

COMPATIBILITY DETERMINATION

Use: Winter Trail Marking Improvements and Marker Maintenance

Refuge Name: Yukon Delta National Wildlife Refuge, Bethel, Alaska

Establishing and Acquisition Authorities

Yukon Delta National Wildlife Refuge encompasses more than 19.5 million acres of federal land on the Yukon-Kuskokwim Delta, was established by the Alaska National Interest Lands Conservation Act (ANILCA) (Public Law 96-487 Stat.2371) on December 2, 1980. Former Clarence Rhode Refuge, Hazen Bay Refuge, and Nunivak Refuge were incorporated into the present Yukon Delta National Wildlife Refuge in 1980.

Section 702(2) of ANILCA designated approximately 1.3 million acres of Yukon Delta Refuge as the Andreafsky Wilderness and Section 702(9) designated approximately 600,000 acres as the Nunivak Wilderness under the Wilderness Act as amended (16 U.S.C. 1131-1136). The purposes for these lands as Wilderness are supplemental to the other purposes of Yukon Delta Refuge.

Section 606(a) (1) of ANILCA designated the Andreafsky as a Wild River under the Wild and Scenic Rivers Act (Public Law 90-542).

Refuge Purposes

ANILCA Section 302(7) (B) established the purposes for the Refuge as follows:

- i. to conserve fish and wildlife populations and habitat in their natural diversity including, but not limited to, shorebirds, seabirds, whistling swans, emperor, white-fronted and Canada geese, black brant and other migratory birds, salmon, muskox, and marine mammals;*
- ii. to fulfill the international treaty obligations of the United States with respect to fish and wildlife and their habitats;*
- iii. to provide, in a manner consistent with the purposes set forth in subparagraphs (i) and (ii), the opportunity for continued subsistence uses by local residents; and*
- iv. to ensure, to the maximum extent practicable and in a manner consistent with the purposes set forth in paragraph (i), water quality and necessary water quantity within the Refuge.*

Pre-ANILCA Purposes

The original purposes for Nunivak Island Reservation (1929), Hazen Bay Migratory Waterfowl Refuge (1937), Kuskokwim National Wildlife Range (1960), and Clarence Rhode NWR (1961), are as follows:

- i. Nunivak Island Reservation (Executive Order No. 5095 (April 15, 1929)...”for the use of the Department of Agriculture in conducting experiments in the crossing and propagation of reindeer and native caribou, for contemplated experiments in reestablishing the musk ox as a native animal of Alaska, and also as a preserve and breeding ground for native birds and wild game and fur-bearing animals...”
- ii. Hazen Bay Migratory Waterfowl Refuge (Executive Order 7770, Dec 14, 1937)...” in order to effectuate further the purposes of the Migratory Bird Conservation Act (45 Stat. 1222), “... for the use of the Department of Agriculture as a refuge and breeding ground for migratory birds and other wildlife.”
- iii. Kuskokwim National Wildlife Range (Public Land Order 2213, December 6, 1960) changed to Clarence Rhode National Wildlife Range (Public Land Order 2253, January 16, 1961) ...” as a refuge, breeding ground and management area for all forms of wildlife,” and “in order to preserve and protect the said waterfowl, other wildlife values, and the habitat.”

These purposes remain in force and effect unless they are inconsistent with ANILCA or the Alaska Native Claims Settlement Act (ANCSA), in which case ANILCA and ANCSA will prevail (ANILCA Section 305).

Wilderness Purposes

The Wilderness Act of 1964 guides management so “that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States..., leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness” (Section 2(a) of The Wilderness Act of 1964 (Public Law 88-577)). In Alaska, the Nunivak Wilderness and Andreafsky Wilderness within Yukon Delta National Wildlife Refuge were designated by ANILCA in 1980 and are administered in accordance with the Wilderness Act (PL 88-577 (16 U.S.C. 1131-1136)), except as expressly provided for in ANILCA (ANILCA Section 707) and US Fish and Wildlife Service Policy 610 FW 5 “Special Provisions for Alaska Wilderness.”

Wild and Scenic Rivers

Pursuant to the provisions of the Wild and Scenic Rivers Act, uses within designated river corridors are prohibited unless determined that the use in no way inhibits the protection and enhancement of the wild and scenic river values, and the river’s” wild” classification. The Andreafsky Wild and Scenic River was designated by ANILCA in 1980 and is administered in accordance with the Wild and Scenic Rivers Act (WSRA)(Public Law 90-542 as amended; 16 U.S.C. et seq), except as expressly provided for in ANILCA (Public Law 96-487). The Andreafsky River possesses the following Wild and Scenic River values: free flowing status, water quality, and the Outstandingly Remarkable Values (ORVs). The river’s classification is Wild, and so the proposed use must be consistent with maintaining a river corridor that is "essentially primitive and generally inaccessible except by trail."

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS) is to administer a national network of lands and waters for the conservation, management, and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (National Wildlife Refuge System Administration Act, as amended [16 U.S.C. 668dd-668ee]).

Description of Use: Installation and Use of Trail Markers on Winter Trails

Why is this use being proposed?

There is interest from rural residents to mark trails over vast open spaces between villages and where snowmachine travel is common. One of the purposes of the Refuge is “to provide an opportunity for rural residents to continue to engage in a subsistence way of life.” ANILCA Section 811 authorizes subsistence use of snowmachines and other means of surface transportation traditionally employed. In addition, ANILCA 1110(a) permits the use of snowmachines (during adequate snow cover) for 1) traditional activities and 2) for travel to and from villages or home sites. The Refuge may authorize installing and maintaining trail markers along existing or new snow trails on the Refuge, improving the safety of travelers who use snowmachines on these trails.

Limited natural terrain features are easily obscured by drifting snow and poor visibility during winter storms, which can lead to disorientation and risk to exposure. Marking snow trails will improve the safety for winter travelers that participate in subsistence activities or travel between villages.

The Refuge users of this use

Permit applicants may include, but are not limited to, villages, tribal governments and search and rescue organizations that are based within or near the Refuge boundary that want to provide marked trails for safety purposes.

Duration of the use

The initial marker installation and subsequent annual maintenance by an applicant will generally be restricted between November and March, when adequate snow cover is present. The Refuge Manager may grant annual permits, or multiyear permits valid up to 5 years.

Locations of the use and the access to the refuge for this use

Snowmachine use is common between many of the villages within and near the Refuge and existing trails are scattered throughout. Primary access onto Refuge lands will be from private inholdings, between villages, or to subsistence hunting areas.

How the use will be conducted

Operation of snowmachines will be conducted in accordance with ANILCA and 43 CFR Part 36, which requires adequate snow cover or frozen river conditions. In issuing trail marking permits, the Service will stipulate environmental conditions for installing and maintaining trail markers. Conditions include: 1) a sufficient depth of snow that is generally 6-12 inches or more, 2) a frost depth that is sufficient to protect the underlying vegetation and soil, and 3) the rivers or lakes that are under a frozen condition.

In addition, an applicant will be required to provide the Service with an agreement that outlines their roles and responsibilities for placing the markers along the snow trails and maintaining them. If approved for a permit, an applicant will be responsible for providing their own marker materials and transportation via snowmachine to install and maintain trail markers. Each applicant will be required to provide the Service with latitude/longitude coordinates describing trail locations.

Methods

Snowmachines and sleds will be used to haul material for marking trails. Typically, this involves multiple people and snowmachines going along a trail and assembling tripods and/or driving monopods into the ground.

Markers will be made of natural material that is typically wooden poles made into tripods with the use of wire, and wooden monopods (Figure 1). Reflective material such as tape will be attached to some of the markers. In forested areas, reflectors may be attached directly to trees. Steel stakes, or rebar, will be prohibited due to safety concerns. Markers will generally be located no more than 500 feet apart. After each winter, tripods and monopods may remain along the snow trail that could be reused or replaced by the applicant the following year(s). To find trails on the opposite side of water bodies (e.g. lakes, rivers, or inlets) willows/alders may be drilled into the ice to mark safe routes.

Additional markers may be placed in hazardous areas to alert snowmachine drivers of a possible risk, such as thin ice, open water, overflow, stream/river crossings, and tidally influenced areas.

Specific areas of the Refuge

Two species are listed as threatened under the Endangered Species Act that reside within the Refuge: the Steller's eider (*Polysticta stelleri*) and spectacled eider (*Somateria fischeri*). Designated critical habitat for both the eiders are on the Refuge located within the central coast. For the Steller's eider, this is the area between Hooper Bay and Scammon Bay; and between Chevak and the northern part of Nelson Island. For the Spectacled eider, critical habitat is between Hooper Bay and Scammon Bay; between Chevak and the northern part of Nelson Island; and between Tooksook Bay and Chefornek. Any permit application requesting to mark snowmachine trails will require an Endangered Species Act Intra-Section 7 consultation to determine affects and if such an activity could occur.

In addition, the placement of trail markers on Yukon Delta NWR will need an analysis for National Environmental Policy Act (NEPA) compliance.

Availability of Resources:

Adequate resources are currently available to manage the use as prescribed in this compatibility determination. Management involves administrative staff time for partnerships and associated written agreements with interested parties, review of permit stipulations, and proposed activities. Field work associated with administering the program primarily involves monitoring compliance with the terms of the permit. Monitoring compliance of permit conditions is typically done in conjunction with non-related projects and travel between villages. Adequate refuge personnel and base operational funds are available to manage marking and maintenance activities.

Anticipated impacts of the use:

Minimal impacts to habitats and wildlife within the Refuge are anticipated. Markers are not expected to significantly disrupt or alter wildlife behavior, habitat quality, or movement of natural resources. Poles used will be biodegradable untreated wood. Once the tripods collapse from natural degradation, they typically lay flat on the tundra, are covered by snow in the winter, and pose no safety risk to snowmobile travelers. Reflective tape attached to the markers typically breaks down over time due to exposure to sunlight, and wire used to hold tripods upright eventually oxidizes. Markers are not known to impede animal behavior, and will be spaced adequately to allow for free movement of wildlife known to exist on the Refuge.

There are no anticipated negative impacts to recreational or subsistence users due to the placement of trail markers. Established trails should provide greater ease of access for visitors to Refuge lands; markers should serve as a source of orientation and add to visitors' confidence and safety in location. Ample area will still exist for visitors who prefer to be removed from trails and visible markers.

The following resources may be affected by the proposed use:

Waterfowl – With the activity continuing into March, the arrival of early waterfowl may have a minimal effect on birds arriving in the coastal areas where nesting occurs. The placement of tripods is not expected to have a negative impact on waterfowl. Any unforeseen impacts are expected to be minimal and insignificant due to the small amount of area the tripods occupy.

Other Migratory Birds – Most migratory birds arrive in late spring after the winter trail markers have been installed. Effects to these breeding migratory birds are anticipated to be minimal given the winter time-frame of this work and small footprint of the markers.

Other Wildlife, Fish & Plants - Effects to other fish, wildlife, and plants within the Refuge are anticipated to be minimal and transitory. Access to the Refuge would be primarily in winter by snowmachine. Temporary displacement and/or disturbance to wildlife could occur during trail marker installation, but effects would likely be short-term and minimal.

Subsistence - No detrimental effects to subsistence users are anticipated. The effects of marked trails may enhance access to wildlife by subsistence users.

Wilderness – Special Use Permit Applications that request the marking of trails within Wilderness will be processed on a case-by-case basis utilizing a minimum requirements analysis to determine impacts and if the activity is necessary for the administration of the area. The

Refuge Manager may be required to complete a Minimum Requirements Decision Guide as part of the application process.

Wild River - Trail marking may be permitted to cross sections of the Andreafsky River corridor that are managed by the FWS, a designated Wild river. Projects that propose to install trail markers on the Andreafsky River may need to contact the Alaska Department of Natural Resources, Southcentral Region, to determine permitting requirements. The impacts of trail marking within the Andreafsky River corridor are anticipated to be minimal. Winter trails already exist within the Andreafsky River corridor and the intent of permitting any trail marking within such designated areas, although unsightly to the scenic quality of the river, would be local, minimal, and acceptable to preserve the Wild classification. The Wild classification includes being “essentially primitive and generally inaccessible except by trail.” Willows/alders used to mark trails across the Andreafsky River would wash out with spring breakup without disrupting free flowing status and water quality. Any unanticipated detrimental impacts to the resource values of the Andreafsky River may result in closure of an area to trail marking.

Public Review and Comment (TBD)

This CD will be advertised via flyers **August 28 through October 16, 2020** in all communities within the Yukon Delta Refuge; through the Delta Discovery newspaper, State of Alaska, and local tribes. The CD will also be available for public comment at the Refuge Headquarters (807 Chief Eddie Hoffman Highway, Bethel, Alaska), on the Refuge website (https://www.fws.gov/refuge/yukon_delta), and Facebook (<https://www.facebook.com/YukonDeltaRefuge/>).

Stipulations Necessary to Ensure Compatibility:

A special use permit with the following stipulations is required to minimize effects and ensure compatibility. Refuge permits may also include other special conditions as necessary or appropriate for the specific operations or activities that are proposed. These stipulations will be updated periodically to reflect management needs or policy changes.

1. Trail marking on Federal Refuge lands does not convey any interest in the land to another party.
2. Trail markers will be freestanding constructed tripods (not anchored with rebar) or single pole that are made of untreated timber.
3. Markers will be maintained in a manner providing safety for travelers using the trails. This includes inspection and replacement of tripods or single poles and reflectors on a periodic basis to prevent missing markers.
4. The permit holder shall indemnify, defend, and hold the United States, its agents, and employees harmless from any claim, loss, damage, penalty, death, or personal injury of whatever kind resulting from permit holder’s activities on and use of the permitted area.

5. Permit holder waives any claim or right of action permit holder may have against the United States in the event of damage to property, and injury to or death of any person that arises due to the activities authorized by this permit.
6. Frozen ground and adequate (6''-12'') snow cover must be present in areas before the marking crew would be permitted to access Refuge lands. This will be dependent on the specific region of the Refuge where marking or maintenance is to occur.
7. A trail marking permit may be canceled or revised at any time by the Refuge Manager to protect refuge resources.
8. Any amendments or deviations to a trail marking permit must be made in writing and may be authorized by the Refuge Manager.
9. The permittee shall comply with any verbal or written instructions that may be given by a Refuge official on site during the permitted activity.
10. Fuel caches are not permitted.
11. The use of off-road vehicles for trail marking is prohibited, except for the use of snowmachines during periods of adequate snow cover.
12. For requests to mark trails in Nunivak or Andreafsky River Wilderness Areas; the Minimum Requirements Analysis Guidelines (under the Minimum Requirements Exception of the Wilderness Act) will be used to analyze all requests for trail marking.

Justification: Subsistence uses is one of the purposes of the Yukon Delta refuge as established by ANILCA. Winter trail marking will facilitate this use and other compatible public activities on the refuge by improving the safety of winter travel between communities within the Refuge boundaries. Natural terrain features are limited and easily obscured by drifting snow and poor visibility during winter storms making travel difficult. Travelers who become disoriented in the winter are at risk from exposure.

Additionally, allowing the marking of trails may help minimize impacts to tundra from snowmachines where concentrating impacts to small areas is deemed most beneficial; and help identify 17(b) easements for the public to cross private property to reach public lands and major waterways.

The proposed use **does not** materially interfere with or detract from the Yukon Delta NWR's primary purpose to conserve fish and wildlife populations and habitats in their natural diversity. Examples include:

1. The installation and maintenance of trail markers will have a minimal impact on wildlife due to the temporary nature of the activity.
2. The installed trail markers will have minimal impacts on wildlife due to the small area they will occupy.
3. The markers will not obstruct free movement of birds, fish, or animals.

The proposed use **does not** materially interfere with or detract from the Yukon Delta NWR's purpose to fulfill international treaty obligations of the United States with respect to fish and wildlife and their habitats. There would be no loss of migratory bird habitat from this activity. There are few migratory birds in the project area during the winter months and the placement of trail markers will make a small footprint on the landscape.

The proposed use **does not** materially interfere with or detract from the Yukon Delta NWR's purpose to provide the opportunity for continued subsistence uses by local residents. The ANILCA Section 810 analysis evaluated the impact to subsistence and concluded that they will not significantly restrict subsistence uses. Improved trail marking will provide additional opportunity for subsistence uses by local residents by clearly marking the trails for easier access to refuge lands for subsistence purposes. In addition, marked trails will improve the overall safety of subsistence users by providing easy-to-follow travel routes.

The proposed use **does not** interfere with or detract from the Yukon Delta NWR's purpose to ensure water quality and quantity within the refuge as there are no anticipated impacts to water.

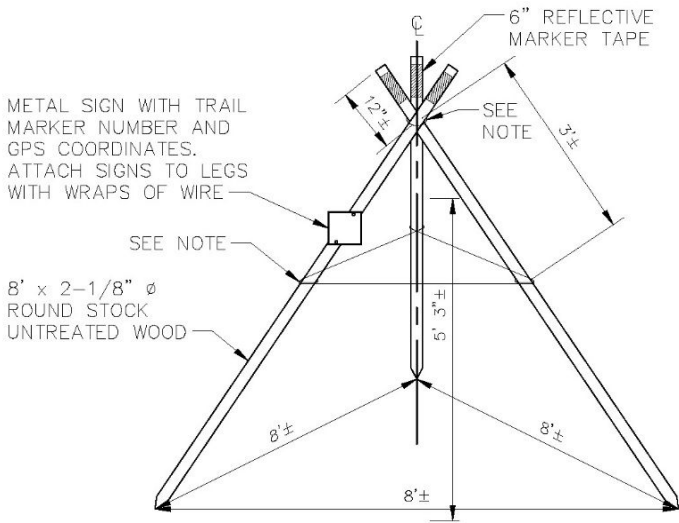
The proposed use **does not** materially interfere with or detract from the Yukon Delta NWR's original purpose for Nunivak Island for conducting experiments in the crossing and propagation of reindeer and native caribou, for contemplated experiments in reestablishing the musk ox as a native animal of Alaska, and also as a preserve and breeding ground for native birds and wild game and fur-bearing animals.'

The proposed use **does not** materially interfere with or detract from the Yukon Delta NWR's original purpose for Hazen Bay Migratory Waterfowl Refuge "to effectuate further the purposes of the Migratory Bird Conservation Act (45 Stat. 1222), "... for the use of the Department of Agriculture as a refuge and breeding ground for migratory birds and other wildlife." The marking and use of trails happens during the winter months with limited access by migratory birds at that time of year.

The proposed use **does not** materially interfere with or detract from the Yukon Delta NWR's original purpose of the Kuskokwim National Wildlife Range (1960) changed to Clarence Rhode National Wildlife Range (1961).. "as a refuge, breeding ground and management area for all forms of wildlife," and "in order to preserve and protect the said waterfowl, other wildlife values, and the habitat." Due to the marking and use of trails happens during the winter months with limited access by migratory birds at that time of year.

The proposed use **does not** materially interfere with or detract from the Yukon Delta NWR's Wild and Scenic River mission to "be maintained in a free-flowing condition, and their immediate environments will be protected for the benefit and enjoyment of present and future generations." Proposed trails may cross through the Andrefsky Wild River corridor; however, marking trails in the winter months should result in minimal effects on the Wild and Scenic character of the rivers.

After fully considering the impacts of this activity, it is my determination that this use **will not** materially interfere with or detract from the purposes of the Refuges or the mission of the NWRS. These activities will remain compatible with the implementation of the listed stipulations.



NOTE:
 WRAP, TIE AND STAPLE WITH #16 STAINLESS STEEL WIRE AT APEX AND 3' \pm FROM APEX, OR DRILL 1/4" DIAMETER HOLES AND PASS WIRE THRU HOLES AND AROUND EACH LEG. WRAP, TIE AND STAPLE AS NEEDED TO FIX WIRE POSITION AS SHOWN.

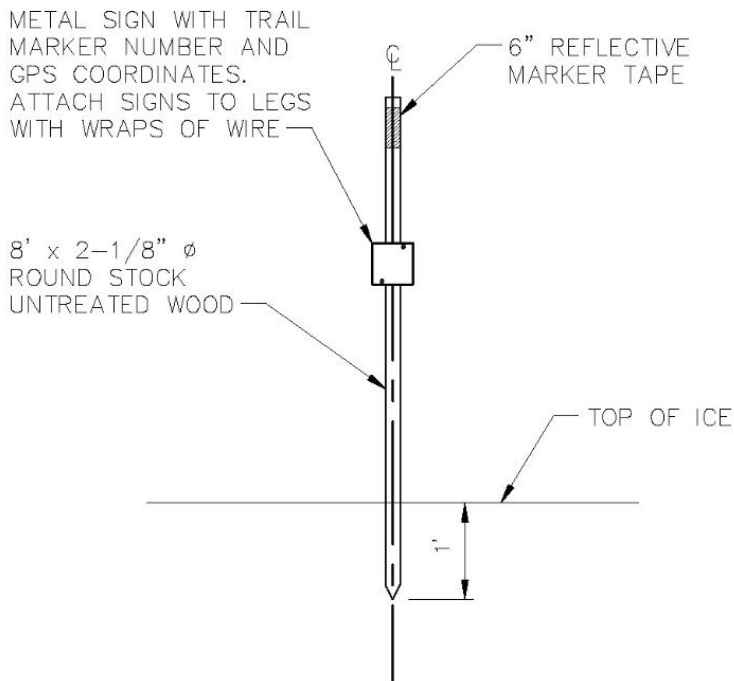


Figure 1. Typical tripod and monopod used to mark winter snowmachine trails.