# National Park Service U.S. Department of the Interior



Bering Land Bridge National Preserve, Alaska

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# **Coastal Emergency Shelter Cabin Construction Environmental Assessment**

July 2015



## Coastal Emergency Shelter Cabin Construction Environmental Assessment

National Park Service U.S. Department of the Interior

## Bering Land Bridge National Preserve Alaska

Public Comment Period July 13, 2015 through August 13, 2915.

## **Note to Reviewers**

We welcome your comments on this document. The public comment period will extend for 30 days, through August 13, 2915. During the comment period, comments may be submitted using several methods:

- 1. We prefer that readers submit comments online at the project website at http://parkplanning.nps.gov/projectHome.cfm?projectId=25458.
- 2. You may send comments by mail, fax or email to:

Jeanette Koelsch, Superintendent Bering Land Bridge National Preserve Pouch 220 Nome, AK 99762 fax 907-443-6139 Jeanette\_Koelsch@nps.gov

Please note: Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

## 1.0 PURPOSE AND NEED

The National Park Service (NPS), in cooperation with the Federal highway Administration (FHWA), proposes to replace a coastal emergency shelter cabin in Bering Land Bridge National Preserve (BELA), Alaska.

In 2006, the Kividluk Emergency Shelter Cabin, located at Kividlo, was destroyed by high winds. It was completely destroyed and the site has no remnant. No materials were found or salvaged. There are currently no NPS shelters available for many miles – about 37 miles by snow machine to Shishmaref or 50 miles to Kotzebue if Kotzebue Sound is frozen. The villages of Shishmaref and Kotzebue have available shelter from weather. They do not have NPS emergency shelters.

A new coastal emergency shelter cabin is needed to replace the destroyed cabin. It would provide life-saving emergency shelter for subsistence users, the public, and NPS staff in the area during severe weather.

This Environmental Assessment (EA) analyzes the No Action alternative and the Proposed Action alternative for constructing a new shelter cabin. It has been prepared in accordance with the National Environmental Policy Act of 1969 and regulations promulgated by the Council of Environmental Quality in Title 40 of the Code of Federal Regulations (CFR).

## 1.1 Background

The Kividluk Emergency Shelter Cabin was originally constructed by the village of Shishmaref in 1983 with State of Alaska funding and later became the responsibility of the NPS.

Bering Land Bridge National Preserve currently maintains five emergency shelter cabins whose primary purpose is to ensure safety for the public and NPS employees during times of inclement weather and emergency situations.

Since the old Kividlo Shelter Cabin blew away in 2006, the NPS has been investigating other more suitable locations. On April 30, 2009, June 17, 2009, and October 2009, the NPS conducted public meetings in Shishmaref, Alaska to determine the best location for a new emergency shelter cabin. At each of these public meetings there was a quorum of the Native Village, City, and Native Corporation.

Two locations were identified, the first being in the Cowpack Lagoon area (Figure 1, Alternative #1) and the second being on the bank of the Sineak River (Figure 1, Alternative #2).

Following additional scoping involving NPS staff, the Cowpack Lagoon site (Figure 1, Alternative #1) was identified as the proposed site of the replacement cabin.

In Figure 1, the former coastal emergency cabin was at the location marked "Kividluk (Kividlo, Kevedlok) KTZ-00009" and the proposed replacement would be at the location marked "Kividlo Shelter Cabin Alternative #1." In this EA, the proposed new cabin site is called Alternative B.

Bering Land Bridge National Preserve

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Figure 1 – Project Area Satellite Photo

In Figure 2, the new cabin location would be on top of a coastal ridge near either the north or south drainage. The figure also shows where the area has been investigated for archeological sites.

Figure 2 – Proposed Cabin Site



Figure 3 – Proposed Cabin Site, North Drainage

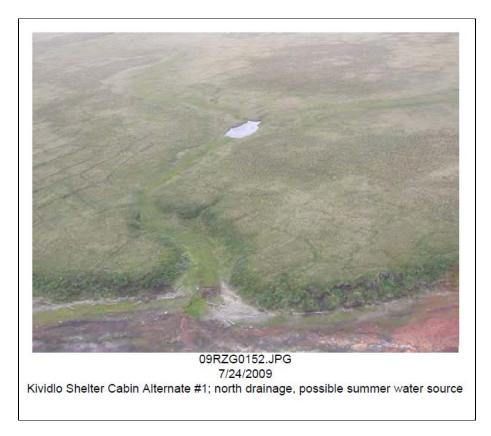


Figure 4 – Proposed Cabin Site, South Drainage



The purposes for which BELA was created are found in Section 201 (8) (a) of the 1980 Alaska National Interest Lands Conservation Act (ANILCA).

ANILCA Title VIII provides for subsistence uses by local rural residents. While the proposed new coastal shelter cabin would not be designated as a subsistence use cabin, it would be available to subsistence users, and to other members of the general public, as an emergency shelter cabin.

ANILCA Section 1303 (a) (3) states that cabins not under permit shall be used only for official government business, provided, however, that during emergencies involving the safety of human life or where designated for public use by the Secretary, these cabins may be used by the general public. The former shelter cabin that blew down in 2006 was not under permit, and it was an administrative use cabin. The proposed coastal shelter cabin replacing would also be an administrative use cabin, and it would not be designated as a "public use cabin."

ANILCA Section 1303 (a) (4) states that the Secretary may issue a permit under such conditions as he may prescribe for the temporary use, occupancy, construction and maintenance of new cabins if he determines that the use is necessary to reasonably accommodate subsistence uses or is otherwise authorized by law. This section applies to issuance of a permit to a non-NPS entity, and not to agency construction, maintenance, or replacement of an administrative cabin. The proposed coastal shelter cabin would not be a subsistence use cabin, but it would be available to subsistence users, as well as other members of the general public, as an emergency shelter cabin.

## 1.2 Impact Topics

Issues and concerns with this project are grouped into distinct impact topics to aid in analyzing environmental consequences, which allows for a standardized comparison of alternatives based on the most relevant information. The impact topics were identified on the basis of federal laws, regulations, orders, NPS Management Policies 2006, and NPS staff knowledge of potentially affected resources. A brief rationale for selecting or dismissing each topic is provided below.

<u>Wildlife</u>: The 12' x 16' footprint of the cabin would directly affect a small amount of habitat. The permanent presence and occasional use of the cabin could disturb nearby wildlife. The availability of the cabin for emergency use would indirectly impact some wildlife by making hunting safer and easier in the area.

The cabin site is in the habitat of the polar bear which is listed as *endangered* on the Endangered Species List. The site is also in the habitat of two eiders which are *candidate* species for listing on the Endangered Species List. Informal Section 7 consultation with FWS was completed by NPS on May 5, 2015.

<u>Subsistence</u>: The cabin would enhance subsistence opportunities in the preserve by increasing safe travel for subsistence users and thus increasing the ability for local community members to provide economically to their community through hunting and gathering activities.

A subsistence evaluation and findings was completed for the proposal under Section 810 of ANILCA and is included in the appendix of this EA.

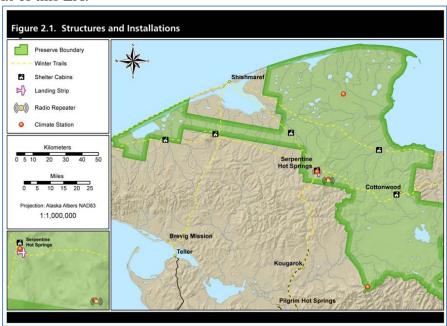
<u>Wilderness</u>: BELA is not designated wilderness, however, it is eligible wilderness as determined by the BELA 1986 General Management Plan. By NPS policy, eligible wilderness is treated and managed like designated wilderness.

ANILCA Section 1315 (d) addresses new cabins in NPS wilderness units. 36 CFR Section13.176 states that within a wilderness area, designated by ANILCA, a new public use cabin or shelter may be constructed, maintained and used only if necessary for the protection of the public health and safety.

The proposed coastal shelter cabin would not be designated as a "public use cabin." It would be a replacement of the former cabin that was destroyed by wind in 2006.

NPS Management Policy 6.3.1 requires NPS to preserve wilderness character of eligible wilderness and to ensure government actions do not diminish wilderness eligibility. Wilderness values would be affected by the permanent presence of a structure in eligible wilderness and by the short-term sights and sounds of helicopters transporting materials and people to the site for construction, maintenance, and operations. The four statutory qualities of wilderness character would be affected – natural, untrammeled, undeveloped, and solitude or primitive and unconfined recreation.

A wilderness *Minimum Requirements Analysis* was completed for the proposal and is included in the appendix of this EA.



<u>Viewshed</u>: The construction of a cabin in this backcountry setting would impact the natural scenery of the area. The cabin would be on high ground, and would be highly visible from both land and sea.

## 1.3 Issues Eliminated from Consideration

<u>Cultural Resources</u>: The NPS has determined that there would be no historic properties affected by the proposed action. The cabin would be placed on top of the tundra on blocks. There would be no excavation for footings, since excavation could disturb the permafrost and the cabin could sink. The coastal ridge is known to be rich with prehistoric sites, however, archeological surveys of the area of potential effect found no historic objects. Mitigation measures to protect cultural resources that may be encountered, have been included in the project.

<u>Soils and Vegetation</u>: The project would not disturb or dig into the vegetation for the cabin footings. The cabin would sit on top of the tundra on blocks. The goal would be to not disturb the tundra as doing so would melt permafrost. The cabin construction would mainly be done in the winter during adequate snow cover. Any soil or vegetation disturbance that may occur in the summer, when the cabin is leveled, would be minor (by foot traffic). Soils and vegetation would be directly impacted for by the placement of the footings for the 12' x 16' cabin and by the shade of the raised cabin. They would be indirectly affected by trampling and erosion during cabin construction and use. Non-native plants could be inadvertently introduced to the area by people during construction or use of the cabin. These impacts would be small but permanent.

<u>Floodplains and Wetlands</u>: The cabin would be on an upland site, not in a wetland or floodplain. Construction and use of the cabin would have no direct impact on floodplains or wetlands.

<u>Natural Soundscape</u>: Construction and transport activities would be a temporary disruption of the natural soundscape. The use, maintenance, and operational activities at the cabin would not substantially impact the natural soundscape beyond the existing background noises from occasional fixed-wing aircraft, marine motorboats, and snowmachines, all of which are allowed in the area. As a mitigation measure to protect the natural quiet, the cabin would not have a generator or other internal combustion engine.

<u>Air Quality</u>: The cabin would have an oil burning heat stove and no other combustion source. Due to the low occupancy levels, the use of the cabin would not cause a substantive impact to air quality. The National Ambient Air Quality Standards, of the Air Quality Act of 1967 or the State Air Quality Implementation Plan, would not be exceeded.

<u>Water Quality</u>: The cabin would have no outhouse, but as an emergency use cabin, it would not receive very much use annually. The cabin would be a few hundred feet from a seasonal creek. Due to the low occupancy levels, the use of the cabin would not cause an impact to water quality.

<u>Visitor Use and Enjoyment</u>: The emergency coastal safety cabin would have a beneficial impact to park users by providing additional safety in the area which has no other facilities or occupation for 37 or more miles.

Environmental Justice: Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, requires all federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. This project would not result in adverse changes in the socioeconomic environment of the area, and therefore would have no substantial direct or indirect negative impacts to minority or low-income populations or communities.

<u>Health and Safety</u>: The project would be a benefit to health and safety of both the visiting public and NPS staff. This is the purpose of the project.

<u>Park Operations</u>: The project would be a benefit to park management and operations. The cabin would be used as an administrative shelter for NPS operations such as search and rescue, archeological research, inventory and monitoring, fish and wildlife research, and winter patrols.

<u>Transportation</u>: The project would be a benefit to transportation in the park. The cabin would be along a winter trail marked with tripods, and would provide emergency shelter for snowmachine users or mushers during inclement weather, 37 or more miles from other shelter. There is no motorized land transportation use in the area in the summer. ATV use for permitted reindeer operations is allowed but does not occur in the cabin area.

<u>Special Designations</u>: The project site is on federal land, in a National Preserve administered by the NPS, in eligible wilderness area, on a national boundary seacoast, and above the Arctic Circle. It does not have a special land designation of Wild and Scenic River, National Natural Landmark, National Historic Landmark, International Biosphere Reserve, or World Heritage Site.

## 1.4 Permits and Approvals Needed

In compliance with the National Historic Preservation Act of 1966, Section 106, the NPS has made a determination of *No Historic Properties Affected* for the proposal.

## 2.0 ALTERNATIVES

## 2.1 Introduction

This chapter describes Alternative A (the *No Action* alternative) and Alternative B (the proposed action to *Construct a New Coastal Emergency Cabin*) in Bering Land Bridge National Preserve. This chapter also describes those alternatives and actions that will not be considered further (i.e., those not analyzed in Chapter 4).

The plans for the proposed action were developed by an interdisciplinary team process of NPS and FHWA staff, and with public input from village meetings.

The tables at the end of this chapter compare the alternatives in terms of actions taken and their environmental impacts.

## 2.2 Alternative A, No Action

Under the No Action alternative the coastal emergency shelter cabin would not be rebuilt. Chapter 3 provides a more detailed profile of the current situation.

A winter trail for snowmachines runs between Shishmaref and Cape Espenberg. It is used by snow machines during periods of adequate snow cover and when the ground is frozen. Tripods made of eight-foot poles mark the winter trail. The trail tripods are being repaired or replaced as needed with the assistance of the Federal Highway Administration (FHWA). The tripods are easily removed, above-ground structures. Their installation is addressed in a separate categorical exclusion (PEPC #58655, 2015).

The existing uses and dangers would continue. Since 2006, when the Kividluk Emergency Shelter Cabin located nearby at Kividlo was destroyed by high winds, there has been no emergency shelter cabin along this stretch of coastline, and this situation would continue. The next nearest shelter is about 37 miles by snowmachine to Shishmaref. This alternative represents a continuation of the existing situation and provides a baseline for evaluating the changes and impacts of the action alternatives. The winter coastal route would be marked with new tripods.

## 2.3 Alternative B, Construct a New Coastal Emergency Cabin (this is the Proposed Action and the NPS Preferred Alternative)

A coastal emergency shelter cabin would be constructed by the NPS.

It would be a simple construction 12' x 16' one room cabin, situated three feet off the ground and at least 300' from the edge of the nearby ocean bluff. It would be constructed of plywood

with a tin roof in the manner typical of the region. It would not be supplied with an electrical generator.

The cabin would not have an outhouse. Since, the cabin would be for emergency shelter only and the use would be mostly in the winter, it will have very low usage. The park has never had a problem with waste on the surface at the other cabins, which are primarily used in the winter. A sign at the cabin would ask folks to not leave toilet paper on the tundra.

Use of the cabin would be limited to emergencies and NPS administrative activities. It would be unlocked but bear proof during both summer and winter. It would not be a Public Use Cabin. It would not be used for commercial purposes, subsistence uses, recreational visits, park concessions, Incidental Business Permits, or by non-NPS agencies, entities, or corporations. In unusual circumstances, the park superintendent could consider issuing a park permit for the use of the cabin.

Materials would be transported by snowmachine from December 2015 to March 2016 from Shishmaref, and construction would begin. Construction crews would be transported by snowmachine. Construction would be in the winter of 2016. Minor fixes would be done in the summer of 2016 to include leveling of the cabin and any unfinished construction. Summer construction crews would be transported by boat or float plane is practical, otherwise by helicopter. Actual construction activities are estimated at 14-20 days, but this is highly dependent on weather conditions.

## 2.3.1 Mitigation Measures

Mitigation measures would avoid, minimize, or eliminate adverse impacts. They are considered part of the proposal, and impact analysis assumes their implementation.

Wilderness – The project site is in eligible wilderness. To protect wilderness values, construction would be done without motorized or mechanized equipment as much as practical. An ATV would not be hauled to the site for construction. ATV use is prohibited except by permit for reindeer herding purposes. Hauling supplies, materials and people would be done by snowmachine, float plane, or boat as much as safe and practical, otherwise helicopter landing would be authorized.

Natural Sounds – The cabin would not be supplied with an electrical generator or other internal combustion engine, except during initial construction.

Cultural Resources – The following three mitigation measures are incorporated into the project.

1) All cultural resources encountered during this project will be avoided. Observations of cultural resources under imminent threat will be reported to the Superintendent (907-443-6101) as soon as possible. The locations of all cultural resources encountered will be reported together with a brief description of the item or feature, its context, and any photographic images (film and/or digital) obtained.

- 2) Should human remains be encountered during the course of construction or transport, activities at the locality will cease immediately. Contact the Superintendent (907/443-6101) immediately for advice pursuant to the Native American Graves Protection and Repatriation Act of 1990 as amended (43 CFR 10).
- 3) All archaeological and paleontological resources on federally managed lands within NPS boundaries are protected from unauthorized human activities that would otherwise damage, destroy or result in the illicit collection of these nonrenewable resources. Should unauthorized human activities be witnessed or evident through past illicit activities, contact park law enforcement (907/412-1189 or 434-1510) and cultural resources (907/442-8331) for advice pursuant to the Archaeological Resources Protection Act of 1979 as amended (43 CFR 7) and the Paleontological Resources Preservation Act of 2009 (P.L. 111-011). Do not attempt to accost individuals or groups of people engaged in illicit activities, and contact park law enforcement as soon as it is safe to do so.

Night Sky – The cabin would have no night lighting.

Hazardous Materials – The heating oil tank and oil line would be designed and constructed to be bear proof. The oil tank would be double walled and on an impervious containment basin. Regular inspection, maintenance, and repairs would keep the fuel oil tank and line safe from accidental spill on the ground. Any spills would be cleaned up and reported as soon as possible.

Polar Bears – There will be limited construction during the polar bear mating season between March and May.

Workers would avoid possible polar bear denning sites.

Workers would use Leave No Trace camping techniques.

Garbage and human waste would be hauled from the site to a village for disposal.

Park employees would be trained in Bear Safety Training.

The park would use electric fencing around the construction camp.

The construction camps (winter and summer) would use bear proof food containers to store food and items with food-like odors.

Summer construction would avoid bird nests and waterfowl in and near the lagoon.

A sign would be posted inside the cabin with text as recommended by FWS in their letter of May 5, 2014, page 5, see appendix.

The *Polar Bear Interaction Guidelines* would be followed. It is found in the FWS letter of May 5, 2014, page 6-8, see appendix.

Denning (October - April) polar bears would not be disturbed.

Human activities would be prohibited within one mile of known den sites.

Human waste disposal – No digging of cat holes in the winter. A sign would be at the cabin asking folks to not leave toilet paper on the tundra.

Nesting migratory birds would not be disturbed.

## 2.4 Environmentally Preferable Alternative

The environmentally preferable alternative is Alternative A, *No Action*. When compared to the construction alternative, the no construction alternative would have less impact to the environment. It is not unusual for a construction project to have the *No Action* alternative identified as the environmentally preferable.

Alternative A, *No Action*, would disturb the environment less than Alternative B, the proposed action. However, Alternative A would not satisfy the project's purpose and need.

## 2.5 Alternatives Considered but Rejected

Several alternate locations were considered and rejected. The site of the original cabin was rejected because of the existing wind hazard. The original cabin blew away during a storm. Cabin sites near archeological sites were rejected. Archeological surveys were conducted to ensure the site selected would not have an impact on an archeological site. Cabin sites were rejected if they might be subject to coastal hazards of sea ice movement, sea level rise, or coastal storm surge.

A site inside the lagoon was selected, rather than on the unprotected coastline. Archeological sites were avoided. A site on an elevated ridge was selected, rather than one close to sea level. Most importantly, the site was selected through meetings with the local tribes and villages. Substantially different cabin designs were not considered.

**Table 2.1 Summary of Alternatives** 

| Characteristics | No Action | Proposed Action            |  |
|-----------------|-----------|----------------------------|--|
| Cabin           | None      | 12 x 16' plywood, 1-room,  |  |
|                 |           | tin roof.                  |  |
| Outhouse        | None      | None                       |  |
| Water supply    | None      | None                       |  |
| Electricity     | None      | None                       |  |
| Heat stove      | None      | Oil heat stove             |  |
| Winter trail    | Tripods   | Tripods                    |  |
| Cost            | None      | \$156,861 initial          |  |
|                 |           | transportation and         |  |
|                 |           | construction.              |  |
|                 |           | No annual costs.           |  |
|                 |           | \$6,274 lifecycle costs    |  |
|                 |           | (annualized) 25 year life. |  |

**Table 2.2 Summary of Alternative Impacts** 

| Impact Topics | No Action                 | Proposed Action                |
|---------------|---------------------------|--------------------------------|
| Wildlife      | No new impacts.           | Not likely to adversely affect |
|               |                           | listed or candidate species or |
|               |                           | habitat. Minor impact to       |
|               |                           | wildlife and habitat from      |
|               |                           | cabin footprint and visual     |
|               |                           | disturbance. No new impact     |
|               |                           | to fish.                       |
| Subsistence   | No new impacts. No safety | Available safety cabin.        |
|               | cabin.                    | Beneficial to subsistence as   |
|               |                           | local residents would be       |
|               |                           | provided safe shelter during   |
|               |                           | storms and emergency           |
|               |                           | situations.                    |
| Wilderness    | No new impacts.           | Adverse impacts to             |
|               |                           | undeveloped character of       |
|               |                           | wilderness long-term due to    |
|               |                           | a structure, and short-term    |
|               |                           | due to landing of aircraft and |
|               |                           | use of motorized equipment.    |
| Viewshed      | No new impacts.           | Adverse impact from visible    |
|               |                           | cabin structure.               |

## 3.0 AFFECTED ENVIRONMENT

## **Climate Change**

The construction and use of the cabin would not have a measurable impact on climate change.

Climate change would affect the area near the cabin site. Climate change would increase the variability of storm events. It would alter the duration of the icepack on the adjacent Arctic Ocean, and could increase the need and usefulness for an emergency cabin in this area. The cabin would be built on a bluff above the influence of rising sea level, coastal land erosion, and coastal sea ice jams.

#### Socioeconomics

The cabin would be beneficial to socioeconomics of the region by increasing the safety for local community members to provide for their community through hunting and gathering activities. Purchase of construction materials, transportation services, and construction labor would have some benefit to the local economy.

## Wildlife

Wildlife is an important resource in the national preserve. Types of mammals include caribou (Rangifer tarandus), musk oxen (Ovibos moschatus), moose (Alces alces), fox (arctic, red and cross) (Vulpes lagopus x vulpes), wolf (Canis lupus), ground squirrel (Urocitellus parryii), and brown bear (Ursus arctos). Marine mammals include a variety of seal (Pinniped spp.), walrus (Odobenus rosmarus), polar bear (Ursus maritimus), and a variety of whale (Cetacea spp.) species. Fish species include a variety of salmon (Oncorhynchus spp.), grayling (Thymallus arcticus), char (Salvelinus alpinus), northern pike (Esox lucius) and the stickleback (Gasterosteidae spp.).

The Steller's eider (*Polysticta stelleri*), spectacled eider (*Somateria fisheri*), and polar bear (*Ursus maritimus*) are listed as threatened by the U.S Fish and Wildlife Service under the Endangered Species Act of 1973. Also, the yellow-billed loon (*Gavia adamsii*) and Pacific walrus (*Odobenus rosmarus divergens*) are listed as candidate species.

Non-nesting or migrating Steller's and spectacled eiders might occur in the project area in very low numbers, if at all, and they do not nest in this area.

Polar bears may occasionally pass through or den in the area, although their density is very low and encounters are expected to be rare.

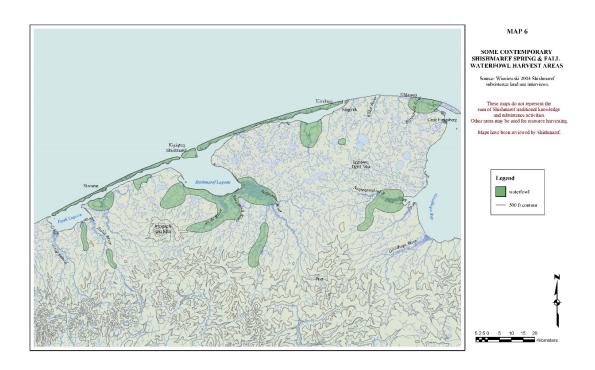
The yellow-billed loon was listed as a candidate species because of its small population size range-wide and concerns about levels of subsistence harvest and other potential impacts to the species. Breeding pairs of migratory yellow-billed loons can inhabit nearby lakes and coastal lagoons of the action area between May and September.

The Pacific walrus breeding occurs January through March, and calves are born in late April or May. In summer, several thousand animals in the Bering Sea use haul-outs along the coast, but most are found on pack ice in the Chukchi Sea. The currents and benthic environments that generally comprise the best feeding areas for walruses are not adjacent to the coastline near the proposed cabin. Thus, cabin users are not likely to encounter groups of walruses feeding in the water or resting on the nearby coast.

## **Subsistence**

This area is primarily utilized for subsistence activities. Local residents rely extensively on subsistence activities to meet dietary and cultural needs. In the spring, the area is utilized to hunt marine mammals such as bearded, ringed and ribbon seals and walrus. Residents also gather bird eggs, and edible plants. In the summer, the area is used to gather edible greens and berries. In the fall and winter, the area is utilized to hunt for caribou, moose and musk oxen.

Winter subsistence use access to the project area is generally by snowmachine. There is no summer motor vehicle access. There is no ATV use to the project site because the land is too rough and the beach is not contiguous. Also, ATV use is prohibited except by permit for reindeer herding purposes. Summer access to the project area is generally by boat or floatplane.



## Wilderness

The project site is not Designated Wilderness but is Eligible Wilderness as determined by the national preserve's 1986 General Management Plan. By NPS policy, Eligible Wilderness is treated and managed like Designated Wilderness.

## Viewshed

The project site is in an area of the preserve that is far from other structures. Summer subsistence camps might be within a few miles but beyond sight. Winter structures are many miles away. The project site currently has no human structures and it presents a natural landscape of gently rolling tundra, coastal lagoon, shoreline, and a gentle elevated and vegetated coastal dune ridge.



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## 4.0 ENVIRONMENTAL CONSEQUENCES

## 4.1 Introduction

This chapter provides an evaluation of the potential effects or impacts of the alternatives on the resources described in Chapter 1.

## 4.2 Impacts of Alternative A: No Action

This section describes the impacts of the *No Action* alternative on the resource impact topics in the Issues section of Chapter 1.

## **No Action Impacts to Wildlife**

There would be no new impacts to wildlife resources or to wildlife habitat if the No Action alternative was selected.

The yellow-billed loon was listed as a candidate species because of its small population size range-wide and concerns about levels of subsistence harvest and other potential impacts to the species.

The Pacific walrus breeding occurs January through March, and calves are born in late April or May. In summer, several thousand animals in the Bering Sea use haul-outs along the coast, but most are found on pack ice in the Chukchi Sea. The currents and benthic environments that generally comprise the best feeding areas for walruses are not adjacent to the coastline near the proposed cabin. Thus, cabin builders and users are not likely to encounter groups of walruses feeding in the water or resting on the nearby coast. Helicopter use is unlikely to disturb walruses because project plans include a landward flight path. Thus, we expect that the proposed action will not jeopardize the continued existence of the Pacific walrus or preclude its survival and recovery in the wild.

## **No Action Impacts to Subsistence**

The *No Action* alternative would have no new impacts on subsistence use, opportunity or resources. It would continue the current situation of no emergency shelter cabin along the north coast of the park. This would be an adverse impact to safety because it continues situation of having no cabin.

## **No Action Impacts to Wilderness**

The *No Action* alternative would result in no new impacts to wilderness qualities of the park.

## No Action Impacts to Viewshed

The *No Action* alternative would result in no new impacts to the natural viewshed of the area.

## 4.3 Impacts of Alternative B, the Proposed Action, Construct a Coastal Emergency Shelter Cabin

## **Replacement Cabin Impacts to Wildlife**

Existing impacts to wildlife in the project area are from subsistence hunting, sport (general) hunting, fishing, and trapping of fur barriers. Project activities would not add perceptively to these existing wildlife impacts.

Wide area impacts have resulted in the listing of the Steller's eider, spectacled eider, and polar bear as threatened. The yellow-billed loon and Pacific walrus are listed as candidate species.

Non-nesting or migrating Steller's and spectacled eiders might occur in the project area in very low numbers, if at all, and they would not nest in this area. Disturbance to non-breeding or migrating eiders would be minor because non-nesting individuals could respond to human presence or disturbance by moving away to a perceived safe distance.

Polar bears may occasionally pass through or den in the area, although their density is very low and encounters are expected to be rare. Transient (non-denning) bears that enter the action area could be disturbed by the presence of humans or equipment noise. However, 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 park would provide field crews an interaction plan for personnel to follow in the event that polar bears are encountered during project activities.

Breeding pairs of migratory yellow-billed loons can inhabit nearby lakes and coastal lagoons of the action area between May and September. Most cabin use would occur in winter and would not affect this species. However, cabin construction and use during summer may disturb a few yellow-billed loons if they are nesting and resting nearby. If there is some minor work in the summer, there may be a short-term disturbance of less than 10 days. Effects on this species may include noise and visual disturbance that causes a loon to dive, temporarily leave its nest, or alter its course of travel. These disturbances would likely only cause minor, temporary changes in behavior. Thus, the proposed action would not jeopardize the continued existence of yellow-billed loons or preclude its survival and recovery in the wild.

The Pacific walrus breeding occurs January through March, and calves are born in late April or May. In summer, several thousand animals in the Bering Sea use haul-outs along the coast, but most are found on pack ice in the Chukchi Sea. The currents and benthic environments that generally comprise the best feeding areas for walruses are not adjacent to the coastline near the proposed cabin. Thus, cabin builders and users are not likely to encounter groups of walruses feeding in the water or resting on the nearby coast. Helicopter use is unlikely to disturb walruses because project plans include a landward flight path. Thus, we expect that the proposed action will not jeopardize the continued existence of the Pacific walrus or preclude its survival and recovery in the wild.

## **Replacement Cabin Impacts to Subsistence**

The new cabin alternative would have a beneficial impact on subsistence opportunity and use by providing an emergency shelter in case of need.

## **Replacement Cabin Impacts to Wilderness**

The new cabin alternative would have an adverse impact to wilderness character of the area. It would impact the *undeveloped* quality of wilderness over the long-term by creating a structure. During construction and transport, it would have a short-term impact to the undeveloped quality of wilderness by use of motorized equipment

## **Replacement Cabin Impacts to Viewshed**

The new cabin alternative would have an adverse impact to the natural viewshed of the area. The cabin would be visible for several hundred yards as the only un-natural feature on the landscape. For a park visitor expecting to see unbroken natural vistas, this would be a negative impact.

From the cabin site, another cabin can be seen on a private native allotment. There are private Alaska native allotments nearby that currently do not have permanent structures on them, but permanent structures, temporary tent frames, or seasonal camps could be built upon them.

## 5.0 CONSULTATION AND COORDINATION

Several people, organizations, and agencies were contacted for information and assistance in identifying important issues, developing alternatives, analyzing impacts, or providing other information for this EA.

On April 30, 2009, June 17, 2009, and October 2009, the NPS conducted public meetings in Shishmaref, Alaska to determine the best location for a new emergency shelter cabin

On May 5, 2014, Ted Swem, Branch Chief, FWS, Fairbanks Field Office, sent NPS a letter regarding informal consultation under the Endangered Species Act.

Fred Eningowuk, General Manager, Native Village of Shishmaref Curtis Nayukpuk, Shishmaref Emergency Services

Richard L. Anderson, EA Project Lead, NPS, Alaska Regional Office (AKRO)
Jeanette Koelsch, Superintendent, Bering Land Bridge National Preserve (BELA)
Frank Hays, Superintendent, Western Arctic National Parklands (WEAR)
Linda Hasselbach, Park Environmental Coordinator, BELA
Joan Darnell, Team Manager, Environmental Planning and Compliance, AKRO
Brooke Merrell, Regional Environmental Coordinator, AKRO
Molly Cobbs, Environmental Protection Specialist, AKRO
Michael J. Holt, Landscape Archaeologist, WEAR
Ken Adkisson, Anthropologist, BELA
Bob Gal, Archeologist, WEAR

## **6.0 REFERENCES CITED**

Gal, Robert and Jeanette Pomrenke, 2009. Archeological Investigation Report, Kividlo Shelter Cabin Replacement: Alternate Sites #1 and #2. Archeological Survey No. 001-09-BELA.

National Park Service (NPS) 1988. General Management Plan for Bering Land Bridge National Preserve.

NPS 2006. Management Policies.

NPS 2008. Environmental Assessment; Temporary Access Permit to Cross Bering Land Bridge National Preserve for the Shishmaref Relocation Reconnaissance Study.

NPS 2011. Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision Making

NPS 2013. Reference Manual #41: Wilderness Stewardship.

#### APPENDIX A

## **ANILCA Section 810 Subsistence Evaluation**

## Alaska National Interest Land Conservation Act (ANILCA), Section 810(a) Summary Evaluations and Findings

#### I. INTRODUCTION

This section was prepared to comply with the Title VIII, Section 810 of the Alaska National Lands Conservation Act (ANILCA). It summarizes the evaluations of potential restrictions to subsistence uses that could result from the proposed action the NPS in cooperation with the Federal Highway Administration (FHWA) to construct a coastal emergency shelter cabin in Bering Land Bridge National Preserve.

#### II. EVALUATION PROCESS

Title VIII Section 810(a) states:

"In determining whether to withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands...the head of the federal agency...over such lands...shall evaluate the effect of such use, occupancy, or disposition on subsistence uses and needs, ....No such withdrawal, reservation, lease, permit or other use, occupancy or disposition of such land which would significantly restrict subsistence uses shall be effected until the head of such Federal agency – ....determines that (A) such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands, (B) the proposed activity will involve the minimal amount of public lands necessary..., and (C) reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions."

When Congress passed ANILCA in 1980, it expanded the national park system in Alaska by creating new parks, monuments and preserves and making additions to existing units. In establishing these new park areas, ANILCA Title II states the management purposes for which Congress created each unit and outlines the human uses and activities that may be permitted. ANILCA Title II Section 202(2) states the following regarding the management purposes for the Bering Land Bridge National Preserve.

"The Preserve shall be managed for the following purposes, among others: to protect and interpret examples of arctic plant communities, volcanic lava flows, ash explosions, coastal formations, and other geological processes; to protect habitat for internationally significant populations of migratory birds; to protect habitat for internationally significant populations of migratory birds; to provide for archeological and paleontological study, in cooperation with Native Alaskans, of the process of plant and animal migration, including man, between North

America and the Asian Continent; to protect habitat for and populations of, fish and wildlife including, but not limited to, marine mammals, brown/grizzly bears, moose, and wolves; subject to such reasonable regulations as the Secretary may prescribe, to continue reindeer grazing use, including necessary facilities and equipment, within the areas which on January 1, 1976, were subject to reindeer grazing permits, in accordance with sound range management practices; to protect the viability of subsistence resources; and in a manner consistent with the foregoing, to provide for outdoor recreation and environmental education activities including public access for recreational purposes to the Serpentine Hot Springs area. The Secretary shall permit the continuation of customary patterns and modes of travel during periods of adequate snow cover within a one-hundred foot right-of-way along either side of an existing route from Deering to the Taylor Highway, subject to such reasonable regulations as the Secretary may promulgate to assure that such travel is consistent with the forgoing purposes."

ANILCA 810(a) further requires that the potential for significant restriction of subsistence uses by a proposed action be evaluated on "...the availability of other lands for the purposes sought to be achieved and other alternatives which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes."

## III. PROPOSED ACTION OF FEDERAL PUBLIC LANDS

The NPS in cooperation with the Federal Highway Administration (FHWA), is proposing to conduct a coastal emergency shelter cabin. Congress has made funds available through FHWA for marking a winter access route and construction of the cabin. The proposed cabin is in the Bering Land Bridge Nation Preserve (Preserve).

## IV. AFFECTED ENVIRONMENT

Bering Land Bridge National Preserve is located on the northern section of the Seward Peninsula and was established in 1980 by Title II Section 201(2) of ANILCA. Subsistence uses are allowed within the Preserve in accordance with Title II, Section 202(2) and Title VIII of ANILCA and in accordance with Title 36 CFR Part 13 regulations prescribed for proper use and management of park areas in Alaska.

Title VIII, Section 803 of ANILCA defines subsistence uses as: "the customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles out of non-edible byproducts of fish and wildlife resources taken for personal or family consumption; for barter, or sharing for personal or family consumption; and for customary trade."

Major resources used for subsistence by local communities within the project-related portion of the Preserve include: moose, reindeer, brown bear, snowshoe hare, fox, mink, wolf, wolverine, ptarmigan, ground squirrel, waterfowl, trout, grayling, berries, and wild edible plants, caribou, and marine mammals (seal, walrus, polar bear, whale), and other fish (salmon, whitefish, herring, lingcod, tomcod, flounder, smelt).

It is estimated that the nearby community of Shishmaref harvests nearly 800 edible pounds per person per year of subsistence resources from the surrounding area which includes parts of Preserve and the proposed project area. The proportion of this harvest by type is estimated as follows: marine mammals (55%), fish (21%), marine invertebrates (18%), birds and eggs (4%) and vegetation (2%).

## V. SUBSISTENCE USES AND NEEDS EVALUATION

To determine the potential impact on subsistence activities, three evaluation criteria were analyzed relative to current subsistence resources that relative to the current subsistence resources that could be impacted.

## The evaluation criteria are:

- 1. The potential to reduce important subsistence fish, wildlife, or plant populations by substantial (a) reductions in abundance; (b) redistribution of subsistence resources; or (c) loss of habitat.
- 2. Potential impacts the action may have on access for subsistence hunters and anglers.
- 3. The potential for the action to increase competition among hunters and anglers for subsistence resources.

## 1. The potential to reduce populations:

No substantial reduction in fish, wildlife, or plant populations is anticipated as a result of the proposed project.

## **Fisheries**

The project is expected to have no substantial impacts on fish abundance, distribution, or habitat.

## Wildlife

The project is expected to have no substantial effects on wildlife or their habitats. No loss of wildlife habitat is expected. To minimize habitat effects, the supplies and materials would be transported and much of the work would be conducted when snow cover is adequate to substantially protect soils, roots, vegetation. Soil and vegetation disturbances would be small, confined to the immediate vicinity.

Plants emerging above snow cover will be avoided. Impacts to shrub branches are expected to constitute a small percentage of the shrub canopy with minimal to no anticipated root damage. Damaged branches are expected to regenerate rapidly in the spring.

Temporary displacement of wildlife from a portion of their movement area may occur as a result of equipment noise and human activities during transport and construction. The displacement would be short in duration during which time abundant suitable alternative habitat areas are readily available nearby. The total estimated time for activities within the Preserve is up to 20 days. When the project is finished, human activity and wildlife

movements are expected to return to normal with no change in wildlife population, distribution, or habitat.

## **Plants**

The project is expected to have no substantial effect to subsistence plant populations. The precautions given under the wildlife discussion above are expected to substantially protect subsistence plants. Minor disturbances are expected to quickly re-colonize in-kind with no measurable change in resource abundance, distribution, or habitat.

## 2. Restriction of Access:

All rights of access for subsistence harvest on National Park Service lands are granted by Section 811 of ANILCA. Bering Land Bridge National Preserve is managed according to the legislative mandates, NPS management policies and guidelines within the approved General Management Plan. The proposed action is not expected to limit or restrict the access of subsistence users to natural resources within the Preserve. The superintendent may enact closures and/or restrictions if necessary to protect subsistence opportunities or to assure the continued viability of a particular fish or wildlife population.

## 3. Increase in Competition:

The proposed action is not expected to result in increased competition for fish, wildlife, or other resources within the park. The project is non-consumptive in nature. The conditions of subsistence activities are expected to remain the same before and after the project. Furthermore, NPS regulations and provision of ANILCA mandate that if and when it is necessary to restrict taking of fish or wildlife, subsistence users will be given a priority over other user groups. Continued implementation of the ANILCA provisions should mitigate any increased competition that may arise from resource users other than subsistence users. The superintendent may enact closures and/or restrictions if necessary to protect subsistence opportunities or to assure the continued viability of a particular fish or wildlife habitat.

## VI. AVAILABILITY OF OTHER LANDS

The proposed project is site specific. There are no other available lands that would meet the purpose and need of the project.

#### VIII. FINDINGS

This analysis concludes that the proposed action will not result in a significant restriction of subsistence uses.

## APPENDIX B

## **National Historic Preservation Act Section 106 Assessment of Effect**

See next six pages.



National Park Service
U.S. Department of the Interior

Bering Land Bridge National Preserve Date: 06/10/2015

## ASSESSMENT OF ACTIONS HAVING AN EFFECT ON HISTORIC

**PROPERTIES** 

A. DESCRIPTION OF UNDERTAKING

1. Park: Bering Land Bridge National Preserve

No Historic Properties Affected Must Alaska State Historic Preservation Officer Date: 6/19/15 File No.: 3130-12 NPS Please review: 36 CFR 800.13 / A.S. 41.35.070(d)

2. Project Description:

Project Name: Coastal Emergency Shelter Cabin

Prepared by: Hannah Atkinson/Michael Holt Date Prepared: 06/15/2014 Telephone: 907-442-3890

PEPC Project Number: 25458

Locations:

County, State: N.A., AK

District, Section: Nome, Kozebue C-6

Geographic Marker: Kividlo

(Survey Marker)

County, State: Nome Census Area, AK

Describe project:

The principal objective of this project is to construct an emergency coastal shelter cabin in the Cowpack Lagoon area utilizing a cooperative agreement with the Shishmaref IRA tribal council (Indian Reorganization Act of 1934) and possibly Kawerak, Inc. In 2006, the Kividluk shelter cabin was destroyed by high winds and was deemed un-repairable. The construction of a new cabin would provide life-saving shelter during severe arctic weather conditions. The Kividluk shelter cabin was originally constructed by the village of Shishmaref in 1983 with State of Alaska funding and later became the responsibility of the NPS. The old shelter cabin materials are located near known archaeological resources. The a new coastal cabin site was agreed upon during public meetings with the village of Shishmaref on April 30 and June 17, 2009 and another follow-up meeting the end of October 2013. An archaeological assessment of the new area was conducted by Bob Gal and Jeanette Koelsch on July 24, 2009. The new shelter cabin, if approved and funded, would be scheduled for construction in the winter of 2016 and completed by September 30, 2016. A majority of the construction is scheduled for the winter, utilizing snowmobile with some minor work to complete cabin (if needed) during the summer of 2016 via boat, fixed wing aircraft or helicopter.

## Area of potential effects (as defined in 36 CFR 800.16[d])

In 2006, the Kividluk Shelter Cabin was destroyed by high winds and was deemed un-repairable. The construction of a new cabin would provide life-saving shelter during severe arctic weather conditions. The Kividluk Shelter Cabin was originally constructed by Shishmaref in 1983 with State of Alaska funding and later became the responsibility of the NPS.

Ground Disturbance: The timeline for construction will be during the winter months when the area can be accessed by snowmobile. Wood blocks will be used on top of the tundra.

Study Locations: Site of proposed construction is located south of Singeak (named location on USGS map) on the mainland at the east side of the channel at the NE end of Cowpak Lagoon. Map/pictures attached.

Methodologies The a new coastal cabin site was agreed upon during public meetings with the village of Shishmaref on April 30 and June 17, 2009 and another follow-up meeting the end of October 2013. An archaeolgical assessment of the

Assessment of Effect Form - Coastal Emergency Shelter Cabin - PEPC ID: 25458

new area was conducted by Bob Gal and Jeanette Pomrenke on July 24, 2009. The new shelter cabin, if approved and funded, would be scheduled for construction the winter of 2016 and completed by May, 2016.

Two alternative construction sites were subjected to systematic cultural resources inventory (Schaaf 1988, Vol 1 & 2; and Gal 2009). In 2009 (Gal), determined that Alternative #2 was not suitable for construction. Alternative #1 was determined suitable for construction and is the preferred site noted in the EA. Alternative #1 was subsequently surveyed from the air and via pedestrian means, examining the bluff top and face, drainages, and undercut sod blocks along the beach in 2009 (Gal). No cultural material was observed on the surface, and careful examination of the bluff face and undercut sod blocks revealed no cultural material in buried context (Gal 2009). Thus it can be reasonably presumed there will be no historic properties affected as a result of this undertaking at Alternative #1.

| No   |
|--|
| X Yes  |
| <b>Source or reference:</b> Gal (2009) Archaeological Investigation Report Form: Kividlo Shelter Cabin replacement: Alternate Sites #1 and #2. 001-09-BELA |
| 4. Potentially Affected Resource(s):   |
| 5. The proposed action will: (check as many as apply)  |
| No Destroy, remove, or alter features/elements from a historic structure   |
| No Replace historic features/elements in kind  |
| No Add non-historic features/elements to a historic structure  |
| No Alter or remove features/elements of a historic setting or environment (inc. terrain)   |
| Add non-historic features/elements (inc. visual, audible, or atmospheric) to a historic  No setting or cultural landscape                                  |
| No Disturb, destroy, or make archeological resources inaccessible  |
| No Disturb, destroy, or make ethnographic resources inaccessible   |
| No Potentially affect presently unidentified cultural resources  |
| Begin or contribute to deterioration of historic features, terrain, setting, landscape  No elements, or archeological or ethnographic resources            |
| No involve a real property transaction (exchange, sale, or lease of land or structures)  |
| Other (please specify):  |
| 6. Supporting Study Data:<br>(Attach if feasible; if action is in a plan, EA or EIS, give name and project or page number.)                                |
| B. REVIEWS BY CULTURAL RESOURCE SPECIALISTS  |
| The park 106 coordinator requested review by the park's cultural resource specialist/advisors as indicated by check-off boxes or as follows:               |

[X] 106 Advisor Name: Michael Holt

Assessment of Effect Form - Coastal Emergency Shelter Cabin - PEPC ID: 25458

Date: 06/10/2015

Comments: The area of potential effect has been adequately surveyed (Gal 2009), and there are no known historic properties within immediate proximity to the preferred location. The cabin would be placed on top of the tundra on blocks. There would be no excavation for footings, since excavation could disturb the permafrost and the cabin could sink. While the NPS has determined that no historic properties would be affected, the coastal ridge is known to be rich with prehistoric sites.

| Check if project does not involve ground disturbance [ ]  |
|---|
| Assessment of Effect: No Potential to Cause EffectX No Historic Properties Affected No  |
| Adverse Effect Adverse Effect Streamlined Review  |
| Recommendations for conditions or stipulations: 1) All cultural resources encountered during this project shall be              |
| avoided. Observations of cultural resources under imminent threat should be reported to the superintendent as soon as           |
| possible. The locations of all cultural resources encountered will be reported together with a brief description of the item or |
| feature, its context, and any photographic images (film and/or digital) obtained. 2) Should human remains be encountered        |
| during the course of construction or equipment/material transport, activities at the locality shall cease immediately. Contact  |
| the Superintendent (907-443-6101) immediately for advice pursuant to the Native American Graves Protection and                  |
| Repatriation Act of 1990 as amended (43 CFR 10) 3) All archaeological and paleontological resources within National Park        |
| Service boundaries are protected from unauthorized human activities that would otherwise damage, destroy or result in the       |
| illicit collection of these nonrenewable resources. Should unauthorized human activities be witnessed or evident through pas    |
| illicit activities, contact park law enforcement (907/412-1189 or 434-1510) and cultural resources (907/442-8331) for advice    |
| pursuant to the Archaeological Resources Protection Act of 1979 as amended (43 CFR 7) and the Paleontological Resources         |
| Preservation Act of 2009 (P.L. 111-011). Do not attempt to accost individualsor groups of people engaged in illicit activities  |
| and contact park law enforcement as soon as it is safe to do so.  |
|   |

Doc Method: Memo to SHPO/THPO

[X] Archeologist Name: Michael Holt Date: 06/10/2015

**Comments:** The area of potential effect has been adequately surveyed (Gal 2009), and there are no known historic properties within immediate proximity to the preferred location.

The cabin would be placed on top of the tundra on blocks. There would be no excavation for footings, since excavation could disturb the permafrost and the cabin could sink. While the NPS has determined that no historic properties would be affected, the coastal ridge is known to be rich with prehistoric sites.

Assessment of Effect: \_\_ No Potential to Cause Effect \_\_X\_ No Historic Properties Affected \_\_ No Adverse Effect \_\_ Adverse Effect \_\_ Streamlined Review

Recommendations for conditions or stipulations: 1) All cultural resources encountered during this project shall be avoided. Observations of cultural resources under imminent threat should be reported to the superintendent as soon as possible. The locations of all cultural resources encountered will be reported together with a brief description of the item or feature, its context, and any photographic images (film and/or digital) obtained. 2) Should human remains be encountered during the course of construction or equipment/material transport, activities at the locality shall cease immediately. Contact the Superintendent (907-443-6101) immediately for advice pursuant to the Native American Graves Protection and Repatriation Act of 1990 as amended (43 CFR 10)... 3) All archaeological and paleontological resources within National Park Service boundaries are protected from unauthorized human activities that would otherwise damage, destroy or result in the

illicit collection of these nonrenewable resources. Should unauthorized human activities be witnessed or evident through past illicit activities, contact park law enforcement (907/412-1189 or 434-1510) and cultural resources (907/442-8331) for advice pursuant to the Archaeological Resources Protection Act of 1979 as amended (43 CFR 7) and the Paleontological Resources

| eservation Act of 2009 (P.L. 111-011). Do not attempt to accost individualsor groups of people engaged in illicit activities of contact park law enforcement as soon as it is safe to do so.  |  |  |  |  |
|---|--|--|--|--|
| Doc Method: Memo to SHPO/THPO   |  |  |  |  |
| Reviews From: Curator, Historical Architect, Historian, Other Advisor, Anthropologist, Historical Landscape Architect   |  |  |  |  |
| PARK SECTION 106 COORDINATOR'S REVIEW AND RECOMMENDATIONS   |  |  |  |  |
| Assessment of Effect:   |  |  |  |  |
| No Potential to Cause Effects   |  |  |  |  |
| X No Historic Properties Affected   |  |  |  |  |
| No Adverse Effect   |  |  |  |  |
| Adverse Effect  |  |  |  |  |
| Documentation Method:   |  |  |  |  |
| [X] A. STANDARD 36 CFR PART 800 CONSULTATION Further consultation under 36 CFR Part 800 is needed.  |  |  |  |  |
| [ ] B. STREAMLINED REVIEW UNDER THE 2008 SERVICEWIDE PROGRAMMATIC AGREEMENT (PA)  |  |  |  |  |
| The above action meets all conditions for a streamlined review under section III of the 2008 Servicewide PA for Section 106 compliance.   |  |  |  |  |
| APPLICABLE STREAMLINED REVIEW Criteria  |  |  |  |  |
| (Specify 1-16 of the list of streamlined review criteria.)  |  |  |  |  |
| [ ] C. PLAN-RELATED UNDERTAKING   |  |  |  |  |
| Consultation and review of the proposed undertaking were completed in the context of a plan review process, in accordance with the 2008 Servicewide PA and 36 CFR Part 800. Specify plan/EA/EIS:                                      |  |  |  |  |
| [ ] D. UNDERTAKING RELATED TO ANOTHER AGREEMENT The proposed undertaking is covered for Section 106 purposes under another document such as a statewide agreement established in accord with 36 CFR 800.7 or counterpart regulations. |  |  |  |  |
|   |  |  |  |  |
| [ ] E. COMBINED NEPA/NHPA Document  |  |  |  |  |
| Documentation is required for the preparation of an EA/FONSI or an EIS/ROD has been developed and used so as also to meet the requirements of 36 CFR 800.3 through 800.6  |  |  |  |  |

[X] G. Memo to SHPO/THPO

Explanation: The cabin would be placed on top of the tundra on blocks. There would be no excavation for footings, since excavation could disturb the permafrost and the cabin could sink. While the NPS has determined that no historic properties would be affected, the coastal ridge is known to be rich with prehistoric sites.

## [ ] H. Memo to ACHP

SHPO/THPO Notes: The cabin would be placed on top of the tundra on blocks. There would be no excavation for footings, since excavation could disturb the permafrost and the cabin could sink. While the NPS has determined that no historic properties would be affected, the coastal ridge is known to be rich with prehistoric sites.

## 3. Additional Consulting Parties Information:

Additional Consulting Parties: No

## 4. Stipulations and Conditions:

Following are listed any stipulations or conditions necessary to ensure that the assessment of effect above is consistent with 36 CFR Part 800 criteria of effect or to avoid or reduce potential adverse effects.

- 1) All cultural resources encountered during this project shall be avoided. Observations of cultural resources under imminent threat should be reported to the superintendent as soon as possible. The locations of all cultural resources encountered will be reported together with a brief description of the item or feature, its context, and any photographic images (film and/or digital) obtained.
- 2) Should human remains be encountered during the course of construction or equipment/material transport, activities at the locality shall cease immediately. Contact the Superintendent (907-443-6101) immediately for advice pursuant to the Native American Graves Protection and Repatriation Act of 1990 as amended (43 CFR 10).
- 3) All archaeological and paleontological resources within National Park Service boundaries are protected from unauthorized human activities that would otherwise damage, destroy or result in the illicit collection of these nonrenewable resources. Should unauthorized human activities be witnessed or evident through past illicit activities, contact park law enforcement (907/412-1189 or 434-1510) and cultural resources (907/442-8331) for advice pursuant to the Archaeological Resources Protection Act of 1979 as amended (43 CFR 7) and the Paleontological Resources Preservation Act of 2009 (P.L. 111-011). Do not attempt to accost individualsor groups of people engaged in illicit activities and contact park law enforcement as soon as it is safe to do so.

## 5. Mitigations/Treatment Measures:

Measures to prevent or minimize loss or impairment of historic/prehistoric properties: (Remember that setting, location, and use may be relevant.)

No Assessment of Effect mitigations identified.

#### D. RECOMMENDED BY PARK SECTION 106 COORDINATOR:

| Compliance Specia | ilist: |       |      |     |      |
|-------------------|--------|-------|------|-----|------|
| NHPA Specialist   | 4      |       | -    | 1.0 | 0015 |
| Michael Holt      | TON    | Date: | June | TU, | ZU15 |

## E. SUPERINTENDENT'S APPROVAL

The proposed work conforms to the NPS *Management Policies* and *Cultural Resource Management Guideline*, and I have reviewed and approve the recommendations, stipulations, or conditions noted in Section C of this form.

Signature

Superintendent:

Jeanette Koelsch

## APPENDIX C

## **Endangered Species Act Section 7 Consultation**

See the next seven pages.



## United States Department of the Interior



U.S. FISH AND WILDLIFE SERVICE Fairbanks Fish and Wildlife Field Office 101 12<sup>th</sup> Avenue, Room 110 Fairbanks, Alaska 99701 May 5, 2014

## **MEMORANDUM**

To:

Richard Anderson, Environmental Protection Specialist, National Park

Service, Alaska Regional Office

From:

Ted Swem, Branch Chief

Subject:

Request for concurrence on a not likely to adversely affect determination for

Jed Swem

spectacled and Alaska-breeding Steller's eiders and polar bears pursuant to

construction and maintenance of Kividlo Shelter Cabin; a conference on

yellow-billed loons and Pacific walrus is also included

Cc:

Jeanette Koelsch, Superintendent, Bering Land Bridge National Preserve

This memorandum is in response to your request for consultation on endangered and threatened species, and critical habitats pursuant to Section 7 of the Endangered Species Act of 1973, as amended (ESA).

## THE PROPOSED ACTION

We understand that the Bering Land Bridge National Preserve (the Park) would work through a cooperative agreement with the Native Village of Shishmaref to provide training opportunities for youth and other local residents during construction of Kividlo Shelter Cabin (Map 1). We understand that the cabin location would be at one of the alternatives in Map 1, but most likely at site #1. The 12' x 16' cabin would rest three feet off the ground and at least 100 meters from the edge of the bluff. The cabin would be built of plywood with a tin roof with modified shutter/plywood shutters and reinforced doors to keep bears out.

The Park plans to begin transporting materials by snowmobile and sled (in 4-5 trips from Shishmaref) and constructing the cabin December-March 2016. If the cabin is not completed in winter, the crew will finish July-September 2016. The cabin site would be reached in summer by boat or helicopter. Construction would take about 14-20 days. During construction, 5-7 workers will camp at the proposed cabin site using tents and a weather port for cooking. If a helicopter is used, the Park would use the Wilderness Minimum Tool Analysis to minimize impacts to wilderness and wildlife. Helicopter use would occur only over the mainland or lagoon. Park employees will minimize use of power tools and generators during construction to the extent possible.

The cabin would most likely receive use in winter. The Park would implement standard bear safety protocols that include the Polar Bear Interaction Guidelines (attached). Signs will instruct users that storage of game carcasses inside the cabin is not permitted. To minimize attractants, all emergency shelter cabins are cleaned annually. To further mitigate human and bear interactions:

- 1) There will be limited construction during the polar bear mating season between March and May;
- 2) Workers avoid possible polar bear denning sites;
- 3) Workers will use Leave No Trace camping techniques;
- 4) All garbage and human waste will hauled from the site to the Shishmaref landfill;
- 5) All park employees will be trained in Bear Safety Training;
- 6) The park will use electric fencing around the construction camp;
- 7) The camps (winter and summer) will use bear proof food containers to store food and items with food-like odors; and
- 8) Summer construction will avoid bird nests and waterfowl in and near the lagoon.

## THE ACTION AREA

The action area for this project includes the path to the cabin, the cabin building and camp site, and the area around the cabin where its use may have direct and indirect effects on listed and candidate species (Map 1).



Map. 1. Possible locations of the proposed Kivildo emergency shelter cabin.

## EFFECTS OF THE ACTION ON LISTED SPECIES

## **Project effects on Alaska-breeding Steller's and spectacled eiders**

The Service listed the spectacled eider (*Somateria fisheri*) on May 10, 1993 (58 FR 27474) and the Alaska-breeding population of the Steller's eider (*Polysticta stelleri*) as threatened on June 11, 1997 (62 FR 31748). Non-nesting or migrating Steller's and spectacled eiders might occur in the project area in very low numbers, if at all, and they do not nest in this area. We expect disturbance to non-breeding or migrating eiders would be minor because non-nesting individuals can respond to human presence or disturbance by moving away to a perceived safe distance. Because disturbance to non-breeding or migrating listed eiders would be so minor that injury or death is not expected, project effects to these birds would be insignificant.

## Project effects on polar bears

On May 15, 2008, the polar bear (*Ursus maritimus*) was listed as threatened (73 FR 28212). Polar bears may occasionally pass through or den in the area, although their density is very low and encounters are expected to be rare. Transient (non-denning) bears that enter 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 Park will provide field crews an interaction plan for personnel to follow in the event that polar bears are encountered during project activities. Because (1) the density of polar bears in the action area is low; (2) encounters with polar bears are expected to be infrequent; (3) behavioral effects to transient bears are not expected to result in injury or death of a bear; and (4) mitigation measures included in the interaction guidelines would minimize potential impacts in the event that transient polar bears are encountered, we expect effects of the proposed action on polar bears would be insignificant.

## Project effects on yellow-billed loons

On March 25, 2009, the Service designated the yellow-billed loon (*Gavia adamsii*) a candidate for protection under the ESA because of its small population size range-wide and concerns about levels of subsistence harvest and other potential impacts to the species (74 FR 12932). Breeding pairs of migratory yellow-billed loons can inhabit nearby lakes and coastal lagoons of the action area between May and September. Most cabin use would occur in winter and would not affect this species. However, cabin construction and use during summer may disturb a few yellow-billed loons if they are nesting and resting nearby. Effects on this species may include noise and visual disturbance that causes a loon to dive, temporarily leave its nest, or alter its course of travel. These disturbances would likely only cause minor, temporary changes in behavior. Thus, we conclude that the proposed action will not jeopardize the continued existence of yellow-billed loons or preclude its survival and recovery in the wild.

## **Project effects on Pacific walruses**

The Pacific walrus (*Odobenus rosmarus divergens*) became a candidate species on February 10, 2011 (76 FR 7634). Breeding occurs January through March, and calves are born in late April or May. In summer, several thousand animals in the Bering Sea use haul-outs along the coast, but most are found on pack ice in the Chukchi Sea. The currents and benthic environments that generally comprise the best feeding areas for walruses are not adjacent to the coastline near the proposed cabin. Thus, cabin builders and users are not likely to encounter groups of walruses feeding in the water or resting on the nearby coast. Helicopter use is unlikely to disturb walruses because project plans include a landward flight path. Thus, we expect that the proposed action will not jeopardize the continued existence of the Pacific walrus or preclude its survival and recovery in the wild.

## Summary

While the proposed action could conceivably potentially disturb low numbers of polar bears and threatened listed eiders in the project area, these disturbances are discountable and insignificant. The Service therefore has determined that that the proposed action is not likely to adversely affect listed eiders or polar bears. We also concluded that that the proposed action is not likely to jeopardize the continued existence of yellow-billed loons and walruses. Further consultation under section 7 of the ESA is not necessary at this time. Thank you for the opportunity to comment on this project. If you need further assistance, please contact Shannon Torrence at (907) 455-1871.

## EXAMPLE TEXT FOR A SIGN INSIDE THE CABIN

Brown and polar bears can occur in this area and can be attracted to this cabin by human waste and trash. Please help keep this cabin bear safe for you and others. Please keep the inside and outside of the cabin clean by:

- Securing the door while inside;
- Packing out all solid human waste in winter and burying it in summer;
- Packing out all food and trash;
- Hauling all animal carcasses *xxx* (*determined by NPS experts*) feet away from cabin, preferably on sea ice when safe

Thank you for your efforts to keep this emergency shelter clean and safe for future users! (the Native word for "thank you!", if appropriate)

## 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: Susanne Miller or Craig Perham, Marine Mammals Management Office (MMM Office), 1-800-362-5148; 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, ice, 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 airtight containers or bags to minimize odor transmission until you return them
  to "bearresistant" 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.

#### APPENDIX D

## **Wilderness Minimum Requirements Analysis**

## **Arthur Carhart National Wilderness Training Center**







Minimum Requirements
Decision Guide
Worksheets

"... except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act ..." — the Wilderness Act, 1964

## Step 1: Determine if any administrative action is Necessary.

The situation that may prompt action:

The National Park Service (NPS) proposes to rebuild a coastal emergency shelter cabin in Bering Land Bridge National Preserve (BELA), Alaska.

The Preserve is Eligible Wilderness.

To determine if administrative action is <u>necessary</u>, answer the questions listed in A - F on the following pages.

## A. Describe Options Outside of Wilderness.

Is action necessary within wilderness?

Yes.

All the lands in BELA are Eligible Wilderness. If a coastal emergency shelter cabin is to be built in BELA, it must be within Eligible Wilderness.

There are no options outside of wilderness.

## B. Describe Valid Existing Rights or Special Provisions of Wilderness Legislation.

Is action necessary to satisfy valid existing rights or a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws) that allows consideration of the Section 4(c) prohibited uses? Cite law and section.

No valid existing rights relate to this project.

No special provisions of the Wilderness Act relate to this project.

No special provisions of ANILCA or subsequent wilderness legislation relate to this project.

## C. Describe Requirements of Other Legislation.

Is action necessary to meet the requirements of other laws?

No, the project is not necessary to meet other laws.

## D. Describe Other Guidance.

Is action necessary to conform to direction contained in agency policy, unit and wilderness management plans, species recovery plans, or agreements with tribal, state and local governments or other federal agencies?

No.

National Park Service 2006 Management Policies

#### E. Wilderness Character.

Is action necessary to preserve one or more of the qualities of wilderness character?

- 1) Untrammeled:
- 2) Undeveloped:
- 3) Natural:
- 4) Outstanding opportunities for solitude or a primitive and unconfined type of recreation:
- 5) Other unique components that reflect the character of this wilderness:

*No, the project is not necessary to preserve a quality of wilderness character.* 

## F. Describe Effects to the Public Purposes of Wilderness.

Is action necessary to support one or more of the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act)?

- 1) Recreation:
- 2) Scenic:
- 3) Scientific:
- 4) Education:
- 5) Conservation:
- 6) Historical use:

No, the project is not necessary to support one of these public purposes; however, an administrative cabin is beneficial to conservation of the area because it supports ranger activities such as research, patrol, search & rescue, and especially staff and visitor safety.

## Step 1 Decision: Is any administrative action Necessary in wilderness?

Yes, the proposed action is necessary in wilderness for safety.

If action is necessary, proceed to Step 2 to determine the minimum activity.

## **Step 2: Determine the Minimum activity.**

Description of Alternatives: For each alternative, describe what methods and techniques will be used, when the activity will take place, where the activity will take place, what mitigation measures are necessary, and the general effects to the wilderness resource and character.

## Alternative 1: No Action

Description: No coastal emergency shelter cabin would be built.

Effects on Wilderness Character:

- 1) Untrammeled:
- 2) Undeveloped:
- 3) Natural:
- 4) Outstanding opportunities for solitude or a primitive and unconfined type of recreation:
- 5) Other unique components that reflect the character of this wilderness:

No adverse effects on these wilderness characters.

Effects on Heritage and Cultural Resources:

No adverse effect.

Effects on Maintaining Contrast and Skills:

No adverse effect.

Effects on Special Provisions:

*No adverse effect.* 

Effects on Safety of Visitors, Personnel, and Contractors:

*The No Action would continue the adverse effects on safety.* 

Effects on Economic and Time Constraints

*No adverse effect.* 

Effects on Additional Wilderness specific Comparison Criteria

*No adverse effect of No Action.* 

## **Alternative 2: Proposed Action**

Description: Construct coastal emergency cabin.

Effects on Wilderness Character:

1) Untrammeled:

No adverse effects.

2) Undeveloped:

Long-term adverse impact of long-term cabin. Short-term adverse impacts of use of motorized equipment and landing of helicopter.

3) Natural:

No adverse effects.

4) Outstanding opportunities for solitude or a primitive and unconfined type of recreation:

No adverse effects.

5) Other unique components that reflect the character of this wilderness:

No adverse effects.

Effects on Heritage and Cultural Resources:

No adverse effect.

Effects on Maintaining Contrast and Skills:

No adverse effect.

Effects on Special Provisions:

No adverse effect.

Effects on Safety of Visitors, Personnel, and Contractors:

*The proposed action would have benefit effect.* 

Effects on Economic and Time Constraints

*No adverse effect.* 

## Effects on Additional Wilderness Specific Comparison Criteria

No adverse effect.

## **Step 2 Decision: What is the Minimum Activity?**

| Selected alternative: Alternative #2, Proposed Action, Construct Cabin  |
|---|
| Rationale for selecting this alternative: Safety  |
| Monitoring and reporting requirements: <i>None</i>  |
| Check any Wilderness Act Section 4(c) uses approved in this alternative:  |
| Commercial enterprise   |
| _X_ Permanent road – winter snowmachine route, allowed by ANILCA  |
| Temporary road  |
| _X_ Motor vehicles – snowmachines, allowed by CFR   |
| _X_ Motorboats – potential use of motorboats, allowed by ANILCA   |
| _X_ Landing of aircraft – potential use of float plane, allowed by ANILCA; and potential use of helicopter, not allowed by ANILCA, but allowed by CFR under permit. |
| Other mechanical transport  |
| _X_ Structure – Cabin, for safety.  |
| Installation  |
| Wilderness Minimum Requirements Analysis Approved by:   |
| Superintendent, Bering Land Bridge Preserve date  |