

# **Decision Record Memorandum**

## **Groundwater Research near Galbraith Lake Airport**

### **Introduction**

#### **Summary**

Alexander Huryn with the University of Alabama proposes to access to two aufeis fields will be required to allow sampling of stream water, groundwater, and invertebrates inhabiting the groundwater. Instruments will be deployed to allow the recording of temperature, water depth, light levels, and conductivity. Access will be by vehicle on established roads and by foot. No significant (i.e., permanent) improvements or developments will occur due to our proposed activities. Instruments will be deployed on sediment surfaces beneath the aufeis and within the stream channel. Five to ten shallow, small bore "wells" consisting of 1.5" diameter PVC pipe will be installed to allow sampling of groundwater and groundwater invertebrates. These wells will not exceed 2 m in depth. All instruments and wells will be removed at the conclusion of our study. Access to all sites is by vehicles on established roads and then by foot. They propose a two (2) year authorization.

#### **Decision**

I have decided to issue a two (2) year authorization to Alexander Huryn with the University of Alabama for them to conduct groundwater research near the Galbraith Lake Airport. All mitigations measures have resolved in the terms and conditions attached to the permit. All access is by vehicle on established roads and then by foot. The use of motorized vehicles across the tundra is not authorized.

#### **Management Considerations**

The Categorical Exclusion and supporting documentation have been prepared consistent with the requirements of various applicable 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 area there would be no impact to the general public. Additionally, this document was published to the electronic Central Yukon Field Office NEPA Register on May 20, 2016. No comments have been received as of June 6, 2016.

#### **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, 222 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

do not 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 Recommendation**

Having considered a full range of alternatives, associated impacts, and public and agency input, I recommend the adoption and implementation of the attached Approved Plan as the Utility Corridor Resource Management Plan.

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| <i>/s/ William H. Hedman</i><br>For Timothy J. La Marr<br>Field, Manager, Central Yukon Field Office | Date<br>June 10, 2016 |
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## Appendix A - Essential Fish Habitat Determination

**NEPA document:** DOI-BLM-AK-F030-2016-0027-CX

**Case File No.:** F-97124

**Title:** University of Alabama, stream water, groundwater, and aquatic invertebrate sampling

**Prepared by:** David G. Parker

**Date:** 13 May 2016

The proposed action lies within the general range of Dolly Varden (*Salvelinus malma*); arctic char (*S. alpinus*); Lake Trout (*Salvelinus namaycush*); burbot (*Lota lota*); and whitefish (Coregonid spp.). Arctic grayling (*Thymallus arcticus*) and slimey sculpin (*Cottus cognatus*) are ubiquitous throughout the region (ADF&G 1978). Northern pike (*Esox lucius*), Alaska blackfish (*Dallia pectoralis*), longnose sucker (*Catostomus catostomus*) and ninespine stickleback (*Pungitius pungitius*) are also found in select streams and lakes in the area (BLM 2010 and Mecklenberg et al. 2002). Chinook (*Oncorhynchus tshawytscha*), coho (*O. kisutch*), and chum salmon (*O. keta*) are listed as present in adjacent watersheds. The National Marine Fisheries Service (NMFS) recognizes fresh waters cataloged (ADF&G 2014) as being used by salmon under AS 41.14.870 (Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes) as essential fish habitat (EFH).

The proposed action is the issuance of a research permit to collect stream water, groundwater, and aquatic invertebrate samples near Galbraith Lake. Adherence to the terms and conditions listed in this CX will limit any negative impacts on adjacent anadromous water courses. Therefore, there is no anticipated deleterious effect on EFH.

**Essential Fish Habitat Finding:** *No adverse effect.* EFH consultation with NMFS is not required.

### References:

Bureau of Land Management, 2010. Fish Streams Along the Trans-Alaska Pipeline System, A Compilation of Selected References with Current TAPS Stationing. BLM Open File Report 105. 43 p.

Mecklenburg, Catherine W., T. Anthony Mecklenberg, and Lyman K. Thorsteinson, 2002. Fishes of Alaska. American Fisheries Society. Bethesda, Maryland. 1037 p.

State of Alaska, Alaska Department of Fish and Game. 1978. Alaska's Fisheries Atlas. Volume 2. Edited by R. McLean and K. Delaney. Alaska Department of Fish and Game.

State of Alaska, Alaska Department of Fish and Game. 2014. An Atlas to the Catalog of Waters Important for Spawning, Rearing, or Migration of Anadromous Fishes, Resource Management Region V. Alaska Department of Fish and Game, Habitat and Restoration Division.

<http://extra.sf.adfg.state.ak.us/FishResourceMonitor/?mode=awc>

## Appendix B - Wilderness Characteristics Assessment

**NEPA Document No.:** DOI-BLM-AK-F030-2016-0027-CX

**Applicant:** Alexander Huryn with the University of Alabama

**Serial No.:** F-97124

**Location:** Galbraith Lake Airport, mile post 274 off the Dalton Highway

**Township/Range:** Secs. 25 and 27, T. 11 S., R. 11 E., Umiat Meridian

**Evaluation by:** Robin Walthour

**Date:** May 20, 2016

**Proposed Action:** Alexander Huryn with the University of Alabama proposes to access to two aufeis fields will be required to allow sampling of stream water, groundwater, and invertebrates inhabiting the groundwater. Instruments will be deployed to allow the recording of temperature, water depth, light levels, and conductivity. Access will be by vehicle on established roads and by foot. No significant (i.e., permanent) improvements or developments will occur due to our proposed activities. Instruments will be deployed on sediment surfaces beneath the aufeis and within the stream channel. Five to ten shallow, small bore "wells" consisting of 1.5" diameter PVC pipe will be installed to allow sampling of groundwater and groundwater invertebrates. These wells will not exceed 2 m in depth. All instruments and wells will be removed at the conclusion of our study. Access to all sites is by vehicles on established roads and then by foot. They propose a two year authorization.

**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 action being considered is located within the Yukon and Prospect Segments of the Nonwilderness Assessment, which covered approximately 1,280,000 acres total in 1980. Portions of this segment meet the 5,000 acre minimum size. However it was determined that the lands where the proposed action will occur did not meet the standards for naturalness due to roads, camps, airfields, pipelines, material sites and associated facilities.

**Finding:** The proposed action will occur on lands identified as lacking wilderness characteristics and therefore will not affect wilderness characteristics.

**Type of Assessment/Sources:**

- U.S. Department of Interior, BLM, 1980. Nonwilderness Assessment: The Alaska Natural Gas Transportation System, Final Decision. Anchorage, Alaska
- USGS topographic maps, GIS data, Google Earth images
- Personal knowledge of the area and 2013 aerial survey

## Appendix C - Compliance with ANILCA Section 810

**NEPA Document No.:** DOI-BLM-AK-030-2016-0027-CX

**Applicant:** University of Alabama, Alexander D. Huryn

**Case File No.:** F-97124

**Proposed Action:** Alexander Huryn with the University of Alabama proposes to access to two aufeis fields will be required to allow sampling of stream water, groundwater, and invertebrates inhabiting the groundwater. Instruments will be deployed to allow the recording of temperature, water depth, light levels, and conductivity. Access will be by vehicle on established roads and by foot. No significant (i.e., permanent) improvements or developments will occur due to our proposed activities. Instruments will be deployed on sediment surfaces beneath the aufeis and within the stream channel. Five to ten shallow, small bore "wells" consisting of 1.5" diameter PVC pipe will be installed to allow sampling of groundwater and groundwater invertebrates. These wells will not exceed 2 m in depth. All instruments and wells will be removed at the conclusion of our study. Access to all sites is by vehicles on established roads and then by foot. They propose a two year authorization.

**Location:** Galbraith Lake Airport, mile post 280 off the Dalton Highway within Secs. 25 and 27, T. 11 S., R. 11 E., Umiat Meridian

**Evaluation by:** David G. Parker and Erin Julianus

**Date:** 5/13/16 and

**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:

The proposed action would not alter the distribution, migration, or location of harvestable fisheries resources. Approved mitigation measures would prevent degradation of adjacent water sources and fisheries habitat. The proposed action will not create any legal or physical barriers that would limit access by subsistence users of the fisheries resources.

#### Wildlife:

The proposed action would not alter the distribution, migration, or location of harvestable wildlife resources. The proposed action will not create any legal or physical barriers that would limit access by subsistence users of wildlife resources.

#### Other resources:

Other resources will not be impacted by the proposed action.

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

None. Fish and wildlife resources may temporarily avoid the area while the permittee and associates are present. However, no expected reduction in the availability of resources due to alteration in resource distribution, migration, or location will occur.

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

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

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

None

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

There is no substantial evidence that would indicate a significant impact on subsistence will result from the proposed action. No other alternatives were evaluated.

**Finding:**

The proposed action will not significantly restrict subsistence uses. No reasonably foreseeable and significant decrease in the abundance of harvestable resources or in the distribution of harvestable resources, and no reasonably foreseeable limitations on harvester access have been forecasted to emerge as a function of the proposed action.