



U.S. Department of the Interior Bureau of Land Management

Central Yukon Field Office
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Categorical Exclusion Remote Automated Weather Stations and Snow Depth Observation Sites

**Applicants: U.S. Fish and Wildlife Service (FWS) (Selawik National Wildlife Refuge) and
The Bureau of Land Management (BLM)**

**Case File Numbers: F-95864
DOI-BLM-AK-03000-2011-0067-CX**



Snow Marker Locations:

NW¹/₄SE¹/₄, Sec. 22, T. 1 N., R. 2 W.,
SE¹/₄SE¹/₄, Sec. 16, T. 5 S., R. 4 W.,
S¹/₂SE¹/₄, Sec. 32, T. 6 S., R. 10 W.,
NE¹/₄NW¹/₄, Sec. 21 T. 12 S., R. 11 W., Kateel River Meridian

RAW Site Locations

SE¹/₄NE¹/₄, Sec. 24, T. 6 N., R. 11 W.,
NE¹/₄SE¹/₄, Sec. 20, T. 2 S., R. 1 W.,
NE¹/₄SE¹/₄, Sec. 8, T. 10 S., R. 6 W., Kateel River Meridian

Prepared By:

Central Yukon Field Office
September 22, 2011

CATEGORICAL EXCLUSION

A. Background

BLM Office: Central Yukon Field Office **Case File No:** F-95864

Environmental Document No.: DOI-BLM-AK-03000-2011-0067-CX

Proposed Action Title/Types: Install three (3) Remote Automated Weather Stations and four (4) snow depth observation sites

Location of Proposed Action:

The snow markers would be located within NW $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 22, T. 1 N., R. 2 W., SE $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 16, T. 5 S., R. 4 W., S $\frac{1}{2}$ SE $\frac{1}{4}$, Sec. 32, T. 6 S., R. 10 W., NE $\frac{1}{4}$ NW $\frac{1}{4}$, Sec. 21 T. 12 S., R. 11 W., Kateel River Meridian, Alaska, depicted on USGS Candle A-1, B-1 and Norton Bay B-1, B-4 topographic maps. The RAW sites are tentatively located within SE $\frac{1}{4}$ NE $\frac{1}{4}$, Sec. 24, T. 6 N., R. 11 W., NE $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 20, T. 2 S., R. 1 W., and NE $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 8, T. 10 S., R. 6 W., Kateel River Meridian, depicted on USGS Candle D-5, Kateel River B-6 and Norton Bay C-2. These RAW sites may be altered slightly depending on compatibility with equipment.

Description of Proposed Action:

The BLM, Central Yukon Field Office, in cooperation with the FWS, Selawik National Wildlife Refuge, proposes to install a variety of weather monitoring facilities in the winter range of the Western Arctic Caribou Herd. Three Remote Automated Weather Stations (RAWS) would be installed at locations as described above. The installation of four (4) snow markers would be installed as described above.

Pilots will fly by the aerial snow depth markers once/month during most winter months to take a reading from the air. The temperature sensors will be revisited using helicopter in the summer and downloaded. The equipment will be removed after two years or if still needed, apply to extend the project after five years.

At each site they would install a standard aluminum aerial snow depth marker. Each marker consists of a 4" wide post 10' tall with measuring arms that extend to the sides (see photo below). The snow depth markers are affixed to an x-shaped base made from two 4' long 2x6" planks, secured to the ground by 30" lengths of rebar at 4 corners. The marker is secured using 3 guy wires (1/8" cable) with duckbill anchors driven 26" to 30" into the ground. Temperature sensor stakes are placed 3 m and 10 m on either side of the aerial snow depth marker, on similar ground (slope, vegetation, height). All the sites are in remote areas on open tundra.

All necessary equipment would be brought in by helicopter for the permafrost and snow study. For the snow marker sites - below ground temperature sensors would be installed by drilling a 1" wide 130 cm to 150 cm deep hole. These sensors would be left in place for 2-5 years and then removed. Additionally, at each site an ibutton (quarter sized) temperature sensors affixed to 2 72" white fiberglass boundary marker stakes (3" wide) would be installed. These sensors would be removed after 2 years. The sensors would be powered by sealed gel 6 cell, 12 volt batteries. Two ski plan landings would be made every winter at each site to measure snow depth, density and hardness.



The RAWS would be similar to a trileg tower with three legs made of heavy aluminum pipes with welded gussetts at all joints and requires no pad. It is a free standing unit. It is unknown at this time the "exact" location of the sites. All sites will be placed on higher elevations and are as described above and on the cover page.



B. Land Use Plan Conformance 43 CFR 1610.5-3(a)

The proposed action is in conformance with the applicable LUPs because it is specifically provided for in the following LUPs:

Kobuk-Seward Peninsula Resource Management Plan approved September 2008.

In Section g) Lands and Realty states: “meet public needs for use authorizations such as ROW, leases, and permits while minimizing adverse impacts to other resource values. Provide for, authorize, or restrict the use of public lands in compliance with existing laws, regulations, withdrawals, BLM policy, and consistent with the goals and objectives of this RMP.”
 Central Yukon Management Plan approved March 1986.

Section 1, Resource Management Plan Summaries: Summary of Management Actions; Realty Actions; Access; states in pertinent part “Access to or across public lands will be considered on a case-by-case basis . . . with a permit (43 CFR 2800 or 43 CFR 2920), or by other appropriate means. Approval would be subject to conditions which minimize the impact to other land uses and/or prevent unnecessary damage to the environment.”

The proposed action is in conformance with the plan even though it is not specifically provided for because it is clearly consistent with the following planning decisions (objectives, terms, and conditions):

C. NEPA Compliance

The proposed action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with United States Department of the Interior 43 CFR §46.210 or United States Department of Interior Manual, Part 516, Appendix 1 which provides:

1.6

Nondestructive data collection, inventory (including field, aerial, and satellite surveying and mapping), study, research and monitoring activities.

The proposed action must be screened against the extraordinary circumstances found in 43 CFR 46.215 as listed below. Any “yes” finding requires that an Environmental Assessment or Environmental Impact Statement be prepared for the Proposed Action.

D. Extraordinary Circumstances

The following Departmental List of Extraordinary Circumstances applies to individual actions. Departmental instructions mandate that environmental documents must be prepared for actions which may:

		YES	NO
1.	Have significant adverse impacts on public health or safety.	_____	_____ X
2.	Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking	_____	_____ X

	water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.		
3.	Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2)(E)].	_____	<u> X </u>
4.	Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.	_____	<u> X </u>
5.	Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.	_____	<u> X </u>
6.	Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.	_____	<u> X </u>
7.	Have significant impacts on properties listed, or eligible for listing on the National Register of Historic Places as determined by either the bureau or office.	_____	<u> X </u>
8.	Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.	_____	<u> X </u>
9.	Violate Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.	_____	<u> X </u>
10.	Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).	_____	<u> X </u>
11.	Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely effect the physical integrity of such sacred sites (Executive Order 13007).	_____	<u> X </u>

12. Contribute to the introduction, continued existence, or spread of _____ X
weeds or non-native invasive species known to occur in the
area or actions that may promote the introduction, growth, or
expansion of the range of such species (Federal Noxious Weed
Control Act and Executive Order 13112).

This categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment. The proposed action has been reviewed, and none of the extraordinary circumstances in 43 CFR §46.215 are pertinent.

F. Signature

The proposed action is in conformance with a management framework plan or a resource management plan, 43 CFR § 1610.8(a)(3). The Department of the Interior has determined and found that the proposed action is within a category of actions that do not individually or cumulatively have a significant effect on the human environment and that neither an environmental assessment nor an environmental impact statement is required, 40 CFR §1508.4.

It is therefore my decision to implement the action, as described, with appropriate mitigation measures or stipulations.

Mitigation Measures/Stipulations: (See Attached Appendices)

Authorized Official: /s/ Nichelle W. Jacobson Date: 1/17/2012