

Lake Sediment Sampling

Introduction

Students and professionals have been conducting research projects in the Toolik and Imnavait sites for many years.

Summary

Matthew Wallenstein with the Colorado State University proposes to conduct soil and vegetative sampling, research and analysis in the Toolik and Imnavait areas for three (3) years in order to study carbon and nutrient dynamics in acidic moist tussock tundra in the region and to investigate how soil interacts between plants and soil microbes, using both lab and field experiments

Alternatives Considered

The No Alternative Option is the only alternative considered and was not selected as it would not allow the Colorado State University to conduct soil and vegetative research and analysis

Decision

I have decided to authorize a permit on public lands for the purpose of conducting soil and vegetation research and analysis from May 1, 2014 to December 31, 2017 to William Wallenstein with the Colorado State University.

Management Considerations

The Categorical Exclusion and supporting documentation have been prepared consistent with the requirements of various statutes and regulations, including but not limited to:

- Alaska National Interest Lands Conservation Act of 1980 (ANILCA)
- Federal Land Policy and Management Act of 1976 (FLPMA)
- National Environmental Policy Act of 1969 (NEPA)
- National Historic Preservation Act of 1966 (NHPA)

One BLM land use plan applies to the overall project area, the Utility Corridor Resource Management Plan.

Public Involvement

It was determined that due to the remoteness of the action, there would be no impact to the general public. Additionally, this document was published to the electronic Central Yukon Field Office NEPA Register on March 31, 2014. No comments have been received as of

Appeal or Protest Opportunities:

This decision may be appealed to the Interior Board of Land Appeals, Office of Hearings and Appeals, in accordance with 43 CFR Part 4 and DOI Form 1842-1. The notice of appeal must be filed in the Bureau of Land Management Central Yukon Field Office, 1150 University Avenue, Fairbanks, Alaska 99709 within 30 days from receipt of this decision. If you decide to file an appeal, you must carefully follow the procedure described on the enclosed form 1842-1. If you

don't file your appeal at the locations specified on the form within 30 days, the Board may dismiss your appeal as untimely without considering its merits. Be sure to send a copy of your notice of appeal to each party named in this decision and to all of the addresses on the enclosed form 1842-1. You may also ask the Board to stay or suspend the effect of this decision while your appeal is pending. If you desire a stay, you must enclose your request for a stay with your notice of appeal. You have the burden of showing a stay is justified. The Board will grant a stay only if you provide sufficient justification based on the following standards:

1. The relative harm to the parties if the Board grants or denies the stay,
2. The likelihood of the success of your appeal on its merits,
3. The likelihood of immediate and irreparable harm if the Board does not grant the stay, and;
4. Whether the public interest favors granting a stay.

Approval from Authorized Official:

Field Office Manager Decision

Having considered a full range of alternatives, associated impacts, and public and agency input, I have decided to adopt and implement the attached Approved Plan in conformance with the Utility Corridor Resource Management Plan.

/s/ Gary M. Foreman

Signature

Nichelle W. Jacobson

Field Manager

Central Yukon Field Office

April 17, 2014

Date

Essential Fish Habitat Assessment

NEPA Document No.: DOI-BLM-AK-F030-2014-0021-CX

Prepared by: David A. Esse

Date: 3/29/2014

Essential Fish Habitat (EFH) Finding: Based on the finding that there are no anadromous species in the area encompassed by this permit (ADF&G 2014) and the unlikelihood of impacts beyond this same area, the proposed action is assigned the EFH determination: *No effect*. EFH consultation with NMFS is not required.

References: Alaska Department of Fish and Game (ADF&G). 2014. Fish Distribution Database. Internet website at: <http://www.sf.adfg.state.ak.us/SARR/FishDistrib/PDFListing/int/wisb1.pdf>.

Wilderness Characteristics Assessment

NEPA Document No.: DOI-BLM-AK-F030-2014-0021-CX

Serial No.: F-96780

Applicants: Songyong Huang and William Longo with Brown University

Location: Toolik Research Area more particularly described as Secs. 24, 26, 29 and 30, T. 9 S., R. 11 E., Umiat Meridian, Alaska, containing approximately 1.0 acre.

Prepared by: Lisa Shon Jodwalis

Date: 31 March 2014

Proposed Action

Students from Brown University propose to take samples of lake sediment in the four locations identified above between May 5 — 18, 2014. They would travel to each site by snow machine which is needed in order to carry their scientific equipment. Once on site they propose to use an ice auger to drill three (3), 12 inch diameter holes in the lake ice, then they would lower the coring device made of polycarbonate casing. Then PVC pipes would be lowered around the coring rods until they also become inserted into the sediment until it becomes filled with a vertical column of sediment. This process would continue until the sediment becomes too hard to penetrate with hand held devices. No structures would be erected and all equipment would be removed after sampling. The sediment samples would be transferred back to the University for processing and archival. Snow machine travel would be limited to the proposed routes (see map) in activity folder and they would not make more than four (4) round trips to each site.

Evaluation

The basis for this evaluation is BLM Manual 6310-Conducting Wilderness Characteristics Inventory on BLM Lands, and BLM Manual 6320 - Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process, which direct offices to conduct and maintain inventories regarding the presence or absence of wilderness characteristics, and to consider identified Lands with Wilderness Characteristics (LWC) in land use plans and when analyzing projects under the National Environmental Policy Act (NEPA).

Effects on wilderness characteristics on BLM lands within the Utility Corridor are evaluated according to the Nonwilderness Assessment, a special project approved by the BLM Director and conducted by the BLM along portions of the Trans-Alaska Pipeline System (TAPS) corridor in 1980. This assessment identified lands under BLM administration that were considered lacking in the wilderness characteristics as defined by the Wilderness Act of 1964. The assessment was conducted in a manner that met the requirements of Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA).

The Dalton Highway and Trans-Alaska Pipeline parallel each other for the entire length of the Utility Corridor. The pipeline is 48” in diameter and elevated above ground for much of its length so it is highly visible. The Dalton Highway supplies Alaska’s arctic oilfields and supports considerable industrial traffic year-round. These man-made features and associated human activities are highly visible and audible depending on topography and proximity. Permitted

activities such as gravel- and gold mining occur throughout the area and have expanded in some locations. These developments are substantially noticeable in some areas and alter the natural character of lands in the immediate vicinity.

The action being considered is located within the Sagavanirktok Segment of the Nonwilderness Assessment, which covered approximately 512,000 acres total in 1980. Portions of this segment meet the 5,000 acre minimum size. However it was determined that the Sagavanirktok Segment did not meet the standards for naturalness due to roads, camps, airfields, pipelines, material sites and associated facilities. These disturbances bisect the entire length of the segment.

FINDING

The proposed action will not occur on lands identified as having wilderness characteristics and therefore will not affect wilderness characteristics.

Type of Assessment/Sources

- Department of Interior, BLM, 1980. Nonwilderness Assessment: The Alaska Natural Gas Transportation System, Final Decision. Anchorage, Alaska
- topographic map Philip Smith Mountains C-5; GIS data; Google Earth images

Section 810 Analysis

NEPA Document No.: DOI-BLM-AK-F030–2014–0021–CX

Applicants: Songyong Huang and William Longo with Brown University

/Serial No.: F-96780

Proposed Action: Students from Brown University propose to take samples of lake sediment in the four locations identified above between May 5 — 18, 2014. They would travel to each site by snow machine which is needed in order to carry their scientific equipment. Once on site they propose to use an ice auger to drill three (3), 12 inch diameter holes in the lake ice, then they would lower the coring device made of polycarbonate casing. Then PVC pipes would be lowered around the coring rods until they also become inserted into the sediment until it becomes filled with a vertical column of sediment. This process would continue until the sediment becomes too hard to penetrate with hand held devices. No structures would be erected and all equipment would be removed after sampling. The sediment samples would be transferred back to the University for processing and archival. Snow machine travel would be limited to the proposed routes (see map) in activity folder and they would not make more than four (4) round trips to each site.

Location: Toolik Research Area mile post 285 Dalton Highway

Township/Range: Secs. 24, 26, 29 and 30, T. 9 S., R. 11 E., Umiat Meridian, Alaska, containing approximately 1.0 acre.

Evaluation by: Erin Julianus and David Esse

Date: 4/10/14 and 3/29/14

Type of Assessment/Sources: Review of application materials, subsistence database, local knowledge, interviews with staff knowledgeable about the area and the proposed action.

Effect of the proposal on subsistence uses and needs

Fisheries: No subsistence use of fish is documented for residents of Alaska within the permitted area (USDI BLM 1989). If there is fish movement and subsequent subsistence use of fish downstream from the study sites, the proposed action would not significantly reduce harvestable fisheries resources that are available for subsistence use since this activities effects on fish or their habitat will be minimal. The proposed action will not alter the distribution, migration or location of harvestable fisheries resources. The proposed action will not create any legal or physical barriers that would limit access by subsistence users of the fisheries resource.

References

USDI Bureau of Land Management. 1989. Utility Corridor Proposed Resource Management Plan and Final Environmental Impact Statement. USDI/Northern Field Office. Fairbanks, Alaska.

Wildlife: The proposed action is located in Game Management Unit (GMU) 26B. Species of wildlife that are used for subsistence harvest in the area include moose, sheep, bears, furbearers, and small game. These species may temporarily avoid the area when activities and personnel associated with the permitted action are present, but the activity will not permanently impact their

distribution in the area. Although subsistence activity occurs throughout the area, the proposed action will not significantly affect subsistence uses and needs.

Other resources:

The proposed activity will not significantly impact other resources such as wood, water, or berries. Subsistence activities that target these resources occur in a much broader area than where the proposed action is to take place. Therefore, the proposed action will not significantly restrict subsistence uses and needs.

Expected reduction, if any, in the availability of resources due to alteration in resource distribution, migration, or location:

The proposed action will not significantly alter the distribution, migration or location of harvestable wildlife resources, nor would it create any legal or physical barriers that would limit subsistence harvest and access.

Expected limitation, if any, in the access of subsistence users resulting from the proposal:

None. Access to resources by subsistence users will not be limited by the proposed action.

Availability of other lands, if any, for the purpose sought to be achieved:

Other public lands are available for the purposes to be achieved. However, the proposed action is a permitted activity on BLM lands in an area that is designated for research activities such as those included in the proposed action, and there is no compelling reason to change the site of operation outside of BLM lands.

Other alternatives, if any, which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes:

The only alternative that would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes is to not allow or permit any activities that conflict with subsistence uses. However, such an alternative is not viable because the BLM manages public lands for multiple uses.

Findings:

The proposed action will not significantly restrict subsistence uses. Access to subsistence resources will not be hampered by the proposed activity. There is no reasonably foreseeable significant decrease in the abundance of harvestable resources and in the distribution of harvestable resources due to the proposed action

References

USDI Bureau of Land Management. 1989. Utility Corridor Proposed Resource Management Plan and Final Environmental Impact Statement. USDI/Northern Field Office. Fairbanks, Alaska.