

ENVIRONMENTAL ASSESSMENT
Case File No.: AA-081706
EA No.: AK-040-00-004

TYPE OF ACTION: Overland Move of Heavy Equipment

LOCATION: East Route - Seward Meridian, Alaska
Sec. 13, T. 23 N., R. 49 W.,
Secs. 18, 19, and 20, T. 23 N., R. 48 W.,
Sec. 21, T. 23 N., R. 48 W.,
Secs. 22, 23 and 24, T. 23 N., R. 48 W.,
Secs. 19, 27, 28, 29, 30, 33, and 34, T. 23 N., R. 47 W.,
Sec. 35, T. 23 N., R. 47 W.,
Secs. 1, 12 and 13, T. 22 N., R. 47 W.,
Secs. 7, 18, 19, 20, 28 and 29, T. 22 N., R. 46 W.,
Sec. 33, T. 22 N., R. 46 W.,
Sec. 4, T. 21 N., R. 46 W.,
Secs. 5, 8, 9, 16, 17, and 20, T. 21 N., R. 46 W.,

APPLICANT: Richard C. Wilmarth
Box 33
Red Devil, Alaska 99656

PREPARED BY: Dorothy Bonds, Realty Specialist

PREPARING OFFICE: Bureau of Land Management
Anchorage Field Office
6881 Abbott Loop Road
Anchorage, Alaska 99507-2599

DATE: February 11, 2000

I. INTRODUCTION

A. Purpose and Need for the Proposed Action

On March 11, 1999, the Anchorage Field Office, Bureau of Land Management (BLM) received an application from Mr. Richard C. Wilmarth (Applicant) to conduct a cross country move of heavy equipment from the confluence of Donlin Creek and Dome Creek to Georgetown, Alaska. He intends to use the equipment to build a runway.

B. Conformance with Land Use Plan

The lands are within the boundary of the Alaska Southwest Planning Area, Management Framework Plan (MFP), dated November 1981.

C. Relationship To Statutes, Regulations, or Other Plans

The BLM has received concurrence from the Kuskokwim Corporation, Calista Corporation, Placer Dome and the State of Alaska, Department of Fish and Game for this proposal. In accordance with 43 CFR 2650.1(a)(2)(1), prior to issuing land use authorizations on Native selected lands, the views of the affected region or village corporations shall be obtained and considered.

II. PROPOSED ACTION AND ALTERNATIVES

A. Proposed Action

The Proposed Action is to move heavy equipment overland along RS-2477 routes from the confluence of the Donlin Creek and Dome Creek in Section 13, T. 23 N., R. 49 W., Seward Meridian (SM), to Georgetown, Alaska in Section 21, T. 21 N., R. 46 W., SM. This route covers a distance of approximately 25 miles. A map is attached that shows the proposed route.

This move will involve the transport of a D-6 caterpillar tractor, with low ground pressure and 34 inch wide tracks. The D-6 caterpillar tractor fuel tank is large enough to make this move without carrying extra fuel.

The route's location and land ownership interests are as follows:

East Route
Seward Meridian, Alaska

Sec. 13,
T. 23 N., R. 49 W.,
50-94-0009 - Kuskokwim (Village) Corporation

Secs. 18, 19, and 20,
T. 23 N., R. 48 W.,
50-94-0009 - Kuskokwim (Village) Corporation

Sec. 21,
T. 23 N., R. 48 W.,
BLM and Calista Native Corporation Selection

Secs. 22, 23 and 24,
T. 23 N., R. 48 W.,
BLM

Secs. 19, 27, 28, 29, 30, 33, and 34,
T. 23 N., R. 47 W.,
BLM

Sec. 35,
T. 23 N., R. 47 W.,
State Selection

Secs. 1, 12 and 13,
T. 22 N., R. 47 W.,
BLM and State Selection

Secs. 7, 18, 19, 20, 28 and 29,
T. 22 N., R. 46 W.,
BLM and State Selection

Sec. 33,
T. 22 N., R. 46 W.,
BLM and Kuskokwim (Village) Corporation

Sec. 4,
T. 21 N., R. 46 W.,
BLM and Kuskokwim (Village) Corporation

Secs. 5, 8, 9, 16, 17, and 20,
T. 21 N., R. 46 W.,
IC 728 - Kuskokwim (Village) Corporation

No additional trails will be created to make this move. The move will be conducted primarily on existing winter trails and ridge tops.

The move will be conducted between March 1 and April 30, 2000, when the temperature is above 10° F. It is estimated that the move will take no more than sixteen hours.

B. Alternative 1 - West Route

This route runs from the confluence of Donlin Creek and Dome Creek in Section 13, T. 23 N., R. 49 W., SM, to the town of Crooked Creek in Section 32, T. 21 N., R. 48 W., SM. This route is mainly by creek bed. (See the attached map for the west route.) The route's locations and land ownership interests are as follows:

West Route
Seward Meridian, Alaska

Secs. 13, 14, 22, 23, 27, 33 and 34,
T. 23 N., R. 49 W.,
50-94-0009 - Kuskokwim (Village) Corporation

Secs. 4, 9 and 21,
T. 22 N., R. 49 W.,
BLM and Kuskokwim (Village) Corporation Application

Secs. 3, 10, 15, 16, 22, 28, 33 and 34,
T. 22 N., R. 49 W.,
50-94-0009 - Kuskokwim (Village) Corporation

Secs. 2, and 3,
T. 21 N., R. 49 W.,
50-94-0009 - Kuskokwim (Village) Corporation

Secs. 11, 12, 13, 14, and 24,
T. 21 N., R. 49 W.,

IC 776 - Kuskokwim (Village) Corporation

Secs. 19, 30, and 32,
T. 21 N., R. 48 W.,
IC 776 - Kuskokwim (Village) Corporation

This route would entail approximately 13 miles of travel up the Kuskokwim River to Georgetown.

- C. Alternative 2 - No Action Alternative
The No Action Alternative is denial of the application.

III. AFFECTED ENVIRONMENT

- A. Critical Elements
The following critical elements of the human environment were not present or would not be affected by the Proposed Action:

Air Quality
Areas of Critical Environmental Concern
Environmental Justice
Farm Lands (Prime or Unique)
Floodplains
Invasive, Non-native Species
Native American Religious Concerns
T&E Species
Wastes, Hazardous or Solid
Water Quality (Surface/Ground)
Wetlands/Riparian Zones
Wild and Scenic Rivers
Wilderness

- B. Fisheries
The proposed cross country heavy equipment move route that traverses the ridge tops and referred to as the East route does not cross any streams with anadromous or resident species of fish. The West route parallels Crooked Creek and follows the stream bottom with the route crossing Bell and other small creeks. Crooked Creek and Bell Creek are documented anadromous fish streams and support resident species. Other smaller tributaries support only resident species.

- C. Subsistence
The entire West route and the beginning and ending portions of the East route consist of lands either already conveyed to, or selected by, Native Corporations and therefore, do not fall under the jurisdiction of the Federal Subsistence Program. Portions of the East route consisting of Sections 22, 23, and 24, T. 23 N., R. 48 W., SM, Alaska and Sections 19, 27, 28, 29, 30, 33, and 34, T. 23 N., R. 47 W., SM, Alaska, do meet the definition of Federal Public Lands as per ANILCA Section 102 (3). These definitions are under the authority of the Federal Subsistence Board and Subsistence Management Regulations for the Harvest of Fish and Wildlife on Federal Public Lands in Alaska.
- D. Water Quality
Of the two routes identified in the Proposed Action, only the West route starting from the confluence of Donlin and Dome Creeks to Georgetown, Alaska is closely associated with water, namely Crooked Creek and its tributaries. These streams are essentially unaffected by man made impacts and have excellent water quality equal to most pristine streams in the area as indicated by the presence of endemic aquatic species. The East route follows ridge lines between 1,500 to 2,000 feet in elevation, maximizing the use of drainage divides and does not cross any streams along the route.
- E. Cultural Resources
The general area surrounding the Proposed Action and alternative route was traditionally occupied by Ingalik, Athabaskans and later Kuskokwim River Yupik. Historic European populations first consisted of Russian fur traders and later American prospectors, traders and settlers.
- F. Visual Resources
The area of the proposed cross country move consists of low rolling hills whose tops are covered by lichens and low shrubs. Taller shrub and tree communities begin to dominate as elevation decreases. The area is divided and drained by numerous streams. Aerial views of the general area reveal a landscape essentially

undisturbed by the activities of man. Closer inspection reveals scattered evidence of old trails left by previous heavy equipment moves and one small airstrip and cabin near the Kuskokwim River.

The area affected by the Proposed Action and alternative is classified as a Class II Visual Resource. The Visual Resource Scenic Quality Inventory rating for this area is Type B. This is a mid-level rating recognizing the undisturbed nature of this area, but also identifies the low contrasting features and vast commonality of the area. The visual resource management objective is to retain the existing character of the landscape with little characteristic landscape change by outside influences.

G. Wildlife

Moderate to low densities of moose occur on winter ranges associated with the river and creek bottoms on portions of the Proposed Action route and alternative route. Scattered caribou groups winter along the lichen/moss dominated ridge tops along the Proposed Action route, the East route. Few other wildlife would be encountered in winter along either route, other than wolves and other predators that are highly mobile. There have been no wildlife surveys completed in this area to identify numbers and distribution along the proposed routes. There are no known threatened or endangered wildlife species within the area of the proposed activity.

H. Vegetation

The portions of the proposed route under BLM management pass through the physiographic province of the Kuskokwim Mountains. The northern part of the Kuskokwim Mountains consists of low mountains with rounded ridges of 1,500 to 2,000 feet in elevation, separated by deep and narrow valleys. Very few pointed peaks and rocky ridges stand above the hills. The dominant vegetation on north facing slopes, valley bottoms and high ridges where permafrost occurs is mosses, sedges, shrubs and black spruce. Forests of white spruce, paper birch and aspen occur on the well-drained soils of south facing slopes and the low bluffs bordering the Kuskokwim River. These trees also occur along the flood plains of Crooked Creek.

The East route would pass above tree line on more well-drained permafrost, free soils that support alpine tundra, composed of dwarf shrubs, lichens, grasses and mosses. The West route would parallel Crooked Creek and follow valley bottoms through scattered forests of black spruce, willows, sedges and mosses on more poorly drained soils with permafrost depths of 10-20 inches below the organic mat.

There are no known threatened or endangered plant species within the area of the proposed activity. There may be sensitive species on bare ridgetops or talus slopes. This area is relatively unknown for sensitive species.

IV. ENVIRONMENTAL CONSEQUENCES

A. Impacts of the Proposed Action - East Route

1. Fisheries

No impacts to fisheries are anticipated.

2. Subsistence

The Proposed Action and alternative do not conflict with large mammal season dates or bag limits relative to the time of operations. Scattered groups of caribou winter along the ridge lines and may be temporarily displaced for up to one day. Furbearer trapping season is open during the period of operation. However, the trails created by the move make snow machine access possible to furbearers for a short period of time. In late March and April fur value decreases due to rubbing/fading. Subsistence trapper effort is not expected to be significant on the Federal Public land portions of the routes.

3. Water Quality

No impacts to water quality are anticipated.

4. Cultural Resources

No cultural resources are known for the Proposed Action (East Route). However, no intensive on-the-ground survey has been performed in this area. Prior over flights by archaeologists indicate that no standing structures or semi-subterranean pit houses exist in this area. There is a

potential for previously undiscovered surface or buried resources, most probably isolated flake scatters and/or campsites. These could be impacted if insufficient snow cover blanketed the route used to move this heavy equipment.

5. Visual Resources

The impact from passage of the equipment is expected to be minimal since the action will occur during the time the ground is frozen and snow covered. The trails in the snow will be short term and either fill in with new snow or melt in the spring. If any blading of snow occurs that disturbs the vegetation or soil, the visual impact would be very noticeable along this route because of the openness of the ridge tops and the light color of the dominate vegetation on the ridge tops. Any fuel barrels, garbage or equipment left or lost would be visible from long distances.

6. Wildlife

The impacts of a one time only passage of heavy equipment would cause at the worst a temporal displacement of moose and caribou to less optimum habitat for a day or two. Damage to vegetation utilized by wildlife could occur if insufficient snow cover exists to protect it. Lichens, which are heavily utilized by caribou, recover very slowly from such impacts which could reduce the availability of caribou forage.

The only indirect impact of consequence would be if the trail created by the passage of equipment would enhance snow machine traffic along the route and enable other public users to use the trail at an increased frequency and time that could exclude animals from primary winter habitats. This could make displaced animals more vulnerable to predators, increase nutritional stress from decreased food availability, and increase mortality of fetuses.

7. Vegetation

The primary impact of the Proposed Action would be the disturbance of vegetation along the trail, which would result from the passage of the

equipment itself. Damage to vegetation may occur from crushing if insufficient snow cover exists to protect it or if temperatures are high enough that the snow is melting and soils are thawing. If snow cover is sufficient and temperatures well below freezing, the low pressure track of the equipment should result in little or no long term or irreversible impacts to lichen, mosses and other vegetation in the areas above tree line that lack permafrost. Due to the low growing and sparse nature of rare and sensitive plant species that may grow in the area, no impacts to these species are expected.

B. Impacts of Alternative 1 - West Route

1. Fisheries

Impacts to fish and fish habitat center around the potential for fuel spills and physical damage to spawning and rearing habitat. Fuel spills can damage aquatic organisms, fish, aquatic plants, water quality and spawning beds. Physical alteration of the stream banks and stream bed can adversely affect water quality and subsequently fisheries habitat by increasing sedimentation and turbidity. The construction of snow or ice bridges over streams can cause alteration of stream flows and destruction of spawning gravels or rearing/feeding areas. This could reduce areas available to anadromous and resident fish populations resulting in an overall reduction of fish productivity.

2. Subsistence

Impacts to subsistence are the same as under the Proposed Action.

3. Water Quality

Principal impacts to water quality associated with this alternative are related to stream crossings and fuel spills. Waters are subject to contamination with petroleum products by fueling or servicing of equipment on stream ice or adjacent flood plains. If snow and ice bridges are not removed prior to the spring thaw, breakup could cause modifications to stream channels and increased sediment loads to the stream. Stream banks and riparian vegetation are subject to alternation at

access and egress points at stream crossings. If blading of vegetation and soil to create ramps occurs, this could result in accelerated stream bank erosion.

4. Cultural Resources

Impacts to cultural resources are the same as under the Proposed Action.

5. Visual Resources

The impacts would be minimal if the ground is snow covered and frozen since a visible trail already exists and the trail is confined to stream bottoms which are screened from view by vegetation and the surrounding hills. Any clearing of new routes through the bottoms would create new linear lines which would be visible from short distances. Any fuel barrels, garbage or equipment left or lost would be visible to travelers along the trail.

6. Wildlife

Impacts to wildlife are the same as under the Proposed Action.

7. Vegetation

Trees, willows, tall woody shrubs and riparian vegetation may be damaged, crushed and/or compacted by the passage of heavy equipment. This is unlikely since the trail already exists and has been cleared of, or meanders around, most woody vegetation along the route. Lowland areas along stream bottoms with permafrost could suffer minor impacts related to increases in thaw depth from the compaction of the organic layer. The infrequent passage of heavy equipment along this route makes it unlikely that thaw depths will be increased. If snow cover is sufficient and temperatures well below freezing, the low pressure track of the equipment should result in little impact to low growing or riparian vegetation.

- C. Impacts of the No Action Alternative
Under the No Action Alternative, there would be no impacts to existing resources.
- D. Residual and Cumulative Impacts
No residual or cumulative impacts will occur from this project.
- E. Mitigation Measures
1. Fisheries
The potential for fuel contamination into streams can be reduced by not fueling any vehicles on or near stream crossings. Stream crossings should be accessed at existing crossings to reduce the potential for increased erosion. If snow or ice bridges are required, the impact can be mitigated by removal or breaching of the ice bridges prior to breakup.
 2. Water Quality
The potential for fuel contamination into streams can be reduced by not fueling any vehicles within 300 feet of wetlands, streams or other water bodies. Stream crossings should be accessed at existing crossings. There should be no blading of soil or vegetation to reduce the potential for increased erosion. If snow or ice bridges are required, the impact can be mitigated by removal or breaching of the ice bridges prior to breakup.
 3. Cultural Resources
The overland move of heavy equipment should be restricted to periods of at least 18 inches of snow cover as well as frozen ground to a depth of six inches. This should avoid ground disturbance and therefore, adverse impacts to buried cultural resources.
 4. Visual Resources
The mitigation measures for the Proposed Action and alternative route are similar. Heavy equipment travel should be restricted to times when the ground is frozen to at least six inches and snow depth exceeds 18 inches.

If blading of snow is required because of snow depth, the blade should be kept 18 inches off the ground to minimize surface disturbance. Existing routes should be followed and if deviation off the trail is required, routes should be away from tall vegetation to prevent the creation of new linear lines that would be visible from a distance. All fuel barrels, equipment and garbage should be removed from the routes.

5. Wildlife

The mitigation measures for the Proposed Action and alternative route are similar. Travel should be restricted to times when the ground is frozen to at least six inches and snow depth exceeds 18 inches to avoid damage to the fragile lichen communities on the ridge tops. The move should occur in as short a period of time as possible to reduce wildlife disturbance.

6. Vegetation

The mitigation measures for the Proposed Action and alternative route are similar. Heavy equipment travel should be restricted to times when the ground is frozen to at least six inches and snow depth exceeds 18 inches. If blading of snow is required because of snow depth, the blade should be kept 18 inches off the ground to minimize disturbance to vegetation. Temperatures should be well below zero to protect vegetation and soils. Existing routes should be followed and if deviation off the trail is required, routes should be away from tall vegetation.

V. CONSULTATION AND COORDINATION

A. List of Preparers

Dorothy Bonds - Realty Specialist
Donna Redding - Archaeologist
Jeff Denton - Subsistence Specialist
Bruce Seppi - Wildlife Biologist
Mike Scott - Fisheries
Debbie Blank - Botanist
David Kelley - Surface Protection
Jake Schlapfer - Recreation