

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

Summary Steese Subunit

Eastern Interior Draft Resource Management Plan

February 2012

PREPARING OFFICE

U.S. Department of the Interior
Bureau of Land Management
Eastern Interior Field Office
Fairbanks, AK



Summary Steese Subunit: Eastern Interior Draft Resource Management Plan

**United States Department of the Interior
Bureau of Land Management-Alaska
Eastern Interior Field Office
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In Reply Refer To:
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Dear Reader:

The draft Eastern Interior Resource Management Plan/Environmental Impact Statement (RMP/EIS) was released on Feb. 24, 2012. To help the public in reviewing this large document, the Bureau of Land Management (BLM) has developed executive summaries that describe proposed management for each subunit. These summaries can be found at: <http://www.blm.gov/ak/st/en.html>.

During the Scoping Phase of the development of the Eastern Interior Resource Management Plan/Environmental Impact Statement (RMP/EIS), many people expressed concern about the size of the planning area, which covers approximately 6.7 million acres. They pointed out that issues vary in importance from one part of the planning area to another. This was one of the reasons that the BLM split the planning area into four subunits: Fortymile, Steese, Upper Black River, and White Mountains. These executive summaries leave out the fine details of the RMP, but they should help you learn:

- why we are planning for this area;
- the most important resources in the area and how people use them;
- the major decisions under consideration; and
- the impacts that may occur with each of the alternatives under consideration.

This document is a draft because we are still in the process of choosing the best plan. We appreciate and need your comments. Let us know if there are inaccuracies or new information we should consider. Describe why you think one option is better than another. Please send your comments to us before the end of the official comment period. The comment period extends from Feb. 24 to July 23, 2012.

There are three ways you can submit comments:

- 1) Public meetings will be held in communities within the planning area to discuss the Draft RMP/EIS before the close of the comment period. We will announce the meeting dates, times, and specific locations through news releases and on the Eastern Interior RMP website at: <http://www.blm.gov/ak>.
- 2) You can send written comments to the BLM Fairbanks District Office, Attn: Eastern Interior Draft RMP/EIS, 1150 University Avenue, Fairbanks, Alaska, 99709.

- 3) Written comments may also be submitted online at https://www.blm.gov/epl-front-office/eplanning/lup/lup_register.do.

The entire Draft RMP/EIS is online at <http://www.blm.gov/ak>. Just click on the link for the Eastern Interior RMP/EIS website under "In the Spotlight." For a hard copy of the draft RMP/EIS document and for additional information or clarification regarding the summaries, Draft RMP/EIS, or the planning process, please contact Jeanie Cole, Planning and Environmental Coordinator or Lenore Heppler, Field Manager at (907) 474-2200.

We appreciate your help in this planning effort and look forward to your interest and participation.

Sincerely



Bud C. Cribley
State Director

Chapter 1. Introduction

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1.1. Purpose and Need

Why Are We Doing This Plan?

The Eastern Interior Resource Management Plan (RMP) will determine the appropriate management of the Bureau of Land Management (BLM) lands in the Eastern Interior Planning Area, including the Steese Subunit. The Draft RMP addresses three questions:

1. What protections and management should be implemented for resources such as fish, wildlife, vegetation, soils, and water within the subunit?
2. What types and levels of use, such as recreation, off-highway vehicle use, and mining, should be allowed and what lands should be available for these uses?
3. Should any areas be designated as wild and scenic rivers or areas of critical environmental concern?

These questions are important because the BLM is required to develop land use plans and manage its lands for multiple-use by the Federal Land Policy and Management Act (FLPMA). The current plan for the Steese National Conservation Area (NCA), the Steese National Conservation Area RMP, is 24 years old and does not meet the BLM's planning requirements. Recreational and off-highway vehicle use of the Steese NCA has increased since the existing RMP was developed. Development of the Eastern Interior RMP will allow the BLM to meet its requirements under FLPMA and to address new issues that have developed since 1986.

1.2. Description of the Steese Subunit

What Lands Are We Planning For?

The Steese Subunit is bounded on the north and east by the Yukon River, on the south by the Yukon-Charley Rivers National Preserve and the Fairbanks North Star Borough, and on the west by the Fairbanks North Star Borough, the White Mountains National Recreation Area (NRA), and Beaver Creek. Within the subunit, BLM lands consist of the Steese [NCA](#), Birch Creek Wild and Scenic River (WSR), federal mining claims along the Steese Highway, and scattered townships around the village of Circle. The Pinnell Mountain National Recreation Trail is located within the subunit. Other federal lands include part of the Yukon Flats National Wildlife Refuge. A large block of state land is located along the Steese Highway, between the north and south units of the Steese NCA. Private lands are found around Central, Circle, Beaver, and Birch Creek, the four communities within the subunit. Roads are limited to the Steese Highway, Circle Hot Springs Road, local village roads, and several mining roads.

The Steese Subunit encompasses 4.2 million acres with approximately 1.3 million acres currently managed by the BLM ([Map 3](#)). Approximately 53,000 acres within the subunit are either State- or Native-selected. Of this, 7,000 acres are high priority State-selections. Approximately 41,000 acres are selected by the village of Circle. Some of these village-selected lands are likely to be retained under BLM management.

1.3. The BLM Planning Process

What Happens Next?

The BLM's planning process involves nine major steps. We are on step seven, which is to publish the Draft [RMP/EIS](#) for public comment. After the public comment period closes, the BLM will review all the comments received. The Draft RMP/EIS will be revised as needed, taking public comments into account. Then the Eastern Interior Proposed RMP and Final EIS will be published. The Proposed RMP may be protested to the Director of the BLM and is also reviewed by the State of Alaska for consistency with state programs. After any protests are resolved and the consistency review is completed, the Final RMP and Record of Decision will be published. Once the Record of Decision for the Steese Subunit is published, decisions in the Approved RMP will be implemented.

1.4. Resources in the Steese Subunit

What Resources Are in the Subunit?

There are far too many resources in the subunit to describe them all in this summary. A few of the resources addressed by the RMP in the Steese Subunit include fish, wildlife, minerals, and specially designated areas.

Fish

Birch Creek is located in the Steese NCA and supports Arctic grayling, small populations of Chinook, chum, and coho salmon, northern pike, sheefish, and other non-game fish species. Past placer mining operations in the Birch Creek watershed resulted in elevated turbidity, poor water quality, and a reduction in fish habitat in the headwaters and tributaries to Birch Creek. As a result, Birch Creek was placed on the Alaska Department of Environmental Conservation impaired waterbody list in 1992. Combined efforts by placer-mine operators and regulatory and land management agencies to meet regulatory requirements have resulted in significant improvement of water quality in mined streams. At moderate to low flow, mined streams now typically meet Alaska Department of Environmental Conservation (ADEC) water quality standards.

Many of the management activities in the Birch Creek area have focused on restoring water quality and improving fish habitat. The BLM began a reclamation project in Harrison Creek, in the upper Birch Creek watershed, in 2005. This project is focused on restoring the connectivity of the stream channel to its floodplain, with the intent of reducing the amount of sediment eroding from the stream channel while allowing anadromous and resident fish populations to expand and colonize previously mined areas.

The upper Birch Creek Arctic grayling population increased between 1984 and 1990 (Townsend 1991). This population increase was attributed to improved water quality and decreased turbidity resulting from improved mining practices. Townsend (1996) found that the population of Arctic grayling in Birch Creek increased again between 1990 and 1995 and suggested that future population increases would depend on the implementation of reclamation plans, such as improving stream bank and overburden stability, and capturing sediments in settling ponds. Preacher Creek, a major tributary to Birch Creek, is generally a pristine system that provides spawning, overwintering, and rearing habitat for Arctic grayling. Degradation of other portions of

the Birch Creek watershed from mining activity may increase the importance of Preacher Creek for the production of Arctic grayling within the Birch Creek system. Preacher Creek also supports anadromous species such as summer chum and Chinook salmon.

Wildlife

Moose

Moose occur throughout the Steese Subunit at elevations below about 3,000 feet. During fall and early winter, mid- to high-elevation shrub and open spruce habitats support higher densities of moose, along with recently burned (10 to 30 years) habitats. During the winter, moose tend to concentrate at lower elevations and especially along creeks and rivers. In summer, moose are widely dispersed and pregnant cows often travel to low-elevation areas with abundant wetlands for calving and summer. Density of moose in Game Management Unit 25(C) (including the Steese NCA), averaged 0.65 moose/mi² in 2007 (Herriges, Unpublished Data).

Moose populations in the planning area are generally thought to be limited by wolf and bear predation. However, large wildfires are generally considered to result in population increases due to the resulting increase in palatable browse. Maier et al. (2005) found that higher moose densities across several areas in Interior Alaska were associated with 11 to 30 year old burns. Similarly, a study developed for the Steese/White Mountains (Nielsen 2007) indicated that 10 to 20 year old burns were one of the habitats likely to be selected by moose.

Caribou

The Fortymile caribou herd range is centered in the Eastern Interior Planning Area and is the most important herd to residents of Interior Alaska. It is also a herd of statewide and international importance. The historic range of the herd is thought to have once included almost the entire planning area, including much of the Steese Subunit.

During the 1920s the Fortymile caribou herd (then known as the Steese-Fortymile caribou herd) was the largest herd in Alaska and was one of the largest in the world, estimated at over 500,000 caribou (Murie 1935). The herd declined during the 1930s to an estimated 10,000-20,000 caribou. By the 1950s the herd had increased to an estimated 50,000 caribou, with population estimates fluctuating around this number through the early 1960s. Between the mid 1960s and mid 1970s, the population experienced a significant decline, reaching a low in 1973-1976 of an estimated 5,740-8,610 caribou (Gross 2007). During this decline, the Fortymile herd reduced range size and changed seasonal migration patterns. By the early 1960s, the herd stopped crossing the Steese Highway in significant numbers, and by the early 1970s, few Fortymile caribou continued to move annually into Yukon Territory, Canada. Since the early 1970s, the herd's range ([Map 90](#)) has remained about 19,300 mi² (50,000 km²), less than 25 percent of the range thought to have been used by the herd during the 1920s (Gross 2007).

Between 1990 and 1995, the herd remained relatively stable at about 22,000 caribou. During 1996-2002, following implementation of the Fortymile Caribou Herd Management Plan and during a period of favorable weather conditions, the herd doubled in size, peaking at 44,100 animals in 2003. Over the next few years, the herd growth stopped and the population declined slightly. The estimated pre-calving population in May 2007 was 41,400 caribou (Gross 2007) and 39,000 in 2008 (J. Gross pers. comm.). The Alaska Board of Game expanded the Upper Yukon-Tanana Predation Control Area to include most of the Fortymile herd's range to initiate an increase in the herd and aid in achieving the population objective of 50,000-100,000 caribou,

with a harvest objective of 1,000-15,000 caribou (Gross 2007). In the last five to 10 years, the herd has expanded its range into more of the traditional range, likely as a result of an increasing population but also possibly due to recent large fires.

Generally high calf weights and high pregnancy and birth rates indicate that nutritional status of the Fortymile caribou herd is moderate to high and range is in good condition (Boertje and Gardner 2000). Although weather conditions cause fluctuations in population growth, predation has been a major factor in limiting recovery of caribou (Boertje and Gardner 2000). Predator control is currently being used by ADF&G to improve growth rates of the Fortymile herd. Habitat conditions and availability will determine the limits to growth of the herd. The habitat across most of the herd's range is largely intact, with a very small proportion (likely less than one percent) of the range impacted by surface-disturbing activities. Potential activities that may limit habitat quantity and quality include: large mining operations with associated access; road and trail density; human disturbance from OHVs (including snowmobiles) or aircraft; and increasing fire frequency.

Dall Sheep

Dall sheep occur in the planning area primarily in the Yukon-Tanana Uplands ([Map 91](#)). These populations are somewhat unique in that they occupy uncharacteristically low-elevation habitats in areas of often rounded topography. In this area, it is not uncommon to see Dall sheep in low shrub or open forest habitat, especially in areas near river bluffs and low-elevation mineral licks.

The West Point sheep population utilizes the Puzzle Gulch and Big Windy Creek drainages in the south Steese NCA. An average of 142 sheep have been counted there in 1999-2002 (Lawler et al. 2005). A small number of sheep also occur around Mount 5580 in the south Steese NCA. An average of 309 sheep were counted in aerial surveys from 1997-2002 in the Yukon-Charley Rivers National Preserve, including small numbers that utilize BLM lands in the south Steese NCA (Lawler et al. 2005). The average Yukon-Tanana Uplands sheep population observed in aerial surveys (1997-2002) was about 1,200. Seventy-four percent (893) of this population was dependent on BLM lands.

Sheep make frequent use of mineral licks even though the licks may be located far from preferred escape habitat. Most sheep at Mt. Prindle travel 14 to 21 miles along open ridgetops, tussock meadows, and open black spruce forests (exposing themselves to significant predation risk) to visit mineral licks on Preacher Creek in the Steese NCA. Although their exact role in individual and population health is not known, mineral licks are typically considered crucial habitats for mountain sheep.

The habitat across most of the herd's range is largely intact and undisturbed. Most sheep habitat in the planning area is remote from roads and access, except by small plane or boat is limited. Winter motorized vehicle use is currently limited in Dall Sheep habitat by remoteness and rough and rocky terrain. There may be areas of low-elevation habitat that in the future could receive snowmobile use at levels sufficient to affect sheep use of those habitats. The sheep in the Mt. Prindle area are closest to roads and summer and winter motorized vehicle access routes.

Leasable Minerals

Leasable minerals are defined by the Mineral Leasing Act and include coal, oil shale, native asphalt, phosphate, sodium, potash, potassium, sulfur, oil, gas, coalbed natural gas, and

geothermal resources. Exploration and production of these minerals on public land may only occur on leases acquired by competitive leasing.

There are some high potential oil and gas lands in the northern part of the Steese [NCA](#), adjacent to the Yukon Flats National Wildlife Refuge ([Map 96](#)). Most BLM lands in the Steese Subunit have no potential for oil and gas. Presently, the subunit is closed to oil and gas leasing and there are no active federal oil and gas leases.

In 2004, the United States Geologic Survey conducted a study of the Yukon Flats Basin and determined the existence of technically recoverable oil. The Yukon Flats Basin overlaps with the Steese Subunit near Circle. The parts of the basin with the highest potential are located within the Yukon Flats National Wildlife Refuge; these areas have comparatively high potential for generating oil or gas. Although the potential that oil and gas exists below the surface of BLM lands on the northern edge of the Steese NCA is high, the potential for these resources to be developed during the life of the RMP is very low.

Locatable Minerals

Locatable minerals are minerals for which the right to explore, develop and extract mineral resources is established by the staking of mining claims as authorized by the General Mining Law of 1872. Examples of locatable minerals include gold, silver and copper. The Steese Subunit is currently closed to the staking of new federal mining claims. There are, however, 7,000 acres of existing federal mining claims.

The Eastern Interior Planning Area includes all or portions of 13 mining districts, as established by Ransome and Kerns (1954). The Circle, Tolovana, Eagle, Fortymile, and Fairbanks districts are classified as major gold producing districts, with the Fairbanks district being the largest producer in Alaska (Nokleberg 1993). The planning area boundary bisects the Fairbanks mining district; three quarters of the gold production of the district occurs within the planning area. In total the Fairbanks district produced 13 million troy ounces of gold; 8.3 million from placer and 4.7 million from hard rock sources. Approximately 11.2 million ounces of gold have been produced in the planning area since 2007. The Tolovana, Eagle, Fortymile and Circle mining districts contributed a combined total of about 1.7 million ounces of gold, as of 2007. The Circle mining district is in the Steese Subunit.

Placer mining for gold has occurred in the Birch Creek watershed for more than 100 years. There are areas with medium to high potential for the occurrence of locatable minerals, including Preacher Creek, Clums Fork, and Harrison Creek ([Map 97](#)). If these areas were to be opened to allow for the staking of new mining claims, additional placer mining and suction dredging would likely occur on some BLM lands.

Special Designations

Steese National Conservation Area

The 1.2 million acre Steese [NCA](#) was established in 1980 by section 401 of ANILCA and is located 70 miles north of Fairbanks, Alaska ([Map 3](#)). Congress identified caribou range and Birch Creek WSR as two special values to be considered in planning and management of the area.

The Steese NCA is part of the BLM's National Landscape Conservation System (NLCS). The mission of the NLCS is to conserve, protect and restore nationally significant landscapes recognized for their outstanding cultural, ecological and scientific values. The NCA's special

values include Birch Creek WSR, caribou calving grounds and home range, and Dall sheep habitat. While various land uses are allowed in the Steese NCA, the area is managed so that its scenic, scientific, cultural and other resources are protected.

Birch Creek Wild and Scenic River

On December 2, 1980, ANILCA (P.L. 96-487) established Birch Creek as a wild and scenic river and designated it as “wild”. ANILCA also directed the Secretary of the Interior to establish detailed boundaries and prepare a management plan. The detailed boundaries of the Birch Creek WSR were set forth by the Birch Creek River Management Plan in 1983 (BLM 1983). The Birch Creek WSR Corridor ([Map 33](#)) includes 69,000 acres.

Birch Creek WSR is managed according to the Steese RMP (BLM 1986), the Birch Creek River Management Plan (BLM 1983b), and by special rules published in the *Federal Register* for the Steese NCA (FR 1988a and 1988b).

Management objectives for Birch Creek outlined in the River Management Plan are:

- Protect valid existing rights and future rights granted pursuant to appropriate federal and state laws;
- Preserve the river and its immediate environment in its natural, primitive condition;
- Preserve the free-flowing conditions of the waters;
- Protect water quality and quantity. Provide high quality primitive recreational opportunities for present and future generations;
- Provide a variety of opportunities for interpretive, scientific, educational, and wildlands oriented uses;
- Assure protection of significant historic and archaeological values; and,
- Maintain and improve fish and wildlife habitat.

The Wild and Scenic Rivers Act states that “Each component of the National Wild and Scenic Rivers System shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values.” These values are commonly referred to as “outstandingly remarkable values”.

Outstandingly remarkable values (ORVs) are defined as those characteristics that make the river worthy of special protection. These can include scenery, recreation, fish and wildlife, geology, history, culture, and other similar values. ORVs are typically identified in a study prior to the designation of a wild and scenic river, but the Birch Creek WSR was designated by ANILCA without these specific values identified by Congress. In these cases, managers typically develop ORVs from study reports and other documentation of management activities and intentions, as well as incorporating current data and expertise. The ORVs for Birch Creek WSR will be determined through this planning process. To see a full description of the process used to determine ORVs, see Appendix E of the Eastern Interior Draft Resource Management Plan and Environmental Impact Statement (BLM 2012).

Pinnell Mountain National Recreation Trail

The Pinnell Mountain Trail was constructed in 1970 for non-motorized use and was designated as a National Recreation Trail in 1971 under the National Trails System Act of 1968. It was the first designated trail in Alaska. This 27 mile trail traverses a series of alpine ridge tops entirely above timberline, with views north to the Yukon River and south to the Alaska Range.

The trail is one of the few maintained primitive hiking trails in Interior Alaska. It is currently managed for a primitive recreation experience and is closed to all motorized vehicles. The trail closely parallels the south boundary of the North Unit of the Steese NCA and some sections of the trail are outside the NCA. Those sections of trail outside the NCA are located on state land. In these areas, the BLM has obtained a 100 foot wide right-of-way from the State of Alaska.

Research Natural Areas

Two Research Natural Areas (RNAs) within the Steese NCA were established through the Steese RMP ([Map 54](#)). The identification of these areas as RNAs was based on natural features of scientific interest including ecologically valuable and/or scientifically interesting plant species, geologic features, and wildlife habitats.

Mount Prindle RNA is located on the boundary between the White Mountains National Recreation Area and the Steese [NCA](#). Mount Prindle contains examples of both glaciated landforms and periglacial (unglaciated) features in proximity, illustrating how different cold-climate processes produce different landscapes (Juday 1988). At least four glacial advances, spanning several hundred of thousand years are evident (Juday 1988), making the area useful in the study of past climates. The periglacial landscape processes have produced remnant features such as granite tors, cryoplanation terraces, and well developed solifluction lobes. Mount Prindle is one of the highest elevations in the Yukon-Tanana Uplands and provides habitat for rare plants, nesting raptors, and dall sheep.

The Big Windy Hot Springs RNA is located on Big Windy Creek, a tributary of South Fork Birch Creek. The RNA contains several undisturbed, medium-grade hot geothermal seeps and pools. Precipitation of dissolved minerals from spring water have formed travertine structures and pools, and altered granite into an uncommon mineral form. The hot springs provides an important mineral lick for Dall sheep. It is part of a cluster of hot springs located east of Fairbanks. The other two springs in this group, Chena Hot Springs and Circle Hot Springs are located on private land and have been developed for commercial resort uses. Big Windy Hot Springs is essentially undisturbed.

1.5. Use of the Steese Subunit

How Are People Using the Land Now?

The primary uses occurring in the Steese Subunit are recreation, subsistence, and mining.

Recreation

The Steese [NCA](#) offers a diversity of outdoor recreation opportunities, including land, water, and snow based activities. Examples of recreation activities commonly conducted in the area include boating and river-based recreation, fishing, hiking and backpacking, gathering of edible plants and berries, dog mushing, skiing, skijoring, hobby mineral collecting, and off-highway vehicle use (including snowmobiling). In addition, the presence of migratory and resident wildlife provides opportunities for hunting, trapping, photography, and wildlife viewing.

Most of the recreational opportunities occur during the snow-free seasons (May to September), with the fall big game hunting season attracting the greatest number of visitors for caribou and moose. Spring bear hunting is also popular, but does not attract as many visitors as the fall season. Grouse and ptarmigan hunting also attract a small number of visitors in the fall and throughout

the winter season. As the popularity of the area has increased, so has visitation and demand for a variety of recreational opportunities.

There are currently four active Special Recreation Permits in the Steese NCA. Permitted activities and locations include, outfitting and guided trips on Birch Creek, outfitting trips on the Pinnell Mountain Trail, and competitive dogsled races on winter trails. Overall permitted use remains fairly low. No Special Recreation Permits for guided hunting trips have been issued during the past five years.

The Steese NCA receives an estimated 10,000 visits per year. The largest number of users arrive during the caribou and moose hunting season, from August 10 to September 15. Due to the close proximity of the NCA to Fairbanks, the growing population of the region, and the increases in fuel prices, a noticeable increase in use has occurred over the past 10 years. An increase in cross-country off-highway vehicle (OHV) travel has also occurred, where recreational hunters use OHVs for accessing remote areas and for retrieving game.

The Great Unknown Creek and the upper Preacher Creek areas receive the most intense OHV use. Demand for OHV activities is expected to continue to increase. This will place demands on the BLM to provide for and monitor motorized users. The increased demand will also have implications on OHV designations, pressures on providing a sustainable trail system, and increases in maintenance workloads. Currently there are 1,075,000 acres designated as limited to summer use of OHVs with weight restrictions, nearly 1,200,000 acres designated as limited to winter use of OHVs with weight restrictions, and 12,000 acres closed to OHVs.

Subsistence Use

Five recognized villages are within or immediately adjacent to the Steese Subunit and qualify as rural for subsistence use including: Birch Creek, Fort Yukon, Beaver, Circle, and Central (Maps 102 and 103).

Birch Creek Village is situated on Birch Creek, the headwaters of which are within the Steese [NCA](#). Historically, people in this area moved seasonally into the White Mountains to harvest caribou and sheep and to the Birch Creek, the Yukon River, and many other lakes and creeks to harvest fish, moose, waterfowl and other resources. People of this area continued to live a mobile life until the early 1950s when Birch Creek village became a more permanent residence for area people. Birch Creek and the Yukon River continued to be important use areas during 1970 through 1982, the years of the Caulfield study (1983).

Fort Yukon is located at the convergence of the Porcupine and Yukon rivers and has been a gathering place for the Gwichyaa Gwich'in since aboriginal times. Fort Yukon became a center of commerce in the region during the 1870s as gold was discovered throughout the Klondike, Fortymile, and Birch Creek drainages. It remains a center of commerce and transportation in contemporary times and has a more mixed economic base of employment and subsistence than other communities in the region (Caulfield 1983).

The subsistence use area for this community includes portions of the Steese and the Upper Black River subunits. The use areas documented by Caulfield (1983) overlap with BLM lands for bear and moose hunting on the scattered lands around Circle and trapping around the confluence of Grayling Creek with the Black River, which is primarily refuge and Doyon, Limited, lands.

The village of Circle is located on the Yukon River at the terminus of the Steese Highway. Based on census statistics from 2000, the village continues to be predominantly Native Alaskan. Caulfield (1979) reports that use of subsistence harvest remains high in Circle. Data from the ADF&G Community Profile Database for 1993-1997 documents continuing high levels of dependence on subsistence resources by residents of Circle. Fishing for salmon adjacent to and below the current village was described by Caulfield (1979) as a major focus of summer. Moose and bear use areas were accessed by riverboat along the Yukon, upriver as far as the Kandik River and down river as far as Birch Creek. Fortymile caribou were an important subsistence resource and were frequently harvested around Medicine Lake and along the Steese Highway near Central. During the mid-1960s the Fortymile caribou population declined enough that the herd stopped using this part of their range. As the herd size has slowly increased over the past decade, they are occupying more of their historic range, but still do not reliably use the Medicine Lake area. Based on registration permit data, no Fortymile caribou have been harvested by residents of Circle in the past six years.

Mining

Mining is a current use within the Steese Subunit. Most BLM lands are closed to new mineral entry due to withdrawals or segregations imposed by land selections. Mining is occurring, however, on existing mining claims. Mining on BLM lands currently consists of small (less than five acres) to large placer mines (five to 20 acres).

There are 236 placer gold occurrences existing in the Eastern Interior Planning Area with 35 currently active. There are 81 separate companies or individuals that are estimated to be producing gold in the planning area (Szumigala et al. 2008). Placer mining is occurring on both federal and state mining claims in the Steese Subunit.

Chapter 2. Alternatives

What Decisions Will the RMP Make?

The Eastern Interior Draft [RMP](#) will make decisions on a wide variety of resources and resource uses including: management of fish and wildlife habitats, management of recreation, off-highway vehicles and access, and management of mineral resources.

The Draft RMP include four alternatives. These are the No Action Alternative (Alternative A) and three action alternatives (Alternatives B, C, and D). Many of the decisions are the same in more than one alternative. Other decisions vary between alternatives.

Federal agencies often identify an Preferred Alternative in the Draft RMP. The BLM has identified Alternative C as the Agency Preferred Alternative. The plan adopted for the Approved RMP may be one of the alternatives presented in the Draft RMP, or it may be created by combining portions of the four alternatives into the selected management option.

What Decisions Are Included in This Document?

The Draft RMP makes too many decisions to list them all in this summary. Only major decisions or those likely to be of most interest are included in the following sections. This summary focuses on allocation decisions. Allocation decisions are those that determine what use can occur on which lands. For example, describing what areas will be closed to mining or off-road vehicles.

Decisions on management of Air Resources, Cultural and Paleontological Resources, Cave and Karst Resources, Forest and Woodland Products, Hazardous Materials, Non-native Invasive Species, Salable Minerals, Soil Resources, Special Status Species, Visual Resource Management, Water Resources, and Wildland Fire are not included in this summary. Additionally, not all decisions applying to Fish, Wildlife, Vegetative Resources, Lands and Realty, Minerals, Recreation, and Special Designations are included. Only the major decisions or allocation decisions are included. To see all the decisions that apply to the Steese Subunit, see the Eastern Interior Draft Resource Management Plan and Environmental Impact Statement (BLM 2012).

2.1. Summary of the Alternatives

Alternative A, No Action Alternative

Alternative A would continue present management practices and present levels of resource use. Proposed activities would be analyzed on a project-specific basis and few uses would be excluded as long as they were consistent with the Steese RMP and management of the Steese NCA. There would be no new oil and gas leases or mining claims as the lands would remain withdrawn from these types of activities.

Off-highway vehicles (OHVs) would be limited by weight and season of use. Research Natural Areas (3,000 acres) would be closed to all OHV use. Approximately 73,000 acres would be closed to summer OHV use, but open to winter snowmobile use. Cross-country winter snowmobile use would be allowed in all areas except the Research Natural Areas. Cross-country summer use of OHVs 1,500 pounds or less would be allowed on 1,075,000 acres. Recreation management would be the focus in the Steese [NCA](#).

No new special designations such as areas of critical environmental concern (ACECs) would be considered. Two existing Research Natural Areas (RNAs) would be retained and managed to

preserve the areas for research purposes. There would be no suitability determinations for wild and scenic rivers. There would be no decisions to manage certain lands to maintain wilderness characteristics, although existing management would preserve wilderness characteristics in most areas.

Alternative B

Ninety-six percent of the subunit would remain closed to new mining claims and mineral leasing. OHVs would be limited by weight and season of use. As in Alternative A, 3,000 acres in RNAs would be closed to OHV use. Approximately 1.2 million acres would be closed to summer OHV use, but open to winter snowmobile use. Cross-country winter snowmobile use would be allowed in all areas except RNAs. Management of OHV use would be the most restrictive under this alternative.

The Steese NCA and adjacent lands would be identified as a Special Recreation Management Area and Recreation setting prescriptions would be assigned. These settings include Primitive, Semi-Primitive, and Backcountry ([Map 54](#)). Alternative B would have the largest amount of land managed for a Primitive setting.

Two existing RNAs would be retained and managed to preserve the areas for research purposes. All historic and recent Fortymile caribou herd calving/postcalving habitat and Dall sheep habitat would be designated as an ACEC ([Map 65](#)) and would be a right-of-way avoidance area. One additional river segment, Big Windy Creek, would be recommended suitable for designation under the Wild and Scenic Rivers Act ([Map 71](#)). Twenty-one watersheds with the highest fish values would be identified as Riparian Conservation Areas and three watersheds would be identified as High Priority Restoration Watersheds. Outstandingly remarkable values would be identified for Birch Creek WSR. Approximately 1,199,000 acres would be managed to maintain wilderness characteristics.

Alternative C, Agency Preferred Alternative

Sixty-one percent of the subunit would remain closed to new mining claims and mineral leasing. OHVs would be limited by weight and season of use. Same as Alternatives A and B, RNAs (3,000 acres) would be closed to OHV use. Approximately 677,000 acres would be closed to summer OHV use. Cross-country winter snowmobile use would be allowed in all areas except RNAs. Summer use of OHVs 1,500 pounds or less would be limited to existing routes, except to retrieve legally harvested game on 611,000 acres.

The Steese NCA and adjacent lands, would be identified as a Special Recreation Management Area and Recreation setting prescriptions would be assigned to the area. These settings include Primitive, Semi-Primitive, Backcountry, Middlecountry, and Frontcountry ([Map 55](#)). Compared to Alternative B, very little land would be managed for a Primitive recreation setting.

Two existing RNAs would be retained and managed to preserve the areas for research purposes. Recent and current Fortymile caribou calving/postcalving habitat and Dall sheep habitat would be designated as an ACEC ([Map 66](#)). Eighteen watersheds would be identified as Riparian Conservation Areas. Same as Alternative B, three watersheds would be identified as High Priority Restoration Watersheds. Outstandingly remarkable values would be identified for Birch Creek WSR. Approximately 647,000 acres would be would be managed to maintain wilderness characteristics.

Alternative D

Approximately 46 percent of the subunit would remain closed to new mining claims and mineral leasing. OHVs would be limited by weight and season of use. Same as the other alternatives, 3,000 acres in RNAs would be closed to all OHV use. Approximately 510,000 acres would be closed to summer OHV use. Cross-country winter snowmobile use would be allowed in all areas except RNAs. Cross-country summer use of OHVs 1,500 pounds or less would be allowed on 778,000 acres.

The Steese NCA and adjacent lands, which would be identified as a Special Recreation Management Area and Recreation setting prescriptions would be assigned to the area. These settings include Primitive, Semi-Primitive, Backcountry, Middlecountry, and Frontcountry ([Map 56](#)). This alternative would have more land managed for Frontcountry and Middlecountry settings than the other alternatives.

Two existing RNAs would be retained and managed to preserve the areas for research purposes. Current Fortymile caribou calving/postcalving habitat and Dall sheep habitat would be designated as an ACEC ([Map 67](#)). Eight watersheds would be identified as Riparian Conservation Areas. Outstandingly remarkable values would be identified for Birch Creek WSR. Approximately 483,000 acres would be managed to maintain wilderness characteristics.

Summary of the Alternatives

The following table summarizes major decisions that vary by alternative. This allows you to compare the three action alternatives. To see the full text of decisions for the programs listed in this table, see sections 2.3, 2.4, 2.5, and 2.6 of this summary document.

Table 2.1. Steese Subunit Summary of Alternatives

Program or Resource	Alternative B	Alternative C	Alternative D
Fish and Aquatic Species	Manage 21 watersheds as Riparian Conservation Areas (RCAs) (Map 8).	Manage 18 watersheds as RCAs (Map 9).	Manage eight watersheds as RCAs (Map 10).
	Complete watershed assessments prior to opening areas to locatable mineral entry and location.	Complete watershed assessments as necessary for management.	
Wilderness Characteristics	Maintain wilderness characteristics on 1,199,000 acres (94 percent) (Map 77).	Maintain wilderness characteristics on 647,000 acres (51 percent) (Map 78).	Maintain wilderness characteristics on 483,000 acres (38 percent) (Map 79).
Wildlife	The use of domestic goats, alpacas, llamas, and other similar species in conjunction with BLM-authorized activities would not be allowed in Dall sheep habitat.		
	Domestic sheep, goats, and camelids (includes alpaca and llama) are not allowed in Dall sheep habitat.	Not addressed.	
	In caribou winter range, plan travel management and development of facilities (such as maintained trails and cabins), in a manner that would result in a level of off-trail oversnow vehicular travel that would maintain continued availability of the area for use by wintering caribou. Monitor oversnow motorized use in these areas and, if it approaches a level which may result in reduced use by wintering caribou, implement changes in maintained trails. If necessary, limited area or season closures may be enacted.		
	Manage the caribou migration corridor on BLM lands (Map 68) as closed to mineral location and leasing. Limit summer motorized travel to existing routes or designated trails. Limit route density to ensure free movement of caribou between upper Birch Creek, the north Steese NCA , and the White Mountains NRA . Consider impacts of developments in the corridor, including state and private land, and ensure it does not significantly impact the ability of caribou to migrate to historically used and biologically important habitats. Develop a management threshold density goal for BLM lands, limiting linear disturbance per unit area. Propose a cooperative effort with State of Alaska to develop a plan to maintain connectivity of habitat in the area.	Management of the caribou migration corridor on BLM lands would be the same as Alternative B, except only portions of the corridor on BLM lands would be closed to mineral location, entry, and leasing.	Management of the caribou migration corridor on BLM lands would be the same as Alternative C, except the corridor would be maintained by addressing potential effects on caribou migration prior to BLM authorizations for use within the corridor, rather than limiting motorized use to existing or designated routes or developing management threshold density goals and a cooperative plan to maintain connectivity of the corridor as described in Alternative B.

Program or Resource	Alternative B	Alternative C	Alternative D
Lands and Realty	The Steese ACEC, RNAs, and Birch Creek WSR Corridor would be right-of-way avoidance areas.	There would be no right-of-way avoidance areas.	
	Retain the Montana Creek to Preacher Creek Transportation Corridor and the Great Unknown Creek Transportation Corridor (Map 54).	No transportation corridors would be designated.	
Leasable Minerals	45,000 acres open to leasable minerals; 1,231,000 acres closed (Map 32).	285,000 acres open; 992,000 acres closed (Map 34).	693,000 acres open; 581,000 acres closed (Map 36).
	A decision on coal leasing is deferred. No coal leasing would occur without an amendment to this RMP.		
Locatable Minerals	45,000 acres open to locatable mineral entry; 1,231,000 acres closed (Map 31).	285,000 acres open; 992,000 acres closed (Map 33).	693,000 acres open; 583,000 acres closed (Map 35).
Recreation	Manage 1,245,000 acres as the Steese Special Recreation Management Area. Establish Recreation Management Zones and Recreation setting character classes within the Special Recreation Management Area (Maps 45, 46, and 47).		
Travel Management	Research Natural Areas (3,000 acres) closed to motorized OHV use, including snowmobiles.		
	No summer OHV use on 1,291,000 acres.	No summer OHV use on 677,000 acres.	No summer OHV use on 510,000 acres.
	No areas are limited to existing routes.	Summer OHV use limited to existing routes and weight on 611,000 acres (Middlecountry and Frontcountry), except to retrieve game.	Summer OHV use limited to by weight on 510,000 acres (Middlecountry and Frontcountry). Cross-country use allowed.
	Winter OHV use of snowmobiles weighing 1,000 pounds or less allowed on 1,291,000 acres; all areas except RNAs.		
	Birch Creek WSR: All forms of non-motorized use allowed. Motorboat use generally allowed without specific authorization. Airboats, hovercraft, and personal watercraft would not be permitted on non-navigable segments above the confluence of Birch Creek and an unnamed creek in T. 6N., R. 17E., Section 8, or within the Steese NCA.		
	16,400 acres outside of the Steese NCA but adjacent to the Birch Creek WSR Corridor would be closed to locatable minerals.		15,200 acres outside of the Steese NCA would be closed to locatable minerals.
	In areas with a Closed OHV designation (RNAs), subject to reasonable regulations, a free permit may be issued for access via snowmobiles for traditional activities and for travel to and from villages and homesites (ANILCA Sec. 1110). Similarly, federally qualified subsistence users, subject to reasonable regulation and with a free permit, may be permitted to use snowmobiles or other means of surface transportation traditionally employed for subsistence purposes (ANILCA Sec. 811).		
	Withdrawals	Retain the ANILCA withdrawal on the entire Steese NCA .	Retain the ANILCA withdrawal on 80 percent of the Steese NCA; issue an opening order for 241,000 acres (20 percent of the NCA).
Areas of Critical Environmental Concern	Designate the Steese ACEC (927,000 acres) (Map 65).	Designate the Steese ACEC (460,000 acres) (Map 66).	Designate the Steese ACEC (193,000 acres) (Map 67).

Program or Resource	Alternative B	Alternative C	Alternative D
Research Natural Areas	Big Windy Hot Springs (160 acres) and Mount Prindle (2,800 acres) are designated as RNAs. These areas would be managed to maintain a Primitive recreation setting and	would be closed to mineral location, mineral leasing, and OHVs.	
	No surface-disturbing activities allowed except permitted research projects and hiking trails. RNAs would be closed to camping. Primitive campsites may be established outside the RNA boundaries and improved access in the form of trails could be developed.	Same as Alternative B, except primitive camping and development of primitive hiking trails would be allowed in the RNAs.	
Wild and Scenic Rivers	Identify outstandingly remarkable values for Birch Creek WSR as scenic, recreation, and fisheries.		
	Big Windy Creek (14 miles) recommended suitable for classification as "wild."	No rivers would be recommended as suitable for designation.	

2.2. Alternative A (No Action)

Current management in the Steese [NCA](#) is guided by the Record of Decision and Resource Management Plan for the Steese National Conservation Area (BLM 1986) which was approved in February 1986. Throughout this document, this plan will be referred to as the Steese RMP. Additional management guidance is provided by the Birch Creek River Management Plan (BLM 1983), and several Special Rules published in the *Federal Register*. Other BLM lands in the Steese Subunit are not covered by an existing land use plan. Current management for selected programs is summarized briefly below. A more complete description can be found in the Eastern Interior Draft Resource Management Plan and Environmental Impact Statement (BLM 2012).

Fish and Aquatic Species

Fish habitat is managed to maintain the present quality of habitat in the tributary streams of Birch Creek that are largely undisturbed, including the South Fork of Birch Creek and its tributaries, Clums Fork, Sheep Creek, and Harrington Fork. Primary management emphasis is placed on arctic grayling. Measures to mitigate the impacts of development on fish are attached as stipulations to permits. Special stipulations are placed on activities in crucial fish habitats such as spawning and overwintering habitats. All surface-disturbing activities are required to meet state water quality standards and will be rehabilitated to minimize future erosion. In cases where upland gravel sources are not available, or where their use would cause greater environmental damage than the use of riparian sources, riparian sources may be used. The gravel will be extracted in such a manner as to minimize the loss of fish and wildlife and their habitats.

Wildlife

The emphasis of the wildlife habitat management program is habitat protection, maintenance and improvement. Priority species are caribou, Dall sheep, fish, and peregrine falcon. Wildlife distribution, movements, and use areas are monitored. Habitat improvement for moose and other species is provided for through management of wildfire. Prescribed burns may be used to reestablish or improve habitat.

The RMP emphasizes the protection of crucial habitats which are protected through the avoidance or mitigation of possible adverse effects of land use activities and by withdrawing specific areas from certain land uses. Crucial habitats include: mineral licks; caribou calving and movement routes; Dall sheep lambing, movement routes, escape habitat, and winter range; moose late winter range; grizzly and black bear dens and seasonal high use areas; raptor nesting and prey gathering areas; and waterfowl nesting areas. When land use actions are proposed, mitigating measures to avoid or minimize possible adverse effects to wildlife are developed and applied to the permit. The Steese RMP (BLM 1986) lists crucial habitats and time frames during which special restrictions may be required in these areas.

Lands and Realty

There are four established transportation corridors in the Steese [NCA](#) ([Map 15](#)). All future rights-of-way will, to the extent possible, be located within these corridors. Existing trails will be followed whenever possible. Holders of rights-of-way for roads or trails would be required to allow public access for recreation unless there is a compelling reason to deny such access. In accordance with Section 1107 of ANILCA, any authorized transportation system within the Birch

Creek Wild and Scenic River Corridor must be compatible with wild river values and shall be constructed in a manner that does not interfere with or impede stream flow or transportation on the river. Location and construction techniques shall be selected to minimize adverse effects on scenic, recreational, fish, and wildlife and other values of the river area.

Approximately 14, 000 acres of state lands within the boundaries of the Steese NCA is identified for acquisition through exchange. Other realty actions compatible with the land uses may be permitted if compatible with land uses designated in the Steese RMP.

Minerals

All BLM lands in the Steese Subunit are closed to leasing of both fluid minerals (oil and gas) and solid minerals (coal). There are no existing mineral leases. All BLM lands in the subunit are closed to locatable minerals through a variety of withdrawals. The Birch Creek Wild and Scenic River Corridor (within one-half mile of the banks) is withdrawn from mineral entry and leasing under ANILCA 606(a)(2) and administered pursuant to the Wild and Scenic Rivers Act. There are 7,000 acres of existing claims in the subunit and mining is occurring on some of these claims.

The following requirements apply to valid existing mining claims:

- Each operator in the Steese [NCA](#) will be required to file a Plan of Operation or notice depending on location and acreage disturbed.
- An operator who disturbs more than five acres per year or who is operating in an area closed to further mineral location is required to file a Plan of Operation.
- A reclamation plan must be included as a part of the Plan of Operation or Notice of Intent.
- All operations in the Steese NCA must be reclaimed to the satisfaction of the Authorized Officer.

Wintertime cross-country moves are preferred for the transport of equipment onto claims. Any cross-country movement of heavy equipment must be approved in advance by the Authorized Officer. All operators producing water-borne effluent must obtain a National Pollutant Discharge Elimination System permit and meet the requirements of that permit.

Recreation

Recreation management is focused on the Steese [NCA](#) and Birch Creek Wild and Scenic River. A remote cabin program has been developed and maintained, including twelve public use cabins and two trail shelters. The BLM issues special recreation use permits as appropriate for commercial, competitive, and special events. Established waysides and trails are maintained.

Travel Management

The current [OHV](#) designation for the Steese [NCA](#) is Limited except for Research Natural Areas, which are Closed to OHV use. All forms of non-motorized use are allowed. Aircraft use is generally unrestricted. For the purposes of travel management, the following management Units are established in the Steese NCA: Research Natural Areas, Birch Creek Wild and Scenic River Corridor and the Primitive and Semi-Primitive Motorized management units. The type and extent of OHV uses allowed depends on the designation of the unit in which the use occurs ([Map 44](#)).

Research Natural Areas: The Mount Prindle and Big Windy Hot Springs Research Natural Areas are closed to OHV use.

Birch Creek Corridor: OHV use is prohibited within the corridor except winter use of snowmobiles weighing 1,500 pounds or less gross vehicle weight rating ([GVWR](#)), for OHVs used to access inholdings, or if there is no economically feasible and prudent alternatives for crossing the corridor.

Primitive Management Unit (73,000 acres): Closed to OHVs except for winter snowmobile use. Authorization is required for the use of any motorized vehicle, other than a snowmobile, off a valid right-of-way.

Semi-Primitive Motorized Management Unit (1,075,000 acres): No permit is required for vehicles of less than 1,500 pounds GVWR. However, a permit is required for the use of OHVs of greater than 1,500 pounds GVWR off a valid right-of-way. Such authorization is generally given only when necessary to provide access to inholdings or for other purposes, based on analysis of need and compatibility with the Steese RMP. Approval is subject to conditions designed to minimize impacts. Generally, the use of vehicles of greater than 1,500 pounds GVWR off a valid existing right-of-way is limited to winter months with adequate snow cover and is limited to existing trails, where practical.

Special Designations

There are two designated Research Natural areas (RNAs): Big Windy Hot Springs (160 acres), and Mount Prindle (2,800 acres). No surface-disturbing activities are allowed except permitted research projects. The areas are closed to OHVs, mineral location, leasing, and camping. Primitive campsites may be established outside the RNA boundaries and improved access in the form of trails could be developed.

Birch Creek is designated as a Wild and Scenic River. It is managed to preserve the river in its natural, primitive condition, in accordance with the Wild and Scenic Rivers Act (P.L. 90-542). OHV use is prohibited within the corridor, except as described above under Travel Management. The corridor is also closed to mineral location and leasing.

2.3. Decisions Common to Alternatives B, C, and D

The following discussion includes a **summary of proposed management under the Draft RMP for selected programs**. A full description of Management Common to All Subunits and Alternatives can be found in the Eastern Interior Draft Resource Management Plan and Environmental Impact Statement (BLM 2012).

Fish and Aquatic Species

The [RMP](#) defines priority fish species as those species utilized for subsistence, designated as BLM-Alaska sensitive species, federally listed under the Endangered Species Act, and those important for recreation. The [BLM](#) would manage and monitor priority species for self-sustaining populations. Current priority species are: Chinook salmon, chum salmon, coho salmon, Arctic grayling, broad whitefish, humpback whitefish, round whitefish, whitefish, least cisco, sheefish, northern pike, burbot, and Alaska Brook Lamprey.

BLM would manage aquatic habitats to meet the following desired conditions:

- Native aquatic species (fish, invertebrates, plants and other aquatic-associated species) are present and generally well distributed in historically occupied habitats.
- Develop a management plan for special status fish and aquatic species so they can thrive and expand into neighboring unoccupied habitats and depressed populations increase.
- Manage native aquatic animals to exhibit genetic integrity and life history strategies necessary to assure self-sustaining populations.
- Monitor spatial extents of habitat disturbances to be sure disturbances are less than the area occupied by priority species, in order to preserve population structure and life history strategies.
- Ensure populations of native and non-native fishes are managed consistently with federal, state and Native population goals.

The RMP identifies priority habitats as those habitats that support any life stages of priority aquatic species, including both resident and anadromous fish species. The highest priority areas for aquatic species are further designated as Riparian Conservation Areas. These watersheds contain the highest fisheries and riparian resource values within the subunit. In these watersheds, riparian-dependent resources would receive primary emphasis and management activities would be subject to specific requirements.

The BLM would manage aquatic habitats to reach a defined set of desired future habitat conditions. Most watersheds, generally should be in or making progress toward a High Condition Rating (Described in Appendix I of the Draft RMP/[EIS](#)). The BLM would design appropriate management actions or mitigate proposed activities at the site-specific project level, in attempt to move watersheds toward a High Condition Rating.

Within all watersheds the desired condition is to provide aquatic habitat to support native vertebrate and invertebrate populations. Stream channel conditions are stable and consistent with the surrounding landform and watershed.

Desired stream and riparian habitat conditions include the following factors (for a full description of these factors, see the complete Draft RMP/EIS):

1. Habitat Connectivity: Native fish species have access to historically occupied habitats.
2. Water Temperature: Cold Water Biota: Habitat complexity provides daily, seasonally, annually and spatially variable water temperatures within expected normal ranges. Consistent with Alaska Water Quality Standards (18 AAC 70) temperatures may not exceed 20 degrees C. at any time. The following maximum temperatures are not exceeded:
 - Migration routes 15 degrees C.
 - Spawning areas 13 degrees C.
 - Rearing areas 15 degrees C.
 - Egg and fry incubation 13 degrees C.
3. Turbidity: Stream stability levels facilitate balanced sediment aggradation and degradation within the watershed, thereby maintaining seasonally consistent turbidity levels. Turbidity levels would not exceed those outlined in the Alaska Water Quality Standards (18 AAC 70).
4. Pool Frequency: Pool frequency would approximate Rosgen (1996) estimates based on channel type.
5. Width to Depth Ratio: Less than or equal to 12:1 for confined channel types (Rosgen channel types A, E and G); less than 20:1 for moderately confined channel types (Rosgen channel type B); and less than 40:1 for unconfined channel types (Rosgen channel types C and F).
6. Channel Substrate Condition: Spawning gravel surface fines (<0.06 mm) in pool tails <5 percent (Bryce et al., 2008).
7. Large Woody Debris (applies to forested systems): Near-natural patterns in size and amount of in-channel, large woody debris and potential wood on stream banks and floodplain.
8. Streambank Stability: Streambank stability greater than ninety-five percent for A and B and E channel types; greater than ninety percent for C channel types within eighty percent of any stream reach. Streambank stability would be evaluated using the BLM Multiple Indicator Monitoring technique or other appropriate methodology.
9. Riparian and RCA Vegetation: Riparian and wetland areas in Proper Functioning Condition. Conditions reflect natural disturbances processes. Desired conditions generally mature to late seral community types as outlined in Winward 2000. Percent of riparian vegetation in the greenline dominated by late seral community types or anchored rocks/logs is greater than eighty percent (good-excellent ecological condition). Over eighty percent of the plant community type along the streambank provides high bank stability, deep fibrous roots, good resistance to streambank erosion or is comprised of anchored rocks/logs. The riparian vegetation provides adequate shade, large wood debris recruitment, and connectivity.

Management of Watersheds

These decisions apply to all watersheds and all subunits unless otherwise noted.

The BLM would provide hydrologic data to, and coordinate with, the state to secure instream flows needed to maintain riparian resources, channel conditions, and aquatic habitats.

To achieve the goals and to meet the Desired Future Conditions for aquatic habitats and species, while maintaining a thriving natural ecological balance and multiple-use relationship, the ROPs in [section 2.7](#) would be implemented on a project-specific basis.

Locate water removal sites to minimize impacts to priority species and to avoid preventing attainment of desired conditions.

The BLM would utilize the watershed matrix to assist in site-specific project impact analysis. Mitigate impacts that are identified during site-specific analysis in the matrix as being potentially degrading to the watershed Condition Rating.

The following decisions apply to mining operations.

To avoid unnecessary and undue degradation of public land under notice level mining operations and mining operations requiring a plan of operations, the 43 CFR 3809.420(b)(3)(ii)(E) requires the rehabilitation of fisheries and wildlife habitat. The fisheries and wildlife habitat rehabilitation performance standard requires the operator to rehabilitate or repair damage caused to fisheries or wildlife habitat.

Further, 43 CFR 3809.420(a)(3) requires operations and post-mining land use to comply with the applicable BLM land use plans and activity plans, and with coastal zone management plans under 16 U.S.C. 1451, as appropriate. The following section outlines planning area and location-specific goals that need to be the focus of a fisheries rehabilitation plan submitted under 43 CFR 3809.301 and 3809.401 in order to meet the fisheries rehabilitation requirement under 43 CFR 3809.420(b)(3)(ii)(E).

For purposes of this plan, the rehabilitation of fisheries habitat is defined as providing aquatic and riparian habitat characteristics that will support fish such that the species and life stage composition and density that occurred prior to disturbance is reestablished. Given the complexity of fisheries habitat rehabilitation in Alaska, reclamation plans will include detailed descriptions of measures that would be used to achieve the following three objectives. By focusing on these three objectives, the probability of fisheries habitat rehabilitation success is increased.

1. A stable channel form that is in balance with the surrounding landform such that channel features are maintained and the stream neither aggrades nor degrades. To achieve this the operator must design a post-mining stream channel using morphological characteristics of the pre-disturbance channel and floodplain (e.g., bankfull and floodprone dimension, meander pattern, design flows and velocity, riffle to pool ratio, substrate particle size). These characteristics could be derived from field surveys of the area, remotely sensed information, or information from adjacent watersheds that exhibit similar characteristics as the watershed proposed for mining. A key reference used on the national scale for alluvial channel design is The National Resources Conservation Service's *Stream Restoration Design, National Engineering Handbook, Part 654* (NRCS 2007 Chapter 9);
2. Sufficient riparian vegetation or anchored rocks/logs to effectively dissipate stream energy, prevent soil erosion, stabilize streambanks, provide essential nutrient input, and maintain water quality and floodplain function; and,
3. Provide instream habitat complexity similar to that of pre-disturbance levels by the use of instream structures (e.g., vortex rock weirs, cross-vane structures, installation of root wads).

Typically, the operator would satisfy these requirements through the development of a site-specific reclamation plan. Bond release would be based on meeting specific measurable objectives outlined in a monitoring plan (43 CFR 3809.401(b)(3)).

Develop monitoring and associated reporting requirements as part of site-specific plans (i.e., Plan of Operation) to measure impacts and subsequent reclamation success levels. Use monitoring data to adaptively manage existing and future plans of operation to make measurable progress toward desired future conditions in subsequent years following reclamation.

Riparian Conservation Areas and ACEC Specific Requirements:

The management goal in RCAs and ACECs that meet the relevance and important criteria for fish and aquatic resources is to: maintain and provide stream channel integrity, ensure riparian proper functioning condition, and achieve desired future conditions for the high-value fish and aquatic resources, and yet allow for surface-disturbing activities.

To increase the likelihood of fisheries habitat rehabilitation within these watersheds, which represent the highest value fisheries resources within the planning area, additional baseline data pursuant to 43 CFR 3809.401 (c) (1) would be required. Within these areas baseline hydrological data that is adequate to characterize seasonal flow patterns and discharge would be required from the operator. The BLM would be available to advise operators on the exact type of baseline data and detail needed to meet this requirement. In addition (reclamation requirements, in site-specific reclamation plans) would be designed to result in rehabilitation of habitats within an accelerated timeframe (e.g., less than three years) and would focus on active revegetation and streambank stabilization techniques as the basis for reclamation design.

High Priority Restoration Watersheds:

The goal is to manage High Priority Restoration Watersheds to restore physical and biological integrity (High Condition Rating). Within the Steese Subunit, federal funding (less than one million dollars in Abandoned Mine Lands Funds) has been used for the Harrison Creek stream channel and floodplain restoration project. To ensure that any future restoration projects are not adversely impacted, the following would apply.

All surface-disturbing activities that are proposed within the same or upstream watersheds of ongoing or completed restoration projects must outline specific measures that would adequately mitigate or minimize adverse impacts the restoration project. This may be accomplished by providing a detailed plan of operations and a reclamation plan demonstrating the use of current best management practices.

Vegetative Communities

Manage wildland fire to achieve natural fire regimes and ecosystem processes dependent upon fire. Use prescribed fire to improve wildlife habitat.

All firelines would be rehabilitated and closed to OHV use to facilitate revegetation. Rehabilitate firelines by spreading original soil and vegetation on the disturbed ground, except in specific circumstances where seeding or planting may be necessary. Protect vegetation from damage caused by summer OHV use.

Reduce disturbance of vegetation by minimizing footprint of surface-disturbing activities, consolidating access to minimize the number of routes, and requiring prompt reclamation and revegetation.

When developing travel management plans, minimize impacts through appropriate restrictions on cross-country OHV use. Monitor vegetation for impacts that may be caused by OHVs.

Manage lichen-rich plant communities as unique habitats due to the slow growth potential of lichen and its great importance to caribou.

The RMP would identify the following as priority plant communities:

- Aspen/Steppe bluffs (most often occurring as river bluffs).
- Riparian communities
- Wetlands (with a focus on wetlands other than the widespread mesic black spruce and tussock and shrub tussock vegetation types)
- Tall shrub communities
- Sparsely plant covered calcareous substrate (e.g. limestone)
- Lichen-rich habitats

Wilderness Characteristics

OBJECTIVE: In areas identified for maintenance of wilderness characteristics, manage to maintain naturalness, outstanding opportunities for solitude or a Primitive and unconfined type of recreation, and supplemental values so that these lands retain their wilderness characteristics for the life of the RMP.

DECISIONS:

Consistent with allocation decisions in the RMP, allow other multiple-uses on lands where wilderness characteristics would be maintained, while applying management restrictions (such as conditions of use or mitigation measures) to avoid or minimize impacts to wilderness characteristics and meet the objective retaining wilderness characteristics over the life of the RMP.

For Alternatives B, C, and D the following activities, uses, and decisions could occur in areas identified as lands where wilderness characteristic will be maintained:

- Snowmobile travel with adequate snow cover
- Motorboat use
- Airplane use, including primitive, unimproved landing areas
- Temporary structures and equipment placement related to hunting, fishing, and trapping
- Public use cabins and other small facilities
- Summer [OHV](#) use, including mechanized, on designated or existing trails
- Locatable mineral location and entry

The following activities, uses, and decisions are generally incompatible with maintaining wilderness characteristics:

- Mineral leasing
- Summer OHV use off of designated or existing trails
- Areas of desired future developed recreation facilities
- Uplands adjacent to navigable rivers where the State of Alaska may authorize development
- Lands available for disposal

Wildlife

Manage habitat for migratory birds to emphasize avoidance or minimization of negative impacts, and to restore and enhance habitat quality (Executive Order 13186).

Minimize impacts to known nest sites of priority raptors from actions authorized by the BLM. Priority raptor species are peregrine falcon, gyrfalcon, bald eagle and golden eagle. Nest sites of other raptors would be managed similarly, although management would generally be less restrictive and would be determined in site-specific environmental analyses.

Employ industry-accepted best management practices to prevent raptors and other birds from colliding with or being electrocuted by utility lines, alternative energy structures, towers, and poles.

Prohibit the use of domestic goats, alpacas, llamas, and other similar species in conjunction with BLM-authorized activities occurring in Dall sheep habitat. Educate the public about the risks of using pack animals within Dall sheep habitat.

Protect crucial wildlife habitats through special restrictions, where necessary, including yearlong or seasonal activity restrictions and minimum altitudes for aircraft use.

Avoid or minimize impacts from projects that could degrade riparian areas and promote restoration of riparian areas to achieve proper functioning condition.

The RMP identifies the following species as priority wildlife species: caribou, Dall sheep, moose, peregrine falcon, gyrfalcon, bald eagle, golden eagle, martin, lynx, and all Special Status Species.

Inventory, and monitor priority wildlife species and their habitats. Monitor populations of priority and subsistence wildlife species in cooperation with ADF&G and U.S. Fish and Wildlife Service. Identify important habitats for priority species and monitor changes.

Lands and Realty

Allow [FLPMA](#) leases throughout the subunit, except where prohibited by law or public land order. All FLPMA leases would be at fair market value. Cabins or permanent structures used for private recreation may not be authorized. FLPMA lease proposals on selected lands must include a letter of non-objection from the selecting entity. Proposals for commercial use leases of cabins (such as guiding or trapping) would be considered.

Permits are used to authorize short-term occupancy, use, or development of a site under Section 302 of FLPMA (43 [CFR](#) 2920) or under [ANILCA](#). Land use permits would be considered throughout the subunit with the following limitations:

1. Cabin or permanent structure permits are not issued for private recreation uses.
2. Trapping shelters would be authorized by short-term (three years maximum) Section 302 permits renewable at the discretion of BLM and generally “tied” to the applicant’s ability to show actual use for commercial or subsistence trapping purposes.
3. Permit authorizations on all other BLM-managed lands would be considered pursuant to Section 302 of FLPMA.
4. Military maneuver permits would be considered within the planning area.
5. Permits for administrative use of BLM-managed lands by the state would be considered throughout the planning area.

Trespass cabins may become the property of the U.S. Government and be managed as administrative sites, emergency shelters or public use cabins. Possible management actions on trespass cabins include:

1. Authorization by lease or permit for legitimate uses, if consistent with goals and objectives for the area.
2. Relinquishment to the U.S. for management purposes.
3. Removal of the structure.

There would be no right-of-way exclusion areas. Rights-of-way authorizations on all BLM lands would be considered, and authorized under Title V of [FLPMA](#) in accordance with the regulations found in 43 [CFR](#) 2800. Rights-of-way would be located near other rights-of-way or on already disturbed areas whenever practical and reasonable to do so.

Allow for additional communication site development on BLM lands. Ensure coordination between existing and potential communication site users, and maximum utilization of existing sites (43 CFR 2800).

Leasable Minerals

Coal leasing is deferred because the coal screening process (as identified by 43 CFR 3420.1-4) has not been completed in the planning area. If an application for a coal lease is received, the appropriate land use and environmental analysis, including the coal screening process, would be conducted to determine whether or not the coal areas are acceptable for further consideration for leasing and development under 43 CFR 3420.1-4. An RMP amendment would be needed before coal leasing could occur. Only those BLM-managed public lands that have development potential may be identified as acceptable for further consideration for coal leasing.

Recreation

Manage Special Recreation Management Areas (SRMAs) proactively, with management directly tied to an identified primary market demand for structured recreation (such as activities, experiences, benefits, and maintenance of recreation setting character).

The following table shows the Recreation Setting decisions that apply to the subunit. These decisions would be applied to the Steese Special Recreation Management Area and correspond to the assigned Recreation Opportunity Spectrum classes in these areas.

Table 2.2. Recreation Setting Decision Matrix for the Eastern Interior Planning Area

PHYSICAL - Resources and Facilities: Character of the Natural Landscape						
	<i>Primitive Classification</i>	<i>Semi-Primitive Classification</i>	<i>Backcountry Classification</i>	<i>Middlecountry Classification</i>	<i>Frontcountry Classification</i>	<i>Rural Classification</i>
Remoteness	Managed for an extremely high probability of experiencing solitude, closeness to nature, tranquility, self reliance, challenge, and risk.	Managed for a very high probability of experiencing solitude, closeness to nature, tranquility, self reliance, challenge, and risk.	Managed for a high probability of experiencing solitude, closeness to nature, tranquility, self reliance, challenge, and risk	Managed for a moderate probability of experiencing solitude, closeness to nature, and tranquility. Managed for a moderate degree of challenge and risk associated with the use of motorized equipment.	Managed for the opportunity to affiliate with other users in developed sites but with some chance for privacy. Little challenge and risk. On or near improved trails or roads.	Managed for the opportunity to observe and affiliate with other users in areas where convenience of facilities is important. On or near primary highways, but still within a rural area.
Naturalness	Protect an undisturbed or rehabilitated naturally-appearing landscape.	Provide a naturally-appearing landscape with a low level of modifications noticeable.	Provide a generally naturally-appearing landscape with a moderate level of modifications noticeable, none of which dominating natural landscape features.	Provide for a landscape partially modified by roads, pipelines, etc., with usually none dominating natural landscape features.	Provide for a landscape partially modified by roads, pipelines, etc., which may dominate natural landscape features.	Provide for a natural landscape substantially modified by structures and roads that usually dominate natural landscape features.
Visitor Facilities	Maintain minimal rustic and rudimentary facilities that are constructed for site protection using natural materials and are designed to blend with the surrounding landscape.	Maintain rustic and rudimentary facilities that are generally constructed using natural materials, and are designed to blend with the surrounding landscape.	Maintain some naturally appearing trails and facilities, such as cabins, bridges and signs for user convenience, which usually blend with the surrounding landscape.	Maintain marked trails with associated trailheads and facilities including cabins, toilets, parking areas and garbage collection, which generally blend with the surrounding landscape.	Maintain improved yet modest facilities such as campgrounds, toilets, trails, and interpretive signs, which could attract attention.	Maintain modern facilities such as developed campgrounds, group shelters, and exhibits, which generally attract attention.

SOCIAL – Visitor Use and Users: Character of the Social Environment						
	<i>Primitive Classification</i>	<i>Semi-Primitive Classification</i>	<i>Backcountry Classification</i>	<i>Middlecountry Classification</i>	<i>Frontcountry Classification</i>	<i>Rural Classification</i>
Contacts (with other group)	Average number of contacts per day to usually fewer than three groups per trip.	Average number of contacts per day to usually fewer than four groups per trip.	Average number of contacts per day to usually fewer than seven groups per trip.	Average number of contacts per day to usually fewer than 10 groups per trip.	People are generally visible at campsites, but are usually distant enough to prevent interactions.	People seem to be prevalent, but human contact is still intermittent
Group Size	Manage for a majority of group sizes that usually average fewer than three people per group.	Manage for a majority of group sizes that usually average fewer than four people per group.	Manage for a majority of group sizes that usually average fewer than seven people per group.	Manage for a majority of group sizes that usually average fewer than 10 people per group.	Manage for a majority of group sizes that usually average fewer than 12 people per group.	Manage for a majority of group sizes that usually average fewer than 15 people per group.
Evidence of Use	Only footprints are typically observed.	Footprints plus slight vegetation trampling at campsites and on travel routes. Winter snow trails and/or tracks may be present.	Winter snow trails and/or tracks may be present, but generally blend with the surrounding landscape. OHV routes may be present in the Fortymile SRMA.	Some landscape alternations are present but generally repeat the basic elements of the surrounding landscape. Surface vegetation showing wear with some bare soils.	Landscape alterations are generally present and may attract attention. Well-worn soils and vegetation, often gravel surfaced for erosion control.	Landscape alterations are present and attract attention. Improved routes protect soils and vegetation, but noise, litter, and facility impacts are possible.

ADMINISTRATIVE – Administrative and Service Setting: Character of the Operational Environment						
	<i>Primitive Classification</i>	<i>Semi-Primitive Classification</i>	<i>Backcountry Classification</i>	<i>Middlecountry Classification</i>	<i>Frontcountry Classification</i>	<i>Rural Classification</i>
Motorized Use	No trails or trailheads managed for motorized activities. Snowmobile, motorboat, and aircraft activity permissible through ANILCA 1110(a) and 811 but encounters are expected to be rare to non-existent. Restrictions may apply in Research Natural Areas. Summer OHV travel prohibited.	No trails or trailheads managed for motorized activities. snowmobile, motorboat, and aircraft activity permissible through ANILCA 1110(a) and 811 but encounters are expected to be rare. Summer OHV travel prohibited.	Various forms use may be present but not substantially noticeable. Winter trails maintained for snowmobile use. Summer OHV use may be restricted.	Four-wheel drives, all-terrain vehicles, motorboats, snowmobiles and aircraft uses are common, in addition to non-motorized use.	Two-wheel drive vehicle use is predominate on developed roads and highways, encounters will be regular. Trails and trailheads managed to accommodate summer and winter OHV use.	Car and truck traffic is characteristic and will be encountered on a regular basis. Trails and trailheads managed to accommodate summer and winter OHV use.
Management Controls	No visitor controls apparent. Enforcement presence very rare.	Signs at key access points on basic user ethics. Use restrictions may be present. Enforcement presence rare.	Occasional regulatory signing. Motorized and mechanized use restrictions are usually in place. Random enforcement presence.	Moderate regulatory signing. Motorized and mechanized use restrictions are usually in place. Periodic enforcement presence.	Rules clearly posted with common seasonal or weight/type of OHV use restrictions. Routine enforcement presence.	Regulations prominent. Total use can be limited by permit, reservation, etc., Significant enforcement presence may exist.
Visitor Services	None typically available on-site.	Basic maps and area personnel rarely available to provide on-site assistance.	Basic maps and area personnel occasionally available to provide on-site assistance.	Area brochures and maps, plus area personnel periodically present to provide on-site assistance. May have information and interpretation available.	Information materials describe recreation areas and activities. Area personnel are sometimes available.	Everything described to the left in this row, plus area personnel perform informal on-site education.

Travel Management

Designate all the BLM-managed lands as Open, Limited, or Closed to motorized travel activities (43 [CFR](#) 8340.0-5(f), (g) and (h)).

Open: "...an area where all types of vehicle use is permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards set forth in subparts 8341 and 8342..."

Limited: "...an area restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type, but can generally be accommodated within the following type of categories: Numbers of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use only; use on existing roads and trails; use on designated roads and trails; and other restrictions."

Closed: "...an area where off-road vehicle use is prohibited. Use of off-road vehicles in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the authorized officer." In closed areas, a permit for motorized use may be issued pursuant to [FLPMA](#), ANILCA, and the 1872 Mining Law.

The following would be exempt from OHV decisions: any fire, military, emergency, or law enforcement vehicle being used for emergency purposes; and any vehicle whose use is expressly authorized by the Authorized Officer, or otherwise officially approved (43 CFR 8340.0-5).

In areas with a Closed OHV designation (Research Natural Areas), subject to reasonable regulations, a free permit may be issued for access via snowmobiles for traditional activities and for travel to and from villages and homesites (ANILCA Sec. 1110). Similarly, federally Qualified Subsistence Users, subject to reasonable regulation and with a free permit, may be permitted to use snowmobiles or other means of surface transportation traditionally employed for subsistence purposes (ANILCA Sec. 811).

Subsistence

At the project or permitting level, develop measures that serve to minimize impacts to subsistence uses, users, and resources. This may include avoidance of specific areas or limitations on season of use.

Implement the ROPs and Fluid Mineral Leasing Stipulations (section 2.7) to assure access to and movement corridors for subsistence resources (roads, powerlines, other rights-of-way, buildings, pipelines, towers) and to minimize displacement of subsistence resources.

Comply with ANILCA Section 810 Evaluation and Finding during analysis of all land use proposals. The management of wild and scenic rivers is to cause the least adverse impact possible on subsistence values (Section 802 of ANILCA).

Require infrastructure be constructed in a manner that it does not unreasonably impede access to subsistence resources. Restrict development of infrastructure or land disturbance in areas of high subsistence resource values or traditional harvest areas, where these activities would significantly restrict access by subsistence users¹. Review subsistence decisions in land use plans for adjacent

¹Review of current land use restrictions and further analysis of existing data would help identify areas that may warrant restricted uses. Existing data would include technical reports on subsistence use, input from rural subsistence hunters, and locatable mineral analysis.

lands and coordinate with the respective land managers and ADF&G when proposed land use actions may affect those lands.

2.4. Alternative B

The following discussion includes a summary of proposed management under the Draft RMP for selected programs. A full description of Alternative C can be found in the Eastern Interior Draft Resource Management Plan and Environmental Impact Statement (BLM 2012).

In addition to the decisions listed as common to all alternatives under Section 2.3 above, the following decisions would apply to Alternative B.

Fish and Aquatic Species

The following 21 High Priority Conservation Watersheds would be managed as Riparian Conservation Areas ([Map 8](#)).

1. McLean Creek-Birch Creek (HUC # 190404020401)
2. Birch Creek (HUC # 190404020212)
3. Puzzle Gulch (HUC # 190404020506)
4. Birch Creek (HUC # 190404020207)
5. Sheep Creek (HUC # 190404020407)
6. Thomas Creek-Birch Creek (HUC # 190404020403)
7. Pitkas Bar (HUC # 190404020408)
8. Birch Creek (HUC # 190404020601)
9. Preacher Creek (HUC # 190404021005)
10. Headwaters North Fork Preacher Creek (HUC # 190404021102)
11. Birch Creek (HUC # 190404020606)
12. Upper North Fork Preacher Creek (HUC # 190404021103)
13. Ninety-eight Pup-Preacher Creek (HUC # 190404021009)
14. Loper Creek (HUC # 190404021201)
15. Middle North Fork Preacher Creek (HUC # 190404021104)
16. Lower North Fork Preacher Creek (HUC # 190404021105)
17. George Creek-Birch Creek (HUC # 190404020903)
18. Middle Preacher Creek (HUC # 190404021202)
19. Yukon River (HUC # 190404011903)
20. Yukon River (HUC # 190404011904)
21. Fourteenmile Creek-Yukon River (HUC # 190404011906)

The following three watersheds would be identified as High Priority Restoration Watersheds and be managed for active restoration.

1. North Fork Birch Creek (HUC # 190404020206)
2. Harrison Creek (HUC # 190404020406)
3. Twelve-mile Creek (HUC # 190404020205)

Complete watershed assessments prior to opening lands to locatable mineral location and entry, using the following priorities:

1. Watersheds containing areas of high/moderate locatable mineral potential.
2. Watersheds identified as RCAs.
3. Other watersheds.

Wilderness Characteristics

Under Alternative B, wilderness characteristics would be maintained on 1,199,000 acres (94 percent of the area with wilderness characteristics in this subunit). These lands include all of the Steese [NCA](#) and upper Birch Creek Wild and Scenic River Corridor ([Map 77](#)).

Wildlife

Domestic sheep, goats, and camelids (includes alpaca and llama) are not allowed in Dall sheep habitat.

In caribou winter range, plan travel management and development of facilities (such as maintained trails and cabins), in a manner that would result in a level of off-trail oversnow vehicular travel that would maintain continued availability of the area for use by wintering caribou. Monitor oversnow motorized use in these areas and, if it approaches a level which may result in reduced use by wintering caribou, implement changes in maintained trails. If necessary, limited area or season closures may be enacted.

Manage the caribou migration corridor on BLM-managed lands ([Map 68](#)) as follows:

- Closed to mineral location, entry, and leasing.
- Limit summer motorized travel to existing routes or designated trails. Route density would be limited to ensure free movement of caribou between upper Birch Creek, the north Steese NCA, and the White Mountains [NRA](#).
- Consider impacts of developments in the corridor, including state and private land, and ensure it does not significantly impact the ability of caribou to migrate to historically used and biologically important habitats. Develop a management threshold density goal for BLM lands, limiting linear disturbance per unit area. Propose a cooperative effort with Alaska Department of Natural Resources to develop a plan to maintain connectivity of habitat in the area.

Lands and Realty

Lands within the Steese NCA would be retained in accordance with Section 402(b) of ANILCA; Retain Birch Creek Wild and Scenic River Corridor and Central Administrative Site (Public Land Order 519).

Consider acquisition of state inholdings in the Steese [NCA](#), including approximately 15,697 acres of state land located within the boundaries of the Steese NCA (FM, T. 7N., R.8E., and FM, T. 10N., R. 13E.) and those lands between the southern boundary of the North Steese NCA Unit and the Pinnell Mountain Trail (FM, T. 7N, R9E.).

If federal mining claims located outside of the Steese NCA and Birch Creek Wild and Scenic River Corridor become null and void, and are not conveyed to the state, consider these lands for disposal or exchange.

Retain two of the existing transportation and right-of-way corridors in the Steese NCA: the Montana Creek to Preacher Creek Corridor in the North Steese NCA Unit and the Great Unknown Creek Corridor in the South Steese NCA Unit ([Map 54](#)).

In order to prevent proliferation of rights-of-way, all rights-of-way would, as far as possible, be located in one of these two corridors. If it were to become necessary for a right-of-way to extend beyond a corridor, existing trails would be followed whenever possible. Several users might be

required to use the same right-of-way and to jointly maintain it. Holders of rights-of-way for roads or trails would be required to allow public access for recreation, unless there is a compelling reason to deny such access.

The Steese ACEC, Mount Prindle RNA, Big Windy Hot Springs RNA, and Birch Creek Wild and Scenic River Corridor would be designated as a right-of-way avoidance areas, except within the designated transportation corridor.

Leasable Minerals

Approximately 1,123,000 acres in the following areas would be closed to fluid and solid leasable minerals ([Map 32](#)):

- The Steese SRMA (includes the Steese NCA and Birch Creek Wild and Scenic River)
- The BLM's Central Administrative Site (seven acres)
- Lands available for disposal (federal mining claims outside Steese NCA and Birch Creek Wild and Scenic River)

Approximately 42,000 acres would be open to fluid mineral leasing, subject to major constraints such as no surface occupancy. This includes split-estate BLM lands (private surface, federal subsurface) and lands near Circle.

The remainder of the subunit, approximately 3,000 acres, would be open to leasing, subject to standard Fluid Mineral Leasing Stipulations.

Locatable Minerals

Approximately 1,123,000 acres in the following areas would be closed to locatable mineral entry ([Map 31](#)):

- The Steese SRMA (includes the Steese [NCA](#) and Birch Creek Wild and Scenic River)
- The BLM's Central Administrative Site (seven acres)
- Lands available for disposal (federal mining claims outside Steese NCA and Birch Creek WSR)

All remaining lands in the Steese Subunit, approximately 45,000 acres, would be open to locatable mineral entry, including scattered parcels near Circle.

Recreation

The Steese Special Recreation Management Area (SRMA) would include approximately 1,245,000 acres of lands including the Steese NCA and Birch Creek Wild and Scenic River Corridor ([Map 54](#)). The SRMA includes approximately 15,000 acres of state inholdings. Under Alternative B, the Steese SRMA would include seven Recreation Management Zones (RMZs), the management of which are described in Appendix H of the Draft Eastern Interior Resource Management Plan and Environmental Impact Statement (BLM 2012). See Table 2.2 for a description of recreation opportunity settings that would apply to reach RMZ.

Table 2.3. Steese Recreation and Travel Management Zones, Alternative B

Name of Zone	Acres	Recreation Opportunity Setting ^a	OHV Designation
Birch Creek	87,000	Semi-Primitive	Limited
Pinnell Mountain Trail	16,000	Primitive	Limited

Name of Zone	Acres	Recreation Opportunity Setting ^a	OHV Designation
Mount Prindle RNA	2,800	Primitive	Closed
Big Windy Hot Springs RNA	160	Primitive	Closed
Preacher Creek	518,000	Primitive	Limited
Harrison Creek	124,000	Backcountry	Limited
Wolf Creek	497,000	Primitive	Limited
Other BLM lands	45,000	Not Applicable	Limited

^a Table 2.2

Travel Management

Travel management prescriptions apply to the Travel Management Zones listed in the table above. Each Travel Management Zone has an [OHV](#) designation of Limited or Closed. The Travel Management Zones consist of the same polygons used for Recreation Management Zones (RMZs) and the travel management decisions complement the recreation management for each zone. The following paragraphs describe the travel management prescriptions for each zone.

It is not practical to define and delineate a comprehensive travel management network for the Steese subunit in this plan, due to incomplete route data, size and complexity of the area. A map of preliminary (existing) routes ([Map 54](#)) and interim management prescriptions would be utilized (see below) until such time as a Comprehensive Travel Management Plan could be completed.

Accurate route information is needed to complete a comprehensive travel management network. This data would be acquired utilizing a combination of methods, including overflights and on-the-ground mapping with GPS. Once the signed Record of Decision for the RMP is released, additional data would be collected and a Comprehensive Travel Management Plan would be completed, through interagency and public collaboration.

Interim Travel Management Prescriptions Common to all Lands

Two transportation and right-of-way corridors would be used (Montana Creek to Preacher Creek Corridor and Great Unknown Creek Corridor).

All forms of non-motorized use would be generally allowed, excluding the use of pack goats in Dall Sheep habitat.

Aircraft use would be generally unrestricted (except in Primitive Zones), with the following provisions: Minimal clearing of rocks, downed logs, and brush would be allowed; use of gravel bars and winter snow areas would be allowed, subject to reasonable provisions to protect the values of “wild,” river segments; and construction or formal improvements of landing areas would require a permit.

New restrictions could be developed for the purposes of site protection, visitor safety, and/or enhancing recreational opportunities, experiences and outcomes.

In areas designated as Limited, subject to reasonable regulations and with a free permit, federally qualified subsistence users may be permitted to use OHVs 50 inches or less in width, and 1,000 pounds [curb weight](#) and less for subsistence purposes (ANILCA 810) during the summer. Permits would be free and widely available.

Interim Travel Management Prescriptions for all Primitive Zones

Same as Management Common to all Zones, with the following additions:

Cross-country winter use (October 15 through April 30) of snowmobiles 50 inches or less in width, and weighing 1,000 pounds [curb weight](#) and less would be allowed, except in Research Natural Areas which are closed to OHV use.

A permit or approved Plan of Operations would be required for all other [OHV](#) use.

The Pinnell Mountain National Recreation Trail is closed to motorized use.

Aircraft landings would be allowed within the Primitive Zones, with the following provisions: No clearing of vegetation would be allowed without a permit.

The use of hovercraft, airboats, and personal watercraft would not be allowed.

Interim Travel Management Prescriptions for all Semi-Primitive and Backcountry Zones

Same as Management Common to all Zones, with the following additions:

All forms of non-motorized use allowed. Motorboat use generally allowed without specific authorization consistent with ANILCA Sections 1110(a) and 811. However, airboats, hovercraft, and personal watercraft would not be permitted on non-navigable segments above the confluence of Birch Creek and an unnamed creek in T. 6N., R. 17E., Section 8. The closure procedures under 43 CFR 36.11(h) would be followed.

Cross-country winter use (October 15 through April 30) of snowmobiles 50 inches or less in width, and weighing 1,000 pounds [curb weight](#) and less would be allowed, except in Research Natural Areas which are closed to OHV use.

A permit or approved Plan of Operations would be required for all other OHV use.

Interim Travel Management Prescriptions for Other BLM Lands outside the SRMA

Same as Management Common to all Zones, with the following additions:

Cross-country winter use (October 15 through April 30) of snowmobiles 50 inches or less in width, and weighing 1,000 pounds [curb weight](#) and less would be allowed, except in Research Natural Areas which are closed to OHV use.

A permit or approved Plan of Operations would be required for all other OHV use.

Withdrawals

Retain Public Land Order 519, for a BLM Administrative site (7.11 acres) at Central, Alaska.

Retain the ANILCA withdrawal in the Steese NCA, keeping the area closed to locatable mineral entry and mineral leasing.

Outside of the Steese NCA, approximately 1,600 acres would be closed to locatable mineral entry to include any lands that are within the Birch Creek Wild and Scenic River Corridor, that are not withdrawn under ANILCA or by the Wild and Scenic Rivers Act, for the purposes of protecting the Outstandingly Remarkable Values of the river.

Outside of the Steese NCA, approximately 16,400 acres would be closed to locatable mineral entry in those parts of the Birch Creek, Pinnell Mountain Trail, and Preacher Creek RMZs that are outside of the existing ANILCA withdrawals.

Areas of Critical Environmental Concern

Approximately 927,000 acres would be designated as the Steese ACEC ([Map 65](#)) to protect current and historical calving and postcalving habitat for the Fortymile caribou herd and Dall Sheep habitat.

The ACEC would remain closed to locatable and leasable mineral entry subject to valid existing rights. A mining Plan of Operations would be required on any mining activity within an ACEC (43 [CFR](#) 3809.11).

Within a distance of one mile of designated ungulate mineral licks, limit all permitted uses and development of facilities for permitted uses, from May 10 through August 31 to activities which would not reduce ungulate use of licks.

Allowed uses would be managed to maintain caribou and Dall sheep habitat. The area is and would remain generally free of summer motorized vehicle use (May 1 through Oct. 14 sheep habitat; May 10 through July 15 remainder). (For example summer motorized vehicle use, in the few areas of the ACEC where allowed, would be restricted to a limited set of trails.) In locations where summer motorized use is currently allowed and vehicle trails are currently established, motorized vehicle use would be limited to select existing routes (or as determined through future travel management planning). Where the ACEC overlays Middle Country RMZs (and OHV trail construction and other development may be planned), manage the area to maintain its value as caribou and Dall sheep habitat as well as to meet the objectives for that RMZ. Designated trails and other developments may be established in this zone if limited in density and compatible with caribou and Dall sheep habitat.

Winter motorized use in Dall sheep habitat is currently minimal but would be monitored and, if it begins to approach a level which may result in altered distribution of Dall sheep, may be restricted in the future (through alteration of maintained trails or, if necessary, closures of limited areas and/or time periods).

Research Natural Areas

The two existing RNA designations would remain in place. Management would generally be the same as Alternative A. The RNAs would be managed to maintain a primitive recreation setting.

Wild and Scenic Rivers

The outstandingly remarkable values for Birch Creek WSR are scenic, recreation, and fish.

Under Alternative B, Big Windy Creek (14 miles) would be recommended suitable for designation as a “wild” river under the Wild and Scenic Rivers Act. The outstandingly remarkable values of Big Windy Creek are scenic, wildlife, and geologic ([Map 71](#)).

2.5. Alternative C

The following discussion includes a summary of proposed management under the Draft RMP for selected programs. A full description of Alternative C can be found in the Eastern Interior Draft Resource Management Plan and Environmental Impact Statement (BLM 2012).

In addition to the decisions listed as common to all alternatives under Section 2.3 above, the following decisions would apply to Alternative C.

Fish and Aquatic Species

The following 18 High Priority Conservation Watersheds would be managed as Riparian Conservation Areas ([Map 9](#)):

1. McLean Creek-Birch Creek (HUC # 190404020401)
2. Birch Creek (HUC # 190404020212)
3. Birch Creek (HUC # 190404020207)
4. Thomas Creek-Birch Creek (HUC # 190404020403)
5. Pitkas Bar (HUC # 190404020408)
6. Birch Creek (HUC # 190404020601)
7. Preacher Creek (HUC # 190404021005)
8. Headwaters North Fork Preacher Creek (HUC # 190404021102)
9. Birch Creek (HUC # 190404020606)
10. Upper North Fork Preacher Creek (HUC # 190404021103)
11. Ninety-eight Pup-Preacher Creek (HUC # 190404021009)
12. Middle North Fork Preacher Creek (HUC # 190404021104)
13. Lower North Fork Preacher Creek (HUC # 190404021105)
14. George Creek-Birch Creek (HUC # 190404020903)
15. Middle Preacher Creek (HUC # 190404021202)
16. Yukon River (HUC # 190404011903)
17. Yukon River (HUC # 190404011904)
18. Fourteenmile Creek-Yukon River (HUC # 190404011906)

Same as Alternative B, three watersheds would be identified as High Priority Restoration Watersheds and be managed for active restoration.

1. North Fork Birch Creek (HUC # 190404020206)
2. Harrison Creek (HUC # 190404020406)
3. Twelve-mile Creek (HUC # 190404020205)

Complete watershed assessments as necessary for management.

Wilderness Characteristics

Wilderness characteristics would be maintained on 647,000 acres (51 percent of the area with wilderness characteristics in this subunit). These lands occur within the Primitive, Semi-Primitive, and Backcountry Recreation Management Zones within the Steese [NCA](#) and upper Birch Creek Wild and Scenic River Corridor ([Map 78](#)).

Lands and Realty

Same as Alternative B except no right-of-way avoidance areas would be designated.

Leasable Minerals

Approximately 992,000 acres in the following areas would be closed to fluid and solid mineral leasing ([Map 34](#)):

- The Mount Prindle and Big Windy Hot Springs [RNAs](#)
- The Birch Creek, Rock Creek, Wolf Creek, Pinnell Mountain Trail, and Rocky Mountain Uplands RMZs
- That portion of the Clums RMZ that overlaps with the Steese [ACEC](#)
- The Bachelor Creek portion of the Preacher Creek RMZ
- The Steese ACEC
- All Riparian Conservation Areas
- Lands available for disposal (federal mining claims outside the Steese NCA and Birch Creek Wild and Scenic River Corridor)
- The BLM's Central Administrative Site

Approximately 214,000 acres would be open to leasing, subject to minor constraints. This includes that portion of the Clums RMZ that does not overlap with the Steese ACEC, and that portion of the Preacher RMZ that is not closed, and lands near Circle.

All remaining lands, approximately 71,000 acres, would be open to leasing, subject to Fluid Mineral Leasing Stipulations. This includes part of the Harrison RMZ and split estate BLM lands.

Locatable Minerals

Approximately 992,000 acres in the following areas would be closed to locatable mineral entry ([Map 33](#)):

- The Mount Prindle and Big Windy Hot Springs RNAs
- The Birch Creek, Rock Creek, Wolf Creek, Pinnell Mountain Trail, and Rocky Mountain Uplands RMZs
- That portion of the Clums RMZ that overlaps with the Steese [ACEC](#)
- The Bachelor Creek portion of the Preacher Creek RMZ
- The Steese ACEC
- All Riparian Conservation Areas
- Lands available for disposal (federal mining claims outside the Steese [NCA](#) and Birch Creek Wild and Scenic River Corridor)
- The BLM's Central Administrative Site
- Harrison Creek reclamation area

All remaining lands in the Steese Subunit, approximately 285,000 acres, would be open to locatable mineral entry. Within the Steese NCA, this includes most of the Harrison RMZ, some of the Preacher Creek RMZ, and the part of the Clums RMZ that is outside the Steese ACEC.

Recreation

Same as Alternative B, the Steese Special Recreation Management Area (SRMA) would include 1,245,000 acres of lands including the Steese NCA and Birch Creek Wild and Scenic River Corridor ([Map 55](#)). The SRMA includes approximately 15,000 acres of state inholdings. Under Alternative C, the Steese SRMA would include ten Recreation Management Zones (RMZs), the management of which are described in Appendix H of the Draft Eastern Interior Resource Management Plan and Environmental Impact Statement (BLM 2012). See Table 2.2 for a description of recreation opportunity settings that would apply to reach RMZ.

Table 2.4. Steese Recreation and Travel Management Zones, Alternative C

Name of Zone	Acres	Recreation Opportunity Setting ^a	OHV Designation
Birch Creek	99,000	Semi-Primitive	Limited
Pinnell Mountain Trail	16,000	Semi-Primitive	Limited
Mount Prindle RNA	2,800	Primitive	Closed
Big Windy Hot Springs RNA	160	Primitive	Closed
Preacher Creek	282,000	Middlecountry	Limited
Harrison Creek	114,000	Frontcountry	Limited
Wolf Creek	325,000	Semi-Primitive	Limited
Rock Creek	83,000	Semi-Primitive	Limited
Clums	170,000	Middlecountry	Limited
Rocky Mountain Uplands	154,000	Backcountry	Limited
Other BLM lands	45,000	Not Applicable	Limited

^a Table 2.2

Travel Management

Travel management prescriptions apply to the Travel Management Zones listed in Table 2.4 above. Each Travel Management Zone has an [OHV](#) designation of Limited or Closed. The Travel Management Zones consist of the same polygons used for Recreation Management Zones (RMZs) and the travel management decisions complement the recreation management for each zone. The following paragraphs describe the travel management prescriptions for each zone.

Accurate route information is needed to complete a comprehensive travel management network. This data would be acquired utilizing a combination of methods, including overflights and on-the-ground mapping with GPS. Once the signed Record of Decision for the RMP is released, additional data would be collected and a Comprehensive Travel Management Plan would be completed, through interagency and public collaboration.

A map of preliminary (existing) routes ([Map 55](#)) and interim management prescriptions would be utilized (described below) until such time as a Comprehensive Travel Management Plan could be completed.

The OHV prescriptions vary by Recreation Management Zone and are described below. Under this alternative, snowmobiles are limited to 50 inches or less in width and 1,000 pounds or less curb weight.

Interim Travel Management Prescriptions Common to all Lands

Two transportation and right-of-way corridors would be utilized (Montana Creek to Preacher Creek Corridor and Great Unknown Creek Corridor).

All forms of non-motorized use would be generally allowed.

Aircraft use would be generally unrestricted (except in Primitive Zones), with the following provisions: Minimal clearing of rocks, downed logs, and brush would be allowed; construction or formal improvement of landing areas would occur by permit only; and use of gravel bars and winter snow areas would be allowed, subject to reasonable provisions to protect the values of “wild,” river segments.

New restrictions could be developed for the purposes of site protection, visitor safety, and/or enhancing recreational opportunities, experiences and outcomes.

Interim Travel Management Prescriptions for all Primitive Zones

Same as Management Common to all Zones, with the following additions:

A permit or approved Plan of Operations would be required for all OHV use.

Aircraft landings would be allowed within the Primitive Zones, with the following provisions: No clearing of vegetation would be allowed without a permit.

The use of hovercraft, airboats, and personal watercraft would not be allowed.

Interim Travel Management Prescriptions for all Semi-Primitive and Backcountry Zones

Same as Management Common to all Zones, with the following additions:

Motorized boats would not be allowed on “wild” river segments above the confluence of Birch Creek and the South Fork, except under the provisions of 43 [CFR](#) 3809 and ANILCA Sections 1110 and 810. The closure procedures under 43 CFR 36.11(h) would be followed.

The use of hovercraft, airboats, and personal watercraft would not be allowed.

Cross-country winter use (October 15 through April 30) of snowmobiles weighing 1,000 pounds [curb weight](#) and less would be allowed.

A permit or approved Plan of Operations would be required for all other OHV use.

The Pinnell Mountain Trail is closed to motorized use.

Interim Travel Management Prescriptions for all Middlecountry, and Frontcountry Zones, and all Other BLM Lands outside the SRMA

Same as Management Common to all Zones, with the following additions:

Cross-country winter use (October 15 through April 30) of snowmobiles weighing 1,000 pounds [curb weight](#) and less would be allowed.

Summer use (May 1 through October 14) of OHVs up to 50 inches in width, and weighing 1,000 pounds curb weight and less would be allowed on existing routes only (see [Map 55](#)), except for [game retrieval](#).

Summer use (May 1 through October 14) of highway vehicles weighing up to 10,000 pounds curb weight would be allowed on existing roads only (Map 55).

A permit or approved Plan of Operations would be required for all other OHV use (new user created routes and cross-country travel off existing routes for any other purpose than game retrieval would not be allowed).

The use of hovercraft, airboats, and personal watercraft would not be allowed.

Withdrawals

Retain the ANILCA withdrawal in the Steese [NCA](#) in the following areas ([Map 33](#)), keeping approximately 955,000 acres closed to locatable mineral entry and mineral leasing:

- Big Windy Hot Springs and Mount Prindle Research Natural Areas
- Birch Creek, Pinnell Mountain Trail, Wolf Creek, Rock Creek, and Rocky Mountains Uplands

RMZs

- Steese ACEC, including that portion of the ACEC that overlaps with the Clums RMZ
- Bachelor Creek portion of the Preacher Creek RMZ
- All Riparian Conservation Areas
- 3,500 acres in Harrison Creek to avoid new mining disturbance to lands that have been reclaimed by the BLM.

Pursuant to ANILCA 402(b) recommend opening approximately 241,000 acres to locatable mineral entry and mineral leasing in the Steese NCA ([Map 33](#)).

Outside of the Steese NCA, approximately 1,600 acres would be closed to locatable mineral entry to include lands within the Birch Creek Wild and Scenic River Corridor that are not withdrawn under ANILCA or the Wild and Scenic Rivers Act, for the purposes of protecting the Outstandingly Remarkable Values of the river.

Outside of the Steese NCA, approximately 16,400 acres would be closed to locatable mineral entry in those parts of the Birch Creek, Pinnell Mountain Trail, and Rock Creek RMZs that are outside of the existing ANILCA withdrawals.

Areas of Critical Environmental Concern

Under Alternative C, approximately 460,000 acres would be designated as the Steese ACEC ([Map 66](#)) to protect current and recent historic calving and postcalving habitat for the Fortymile caribou herd and Dall sheep habitat. The ACEC would be smaller than in Alternative B, but management would be very similar.

The ACEC would be closed to locatable mineral entry and mineral leasing subject to valid existing rights. A mining Plan of Operations would be required on any mining activity within an ACEC (43 CFR 3809.11(c)(3)).

Within a distance of one mile of designated ungulate mineral licks, limit all permitted uses and development of facilities for permitted uses, from May 10 through August 31 to activities which would not reduce ungulate use of licks.

Allowed uses would be managed to maintain caribou and Dall sheep habitat. The area is and would remain generally free of summer motorized vehicle use (May 1 through Oct. 14 sheep habitat; May 10 through July 15 remainder). (For example summer motorized vehicle use, in the few areas of the ACEC where allowed (Middlecountry RMZ), would be restricted to a

limited set of trails.) In locations where summer motorized use is currently allowed and vehicle trails are currently established, motorized vehicle use would be limited to select existing routes (or as determined through future travel management planning). Where the ACEC overlays Middlecountry RMZs (and [OHV](#) trail construction and other development may be planned), manage the area to maintain its value as caribou and Dall sheep habitat as well as to meet the objectives for that RMZ. Designated trails and other developments may be established in this zone if limited in density and compatible with caribou and Dall sheep habitat.

Winter motorized use in Dall sheep habitat is currently minimal but would be monitored and, if it begins to approach a level which may result in altered distribution of Dall sheep, may be restricted in the future (through alteration of maintained trails or, if necessary, closures of limited areas and/or time periods).

Research Natural Areas

Two existing Research Natural Areas (RNAs) would be maintained: the Mount Prindle RNA (2,800 acres) and Big Windy Hot Springs RNA (160 acres). Management would be similar to Alternative A. The RNAs would be closed to off-road vehicles, mineral entry, and mineral leasing. Natural processes, including wildfire, would be allowed to continue with as little interference as possible. Hiking, hunting, and nature appreciation would be allowed.

Under this alternative primitive camping and hiking trails would be allowed in the RNAs.

Wild and Scenic Rivers

Same as Alternative B, except Big Windy Creek would not be recommended suitable for designation under the Wild and Scenic Rivers Act.

2.6. Alternative D

The following discussion includes a summary of proposed management under the Draft RMP for selected programs. A full description of Alternative D can be found in the Eastern Interior Draft Resource Management Plan and Environmental Impact Statement (BLM 2012).

In addition to the decisions listed as common to all alternatives under Section 2.3 above, the following decisions would apply to Alternative D.

Fish and Aquatic Species

The following eight High Priority Conservation Watersheds would be managed as Riparian Conservation Areas ([Map 10](#)):

1. McLean Creek-Birch Creek (HUC # 190404020401)
2. Birch Creek (HUC # 190404020212)
3. Birch Creek (HUC # 190404020207)
4. Thomas Creek-Birch Creek (HUC # 190404020403)
5. Pitkas Bar (HUC # 190404020408)
6. Birch Creek (HUC # 190404020601)
7. Birch Creek (HUC # 190404020606)
8. George Creek-Birch Creek (HUC # 190404020903)

Same as Alternative B, three watersheds would be identified as High Priority Restoration Watersheds and be managed for active restoration.

1. North Fork Birch Creek (HUC # 190404020206)
2. Harrison Creek (HUC # 190404020406)
3. Twelve-mile Creek (HUC # 190404020205)

Complete watershed assessments as necessary for management.

Wilderness Characteristics

Under Alternative D, Wilderness characteristics would be maintained on 483,000 acres (38 percent of the area with wilderness characteristics in this subunit). These lands occur within the Primitive, Semi-Primitive and Backcountry Recreation Management Zones in the Steese [NCA](#) ([Map 79](#)).

Lands and Realty

Same as Alternative B, except there would be no right-of-way avoidance areas or designated transportation corridors.

Leasable Minerals

Approximately 581,000 acres in the following areas would be closed to fluid and solid mineral leasing ([Map 36](#)):

- The Mount Prindle and Big Windy Hot Springs RNAs
- The Birch Creek, Wolf Creek, Pinnell Mountain Trail, and Rocky Mountain Uplands RMZs
- The Steese ACEC and mineral licks
- Lands available for disposal (federal mining claims outside the Steese NCA and Birch Creek Wild and Scenic River Corridor)
- The BLM's Central Administrative Site

Approximately 524,000 acres would be open to leasing, subject to minor constraints. This includes that portion of the Clums RMZ that does not overlap with the Steese ACEC and the Preacher RMZ.

All remaining lands, approximately 169,000 acres, would be open to leasing, subject to standard Leasing Stipulations. This includes the Harrison RMZ, split estate BLM lands, BLM lands near Circle, and any remaining lands.

Locatable Minerals

The same areas described above as closed to leasable minerals under this alternative, approximately 581,000 acres, would also be closed to locatable minerals ([Map 35](#)).

All remaining lands in the Steese Subunit, approximately 693,000 acres, would be open to locatable mineral entry. Within the Steese [NCA](#), this includes Harrison RMZ, Preacher Creek RMZ, and the Clums RMZ (except that portion that is within the Steese ACEC).

Recreation

Same as Alternative B, the Steese Special Recreation Management Area (SRMA) would include 1,245,000 acres of lands including the Steese NCA and Birch Creek Wild and Scenic River Corridor ([Map 56](#)). The SRMA includes approximately 15,000 acres of state inholdings. Under this Alternative, the Steese SRMA would include nine Recreation Management Zones (RMZs), the management of which are described in Appendix H of the Draft Eastern Interior Resource Management Plan and Environmental Impact Statement (BLM 2012). See Table 2.2 for a description of recreation opportunity settings that would apply to reach RMZ.

Table 2.5. Steese Recreation and Travel Management Zones, Alternative D

Name of Zone	Acres	Recreation Opportunity Setting ^a	OHV Designation
Birch Creek	87,000	Semi-Primitive	Limited
Pinnell Mountain Trail	16,000	Semi-Primitive	Limited
Mount Prindle RNA	2,800	Primitive	Closed
Big Windy Hot Springs RNA	160	Primitive	Closed
Preacher Creek	437,000	Middlecountry	Limited
Harrison Creek	124,000	Frontcountry	Limited
Wolf Creek	325,000	Backcountry	Limited
Clums	170,000	Middlecountry	Limited
Rocky Mountain Uplands	82,000	Backcountry	Limited
Other BLM Lands	45,000	Not Applicable	Limited

^a Table 2.2

Travel Management

Travel management prescriptions apply to the Travel Management Zones listed in the Table above. Each Travel Management Zone has an [OHV](#) designation of Limited or Closed. The Travel Management Zones consist of the same polygons used for Recreation Management Zones (RMZs) and the travel management decisions complement the recreation management for each zone. The following paragraphs describe the travel management prescriptions for each zone. Snowmobiles are limited to 50 inches or less in width and 1,000 pounds or less curb weight.

Accurate route information is needed to complete a comprehensive travel management network. This data would be acquired utilizing a combination of methods, including overflights and on-the-ground mapping with GPS. Once the signed Record of Decision for the RMP is released, additional data would be collected and a Comprehensive Travel Management Plan would be completed, through interagency and public collaboration.

A map of preliminary (existing) routes ([Map 56](#)) and interim management prescriptions would be utilized (described below) until such time as a Comprehensive Travel Management Plan could be completed.

Interim Travel Management Prescriptions Common to all Zones

All forms of non-motorized use would be generally allowed.

Aircraft use would be generally unrestricted (except in Primitive Zones), with the following provisions: Minimal clearing of rocks, downed logs, and brush would be allowed; construction or formal improvement of landing areas would occur by permit only; and use of gravel bars

and winter snow areas would be allowed, subject to reasonable provisions to protect the values of “wild,” river segments.

New restrictions could be developed for the purposes of site protection, visitor safety, and/or enhancing recreational opportunities, experiences and outcomes.

Interim Travel Management Prescriptions for all Primitive Zones

Same as Management Common to all Zones, with the following additions:

A permit or approved Plan of Operations would be required for all OHV use.

Aircraft landings would be allowed within the Primitive Zones, with the following provisions: No clearing of vegetation would be allowed without a permit.

The use of hovercraft, airboats, and personal watercraft would not be allowed.

Interim Travel Management Prescriptions for all Semi-Primitive and Backcountry Zones

Same as Management Common to all Zones, with the following additions:

Same as Alternative B, all forms of non-motorized use allowed. Motorboat use generally allowed without specific authorization consistent with ANILCA Sections 1110(a) and 811. However, airboats, hovercraft, and personal watercraft would not be permitted on non-navigable segments above the confluence of Birch Creek and an unnamed creek in T. 6N., R. 17E., Section 8. The closure procedures under 43 CFR 36.11(h) would be followed.

Cross-country winter use (October 15 through April 30) of snowmobiles weighing 1,000 pounds [curb weight](#) and less would be allowed.

A permit or approved Plan of Operations would be required for all other OHV use.

The Pinnell Mountain Trail is closed to motorized use.

Interim Travel Management Prescriptions for all Middlecountry, and Frontcountry Zones, and all Other BLM Lands outside the SRMA

Same as Management Common to all Zones, with the following additions:

Cross-country winter use (October 15 through April 30) of snowmobiles weighing 1,000 pounds curb weight and less would be allowed.

Cross-country summer use (May 1 through October 14) of OHVs 50 inches or less in width, and weighing 1,000 pounds curb weight and less would be allowed.

Highway vehicles weighing up to 10,000 pounds curb weight would be allowed on existing roads ([Map 56](#)).

A permit or approved Plan of Operations would be required for all other OHV use.

The use of hovercraft, airboats, and personal watercraft would not be allowed.

Withdrawals

Retain the ANILCA withdrawal in the Steese [NCA](#) in the following areas ([Map 35](#)), keeping approximately 550,000 acres closed to locatable mineral entry and mineral leasing:

- Big Windy Hot Springs and Mount Prindle Research Natural Areas
- Birch Creek, Wolf Creek, Pinnell Mountain Trail, Rock Creek, and Rocky Mountain Uplands RMZs
- Steese ACEC, including that portion of the ACEC that overlaps with the Clums RMZ

Pursuant to ANILCA 402(b), recommend opening approximately 646,000 acres to locatable mineral entry and mineral leasing in the Steese NCA in the following areas ([Map 35](#)):

- Harrison RMZ
- Preacher Creek RMZ
- Clums RMZ (except that part within the Steese ACEC).

Outside of the Steese NCA, approximately 1,600 acres would be closed to locatable mineral entry to include any lands that are within the Birch Creek Wild and Scenic River Corridor, that are not withdrawn under ANILCA or by the Wild and Scenic Rivers Act, for the purposes of protecting the Outstandingly Remarkable Values of the river.

Outside of the Steese NCA, approximately 15,200 acres would be closed to locatable mineral entry in those parts of the Birch Creek and Pinnell Mountain Trail RMZs that are outside of the existing ANILCA withdrawals.

Areas of Critical Environmental Concern

Under Alternative D the ACEC would be smaller than in Alternatives B and C, but management would be similar. Approximately 193,000 acres would be designated as the Steese ACEC ([Map 67](#)) to protect core current and Clums Fork calving habitat for the Fortymile caribou herd and Dall sheep mineral licks.

The ACEC would remain closed to locatable and leasable mineral entry subject to valid existing rights. A mining Plan of Operations would be required on any mining activity within an ACEC (43 CFR 3809.11(c)(3)).

Within a distance of one-half mile of designated ungulate mineral licks, limit all permitted uses and development of facilities for permitted uses, from May 10 through August 31 to activities which would not reduce ungulate use of licks.

Allowed uses would be managed to maintain caribou and Dall sheep habitat. The majority of the ACEC is and would remain generally free of summer motorized vehicle use (May 1 through Oct. 14 sheep habitat; May 10 through July 15 remainder). (for example summer motorized vehicle use, in the few areas of the ACEC where allowed (Middlecountry RMZ), would be restricted to a limited set of trails.) In locations where summer motorized use is currently allowed and vehicle trails are currently established, motorized vehicle use would be limited to select existing routes (or as determined through future travel management planning). Where the ACEC overlays Middlecountry RMZs (and OHV trail construction and other development may be planned), manage the area to maintain its value as caribou and Dall sheep habitat as well as to meet the objectives for that RMZ. Designated trails and other developments may be established in this zone if limited in density and compatible with caribou and Dall sheep habitat.

Winter motorized use in Dall sheep habitat is currently minimal but would be monitored and, if it begins to approach a level which may result in altered distribution of Dall sheep, may be

restricted in the future (through alteration of maintained trails or, if necessary, closures of limited areas and/or time periods).

Research Natural Areas

The two existing Research Natural Areas (RNAs) would be maintained: the Mount Prindle RNA (2,800 acres) and Big Windy Hot Springs RNA (160 acres). Management of the RNAs would be the same as Alternative C.

Wild and Scenic River

Same as Alternative C.

2.7. Required Operating Procedures and Leasing Stipulations

The BLM has developed measures to protect resources called “Required Operating Procedures” (ROPs) and “Fluid Mineral Leasing Stipulations” (Leasing Stipulations) as part of this planning process. These measures were guided by the standards and guidelines included in the Alaska Statewide Land Health Standards (IM AK 2004-023) and by the goals outlined in this RMP/EIS. The ROPs are requirements, procedures, management practices, or design features that the BLM will adopt to protect resources. Leasing Stipulations are requirements to reduce impacts to natural resources from fluid mineral exploration and development. The ROPs and Leasing Stipulations generally do not restate requirements that already exist in regulations or laws. Regulations or laws may require conditions that are more stringent than those presented in this section.

The ROPs apply to all actions, whether implemented by the BLM or authorized by the BLM and implemented by another individual, organization or agency on public land. These were based on the best information available during development of the RMP/EIS.

[ROPs](#) are common to Alternatives B, C, and D, and will be applied as appropriate for BLM actions and BLM-authorized activities including: FLPMA leases and permits; Special Recreation Permits; oil and gas activities; coal activities; renewable energy activities; mining Plans of Operation; and, authorizations for rights-of-way. For fluid mineral leasing activities, ROPs would apply in addition to the Standard Lease Terms and Leasing Stipulations. Only those ROPs concerning resources that are potentially affected by the action will be applied to permits and authorizations. The ROPs may be modified through site-specific analysis of subsequent authorizations. Modifications to ROPs may be appropriate if other measures are taken to protect resources that would result in the same or reduced impact.

Fluid Mineral Leasing Stipulations (Leasing Stipulations) are specific to fluid mineral activity, including exploration, development, and production. These Leasing Stipulations are included in a lease in addition to the Standard Lease Terms. Fluid minerals include oil and gas, geothermal, and coal bed natural gas. Leasing Stipulations constitute significant restrictions on the conduct of operations under a lease.

Additional site-specific Leasing Stipulations may be added, if determined necessary, through further analysis. Since no fluid leasing is assumed during the life of this plan, leasing may only occur following additional National Environmental Policy (NEPA) analysis. Additional stipulations may be developed at that time.

Leasing Stipulations may be excepted, modified or waived by the [AO](#) pursuant to 43 CFR 3101.1-4 and WO-IM-2008-032. The environmental analysis prepared for fluid mineral development (such as Applications for Permit to Drill or sundry notices) will address proposals to except, modify, or waive a Leasing Stipulation. To except, modify, or waive a stipulation, the environmental analysis would need to show that: 1) the circumstances or relative resource values in the area had changed following issuance of the lease; or 2) less restrictive requirements could be developed to protect the resource of concern; or 3) operations could be conducted without causing unacceptable impacts; or 4) the resource value of concern does not occur within the lease area. An exception exempts the holder of a lease from the Leasing Stipulation on a one-time basis. A modification changes the language or provisions of a Leasing Stipulation, either temporarily or for the term of the lease. A waiver permanently exempts the Leasing Stipulation.

2.7.1. Required Operating Procedures

Cultural and Paleontology

ROP C-1 For permitted activities, cultural resource protection and conservation will be consistent with 1) Sections 106, 110, and 101d of the National Historic Preservation Act (1966, as amended); 2) procedures under BLM's 1997 National Programmatic Agreement for Section 106 compliance or its successor agreement; and, 3) the 1998 Protocol for Managing Cultural Resources in Alaska between BLM-Alaska and the Alaska State Historic Preservation Officer (SHPO) or its successor agreement.

ROP C-2 Mitigation measures will be considered for all actions that may potentially affect cultural resources. If the AO determines mitigation measures are necessary to protect and conserve known cultural resources, a mitigation plan will be approved by SHPO and implemented by the AO. Mitigation plans will be reviewed as part of Section 106 consultation for National Register of Historic Places eligible or listed properties. The extent and nature of recommended mitigation will be commensurate with the significance of the cultural resource involved and the anticipated extent of the damage. Costs for mitigation will be borne by the land use applicant.

ROP C-3 The BLM will evaluate the impacts of proposed actions to known paleontological resources. If damage to known significant paleontological resources cannot be avoided, the applicant (or the BLM for internal actions) will perform scientific examination of the impacted significant paleontological resources followed by mitigation approved by the [AO](#). This may include the professional collection and analysis of significant specimens by scientists.

Fish and Aquatic Species

ROP FA-1 No road crossings will be permitted in priority fish species spawning habitat, unless no feasible alternative exists.

ROP FA-2 New, replacement, and reconstructed stream crossing structures (such as bridges and culverts) will be designed to:

- Accommodate a 100-year flood event, including bedload and debris;
- Maintain fish and aquatic organism passage;
- Maintain channel integrity;
- Accommodate mean bankfull channel widths; and,

- Incorporate adjacent reclamation (such as willow cuttings, wattles, brush layering) on the disturbed areas up and downstream of the abutments.

ROP FA-3 Application of pesticides and other toxicants will occur in a manner that does not prevent or retard attainment of desired conditions or adversely impacts priority aquatic species.

ROP FA-4 Drilling is prohibited in fish-bearing rivers and streams, as determined by the active floodplain; and fish-bearing lakes, except where the applicant can demonstrate on a site-specific basis that impacts would be minimal or it is determined by the [AO](#) that there is no feasible or prudent alternative.

ROP FA-5 When feasible, all water intakes will be screened and designed to prevent fish intake.

ROP FA-6 Reclamation plans for the rehabilitation of fish habitat as required under 43 CFR 3809.420(b)(3)(ii)(E) will focus on three objectives. Typically, these requirements would be satisfied through the development of a site-specific reclamation plan and on achievement of reclamation objectives. Bond release would be based on meeting specific measurable objectives outlined in a monitoring plan (43 CFR 3809.401(b)(3)). These objectives are:

1. Provide a stable channel form that is in balance with the surrounding landform such that channel features are maintained and the stream neither aggrades nor degrades. To achieve this, it will be necessary to design a post-mining stream channel using morphological characteristics of the pre-disturbance channel and floodplain (such as bankfull and floodprone dimensions, meander patterns, design flows and velocities, riffle-to-pool ratios, substrate particle sizes, and so on); which could be derived from field surveys of the area, remotely sensed information, and/or information from adjacent watersheds that exhibit similar characteristics as the watershed proposed for mining.
2. Provide sufficient riparian vegetation or anchored rocks/logs to effectively dissipate stream energy, prevent soil erosion, stabilize streambanks, provide essential nutrient input, and maintain water quality and floodplain function.
3. Provide instream habitat complexity similar to that of pre-disturbance levels through the use of instream structures (such as vortex rock weirs, cross-vane structures, and installation of root wads).

ROP FA-7

Within Riparian Conservation Areas and the Salmon Fork ACEC, baseline hydrological data adequate to characterize the seasonal flow patterns and discharge will be required prior to surface-disturbing activities with the potential to affect stream channel integrity; reduce riparian functioning condition; or, reduce the Watershed Condition Rating. The BLM will be available to advise operators on the exact type of information and detail needed to meet this requirement. Reclamation plans will be designed to result in rehabilitation of habitats within an accelerated timeframe (such as less than three years) and will focus on active revegetation and streambank stabilization techniques as the basis for reclamation design.

Forestry

ROP Forest-1 Timber sale authorizations will require the proper site preparation to ensure natural regeneration of timber stands.

ROP Forest-2 Timber sales will include buffers to prevent disturbance of priority fish species habitat and sedimentation into streams. Buffer widths will be dependent on harvest method, season of harvest, equipment used, slope, vegetation, and soil type. Winter operations will be considered in order to avoid the need for road building and reduce impacts to soils, vegetation, and riparian areas.

Hazmat and Waste Management

ROP Hazmat-1 Areas of activities will be left clean of all debris to minimize environmental contamination from solid waste.

ROP Hazmat-2 All solid wastes, including incinerated ash, will be removed by the permittee from public lands and disposed of within an Alaska Department of Environmental Conservation (ADEC) approved facility, unless otherwise specified. Solid waste combustibles may be incinerated in a contained and controlled manner, however, burn restrictions may apply during high-risk wildland fire seasons. Burial of solid waste is not authorized on public lands.

ROP Hazmat-3 Wastewater should be managed in accordance with Title 18 Alaska Administrative Code, Chapter 72, (18 [AAC](#) 72) Wastewater disposal. Wastewater can be defined as human wastes (sewage) and gray water (wastewater from a laundry, kitchen, sink, shower, bath or other domestic sources). Pit privies are authorized in accordance with 18 AAC 72.020(b)(c)(i), 72.030 and all applicable updates. If these standards cannot be met, then special authorization may be given by the AO. Gray water may not be released in any waterbody, without authorization under the Alaska Pollutant Discharge Elimination System (APDES). Gray water may be filtered and released to the surface so as not to cause erosion, and the grey water released must maintain compliance with the [ADEC's](#) guidance.

ROP Hazmat-4 All hazardous materials and petroleum, oil, and lubricants (POLs) will be stored in containers that are compatible to the material being stored. Containers will be labeled with the responsible party's name, contents of the container, the date the product was purchased, and the date the container was filled.

ROP Hazmat-5 Transportation and storage of POLs will be handled in a safe manner to avoid impacts to the environment and human health. The storage area for any POLs must be approved by the AO.

ROP Hazmat-6 [POLs](#) that are transferred to remote locations for operations are to be stored within a containment area constructed to contain 110 percent of the volume of the largest container. The containment area must be lined with an impermeable liner which is free of cracks or gaps, compatible with the contents to be stored, and sufficiently impervious to contain leaks or spills. The containers shall be covered to eliminate the collection of rainwater within the containment area throughout the storage period.

ROP Hazmat-7 All hazardous materials/toxic substances must be disposed of in accordance with EPA and [ADEC](#) regulations at the time of disposal.

ROP Hazmat-8 Transfer of POLs to equipment will be completed in a secure manner to minimize the possibility of contamination to the surrounding environment. At a minimum, POL-type absorbent pads will be placed under the transfer location to catch overflow or assist the operator in containing a spill. If refueling cannot be avoided within riparian habitat, 500 feet of fish-bearing waterbodies, or 100 feet of non-fish bearing waterbodies; the responsible party must

exercise caution while refueling to ensure no release of POLs into the waterbody. Equipment that has been identified as having a fluid leak must have a drip basin placed under the leak area to ensure no release to the surrounding environment or collection of rain water.

ROP Hazmat-9 Equipment maintenance by the responsible party may be allowed if it is necessary to operate equipment as described in the authorization. Equipment maintenance that has the potential to release fluids should be completed over an impermeable liner to ensure fluid migration to the environment does not occur.

ROP Hazmat-10 A Spill Prevention, Control and Countermeasure Plan (SPCC) will be written for all sites which have the potential to store 1,320 gallons or more of POLs. SPCCs will follow the requirements in 40 CFR 112 and state regulations.

ROP Hazmat-11 All spills will be contained and cleaned up in accordance with [ADEC](#) guidance as soon as the release has been identified, unless health and safety of personnel is at risk. ADEC discharge notifications and reporting requirements are outlined in [AS](#) 46.03.755 and 18 [AAC](#) 75 Article 3. The release of POLs to any waterbody must be immediately reported to ADEC, as soon as the person has knowledge of the release. The responsible party will contact the [AO](#) within 48 hours of a spill on public lands. Notifying the EPA may be required for discharges of oil, as required by 40 CFR 112.4.

Mineral Materials (Salable Minerals)

ROP MM-1 Use existing upland material sources that meet suitability and economic needs whenever possible. Using material from wetlands, lakes, and active or inactive floodplains will be avoided, unless no feasible upland alternative exists. Sales or permits for in-stream gravel extraction within an active channel will not be allowed in priority fish species spawning habitat.

ROP MM-2 When authorizing mineral material sale sites, avoid habitats critical to local fish or wildlife populations (such as fish spawning and overwintering, calving areas, or raptor nesting sites). Avoid key geomorphic features, such as the river cut banks and associated riparian zones; springs; active channels of small, single channel rivers; and, wetlands.

ROP MM-3 When authorizing mineral material sale sites, avoid priority plant species and communities. If sales are authorized in vegetated areas all overburden, vegetation mats and debris will be saved and appropriately stored for use during site reclamation to facilitate vegetative recovery.

ROP MM-4 When scraping gravel in active or inactive floodplains, maintain buffers that will constrain active channels to their original locations and configurations.

Soils

ROP Soils-1 Save all organic material in a separate area from overburden (defined in 43 CFR 23.3 (d)) for future use.

ROP Soils-2 Stockpiled soil and overburden will be spread over mine tailings and stabilized to minimize erosion. The shape of contoured tailing and overburden should approximate the shape of surrounding terrain.

ROP Soils-3 Roadways will be ditched on the uphill side. Culverts or low water crossings will be installed at suitable intervals. Spacing of drainage devices and water bars will be appropriate for the road gradient and soil erodibility of the site.

ROP Soils-4 Design roads and trails for minimal disruption of natural drainage patterns.

ROP Soils-5 Roads and trails should avoid areas with unstable or fragile soils.

ROP Soils-6 Water bars will be placed across reclaimed roads. Spacing will be dependent on road gradient, soil erodibility, and other site-specific factors.

ROP Soils-7 Snow and ice bridges will be removed, breached, or slotted before spring break-up. Ramps and bridges will be substantially free of soil and debris.

ROP Soils-8 Overland moves and heavy equipment use:

- Whenever possible, overland moves that are a part of permitted operations will occur during winter when frost and snow cover is sufficient to minimize vegetation and soil disturbance and compaction. The [AO](#) will determine the date when sufficient frost and snow cover exists and no overland moves should occur until these conditions are met.
- Design and locate winter trails and ice roads for overland moves to minimize compaction of soils and breakage, abrasion, compaction, or displacement of vegetation.
- Clearing of drifted snow is generally allowed, to the extent that vegetative ground cover is not disturbed.
- Offsets of winter trail/ice road locations may be required to avoid using the same route or track each subsequent year.
- When access is required in snow-free months, routes that utilize naturally hardened sites will be selected to avoid trail braiding and wetlands will be avoided. The permittee will employ vehicle types and methods that minimize vegetation and soil disturbance, such as use of air or water craft, utilizing existing roads or trails, or use of low ground pressure vehicles.
- The use of heavy machinery in saturated soil conditions will be limited to low ground pressure designated machinery.

Special Status Species

ROP SS-1 The planning area may contain or be identified with Special Status Species or their habitats. The BLM may require actions to avoid or minimize impacts to Special Status Species, pursuant to BLM policy and Endangered Species Act consultation.

ROP SS-2 Where practical, use may be redirected to protect Special Status Species habitat; to enhance indigenous animal population; or, to otherwise maintain public land health through avoidance of sensitive habitat. If impacts to Special Status Species (populations and habitats) cannot be avoided, the applicant (or the BLM for internal actions) will develop mitigation measures to reduce impacts.

ROP SS-3 Where populations or individual sensitive status plant species are located, take measures to protect these populations or individuals through site-specific buffers or management prescriptions. Route new roads and trails away from known sensitive plant communities, with minimum 100-foot buffers; and minimize summer cross-country [OHV](#) travel where there are sensitive plants.

Subsistence

ROP Sub-1 For externally generated actions, the BLM may require applicants to provide information to potentially affected subsistence communities regarding the timing, siting, and scope of the proposed activity and to consult with potentially affected subsistence communities regarding ways to minimize impacts to subsistence. If consultation occurs, the applicant may be required to provide documentation of their consultation efforts to the BLM.

Vegetation and Non-Native Invasive Species

ROP Veg-1 All vegetation treatments and revegetation of surface disturbance will require an approved site-specific plan designed to prevent the introduction of non-native invasive plants (NIP), and achieve desired conditions. These plans should describe current vegetative conditions: including plant community composition, structure, cover, seral stages, soil descriptions, age class distribution if applicable, and presence of [NIP](#), desired vegetative conditions (based on the ecological capability of the site), treatment methods, measures for preventing introduction and spread of NIP, and monitoring actions. Whenever possible, treatments will use native vegetation and seed. Non-native vegetation and seed may be used with specific approval from the AO, and in the following cases (1) where native species are not available in sufficient quantities; (2) where native species are incapable of maintaining or achieving the objectives; or, (3) where non-native species are essential to the functional integrity of the site. Seed must meet Alaska certification standards (11 [AAC](#) 34.020 Prohibited and Restricted Noxious Weeds) and any amendments to the existing seed laws or new seed legislation.

ROP Veg-2 Existing roads and trails will be utilized for access where feasible, rather than creating new roads and trails. All road or trail construction must include a plan for reclamation similar to a vegetation treatment plan in ROP Veg-1 above. It should also include best management practices for revegetation of cuts and fills and minimize off-site sediment transport impacts. Construction of road or trails in wetlands and floodplains will be avoided.

ROP Veg-3 Destruction of the vegetative mat and associated vegetation will not be authorized, unless the AO determines that no feasible alternative exists. In those cases the [AO](#) will require that the vegetative mat and topsoils be salvaged and appropriately stored and used for reclamation. If the AO decides that vegetative mat and topsoils cannot be salvaged, other measures to protect vegetation and soils will be considered. Plans for revegetation of surface disturbances will be clearly addressed during authorization of an action.

ROP Veg-4 Design and locate permanent facilities to minimize the development footprint.

ROP NIS-1 To eliminate, minimize, or limit the spread of noxious and non-native invasive plants, only feed and mulch (hay cubes, hay pellets, or straw, for example) certified as weed-free through the Alaska Weed-Free Forage certification program (or other programs with approval of the AO) will be authorized on BLM lands. Where Alaska certified sources are not available, locally produced forage and mulch may be used with approval from the AO. If no certified weed-free or local sources are available, other products may be used with the approval of the AO.

ROP NIS-2 To eliminate, minimize, or limit the spread of noxious and non-native invasive plants, only gravel and material certified as weed-free through the Alaska Weed-Free Gravel certification program will be authorized on BLM lands. Where weed-free gravel and materials are not available other sources may be used, with the approval of the AO.

ROP NIS-3 Fire management actions, including prescribed fire operations, wildland fire suppression and fire rehabilitation efforts, will protect burned and adjacent areas from the introduction and spread of non-native invasive plants. Protection may include the use of washing stations with a containment system.

ROP NIS-4 Employ measures outlined in the most current Alaska Aquatic Nuisance Species Management Plan (ADF&G 2002a) and the most current Interim Fire Operations Guidance to Prevent Spread of Aquatic Invasive Species (USFS 2011) to reduce the introduction and spread of Aquatic Nuisance Species.

ROP NIS-5 All actions implemented or authorized by the BLM will include measures to prevent the introduction and spread of non-native invasive species, if applicable to the site.

Visual Resource Management (VRM)

ROP VRM-1 To the extent practicable, all facilities and activities will be located away from roads (except access roads), rivers, trails, and other transportation features; using distance to reduce the facility's visual impact along travel corridors.

ROP VRM-2 All facilities and activities will be designed to meet the visual resource management class, using proper siting and location so that natural features of vegetation and landforms provide screening from travel corridors and other key observation points, and to blend with the natural surroundings.

ROP VRM-3 The modification or disturbance of landforms and vegetative cover will be minimized. Facilities and activities will be designed to reduce unnecessary disturbance.

ROP VRM-4 Facilities and activities will be designed so their shapes, sizes, colors, and textures harmonize with the scale and character by repeating the elements of line, form, color and texture of the surrounding landscape, where possible.

ROP VRM-5 In open exposed landscapes, development will be located in the opposite direction from the primary scenic views, where feasible.

Water, Riparian, and Wetland

ROP Water-1 Where instream operations are authorized, streams must be diverted using an appropriately sized bypass channel.

ROP Water-2 In mining operations and fluid mineral leasing operations, all process water and ground water seeping into an operating area must be treated appropriately (i.e., use of settling ponds) prior to re-entering the natural water system.

ROP Water-3 Settling ponds will be cleaned out and maintained at appropriate intervals to comply with state and federal water quality standards. Fine sediment captured in the settling ponds will be protected from washout and left in a stable condition at the end of each field season to prevent unnecessary or undue degradation to the environment during periods of non-operation.

ROP Water-4 Streams altered by channeling, diversion, or damming will be restored to a condition that will allow for proper functioning of the riparian zone and stream channels. Active streams will be returned to the natural water course or a new channel will be created at its lowest

energy state (valley bottom) that approximates the old natural channel in shape, gradient, and meander frequency using a stable channel design.

ROP Water-5 All permitted operations will be conducted in such a manner to not block any stream or drainage system.

ROP Water-6 Structural and vegetative treatments in riparian and wetland areas will be compatible with the capability of the site, including the system's hydrologic regime, and will contribute to maintenance or restoration of proper functioning condition.

ROP Water-7 Projects requiring the withdrawal of water will be designed to maintain sufficient quantities of surface water and contributing groundwater to support fish, wildlife, and other beneficial uses.

ROP Water-8 State-designated stream crossings will be used where possible for vehicle travel. Stream crossings are online at <http://www.habitat.adfg.alaska.gov/gpvehstreamxings.php>, noted under the General Permits Index-Authorized Vehicle Stream Crossings

ROP Water-9 Rivers and streams will be crossed by vehicles at shallow riffles from point bar to point bar, where possible.

ROP Water-10 When a stream must be crossed, the crossing will be as close to possible to a ninety degree angle to the stream. Stream crossings will be made at stable sections in the stream channel, based on Rosgen channel type evaluations.

ROP Water-11 Disturbed stream banks will be recontoured and revegetated (or other protective measures will be taken) to prevent soil erosion into adjacent waters.

Wildland Fire Management

ROP FM-1 Permittees and casual users will be held financially responsible for any actions or activity that results in a wildland fire. Costs associated with wildland fires include (but are not limited to) damage to natural or cultural resources and costs associated with any suppression action taken on the fire.

ROP FM-2 The BLM will not be held responsible for protection of permittees' structures or their personal property from wildland fire. It is the responsibility of permittees and lessees to mitigate and minimize risk to their personal property and structures from wildland fire, following the conditions in their permit.

ROP FM-3 Gas-powered equipment must be equipped with manufacturer approved and functional spark arrestors.

ROP FM-4 To avoid the potential impacts to aquatic life, the BLM prohibits the use of fire retardant, except when necessary to protect human life, permanent year-round residences, national historic land-marks, structures listed or eligible for the National Register of Historic Places, government facilities, other designated sites or structures, or high-value resources on adjacent lands. Water will be used instead of fire retardant where possible or appropriate. The use of fire suppressant foams is prohibited. Fisheries staff will be involved with decisions to deliver chemical retardant, additives to, or grey water discharge into surface waters.

ROP FM-5 The use of tracked or off-road vehicles in wildland fire suppression or management activities will be conducted in a manner that does not cause erosion, riparian area damage, water quality or fish habitat degradation, or contributes to stream channel sedimentation.

ROP FM-6 Off-road use of heavy equipment and other motorized vehicles requires approval of the AO.

ROP FM-7 Rehabilitate burned areas in accordance with the wildland fire-specific rehabilitation plan provided by the Field Office to the suppression agency.

ROP FM-8 Firelines to mineral soil will not be built in or around riparian areas; unless they are needed to protect life, property, and/or wetland resources. Use natural features as preferred firebreaks over firelines constructed to mineral soil. When possible, use hand crews to construct firelines within (or adjacent to) riparian areas.

ROP FM-9 To the extent practicable, select the location for incident bases, camps, helibases, and so on to avoid riparian areas.

Wildlife

ROP Wild-1 Design pipelines and roads to allow the free movement of wildlife and the safe, unimpeded passage of the public while participating in traditional subsistence activities. The currently accepted design practices are: 1) Above-ground pipelines will be elevated a minimum of seven feet, measured from the ground to the bottom of the pipeline at vertical support members, to facilitate human and wildlife movement under the pipe; 2) In areas where facilities or terrain may funnel caribou movement, ramps over pipelines or buried pipelines may be required; and, 3) Where feasible, maintain a minimum distance of 500 feet between above-ground pipelines and roads.

ROP Wild-2 Prior to development of large facilities, the [AO](#) may require development of an ecological land classification map of the development area. The map will integrate geomorphology, surface form, and vegetation at a scale, level of resolution, and level of positional accuracy adequate for detailed analyses of development alternatives and facility siting options. The map will be prepared in time to plan one summer season of ground-based wildlife or vegetation surveys, if deemed necessary by the AO, before approval of exact facility location and facility construction.

ROP Wild-3 Whenever possible, operations that require vegetation removal will avoid the migratory bird nesting period of May 1 to July 15 (USFWS Advisory: Recommended Time Periods for Avoiding Vegetation Clearing in Alaska to Protect Migratory Birds. September 2007). If NEPA analysis reveals that this would unacceptably compromise project objectives or logistical feasibility, potential impacts must be identified, and mitigation applied that are appropriate to the magnitude and duration of expected effects. Assessments would focus on species of concern, priority habitats, and key risk factors. Permittees/project proponents will be reminded that it is their responsibility to comply with provisions of the Migratory Bird Treaty Act.

ROP Wild-4 Employ industry accepted best management practices to prevent raptors and other birds from colliding with or being electrocuted by utility lines, alternative energy structures, towers, and poles (APLIC 2006, <http://www.aplic.org/>). If possible bury utility lines in important bird areas. Where raptors are likely to nest in human-made structures (such as cell phone towers) and such use could impede operation or maintenance of the structures or jeopardize the safety

of the raptors; equip the structures with either (1) devices engineered to discourage raptors from building nests, or (2) nesting platforms that will safely accommodate raptor nests without interfering with structure performance.

ROP Wild-5 Guy-wired apparatus, regardless of purpose, will be marked in accordance with the guidance provided by the [USFWS](#) Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers, dated September 14, 2000, or a more current or contemporaneous version of that guidance.

ROP Wild-6 To minimize the potential for disease transmission to wildlife, the use of domestic sheep, goats, alpacas, llamas, and other similar species will not be authorized in conjunction with BLM-authorized activities in Dall sheep habitat.

ROP Wild-7 Activities will not be authorized between May 15 and July 15 if the activity will interfere with caribou calving and postcalving activities or Dall sheep lambing (May 10 through June 1). However, ongoing mineral production activities will be allowed throughout these time periods. In these areas and time periods, aircraft associated with activities that require BLM authorization will maintain an altitude of at least 1,500 feet above ground level (except for takeoffs and landings), unless doing so would endanger human life or violate safe flying practices. These seasonal restrictions can be modified based on actual caribou or Dall sheep occupancy of the area.

ROP Wild-8 Within the Fortymile and White Mountains caribou calving and postcalving ranges ([Map 90](#)), mineral exploration activities will not be authorized from May 15 through July 15 unless the AO determines that caribou no longer occupy the specific area of the proposed operations. This seasonal restriction can be modified based on actual caribou occupancy of area.

ROP Wild-9 All reasonable precautions will be taken to avoid attracting wildlife to food and garbage. Garbage from all BLM-authorized activities will be removed and properly disposed to prevent habituation of wildlife or alteration of populations. The BLM may require food and garbage to be stored in bear-proof containers or by methods that make it unavailable to bears or other wildlife.

ROP Wild-10 From May 1 through August 31, avoid sustained human activity within one-quarter mile of trumpeter swan nests and rearing ponds. No activity will commence prior to May 15 and, if necessary, qualified personnel will conduct a preliminary site survey within the two-week period prior to the projected start date of the activity to determine trumpeter swan presence. If present, short-term activities will be delayed until after nesting trumpeter swans and cygnets have left the habitat. Exceptions may be granted by the AO, following NEPA analysis, if no feasible alternative exists.

ROPs Specific to Areas of Critical Environmental Concern

The following four ROPs apply to the Steese ACEC.

ROP Wild-11² Applicants proposing to conduct surface-disturbing activities or other intensive activities will, at the determination of the AO, be required to submit an approved plan (Caribou and Dall Sheep Impact Assessment and Mitigation Plan) describing methods to minimize impacts to caribou and Dall sheep and their habitat. This plan must describe the proposed project, the design and mitigation alternatives considered, the amount and quality of habitat to be affected, the

² Applicable to the Steese, Fortymile, and White Mountains ACECs and the White Mountains Wildlife Conservation Area.

mitigation and restoration to be applied, the residual impacts predicted, and the monitoring to be undertaken to confirm mitigation success.

ROP Wild-12² Permanent roads will generally not be allowed (although long-term temporary roads may be) and roads will generally not be open to the public. Roads will be of the lowest practical profile. Road use may be restricted during caribou calving, postcalving, or Dall sheep lambing. Road construction will not be permitted if other means of access is practical (such as aircraft or winter ice-road). Facilities within ACECs that require year-round access will be located in forested areas where practical. Permitted aircraft will follow a minimum flight level of 1,500 feet above ground level, except at landing and takeoff and when it would compromise safety. The AO may allow exceptions to these access requirements where impacts to caribou and Dall sheep are adequately minimized and where other resource considerations are of higher priority.

ROP Wild-13² To minimize habitat loss, the surface disturbance and the aerial extent of facilities will be minimized. The amount of cumulative vegetation clearing and surface disturbance will be minimized through an integrated review of planned disturbance between all land users.

ROP Wild-14² Reclamation and revegetation of disturbed areas will be required to meet performance standards set in site-specific reclamation plans, such as a required plant cover (percent) within a certain number of years before a performance bond is released.

Priority Raptor ROPs

Priority raptor species are peregrine falcon, gyrfalcon, bald eagle, and golden eagle. Nesting seasons are defined as: From April 15 through August 15 for bald eagles, golden eagles, and peregrine falcons; and, from March 15 through July 20 for gyrfalcons. Nesting season dates apply to ROP Wild-16 through ROP Wild-20.

ROP Wild-15 To minimize the direct loss of priority raptor foraging habitat, all reasonable and practicable efforts will be made to locate permanent facilities as far from priority raptor nests as feasible and to minimize habitat loss to the extent feasible. Of particular concern for avoidance are ponds, lakes, streams, wetlands, and riparian habitats.

ROP Wild-16 To minimize disturbance to nesting priority raptors, aircraft authorized by the BLM are required to maintain an altitude of at least 1,500 feet above ground level when within one-half mile of priority raptor nesting sites during nesting season. This protection is not intended to restrict flights necessary to conduct wildlife surveys satisfying wildlife data collection requirements.

ROP Wild-17 To reduce disturbance to nesting priority raptors, campsites authorized by the BLM, including short- and long-term camps and agency work camps, must be located at least 500 meters from any known priority raptor nest site during the nesting season. Exceptions may be granted by the AO if no feasible alternative exists.

ROP Wild-18 Authorized human activity within 500 meters of priority raptor nest sites will be minimized during the nesting season. The cumulative number of authorized visits (defined as each day in which work is done within 500 meters of a nest site) to any nest site per nesting season, by all authorized users, must be limited to three visits per nest site. Exceptions may be granted by the AO if no other feasible alternative exists.

ROP Wild-19 To reduce disturbance impacts to priority raptors, motorized ground-vehicle use must be minimized within one mile of any known priority raptor nest during the nesting season.

Such use is prohibited within one-half mile of nests during the nesting season, unless an exception is granted by the AO.

ROP Wild-20 Construction within one-half mile of known priority raptor nests is prohibited during the nesting season. No facilities that will be used or accessed during the nesting period (including the area of associated human activity by facility users) can be constructed within one-half mile of known priority raptor nesting sites. Exceptions may be granted by the AO if no feasible alternative exists.

2.7.2. Fluid Mineral Leasing Stipulations

The following leasing stipulations would be applied to any lease sales in the Eastern Interior Planning Area.

Table 2.6. Fluid Mineral Leasing Stipulations

Stipulation	Areas where Stipulations Apply	Exception, Modification, Waiver
Goal: Prevent avoidable damage from proposed land uses to habitats supporting Special Status Species animals and plants, and their habitats.		
Stipulation 1: The lease area may now or hereafter contain Special Status Species or their habitats. BLM may require applicants to avoid or minimize impacts to these species pursuant to BLM policy and Endangered Species Act consultation.	Areas open to fluid mineral leasing	Exception: None Modification: None Waiver: None
Goal: When authorizing fluid leasable minerals actions ensure that goals to protect other resource values in the planning area are met to the extent possible.		
Stipulation 2: Upon abandonment or expiration of the lease, all fluid mineral-related facilities will be removed and sites rehabilitated to as near the original condition as practicable, subject to the review of the AO .	Areas open to fluid mineral leasing	Exception: The AO determines that it is in the best interest of the public to retain some or all facilities. Modification: None Waiver: None
Stipulation 3: Exploratory drilling will be limited to temporary facilities such as ice pads, ice roads, ice airstrips, and temporary platforms.	Areas open to fluid mineral leasing	Exception: The AO may grant an exception if the lessee demonstrates that construction of permanent facilities such as gravel airstrips, storage pads, and connecting roads is environmentally preferable or that exploring from temporary facilities is not practical or economically feasible. Modification: None Waiver: None
Goal: Maintain and protect aquatic habitat to support populations of well-distributed native fish populations.		

Stipulation	Areas where Stipulations Apply	Exception, Modification, Waiver
Stipulation 4: Drilling is prohibited in fish-bearing lake and rivers and streams within the active floodplain.	Fish-bearing rivers, streams, and lakes	<p>Exception: The AO may grant an exception if the lessee demonstrates that impacts would be minimal or there is no feasible or prudent alternative.</p> <p>Modification: None</p> <p>Waiver: None</p>
Goal: Minimize impacts to wildlife species from BLM-authorized activities.		
Stipulation 5: No exploration activities from May 10 through June 1 in Dall sheep habitats and from May 15 through July 15 in caribou calving/postcalving habitat. Construction of production facilities and production activities may occur (no work over rigs).	Identified caribou calving/postcalving and Dall sheep habitats	<p>Exception: The AO may grant an exception if the lessee demonstrates that calving caribou or Dall sheep are not currently using the area.</p> <p>Modification: Season may be shortened or extended based on actual occupancy of the area.</p> <p>Waiver: This stipulation may be waived if caribou migratory patterns change and the areas are no longer used for calving.</p>
Stipulation 6: No exploration or development activities within 500 meters of active priority raptor nests from April 15 through August 15 (only March 15 through July 20 for gyrfalcon nests).	Areas open to fluid mineral leasing	<p>Exception: The AO may grant an exception if the lessee demonstrates that impacts would be minimal or there is no feasible or prudent alternative.</p> <p>Modification: Season may be adjusted based on actual nest occupancy.</p> <p>Waiver: None</p>
Stipulation 7: No motorized ground-vehicle use or facility construction within a half mile of any known priority raptor nests from April 15 through August 15 (only March 15 through July 20 for gyrfalcon nests).	Areas open to fluid mineral leasing	<p>Exception: The AO may grant an exception if the lessee demonstrates that impacts would be minimal or there is no feasible or prudent alternative.</p> <p>Modification: Season may be adjusted based on actual nest occupancy.</p> <p>Waiver: None</p>

2.8. Comparison of Impacts

The following table summarizes the impacts that could occur in the Steese Subunit due to implementation of the RMP. This table only addresses impacts from the programs discussed in this summary document. For a full disclosure of impacts, see the Eastern Interior Draft Resource Management Plan and Environmental Impact Statement (2012).

Table 2.7. Steese Subunit: Comparison of Impacts

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
Fish and Aquatic Species	<p>Effects from mining, recreation, travel management and special designations could occur. Three species of salmon and numerous resident species could be affected. Effects from recreation would be minimal to minor under all alternatives. The Birch Creek WSR Corridor is closed to mineral entry, benefitting high-value fish resources. Increased resource protection within the Mount Prindle and Big Windy Hot Springs RNAs could be beneficial to fish and aquatic resources. Invasive species can adversely effect fish and aquatic resources through habitat change, predation, parasitic behavior, disease, competition, and hybridization. Initially, adverse impacts would be localized since the distribution of invasive species would be highly localized; if invasive species became widely established, however, major adverse impacts would be expected. The initial introduction of aquatic invasive species into the planning area would have adverse impacts at the local level; however as time progressed long-term, major adverse impacts would be expected as invasives spread across the planning area. Measures proposed in the RMP aimed at limiting the introduction and spread of invasive species would benefit fish and aquatic resources. Wildland fire directly and indirectly impacts fish populations and their prey through increased siltation, and changes in water quality and temperature. Wildland fire can change the nutrient input to water systems and changes to permafrost status can lead to altered hydrology. Fish will generally re-invade burned areas rapidly where movement is not limited by barriers. Fish population recovery generally tracks the increase in primary and secondary production that occurs in the early postfire period. Where sediment is continually delivered into the stream, there could be short-term negative effects on fish and macro-invertebrate communities.</p>			
	<p>No Riparian Conservation Areas (RCAs) are identified. Few surface-disturbing activities are anticipated in riparian areas.</p>	<p>21 RCAs would provide additional protection to high priority fish habitat. Effects would be minimal due to lack of surface-disturbing activities.</p>	<p>18 RCAs would provide additional protection to high priority fish habitat. Effects would be minimal due to lack of surface-disturbing activities.</p>	<p>Eight RCAs would provide additional protection to high priority fish habitats. The protective effect would be limited as most RCAs overlay Birch Creek WSR which is closed to mining.</p>
	<p>No seismic exploration would occur.</p>			
	<p>Mining could occur on 7,000 acres of existing mining claims (5,000 acres in the Steese NCA), covering 106 stream miles. 370 acres (6 stream miles) could be directly disturbed by placer mining. Impacts from suction dredging would be localized and may be short or long-term. Impacts from mining would be low to moderate, but could have long-term effects resulting in an overall decrease in</p>	<p>Effects from locatable minerals in the Steese NCA would be similar to Alternative A except that higher reclamation standards and ROPs would apply. Mining could occur on 45,000 acres (165 stream miles). 23 (fourteen percent) of these 165 stream miles occur in RCAs. Approximately 500 acres (seven stream miles) could be directly disturbed from placer mining. Impacts would likely be minor as only nine percent of the stream miles are open to mining and only one mile falls</p>	<p>Mining could occur on 285,000 acres (492 stream miles), including parts of the Steese NCA. 23 (fourteen percent) of these 165 stream miles occur in RCAs. Approximately 770 acres (11 stream miles) could be directly disturbed from placer mining. Opening 250 stream miles to mining in medium to high mineral potential areas and the absence of higher reclamation standards on ninety-five percent of these streams, would result in readily detectable and</p>	<p>Mining could occur on 705,000 acres (988 stream miles), including part of the Steese NCA. Of these 988 stream miles, six percent occur in RCAs. Approximately 1,040 acres (15 stream miles) could be directly disturbed from placer mining. Opening 413 stream miles in medium to high mineral potential areas, would increase the potential for impacts. Higher reclamation standards would only apply on six percent of these streams. 45 miles of anadromous</p>

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
	<p>levels of fish populations at the local level. This alternative likely provide the greatest protection due to the small amount of potential disturbance. Benefits from the higher reclamation standards and ROPs designed reduce recovery time may not occur. Alternative A may have more adverse long-term impacts than other alternatives. Winter cross-country OHV travel is allowed on ninety-nine percent of the subunit. Six percent of the subunit is closed to summer OHV use. Unauthorized and unmanaged proliferation of trails would result in increased erosion and sediment impacts. There could be localized impacts on fish and aquatic habitats.</p>	<p>in a high mineral potential area. Limitations on summer use of OHVs over ninety-nine percent of the subunit would generally benefit fish and aquatic resources because of reduced potential for erosion and sedimentation associated with trail proliferation.</p>	<p>long-term (10 to 20 years) adverse impacts. This could result in a downward trend of fish populations at the watershed scale. Alternative C would provide less protection than Alternatives A and B, but more protection than Alternative D. Fifty-two percent of the subunit would be closed to summer OHV use, benefitting fish and aquatic resources. In the remaining areas, summer OHV use would be limited to existing routes. Impacts to fish and aquatic resources would be highly localized and associated with route erosion and stream crossings. Impacts would be minor and generally short-term.</p>	<p>stream in Preacher Creek basin could be directly impacted by placer mining. Localized loss of riparian and streambank vegetation and creation of areas with channel instability could be widespread, creating a matrix of degraded habitats interspersed with “islands” of intact riparian areas. These islands would likely exhibit degraded pool and spawning habitat quality resulting from catchment erosion and downstream sedimentation. There could be significant impacts to both Chinook salmon spawning habitat and the high quality resident fish habitat found within the Preacher Creek drainage. Effects from Travel Management would be similar to, but more beneficial than Alternative A, as forty percent of the subunit would be closed to summer OHV use.</p>
	<p>Management of Birch Creek WSR would benefit high-value fish resources. Fish and aquatic resource values are not high within the Mount Prindle and Big Windy Hot Springs RNAs, however increased resource protection in these areas could be beneficial.</p>	<p>Effects from Birch Creek WSR and the RNAs would be the same as Alternative A. The Steese ACEC (927,000 acres) would provide additional protection to fish and aquatic habitat outside of the Birch Creek WSR Corridor. Big Windy Creek would be recommended suitable for designation as a WSR, providing additional protection to low-value fish and aquatic resources.</p>	<p>Effects from Birch Creek WSR and the RNAs would be the same as Alternative A. Proposed management of a smaller Steese ACEC (460,000 acres) would provide additional protection to fish and aquatic habitat.</p>	<p>Effects from Birch Creek WSR and the RNAs would be the same as Alternative A. The Steese ACEC (193,000 acres) would provide less protection to fish and aquatic habitats because the ACEC is smaller and includes less fish habitat.</p>

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
Vegetation	<p>Management to maintain soil, water quality, fish habitat, Special Status Species, visual resources, wilderness characteristics, subsistence, and special designations will generally benefit natural diversity of vegetative communities. The effects of leasable minerals, salable minerals, lands and realty, and renewable energy is predicted to be small due to the limited activity expected. The ROPs would reduce potential impacts to vegetative communities in Alternatives B, C, and D. RCAs would reduce impacts to riparian vegetation where they are identified. The potential impact of introduction and spread of non-native plants (NIP) is large and most often occurs in conjunction with surface-disturbing activities or use of motorized vehicles. Requirements for weed-free hay, mulch, seed, and gravel sources would reduce potential for establishment of NIP. Cross-country OHV use, especially in recently burned areas, may represent the largest potential impact to vegetative communities, through the spread of NIP. Wildland fire is the major determinant of vegetative communities. A natural fire regime is considered desirable and is maintained for most of the subunit through the Limited Management Option. Areas near the road system and communities are typically within Modified, Full, or Critical fire management options and fire suppression will artificially modify the fire regime in these areas. Greater public presence and establishment of human infrastructure, which could result from decisions in this plan, often leads to greater fire suppression which can cause deviations away from normal fire regime. Effects to vegetation of a longer fire return interval include older stand ages, changes in community composition, trend towards less productivity and growth, and larger areas of similar vegetation. Climate change is predicted to result in major changes to vegetation in the next 30 years as fire frequency increases. Activities which facilitate the spread of NIP will compound the effects of climate change and the regional increase in prevalence of NIP.</p>			
	<p>Impacts from locatable minerals include both direct loss of habitat and changes in human use due to improved access. Placer mining disturbs riparian and near-stream vegetation and the stream channel which may result in downstream effects on riparian vegetation. Mining typically changes the vegetation from late seral to early seral communities. Recovery of habitats is highly variable and may be very slow. Aufeis formation can result in erosion and prevent or slow vegetation growth. It may require 50 years or more (following end of mining) for riparian habitat quality to approach pre-mining conditions. Lode mining disturbs upland vegetation, results in permanent change to the landscape, and typically requires road access. In addition to direct loss of habitat, roads can cause changes to vegetation through melting permafrost, obstruction or change in drainage, aufeis formation, erosion and deposition into streams, and dust deposition on adjacent vegetation. NIP are frequently spread along roadways. Roads facilitate access to areas which may previously have been remote and inaccessible, resulting in indirect impacts.</p>			
	<p>Effects from mining would be limited to 7,000 acres of existing mining claims.</p>	<p>45,000 acres would be open to locatable minerals. Mining could occur on new claims in these areas but is unlikely. Effects would be higher than Alternative A.</p>	<p>285,000 acres would be open to locatable minerals. Mining could occur on new claims in these areas. Effects would be higher than Alternatives A and B.</p>	<p>693,000 acres would be open to locatable minerals. Mining could occur on new claims in these areas. Effects would be highest in this alternative.</p>

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
Vegetation	Recreational facilities impact vegetation directly from loss of habitat, and indirectly through visitor use. High levels of visitors can impact vegetation through trampling. Visitors using motorized vehicles typically have larger impacts to vegetation, both in area impacted and degree of modification. Effects of non-motorized recreation typically occurs in only limited areas of concentrated use. Impacts to vegetation from snowmobiles would be low and noticeable impacts limited to local areas of heavy use. Summer use of OHVs both on and off trails can affect the vegetation including: crushing and breakage of shrubs, exposure of mineral soil, changes in drainage patterns, compression of the organic layer, and increased thaw depth. In permafrost soils, this can lead to thermokarsting and erosion. In user-created trails, vegetative cover and composition may change or vegetation may be totally lost in the trail tread. Trails with exposed soil (whether managed or user-created) serve as routes of spread for NIP.			
	Effects to vegetation from OHV use would be the highest as yearlong cross-country use of OHVs 1,500 pounds or less is allowed on 1,075,000 acres. Only 73,000 acres is closed to summer OHV use.	Effects from OHV use would be the lowest as summer OHV use would not be allowed.	Effects from OHV use would be somewhat higher than Alternative B. Only 677,000 acres would be closed to summer OHV use. On the remaining lands, summer OHV use would be limited to existing routes, except to retrieve game.	Effects from OHV use would be similar to Alternative A. Only 54,000 acres would be closed to summer OHV use. Cross-country use by vehicles weighing 1,500 pounds or less could occur on 2,023,000 acres.
Wilderness Characteristics	Not Addressed	Wilderness characteristics would be protected on ninety-four percent of the subunit. Lack of activity and other management actions would indirectly protect wilderness characteristics on the remaining 6 percent of the subunit. Naturalness may be impacted over the short-term in localized areas.	Wilderness characteristics would be protected on fifty-one percent of the subunit. Low levels of activity and recreation settings would indirectly protect wilderness characteristics on most of the remainder. Naturalness may be impacted over the short-term in localized areas.	Wilderness characteristics would be protected on thirty-eight percent of the subunit. Low levels of activity and recreation settings would indirectly protect wilderness characteristics on most of the remainder. Naturalness may be impacted over the short-term in localized areas.
Wildlife	Management to maintain soil and water resources, Special Status Species, vegetative communities, visual resources, wilderness characteristics, and subsistence will generally benefit wildlife and their habitat, as would management of NIP. The effects of solid leasable minerals, salable minerals, lands and realty, and renewable energy are anticipated to be small due to the limited activity expected. The ROPs (Section 2.7) will apply in Alternatives B, C, and D; and, would reduce potential impacts to habitat and many wildlife species. Measures to minimize impacts to fish habitat will generally benefit wildlife and habitat because of the high value of riparian habitats to many species. RCAs and High Priority Restoration Watersheds will reduce impacts to riparian vegetation, especially stream bank vegetation, resulting in lesser impacts to wildlife in general, and more specifically to BLM-Alaska sensitive species and Bird Species of Conservation Concern. NIP have the potential for impacts to wildlife due to alteration of habitat. Introduction and spread of non-native animal species is also a potential impact. All action alternatives include measures to monitor and control the spread of invasive species. These measures will reduce impacts, but some increased abundance of NIP are inevitable and loss of habitat for native wildlife species can be expected. Roads and trails (and associated vehicle use) are recognized as the primary avenues of spread of NIP. Alternatives which minimize creation of roads and trails, and off-trail summer use of OHVs will reduce potential spread and impacts of NIP. Treatment of NIP infestations may impact wildlife habitats, but generally less than continuation and spread of NIP at the site.			

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
	Not Addressed	A ROP which does not allow use of domestic sheep, goats, or llamas as pack animals by BLM-permittees (such as commercial outfitters) would reduce the potential for disease transmission to Dall sheep. Members of the public, however, could use these pack animals (except in Alternative B) and potential impacts to Dall sheep are considerable.		
	There would be no effects from leasable minerals as the entire subunit is closed to leasing.	45,000 acres near Circle would be open to leasable minerals. Winter seismic exploration could create local displacement of wildlife and some fragmentation of habitat.	285,000 acres would be open to leasable minerals. Effects from exploration would be similar to Alternative B, except that more lands are open to exploration.	693,000 acres would be open. Effects from seismic exploration would be similar to Alternative B, except more sensitive habitats are open, including some caribou calving and Dall sheep habitat.
	The subunit is closed to locatable minerals. However, mining is occurring on existing mining claims (7,000 acres). Impacts include localized disturbance of wildlife and habitats by road, trails, and mining operations. The period of recovery of riparian and aquatic habitats is typically long. Roads and trails result in increased off-trail OHV use by recreation users. The BLM lands historically used by the Fortymile caribou to access calving habitat north of the Steese Highway would be closed to locatable minerals, increasing the likelihood of reestablishment of caribou migration to calving habitat in the North Steese and White Mountains.	Only 45,000 acres near Circle would be open to locatable minerals. Caribou calving/postcalving and Dall sheep habitats would be closed. Impacts would be similar to Alternative A, except near Circle. Additional access could be developed to reach claims. Little additional mining is expected. However, mineral price increases or changes in access could result in greater mining activity than anticipated.	285,000 acres would be open. Dall sheep habitat and most current and historical caribou calving/postcalving habitat would be closed, minimizing impacts to sheep and caribou. Most known priority raptor nest sites are in closed areas. Substantial increases in placer mining activity are predicted, increasing localized disturbance to riparian and aquatic habitats and the miles of roads and trails needed for access. Roads and trails result in increased off-trail OHV use, however summer OHV use will be limited to existing trails in this alternative. Major portions of migration habitats are open to mineral location and leasing. Increased mining activity and density of roads could reduce the likelihood of reestablishment of caribou migration to calving grounds north of the Steese Highway, resulting in an effective loss of habitat.	693,000 acres would be open. In addition to the sensitive habitats opened in Alternative C, this alternative would open additional caribou habitat and a corridor used by Dall sheep to access a mineral lick. Use of this corridor by Dall sheep could be impaired by mining or road activity. Impacts to riparian habitats and those due to increased access would be similar to Alternative C but would affect a larger area and may be more extensive as cross-country OHV use is allowed. Additionally, all most all of the area historically used by Fortymile caribou to access calving habitat north of the Steese Highway would be open to mineral entry. Relative to Alternative C, this alternative would provide less protection to north Steese NCA caribou calving/postcalving habitats and less assurance that migration of Fortymile caribou to these habitats will remain largely unimpeded.

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
	<p>Recreation affects wildlife primarily along the Pinnell Mountain Trail, Birch Creek, Mount Prindle, and in areas of OHV use. Wildlife is displaced, at least temporarily, by recreational activities. Recreational OHV users are more abundant, are traveling further and expanding the zone of impact. Motor boat use on lower Birch Creek results in wildlife disturbance, including potential impacts to a few nesting bald eagles. Disturbance of nesting raptors along Birch Creek can potentially lead to nest abandonment or reduced survival of nestlings.</p>	<p>The Steese SRMA would be managed as Primitive, Semi-Primitive, or Backcountry. The level of use expected would have very small impacts to wildlife. Most of the area would be in a Primitive classification (1,034,000 acres) and would prohibit OHV use, including snowmobiles not used for subsistence purposes. This would largely eliminate potential impacts from recreational motorized vehicle use. Disturbance of raptors and temporary displacement of wildlife could still occur from non-motorized activities, but would be less likely.</p>	<p>Impacts would be similar to Alternative B but more extensive. More lands are designated as Frontcountry and Middlecountry than in Alternative B, resulting in more facilities and greater recreational use, including motorized use. However, most key wildlife habitats are in Primitive, Semi-Primitive, or Backcountry RMZs, with the exception of much of the caribou migration corridor.</p>	<p>The Alternative C Semi-Primitive RMZ adjacent to upper Birch Creek WSR Corridor is changed to Middlecountry or Frontcountry in Alternative D, potentially increasing recreational impacts to migrating caribou. The allowance of cross-country OHV use will compound the impacts in areas where allowed (Middlecountry and Frontcountry RMZs). Dall sheep use of a mineral lick on Preacher Creek (in the Preacher Creek RMZ) could potentially be affected by allowed cross-country OHV use, if that level of use increases.</p>
	<p>Most of the subunit is open to cross-country summer OHV travel. The area south of the Birch Creek Corridor, although open to OHVs, has received very little use due to the inability to legally cross Birch Creek and the remoteness. If access were developed to the unit from the south, OHV use would likely occur in that area. Development of motorized access would expand the intensity and area of OHV use. Snowmobile use could potentially impact wildlife, especially caribou winter</p>	<p>Almost the entire subunit is closed to summer OHV use. No effects from recreational summer motorized use would occur, except on BLM lands near Circle and on Birch Creek. Winter OHV use would be allowed on ninety-nine percent of the subunit. Extensive off-trail use could impact wildlife, especially caribou winter habitats that are sparsely or non-forested. However, in action Alternatives, this use would be monitored and adjusted to minimize impacts to caribou and Dall sheep.</p>	<p>The potential for impacts to wildlife from summer motorized vehicle use will be much reduced in this alternative relative to Alternative A, due to reduced area where OHVs are allowed and restricting of use to existing routes (forty-eight percent is open to summer OHV routes). Similar to Alternatives A and B, ninety-nine percent of the subunit would be open for snowmobile use and impacts would be the same as Alternative B.</p>	<p>Potential for impacts from summer OHV use are greater than Alternative C due to increased area in which summer OHVs are allowed (sixty-one percent of subunit) and allowance of cross-country use. Impacts would be very similar to Alternative A. Alternative D includes the Wolf Creek Semi-Primitive RMZ, which is closed to summer OHV use, while Alternative A allows such use in that area; however the area is essentially inaccessible. Extensive off-trail use by snowmobiles could potentially impact caribou winter habitats. There are no specific</p>

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
	habitats that are sparsely or non-forested.			management provisions for monitoring this use and adjusting management.
	Two RNAs are designated. No camping is allowed in the RNAs, limiting human activity and disturbance of Dall sheep, gyrfalcon, and other species.	Effects from RNAs would be the same as Alternative A. The Steese ACEC (927,000 acres) would be designated and managed to maintain caribou and sheep habitat quality. Because of other decisions in Alternative B, ACEC designation would have little additional effect. Big Windy Creek would be recommended suitable for designation as a “wild” river. Designation would have little effect on wildlife due to other management constraints in the area. However, WSR designation would be more permanent than provisions in this RMP.	Allowing primitive camping in the RNAs, may result in slightly greater disturbance of Dall sheep, gyrfalcon, and other species. Relative to Alternative B, this alternative eliminates large areas (467,000 acres) of historical Fortymile caribou calving and migration habitat from the Steese ACEC which could result in reduced potential for future use of these habitats by caribou. The ACEC would result in significant modification of future management in portions of the Clums Fork drainage, an area with many existing mining claims. ACEC designation would limit motorized use and not allow new mining claims. The Clums Fork calving area was used by Fortymile caribou in the 1960s and 1970s. In Alternative A this area was closed to mineral entry to protect caribou calving habitat. The ACEC designation will maintain the mineral closure, and minimize motorized use at a level which will maintain the value of the habitat for caribou.	Effects from RNAs would be the same as Alternative C. A smaller Steese ACEC (193,000 acres) would be less protective of caribou and Dall sheep habitat. The ACEC would be closed to mineral entry, location, and leasing. However, important sheep and caribou habitats outside the ACEC would be opened to mining and summer cross-country OHV use. Although activities in these areas are currently not heavy, the combined effects of opening them to mineral location, entry, and leasing and allowance of cross-country summer OHV use may result in degradation of wildlife habitat in these areas, including reduced use of the Preacher Creek Mineral lick by Dall sheep, reduced likelihood of reestablishing migration to White Mountains calving range by the Fortymile Herd, and reduced calving habitat quality in these areas.
Lands and Realty	The primary effect would be the potential for requiring relocation, redesign, or denial of realty authorizations to protect other resources.			

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
Leasable Minerals	The subunit is withdrawn from the mineral leasing laws. This would have minimal effect due to the limited resources on BLM lands and lack of industry interest.	45,000 acres would be opened to the mineral leasing laws, allowing for exploration of high potential oil and gas lands near Circle. This decision would have little effect due to the lack of infrastructure and low development potential of these lands.	285,000 acres would be opened to the mineral leasing laws. Slightly more of the high potential oil and gas lands would be available for exploration. No interest in exploration, however, is anticipated. Effects would be essentially the same as Alternative B.	693,000 acres would be opened to the mineral leasing laws. Effects would be the same as Alternatives B and C.
Locatable Minerals	Potential for exploration and development would be limited to 7,000 acres of existing mining claims. Mining activity would likely decrease as there would be no opportunities to stake new federal claims to offset claim attrition.	Closure of 1,231,000 acres to mineral entry, including some high potential lands, would constrain extraction of the minerals and their benefits to society would remain unavailable for the foreseeable future. Although 45,000 acres of low potential mineral lands would be opened to mineral location, mining opportunity would still be greatly limited.	992,000 acres would be closed. The minerals in closed areas would remain unavailable for the foreseeable future. Potential for mining would increase as 285,000 acres would be opened to mineral location, including some high potential lands with road and trail access.	583,000 acres would be closed. Potential for mining would increase as 693,000 acres would be opened to mineral location, including high potential areas in the North Steese.
Recreation	Land use authorizations could result in additional development that may adversely affect those areas managed for Primitive or Semi-Primitive recreation experiences. Land use authorizations could also result in increased access opportunities. The Fortymile Subunit would continue to be managed for a variety of recreational opportunities. Existing facilities would be maintained. These actions would directly affect recreation management by ensuring that land- and water-based recreational opportunities continue to exist in both designated and undesignated areas. Measures to protect natural resources would generally benefit recreation by enhancing scenic quality and opportunities for fish and wildlife related recreation. The protection and interpretation of cultural sites would provide beneficial experiences for those seeking historical and cultural appreciation opportunities. Visual Resource Management would have long-term, beneficial impacts on recreational activities that include scenic qualities as part of the experience. Negative effects may occur due to restrictions on trail, site, or facility development to avoid sensitive areas, protect viewsheds, or to prevent resource degradation. Resource development activities such as timber harvest, land use authorizations, gravel pits, or mining could result in increased trails, potential dislocation of wildlife and alteration of scenic viewsheds. Gravel pits may also provide parking and motorized free-play areas. These could impact recreation resources and experiences of naturalness and closeness to nature in Semi-Primitive and Backcountry Zones. In Middlecountry and Frontcountry Zones, impacts would be less due to the more developed nature of these settings. The Steese NCA and Birch Creek WSR would continue to be managed to provide a range of recreation opportunities. Birch Creek would continue to be managed to enhance primitive recreational float-boat experiences. Existing facilities would be maintained, ensuring that recreational opportunities continue to exist. Land use authorizations could indirectly and directly impact recreation resources and experiences of naturalness and escape from crowds and pressures of life, in Primitive or Semi-Primitive, or Backcountry Zones.			

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
	There is no defined management for lands with wilderness characteristics.	Maintenance of wilderness characteristics on 1,199,000 acres would protect Primitive and Semi-Primitive recreation settings and enhance related recreational activities.	Maintenance of wilderness characteristics on 647,000 acres would protect Primitive and Semi-Primitive recreation settings and enhance related recreational activities; development of recreational facilities may be constrained on 154,000 acres of Backcountry.	Maintenance of wilderness characteristics on 483,000 acres would protect Primitive and Semi-Primitive recreation settings and enhance related recreational activities; development of recreational facilities may be constrained on 325,000 acres of Backcountry.
	Four transportation corridors would impact naturalness if development occurred. Corridors could impact up to 20,000 acres. However, development would be unlikely and as a result, impacts would be minimal. Corridors could also enhance recreation opportunities by providing additional access to remote areas.	Impacts from transportation corridors would be similar to Alternative A except only two corridors are identified. Identification of the Steese ACEC and RNAs as right-of-way avoidance areas would protect recreation resources and experiences of naturalness on 1,182,000 acres.	Impacts from transportation corridors would be similar to Alternative A but would be more consistent with recreation management objectives as the corridors cross Middlecountry and Frontcountry Zones. Development of rights-of-ways within corridors would be more likely as some lands would be open to new mineral entry.	No transportation corridors are identified. Approval of rights-of-way would impact naturalness, but would also improve access. Future rights-of-way would not be concentrated in corridors, so impacts may be more dispersed.
	There would be no effects from leasable minerals.	Seismic exploration could both improve winter access and impact naturalness through clearing of seismic lines. The experience of escape from crowds would be impacted during seismic operations. Impacts would be minor as seismic exploration would be very limited.		
	Mining on 5,000 acres of existing claims in the Steese NCA would impact naturalness but could improve access. Closure of the remaining lands would protect naturalness and recreation resources.	Mining on existing claims and 45,000 acres of newly opened lands near Circle would impact naturalness but could also improve access. Closure of remaining lands, including all of the Steese NCA, would protect naturalness and recreation resources. Recreation settings would be protected within the Steese NCA.	Mining on existing claims and 285,000 acres of newly opened lands would impact naturalness, but could improve access. Closure of 992,000 acres would protect naturalness and recreation resources. Recreation settings would be protected on 955,000 acres within the Steese NCA.	Mining on existing claims and 693,000 acres of newly opened lands would impact naturalness, but could improve access. Closure of 583,000 acres would protect naturalness and recreation resources. Recreation settings would be protected on 496,000 acres within the Steese NCA.
	The Steese NCA and Birch Creek WSR Corridor would be managed for recreation opportunities based on the recreation	Eighty-three percent of the SRMA would be managed for a Primitive setting; seven percent for Semi-Primitive (Birch Creek WSR); and ten percent for	Forty-two percent of the SRMA would be managed for a Semi-Primitive setting; twelve percent for Backcountry; thirty-five percent for	Eight percent of the SRMA would be managed for a Semi-Primitive setting; thirty-three percent for Backcountry; forty-nine percent for Middlecountry; and ten

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
	<p>opportunity spectrum and managed as an SRMA. Management would provide for multiple recreation activities. Facilities could be built to protect resources and to enhance recreation activities and experiences.</p>	<p>Backcountry. Most of the SRMA would be managed for Primitive experiences of non-motorized use, minimal facilities, and small user groups. In the Semi-Primitive and Backcountry areas, facility development would be limited. These settings would protect and enhance the experiences of naturalness, escape from crowds and solitude.</p>	<p>Middlecountry; and nine percent for Frontcountry. The greater emphasis on Middlecountry and Frontcountry would provide for more facilities development, more motorized recreation opportunities, and larger group sizes than Alternative B. Opportunities for Primitive experiences would be small as only one percent of the SRMA would be managed as such.</p>	<p>percent for Frontcountry. The greater emphasis on Middle- and Frontcountry would provide for more facilities development, more motorized recreation opportunities, and larger group sizes than Alternatives B and C. Opportunities for Primitive experiences would be small as only one percent of the SRMA would be managed as such.</p>
	<p>Closure of 3,000 acres to OHV use would somewhat limit motorized recreation but enhance opportunities for Primitive experiences. Prohibitions on summer OHV use on 133,000 acres in Birch Creek and the Primitive Management Unit would negatively impact motorized assisted activities. Allowance of both summer and winter cross-country OHV use on the remaining lands could result in user conflicts and impacts to naturalness, but would provide opportunities for motorized recreation.</p>	<p>Closure of 3,000 acres to OHV use would somewhat limit motorized recreation but enhance opportunities for Primitive experiences. Closure of 1,288,000 acres in Primitive, Semi-Primitive, and Backcountry zones to summer OHV use, except by permit, greatly would limit motorized recreation activities but would enhance opportunities for Primitive, Semi-Primitive, and Backcountry experiences. Prohibitions on summer OHV use would negatively impact motorized assisted activities such as hunting. Allowance of winter motorized use on ninety-nine percent of the subunit could result in user conflicts and impacts to naturalness and solitude, but would enhance winter motorized opportunities.</p>	<p>Opportunities for summer motorized recreation would increase greatly compared to Alternative B. Closure of 3,000 acres to OHV use except by permit would result in impacts similar to Alternatives A and B. Prohibitions on summer OHV use in Semi-Primitive and Backcountry Zones (680,000 acres) and limiting summer OHV use to existing trails on the remaining lands (566,000 acres) would negatively impact motorized assisted activities. Allowance of winter motorized use on ninety-nine percent of the subunit would have similar effects to Alternative B.</p>	<p>Opportunities for motorized recreation would increase compared to Alternatives B and C. Closure of 3,000 acres to motorized uses would limit motorized recreation but would enhance opportunities for Primitive experiences. Prohibitions on summer OHV use in Semi-Primitive and Backcountry Zones (510,000 acres) would negatively impact motorized assisted activities. Allowance of both summer and winter cross-country use on 778,000 acres could result in user conflicts and impacts to naturalness, but would provide opportunities for motorized recreation. Same as Alternatives B and C, winter motorized use could occur on ninety-nine percent of the subunit.</p>
	<p>Management of Big Windy and Mount Prindle RNAs (3,000 acres) would protect recreation resources and experiences of naturalness.</p>			
	<p>Prohibiting primitive camping in the RNAs would impact recreation experiences by not allowing users to camp in close proximity to the area of activity, increasing travel time, and possible creation of unsustainable social routes.</p>		<p>Allowing primitive camping in the RNAs would enhance recreation experiences by allowing users to camp in close proximity to the area of activity. Some short unsustainable social routes may develop.</p>	

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
	<p>There are no designated ACECs and no rivers identified as suitable for designation under the Wild and Scenic Rivers Act.</p>	<p>Designation of 927,000 acres as the Steese ACEC would protect recreation resources and experiences of naturalness. Impacts may occur if restrictions are placed on facilities development and use to protect habitat. The designation of Big Windy Creek as a “wild” river would ensure the protection and enhancement of the ORVs, providing long-term, benefits to recreation experiences of naturalness and a closeness to the sights and sounds of nature on 4,500 acres.</p>	<p>Designation of 460,000 acres as the Steese ACEC would protect recreation resources and experiences of naturalness. Impacts to recreation use may occur if restrictions are placed on facilities development and use.</p>	<p>Designation of 193,000 acres as the Steese ACEC would protect recreation resources and experiences of naturalness. Impacts to recreation use may occur if restrictions are placed on facilities development and use.</p>
<p>Travel Management</p>	<p>The construction of winter roads and trails for mineral development would provide a direct benefit to OHV users through the enhancement of public access opportunities. These effects would be the highest under Alternative D, followed by Alternatives C, B, and A. Travel management actions would continue to provide for a range of motorized and non-motorized opportunities, while protecting resource values and minimizing user conflicts. Research Natural Areas would be closed to motorized use limiting the areas to non-motorized travel only. Management of Birch Creek WSR, would impact travel in river corridor where the construction of new roads, primitive roads, trails, or other provisions for overland motorized travel would not be permitted (BLM 8351 Manual).</p>			
	<p>Maintaining four transportation corridors would allow for concentrated travel within these corridors and could possibly restrict the development of rights-of-way and other travel routes in other areas. Existing mineral closures would remain in place, limiting the need for new access associated with mining.</p>	<p>Relinquishing two of the transportation corridors could potentially limit access to parts of the Steese NCA. However, rights-of-way could still be authorized, outside of these corridors and within the two remaining corridors. Designation of right-of-way avoidance areas could limit future transportation routes. Effects would likely be minimal as few rights-of-way are anticipated.</p>	<p>Effects would be the same as Alternative B except there would be no right-of-way avoidance areas designated and rights-of-way may be more likely since new areas would be opened to mineral entry. The two corridors retained access areas opened to mineral entry.</p>	<p>No transportation corridors are identified. Rights-of-way would be considered throughout the subunit, potentially resulting in additional access.</p>
	<p>This alternative would offer the most opportunities for recreational activities that involve the use of motorized</p>	<p>The recreation setting would maintain one percent of the subunit as available to non-motorized recreation opportunities only. The</p>	<p>The recreation would maintain forty-seven percent of the subunit as available for summer-motorized experiences</p>	<p>The recreation setting would maintain sixty percent of the subunit as limited (by weight) to summer-motorized experiences,</p>

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
	<p>travel, including hunting and OHV riding; fewer opportunities would exist for recreational users seeking a primitive, non-motorized type of experience. More than ninety-nine percent of the subunit is available for winter motorized use and more than eighty-four percent is available for summer-motorized experiences.</p>	<p>remaining ninety-nine percent would be closed to summer motorized use, but open to winter use of snowmobiles. Only one percent would be available for summer motorized experiences without a permit.</p>	<p>(limited by weight and to existing routes) while fifty-three percent would remain closed. In contrast, during the winter more than ninety-nine percent of the subunit would be open to winter use of snowmobiles. Compared to Alternative B, much greater opportunity would be available for recreational activities that involve summer motorized travel.</p>	<p>while forty percent would remain closed to summer use. Same as Alternatives B and C, more than ninety-nine percent would be available to the winter use of snowmobiles. While this alternative would offer the least opportunity for primitive, non-motorized experiences, more opportunities would exist for recreational activities that involve the use of motorized travel compared to Alternatives B and C.</p>
	<p>About ninety percent of the subunit is open to summer-motorized use; ninety-nine percent is open to winter snowmobile use. Limited only by weight (1,000 pounds curb weight and less), except for RNAs, which are closed to OHV use, this alternative provides the greatest opportunity for users seeking cross-country motorized activities.</p>	<p>Less than one percent of the subunit would be closed to motorized use yearlong. Ninety-nine percent would be open to winter snowmobile use. Summer motorized access could be authorized by permit. This alternative would greatly limit summer motorized use and access compared to the other alternatives.</p>	<p>Less than one percent of the subunit would be closed to motorized use; Ninety-nine percent would be open to winter snowmobile use. Summer motorized use would be limited to existing trails on forty-seven percent of the subunit, and not allowed on fifty-three percent. This alternative would offer more opportunity for motorized use and access than Alternative B, but less than Alternative A.</p>	<p>Less than one percent of the subunit would be closed to motorized use; ninety-nine percent would be open to winter snowmobile use. Cross-country summer motorized use (limited by weight) would be allowed on sixty percent of the subunit and now allowed on forty percent. Summer motorized use would be more limited than Alternative A, but less restricted than in Alternatives B and C.</p>
<p>There are no designated ACECs.</p>		<p>The Steese ACEC (927,000 acres) would be subject to restrictions to winter motorized use if necessary to protect wildlife habitat. Designation of Big Windy Creek as a “wild” river would prohibit, new roads and trails.</p>	<p>The Steese ACEC (460,000 acres) would be subject to restrictions to winter motorized use if necessary to protect wildlife habitat. Effects would be less than Alternative B as the ACEC is smaller.</p>	<p>The Steese ACEC (193,000 acres) would be subject to restrictions to winter motorized use if necessary to protect wildlife habitat. Effects would be less than Alternative C as the ACEC is smaller.</p>

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
Wild and Scenic Rivers	No rivers are recommended suitable for addition to the Wild and Scenic Rivers System.	Big Windy Creek would be recommended suitable for designation as “wild,” protecting its free-flow and ORVs until Congress made a decision on designation. surface-disturbing activities may impact water quality and outstandingly remarkable scenic, geologic and wildlife values.	Big Windy Creek would not be recommended as suitable for designation as a “wild” river.	
Subsistence	Alternative A would not significantly restrict subsistence use by communities in and adjacent to the planning area, as impacts to subsistence resources would be minimal. Impacts to subsistence species are expected to be localized and are not expected to impact resources at the population level. No impacts to access by subsistence users are anticipated. Alternative A when combined with the cumulative case would not result in significant restrictions to subsistence use.	Alternative B would not result in significant reductions in subsistence resources or uses by residents in the subunit. Most impacts to subsistence resources would be beneficial, and any impacts by way of the limited amount of development allowed to occur under this alternative would be minimized by Fluid Mineral Leasing Stipulations and ROPs (Section 2.7). Alternative B when combined with the cumulative case would not result in significant restrictions to subsistence use.	Alternative C would not significantly restrict subsistence use by communities in the planning area. Most impacts to subsistence resources and uses would be minor, and any impacts from the development allowed to occur would be minimized by the Leasing Stipulations and ROPs. With the exception of locatable minerals, impacts to subsistence resources are expected to be localized and temporary, and are not expected to impact resources at the population level. No impacts to access by subsistence users are expected to occur. No reasonably foreseeable significant restrictions have been identified for Alternative C when combined with the cumulative case. Most habitat important to subsistence resources would be within the ACEC or afforded protection by other management prescriptions, including RCAs, riparian buffers and restrictions on off-trail OHV use.	Alternative D in and of itself would not significantly restrict subsistence use by communities in or near the planning area given anticipated levels of development and use of ROPs and Fluid Mineral Leasing Stipulations to reduce impacts. Alternative D when combined with the cumulative case may result in a reasonably foreseeable and significant restriction of subsistence use for rural communities within the planning area, if significant activity occurs within the migration or other crucial habitat of the fish and wildlife. The level of impacts on subsistence use depend on the response to increased opportunity for development of locatable minerals and cross-country use of OHVs. The Fortymile caribou herd could be impacted by activities in the Steese and Fortymile subunits.

Acronyms and Glossary

AAC:	Alaska Administrative Code
ACEC:	Area of Critical Environmental Concern: An area within the public lands where special management attention is required to protect important historic, cultural, or scenic values, fish and wildlife or natural systems or processes, or to protect life and safety from natural hazards.
ADEC:	Alaska Department of Environmental Conservation
ADF&G:	Alaska Department of Fish and Game
All-Terrain Vehicle (ATV):	A wheeled vehicle other than a snowmobile that is defined as having a curb weight of 1,000 pounds or less, maximum width of 50-inches or less, steered using handlebars, travels on three or more low-pressure tires, and has a seat designed to be straddled by the operator.
ANCSA:	Alaska Native Claims Settlement Act
ANILCA:	Alaska National Interest Lands Conservation Act
AO:	Authorized Officer
AS:	Alaska Statute
BLM:	Bureau of Land Management
CFR:	Code of Federal Regulations
Curb Weight:	The weight of a vehicle with a full tank of fuel and all fluids full, but with no people or cargo loaded. “Curb weight” is synonymous with “wet weight” and “operating weight”.
EIS:	Environmental Impact Statement
FLPMA:	Federal Land Policy and Management Act
Game retrieval:	Retrieval of legally harvested big game animals off of a designated trail is allowed within designated areas (Frontcountry and Middlecountry Zones only) and within the OHV limitations for the area. Individuals must have a punched harvest ticket. Up to three all terrain vehicles s may participate in the retrieval of the legally harvested big game. Retrieval of big game may not exceed one mile from the designated trail. Legally harvested big game must be retrieved within 24 hours.
GVWR:	Gross Vehicle Weight Rating: The total weight of the vehicle plus the maximum loaded carrying capacity of the vehicle as specified by the manufacturer (i.e., GVWR = weight of vehicle + fuel + passengers + cargo, as per manufacturers limitations). Pull-behind trailers are not included in the GVWR calculation for the vehicle.
NCA:	National Conservation Area

NEPA:	National Environmental Policy Act
NIP:	Non-native invasive plants
NIS:	Non-native invasive species
NRA:	National Recreation Area
OHV:	Off-highway Vehicle: Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding: 1) any non-amphibious registered motorboat; 2) any military, fire, emergency, or law enforcement vehicle being used for emergency purposes; 3) any vehicle whose use is expressly authorized by the authorizing officer, or otherwise officially approved; 4) vehicles in official use; and 5) any combat or combat support vehicle when used for national defense (43 CFR 8340.05(a)). OHVs generally include dirt motorcycles, dune buggies, jeeps, four-wheel drive vehicles, snowmobiles, and all terrain vehicles. OHV is synonymous with Off-road vehicle and All Terrain Vehicle. Aircraft are not OHVs.
ORV:	Outstandingly Remarkable Value: As defined by the Wild and Scenic Rivers Act, an “outstandingly remarkable value” is the characteristic of a river segment that is judged to be a rare, unique, or exemplary feature that is significant at a regional or natural scale. Values can be recreational, scenic, geological, historical, cultural, biological, botanical, ecological, heritage, hydrological, paleontological, scientific, or research-related.
POL:	Petroleum, oils, and lubricants
RCA:	Riparian Conservation Area
RMP:	Resource Management Plan
RMZ:	Recreation Management Zone
RNA:	Research Natural Area
ROP:	Required Operating Procedure
ROW:	Right-of-way
SHPO:	State Historic Preservation Office
snowmachine, snowmobile:	A motorized vehicle that is designed for use over snow that runs on a track or tracks and uses a ski or skis for steering, has a curb weight of 1,000 pounds or less, maximum width of 50-inches or less, steered using handlebars, and has a seat designed to be straddled by the operator. A snowmobile does not include machinery used strictly for the grooming of non-motorized trails.
SRMA:	Special Recreation Management Area
SSS:	Special Status Species

USFWS:	United States Fish and Wildlife Service
Utility Type (or Terrain) Vehicle (UTV):	Any recreational motor vehicle other than an all-terrain vehicle, motorcycle, or snowmobile designed for and capable of travel over unpaved roads, traveling on four or more low-pressure tires, a curb weight of 1,500 pounds or less, and maximum width is 64 inches or less. Utility type vehicles do not include vehicles specially designed to carry a person with disabilities.
VRM:	Visual Resource Management
Wild and Scenic River (WSR):	A river that is part of the National Wild and Scenic River System.

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Appendix A. Maps

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