

National Park Service
U.S. Department of the Interior

Bering Land Bridge National Preserve
Alaska



Finding of No Significant Impact

**Temporary Access Permit to Cross Bering Land Bridge National Preserve for
the Shishmaref Relocation Reconnaissance Study**

March 2008

Recommended:

Wendy K. Swindon

Interim Superintendent, Bering Land Bridge National Preserve

March 31, 2008

Date

Approved:

Marcia Blazyn

Regional Director, Alaska

04/02/08

Date

FINDING OF NO SIGNIFICANT IMPACT

Temporary Access Permit to Cross Bering Land Bridge National Preserve For the Shishmaref Relocation Reconnaissance Study March 2008

The National Park Service (NPS) prepared an environmental assessment to consider issuing a special use permit for temporary access across Bering Land Bridge National Preserve (BELA) to the Alaska Department of Transportation and Public Facilities (ADOT&PF), in cooperation with the Federal Highway Administration, to conduct reconnaissance level engineering studies in support of the Shishmaref Relocation Road Project. The village of Shishmaref has faced severe erosion of its beach front property (including loss of homes, roads, and other infrastructure) from fall/winter storms due to retreating sea ice and melting permafrost. The community voted to relocate to Tin Creek inside Shishmaref Inlet; however, federal agencies are also considering other alternatives such as transporting massive amounts of rock to protect the seaside of the barrier island on which the village is now located. Access across BELA to Ear Mountain, a potential rock and gravel source, is needed to facilitate the Shishmaref Relocation Project reconnaissance studies. The NPS is considering this access request under Title XI of the Alaska National Interest Lands Conservation Act of 1980 (ANILCA) and its implementing regulations at 43 CFR Part 36.3 as a pre-application activity to obtain information for a possible future application for a road across BELA.

The NPS has selected Alternative 2 (NPS Preferred Alternative), which would permit ADOT&PF to conduct the reconnaissance engineering studies this spring given adequate protective snow cover. The alternative was not modified by public comment. ADOT&PF requested use of a smaller tracked vehicle with a smaller diameter solid auger for sample drilling. The NPS determined this would not change or exceed the analysis of impacts of the proposal. A specifications sheet for the 1983 Raid Trac Carrier with Mobile B-24 Surveyor Drill is attached, and it replaces the 1994 Bombardier Muskeg carrier with CME 45-C Drill, which was described in the EA.

ALTERNATIVES

Three alternatives were evaluated in the EA.

Alternative 1, No Action

Under the no-action alternative the NPS would not issue a special use permit to ADOT&PF for access across BELA with a tracked drilling rig. The equipment would have to be transported to Ear Mountain by air or walked overland from Brevig Mission or Teller, which is about three times the distance as from Shishmaref.

Alternative 2 – Land Travel across and Drilling within the Preserve (*NPS Preferred Alternative*)

The NPS would issue a special use permit to ADOT&PF in the spring of 2008 to provide access across BELA between Shishmaref Inlet to Ear Mountain using snowmobiles with sleds carrying supplies and a tracked vehicle where there is adequate snow to minimize impacts to vegetation and soils.

The tracked vehicle would have a six-inch or less diameter solid stem auger to obtain test hole data to depths of 5 to 20 feet at a reconnaissance spacing of one hole every mile, including about 8 test holes in BELA. Snowmobile sleds would carry support equipment including pumps, fuel, drill steel, and other supplies. The subsurface information would be used to evaluate conditions for a potential road route from Shishmaref Inlet to Ear Mountain including across the Preserve and to obtain information on rock materials at Ear Mountain. Test holes in BELA would be back-filled with drill cuttings, locations recorded with GPS units, and otherwise no markings left at the drill sites. Drilling operations would continue in summer 2008 at Ear Mountain, and the drilling equipment would be walked back north across BELA when adequate snow and ice is present the following winter season.

Workers would commute to the work area each day by snowmachine from Shishmaref; no camps would be established inside BELA. The drill rig would make one round trip across BELA to and from Ear Mountain. Snowmobiles with sleds and equipment would make 10-12 RT passes over BELA. Food would be transported to and from work sites each day, except emergency food supplies, which may be stored on site during non-work hours in bear-resistant containers locked within the drill rig cab. Trash would be packed out of the Preserve.

The travel route would be adjusted to follow adequate snow cover, frozen ground, and ice along the way. Stream crossings would be made from bank to bank with a preference for low and sloping banks and in a direction as close to perpendicular to stream flow direction as possible. Stream crossing would avoid open water and any ice-covered deep water pools.

Fuel would be transported in sealed and secured containers on the drill rig and snowmobiles. If any fuel is left on site during non-work hours, it would be locked within the drill rig cab or storage boxes.

Human waste would be deposited at least 200 feet from water bodies and covered with snow. Toilet paper and related materials would be packed out.

Alternative 3 – Land Travel across with no and Drilling in the Preserve

Under alternative 3 the NPS would issue a special use permit to transport equipment across BELA, but no test-hole drilling would be authorized. Operations would otherwise be the same as described in alternative 2 except round trip passes across the preserve would be one for the drill rig and 5-6 for the snowmobiles and support equipment.

PUBLIC INVOLVEMENT

The EA was issued for public review and comment from March 11, 2008 to March 26, 2008. The EA was sent by mail or hand-delivered to 56 agencies, organizations, and individuals and was posted on the NPS Planning, Environment, and Public Comment website.

Two comment letters were received on the EA; one from National Parks and Conservation Association and the other from the State of Alaska. The public comments did not change the conclusions in the EA concerning the environmental effects of the action. The State made one comment regarding the disposal of human waste and several comments addressing the ANILCA 810 summary evaluation and findings, which are addressed in the attached responses to comments and errata sheet.

DECISION

The NPS decision is to select Alternative 2 (Land Travel across and Drilling within the Preserve). The NPS would issue a special use permit to ADOT&PF for access across BELA to conduct reconnaissance engineering studies in support of a possible future application for road access across BELA between Shishmaref Inlet and Ear Mountain. The permit would contain stipulations to protect park purposes and values as expressed in the following mitigating measures.

MITIGATING MEASURES

The NPS developed the following mitigating measures as permit stipulations.

NPS Monitoring: An NPS staff person shall be on site during the phases of the project that take place inside Bering Land Bridge National Preserve.

Route Selection: In coordination with the Permittee, the NPS shall select and mark the route in advance of the drill rig and any other heavy equipment. The NPS shall select the route according to snow cover, ground frost, vegetation, animal groups, topography, and other factors. Snowy ridge crests are preferred. Snow free areas shall be avoided.

Snowcover: Before the project may proceed, the NPS will determine if the ground is frozen to a sufficient depth to protect soils. There shall be at least 6 inches of ground frost. Before the project may proceed, the NPS will determine if the snow cover is adequate to protect soils and vegetation and travel shall not leave any permanent scars on the landscape. There shall be at least 10 inches of snow cover.

Wildlife: The Permittee shall avoid wintering moose, muskoxen, reindeer-caribou, and other large wildlife to the extent they are not disturbed.

Soils and Vegetation: The Permittee shall not expose or disturb ground cover, vegetation, or soils. The Permittee shall avoid breaking branches of willows and other plants. The Permittee

may not blade soils or vegetation. Blading of snow drifts would be permitted only when blades remain a minimum of 10 inches above the ground surface.

Stream Crossings: Equipment crossings shall be made from bank to bank in a direction substantially perpendicular to the direction of stream flow. Snow ramps may be constructed at stream crossings but must be substantially free of extraneous material (i.e., soil rock, wood or vegetation). Any ramps which may cause stream blockages during breakup will be removed after crossings are completed.

Banks shall not be altered or disturbed in any way to facilitate crossings. If stream banks are inadvertently disturbed, the damage shall be immediately reported to the NPS monitor.

Cultural Resources: Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the Permittee, or any person working on his behalf, on public or Federal land shall be immediately reported to the NPS. The Permittee shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the NPS. An evaluation of the discovery will be made by the NPS to determine appropriate actions to prevent the loss of significant cultural or scientific values. The Permittee will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the NPS after consulting with the Permittee.

Waste Disposal: The Permittee may not leave waste oil, garbage, or equipment inside the Preserve.

Motorized Equipment: All motorized equipment shall travel under its own power or be towed on an appropriate size sled. Any inoperative equipment will be repaired on-site and not towed unless on a sled or a break down occurs while crossing a river, lake or pond.

Permits and Regulations: The Permittee shall abide by all National Park Service (NPS) regulations. The Permittee is required to obtain all applicable federal and state permits prior to commencement of operation and to comply with all pertinent federal and state laws including, but not limited to, air and water quality standards and regulations issued pursuant to the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (43 U.S.C. 6901 et. seq.) for disposal of solid waste.

Other Stipulations: The Permittee shall report any accidents, or injuries resulting in death, personal injury, requiring medical care, or property loss or damage over \$300 per incident to the Superintendent at the earliest possible time.

The Permittee shall report any resources damage at the earliest possible time. The Permittee shall reimburse any costs incurred by the NPS to correct damages caused by the failure to comply with the provisions of this permit.

RATIONALE for the DECISION

Alternative 2 (NPS Preferred Alternative) was selected because the NPS concluded that temporary access across BELA would not lead to permanent harm to the resources and values of the Preserve. The ADOT&PF, Federal Highway Administration, and village of Shishmaref need access to Ear Mountain from Shishmaref Inlet to investigate subsurface conditions between the two locations and a potential rock and gravel source at Ear Mountain in support of a possible future road access request for the Shishmaref Relocation Project. BELA lies between the two locations and a reasonable alternative of access by land and sea does not exist. ANILCA Title XI and its implementing regulations at 43 CFR Part 36 provide for access to inholdings where an area is effectively surrounded. Issuance of a special use permit with stipulations for temporary access to prevent any permanent harm to preserve resources would allow access across the Preserve to facilitate reconnaissance engineering studies in support of the Shishmaref Relocation Project.

SIGNIFICANCE CRITERIA

The preferred alternative will not have a significant effect on the human environment. This conclusion is based on the following examination of the significance criteria defined in 40 CFR Section 1508.27.”

(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

As documented in the EA the NPS special use permit with stipulations to protect Preserve resources would result in minimal effect on the Preserve’s natural and cultural resources while ensuring temporary access to lands in and effectively surrounded by the Preserve for the Shishmaref engineering reconnaissance studies.

(2) The degree to which the proposed action affects public health or safety.

The proposed action would not affect public health or safety. Access across the Preserve would facilitate the Shishmaref Relocation Project reconnaissance studies.

(3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetland, wild and scenic rives, or ecologically critical areas.

There are no known historic or prehistoric sites along the proposed route through BELA, however, muskoxen and moose winter habitat and reindeer herds may occur in the area. Permit stipulations would minimize adverse effects to theses resources and uses.

(4) The degree to which effects on the quality of the human environment are likely to be highly controversial.

The effects from the proposed temporary access across the Preserve on the quality of the human environment would not be controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The effects of the selected alternative do not involve highly uncertain, unique, or unknown risks.

(6) The degree to which the action may establish a precedent of future actions with significant effects or represents a decision in principle about a future consideration.

The special use permit for temporary access across the Preserve would not set a precedent for future actions. Should ADOT&PF proceed with a future application for access across BELA to construct and maintain a road for the Shishmaref Relocation Project, the NPS would complete an EIS.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

The action is not related to other actions with individually insignificant but cumulative significant impacts.

(8) Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The selected alternative would not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

The selected alternative would not adversely affect an endangered or threatened species or its habitat.

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The selected alternative would not violate any Federal, State, or local law.

FINDINGS

The levels of adverse impacts to park resources anticipated from the selected alternative will not result in an impairment of park resources that fulfill specific purposes identified in the establishing legislation or that are key to the natural or cultural integrity of the park.

The selected alternative complies with the Endangered Species Act, the National Historic Preservation Act, and Executive Orders 11988 and 11990]. There will be no restriction of subsistence activities as documented by the Alaska National Interest Lands Conservation Act, Title VIII, Section 810(a) Summary Evaluation and Findings.

The National Park Service has determined that the selected alternative does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, in accordance with the National Environmental Policy Act of 1969 and regulations of the Council on Environmental Quality (40 CFR 1508.9), an environmental impact statement is not needed and will not be prepared for this project.

RESPONSES TO COMMENTS & ERRATA

1. State of Alaska (SOA) Comment #1, Page 6, last paragraph of Alternative 2:

Please specify in the decision notice that the separation distance between human waste and water bodies must be measured from the *ordinary high water mark* (OHWM). According to Alaska Department of Environmental Conservation regulation at 18 AAC 72.020, human waste must be disposed of at least 100 feet away from the OHWM of streams, rivers, or lakes. This distinction is important because a separation of 200 feet from *surface water* may, in some instances, still not meet the required 100 foot setback from OHWM.

NPS Response: *NPS regulation at 36 CFR 2.14 Sanitation and Refuse similarly states: "In non-developed areas, the disposal of human body waste within 100 feet of a water source, high water mark of a body of water, or campsite, or within site of a trail, except as otherwise designated, is prohibited." The NPS has determined the ADOT&PF's proposed doubling of the apparent distance from a surface water source from 100 feet to 200 feet provides a reasonable assurance that the criteria to deposit human waste at least 100 feet from OHWM would be met. Furthermore, the NPS monitor would assure the applicable state and federal regulatory criteria are met.*

2. SOA Comment #2, ANILCA 810 Analyses, Appendix D, Page 25:

The second sentence of the first paragraph under Affected Environment on page 25 would be more accurate if stated as follows:

Section 203 and Title VIII of ANILCA allows for harvest of fish and wildlife in Bering Land Bridge National Preserve as regulated by the State of Alaska, except as superseded by Federal subsistence regulations and Park-specific regulations.

NPS Response: *The NPS incorrectly cited ANILCA Section 202(2) rather than Section 203.*

3. SOA Comment #3, ANILCA 810 Analyses, Appendix D, Page 24; II: Evaluation Process:

Please note that the second major quote about the purposes of the Bering Land Bridge National Preserve is from Section 201(2) of ANILCA, not 202(2).

NPS Response: *The EA incorrectly cited ANILCA Section 201(2) rather than Section 202(2).*

4. SOA Comment #4, ANILCA 810 Analyses, Appendix D Page 27; Restriction of Access:

The first sentence says: "All rights of access for subsistence harvest on National Park Service lands are granted by Section 811 of ANILCA." [emphasis added] We request deleting the word "All" because other entities may have the authority to impose limits.

NPS Response: *The EA is corrected to delete the word "All" as noted above.*

5. SOA Comment #5, ANILCA 810 Analysis, Appendix D Page 27; Restriction of Access; Last sentence; and Page 28; Increase in Competition; Last sentence: ANILCA provides the opportunity for a consumptive subsistence priority “*when it is necessary to restrict taking in order to assure the continued viability of a fish or wildlife population or the continuation of subsistence uses of such population*” (see ANILCA Section 802(2)). Neither of the two referenced sentences, especially the one on page 28, accurately reflect 802(2), therefore we recommend the errata sheet include the following correction:

The superintendent may **enact** closures and/or restrictions on take if necessary to protect subsistence **uses** or to assure the continued viability of a particular fish or wildlife population.

NPS Response: *The EA is corrected to replace the word “edict” with “enact” and the word “opportunities” with “uses” as per the comment.*

ERRATA

1. Appendix D, Page 24, EVALUATION PROCESS, 2nd paragraph, 3rd sentence. The sentence has been modified to reference ANILCA Section 201(2) rather than ANILCA Section 202(2). The sentence should read as follows:

ANILCA Title II Section 201(2) states the following regarding the management purposes for the Bering Land Bridge National Preserve.

2. Appendix D, Page 25, AFFECTED ENVIRONMENT, 1st paragraph, 2nd sentence. The sentence has been modified to reference ANILCA Section 203 rather than ANILCA Section 202(2). The sentence should read as follows:

Subsistence uses are allowed within the Preserve in accordance with Title II, Section 203 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.

3. Appendix D, Page 27, Restriction of Access, paragraph 1, 1st sentence. The sentence has been modified to delete the word “All” at the beginning of the sentence. The sentence should read as follows:

Rights of access for subsistence harvest on National Park Service lands are granted by Section 811 of ANILCA.

4. Appendix D, Page 28, Increase in Competition, 1st paragraph, last sentence. The following sentence has been modified to accurately reflect ANILCA Section 202(2).

The superintendent may edict closures and/or restrictions if necessary to protect subsistence opportunities or to assure the continued viability of a particular fish or wildlife habitat.

The sentence should read as follows:

The superintendent may enact closures and/or restrictions if necessary to protect subsistence uses or to assure the continued viability of a particular fish or wildlife population.



1983 Raid Trac Carrier with Mobile B-24 Surveyor Drill

Drill Serial # 624964, Vehicle Number 28849

Equipment: Carrier hydraulically driven by Onan gasoline drill engine. 10 foot tower, hydraulic cathead, and 1 sand line.

Drill dimensions: 5' 1" wide x 7' 5" long x 4' 11" high.

Curb weight: Tooled weight 3,550 pounds, un-tooled – 3,200 pounds

Ground pressure: 1.7 PSI @ 3,550 pounds.

Aircraft: Casa / Skyvan medium to heavy duty side and rear entry air craft.

Min. Runway length: 1800' (without tooling)

Drill methods, tool sizes and approximate depth limits:

Solid Flight Auger - 4 ½" OD x 4', depth limit ~ 50 feet.

Hollow Stem Auger - 2 ¼" ID x 4 3/8" OD x 5,' depth limit ~ 35 feet.

Wash bore rotary - 3 ½" OD x 3" ID x 5' long casing, depth limit ~ 50 feet

BWD4 Core barrel - 2.365" OD x 1.615" ID x 5' long, depth limit ~ 50 feet

(6" OD X 5' long solid flight and 3 ¼" ID X 6 5/8" OD x 5' long hollow stem augers can be used to limited depths depending on soil conditions.)

Drilling and sampling methods are job specific and can be obtained by contacting the State of Alaska D.O.T. & P.F Northern Region Materials Section at (907)-451-2245.