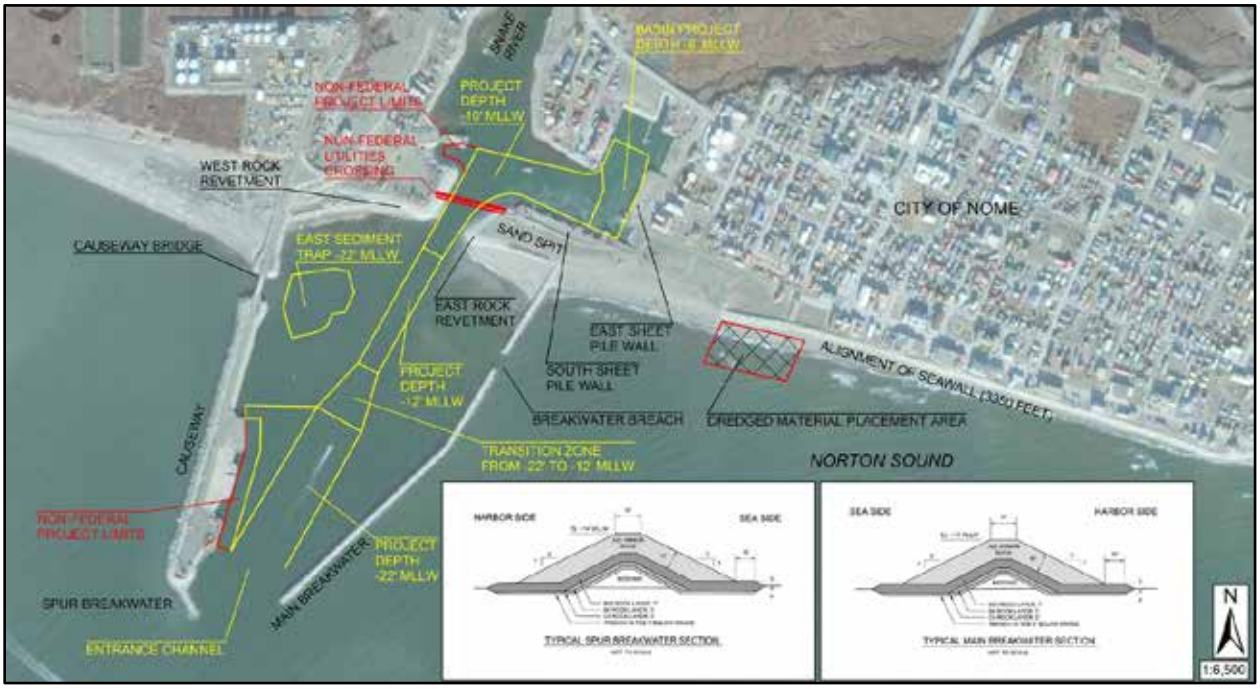

Figure 2. Layout of existing port facilities at Nome (adapted from USACE 2015).

Project Description

The Corps is currently studying six construction alternatives (Alternatives 3a, 3b, 3c, 4a, 8a, and 8b; figures 3-1 through 3-6) in an effort to identify the most useful, cost-effective, and least environmentally-damaging project. From an environmental perspective, the construction alternatives are all similar to one another, differing primarily in the extent, rather than type or location, of their impacts.

Each alternative includes several modification elements:

1. The existing west rubblemound causeway (figure 2) would be lengthened into an L-shaped structure extending into deeper water; the proposed extensions range from 2,340 to 3,937 linear feet (figures 3-1 to 3-6). One to three new concrete caisson docks would be added to the causeway extension. Alternatives 3a, 4a, 8a, and 8b also add a sheet pile dock to the existing causeway.

2. The existing east rubblemound breakwater (figure 2) would be:
   a. modified to a minor degree (Alternatives 3a and 3c); or
   b. removed, and a new rubblemound causeway constructed, tying into shore at the same location as the existing breakwater (Alternative 4a); or
   c. removed, and a new rubblemound causeway constructed, tying into shore about 600 feet to the east of the existing breakwater location (8a, and 8b). A new east causeway would include one or two concrete caisson docks.

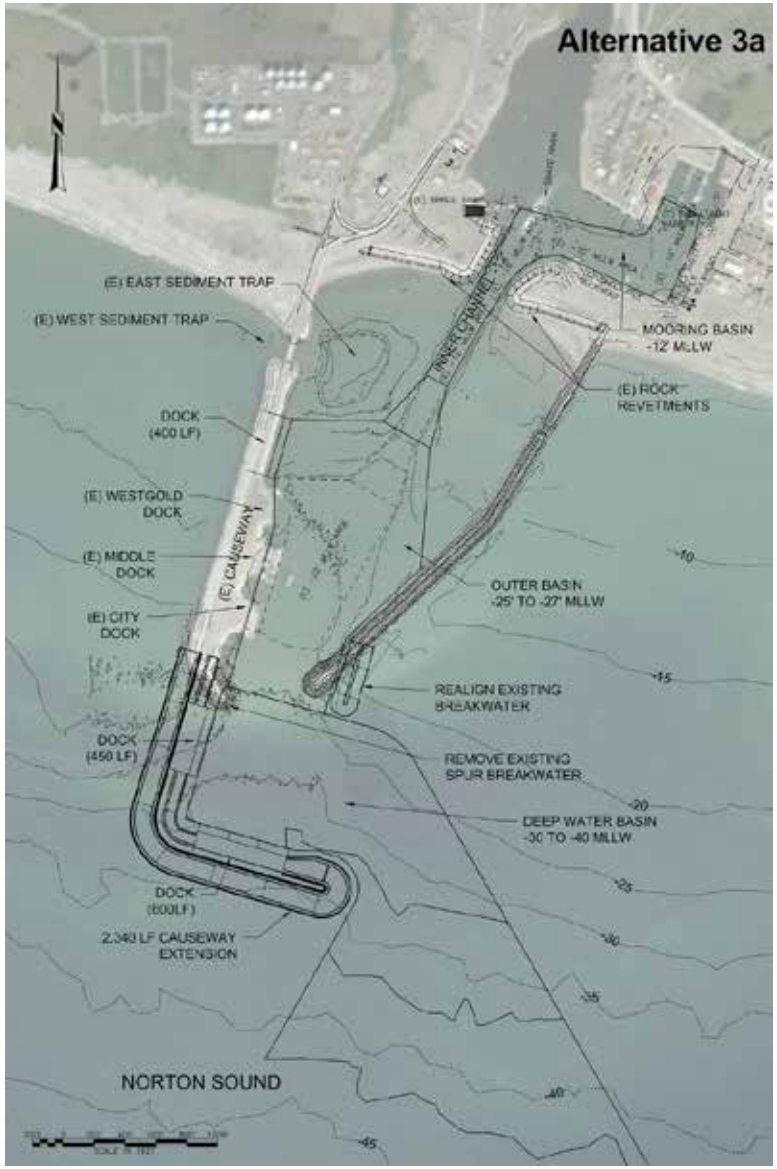

Figure 3-1. Alternative 3a

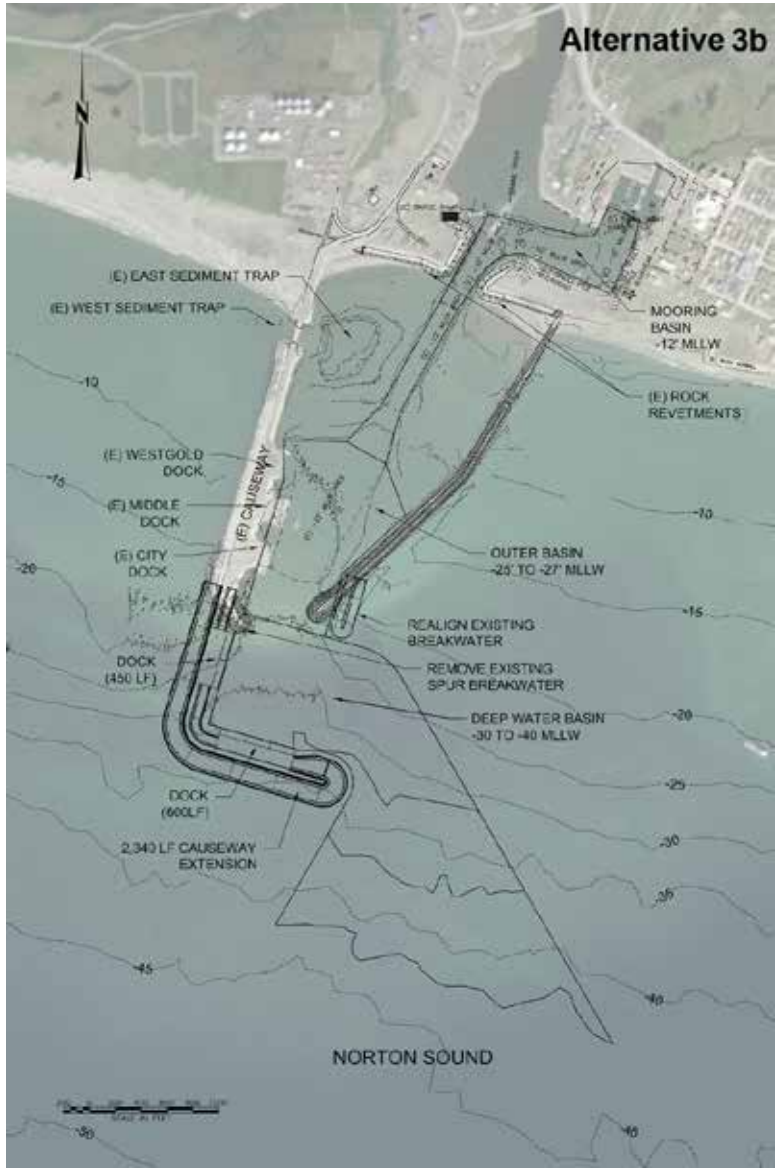

Figure 3-2. Alternative 3b

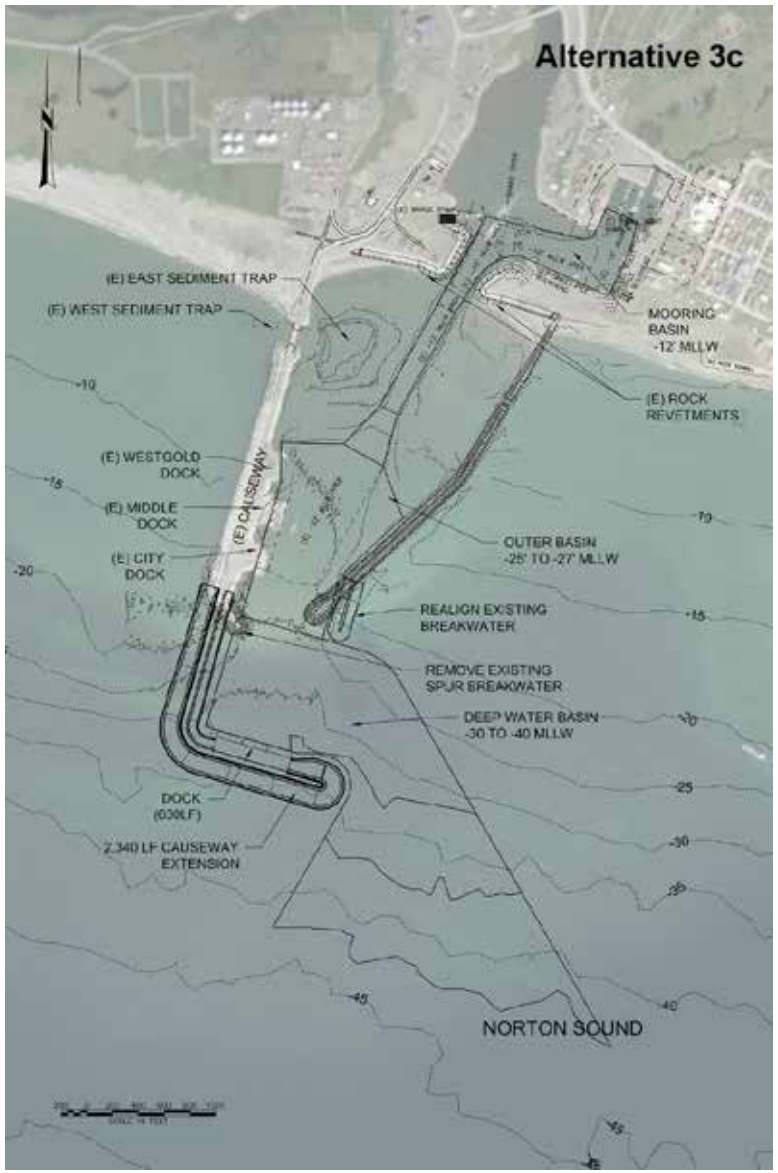

Figure 3-3. Alternative 3c

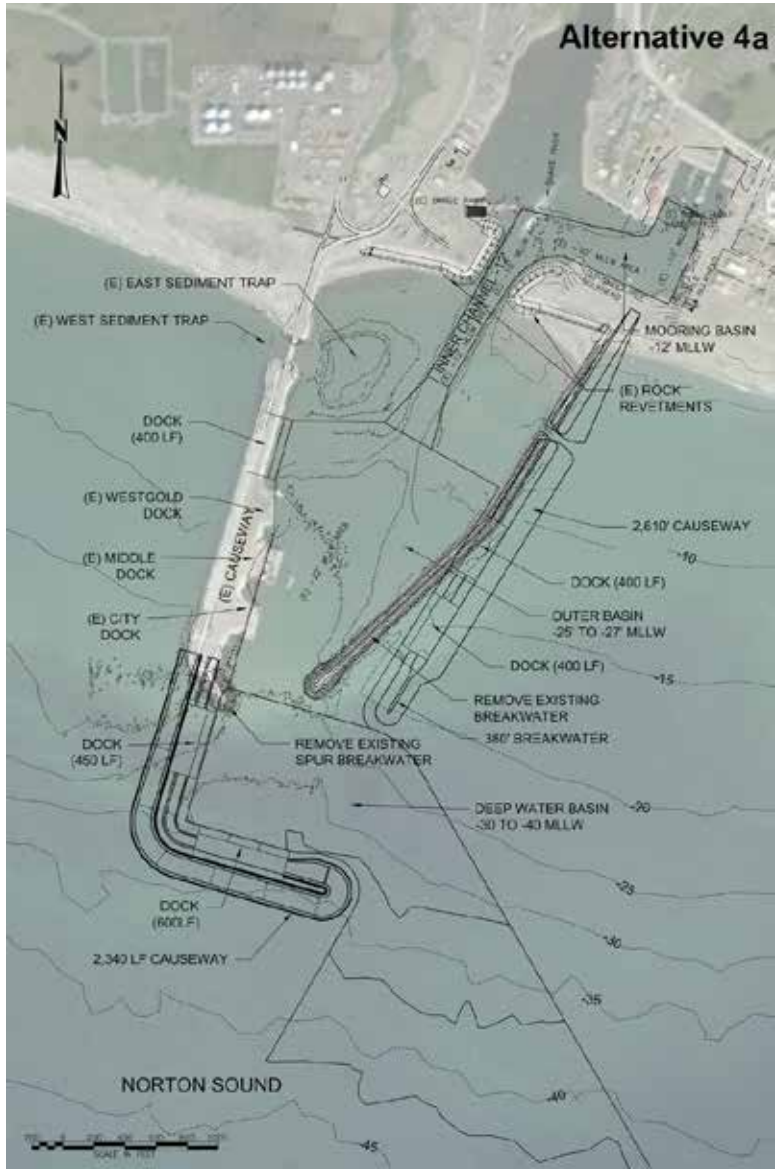

Figure 3-4. Alternative 4a

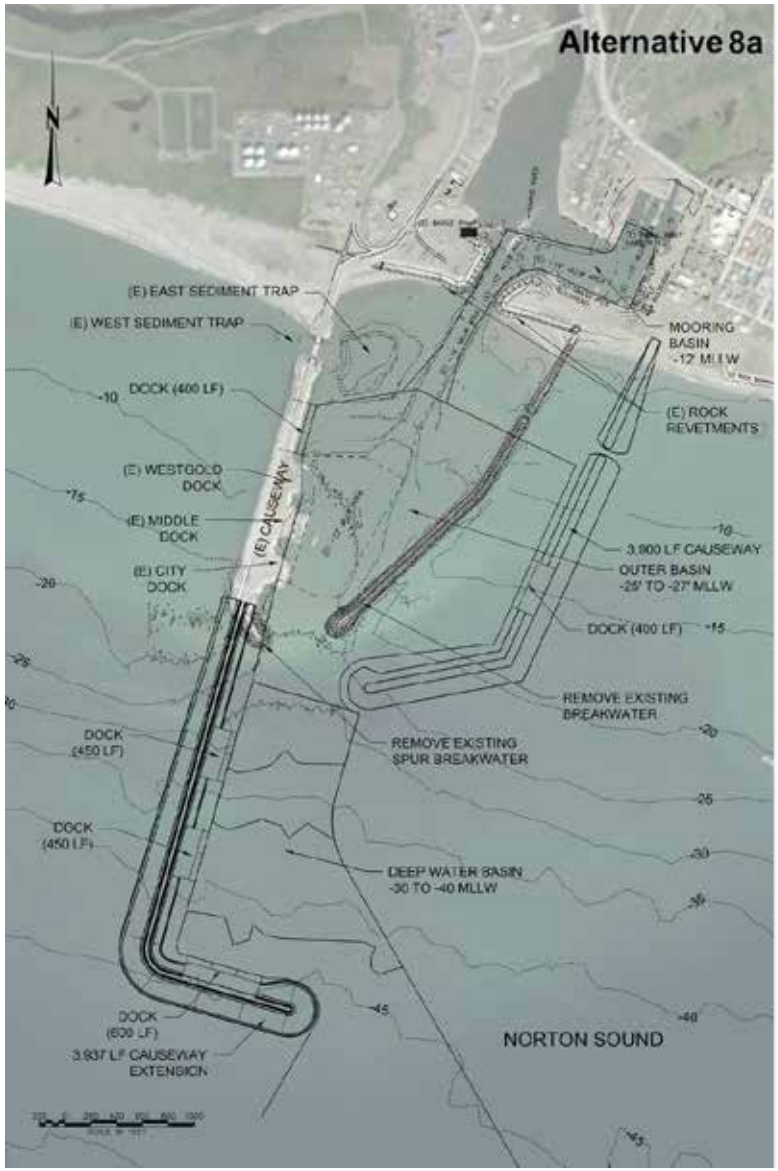

Figure 3-5. Alternative 8a

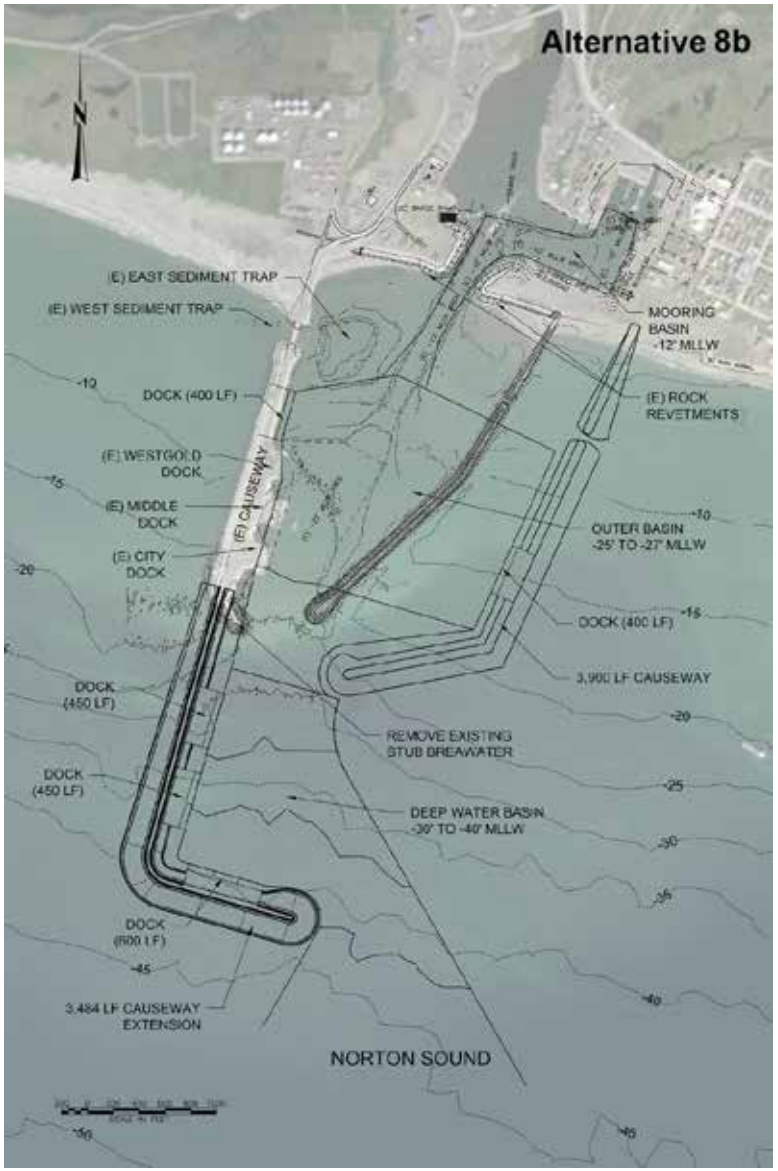

Figure 3-6. Alternative 8b

3. Several areas of sea floor would be deepened by dredging to allow passage of deeper-draft vessels:

a. a new deep water basin at the end of the extended causeway would be dredged to depths of 30 to 40 feet below mean lower low water (MLLW);

b. the existing outer basin would be deepened to 25–27 feet below MLLW, from the current depth of -22 feet MLLW;

Project construction dredging will remove roughly 700,000 to 2,000,000 cubic yards of sea floor material, depending on the alternative and design depths selected. All material to be dredged will be sampled and analyzed for physical characteristics and chemical content prior to dredging. The current assumption is that most of this material, if found suitable, will be placed for beach nourishment along the base of the Nome seawall, as is currently done with the material from annual maintenance dredging at Nome (figure 2). Alternate disposal methods, such as confined disposal, may be necessary for material not suitable for beneficial placement; any alternate disposal methods would be coordinated with the USFWS.

As of the writing of this letter, the “tentatively selected plan” is expected to be Alternative 8b (figure 3-5), with the deep water basin dredged to a design depth of -40 feet MLLW, and the outer basin deepened to -27 feet MLLW. Deepening of the inner harbor mooring basin is no longer part of this project.

The intent of the completed project is to relieve vessel congestion and improve efficiency at the Port of Nome, allow larger vessels to dock at Nome, and provide a better platform for emergency responses to marine spills and vessels in distress. One specific aim of the port modification is to allow fuel tankers to moor while transferring fuel, and reduce the current risky practice of off-shore fuel transfers. The observed and anticipated increases in shipping through the Bering Strait region have been a cause of great environmental concern in the region. The proposed project is in part a response to the increasing Bering Strait shipping traffic, and the risks and opportunities it represents. Ship visits at Nome are expected to increase whether or not the Port of Nome is expanded; the proposed project is intended to manage these vessels more safely and efficiently. Project economic projections suggest that the finished project will *reduce* the rate at which Nome port-visits increase over time, as a result of being able to accommodate larger vessels that require fewer transits to deliver a given volume of commodities.

Previous and Current Coordination

Similar modifications to the Nome port facilities were proposed as part of the Arctic Deep Draft studies in 2013-2015. The Corps pursued ESA Section 7 informal consultation with the USFWS Fairbanks Field Office at that time, requesting species lists and providing study status updates, but does not appear to have sought concurrence on determinations of effect at that time (USACE 2015).

Chris Floyd of the Corps (Alaska District Project Management-Civil Works Branch, Environmental Resources Section) met with Amal Ajmi and Bob Henszey of the USFWS Fairbanks Field Office, in Fairbanks on 23 May 2018. The purpose of this meeting was to discuss the new study for Port of Nome Modifications, and future coordination between the Corps and the USFWS under the ESA and the Fish & Wildlife Coordination Act (FWCA).

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 present in the project area; this list has been confirmed by the USFWS (USFWS 2018):

- 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 general project area in this study is the nearshore marine habitat of Norton Sound from Cape Nome to the higher lands just west of Cripple River, and extending seaward to the 60-foot depth profile (roughly 2 nautical miles offshore). This area encompasses the project construction area at Nome within its setting of similar exposed, high-energy coastline at the north entrance of Norton Sound; the presumptive source of rock for the project at a Cape Nome quarry; and the marine interface of several anadromous streams discharging along that coast (figure 4).

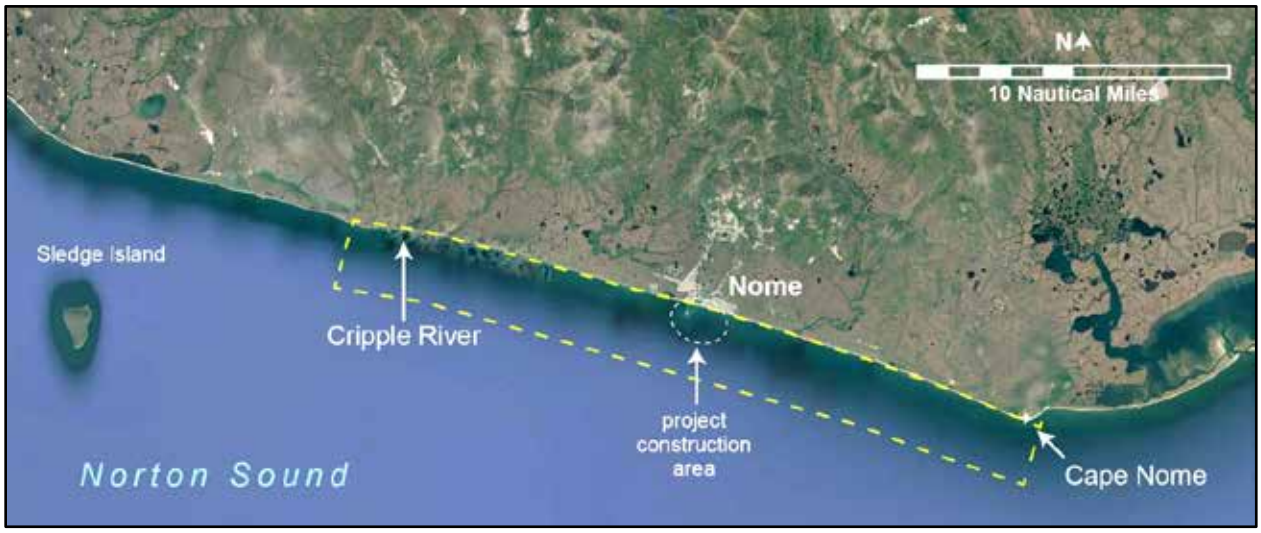

Figure 4. Norton Sound project region of influence.

An additional project area identified is the presumptive route of project vessels transiting between Anchorage and Nome (figure 5); this is primarily intended to assess potential effects from project vessels on protected species beyond Norton Sound. The base image of figure 5 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, passing through Cook Inlet, hugging the protected south coast of the Alaska Peninsula, then turning north into the Bering Sea at Unimak Pass. As is discussed previously, the proposed project is not expected to contribute significantly to long-term increases in Bering Sea or Bering Strait ship traffic, so the transit area is confined to that route that may be affected by project-related vessel traffic.

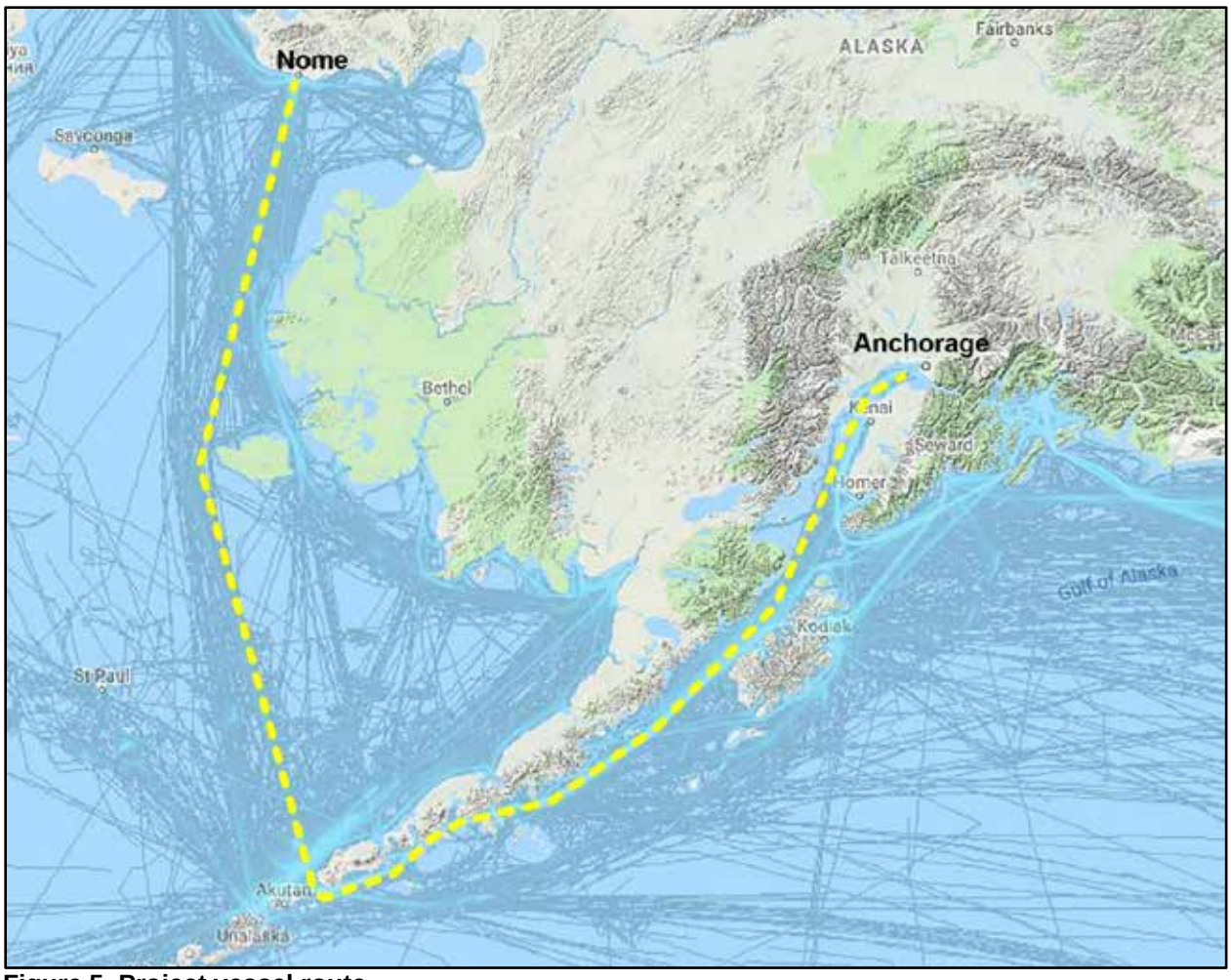

Figure 5. Project vessel route.

Polar Bear. The polar bear is a maritime carnivore dependent on arctic sea ice and the associated assemblage of sea mammals. It is listed as a threatened species throughout its range (73 FR 28212), due to observed and anticipated changes to its sea ice habitat; in the United States, the polar bear is also protected under the Marine Mammal Protection Act

(MMPA). 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).

Critical habitat for polar bears was designated by the USFWS 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. The only CH unit appearing at Nome itself is 'sea ice'. The nearest 'barrier island' CH exists at Safety Sound, roughly 17 miles southeast of Nome, and at Sledge Island, about 23 miles west of Nome (figure 6). No terrestrial denning habitat has been identified along the Norton Sound coast.

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. As mentioned above, polar bears depend on sea ice for a number of purposes, including as a platform from which to hunt and feed upon seals, as habitat on which to seek mates, breed, and sometimes den, and as a vehicle on which 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 must 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 occupying these areas move as much as 600 miles to stay with the retreating pack ice (USFWS 2010, USFWS 2015).

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 (figure 6).

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).

While polar bears may be present near Nome, population studies suggest that typical polar bear winter foraging and denning ranges do not extend far into Norton Sound, and that Nome is near the margin of those ranges (figure 7; Smith *et al*, 2017). The presence of a polar bear at Nome during a given year would therefore be uncommon. The likelihood of a polar bear appearing near Nome 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).

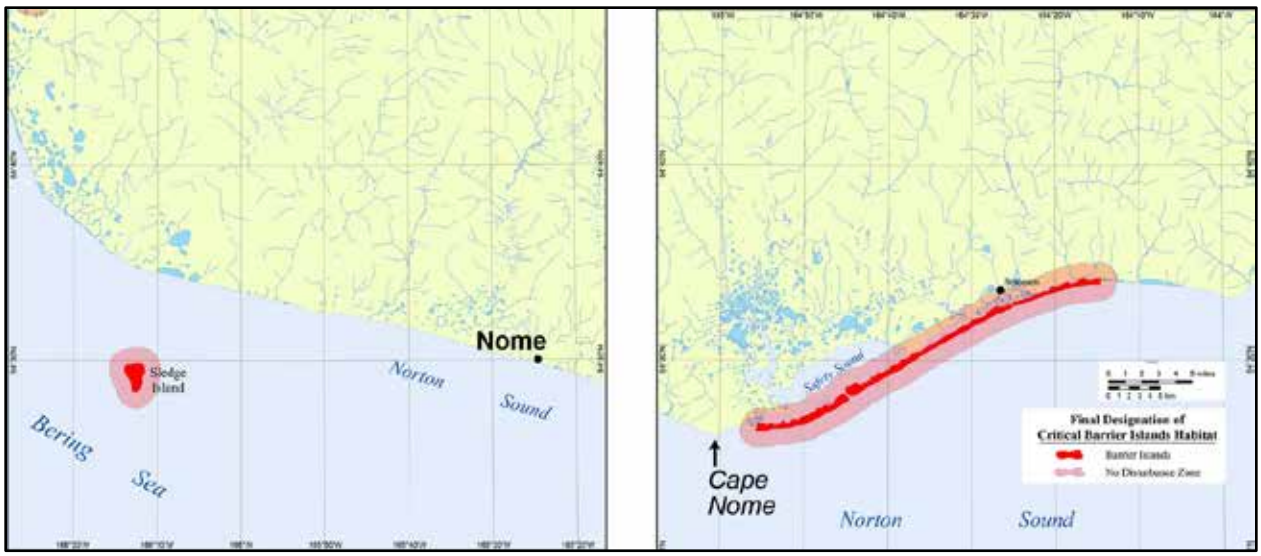

Figure 6. Barrier island polar bear CH identified near Nome (excerpted from maps provided at USFWS 2017).

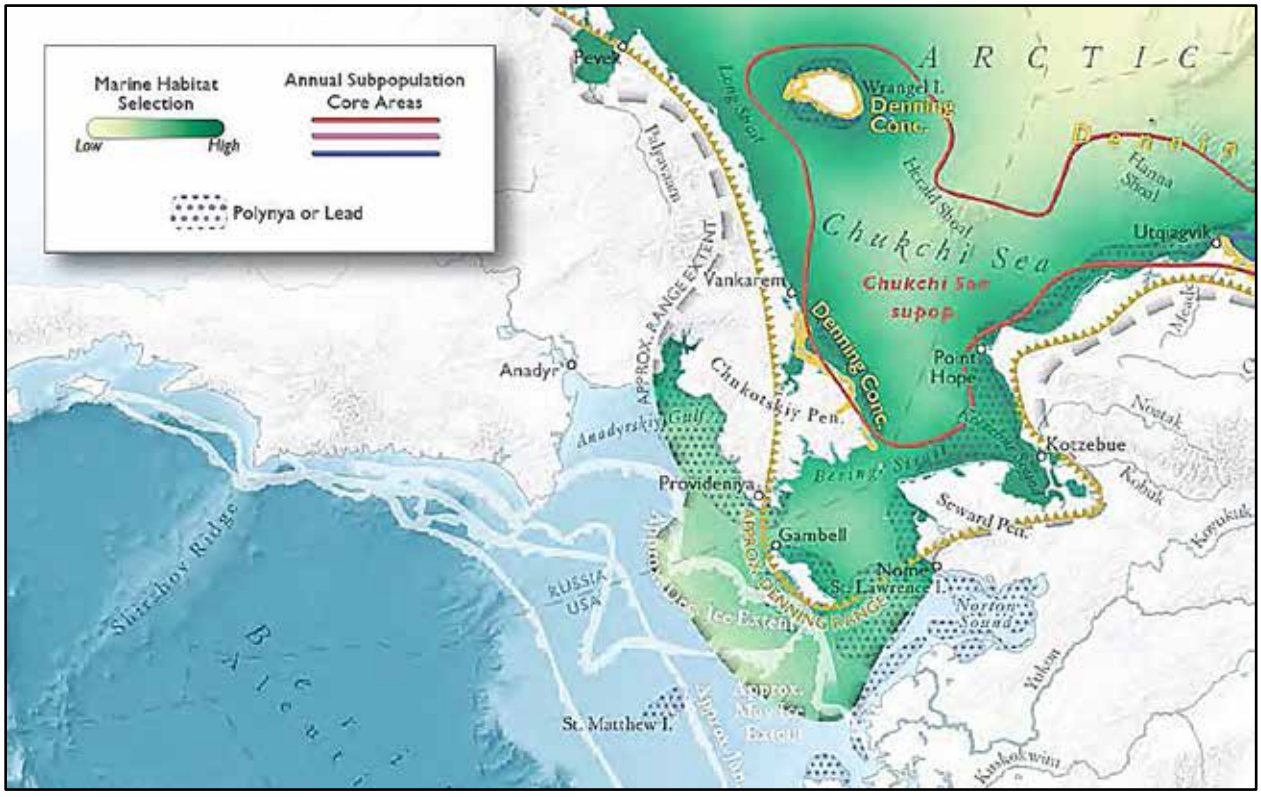

Figure 7. Extent of polar bear winter migration and denning ranges (adapted from Smith, *et al*, 2017).

The great majority of project construction or study activities would occur when ice is absent from the Port of Nome area, and therefore when a polar bear is least likely to be present near Nome. Geotechnical studies needed prior to the start of 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 (figure 4), but outside of the 1-mile no-disturbance zone associated with that CH. A polar bear that found itself near Nome after sea ice has retreated in the spring would be in far more immediate danger from vehicles, hunters, and public safety officers than from construction of the proposed project. The project site is currently a busy sea port and industrial area, and both the construction disturbance and the finished project will be an incremental increase to the human activity and infrastructure that exist there now. It is possible that the extended causeway and altered breakwater 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.

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-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 pack ice of the central Bering Sea south/southwest of St. Lawrence Island (figure 8).

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 9). None of the identified spectacled eider concentration areas or CH is in the vicinity of Nome. The closest CH unit, the Unit 3 fall molting area, is in the eastern one-third of Norton Sound. During construction, project vessels operating within Norton Sound would be shuttling back and forth between the project site and the presumptive rock source at the Cape Nome quarry, but would have no reason to venture any further east into Norton Sound than Cape Nome. Project

Figure 8. Spectacled eider use areas and migration patterns (USFWS 2015).

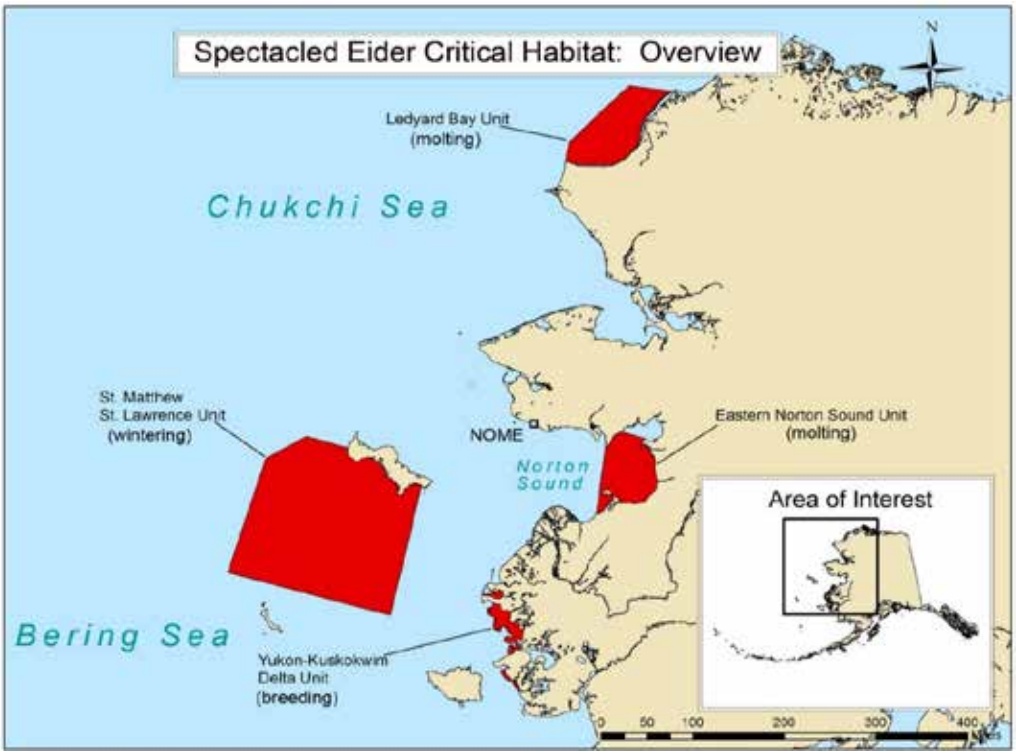

Figure 9. Spectacled eider critical habitat units (adapted from USFWS 2013).

vessels would therefore not approach the Unit 3 CH boundary any closer than about 67 miles (figure 10). Spectacled eiders found near Nome would most likely be transients migrating between breeding, molting, and wintering areas.

Project potential impacts on spectacled 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.

Figure 10. Relationship of Norton Sound spectacled eider CH to expected project vessel routes.

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 11). 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).

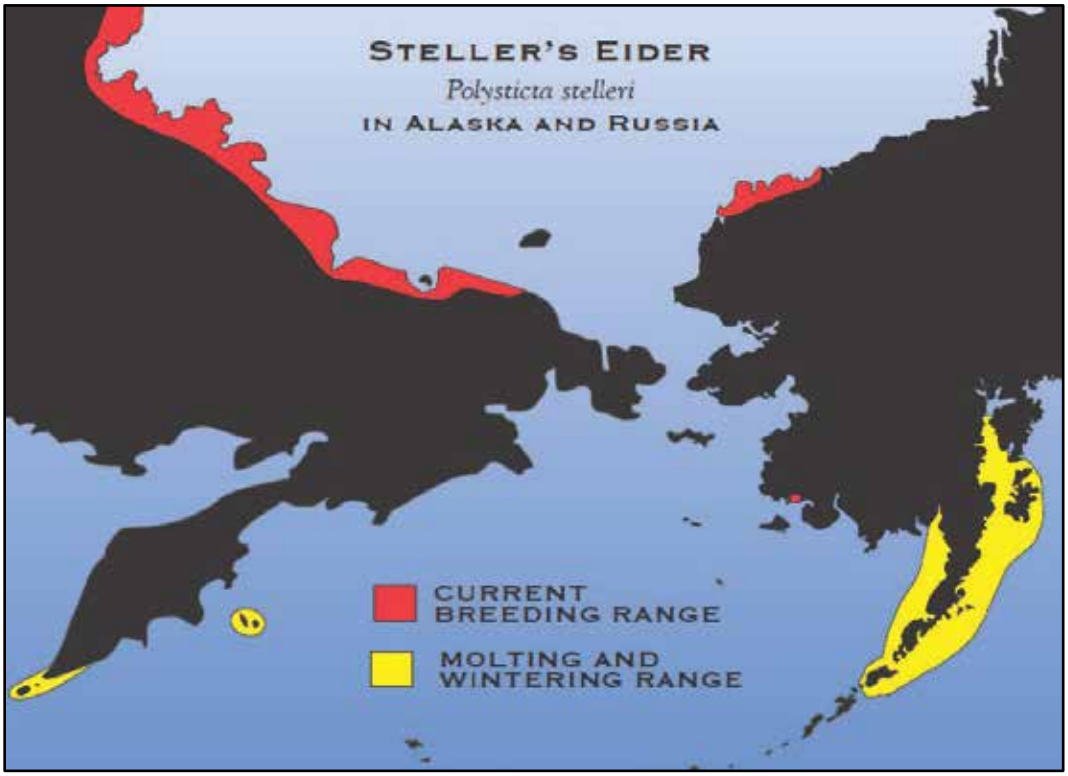

Figure 11. Breeding and wintering range of Steller's eider (USFWS 2013).

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 9).

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 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, but large areas of similar, disturbance-free habitat is readily available near the project site. The project site is currently a busy sea port and industrial area, and both the construction disturbance and the finished project will be an incremental increase to the human activity and infrastructure that exist there now.

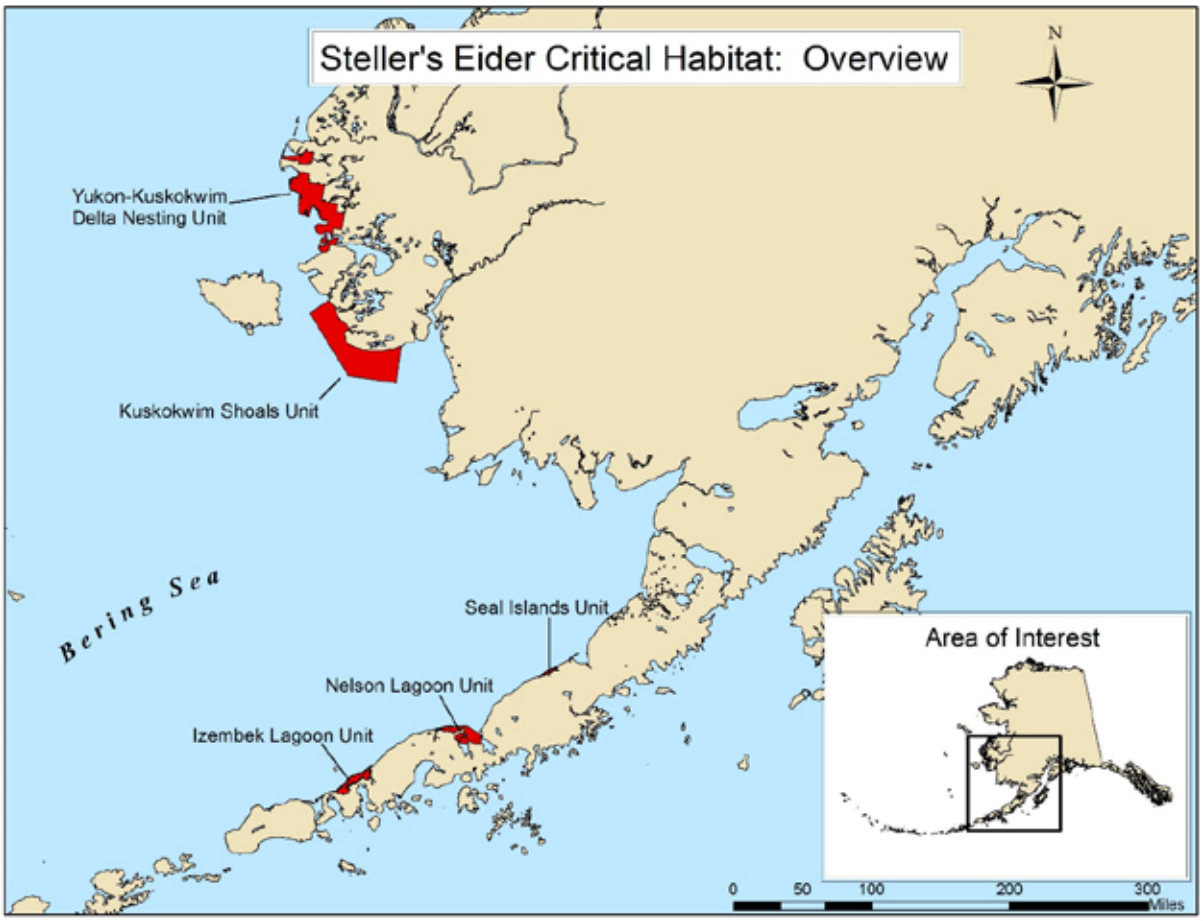

Figure 12. Steller's eider critical habitat (USFWS 2013).

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 13 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 ft.) from the mean high tide line."* A project vessel in transit is unlikely to intentionally pass within 100 meters from shore.

Short Tailed Albatrosses

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 14). Their only known breeding range is an isolated group of small islands off the coast of

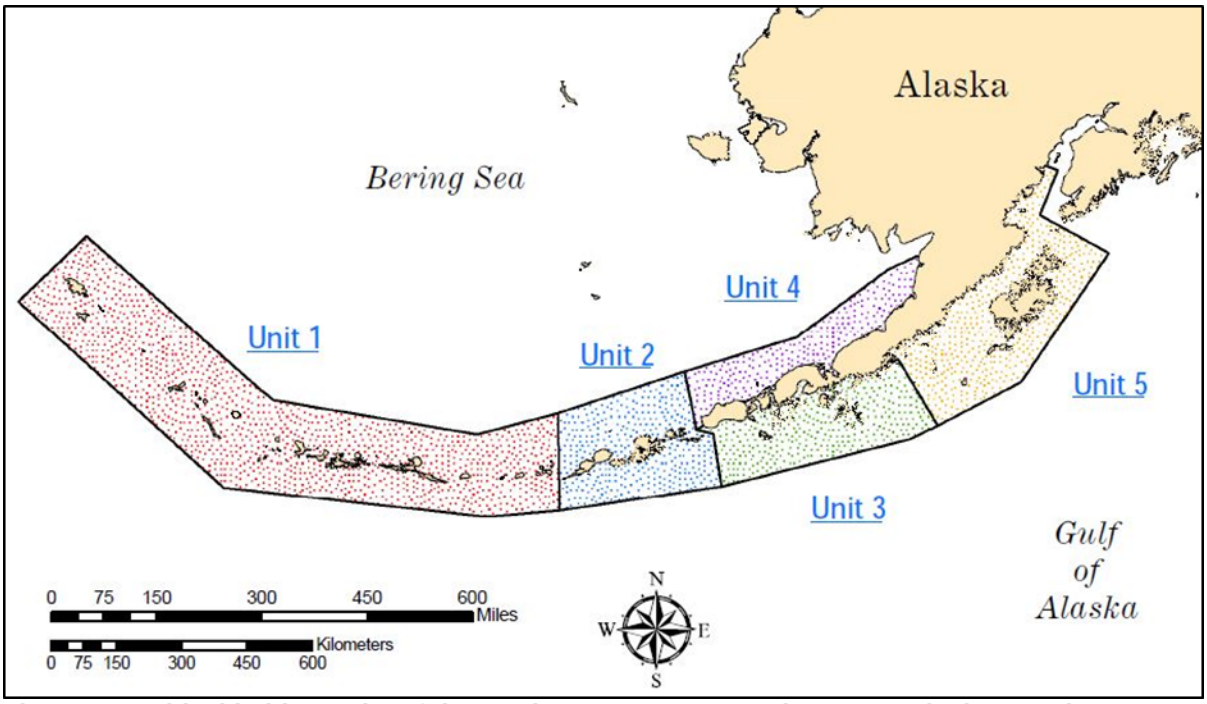

Figure 13. Critical habitat units of the northern sea otter, Southwestern Alaska DPS (USFWS 2013b)

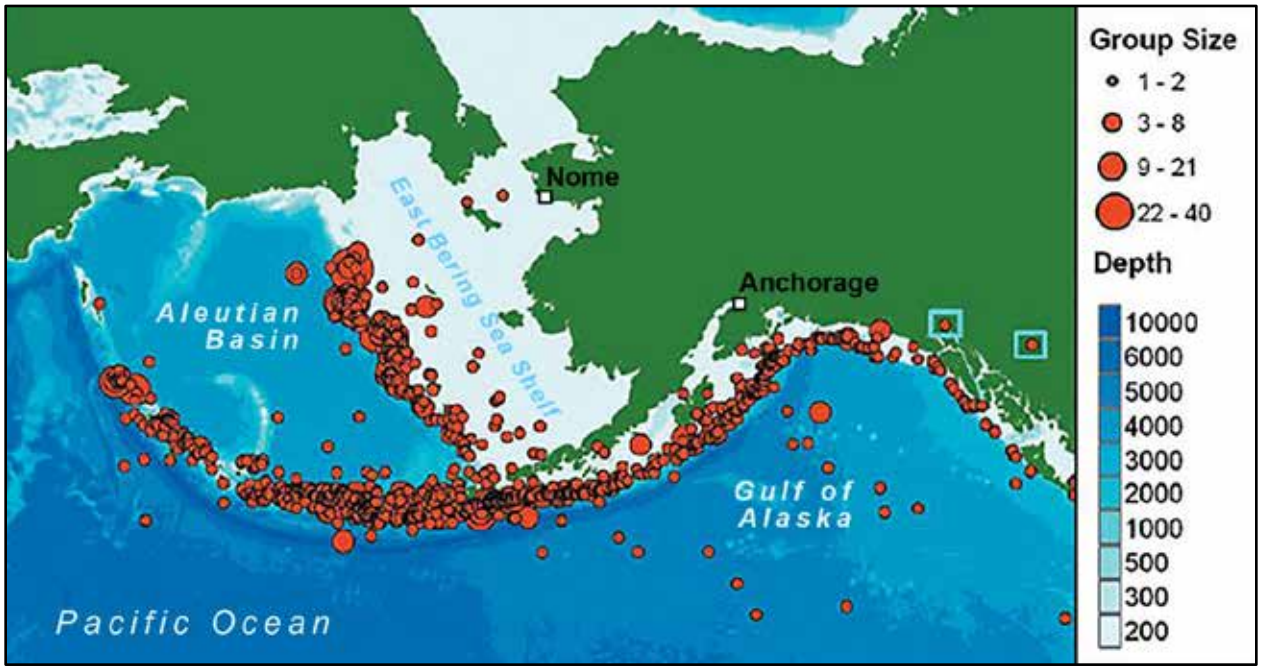

Figure 14. Opportunistic sightings of short-tailed albatross, compiled 1944-2004 (adapted from USFWS 2008).

Japan. There is no ESA-designated critical habitat for this species (USFWS 2008). Project related vessels traveling to Nome could travel close to areas where short-tailed albatross concentrate to feed. There is no designated CH for this species.

Summary

The 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-November construction season. Winter construction or survey activities have the potential to encounter and/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 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-travelled tug-and-barge route along the Alaska Peninsula (figure 5) 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 R. Salyer
Chief, Environmental Resources Section

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Fairbanks Fish and Wildlife Field Office
101 12th Avenue, Room 110
Fairbanks, Alaska 99701
March 11, 2019

U.S. Army Corps of Engineers
Attn: Colonel Phillip J. Borders
District Engineer, Alaska District
Post Office Box 6898
Elmendorf AFB, Alaska 99506-0898

Re: Port of Nome Modifications
Fish and Wildlife Coordination Act Report

Dear Colonel Borders:

The U.S. Fish and Wildlife Service (Service) Conservation Planning Assistance Branch has reviewed the proposed six construction alternatives for the Port of Nome Modifications project (Alternatives 3a, 3b, 3c, 4a, 8a, and 8b). All the alternatives focus primarily on modifying the causeway and breakwater configurations, and dredging within the confines of the causeways and the Nome harbor to accommodate deeper-draft boats.

The Service does not believe a Fish and Wildlife Coordination Act Report (CAR) is required at this time. The Service began preparing a CAR when previous alternatives included potentially using Port Clearance near Teller, Alaska, as part of the Alaska Deep-Draft Port System. We submitted to the U.S. Army Corps of Engineers (USACE) a draft CAR (May 10, 2014) for this effort that focused on potentially affected environmental resources, but we did not provide recommendations since a preferred alternative was not selected. The Port of Nome Modifications project is much narrower in scope, and likely would have been our recommended alternative for the Alaska Deep-Draft Port System.

The proposed project, however, is within the range of five species listed as threatened or endangered under the Endangered Species Act of 1973 (ESA), as amended: spectacled eider (*Somateria fischeri*), Alaska-breeding population of the Steller's eider (*Polysticta stelleri*), polar bear (*Ursus maritimus*), Southwest Alaska district population segment of the northern sea otter, (*Enhydra lutris kenyoni*), and short-tailed albatross (*Phoebastria albatrus*). Although a CAR under the Fish and Wildlife Coordination Act is not required, because the project would occur within the range of ESA-listed species, it does not preclude the requirement for project-specific consultation under section 7 of the ESA. The Service's Endangered Species Branch is currently consulting with the USACE regarding potential impacts to these species by the proposed project.

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). A small possibility exists Port Nome related vessel traffic in the Bering Sea would encounter walrus swimming offshore. We encourage the USACE to contact the Service's Marine

Mammals Management (MMM) Office to develop an appropriate mitigation plan to minimize potential effects on walrus.

In summary, after reviewing the Port of Nome Modifications, we have no further concerns when consultation under section 7 of the ESA, and coordination with the MMM Office is completed. 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.

We appreciate the offer to prepare a CAR, and we would be happy to continue providing recommendations to avoid and minimize adverse impacts to fish, wildlife and their habitats as the project progresses. Please contact Amal Ajmi at 907-456-0324 or amal_ajmi@fws.gov, or me, should you have any questions concerning these comments.

Sincerely,

Robert J. Henszey
Conservation Planning Assistance Branch Chief

ecc: Chrisopher Floyd, USACE, ERS, Christopher.B.Floyd@usace.army.mil
Kimberly Klein, USFWS, MMM, Kimberly_Klein@fws.gov

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
March 12, 2019

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

Re: Section 7 Endangered Species Act determination for the Port of Nome Modifications Project.

Dear Mr. Floyd:

Thank you for inquiring about endangered and threatened species and critical habitats pursuant to section 7 of the Endangered Species Act of 1973 (ESA), as amended.

THE PROPOSED ACTION

The U.S. Fish and Wildlife Service (Service) has reviewed the proposed six construction alternatives for the Port of Nome Modifications project (Alternatives 3a, 3b, 3c, 4a, 8a, and 8b). All the alternatives focus primarily on modifying the causeway and breakwater configurations, and dredging within the confines of the causeways and harbor to accommodate deeper-draft boats. Increases in shipping traffic through the Bering Sea region are anticipated with the proposed expansion of Port Nome.

THE ACTION AREA

The action area includes Port Nome, and the major ship routes affected by project-related vessel traffic within the Bering Sea of Alaska (Figure 1).

EFFECTS OF THE ACTION ON LISTED SPECIES

Effects of the action include direct effects, which are those with an immediate effect on listed species or habitat, and indirect effects, which are caused by or result from the proposed action, are later in time, are reasonably certain to occur, and may occur outside of the area directly affected by the action.

Project effects on listed eiders

The Service listed the spectacled eider 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). Although low numbers of listed eiders may migrate through the project area, neither species currently nests in the region. While migrating listed eiders may rest and feed

within the Port Nome area, we expect disturbance to them would be minor because these individuals can respond to human presence or disturbance by moving to a safe distance.

Migrating eiders or those making local movements could conceivably collide with the new infrastructure. Eiders are known to fly at low altitudes (less than 32 ft. [10 m]), putting them at risk of striking even relatively low objects in their path. However, due to the low density of listed eiders in the Action Area, we anticipate the risk of mortality from collisions with new structures would be low. Additionally, we expect most migratory eiders would fly offshore, thereby avoiding onshore structures (Johnson and Richardson 1982; Petersen et al. 1999; USGS unpublished data).

The Y-K Delta spectacled eider breeding population molts and stages in eastern Norton Sound Critical Habitat (CH). USACE stipulates the Bering Sea shipping route associated with the project is located > 67 miles west of Norton Sound CH and therefore will not impact molting spectacled eiders in the fall (Figure 2).

In summary, we do not anticipate an appreciable increase in injury or death to listed eiders from the proposed project because (1) listed eider density in the action area is low, (2) impacts from disturbance to listed eiders are not expected, and (3) migratory eiders are expected to make flights offshore.

Project effects on polar bears

The Service listed the polar bear as threatened under the ESA on May 15, 2008 (73 FR 28212). Polar bears may occasionally pass through or den in the Action Area, although their density is low and encounters are expected to be extremely rare. Transient (non-denning) bears entering the Action Area could be disturbed by the presence of humans or equipment noise. However, we expect disturbances would be minor and temporary because transient bears would be able to respond to human presence or disturbance by departing the area. Furthermore, the Service is providing standard Polar Bear Interaction Guidelines (attached) for personnel to follow in the unlikely event polar bears are encountered during authorized activities.

Polar bears in the Chukchi Sea subpopulation primarily den in Russia, and only very rarely den in Alaska. Additionally, there is a lack of preferred denning habitat near the Action Area. These factors combined with the existing levels of human activity and development make it extremely unlikely that polar bears would den in or near the Action Area.

We expect effects of the proposed action on polar bears would be insignificant because (1) the density of polar bears in the Action Area is very low, (2) encounters with polar bears are expected to be infrequent, (3) behavioral effects to transient bears would be minor and temporary, (4) mitigation measures included in the attached interaction guidelines would minimize potential impacts in the event transient polar bears are encountered, and (5) the probability of polar bears denning in the Action Area is extremely low.

CONCLUSION

The proposed action could conceivably present a minor collision risk to listed eiders moving through the project area. However, due to low densities of these species and the presence of existing structures, we expect the effects of collision risk to be insignificant. The proposed action could also temporarily disturb listed eiders or polar bears; however, due to low densities of these species and minimization measures included in the attached interaction guidelines, we expect these disturbances would be insignificant. Therefore, the Service concurs the proposed action is not likely to adversely affect listed eiders or polar bears. Preparation of a Biological Assessment or further consultation under section 7 of the ESA is not necessary at this time. However, should the proposed project undergo any significant changes in the design, siting, or management, please contact our office.

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,

Ted Swem
Consultation Branch Chief

Literature Cited

Johnson, R., and W. Richardson. 1982. Waterbird migration near the Yukon and Alaska coast of the Beaufort Sea: II. Molt migration of seaducks in summer. Arctic 35:291-301.

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

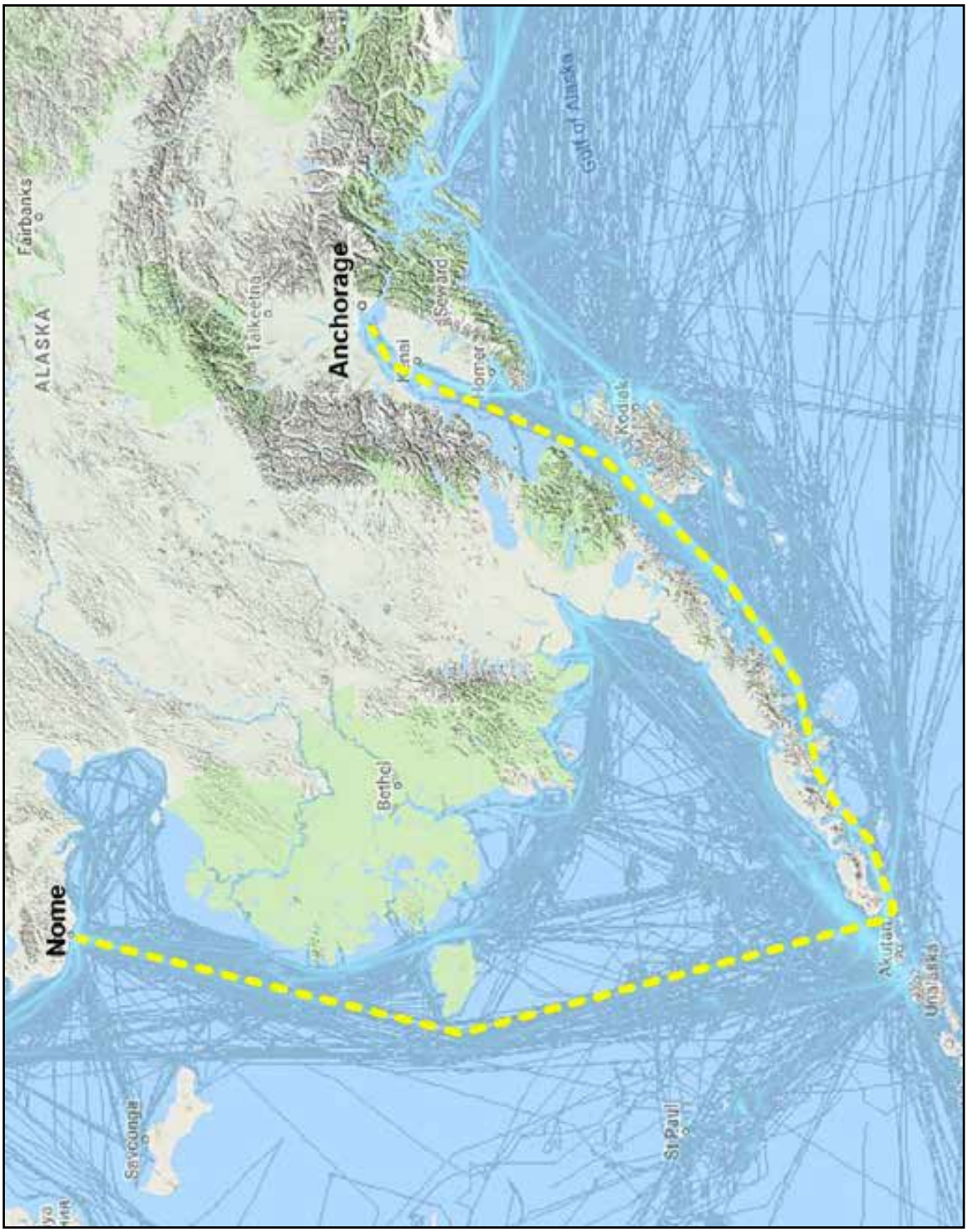

Figure 1. Action Area for the Port of Nome Modifications Project.

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

POLAR BEAR INTERACTION GUIDELINES

These Polar Bear Interaction Guidelines (Guidelines) were developed to ensure that activities are conducted in a manner that avoids conflicts between humans and polar bears. Polar bears are protected under the Marine Mammal Protection Act (MMPA), and were listed as a threatened species under the Endangered Species Act (ESA) in 2008. The MMPA and ESA both prohibit the "take" of polar bears without authorization. Take includes disturbance/harassment, as well as physical injury and killing of individuals.

In addition to sea ice, polar bears use marine waters and lands in northern Alaska for resting, feeding, denning, and seasonal movements. They are most likely to be encountered within 25 miles of the coastline, especially along barrier islands during July-October. Polar bears may also be encountered farther inland, especially females during the denning period (October-April). Polar bears may react differently to noise and human presence. The general methods for minimizing human-bear conflicts are to: 1) avoid detection and close encounters; 2) minimize attractants; and 3) recognize and respond appropriately to polar bear behaviors. These Guidelines provide information for avoiding conflicts with polar bears during air, land, or water-based activities.

Unusual sightings or questions/concerns can be referred to: Christopher Putnam, Marine Mammals Management Office (MMM Office), (907) 786-3844; or to Sarah Conn (907) 456-0499 of the Fairbanks Fish & Wildlife Field Office (FFWFO).

When operating aircraft:

- If a polar bear(s) is encountered, divert flight path to a minimum of 2,000 feet above ground level or ½ mile horizontal distance away from observed bear(s) whenever possible.

When traveling on land or water:

- Avoid surprising a bear. Be vigilant—especially on barrier islands, in river drainages, along bluff habitat, near whale or other marine mammal carcasses, or in the vicinity of fresh tracks.

- Between October and April special care is needed to avoid disturbance of denning bears. If activities are to take place in that time period the MMM Office should be contacted to determine if any additional mitigation is required. In general, activities are not permitted within one mile of known den sites.

- Avoid carrying bear attractants (such as strongly scented snacks, fish, meat, or dog food) while away from camp; if you must carry attractants away from camp, store foods in air-tight containers or bags to minimize odor transmission until you return them to "bear-resistant" containers.*

- If a polar bear(s) is encountered, remain calm and avoid making sudden movements. Stay downwind if possible to avoid allowing the bear to smell you. Do not approach polar bears. Allow bears to continue what they were doing before you encountered them. Slowly leave the vicinity if you see signs that you've been detected. Be aware that safe

viewing distances will vary with each bear and individual situation. Remember that the closer you are to the animal, the more likely you are to disturb it.

- If a bear detects you, observe its behavior and react appropriately. Polar bears that stop what they are doing to turn their head or sniff the air in your direction have likely become aware of your presence. These animals may exhibit various behaviors:

  - *Curious* polar bears typically move slowly, stopping frequently to sniff the air, moving their heads around to catch a scent, or holding their heads high with ears forward. They may also stand up.

  - *A threatened or agitated* polar bear may huff, snap its jaws together, stare at you (or the object of threat) and lower its head to below shoulder level, pressing its ears back and swaying from side to side. These are signals for you to begin immediate withdrawal by backing away from the bear. If this behavior is ignored, the polar bear may charge. Threatened animals may also retreat.

  - In rare instances you may encounter a *predatory* bear. It may sneak or crawl up on an object it considers prey. It may also approach in a straight line at constant speed without exhibiting curious or threatened behavior. This behavior suggests the bear is about to attack. Standing your ground, grouping together, shouting, and waving your hands may halt the bear's approach.

- If a polar bear approaches and you are in the bear's path—or between a mother and her cubs—get out of the way (without running). If the animal continues to approach, stand your ground. Gather people together in a group and/or hold a jacket over your head to look bigger. Shout or make noise to discourage the approach.

- If a single polar bear attacks, defend yourself by using any deterrents available. If the attack is by a surprised female defending her cubs, remove yourself as a threat to the cubs.

When camping:

- Avoid camping or lingering in bear high-use areas such as river drainages, coastal bluffs and barrier islands.

- Store food and other attractants in "bear-resistant" containers*. Consider the use of an electric fence as additional protection. Do not allow the bear to receive food as a reward in your camp. A food-rewarded bear is likely to become a problem bear for you or someone else in the future.

- Maintain a clean camp. Plan carefully to: minimize excess food; fly unnecessary attractants out on a regular basis (i.e. garbage, animal carcasses, excess anti-freeze or petroleum products); locate latrines at least ¼ mile from camp; and wash kitchen equipment after every use.

- If a polar bear approaches you in camp, defend your space by gathering people into a large group, making noise and waving jackets or tarps. Continue to discourage the bear until it moves off. Have people watch the surrounding area in case it returns later,

keeping in mind that polar bears are known to be more active at night. Additional measures to protect your camp, such as electric fences or motion sensors can be used.

Harassment of polar bears is not permissible, unless such taking (as defined under the MMPA) is imminently necessary in defense of life, and such taking is reported to FWS within 48 hours.

*Containers must be approved and certified by the Interagency Grizzly Bear Committee as "bear-resistant." Information about certified containers can be found at http://www.igbconline.org/html/container.html.

FOR DEPARTMENT OF INTERIOR EMPLOYEES ONLY

Use of Deterrents

In addition to following the Guidelines above, all U.S. Fish and Wildlife Service (Service) employees must have completed the Department of the Interior's (DOI) Bear and Firearm Safety Training course and be current in certification before engaging in field activities. Service staff must practice with and know how to use deterrents prior to conducting field work. If working in bear habitat, Service staff must anticipate and plan for possible scenarios of encountering polar bears, and identify appropriate responses, prior to initiating field work. Use of non-lethal polar bear deterrents by Service staff is only permissible if it is done in a humane manner and is for the purposes of protection or welfare of the bear or the public. Service staff has the right to use lethal methods to protect the public from polar bears in defense of life situations, and may do so when all reasonable steps to avoid killing the bear(s) have been taken.

Notification of Use of Deterrents

The Department of the Interior Bear Incident Report Form will be used to record and report polar bear-human interactions *that require use of deterrents*. These incidents will be reported to the MMM Office. This information will be used to track interactions over time and improve polar bear conservation and management.

From: Floyd, Christopher B CIV USARMY CEPOA (US)
To: "Colette Cairns - NOAA Federal"
Cc: Salyer, Michael R CIV USARMY CEPOA (USA)
Subject: RE: [Non-DoD Source] Port of Nome: ESA determination letter/LOC Request
Date: Tuesday, April 02, 2019 6:35:00 PM
Attachments: PoN 400ft dock piling plan 2Apr2019.pdf

Hi Colette -
I'm able to provide some details on the types and numbers of pilings that would go into the proposed 400-foot sheet-pile dock; please see the attached document.

Thanks,
Chris Floyd

-----Original Message-----
From: Colette Cairns - NOAA Federal [mailto:colette.cairns@noaa.gov]
Sent: Thursday, March 28, 2019 11:36 AM
To: Floyd, Christopher B CIV USARMY CEPOA (US) <Christopher.B.Floyd@usace.army.mil>
Subject: Re: [Non-DoD Source] Port of Nome: ESA determination letter/LOC Request

Hi Chris,

Thanks for your response on my earlier questions. Good information on the position of the breakwater, I'll keep that in mind. I'm trying to evaluate the effects of the action and potential exposure, and it would be helpful for me if you could provide a more detailed description of the action.

I'm particularly interested in details on the sheet piling. As I mentioned before, we need to be able to predict the extent of the sound caused by the sheet piling. How many piles, what size will they be?

If it would be easier for you, and you're able to share it, the description of the action from the draft NEPA document would be very helpful. I'm available at my desk most of today if you'd like to talk.

Thanks,

Colette

On Tue, Mar 26, 2019 at 11:46 AM Floyd, Christopher B CIV USARMY CEPOA (US) <Christopher.B.Floyd@usace.army.mil <mailto:Christopher.B.Floyd@usace.army.mil> > wrote:

> Okay, thanks.
> Something to bear in mind is that the sheetpile dock may well be constructed after other project elements.
> The preferred alternative is 8b, which removes the existing east rubblemound breakwater and replaces it with a rubblemound structure several hundred feet further east... i.o.w., there will still be a noise-attenuating stone structure to the east, but farther away from the proposed pile-driving.
>
> Chris Floyd
>
> -----Original Message-----
> From: Colette Cairns - NOAA Federal [mailto:colette.cairns@noaa.gov <mailto:colette.cairns@noaa.gov>]
> Sent: Tuesday, March 26, 2019 11:16 AM
> To: Floyd, Christopher B CIV USARMY CEPOA (US) <Christopher.B.Floyd@usace.army.mil <mailto:Christopher.B.Floyd@usace.army.mil> > >
> Subject: Re: [Non-DoD Source] Port of Nome: ESA determination letter/LOC Request

Hi Chris,

Thanks for your prompt responses. I looked over the 2012 Permit; it's good to have that reference. One thing I should point out about the 350 meter exclusion zone is that in 2012, the new marine mammal acoustic guidance had not come out yet (that happened in 2016). So, the exclusion zone distances may change based on the 2016 guidance for this action. I have to look into it to get an idea of what an exclusion zone distance would look like (which is why we were asking about the sound source levels), so I will be in touch with you about that as I find out more.

Thanks,

Colette

On Mon, Mar 25, 2019 at 2:50 PM Floyd, Christopher B CIV USARMY CEPOA (US) <Christopher.B.Floyd@usace.army.mil <mailto:Christopher.B.Floyd@usace.army.mil> <mailto:Christopher.B.Floyd@usace.army.mil > > > wrote:

Thank you for your note, Colette -

1. I haven't worked up any noise scenarios for the proposed dock. It would be very similar to a dock the city of Nome built recently on the same causeway, and I was hoping, for simplicity's sake, we could adopt the same marine mammal Special Conditions for our project as were stipulated in the DA Permit for the City's action (attached).

2. For the purposes of the Corps' current NEPA and agency coordination, we are including the sheetpile dock construction as part of our overall action.

3. I think I told Jill that 2022 was the earliest conceivable year that construction could start; it would probably be later than 2022. Definitely not starting in 2020.

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

-----Original Message-----
From: Colette Cairns - NOAA Federal [mailto:colette.cairns@noaa.gov <mailto:colette.cairns@noaa.gov> <mailto:colette.cairns@noaa.gov > >]
Sent: Monday, March 25, 2019 12:43 PM
To: Floyd, Christopher B CIV USARMY CEPOA (US) <Christopher.B.Floyd@usace.army.mil <mailto:Christopher.B.Floyd@usace.army.mil> <mailto:Christopher.B.Floyd@usace.army.mil > > >
Subject: [Non-DoD Source] Port of Nome: ESA determination letter/LOC Request

Hi Chris,

I am on a detail to the NMFS Anchorage Office, and I wanted to introduce myself. I am taking over the USACE's Port of Nome LOC request from my colleague, Jill Prewitt. Jill brought me up to speed on your request, and I have been reviewing your materials. I had a few questions, and I hope they are not too redundant to anything you've covered previously with Jill.

--In your 2.20.19 email exchange with Jill, you talked about possibly providing a generic scenario for noise levels related to the sheet-pile driving. Do you have that information?

--In the same email, you mention that the dock construction might actually be conducted by the City of Nome. Is dock construction not part of your proposed action now? Would the Corps be authorizing any part of the City's dock construction?

--Can you confirm the start date (spring 2022)? I thought Jill mentioned 2020 as a start date. Just want to make sure I have that correct.

If you'd like to chat, I can be reached by phone (907-271-1692).

Thanks, and I look forward to working with you.

Colette

--

Colette Cairns

National Marine Fisheries Service

on detail

Alaska Regional Office
Protected Resources Division
Anchorage
222 West 7th Avenue Rm 552
Anchorage, AK 99513
907-271-1692

colette.cairns@noaa.gov <mailto:colette.cairns@noaa.gov> <mailto:colette.cairns@noaa.gov > > <mailto:colette.cairns@noaa.gov > <mailto:colette.cairns@noaa.gov > > >

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Colette Cairns

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Colette Cairns

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colette.cairns@noaa.gov <mailto:colette.cairns@noaa.gov>

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

April 22, 2019

Mr. Michael Salyer
Chief, Environmental Resources Section
Alaska District
U.S. Army Corps of Engineers
PO Box 6898
Joint Base Elmendorf-Richardson, AK 99506-0898

Dear Mr. Salyer:

Thank you for providing a request for informal consultation under the Endangered Species Act (ESA) for the Port of Nome Modifications project to expand the existing port and harbor facilities starting in the spring of 2022. The National Marine Fisheries Service (NMFS) understands that the U.S. Army Corps of Engineers is currently undertaking a feasibility study to choose one of six possible construction alternatives at the Port of Nome. As discussed below, we recommend initiating ESA Section 7 consultation only after the Corps can provide sufficient certainty and precision regarding project details to allow for a meaningful analysis of project effects upon ESA-listed species.

In order to engage in ESA section 7 consultation, NMFS will need sufficient details on the proposed action, including those regarding the timing and duration of the activities, specifics on the dredging, pile-driving and dock construction activities, and an analysis of the effects of the proposed action on ESA-listed species. Because your request lacks important details regarding this project that are not currently available, we recommend that the Corps submit a revised request for concurrence once sufficient project details are known to enable the Corps to provide a justification for its determination of project effects on threatened and endangered species.

This approach – completing the ESA consultation later in the planning process when additional project details are known, such that you can submit a complete request for informal consultation – is appropriate for any Corps Civil Works projects that involve ESA-listed species.

Sincerely,

Jonathan M. Kurland
Assistant Regional Administrator
for Protected Resources

Magnuson-Stevens Act Essential Fish Habitat

Correspondence

NMFS Habitat Conservation Division

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

15 January 2019

Dear Mr. Eagleton,

Attached please find an Essential Fish Habitat (EFH) Assessment for the U.S. Army Corps of Engineers (Corps) "Port of Nome Modifications" project at Nome, Alaska. The Corps requests a review of this document and recommendations on EFH conservation from the National Marine Fisheries Service (NMFS). The attached EFH Assessment determines that the project may have adverse, but minor and localized, effects on EFH for Pacific salmon, red king crab, and several species of Bering Sea groundfish.

The Corps 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 L. 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

March 6, 2019

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

Re: Essential Fish Habitat Assessment for Port of Nome Modifications

Dear Colonel Borders:

The National Marine Fisheries Service (NMFS) Habitat Conservation Division (HCD) has received the United State Army Corps of Engineers' (USACE) request for agency review comments on the Essential Fish Habitat (EFH) Assessment for the Port of Nome Modifications Project located in Nome, Alaska. The proposed project seeks to improve marine infrastructure by 1) extending the rock causeway and breakwater, and 2) dredging the Port of Nome to a deeper maximum depth. The proposed project intends to reduce vessel congestion, vessel damage, and risk of fuel spills. One goal of this project is to increase operational efficiencies in the Port of Nome and the surrounding region.

NMFS acknowledges that although the USACE is considering six construction alternatives, all alternatives are similar to one another with respect to environmental impact. While some of the alternatives involve the demolition of the existing eastern breakwater and its subsequent reconstruction, most construction-related impacts will be localized and short term. NMFS appreciates that the USACE includes fish passageways and construction timing windows in each alternative to mitigate the short-term impacts to EFH caused by construction.

All alternatives under consideration include the beneficial use of the 700,000 to 2,000,000 cubic yards of dredge spoils. Fine sediments can negatively impact EFH by smothering and covering existing fish habitat; however, NMFS agrees beach nourishment is a beneficial use of these dredge yields. The base of the Nome seawall supports nearshore habitat that is highly ephemeral due to natural alongshore transport of fine sediments, wave action, and seasonal ice gouging. Although some effect will likely occur, the fish habitat will likely recover in the short term given the shallow depth and storm frequency in the area.

NMFS recognizes that the USACE has consulted with local biologists, Alaska Native representatives, and other stakeholders about the potential impacts of beach nourishment on local subsistence crab fisheries. NMFS notes the USACE does not expect beach nourishment to affect crab fishing or habitat. NMFS highlights that disposal is only possible if the material is deemed suitable for open-water placement under Section 404(b)(1) of the Clean Water Act, which will not be determined until the Project Engineering Design phase of the project.

NMFS recognizes the mitigation measures that USACE included in the EFH Assessment. Additionally, NMFS proposes the following EFH conservation recommendations. NMFS recommends the USACE:

- establish long-term monitoring of the new/extended rubblemounds for recolonization of habitat-forming organisms as well as any abundance information on predator species (e.g., sculpin) that may impact species with designated EFH in the Nome area (e.g. juvenile salmonids, crab);
- provide NMFS HCD with any information on the presence or absence of any fish or prey of fish overtime; and,
- pursue the beneficial ocean placement of appropriate coarse grain dredge spoils.

The USACE offers to use appropriate clean project dredge materials (e.g., cobble and boulders) excavated during the project to mitigate the loss of EFH through the creation of habitat in deeper waters offshore that do not currently support living substrates or the critical life stages for species such as crab. NMFS agrees this would be a beneficial use of these materials.

The USACE has determined the proposed project "may have adverse, but minor and localized, effects on EFH." NMFS agrees with the USACE's determination. However, the USACE offers mitigation that may lessen project effects on EFH. In accordance with Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act, the USACE is required to consult with NMFS on activities that may adversely affect EFH. Thus, Section 305 of the Magnuson-Stevens Act and associated EFH consultation is satisfied.

Should the project or preferred alternative change significantly, NMFS wishes to be informed of any such changes in order to reassess the determination. 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, Ph.D.
Administrator, Alaska Region

cc: Christopher Floyd, USACE, Christopher.B.Floyd@usace.army.mil

From: Seanbob Kelly - NOAA Federal
To: Floyd, Christopher B CIV USARMY CEPOA (USA)
Cc: lydia.ames@noaa.gov; Matthew Eagleton
Subject: [Non-DoD Source] Re: "Port of Nome" EFH Assessment - noise issues (UNCLASSIFIED)
Date: Monday, November 25, 2019 1:22:18 PM

Hello Chris and thank you for your continued coordination with our office on this project. I agree with your way forward on this project, as long as the pile driving recommendations from the non-fishing effect document are incorporated in the EA/IRFA and the timing windows for fish passage are still in place.
I will be in and out today but feel free to call my cell if you have any questions or concerns.
Seanbob
907-687-5288
Seanbob Kelly

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

Office (907) 271-5195

On Thu, Nov 21, 2019 at 4:35 PM Floyd, Christopher B CIV USARMY CEPOA (USA) <Christopher.B.Floyd@usace.army.mil <mailto:Christopher.B.Floyd@usace.army.mil> > wrote:

CLASSIFICATION: UNCLASSIFIED

Hi -
We are finalizing the Integrated Feasibility Report/Environmental Assessment (IFR/EA) for the "Port of Nome" project.
The EFH Assessment you reviewed and commented on (see attached) will be appended to that document.

1. I realized recently that the USACE never responded in writing to the conservation recommendations provided in the NMFS letter dated 5 March 2109. The USACE does in fact accept those recommendations, and has begun implementing several of them.

2. Since the draft IFR/EA went out in May 2019, the scale of pile driving expected for the project has increased greatly.
The "tentatively selected plan" (Alternative 8a) will include 5 new sheet pile docks, each with 2 hollow-steel-pile mooring-dolphins.

The January 2019 EFH Assessment describes a single sheet pile dock and no mooring-dolphins, and does not address pile driving effects on EFH.
I apologize for not realizing this deficiency in the EFH Assessment sooner.
Much of the construction detail necessary to develop site-specific noise profiles is not available yet. The docks and mooring-dolphins would be installed after the new rubble mound causeways are constructed. As you can see from the attached Alt 8b figure, those rubble mound structures will greatly limit noise propagation in most directions, except to the southeast of the new entrance.

In lieu of generating a revised EFH Assessment, I would like to propose that I incorporate into the final IFR/EA the generic "recommended conservation measures for pile driving" in Section 4.5.1.2 of the "Impacts to EFH from Nonfishing Activities in Alaska".
If that is acceptable, it would help our paper-trail if NMFS could provide a supplemental concurrence letter recommending the addition of the piledriving-related measures.

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

National Historic Preservation Act Section 106

Correspondence

State Historic Preservation Officer

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

CEPOA-PM-C-ER 08 APR 2019

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 (USACE) Alaska District, Civil Works (CW) Program, is planning to implement measures to improve navigation at the Port of Nome, Alaska (Section 26, T11S, R34W, Kateel River Meridian, USGS Quad Nome C-1; Figure 1). In compliance with Section 106 of the National Historic Preservation Act of 1966, the purpose of this letter is to notify you of a Federal undertaking [36 CFR § 800.3(c)(3)] and to seek your review regarding our determination of effect on historic properties from the proposed undertaking [36 CFR § 800.4(d)(1)].

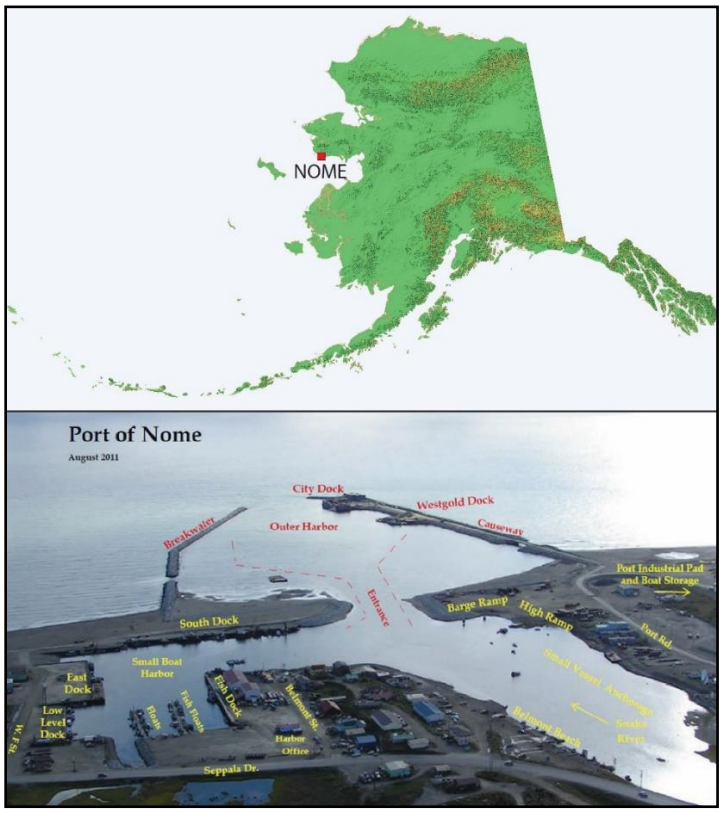

Figure 1. Location of Nome, Alaska, and details of the Port of Nome.

Context

The City of Nome is located at the northern edge of Norton Sound, which forms the southern boundary of the Seward Peninsula. Norton Sound is the geographic break between two peoples: the Iñupiat to the north and the Yup'ik to the south. The Seward Peninsula has been occupied for at least 10,000 years (Keene et al. 2009; Larsen 1968); Norton Sound has been occupied for at least 5,000 years, as demonstrated by the Iyatayet site on Cape Denbigh (Mason et al. 2007). Previous archaeological research in the general vicinity of Nome includes Hrdlicka's (1930:90) survey of Safety Sound in 1926, and limited excavations at Cape Nome and Safety Sound by Rainey 1950, Hopkins in 1951, and Hadleigh-West in 1960 (Bockstoce and Rainey 1970:42-43), Townsend in 1969 (Townsend 1969:4-5), and Bockstoce in 1972 (Bockstoce 1979:24).

The mouth of the Snake River at Nome was the site of a permanent village, known now as the Snake River Sandspit Site, approximately 200 years ago (Eldridge 2014). Euroamericans began impacting the region in the nineteenth century. Beginning in the late 1940s, whaling fleets roamed the Bering Strait. In 1848, Captain Thomas Roys entered the Bering Strait on the whaling ship *Superior* and encountered massive numbers of humpback whales (Bockstoce 1986). This event resulted in a significant increase in whaling activity in the region, which in turn led to increased contact between Euroamericans and the indigenous peoples of Norton Sound.

Between 1848 and 1854, more regular foreign incursions into the Bering Strait region occurred as part of the search for the missing British Arctic expedition of Sir John Franklin (Bockstoce 1979), and in the 1860s, members of the Western Union Telegraph Expedition surveyed the Bering Strait and Norton Sound in an effort toward establishing a telegraph link between America and Europe (Sherwood 1965).

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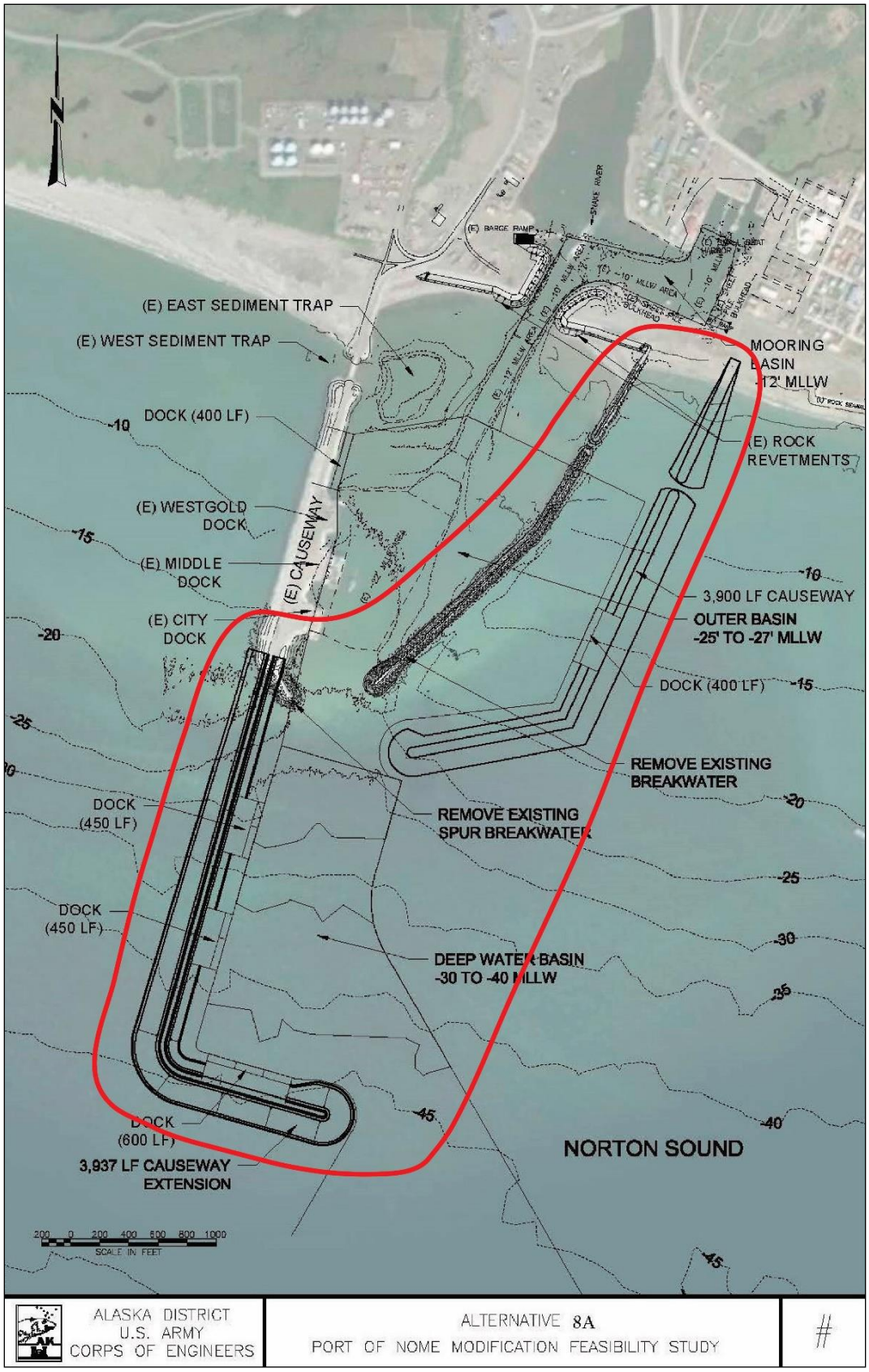

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For the purposes of this undertaking, the USACE proposes to treat NOM-158 as eligible for the NRHP.

It is unknown whether NOM-158 actually extends into the proposed project's APE. When the eastern breakwater was constructed in 2005, no intact historic cultural materials were identified. Additionally, the proposed area was the location of "beach nourishment" in 2008 and 2009, *i.e.* the where sediment dredged from the harbor was placed during normal operational maintenance. The beach nourishment location was moved eastward from this original location after 2009 due to the fact that too much accretion was occuring. Therefore, it is highly unlikely that any of the approximate 10-inch layer of historic materials (building foundations, boardwalks, artifacts, etc.) associated with NOM-158 which may be in the APE will be disturbed by the proposed 2-foot deep excavations.

Conclusion

The proposed navigation improvements at the Port of Nome have the potential to affect the Snake River Sandspit Site (NOM-146) and the Nome Subsurface Historic District (NOM-158); however, the USACE proposes construction methods to ensure that neither site is adversely impacted. In addition to the proposed construction methods, the USACE will have an archaeological monitor who meets the Secretary of Interior's Professional Qualifications Standards [62 FR 33708] present during all terrestrial ground-disturbing activities. As such, and per 36 CFR § 800.5(b), the USACE requests your review regarding our determination that the proposed undertaking will have **no adverse effect** on historic properties.

If you have any questions about this project, please contact me 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:
Tiffany Martinson, Executive Director, Nome Eskimo Community
Jacob Martin, Tribal Resource Director, Nome Eskimo Community
Benjamin Payenna, King Island Native Community
Ukallaysaaq Okleasik, VP of Corporate Affairs, Sitnasuak Native Corporation
Austin Ahmasuk, Marine Advocate, Kawerak, Inc.
Julie Raymond-Yakoubian, Social Science Program Director, Kawerak, Inc.
Kevin Bahnke, Lands and Resources Department, Bering Straits Native Corporation
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5-7-19

3130-1R COE-E

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

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 (USACE) Alaska District, Civil Works (CW) Program, is planning to implement measures to improve navigation at the Port of Nome, Alaska (Section 26, T11S, R34W, Kateel River Meridian, USGS Quad Nome C-1; Figure 1). In compliance with Section 106 of the National Historic Preservation Act of 1966, the purpose of this letter is to notify you of a Federal undertaking [36 CFR § 800.3(c)(3)] and to seek your review regarding our determination of effect on historic properties from the proposed undertaking [36 CFR § 800.4(d)(1)].

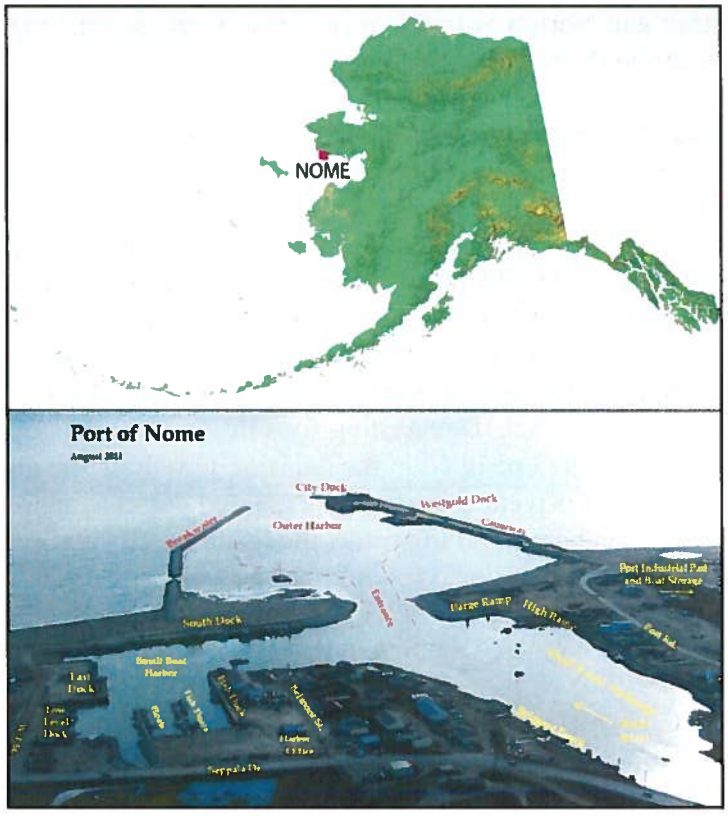

Figure 1. Location of Nome, Alaska, and details of the Port of Nome.

2019-00486

Context

The City of Nome is located at the northern edge of Norton Sound, which forms the southern boundary of the Seward Peninsula. Norton Sound is the geographic break between two peoples: the Iñupiat to the north and the Yup'ik to the south. The Seward Peninsula has been occupied for at least 10,000 years (Keene et al. 2009; Larsen 1968); Norton Sound has been occupied for at least 5,000 years, as demonstrated by the Iyatayet site on Cape Denbigh (Mason et al. 2007). Previous archaeological research in the general vicinity of Nome includes Hrdlicka's (1930:90) survey of Safety Sound in 1926, and limited excavations at Cape Nome and Safety Sound by Rainey 1950, Hopkins in 1951, and Hadleigh-West in 1960 (Bockstoce and Rainey 1970:42-43), Townsend in 1969 (Townsend 1969:4-5), and Bockstoce in 1972 (Bockstoce 1979:24).

The mouth of the Snake River at Nome was the site of a permanent village, known now as the Snake River Sandspit Site, approximately 200 years ago (Eldridge 2014). Euroamericans began impacting the region in the nineteenth century. Beginning in the late 1940s, whaling fleets roamed the Bering Strait. In 1848, Captain Thomas Roys entered the Bering Strait on the whaling ship *Superior* and encountered massive numbers of humpback whales (Bockstoce 1986). This event resulted in a significant increase in whaling activity in the region, which in turn led to increased contact between Euroamericans and the indigenous peoples of Norton Sound.

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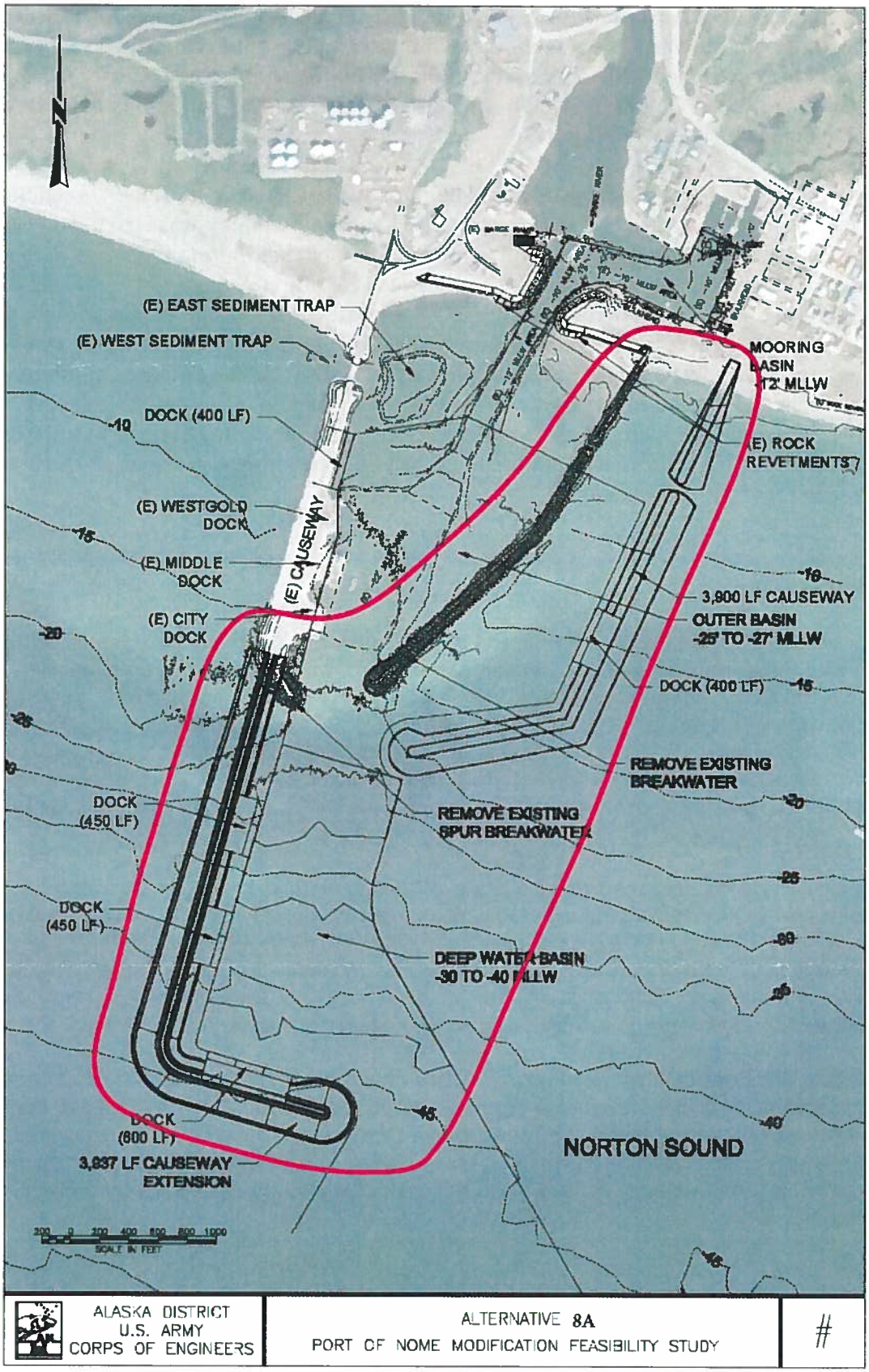

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Sincerely,

Kelly A. Eldridge
Archaeologist
Environmental Resources Section

No Historic Properties Adversely Affected
Alaska State Historic Preservation Officer
Date: 5.7.19 File No.: 3130-1R COE 2019-00486
Please review: 36 CFR 800.13 / A.S. 41.35 070(d)

Cc:
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Jacob Martin, Tribal Resource Director, Nome Eskimo Community
Benjamin Payenna, King Island Native Community
Ukallaysaaq Okleasik, VP of Corporate Affairs, Sitnasuak Native Corporation
Austin Ahmasuk, Marine Advocate, Kawerak, Inc.
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USACE Policy Waiver

Correspondence

Assistant Secretary of the Army (Civil Works)

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

DEC 17 2019

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

SUBJECT: Port of Nome Feasibility Study/Environmental Assessment, Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA) Policy Exception Request

1. Reference memorandum, CECW-POD, 26 Nov 2019, subject: Policy Waiver Request for Port of Nome Feasibility Study/Environmental Assessment, Nome, 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 Nome, Alaska project and defer completion until the Preconstruction Engineering and Design (PED) Phase.

3. My staff has reviewed the memorandum and recommendations by the Alaska District and Pacific Ocean Division, and the assessment by Corps Headquarters. Completing the Nome ESA consultation in PED 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. I approve the requested policy waiver for Nome Harbor.

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)

CF:
CECW-ZA
CECW-ZB

Water Quality Certification – Clean Water Act, Section 401

Correspondence

State of Alaska Department of Environmental Quality

Division of Water

THE STATE of ALASKA
GOVERNOR MICHAEL J. 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

July 12, 2019

U.S. Army Corps of Engineers, Alaska District
Attn: CEPOA-PM-C-ER, Mr. Floyd
P.O. Box 6898
JBER, Alaska 995066-0898

Re: USACE, AK District, Port of Nome Modification
ER-19-007, Port of Nome

Dear Mr. Floyd:

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 navigational improvements at the Port of Nome.

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/ReviewGuidance.htm for information on Administrative Appeals of Department decisions.

An adjudicatory hearing request must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, PO Box 111800, Juneau, AK 99811-1800, 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.)
Jenipher Cate, USACE, Anchorage
Betsy McCraken, EPA, AK Operations
Audra Brase, ADF&G/Habitat, Fairbanks
Fairbanks USFWS Field Office

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 the U.S. Army Corps of Engineers, Alaska District (Attention: CEPOA-PM-C-ER, Mr. Floyd) at P.O. Box 6898, JBER, Alaska 995066-0898, for placement of dredged and/or fill material in waters of the U.S. including wetlands and streams, in association with navigational improvements at the Port of Nome. The Alaska District circulated a Draft Finding of No Significant Impact during the public notice period for the proposed project.

Vessel traffic in the Arctic, coupled with limited marine infrastructure and available draft in Nome results in operational inefficiencies, vessel damage, and decreased safety, increased costs of goods and services, and threats to the long-term viability of surrounding communities. The existing port facilities in the region are over-crowded and have insufficient draft to accommodate new, deeper drafting vessel traffic. The Port of Nome is also over-crowded due to the high number of barges and ships attempting to use the existing dock space. Large vessels delivering fuel and cargo to Nome for transshipment to other vessels for delivery to surrounding villages are often forced to anchor offshore or lighter goods to the port. Commercial fishing vessels also add to the demand for space and services during the short open water season.

The Port of Nome has limited refuge capacity for larger vessels due to the relatively low shallow basins, limited berthing and open area within the basins suitable for anchorage. A modification to the Port of Nome would improve navigation and provide safe, reliable, and efficient waterborne transportation systems for movement of commerce, national security, and recreation at the Port of Nome. The project would involve the following activities:

- Extending the existing west causeway by 3,484 feet;
- Removing the existing east breakwater and replace it with a new 3,900-foot causeway;
- Deepening the existing Outer Basin to 28 feet below mean lower low water (MLLW);
- Creating a Deep Water Basin to minus 30 or 40 feet below MLLW; and
- Constructing five new docks.

Pending results of the chemical characterization of the sediments, the proposed placement of dredged material will likely be a combination of beach placement in front of the seawall, in the near shore area within the depth of closure (which is believed to be from shore to within 20-30 ft depth), and potentially using some of the material as fill within the newly constructed causeway and caisson docks. Table 1 lists the proposed disposal coordinates.

Table 1: Proposed Disposal Coordinates

	Latitude (NAD83)	Longitude (NAD83)
Northwest	64 29'27.28N/64.490911	165 25'30.33W/-165.425092
Southwest	64 29'50.52N/64.480625	165 25'4.20W/-165.417833
Northeast	64 29'34.96N/64.493044	165 23'16.67W/-165.387964
Southwest	64 29'10.37N/64.486214	165 23'39.74W/-165.394372

The Alaska District has applied for a state issued water quality certification under Clean Water Act Section 401 for the discharge of pollutants to waters of the U.S. The Alaska District will construct the project 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-19-007 posted from May 8 to June 8, 2019.

The proposed activity is located within Section 26, T. 11 N., R. 34 W., Kateel River Meridian; Latitude 64.500797° N. Longitude -165.424597° W; in Nome, 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. The permittee must perform chemical characterization of the sediment within the dredging prism. The permittee must submit a Sampling and Analysis Plan to DEC (Angela Hunt, 269-7599, Angela.Hunt@alaska.gov) for review and approval prior to beginning sampling.
2. 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.
3. 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.
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 on a daily basis for leaks. If leaks are found, the equipment shall not be used and pulled from service until the leak is repaired.
5. The permittee must stabilize any dredged material (temporarily or permanently) stored on upland property to prevent erosion and subsequent sedimentation into jurisdictional waters of the United States. The material must be contained with siltation control measures to preclude reentry into any waters of the U.S., including wetlands.
6. All dredging shall be conducted so as 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.

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: July 12, 2019

James Rypkema, Program Manager
Storm Water and Wetlands

Letters of Support and Intent from Sponsor

Letters of Support from Others

S T A T E O F A L A S K A
THE LEGISLATURE

2019

Source
HJR 14

Legislative Resolve No.
4

Urging the Alaska Congressional delegation to pursue infrastructure funding for a deep draft Arctic port in Nome; requesting the Department of Transportation and Public Facilities to send a letter from the state to the Alaska Congressional delegation supporting a deep draft Arctic port in Nome; and requesting the Department of Transportation and Public Facilities to work collaboratively with the City of Nome on a deep draft Arctic port in Nome.

BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:

WHEREAS Alaska is the only state in the United States that borders the Arctic Ocean; and

WHEREAS the retreat of Arctic sea ice is increasing the seasonal navigability of the Arctic Ocean, which has resulted in an influx of marine traffic in the circumpolar Arctic; and

WHEREAS the other seven Arctic nations have been very proactive in addressing the changing situation in the Arctic and have begun to assert their interest in the region; and

WHEREAS the United States Army Corps of Engineers launched the Alaska Deep-

Draft Arctic Port System study in 2012 to evaluate potential locations for a deep draft Arctic port on the northern and western coasts of the state and determine the feasibility of constructing navigation improvements as part of a large system of port facilities in the Arctic and subarctic regions; and

WHEREAS, in 2015, the United States Army Corps of Engineers released a draft feasibility report and environmental assessment that selected the Port of Nome as the preferred site to establish a deep draft Arctic port; and

WHEREAS the state, the Alaska State Legislature, and the Arctic Policy Commission realize that access to newly open Arctic waterways is vitally important to the state; and

WHEREAS the Alaska State Legislature appropriated $1,600,000 in the fiscal year ending June 30, 2017, and $1,600,000 in the fiscal year ending June 30, 2019, to fund the City of Nome's 50/50 match requirement for the United States Army Corps of Engineers feasibility and design studies; and

WHEREAS the first year of the accelerated two-year study is almost complete, and the selection of a preferred project design alternative is scheduled for March 2019; and

WHEREAS the timeline for developing a deep draft Arctic port is fairly short, with construction potentially beginning in 2023 or 2024 if the project is authorized by Congress in 2020; and

WHEREAS the Alaska State Legislature recognizes the urgency of developing key infrastructure and defense capabilities in the Arctic;

BE IT RESOLVED that the Alaska State Legislature urges the Alaska Congressional delegation to pursue all infrastructure funding that recognizes the region's importance in addressing the nation's critical security concerns, vital energy supply, and significant opportunities to decrease intercontinental shipping distances; and be it

FURTHER RESOLVED that the Alaska State Legislature requests the Department of Transportation and Public Facilities to send a letter from the state to the Alaska Congressional delegation supporting a deep draft Arctic port in Nome; and be it

FURTHER RESOLVED that the Alaska State Legislature requests the Department of Transportation and Public Facilities to work collaboratively with the City of Nome to provide technical support through the completion of the feasibility and design phases of establishing a deep draft Arctic port and assist the City of Nome in developing innovative

funding strategies for the city's construction cost share.

COPIES of this resolution shall be sent to the Honorable Lisa Murkowski and the Honorable Dan Sullivan, U.S. Senators, and the Honorable Don Young, U.S. Representative, members of the Alaska delegation in Congress.

P.O. Box 281 o Nome, Alaska 99762
phone 907.443.6663 fax 907.443.5349

September 9, 2019

Colonel Philip Borders
Alaska District Corps of Engineers
CEPOA-PM-CW
P.O. Box 6898
JBER, AK 99506-0898

RE: Nome Modification Feasibility Study – Alaska Marine Pilots' Ship Simulation Report

Dear Colonel Borders,

The City of Nome respectfully submits the attached pilot report prepared by Alaska Marine Pilots, Captain Bill Gillespie and Captain Rick Entenmann. These pilots were present for the ship simulations held at the USACE Engineer Research and Development Center (ERDC) in Vicksburg, MS, in April 2019 in support of the Nome Modification Feasibility Study.

In reviewing the report, the City asks that the District give particular attention to the navigational constraints and maneuverability limitations described within the report, before decisions are made on any particular alternative that does not support the project design vessel. Specifically, Alternative 4(a) which the District is currently considering as the selected plan does not work for Nome's conditions, according to the pilots. Any plan layout that restricts Nome's ability to maximize use of the additional docks to be developed in the project, will conflict with Nome's objectives to expand the Port.

The City appreciates the ongoing collaboration with the District to develop the first Arctic Deep-Draft Port, and looks forward to a timely completed feasibility report that can be included in the 2020 Water Resources and Development Act (WRDA) legislation. However, the City has grave concerns about the project schedule that was recently pushed back an additional 2 months, a delay that negatively impacts inclusion in the WRDA 2020 bill. It is the City's hope that there will be opportunities to make up time in the present schedule, and believe that sharing this report will assist in expediting the final plan selection for the Agency Decision Milestone Meeting.

The City remains available to assist with all elements of the study, and again, appreciates the District's commitment to the project. Please advise if any questions.

Sincerely,

CITY OF NOME

Richard Beneville
Mayor

Cc: Bruce Sexauer – Chief, Civil Works Planning
Jenipher Cate – Chief, Project Management
John Handeland – City Manager (Interim)
Joy Baker – Port Director

ALASKA MARINE PILOTS LLC
P.O. Box 920226 - Dutch Harbor, AK 99692
Office (907)581-1240 - Fax (907)581-1372
www.alaskamarinepilots.com

August 26, 2019

Subject: Nome Port Expansion Project – Marine Pilot Report.

The City of Nome and the Army Corps of Engineers contracted Captain Rick Entenmann and Captain Bill Gillespie of Alaska Marine Pilots, to evaluate port designs under consideration for the Nome Port Expansion Project. The designs were tested using the marine simulator in Vicksburg, MS. Simulations were completed over a period of 10 days in April 2019.

Port configuration **8b**;
The **8b** design proved to be the best option in every respect. **8b** is a well-designed port with satisfactory safety parameters. **8b** will be available for operations most days of the ice-free season and can handle the seasonal weather conditions.

The deep-water basin depth of 40 feet is of a sufficient depth for the design vessel. The design vessels maximum draft is 31.2 feet. The design vessels under keel clearance requirement (UKC) would be 3.12 feet for squat and 3 feet for weather. Adding 2 feet for hard bottom clearance, a total of 8.1 feet of UKC is required for the design vessel. The 8.1-foot UKC indicates that a charted depth of 40 feet in the deep-water basin is correct for the design vessel. It should be noted that if the design vessel, a tanker, is restricted in its arrival draft by the dredged depth, the vessel will be required to lighter cargo at anchor. Lightering can increase environmental risk to the area.

Port configuration 4a;
The 4a design severely restricts port operations and it is difficult to maintain satisfactory safety parameters for vessel movements. 4a does not have adequate maneuvering room for the design vessel.

4a allows operations only in the best of weather conditions. Vessels calling on the port of Nome will have to wait several days for calm weather before entering port. In several 4a simulations, the maneuver could only be accomplished in winds of 10 knots or less. Vessels will have difficulty planning the duration of their port stays. An assumption can clearly be made that the Port of Nome will be restricted to fair weather maneuvering only. The unpredictable nature of 4a will have an economic impact on all port users.

The confining nature of 4a also creates another problem that must be managed and will become a life long characteristic of the port. When the designed vessel is maneuvered in to or out of the port, every dock along the route must be vacated of any moored vessels.

ALASKA MARINE PILOTS LLC
P.O. Box 920226 - Dutch Harbor, AK 99692
Office (907)581-1240 - Fax (907)581-1372
www.alaskamarinepilots.com

This will be required in order to increase the maneuvering room available to the design vessel.

The constricted design of the deep-water basin of 4a is of particular concern. The loaded design vessel must transition through the offshore currents before berthing in the deep-water basin. The vessel must move at a controllable speed through the offshore current zone. Simulations have shown that full stopping power was required from the assist tug and the vessel astern engine to stop the vessel within the deep-water basin. This is a very unsafe condition and any machinery failure during the approach maneuver would cause unacceptable damage.

If 4a is built, Alaska Marine Pilots will have to institute severe and restrictive port parameters that will limit port operations. These parameters would include wind speed limits, wind direction limits, daylight restrictions and tug horsepower requirements.

Generally comments;
A satisfactory safety parameter is defined as adequate distances within the berthing area to maneuver a vessel and still maintain safe distances from hazards. In the case of Nome, the safety parameters are of particular concern. Nome is a coastal port subject to strong weather conditions. To insure that Nome is a reliable working port, sufficient room must be available for a ship maneuvering to the berth during seasonal weather conditions.

If the berths in 4a must be vacant for the design vessel to enter port, what is the benefit of having multiple docks for simultaneous use? It does not seem to be cost effective to build extra docks if these docks cannot be used while a design vessel is maneuvering in the area.

4a will always be restricted to the design vessel length or shorter. **8b** will allow larger vessels to call on the port. It can be foreseen that large cruise ships could access the inner berth of the east breakwater design of **8b**.

Tug type and horsepower availability must be taken into consideration when selecting a port design. 4a will never generate strong maritime trade to the region. This weakness in the 4a design will make it difficult for port users to attract adequate ship assist tugs required to mitigate the inherent weakness of the 4a design.

ALASKA MARINE PILOTS LLC
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www.alaskamarinepilots.com

In conclusion, 4a will always and forever be a difficult port to manage, to operate and to pilot within. **8b** will be a well designed, smooth functioning, high capacity port that will immediately be recognized as the international port for this Arctic region.

Sincerely,

William A. Gillespie
(907) 831-2244 cell
gillespie@ampilots.com

Richard Entenmann

THE STATE of ALASKA
GOVERNOR MICHAEL J. DUNLEAVY

Department of Transportation and Public Facilities

OFFICE OF THE COMMISSIONER
John MacKinnon, Commissioner

3132 Channel Drive
PO Box 112500
Juneau, Alaska 99811-2500
Main: 907.465.3900
dot.alaska.gov

September 10, 2019

The Honorable Lisa Murkowski
United States Senate
709 Hart Senate Office
Washington, DC 20510

The Honorable Dan Sullivan
United States Senate
111 Russell Senate Office Building
Washington, DC 20510

The Honorable Don Young
United States House of Representatives
2314 Rayburn House Office Building
Washington, DC 20515

Dear Senator Murkowski, Senator Sullivan, and Representative Young:

During deliberations in late April and early May, the Alaska Legislature almost unanimously passed House Joint Resolution 14 (HJR 14): Urging Support for Nome Deep-Draft Port. One House member opposed the resolution and one Senate member was absent from the floor session during the vote. I've enclosed a copy of HJR 14 for your convenience.

I write to you today to express the Department of Transportation & Public Facilities' (DOT&PF) support for the Nome Deep-Draft Port project. The resolution itself is a testament to the importance of this project. The retreat of Arctic sea ice is impacting seasonal navigability of the Arctic Ocean by decreasing intercontinental shipping distances and increasing marine traffic in the circumpolar Arctic. The time for a Nome Deep-Draft Port project is now. It is a project of national security and energy supply significance.

Thank you in advance for your advocacy efforts toward congressional funding for this project. I appreciate all that you do for Alaska's transportation infrastructure.

Sincerely,

John MacKinnon
Commissioner

Enclosure

Cc: The Honorable Michael J. Dunleavy, Governor, State of Alaska
The Honorable Bryce Edgmon, Alaska House of Representatives
The Honorable Cathy Giessel, Alaska State Senate

P.O. Box 281 • Nome, Alaska 99762

December 27, 2019

Alaska District, US Army Corps of Engineers
CEPOA-PM-C
Attention: Mr. Bruce Sexauer
P.O. Box 6898
JBER, AK 99506-6898

RE: Transmittal of Nome MFS Letter of Intent/Financial Certification Form

Dear Mr. Sexauer,

Attached you will find the City of Nome's Letter of Intent and Financial Certification form for inclusion in the Port of Nome Modification Feasibility Study Final Report.

Please contact me at (907)304-1905 or jbaker@nomealaska.org if you require further information.

Sincerely,

CITY OF NOME

Joy Baker
Port Director (Project Manager)

Cc: Glenn Steckman – City Manager
Nickie Crowe – Acting Finance Director
Steve Howard – USACE/POA Project Manager

P.O. Box 281 • Nome, Alaska 99762

December 26, 2019

Alaska District, US Army Corps of Engineers
CEPOA-PM-C
Attention: Mr. Bruce Sexauer
P.O. Box 6898
JBER, AK 99506-6898

Dear Mr. Sexauer,

This letter formalizes the City of Nome's intent to partner with the U.S. Army Corps of Engineers in the design and construction for deep-draft navigation improvements at Nome. The City of Nome concurs with the findings of the draft Port of Nome Modification Feasibility Study ("the Study") and based on the preliminary cost share identified in the Draft Integrated Feasibility Report and Environmental Assessment section of the Study stands ready to enter a Design and Construction Cost Sharing Agreement with the Corps for the selected alternative 8(b) with a draft of minus 40-feet upon project authorization and funding.

The amended language of Section 2006 "Remote and Subsistence Harbors" allows for consideration of the long-term viability and welfare of communities in a *region*, as well as a project's social and cultural value. These are major factors in justification of a navigation improvements project at Nome. As you are aware, dozens of communities in Norton Sound and the Bering Strait region rely upon the hub port at Nome for transshipment of fuel and supplies. Many of the communities in this rural region are legitimately threatened by climate change and the high price of fuel and goods. Enabling larger vessels to call on Nome could lead to lower costs of commodities, a savings that could be passed on to the residents of these surrounding communities, many of whom are Alaska Native and practice a subsistence-based way of life. Nome has the opportunity to change the standard for the delivery of goods and services in the region.

In addition, WIIN 2016 amends Section 2105 of WRRDA 2014 "Arctic Deep-Draft Port Development Partnerships" to require the Secretary of the Army to consult with DOD and the Coast Guard to consider benefits to national security or Coast Guard missions, when determining whether an Arctic Deep-Draft Port is feasible. These DOD benefits, while not forming the basis for a National Economic Development decision, can be used to support the selected plan. The City of Nome is appreciative that the process to arrive at the selected plan also coincides with what the City believes is needed for Alaska and the Nation.

The City of Nome currently has funds to proceed directly from the feasibility study to the Preconstruction Engineering and Design phase. The City is working with several consultants to secure funding for the ultimate construction of the project. We understand a separate cost-sharing agreement will be needed for the construction phase. Current expectations for construction funding based on about $292 million in non-Federal sponsor funding is described in the following table:

P.O. Box 281 • Nome, Alaska 99762

Source:	Potential Amount	Percent of Total
State of Alaska grants [1]	$65 million	22 %
Federal grants [1]	$125 million	43 %
Anchor Tenant [2]	$25 million	9 %
Significant Port User(s) [3]	$5 million	2 %
City funds [4]	$10 million	3 %
Native Corps P3 [5]	$33 million	11 %
Financing through Corps [6]	$29 million	10 %
Total Funding:	**$292 million**	**100%**

*Based on Potential $292 million share to the City of Nome

Notes:

1. State of Alaska and Federal grants depend on funding availability. Both the State and the Federal government have shown strong support for this project and have qualifying programs.
2. The Port is in discussion with a potential anchor tenant also looking for uplands facilities. Details are confidential.
3. There are several significant port users identified as potentially willing to engage in preferential berthing options in exchange for funding contributions.
4. The City has the capacity to obtain general obligation bonds issued by the state.
5. Discussions continue with Alaska Native corporations wishing to invest in the project.
6. The 10 percent financing option with the Corps over 30 years will be considered if full funding falls short.

There is strong local, regional, state and Federal legislative support for this project and the City of Nome stands ready to take this project to its final construction completion and looks forward to managing the increased Arctic traffic arriving at Nome.

Thank you for your consideration. We understand this letter is a statement of intent, not a binding contract. Should you have any questions, please contact me at (907)443-6600, or Joy Baker at (907)304-1905 for further information.

Sincerely,

CITY OF NOME

Glenn Steckman
City Manager

Cc: Brooks Chandler – City Attorney
Joy Baker – Port Director

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

I, Nichole Crowe, do hereby certify that I am the Acting Finance Director of the City of Nome (the "Non-Federal Sponsor"); that I am aware of the financial obligations of the Non-Federal Sponsor for the Port of Nome Modification Feasibility Study; and that the Non-Federal Sponsor has the financial capability to satisfy the Non-Federal Sponsor's obligations under the Agreement between the Department of the Army and City of Nome for the Port of Nome Modification Feasibility Study through completion of preliminary engineering and design.

IN WITNESS WHEREOF, I have made and executed this certification this 26th day of December, 2019.

BY: Nichole Crowe

TITLE: Acting Finance Director

DATE: 12/26/19

River and Harbor Act, Section 107 – CAP Study Approval

Correspondence

USACE Pacific Ocean Division

DEPARTMENT OF THE ARMY
PACIFIC OCEAN DIVISION, U.S. ARMY CORPS OF ENGINEERS
573 BONNEY LOOP, BUILDING 525
FORT SHAFTER, HAWAII 96858-5440

CEPOD-PDC

DEC 16 2019

MEMORANDUM FOR Commander, Alaska Engineer District (CEPOA-PM-C/Jenipher Cate), P.O. Box 6898, JBER, AK 99506-0898

SUBJECT: Approval to continue a Continuing Authority Program (CAP) study and Investigations study at the Port of Nome

1. References:

a. Memorandum, CEPOA-PM-C, 25 Nov 19, subject: Approval to continue a Continuing Authority Program (CAP) study and Investigations study at the Port of Nome (Encl).

b. EP 1105-2-58, Continuing Authorities Program, 1 Mar 19.

2. As detailed in reference 1.a., I approve your request to continue with both the Investigations and CAP studies as two separate navigation projects at the Port of Nome. The policy requirements specified in reference 1.b. have been satisfied.

3. POC for this action is Ms. Sharon Ishikawa, POD CAP Manager, Civil Works Integration Division, at 808-835-4621 or sharon.m.ishikawa@usace.army.mil.

Encl

THOMAS J. TICKNER, PMP
Brigadier General, USA
Commanding