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

## **Summary White Mountains Subunit**

Eastern Interior Draft Resource Management Plan and Environmental Impact Statement

February 2012

## PREPARING OFFICE

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



# Summary White Mountains Subunit: Eastern Interior Draft Resource Management Plan and Environmental Impact Statement

# Bureau of Land Management-Alaska Eastern Interior Field Office Fairbanks, Alaska BLM/AK/PL12/006+1610+F000 February 2012

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## United States Department of the Interior



## BUREAU OF LAND MANAGEMENT Alaska State Office 222 West Seventh Avenue, #13 Anchorage, Alaska 99513-7504 http://www.blm.gov/ak

MAR 1 4 2012

In Reply Refer To: 1610 (020)

#### 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: <a href="http://www.blm.gov/ak/st/en.html">http://www.blm.gov/ak/st/en.html</a>.

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: <a href="http://www.blm.gov/ak">http://www.blm.gov/ak</a>.
- 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 <a href="https://www.blm.gov/epl-front-office/eplanning/lup/lup\_register.do">https://www.blm.gov/epl-front-office/eplanning/lup/lup\_register.do</a>.

The entire Draft RMP/EIS is online at <a href="http://www.blm.gov/ak">http://www.blm.gov/ak</a>. 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 <u>RMP</u> will determine the appropriate management of <u>BLM</u> lands in the Eastern Interior Planning Area, including the White Mountains 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 White Mountains area, the White Mountains National Recreation Area RMP, is 24 years old and does not meet the BLM's planning requirements. Also, recreational and off-highway vehicle use of the White Mountains has increased substantially 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 White Mountains Subunit

## What Lands Are We Planning For?

The White Mountain Subunit is bounded on the north by the Yukon River, on the east by Beaver Creek and the Steese National Conservation Area, on the south by the Chatinika River, and on the west by the Elliott and Dalton highways. Within the subunit, <a href="BLM">BLM</a> lands consist of the one-million-acre White Mountains National Recreation Area (NRA) and associated lands (Wickersham Dome and three recreation withdrawals), Beaver Creek Wild and Scenic River, and federal mining claims near Livengood (<a href="Map 5">Map 5</a>). The remainder of the subunit consists of part of the Yukon Flats National Wildlife Refuge, large blocks of state land, and small parcels of private land. The Steese Highway crosses the southern part of the subunit and the Elliott and Dalton highways bound the subunit. Other roads include the Livengood, U.S. Creek, and Nome Creek roads. The communities of Livengood and Stevens Village are within or immediately adjacent to the subunit.

The subunit encompasses approximately 3.1 million acres with approximately one million acres currently managed by the BLM. Approximately 17,000 acres within the subunit are high priority State-selections and there are no BLM Native-selected lands.

## 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 complete, the Final RMP and Record of Decision will be published. Once the Record of Decision for the White Mountains Subunit is published, decisions in the Approved RMP will be implemented.

### 1.4. Resources in the White Mountains 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 <u>RMP</u> in the White Mountains Subunit include fish, wildlife, minerals, and specially designated areas.

#### Fish and Aquatic Species

Beaver Creek, located in the White Mountains NRA supports small but viable Chinook, summer chum, and coho salmon populations. The BLM monitored Beaver Creek Chinook salmon escapement from 1996–2000 and the data revealed a declining trend similar to the overall decline of Yukon River Chinook salmon (Volk et al. 2009). Beaver Creek Chinook salmon were designated as a BLM-Alaska sensitive species in 2004 due to the downward trend of this small population, but have recently been removed from that list and placed on a BLM-Alaska Watch List. Beaver Creek also supports healthy Arctic grayling and pike populations which provides sport fishing opportunity for recreational anglers.

Placer mining disturbed approximately eight miles of stream bed and associated floodplain in Nome Creek, a tributary to Beaver Creek, from the early 1900s to the late 1980s. The BLM initiated a riparian reclamation and stream channel reconstruction project in Nome Creek in 1990. Since then, five and one-half miles of stream channel and approximately 210 acres of riparian habitat and floodplain have been reclaimed through annual maintenance of the stream channel, fertilizing, and willow planting.

#### Wildlife

#### Moose

Moose occur throughout the White Mountains 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 White Mountains NRA), averaged 0.65 moose/mi² in 2007 (Herriges, Unpublished Data).

Moose in the planning area are generally thought to be limited by wolf and bear predation. However, large wildland fires 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 White Mountains caribou herd was first recognized in the late 1970s and was thought to number 100-200 caribou (P. Valkenburg pers. comm., in Seaton 2007). At that time it was believed to be a remnant of the Fortymile caribou herd, because it occurs within the historic range of the Fortymile herd. It is now considered likely that it has long been a separate herd. The range of the White Mountains herd is centered on the White Mountains NRA and north unit of the Steese National Conservation Area (Map 90). Small groups of caribou are observed year-round in the area of the Pinnell Mountain Trail (between Twelvemile and Eagle Summits of the Steese Highway) and they could be considered part of the White Mountains herd. A census in June 2008 resulted in an estimated population of 762. Reported harvest of this herd in 1987-2006 totaled 381 caribou, or an average of 21 caribou per year. Weights of female calves are consistently high indicating that nutritional status is high and that range quality is good.

Historically, the Fortymile caribou herd ranged into the White Mountains Subunit. During the 1920s the Fortymile herd (then known as the Steese-Fortymile herd) was the largest caribou herd in Alaska and was one of the largest in the world, estimated at over 500,000 caribou (Murie 1935). By the early 1960s, the herd stopped crossing the Steese Highway in significant numbers.

#### **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 White Mountains are the western edge of the Yukon-Tanana Uplands and support a population of sheep which has likely been isolated from other populations for many years. At least occasional interchange likely occurs between all other populations of sheep (Burch and Lawler 2001) in the Yukon Tanana Uplands and between Alaska herds and those in Canada.

Sheep in most areas of the White Mountains make frequent use of mineral licks even though the licks may be located far from preferred escape habitat. The mineral lick at Lime Peak was visited almost daily during June through September by some radio-collared sheep. 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. Although their exact role in individual and population health is not known, mineral licks are typically considered crucial habitats for mountain sheep.

Aerial surveys of the White Mountains Dall sheep populations have occurred since 1970. The population count decreased from 285 sheep in 1970 to 124 sheep in 1977, and then counts gradually increased to a peak of 717 sheep in 1999. Some of this increase may have been due to increased survey effort and a more complete knowledge of utilized sheep habitats, but it is clear that sheep were much less numerous in the 1970s. Counts of sheep declined by about 32 percent from 1999 to 2002. The White Mountains caribou herd suffered an apparent decline in this same time period, indicating a possible common factor, such as weather. Although a number of animals prey on Dall sheep, it is generally considered that weather conditions are a larger factor than predation in determining sheep populations and trends.

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. Oil and gas is the only leasable mineral found in the White Mountains Subunit.

The White Mountains Subunit falls within the Yukon Flats oil and gas basin. Other than north of Victoria Creek, potential for oil and gas within the White Mountains Subunit is low (Map 96). Although there are occurrences of oil and gas in the White Mountains Subunit, no leasing of oil and gas is expected to occur over the life of this RMP.

#### 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 White Mountains Subunit is currently closed to the staking of new federal mining claims. There are, however, 4,000 acres of existing federal mining claims near Livengood (outside of the White Mountains NRA). The Livengood/Money Knob deposit is considered a significant mineral deposit. BLM lands in the Livengood area are limited to federal mining claims.

Mineral potential in Nome Creek valley, of the White Mountains NRA is considered medium to high (Map 97). However, there are no existing mining claims within the White Mountains NRA and the NRA is closed to staking of new mining claims by the Alaska National Interest Lands Conservation Act (ANILCA).

#### Special Designations

#### White Mountains National Recreation Area

The one-million-acre White Mountains <u>NRA</u> was established by Congress in 1980 by Section 403 of <u>ANILCA</u> (P.L. 96-487). ANILCA directs that the NRA shall be administered to provide for public outdoor recreational use and for the conservation of scenic, historic, cultural and wildlife values, and for other uses, if they are compatible or do not significantly impair the previously mentioned values.

#### Beaver Creek Wild and Scenic River

On December 2, 1980, ANILCA established the upper portion of Beaver Creek as a wild and scenic river (WSR). ANILCA also directed the Secretary of the Interior to establish detailed boundaries and prepare a management plan. The detailed boundaries of Beaver Creek WSR were set forth by the Beaver Creek River Management Plan in 1983 (BLM 1983). The first 111 miles of the 127 mile Beaver Creek WSR flow through the White Mountains NRA. The remainder of

the corridor is located in Yukon Flats National Wildlife Refuge. The part of Beaver Creek WSR Corridor on BLM lands (Map 5) includes 69,000 acres.

Management objectives for Beaver 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 condition 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 by the Wild and Scenic Rivers Act 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 Beaver Creek 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 Beaver 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).

#### **Research Natural Areas**

There are three Research Natural Areas (RNAs) within the White Mountains NRA (Map 65) which were established through the White Mountains RMP (BLM 1986).

#### Limestone Jags RNA

The main features of geologic interest in the Limestone Jags RNA are karst (limestone dissolution) features in an unusual subarctic setting. These include caves, a natural bridge, disappearing streams, and cold springs. Karst features are rare at high latitudes because the slow chemical reaction rates of dry subarctic soils restrict the rate at which they form. Additionally, in many areas such features were later destroyed through glaciation. One of the largest limestone dissolution cave reported in high latitudes of North America is found in the RNA. The central and southern portions of Fossil Creek Ridge do not appear to have been glaciated during the Pleistocene. As a result, the landforms of the RNA have been shaped over long periods (Juday 1989). The cliffs and pinnacles of the RNA provide escape habitat for Dall sheep and nesting habitat for raptors.

#### Mount Prindle RNA

Mount Prindle RNA is located on the boundary between the White Mountains NRA and the Steese National Conservation Area. The RNA contains examples of both glaciated landforms and periglacial (unglaciated) features in proximity, illustrating how different cold-climate processes produce different landscapes. 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.

#### Serpentine Slide RNA

Serpentine is a iron- and magnesium-rich rock of ecological interest. The RNA contains one of the largest surface exposures of serpentine in Alaska (Juday 1992). Serpentine forms under very specific conditions, making it useful in understanding the origin and history of continental landscapes. The earthslide is also an unusual feature in Interior Alaska. The hydrology of the RNA is of interest to researchers. The RNA contains a diversity of vascular plant and wildlife habitats, including a number of unusual plants.

### 1.5. Use of the White Mountains Subunit

## **How Are People Using the Land Now?**

The primary use occurring on <u>BLM</u> lands in the White Mountains Subunit are recreation and mining. Little use of wildlife resources by rural communities has been documented in the White Mountains Subunit. Therefore, subsistence is not discussed in this summary document.

#### Recreation

Most BLM lands within the White Mountains Subunit are either part of the White Mountains <u>NRA</u> or associated with it. The White Mountains is recognized for both its recreational opportunities and its extraordinary natural beauty and landscapes. As the popularity of this area has grown, visitation and demand for a variety of recreational opportunities has increased. Examples of

common recreational activities include boating and river-based recreation, camping, hiking, gathering of edible plants and berries, sightseeing and photography, horseback riding, hunting, dog mushing, skiing, skijoring, and off-highway vehicle (OHV) use (including snowmobiles). During the milder winter temperatures, visitors may enjoy traveling using the network of winter trails and cabins, while during the summer season, visitors may enjoy dispersed camping associated with motorized access.

The overall management strategy for the White Mountains NRA is to enhance the outdoor recreation opportunities by developing facilities that promote greater user access including, winter trails and cabins, motorized and non-motorized trails, and campgrounds. Developed recreation sites include: Colorado Creek Trailhead, Wickersham Dome Trailhead, McKay Creek Trailhead, U.S. Creek Trailhead, Cripple Creek Campground, Offer Creek Campground and Mt. Prindle Campground. In addition, the BLM also maintains the Fred Blixt Cabin (Mile 62.5 Steese Highway), two trail shelters and 12 public-use cabins that have been built along the White Mountains winter trail system.

There are currently seven Special Recreation Permits in the White Mountains NRA including: day-hiking trips, outfitted and guided trips on Beaver Creek, and ski racing near Wickersham Dome. Overall permitted use remains fairly low. Special Recreation Permits related to guided hunting trips have not been issued during the past five years.

The White Mountains receives roughly 35,000 visits per year, with many of those being repeat users. Peak use periods include early March through mid-April for winter activities and late summer for activities focused around berry picking and hunting. The Nome Creek Valley receives the largest number of users, partly due to ease of access and developed recreational facilities. The reservation demands for public-use cabins has increased significantly over the last 20 years. Even though additional cabins have been constructed during this period, the BLM has been unable to meet public demand during peak use periods, including the holidays and late spring. It is not uncommon for public to be turned away due to a lack of cabin availability. Occupancy rates generally range around 80 percent during peak use periods.

The Nome Creek valley and surrounding trails receive the most intense OHV use. Demand for OHV activities is expected to continue to increase, placing additional 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 increased maintenance workloads. Currently there are 402,500 acres designated as limited to summer use of OHVs with weight restrictions, 990,000 acres designated as limited to winter use of OHVs with weight restrictions, and 13,000 acres closed to OHVs.

Increased cross-country motorized travel occurs primarily during the big-game hunting season, as recreational hunters use OHVs for accessing remote areas and for retrieving game. A noticeable increase in use has occurred over the past 10 years. This is due to the close proximity of the White Mountains NRA to Fairbanks. The construction of the Nome Creek Road in 1998 also increased the popularity of the area.

#### Mining

Mining and mining exploration is occurring on private land, and federal and state mining claims near Livengood (Map 5). No other mining activity is occurring on BLM lands in the White Mountains Subunit.

February 2012 Chapter 1 Introduction

# **Chapter 2. Alternatives**

#### What Decisions Will the RMP Make?

The Eastern Interior Draft <u>RMP</u> will make decisions on a wide variety of resources and resource uses including: management of fish and wildlife habitats, management of 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, Subsistence, 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 White Mountains 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 White Mountains RMP and management of the White Mountains NRA. There would, however, be no new oil and gas leases or mining claims as the lands would remain closed to these types of activities.

Off-highway vehicles (OHVs) would be limited by weight and season of use. Research Natural Areas (12,600 acres) would be closed to all OHV use. Approximately 494,000 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 428,000 acres. Recreation management would be the focus in the White Mountains NRA and surrounding lands.

No new special designations such as areas of critical environmental concern (ACECs) would be considered. Three existing Research Natural Areas 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 many areas.

#### Alternative B

The subunit would remain closed to new mining claims and mineral leasing. OHVs would be limited by weight, width, and season of use. Same as Alternative A, Research Natural Areas (12,600 acres) would be closed to all OHV use. Approximately 635,000 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 Research Natural Areas. Summer use of OHVs 1,000 pounds or less would be limited to designated trails on approximately 337,000 acres. Management of OHV use would be the most restrictive under this Alternative.

Recreation management would be the focus in the White Mountains NRA and surrounding lands, which would be identified as a Special Recreation Management Area. Recreation setting prescriptions would be assigned to the Special Recreation Management Area. These settings include Primitive, Semi-Primitive, Backcountry, Middlecountry, and Frontcountry. Alternative B would have the largest amount of land managed for Primitive and Semi-Primitive settings.

Three existing Research Natural Areas would be retained and managed to preserve the areas for research purposes. The White Mountains caribou herd calving/postcalving habitat would be designated as an ACEC and would be a right-of-way avoidance area. One additional river segment, Fossil Creek, would be recommended suitable for designation under the Wild and Scenic Rivers Act. Fifteen watersheds with the highest fish values would be identified as Riparian Conservation Areas. Outstandingly Remarkable Values would be identified for Beaver Creek Wild and Scenic River. Wilderness characteristics would be maintained on 509,000 acres.

## Alternative C, Agency Preferred Alternative

The subunit would remain closed to mining claims and mineral leasing. OHVs would be limited by width, weight and season of use. Similar to Alternative B, Research Natural Areas (12,600 acres) would be closed to all OHV use. Approximately 565,000 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 Research Natural Areas. Summer use of OHVs 1,000 pounds or less would be limited to designated trails on approximately 437,000 acres. However, travel off existing trails could occur to retrieve legally harvested game and some trails would be designated for use with Utility Terrain Vehicles (UTVs) weighing more than 1,500 pounds.

Recreation management would be the focus in the White Mountains NRA and surrounding lands, which would be identified as a Special Recreation Management Area. Recreation setting prescriptions would be assigned to the Special Recreation Management Area. These settings include Primitive, Semi-Primitive, Backcountry, Middlecountry, and Frontcountry. Under Alternative C, less land would be managed for Primitive and Semi-Primitive settings than in Alternative B.

Three existing Research Natural Areas would be retained and managed to preserve the areas for research purposes. No new ACECs would be designated. Fourteen watersheds would be identified

as Riparian Conservation Areas. Outstandingly Remarkable Values would be identified for Beaver Creek Wild and Scenic River. Wilderness characteristics would be maintained 312,000 acres.

#### Alternative D

The subunit would remain closed to mining claims. Approximately 451,000 acres would be recommended open for mineral leasing. OHVs would be limited by weight, width, and season of use. Same as the other alternatives, the Research Natural Areas (12,600 acres) would be closed to all OHV use. Approximately 514,000 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 Research Natural Areas. Cross-country summer use of OHVs 1,000 pounds or less would be allowed on 464,000 acres. Summer use of OHVs would be limited to designated trails in Nome Creek valley. Additional miles of trail would be designated for use with UTVs.

Recreation management would be the focus in the White Mountains NRA and surrounding lands, which would be identified as a Special Recreation Management Area. Recreation setting prescriptions would be assigned to the Special Recreation Management Area. These settings include Primitive, Semi-Primitive, Backcountry, Middlecountry, and Frontcountry. Alternative D would have the least land managed for Primitive and Semi-Primitive settings and the most land managed for Middlecountry and Frountcountry settings.

Three existing Research Natural Areas would be retained and managed to preserve the areas for research purposes. No new ACECs would be designated. Eight watersheds would be identified as Riparian Conservation Areas. Outstandingly Remarkable Values would be identified for Beaver Creek Wild and Scenic River. Wilderness characteristics would be maintained 205,000 acres.

## **Summary of Alternatives**

The following table summarizes major decisions that vary by alternative and those considered to be of most interest to the reader. This allows you to compare the three action alternatives. For full text of the decisions outlined in the following table, refer to sections 2.3, 2.4, 2.5, and 2.6 of this summary.

**Table 2.1. White Mountains Subunit: Summary of Alternatives** 

Program or Resource	Alternative B	Alternative C	Alternative D			
Fish and Aquatic	Manage 15 watersheds as Riparian	Manage 14 watersheds as RCAs (Map 9).	Manage eight watersheds as RCAs (Map			
Species	Conservation Areas (RCAs) (Map 8).	10).				
Wilderness	Maintain wilderness characteristics on	Maintain wilderness characteristics on Maintain wilderness characteristics				
Characteristics	509,000 acres (50 percent) (Map 83).	312,000 acres (31 percent) (Map 84). 205,000 acres (20 percent) (Map 85).				
Wildlife	The use of domestic goats, alpacas, llama be allowed in Dall sheep habitat.	s, and other similar species in conjunction with BLM-authorized activities would not				
	Domestic sheep, goats, and camelids (includes alpaca and llama) are not allowed in Dall sheep habitat.	No related action				
Lands and Realty	The Research Natural Areas, White Mountains ACEC, and Beaver Creek WSR Corridor would be right-of-way avoidance areas.	There would be no right-of-way avoidance				
	Retain one transportation corridor extending from U.S. Creek Road to Nome Creek (Map 57).	No transportation corridors would be desig				
Leasable Minerals	100 acres BLM split-estate lands open to fluid mineral leasing; remainder of subunit, 1,020,000 acres open to fluid and solid mineral leasing; 569,000 acres closed.  A decision on coal leasing is deferred. No coal leasing would occur without an amendment to this RMP.					
<b>Locatable Minerals</b>	The entire subunit (1,020,000 acres) would by ANILCA.	ld be closed to locatable minerals. The Whit	te Mountains NRA is closed to mining			
Recreation	Zones and Recreation setting character cla	ountains Special Recreation Management Arasses within the Special Recreation Manager				
Travel Management	12,600 acres in Research Natural Areas c					
	No summer OHV use on 635,000 acres (Map 57).	No summer OHV use on 565,000 acres (Map 58).	No summer OHV use on 514,000 acres (Map 59).			
	acres.	Cross-country summer OHV use limited by weight (1,000 pounds) allowed on 3,800 Cross-country summer OHV use limited by weight (1,000 pounds) allowed on 464,000 acres.				
	Summer OHV use limited to designated routes, weight, and width on 337,000 acres (Middlecountry and Frontcountry areas).	oo routes, weight, and width on 437,000 routes, weight, and width on 31,000				
	Winter OHV use limited to snowmobiles weighing 1,000 pounds or less on 1,008,000 acres: all areas except Research Natural Areas.					

Summary of the Alternatives	Chapter
e Alternative	2 Alternatives

Program or Resource	Alternative B	Alternative C	Alternative D				
	0 miles of trail open to Utility Terrain Vehicle (UTV) use.	27 miles trails open to UTV use.	112 miles trails open to UTV use.				
	117 miles winter trails closed to summer	use					
	Motorboat use generally allowed without specific authorization consistent with ANILCA with the following reasonable regulation: Launching boats with motors exceeding 15 horsepower is prohibited in the Nome Creek Valley and; Airboats, hovercraft, and personal watercraft would be prohibited in the White Mountains Special Recreation Management Area.  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).						
Withdrawals	Retain Public Land Order 4176, Recreation site withdrawal (505 acres); Perhaps Creek, U.S. Creek, and Cripple Creek. (FM. T. 5N., R. 5E.); Manage Perhaps Creek to provide a gravel source for maintenance or construction of recreation facilities.  The White Mountains NRA (1,000,000 acres) would remain withdrawn and closed to locatable mineral entry. An additional 12,800 acres at Wickersham Dome outside the NRA would also be closed to locatable entry, including metaliferous minerals.						
Areas of Critical	Designate the White Mountains ACEC	No ACECs designated.	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5				
Environmental Concern	(589,000 acres) (Map 65).	Ç					
Research Natural Areas		2 Jags (5,170 acres) and Mount Prindle (3,15 as and would be closed to mineral location, n					
	No surface-disturbing activities allowed except permitted research projects. 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		s for Reaver Creek WSR as scenic regrestion	on geologic fisheries and wildlife				
Who and Stelle Mivers	Fossil Creek (23 miles) recommended suitable for classification as "scenic".						

## 2.2. Alternative A (No Action)

Current management in the White Mountains NRA under Alternative A (No Action Alternative) is guided by the Record of Decision and Resource Management Plan for the White Mountains National Recreation Area (BLM 1986) which was approved in February 1986. Throughout this section, this plan will be referred to as the White Mountains RMP (BLM 1986). Additional management guidance is provided by the Beaver Creek River Management Plan (BLM 1983), and several special rules published in the *Federal Register*. Other BLM-managed lands in the White Mountains Subunit are not covered by any existing land use plan. Current management for selected programs is summarized briefly below. A full 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 and/or enhance fish populations. Primary emphasis is placed on habitat for Arctic grayling. Ongoing projects include rehabilitation of stream and riparian areas in Nome Creek where past placer mining has altered the aquatic environment. 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. The best available technology is used to reduce siltation and stream turbidity to an acceptable level for fish survival and reproduction. All surface-disturbing activities are required to be rehabilitated to minimize future erosion. Riparian gravel sources are used only where upland sources are not reasonably available and where any damaging impacts can be mitigated to the extent that the water quality and fisheries of the Beaver Creek system will not be significantly impaired. Beaver Creek fish habitat and riparian areas are maintained to support viable self-sustaining populations of fish and to provide a quality fishing experience.

#### 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 wildland fire. Prescribed burns may be used to reestablish or improve habitat.

Wildlife management 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, escape habitat, and winter range; moose late winter range; grizzly and black bear dens and seasonal high use areas; raptor nesing 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 White Mountains RMP lists crucial habitats and time frames during which special restrictions may be required in these areas. These restrictions prohibit surface movement within one mile of the area or the use of aircraft under an altitude of 1,500 feet.

## **Lands and Realty**

There are two established transportation corridors in the White Mountains NRA. One crosses upper Nome Creek from the U.S. Creek Road and extends to the vicinity of Champion Creek. The other begins at the NRA boundary near the Steese Highway and extends to lower Nome Creek. 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. Rights-of-way will be allowed within the Primitive Management Unit only if there is no economically feasible and prudent alternative. Other realty actions compatible with the land uses may be permitted if compatible with land uses designated in the White Mountains RMP.

No lands within the White Mountains NRA will be exchanged or otherwise disposed of. Lands outside the NRA in the Wickersham Dome area have been retained in federal management for recreational purposes under Public Land Order 5150, which establishes a corridor for the Trans-Alaska Pipeline System. If Public Land Order 5150 is revoked, another Public Land Order will be issued to ensure that Wickersham Dome remains in federal management and is reserved for recreational purposes. Three recreation withdrawals along the Steese Highway will be retained for recreational purposes: the Cripple Creek campground, U.S. Creek; and Perhaps Creek.

#### Minerals

All <u>BLM</u> lands in the White Mountains Subunit are closed to locatable minerals through a variety of withdrawals. There are no valid mining claims remaining in the White Mountains NRA. Mining is occurring on valid existing mining claims outside the NRA, near Livengood. All BLM lands in the White Mountains Subunit are closed to leasing of both fluid minerals (oil and gas) and solid minerals (coal). There are no existing mineral leases.

#### Recreation

Recreation management is focused on the White Mountains NRA and adjacent lands. A remote cabin program has been developed and maintained, including twelve public use cabins and two trail shelters. There are over 220 miles of trails connecting the public use cabins to the highways. Other recreational sites include several waysides and trailheads, campgrounds, Beaver Creek access, and Nome Creek Road. The BLM issues special recreation use permits as appropriate for commercial, competitive, and special events. Important recreational resource values of the White Mountains NRA are enhanced and protected including: the outstanding scenic quality of the viewshed, the natural state of the river corridor, the water quality of the river system, the fishing and hunting opportunities, wildlife viewing, hiking opportunities, and unique landforms/geologic formations.

## **Travel Management**

The current OHV designation for the White Mountains NRA is Limited except for Research Natural Areas, which are Closed to OHV use. All forms of non-motorized use are allowed. Some trails are managed as non-motorized. Aircraft use is generally unrestricted. Four Management Units are established in the White Mountains NRA: Beaver Creek WSR Corridor, the Primitive Management Unit, the Semi-Primitive Motorized Management Unit, and the Research Natural Areas. The type and extent of OHV uses allowed depends on the designation of the unit in which the use occurs (Map 44).

Beaver Creek WSR Corridor: Launching of boats in the Nome Creek Valley is restricted to 15 horsepower or less. Hovercraft and airboats will not be authorized. OHV use is prohibited within the corridor except winter use of snowmobiles weighing 1,500 pounds or less, for OHVs used to access inholdings, or if there is no economically feasible and prudent alternatives for crossing the corridor.

Primitive Management Unit (494,000 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. All OHV use is prohibited in the Windy Creek and Fossil Creek drainages April 15 through August 31 to avoid disturbance to known peregrine falcon nesting areas (FR 1998).

Semi-Primitive Motorized Management Unit (428,000 acres): No permit is required for vehicles of less than 1,500 pounds except on the Summit, Ski Loop, and Table Top Mountain trails, which are closed to motorized use year round, and within the Wickersham Creek Closed Area, which is closed to all motorized use May 1 through October 14. A permit is required for the use of OHVs greater than 1,500 pounds off a valid right-of-way.

Research Natural Areas: The Limestone Jags, Serpentine Slide, and Mount Prindle RNAs are closed to OHV use.

## **Special Designations**

There are three designated research natural areas (RNA): Limestone Jags (5,170 acres), Serpentine Slide (4,270 acres), and Mount Prindle (3,150 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.

Beaver 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 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**. As stated earlier, there are too many decisions to include them all in this summary. 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 <u>RMP</u> 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 <u>BLM</u> 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 ciso, 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 <u>priority habitats</u> 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 <u>desired future habitat</u> <u>conditions</u>. Most watersheds, generally should be in or making progress toward a High Condition Rating (Described in Appendix I of the Draft RMP/<u>EIS</u>). 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 <u>AAC</u> 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 shall 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.

## **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.

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.

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.

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 this RMP, activities and uses will be allowed on lands identified for maintenance of wilderness characteristics, with management restrictions (e.g., conditions of use or mitigation measures) which will avoid or minimize impacts to wilderness characteristics and meet the objective to retain 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 <u>FLPMA</u> 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 <u>ANILCA</u>. 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 <u>FLPMA</u> 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).

#### 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 White Mountains SRMA and correspond to the assigned Recreation Opportunity Spectrum classes in these areas.

Chapter 2 Alternatives Decisions Common to Alternatives B, C, and D

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

PHYSICAL - Resources and Facilities: Character of the Natural Landscape						
	Primitive Classification	Semi-Primitive Classification	Backcountry Classification	Middlecountry Classification	Frontcountry Classification	Rural Classification
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.

White Mountains Subunit Summary

SOCIAL – Visitor Use and Users: Character of the Social Environment						
	Primitive	Semi-Primitive	Backcountry	Middlecountry	Frontcountry	
	Classification	Classification	Classification	Classification	Classification	Rural Classification
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.

White Mountains Subunit Summary

ADMINISTRATIVE – Administrative and Service Setting: Character of the Operational Environment						
	Primitive	Semi-Primitive	Backcountry	Middlecountry	Frontcountry	
	Classification	Classification	Classification	Classification	Classification	Rural Classification
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.

White Mountains Subunit Summary

## **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).

### 2.4. Alternative B

The following discussion includes a **summary of proposed management under the Draft RMP for selected programs**. There are too many decisions to include them all in this summary. A full description of Alternative B 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 15 High Priority Conservation Watersheds would be managed as Riparian Conservation Areas (Map 8).

- 1. Ophir Creek (HUC # 190404022003)
- 2. Beaver Creek (HUC # 190404022104)
- 3. Beaver Creek (HUC # 190404022109)
- 4. Sumner Creek-Nome Creek (HUC # 190404022004)
- 5. South Beaver Creek (HUC # 190404022202)
- 6. Bear Creek (HUC # 190404021803)

- 7. Montana Creek-South Beaver Creek (HUC # 190404022206)
- 8. South Beaver Creek (HUC # 190404022207)
- 9. Beaver Creek (HUC # 190404022208)
- 10. Victoria Mountain-Beaver Creek (HUC # 190404022406)
- 11. Headwaters Victoria Creek (HUC # 190404022301)
- 12. Victoria Creek (HUC # 190404022303)
- 13. Yellow Creek- Beaver Creek (HUC # 190404022408)
- 14. Deadwood Creek-Victoria Creek (HUC # 190404022304)
- 15. Outlet Victoria Creek (HUC # 190404022305)

Complete watershed assessments as necessary for management.

#### **Wilderness Characteristics**

Wilderness characteristics would be maintained on 509,000 acres (50 percent of the area with wilderness characteristics in this subunit). These lands occur within the Primitive and Semi-Primitive Recreation Management Zones (Map 83).

#### 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 (Map 68).

## **Lands and Realty**

Retain the White Mountains Special Recreation Management Area in federal ownership. (includes the National Recreation Area, Beaver Creek <u>WSR</u> Corridor, Wickersham Dome, Cripple Creek campground, and U.S. Creek Wayside)

Consider acquisition of private land inholdings from willing sellers within the White Mountains NRA.

If federal mining claims outside of the White Mountains Special Recreation Management Area become null and void, and are not conveyed to the state, consider these lands for disposal or exchange.

Retain Public Land Order 4176, Recreation site withdrawal (505 acres). Withdrawn lands are located at Perhaps Creek, U.S. Creek, and Cripple Creek, all of which are within FM, T.5N., R.5E. Manage the Perhaps Creek withdrawal to provide a gravel source for maintenance or construction of recreation facilities such as roads, trails, and campgrounds.

Retain one transportation corridor extending from U.S. Creek Road to the Nome Creek Road, which provides access to both upper and lower Nome Creek.

Designate Serpentine Slide, Limestone Jags and Mt. Prindle <u>RNAs</u>, the White Mountain <u>ACEC</u>, and Beaver Creek <u>WSR</u> Corridor as right-of-way avoidance areas.

Obtain a right-of-way from the State of Alaska for the portion of Colorado Creek trail from the Elliott Highway to the White Mountains NRA.

#### Leasable Minerals

Approximately 1,020,000 acres in the following areas would be closed to fluid and solid leasable minerals (Map 32):

- The White Mountains Special Recreation Management Area (1,017,000 acres)
- The Perhaps Creek withdrawal (200 acres)
- Zone 3 disposal lands (federal mining claims)

All <u>BLM</u> split-estate lands would be open to fluid and solid mineral leasing, subject to major constraints such as no surface occupancy (approximately 100 acres).

#### **Locatable Minerals**

Approximately 1,020,000 acres, the entire White Mountains Subunit, would be closed to locatable mineral entry.

#### Recreation

The White Mountains Special Recreation Management Area (SRMA) would include approximately 1,017,000 acres of lands including Beaver Creek WSR Corridor and the White Mountains NRA and associated lands (Map 48). Under Alternative B, the White Mountains 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. White Mountains Recreation and Travel Management Zones, Alternative B

Name	Acres	Recreation Opportunity Setting <sup>a</sup>	OHV Designation
Research Natural Areas	12,600	Primitive	Closed
White Mountains Spine	13,400	Primitive	Limited
White Mountain Highlands	414,000	Semi-Primitive	Limited
Beaver Creek Corridor	69,000	Semi-Primitive	Limited
Cache Mountain	140,000	Backcountry	Limited
White Mountains Foothills	329,000	Middlecountry	Limited
Nome Creek	31,000	Frontcountry	Limited
Wickersham Dome/Blixt Cabin	7,500	Frontcountry	Limited
Other BLM Lands	3,800	Not Applicable	Limited

<sup>&</sup>lt;sup>a</sup>Table 2.2

## **Travel Management**

Travel management prescriptions apply to the Travel Management Zones listed in Table 2.3 above. Each Travel Management Zone has an <u>OHV</u> 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. In all alternatives, snowmobiles are defined as 50 inches or less in width, and 1,000 pounds curb weight or less. Snowmobiles are defined as 50 inches or less in width, and 1,000 pounds curb weight or less. ATVs are defined as 50 inches or less in width, and 1,000 pounds curb weight or less.

A comprehensive travel management network has been defined for the White Mountains Subunit. This is described fully in Appendix B, of the Draft Eastern Interior Resource Management Plan and Environmental Impact Statement (BLM 2012).

#### Travel Management Prescriptions Common to All Lands

The BLM may continue to issue temporary emergency closures based on a determination of considerable adverse effects pursuant to 43 CFR 8341.2, special rules. This includes considerable adverse impacts to soil, vegetation, wildlife habitat, or cultural resources. The agency can maintain this closure until the effects are mitigated and measures are implemented to prevent future recurrence.

All forms of non-motorized uses are generally allowed, including the use of horses and mountain bikes but, excepting the use of goats in Dall sheep habitat. Cross-country travel by non-motorized means is allowed.

The following trails are limited to non-motorized uses: Ski Loop Trail, Table Top Trail, Summit Trail, Two-Step Louis Trail, and the Fishing Trail inside Cripple Creek Campground.

Camping and/or campfires are prohibited within 25 feet of BLM-maintained trails within the White Mountains NRA. Trapping and placement of bait and wildlife lures (scents) is prohibited within 25 feet of BLM-maintained trails.

Trapping includes but is not limited to the use of marten pole sets, snares, conibear, or leg hold traps. These restrictions do not apply to sections of trail on land managed by the State of Alaska, where BLM maintains access to the White Mountains NRA.

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.

Motorboat use generally allowed without specific authorization consistent with ANILCA sections 1110(a) and 811 with the following reasonable regulation.

- Launching boats with motors exceeding 15 horsepower without written authorization from the AO is prohibited in the Nome Creek Valley.
- Airboats, hovercraft, and <u>personal watercraft</u> would be prohibited in the White Mountains Special Recreation Management Area.

Travel Management Prescriptions for the Primitive RMZ

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 <a href="mailto:curb weight">curb weight</a> and less would be allowed, except in research natural areas which are closed to OHV use.

Aircraft landings would be allowed within the <u>RNAs</u> and the White Mountain Spine, with the following provisions: No clearing of vegetation would be allowed without a permit.

A permit would be required for all other OHV use.

Travel Management Prescriptions for the Semi-Primitive RMZs

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.

A permit would be required for all other OHV use.

Travel Management Prescriptions for the Backcountry RMZ

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.

A permit would be required for all other OHV use.

Travel Management Prescriptions for the Middlecountry RMZ

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

OHVs 50" width and less, and 1,0500 pounds curb weight and less would be allowed on designated trails only (May 1 through October 14 except for Wickersham Creek Trail). Wickersham Creek Trail from Mile 28 Elliott Highway to its intersection with 23.5 mile trail is open to the summer use of OHVs from June 1 through October 14. Summer use is delayed to protect costly improvements to trail tread from rutting and erosion, and allow the ground to thaw. The use of motorized travel, except snowmobiles, ends October 14, unless posted otherwise, so as not to impact winter trail grooming activities. User created routes and travel off of designated trails would not be allowed (Map 57). Designated Trails include:

- 1. Wickersham Creek Trail from Mile 28 Elliott Highway to the intersection with Trail Creek Trail.
- 2. Trail Creek Trail from the intersection with Wickersham Creek Trail to Lee's Cabin.
- 3. Mile 23.5 Elliott Highway to the intersection with Wickersham Creek Trail.
- 4. Trail Creek Trail from Lee's Cabin to Beaver Creek WSR Corridor.
- 5. McKay Creek Trail from the White Mountains NRA boundary to Beaver Creek WSR Corridor.
- 6. Lower Nome Creek Trail from McKay Creek Trail intersection to Nome Creek Road.
- 7. Bear Creek Trail from Nome Creek Road to Richards Cabin, Richards cabin NE along Bear Creek.
- 8. Sled Dog Rocks Trail from Richards Cabin to Sled Dog Rocks.
- 9. Quartz Creek Trail from Nome Creek Road to Quartz Creek (reroute only).
- 10. Champion Ridge Trail from Quartz Creek Trail west 3 miles.
- 11. Moose Creek Ridge Trail from Nome Creek Road to top of Ridge, then east along ridge to Quartz Creek Trail and west along ridge to Moose Creek.
- 12. White Mountains NRA Boundary Trail from McKay Creek Trail west along boundary 11 miles.

- 13. Globe Peak Trail from Globe Peak to intersection with Big Bend Trail.
- 14. Big Bend Trail from Colorado Creek Cabin to Beaver Creek WSR Corridor.
- 15. Colorado Creek Trail from Colorado Creek cabin, west to White Mountains NRA boundary.
- 16. Ridge Trail from Colorado Creek Trail to VABM Beaver.
- 17. Portion of Haystack Mountain access on BLM-managed land.
- 18. Little Champion Creek extension.

Additional trails could be added as they are identified or designed and constructed by BLM in a sustainable fashion.

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

A permit would be required for all other OHV use.

Travel Management Prescriptions for the Nome Creek Frontcountry RMZ

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

The Table Top Mountain Trail, Two-Step Louis Trail, and Fishing Trail inside the Cripple Creek Campground are limited to non-motorized use only.

OHVs 50" width and less, and 1,000 pounds curb weight and less are allowed on designated trails only (May 1 through October 14). User created routes and travel off of designated trails would not be allowed. Designated Trails include:

- 1. Moose Creek Ridge Trail from Nome Creek Road to top of Ridge, then east along ridge to Quartz Creek Trail and west along ridge to Moose Creek.
- 2. Bear Creek Trail from Nome Creek Road to Richards Cabin.
- 3. Quartz Creek Trail reroute.
- 4. Lower Nome Creek Trail.

Additional designated trails could be added to the trail network as they are designed and constructed by BLM in a sustainable fashion.

The management intent for the Nome Creek tailings area is to continue to allow access and recreation opportunities within the disturbed, gravel area. The tailings area would be classified as a Limited Area Designation. The use of licensed, highway vehicles (including, but not limited to trucks and motorhomes) and OHVs weighing 2,000 pounds GVWR and less, and 60" width and less would be allowed. Travel off of the disturbed rock tailings by motorized means would not be allowed. Travel by motorized vehicle up or down Nome Creek or its tributaries would not be allowed. Motorized users may cross Nome Creek or its tributaries at right angles only.

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

A permit would be required for all other OHV use.

Launching of boats in the Nome Creek Valley would be restricted to 15 horsepower or less.

#### Travel Management Prescriptions for the Wickersham Dome-Fred Blixt Frontcountry RMZ

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

The Ski Loop and Summit trails are limited to non-motorized use only. OHVs 50" width and less, and 1,000 pounds curb weight and less would be allowed on designated trails only (May 1 through October 14 except for Wickersham Creek Trail).

Wickersham Creek Trail from Mile 28 Elliott Highway to its intersection with 23.5 mile trail is open to the summer use of OHVs from June 1 through October 14. Summer use is delayed to protect costly improvements to trail tread from rutting and erosion, and to allow the ground to thaw. The use of motorized travel, except snowmobiles, ends October 14, unless posted otherwise, so as not to impact winter trail grooming activities. User created routes and travel off of designated trails would not be allowed. Designated Trails include:

- 1. Wickersham Creek Trail from Mile 28 Elliott Highway to the intersection of Trail Creek Trail.
- 2. Trail Creek Trail from the intersection of Wickersham Creek Trail to Lee's Cabin.
- 3. Mile 23.5 Elliott Highway to intersection with Wickersham Creek Trail.

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

A permit would be required for all other OHV use.

#### Travel Management Prescriptions for Other BLM Lands

Same as Management Common to all Lands, 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 weighing 1,500 pounds curb weight and less would be allowed (cross-country travel allowed except where this use may interfere with active mining operations).

A permit or plan of operations would be required for all other OHV use.

#### Withdrawals

Retain the existing withdrawal under <u>ANILCA</u> 1312(b) in the White Mountains <u>NRA</u>, keeping the area closed to locatable mineral entry.

Approximately 12,800 acres would be closed to locatable mineral entry, including metalliferous minerals, at Wickersham Dome (FM., T. 4N., R. 2W., that portion of the township north and east of the Elliott Highway) for the purposes of maintaining the recreation setting prescriptions and facilities

Retain Public Land Order 4176, Recreation site withdrawal (505 acres).

#### **Areas of Critical Environmental Concern**

Designate approximately 589,000 acres as the White Mountains <u>ACEC</u> (Map 65) to protect caribou calving and postcalving habitat for the White Mountains caribou herd and Dall Sheep habitat.

Within a distance of one mile of designated ungulate mineral licks, limit all permitted uses between 10 May and 1 September (as well as development of facilities to be used in that time period) to activities which would not reduce sheep 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 October 14 sheep habitat; May 10 through July 15 remainder), i.e. 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 designated trails. 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 three existing <u>RNA</u> designations would remain in place. Management of RNAs 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 Beaver Creek <u>WSR</u> are scenic, recreation, geologic, fisheries, and wildlife.

Under Alternative B, Fossil Creek (23 miles) would be recommended as suitable for designation under the Wild and Scenic Rivers Act as a "scenic" river. The Outstandingly Remarkable Values of Fossil Creek are scenic and geologic (Map 73).

## 2.5. Alternative C

The following discussion includes a **summary of proposed management under the Draft RMP for selected programs**. There are too many decisions to include them all in this summary. 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 14 High Priority Conservation Watersheds would be managed as Riparian Conservation Areas (Map 9):

- 1. Ophir Creek (HUC # 190404022003)
- 2. Beaver Creek (HUC # 190404022104)
- 3. Beaver Creek (HUC # 190404022109)
- 4. Sumner Creek-Nome Creek (HUC # 190404022004)
- 5. South Beaver Creek (HUC # 190404022202)
- 6. Montana Creek-South Beaver Creek (HUC # 190404022206)
- 7. South Beaver Creek (HUC # 190404022207)
- 8. Beaver Creek (HUC # 190404022208)
- 9. Victoria Mountain-Beaver Creek (HUC # 190404022406)
- 10. Headwaters Victoria Creek (HUC # 190404022301)
- 11. Victoria Creek (HUC # 190404022303)
- 12. Yellow Creek- Beaver Creek (HUC # 190404022408)
- 13. Deadwood Creek-Victoria Creek (HUC # 190404022304)
- 14. Outlet Victoria Creek (HUC # 190404022305)

Complete watershed assessments as necessary for management.

#### Wildlife

Same as Alternative B except:

Casual use of domestic sheep, goats, and camelids (includes alpaca & llama), would not be prohibited in Dall sheep habitat.

No <u>ACEC</u> would be designated. Instead a smaller area of 427,000 acres would be identified as the White Mountains Wildlife Conservation Area (Map 66) to protect caribou calving and postcalving habitat for the White Mountains caribou herd and Dall sheep habitat. The following decisions will apply to this area and are the same management prescribed for the White Mountains ACEC under Alternative B.

Within one mile of designated ungulate mineral licks, limit all permitted uses between 10 May and 1 September (as well as development of facilities to be used in that time period) to activities which will not reduce sheep 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 October 14 sheep habitat; May 10 through July 15 remainder).

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, limited closures (limited areas and/or time periods).

#### Wilderness Characteristics

Wilderness characteristics would be maintained on 312,000 acres (31 percent of the area with wilderness characteristics in this subunit). These lands occur within the Primitive, Semi-Primitive, and portions of the Cache Mountain Backcountry Recreation Management Zones (Map 84).

## **Lands and Realty**

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

#### **Leasable Minerals**

Same as Alternative B except split-estate <u>BLM</u> lands would be open subject to standard Fluid Mineral Leasing Stipulations instead of No Surface Occupancy.

#### **Locatable Minerals**

Same as Alternative B, the entire subunit would be closed to locatable mineral entry.

#### Recreation

The White Mountains Special Recreation Management Area (SRMA) would include 1,017,000 acres including Beaver Creek <u>WSR</u> Corridor and the White Mountains <u>NRA</u> and associated lands (Map 49). The White Mountains 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 2.4. White Mountains Recreation and Travel Management Zones, Alternative C

Name	Acres	Recreation Opportunity Setting <sup>a</sup>	OHV Designation
Research Natural Areas	12,600	Primitive	Closed
White Mountains Spine	13,400	Primitive	Limited
White Mountain Highlands	102,000	Semi-Primitive	Limited
Beaver Creek Corridor	69,000	Semi-Primitive	Limited
Cache Mountain	382,000	Backcountry	Limited
White Mountains Foothills	399,000	Middlecountry	Limited
Nome Creek	31,000	Frontcountry	Limited
Wickersham Dome/Blixt Cabin	7,500	Frontcountry	Limited
Other BLM Lands	3,800	Not Applicable	Limited

aTable 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. Snowmobiles are defined as 50 inches or less in width, and 1,000 pounds curb weight or less.

ATVs are defined as 50 inches or less in width, and 1,000 pounds curb weight or less. UTVs are defined as 64 inches or less in width and 1,500 pounds curb weight or less.

A comprehensive travel management network has been defined for the White Mountains Subunit. This is described fully in Appendix B, of the Draft Eastern Interior Resource Management Plan and Environmental Impact Statement (BLM 2012).

#### Travel Management Prescriptions Common to All Lands

Within all zones, the BLM may continue to issue temporary emergency closures based on a determination of considerable adverse effects pursuant to 43 CFR 8341.2, special rules. This includes considerable adverse impacts to soil, vegetation, wildlife habitat, or cultural resources. The agency can maintain this closure until the effects are mitigated and measures are implemented to prevent future recurrence.

All forms of non-motorized uses are generally allowed, including the use of horses and mountain bikes. Cross-country travel by non-motorized means is allowed.

The following trails are limited to non-motorized uses: Ski Loop Trail, Table Top Trail, Summit Trail, Two-Step Louis Trail, and the Fishing Trail inside Cripple Creek Campground.

Camping and/or campfires are prohibited within 25 feet of BLM-maintained trails within the White Mountains NRA.

Trapping and placement of bait and wildlife lures (scents) is prohibited within 25 feet of BLM-maintained trails. Trapping includes but is not limited to the use of marten pole sets, snares, conibear, or leg hold traps. These restrictions do not apply to sections of trail on land managed by the State of Alaska, where BLM maintains access to the White Mountains NRA.

Aircraft use would be generally unrestricted (except in Primitive RMZ), 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; Use of gravel bars and winter snow areas would be allowed.

Motorboat use generally allowed without specific authorization consistent with ANILCA sections 1110(a) and 811 with the following reasonable regulation.

- Launching boats with motors exceeding 15 horsepower without written authorization from the AO is prohibited in the Nome Creek Valley.
- Airboats, hovercraft, and <u>personal watercraft</u> would be prohibited in the White Mountains Special Recreation Management Area.

#### Travel Management Prescriptions for the Primitive RMZ

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 <u>curb weight</u> and less would be allowed except within the research natural areas which are closed to OHV use.

A permit would be required for all OHV use.

Aircraft landings would be allowed within the RNAs and the White Mountain Spine, with the following provisions: No clearing of vegetation would be allowed without a permit from the Authorized Officer.

### Travel Management Prescriptions for the Semi-Primitive and Backcountry RMZs

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.

A permit would be required for all other OHV use.

#### Travel Management Prescriptions for the Middlecountry RMZ

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

OHVs 50" width and less, and 1,000 pounds curb weight and less, would be allowed on designated trails only (May 1 through October 14 except for Wickersham Creek Trail). Wickersham Creek Trail from Mile 28 Elliott Highway to its intersection with 23.5 mile trail is open to the summer use of OHVs from June 1 through October 14. Summer use is delayed to protect costly improvements to trail tread from rutting and erosion, and allow the ground to thaw. The use of motorized travel, except snowmobiles, ends October 14, unless posted otherwise, so as not to impact winter trail grooming activities. Travel off of designated trails would be allowed only to retrieve legally harvested game within the Middlecountry RMZ. Designated Motorized Trails include (Map 58):

- 1. Wickersham Creek Trail from Mile 28 Elliott Highway to the intersection with Trail Creek Trail
- 2. Trail Creek Trail from the intersection with Wickersham Creek Trail to Lee's Cabin.
- 3. Mile 23.5 Elliott Highway to the intersection with Wickersham Creek Trail.
- 4. Trail Creek Trail from Lee's Cabin to Beaver Creek WSR Corridor.
- 5. McKay Creek Trail from the White Mountains NRA boundary to Beaver Creek WSR Corridor.
- 6. Lower Nome Creek Trail from McKay Creek Trail intersection to Nome Creek Road.
- 7. Bear Creek Trail from Nome Creek Road to Richards Cabin, Richards cabin NE along Bear Creek.
- 8. Sled Dog Rocks Trail from Richards Cabin to Sled Dog Rocks.
- 9. Quartz Creek Trail from Nome Creek Road to Quartz Creek (reroute only).
- 10. Champion Ridge Trail from Quartz Creek Trail west 3 miles.
- 11. Moose Creek Ridge Trail from Nome Creek Road to top of Ridge, then east along ridge to Quartz Creek Trail and west along ridge to Moose Creek.
- 12. White Mountains NRA Boundary Trail from McKay Creek Trail west along boundary 11 miles.

- 13. Globe Peak Trail from Globe Peak to intersection with Big Bend Trail.
- 14. Big Bend Trail from Colorado Creek Cabin to Beaver Creek WSR Corridor.
- 15. Colorado Creek Trail from Colorado Creek cabin, west to White Mountains NRA boundary.
- 16. Ridge Trail from Colorado Creek Trail to VABM Beaver.
- 17. Portion of Haystack Mountain access on BLM-managed land.
- 18. Little Champion Creek extension.

UTVs are allowed on designated trails only. Designated trails for UTVs include:

- 1. Quartz Creek Trail from Nome Creek Road to Quartz Creek (reroute only).
- 2. Wickersham Creek Trail from Mile 28 Elliott Highway to the intersection with Trail Creek Trail
- 3. Trail Creek Trail from the intersection with Wickersham Creek Trail to Lee's Cabin.
- 4. Mile 23.5 Elliott Highway to Wickersham Creek Trail.

Additional designated trails could be added in the future, once a trail is improved and sustainable for this use. No game retrieval by UTVs would be allowed off of the designated trail.

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

A permit would be required for all other OHV use.

Travel Management Prescriptions for the Nome Creek Frontcountry RMZ

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

The Table Top Mountain Trail, Two-Step Louis Trail and Fishing Trail, inside the Cripple Creek Campground, are limited to non-motorized use only.

OHVs 50" width and less, and 1,000 pounds curb weight and less would be allowed on designated trails only (May 1 through October 14). Travel off of designated trails would be allowed only to retrieve legally harvested game within the Frontcountry RMZ. Designated trails include (Map 58):

- 1. Moose Creek Ridge Trail from Nome Creek Road to top of Ridge, then east along ridge to Quartz Creek Trail and west along ridge to Moose Creek.
- 2. Bear Creek Trail from Nome Creek Road to Richards Cabin.
- 3. Quartz Creek Trail from Nome Creek Road to Quartz Creek (reroute only).
- 4. Lower Nome Creek Trail from McKay Creek Trail intersection to Nome Creek Road.

Additional designated trails could be added to the trail network as they are designed and constructed by BLM in a sustainable fashion.

<u>UTVs</u> are allowed on the Quartz Creek Trail reroute only. Additional trails may be provided in the future once a trail is improved and sustainable for this use. No game retrieval by UTVs is allowed off of the designated trail.

The intent of management for the Nome Creek tailings area is to continue to allow access and recreation opportunities within the disturbed, gravel area. The use of licensed, highway vehicles (including, but not limited to trucks and motorhomes) and OHVs weighing 2,000 pounds GVWR and less, and 60" and less is allowed. Travel off of the disturbed rock tailings by motorized means is not allowed. The tailings area would be classified as "Limited" to such motorized uses as to not adversely affect the area. Travel by motorized vehicle up or down Nome Creek or its tributaries is not allowed. Motorized users may cross Nome Creek or its tributaries at right angles only.

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

A permit would be required for all other OHV use.

Launching of boats in the Nome Creek Valley would be restricted to 15hp or less.

Travel Management Prescriptions for the Wickersham Dome-Fred Blixt Frontcountry RMZ

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

OHVs 50" width and less, and 1,000 pounds curb weight and less would be allowed on designated trails only (May 1 through October 14 except for Wickersham Creek Trail). Wickersham Creek Trail from Mile 28 Elliott Highway to its intersection with 23.5 mile trail is open to the summer use of OHVs from June 1 through October 14. Summer use is delayed to protect costly improvements to trail tread from rutting and erosion, and allow the ground to thaw. The use of motorized travel, except snowmobiles, ends October 14, unless posted otherwise, so as not to impact winter trail grooming activities. Travel off of designated trails allowed only to retrieve legally harvested game. Designated Trails include:

- 1. Wickersham Creek Trail from Mile 28 Elliott Highway to the intersection of Trail Creek Trail.
- 2. Trail Creek Trail from the intersection of Wickersham Creek Trail to Lee's Cabin.
- 3. Mile 23.5 Elliott Highway to intersection with Wickersham Creek Trail.

<u>UTVs</u> are allowed on designated trails only (May 1 through October 14 except for Wickersham Creek Trail, same as above). No game retrieval by UTVs is allowed off of the designated trail. Designated Trails for UTVs include (Map 58):

- 1. Wickersham Creek Trail from Mile 28 Elliott Highway to the intersection with Trail Creek Trail
- 2. Trail Creek Trail from the intersection with Wickersham Creek Trail to Lee's Cabin.
- 3. Mile 23.5 Elliott Highway to intersection with Wickersham Creek Trail.

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

A permit would be required for all other OHV use.

Travel Management Prescriptions for Other BLM Lands

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 weighing 1,500 pounds curb weight and less would be allowed (cross-country travel allowed except where this use may interfere with active mining operations).

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

#### Withdrawals

Same as Alternative B.

### **Research Natural Areas**

The three existing <u>RNA</u> designations described in Alternative A would remain in place. Management of RNAs would be the same as Alternative B, except that primitive camping and development of primitive hiking trails would be allowed.

#### Wild and Scenic Rivers

Same as Alternative B except no rivers would 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. Beaver Creek (HUC # 190404022104)
- 2. Beaver Creek (HUC # 190404022109)
- 3. South Beaver Creek (HUC # 190404022202)
- 4. Montana Creek-South Beaver Creek (HUC # 190404022206)
- 5. South Beaver Creek (HUC # 190404022207)
- 6. Beaver Creek (HUC # 190404022208)
- 7. Victoria Mountain-Beaver Creek (HUC # 190404022406)
- 8. Yellow Creek- Beaver Creek (HUC # 190404022408)

Complete watershed assessments as necessary for management.

#### Wildlife

Alternative D is similar to Alternative C, except the Wildlife Conservation Area is smaller and ungulate mineral lick provisions apply only to the area within one-half mile of mineral licks. Under Alternative D, approximately 185,000 acres would be identified as the White Mountains Wildlife Conservation Area (Map 67) to protect caribou calving and postcalving habitat for the White Mountains caribou herd and Dall Sheep habitat.

Within a distance of one-half mile of designated ungulate mineral licks, limit all permitted uses between 10 May and 1 September (as well as development of facilities to be used in that time

period) to activities which will not reduce sheep 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 October 14 sheep habitat; May 10 through July 15 remainder). 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, limited closures (limited areas and/or time periods).

#### **Wilderness Characteristics**

Wilderness characteristics would be maintained on 205,000 acres (20 percent of the area with wilderness characteristics in this subunit). These lands occur within the Beaver Creek WSR Corridor, the northeast portion of the Cache Mountain Recreation Management Zones, and the Research Natural Areas (Map 85).

## **Lands and Realty**

Same as decisions in Alternative C, except the Perhaps Creek portion of Public Land Order 4176 would not be retained. The withdrawal would be modified to make this parcel available for State selection.

#### Leasable Minerals

The Foothills Middlecountry RMZ (451,000 acres) would be open to fluid and solid mineral leasing, subject to minor constraints (Map 36).

All split-estate <u>BLM</u> lands would be open to fluid mineral leasing, subject to standard Fluid Mineral Leasing Stipulations (100 acres).

All remaining BLM lands, approximately 569,000 acres in the following areas would be closed to leasable minerals.

#### **Locatable Minerals**

Same as Alternative B, the entire subunit is closed to locatable minerals.

#### Recreation

The White Mountains Special Recreation Management Area (SRMA) would include 1,017,000 acres including Beaver Creek WSR Corridor and the White Mountains NRA and associated lands (Map 50). The White Mountains SRMA would include six 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. See Table 2.2 for a description of recreation opportunity settings that would apply to reach RMZ.

Name **Recreation Opportunity OHV Designation** Acres Settinga Research Natural Areas 12,600 Primitive Closed Beaver Creek Corridor 69,000 Semi-Primitive Limited 445.000 Backcountry Limited Cache Mountain White Mountains Foothills 452,000 Middlecountry Limited Nome Creek 31,000 Frontcountry Limited Wickersham Dome/Blixt Cabin 7,500 Frontcountry Limited Other BLM Lands 3,800 | Not Applicable Limited

Table 2.5. White Mountains Recreation and Travel Management Zones, Alternative D

## **Travel Management**

Travel management prescriptions apply to the Travel Management Zones listed in Table 2.5 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 defined as 50 inches or less in width, and 1,000 pounds curb weight or less. ATVs are defined as 50 inches or less in width, and 1,000 pounds curb weight or less. UTVs are defined as 64 inches or less in width and 1,500 pounds curb weight or less.

A comprehensive travel management network has been defined for the White Mountains Subunit. This is described fully in Appendix B, of the Draft Eastern Interior Resource Management Plan and Environmental Impact Statement (BLM 2012).

Alternative D differs from Alternative C primarily due to the location and size of the RMZs, that cross-country use of all-terrain vehicles (ATVs) would be allowed in some areas, and some additional allowance for use of utility terrain vehicles (UTVs) as described below.

### Travel Management Prescriptions Common to All Lands

Within all zones, the BLM may continue to issue temporary emergency closures based on a determination of considerable adverse effects pursuant to 43 CFR 8341.2, special rules. This includes considerable adverse impacts to soil, vegetation, wildlife habitat, or cultural resources. The agency can maintain this closure until the effects are mitigated and measures are implemented to prevent future recurrence.

All forms of non-motorized uses are generally allowed, including the use of horses and mountain bikes. Cross-country travel by non-motorized means is allowed.

The following trails are limited to non-motorized uses: Ski Loop Trail, Table Top Trail, Summit Trail, Two-Step Louis Trail, and the Fishing Trail inside Cripple Creek Campground.

Camping and/or campfires are prohibited within 25 feet of BLM-maintained trails within the White Mountains NRA.

Trapping and placement of bait and wildlife lures (scents) is prohibited within 25 feet of BLM-maintained trails. Trapping includes but is not limited to the use of marten pole sets, snares, conibear, or leg hold traps. These restrictions do not apply to sections of trail on land managed by the State of Alaska, where BLM maintains access to the White Mountains NRA.

<sup>&</sup>lt;sup>a</sup>Table 2.2

Aircraft use would be generally unrestricted (except in Primitive management RMZ), 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; Use of gravel bars and winter snow areas would be allowed.

Motorboat use generally allowed without specific authorization consistent with ANILCA sections 1110(a) and 811 with the following reasonable regulation.

- Launching boats with motors exceeding 15 horsepower without written authorization from the AO is prohibited in the Nome Creek Valley.
- Airboats, hovercraft, and <u>personal watercraft</u> would be prohibited in the White Mountains Special Recreation Management Area.

#### Travel Management Prescriptions for the Primitive RMZ

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

Aircraft landings would be allowed within the <u>RNAs</u> and the White Mountain Spine, with the following provisions: No clearing of vegetation would be allowed without a permit from the Authorized Officer.

A permit would be required for all OHV use.

Travel Management Prescriptions for the Semi-Primitive and Backcountry RMZs

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.

A permit would be required for all other OHV use.

Launching boats with motors exceeding 15 horsepower without written authorization from the AO would be prohibited in the Nome Creek Valley.

Travel Management Prescriptions for the Middlecountry RMZ

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

OHV 50" width and less, and 1,000 pounds curb weight and less would be allowed (May 1 through October 14 except for Wickersham Creek Trail). Wickersham Creek Trail from Mile 28 Elliott Highway to its intersection with 23.5 mile trail would be open to the summer use of OHVs from June 1 through October 14. Summer use is delayed to protect costly improvements to trail tread from rutting and erosion, and allow the ground to thaw. The use of motorized travel, except snowmobiles, ends October 14, unless posted otherwise, so as not to impact winter trail grooming activities. Cross-country travel would be allowed except on the Summit and Ski Loop trails, and within the Wickersham Creek Closed Area.

UTVs would be allowed on designated trails only. Designated Motorized Trails include (Map 59):

- 1. Quartz Creek Trail from Nome Creek Road to Quartz Creek (reroute only).
- 2. Wickersham Creek Trail from Mile 28 Elliott Highway to the intersection with Trail Creek Trail.

- 3. Trail Creek Trail from the intersection with Wickersham Creek Trail to Lee's Cabin.
- 4. Mile 23.5 Elliott Highway to intersection with Wickersham Creek Trail.
- 5. Trail Creek Trail from Lee's Cabin to Crowberry Cabin.
- 6. McKay Creek Trail from the White Mountains NRA boundary to Beaver Creek WSR Corridor.
- 7. White Mountains Boundary Trail from McKay Creek Trail west along boundary approximately 11 miles.
- 8. Moose Creek Ridge Trail from Nome Creek Road to top of Ridge, then east to Quartz Creek Trail and west along ridge to Moose Creek.
- 9. Globe Peak Trail from Globe Peak to intersection with Big Bend Trail.
- 10. Big Bend Trail from Colorado Creek Cabin to Beaver Creek WSR Corridor.
- 11. Colorado Creek Trail from Colorado Creek cabin, west to White Mountains NRA boundary.
- 12. Ridge Trail from Colorado Creek Trail to VABM Beaver.
- 13. Portion of Haystack Mountain access on BLM-managed land.
- 14. Little Champion Creek extension.

Additional trails could be designated in the future once a trail is improved and sustainable for this use.

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

A permit would be required for all other OHV use.

Travel Management Prescriptions for the Nome Creek Frontcountry RMZ

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

The Table Top Mountain Trail, Two-Step Louis Trail and Fishing Trail inside the Cripple Creek Campground would be limited to non-motorized use only.

OHVs 50" width and less, and 1,000 pounds curb weight and less would be allowed on designated trails only (May 1 through October 14). Travel off of designated trails allowed only to retrieve legally harvested game. Designated Motorized Trails include (Map 59):

- 1. Moose Creek Ridge Trail from Nome Creek Road to top of Ridge, then east to Quartz Creek Trail and west along ridge to Moose Creek.
- 2. Bear Creek Trail from Nome Creek Road to Richards Cabin.
- 3. Quartz Creek Trail from Nome Creek Road to Quartz Creek (reroute only).
- 4. Lower Nome Creek Trail from McKay Creek Trail intersection to Nome Creek Road.

<u>UTVs</u> would be allowed on designated trails only (May 1 through October 14). No game retrieval by UTVs would be allowed off of the designated trail. Designated Motorized Trails for UTVs include (Map 59):

- 1. Moose Creek Ridge Trail from Nome Creek Road to top of Ridge, then east to Quartz Creek Trail and west along ridge to Moose Creek.
- 2. Quartz Creek Trail from Nome Creek Road to Quartz Creek (reroute only).

Additional trails could be added to the designated trail system as they are designed and constructed in a sustainable fashion.

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

A permit would be required for all other OHV use.

The management intent for the Nome Creek tailings area is to continue to allow access and recreation opportunities within the disturbed, gravel area. The tailings area would be classified as a Limited Area Designation. The use of licensed, highway vehicles (including, but not limited to trucks and motorhomes) and OHVs weighing 2,000 pounds GVWR and less, and 60" width and less would be allowed. Travel off of the disturbed rock tailings by motorized means would not be allowed. Travel by motorized vehicle up or down Nome Creek or its tributaries would not be allowed. Motorized users may cross Nome Creek or its tributaries at right angles only.

Travel Management Prescriptions for the Wickersham Dome/Fred Blixt Frontcountry RMZ

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

The Ski Loop and Summit trails would be limited to non-motorized use only.

OHVs 50" width and less, and 1,000 pounds curb weight and less would be allowed (May 1 through October 14) except for Wickersham Creek Trail. Wickersham Creek Trail from Mile 28 Elliott Highway to its intersection with 23.5 mile trail would be open to the summer use of OHVs from June 1 through October 14. Summer use is delayed to protect costly improvements to trail tread from rutting and erosion, and allow the ground to thaw. The use of motorized travel, except snowmobiles, ends October 14, unless posted otherwise, so as not to impact winter trail grooming activities. Cross-country travel would be allowed except within the Wickersham Creek Closed Area.

<u>UTVs</u> would be allowed on designated trails only (Same seasonal restrictions apply to Wickersham Creek Trail as above). Designated Motorized Trails include:

- 1. Wickersham Creek Trail from Mile 28 Elliott Highway to the intersection with Trail Creek Trail
- 2. Trail Creek Trail from the intersection with Wickersham Creek Trail to Lee's Cabin.
- 3. Mile 23.5 Elliott Highway to intersection with Wickersham Creek Trail.

Additional trails could be added to the designated trail system as they are designed and constructed in a sustainable fashion.

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

A permit would be required for all other OHV use.

Travel Management Prescriptions for the Other BLM Lands

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 weighing 1,500 pounds curb weight and less would be allowed (cross-country travel allowed except where this use may interfere with active mining operations).

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

#### Withdrawals

Same as Alternative C, except for the following:

Revoke that portion of Public Land Order 4167 on Perhaps Creek (200 acres) and allow it to be conveyed to the State of Alaska (FM., T. 5N., R. 5E., Section 17, SW ¼; Section 20, N ½ N ½ NW ¼.)

#### **Research Natural Areas**

Same as Alternative C.

#### Wild and Scenic Rivers

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 <u>AO</u> pursuant to 43 <u>CFR</u> 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 <u>AO</u>. 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 <u>AO</u> 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 <u>ADEC</u> 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 <u>AS</u> 46.03.755 and 18 <u>AAC</u> 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 <u>AO</u> 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 a 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 degredation, 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 <u>AO</u> 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 <u>USFWS</u> 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 White Mountains ACEC (Alternative B) and the White Mountains Wildlife Conservation Area (Alternatives C and D).

**ROP Wild-11**<sup>1</sup> 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

<sup>&</sup>lt;sup>1</sup> Applicable to the Steese, Fortymile, and White Mountains ACECs and the White Mountains Wildlife Conservation Area.

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

ROP Wild-12¹ 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-13**<sup>1</sup> 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-14**<sup>1</sup> 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. The 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	
<b>Goal:</b> When authorizing fluid leasable minerals planning area are met to the extent possible.	actions ensure that goals	to protect other resource values in the	
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 <u>AO</u> .	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	
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	Waiver: None  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 so	apport populations of wel	l-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	Exception: The AO may grant an exception if the lessee demonstrates that impacts would be minimal or there is no feasible or prudent alternative.  Modification: None
		Waiver: None
Goal: Minimize impacts to wildlife species from	<u>l</u> m BLM-authorized activit	
Stipulation 5: No exploration activities from	Identified caribou	Exception: The AO may grant an
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	calving/postcalving and Dall sheep habitats	exception: The AO may grant an exception if the lessee demonstrates that calving caribou or Dall sheep are not currently using the area.
may occur (no work over rigs).		Modification: Season may be shortened or extended based on actual occupancy of the area.  Waiver: This stipulation may be waived if caribou migratory patterns change and the areas are no longer used for calving.
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	Exception: The AO may grant an exception if the lessee demonstrates that impacts would be minimal or there is no feasible or prudent alternative.  Modification: Season may be adjusted based on actual nest occupancy.  Waiver: None
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	Exception: The AO may grant an exception if the lessee demonstrates that impacts would be minimal or there is no feasible or prudent alternative.  Modification: Season may be adjusted based on actual nest occupancy.
		Waiver: None

# 2.8. Comparison of Impacts

The following table summarize the impacts that could occur in the White Mountains Subunit due to implementation of the <u>RMP</u>. This table 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. White Mountains Subunit: Comparison of Impacts

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
Fish and Aquatic Species	Fish and aquatic resources would be primarily affected by surface-disturbing activities which alter stream channels, remove or damage riparian vegetation, or result in soil erosion and sedimentation to aquatic habitat. Activities causing extensive stream channel or riparian alteration would likely result in unavoidable loss of fish and aquatic habitat, with both short- and long-term adverse impacts. Effects from recreation would be minor. The White Mountains NRA and the Beaver Creek WSR are closed to locatable minerals, benefitting high-value fish resources. Although fish and aquatic inhabitat resources are relatively low within RNAs, the protections provided in these areas would ensure these headwater areas remain intact, reducing potential impacts to fish and aquatic habitat lower in the drainage. Invasive species valversely 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 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 by minimizing surface-disturbing activities and decreasing recovery time from disturbance. Wildland fire directly ampacts 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			
				Effects would be similar

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
Resource	erosion and sediment impacts. Closure of fifty-five percent of the subunit to summer OHV use would provide protection to high-value fish resources in Beaver Creek watershed. Currently, there are no known impacts to fish and aquatic habitat from OHV use, but this could change with the trend of increasing use.	protect high-value fish resources in Beaver Creek watershed. Alternative B would provide the greatest protection. Impacts are expected to be minimal. Fossil Creek would be recommended suitable for designation as a WSR, generally providing additional protection to fish habitat.	percent of the subunit to summer OHV use, would protect high-value fish resources in Beaver Creek watershed. Alternative C provides slightly less protection than Alternative B, but more than Alternatives A and D. Impacts to fish and aquatic habitat are expected to be minimal.	Proliferation of user made trails would continue resulting in increased erosion and sediment impacts. This alternative has more potential to effect fish and aquatic habitat than Alternatives B and C. Fifty percent of the subunit would be closed to summer OHV use, providing protection to high-value fish resources in Beaver Creek watershed.
Vegetation	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, salable minerals, salable minerals, salable 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 o			

Comparison of Impacts	Chapter 2 Z
of Impacts	Alternatives

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D	
Resource	Recreational facilities impact vegetation directly from loss of habitat, and indirectly through visitor use. High levels of visitors can impact vegetation through trampling. Recreationists 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 from OHV use would be the highest due to the lack of OHV designations on sixty-three percent of the planning area. Eleven percent is closed to summer OHV use. On remaining lands the only limitation on OHV use is a 1,500 pound GVWR weight limit; cross country travel is allowed.	Effects from OHV use would be the lowest as less than one percent of the planning area would be closed to all motorized use, forty-seven percent would be closed to summer OHV use, and twenty-seven percent would be limited to designated or existing trails.	Effects would be higher than Alternative B. Less than one percent would be closed to all motorized use, twenty percent would be closed to summer OHV use, and forty-five percent would be limited to designated or existing trails. Cross-country summer use of OHVs 1,000 pounds curb wight and less would be allowed on thirty-five percent (all in the Upper Black River subunit).	Effects would be higher than Alternative C but less than Alternative A. Less than one percent would be closed to all motorized use and sixteen percent would be closed to summer OHV use. Cross-country summer use of OHVs 1,000 pounds curb weight and less (1,500 pounds in Fortymile subunit) would be allowed on eighty-three percent.	
Wilderness Characteristics	Not Addressed	Wilderness characteristics would be protected on fifty percent of the subunit. Low levels of activity and recreation settings would indirectly protect wilderness characteristics on most of the remainder. Recreation facility development may impact naturalness in localized areas.	Wilderness characteristics would be protected on thirty-one percent of the subunit. Low levels of activity and recreation settings would indirectly protect wilderness characteristics on most of the remainder. Recreation facility development may impact naturalness in localized areas.	Wilderness characteristics would be protected on twenty percent of the subunit. Low levels of activity and recreation settings would indirectly protect wilderness characteristics on most of the remainder. Recreation facility development may impact naturalness in localized areas.	

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D	
Wildlife	characteristics, and subsistence minerals, salable minerals, lat ROPs (Section 2.7) will apply Measures to minimize impact value of riparian habitats to impacts to riparian vegetation general, and more specificall. Use of motorized boats can recommend to the composition of the c	oil and water resources, Special Status Species, vegetative communities, visual resources, wilderness ence will generally benefit wildlife and their habitat, as would management of NIP. The effects of solid leasable lands and realty, and renewable energy are anticipated to be small due to the limited activity expected. The ply in Alternatives B, C, and D; and, would reduce potential impacts to habitat and many wildlife species. Packs to fish habitat will generally benefit wildlife and habitat because of the high room many species. RCAs and High Priority Restoration Watersheds will reduce ion, especially stream bank vegetation, resulting in lesser impacts to wildlife in ally to BLM-Alaska sensitive species and Bird Species of Conservation Concern.  Tresult in disturbance of wildlife along Beaver Creek. Limitations on horsepower for boats launching at ance and speed that many boats will travel, reducing potential impacts. Greater impacts could occur if use reased greatly, road access to lower Beaver Creek was developed, or technology advances allow easier travel ement of Beaver Creek as a WSR, even though it attracts recreational use, limits impacts to wildlife overall. Impacts to wildlife due to alteration of habitat. Introduction and spread of non-native animal species is also an alternatives include measures to monitor and control the spread of invasive species. These measures will increased abundance of NIP are inevitable and loss of habitat for native wildlife species can be expected. Finally, and off-trail summer use of OHVs will reduce potential spread of NIP. Alternatives which minimize and off-trail summer use of OHVs will reduce potential spread and impacts of NIP. Treatment of NIP in the habitats, but generally less than continuation and spread of NIP at the site.  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			
	Not addressed	A provision to monitor snowmobile use of non-forested caribou habitat and adjust management if necessary will minimize potential future impacts should use of these habitats increase.			
There would be no effects to wildlife from leasable minerals as the entire subunit is closed to leasing.				451,000 acres would be open to leasing. If exploration or leasing occurred, which is unlikely, wildlife and habitat could be impacted. The greatest potential conflicts would be in lower Victoria Creek sheep habitat, and the area north of Nome Creek and upper Beaver Creek. Sheep movement between Victoria Mountain and Mount Schwatka and use of a mineral lick along Victoria Creek could be disrupted.	
	The Primitive Management Unit (575,000 acres) is	Effects of recreation to wildlife would be reduced as the	Effects to wildlife will increase relative to Alternative B,	This alternative has fewer acres of Primitive and Semi-Primitive	

Compari.	Chapter 2
ison of	
Impacts	Alternatives

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
	managed to protect remote, Primitive values. Impacts from recreation in this unit are minor. The Beaver Creek WSR is used mostly by summer float boaters, although motorized use is allowed and occurs mostly during hunting season in the upper portion. The Semi-Primitive Motorized Unit (428,000 acres) is subject to the most recreational use (and variety of types of use).	recreation settings manage for smaller changes to the landscape than in other alternatives. Primitive and Semi-Primitive settings would protect Dall sheep habitat in the White Mountains Spine area, and caribou and moose habitat in the upper Victoria Creek drainage.	with the increased area of Middlecountry and reduced area of Semi-Primitive settings. If the Backcountry zone is managed to allow more human use than the Alternative A Primitive Management Unit, there may be minor additional impacts in those areas compared to Alternative A. Potential impacts to wildlife from Middlecountry management will be greatly reduced by limiting OHV use to designated trails.	settings. Relative to other alternatives, it will allow motorized use in a large portion of Victoria Creek. Effects of recreation on wildlife will be higher than all other alternatives. The area of Middlecountry is increased greatly (from 54,000 to 123,000 acres) over other action alternatives, and over the Semi-Primitive Motorized Unit of Alternative A. Impacts would potentially occur to Dall sheep, caribou, moose and other wildlife, primarily in the northern portion of the White Mountains NRA.
	Cross-country OHV use will continue to increase, resulting in direct loss of habitat. Sheep use in the area surrounding a mineral lick in upper Little Champion Creek may be hampered by increasing levels of motorized and non-motorized recreation. Due to the very scattered nature of small tors for escape terrain in the area between Champion Creek and Quartz Creek, sheep could possibly abandon use of that area under foreseeable levels of OHV activity. Caribou winter habitats in upper Victoria Creek could be affected by snowmobile use facilitated by trails created in summer by OHV users.	Restricting summer OHV use to 139 miles of designated trails on 491,000 acres will greatly reduce the potential impacts of summer OHVs on wildlife. Over time, managed/constructed trails will replace designated trails that are not sustainable. These trails can be routed to minimize impacts to sensitive wildlife and habitats. Pioneering of new routes will be greatly reduced and current non-designated routes will begin to recover. The area of wildlife habitat influenced by OHVs will decrease dramatically. Managed/constructed trails and OHV use will impact wildlife, but this impact will be much smaller and can be better managed.	The area open to summer OHV use on designated trails is somewhat larger than in Alternative B and off-trail use will be allowed for game retrieval. This provision may create some of the impacts associated with allowance of cross-country travel, but those impacts are expected to be relatively minor. Off-trail use for game retrieval will be very limited. relative to Alternatives A or D. Compared to Alternatives A or D, impacts of summer OHV use would be very small. UTVs (larger OHVs) will be allowed on 27 miles of trail. This allowance will have little impact. However, trails constructed to support use by large OHVs begin to approach roads in size and design, with relatively larger potential impacts.	Cross-country summer OHV use is allowed on a somewhat larger area than Alternative A. Effects from summer OHV use would be greatest in this alternative. In addition to effects described for Alternative A, opening of Victoria Creek drainage to OHVs could eventually result in a trail to or near lower Beaver Creek, potentially affecting Dall sheep in the area. Similar to Alternative C, UTVs would be allowed on designated trails but, the miles of designated UTV trail will approximately triple (112 miles). This allowance on select existing trails will have little impact. However, trails constructed to support use by large OHVs begin to approach roads in size and design, with relatively larger potential impacts.

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
	No camping is allowed in three designated RNAs, limiting human activity and disturbance of Dall sheep, raptors, and other species.	Effects from the RNAs would be the same as Alternative A. The White Mountains ACEC would be managed to maintain caribou and sheep habitat quality. Designation of Fossil Creek as a "scenic" river would have little effect on wildlife due to other management constraints in the area.	Allowing primitive camping in the RNAs may result in slightly greater disturbance of Dall sheep, raptors, and other species. No ACEC would be designated. A smaller area of Dall sheep and caribou calving/postcalving habitat would be managed as a Wildlife Conservation Area, maintaining these habitats. Some degradation of habitat from motorized use is possible.	Effects from RNAs would be the same as Alternative C. A smaller area would be managed as a Wildlife Conservation Area, protecting most Dall Sheep habitats and the most highly used caribou calving/postcalving habitat. Portions of caribou the habitats could be impacted by motorized vehicle use, including cross-country summer OHV use.
Lands and Realty		he potential for requiring relocation are anticipated within the White M		prizations to protect other resources.
Leasable Minerals	The subunit is closed to the mineral leasing laws. This would have little effect due to the lack of leasable mineral resources on BLM lands.  451,000 acres would be open to leasable minerals. This decision would have little effect due to the lack of these resources on BLM lands.			
Locatable Minerals	Impacts from mining would be localized on 4,000 acres of existing mining claims in the Livengood area, where a large lode mine is being developed. Impacts include direct loss of habitat, wildlife disturbance resulting in some level of avoidance, and changes in human use of the area. The White Mountains NRA would remain Congressionally withdrawn from locatable mineral entry, including known high mineral potential areas.			
Recreation	Restrictions to address wildlife concerns could make recreation projects more costly, more difficult to accomplish, or unable to meet recreation management objectives. Healthy wildlife populations would benefit hunting, wildlife viewing, and trapping which are generally secondary activities in most RMZs. Access restrictions could offset that benefit by limiting participation in those activities. The biggest potential impact would be in limiting potential motorized and non-motorized recreational opportunities and possibly limiting further development of the winter cabin/trails program. The White Mountains NRA and adjacent facilities would be managed to enhance and promote recreational opportunities, ensuring that recreation opportunities continue to exist.  There would be no effects to recreation from leasable minerals as the entire subunit is closed to leasing.  The Middlecountry RMZ, 451,000 acres, would be open. If leasing occurred, which is unlikely, desired recreation outcomes could be diminished.			
	Summer cross-country travel by OHVs 1,500 pounds and less is allowed on forty-three percent of the subunit. Resource and user conflict issues would	Summer use of OHVs would be limited to designated trails in the Middlecountry and Frontcountry RMZs (367,000 acres). Opportunities for cross-country summer OHV	Effects from travel management would be similar to Alternative B. Additionally, allowances for off-trail travel by vehicles 1,000 pounds curb weight or less in the Middlecountry	Effects from travel management would be similar to Alternative A. The size of the area where summer cross-country OHV use is allowed would increase by five percent. Portions of the

Program or

Resource

Alternative A

not be addressed, potentially

resulting in emergency

Alternative D

northern and northwestern White

Mountains would be opened to

Alternative B

hunting, would not be available.

use, including exploring and

Alternative C

and Frontcountry RMZs, to

retrieve legally harvested game

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
		provide long-term beneficial experiences for those seeking scenic and natural landscapes and wanting to experience adventure.	would provide long-term recreation scenic and natural landscapes and	
Travel Management	route restrictions or closures. Recreation Opportunity Spect desire, and is directly related are applied to the same manage	BLM-authorized activities, such a trum (ROS) provides a framework to transportation and travel management units as the ROS, impacts avel in river corridor where the contract of the contract	h as wildlife, water, and soil could as rights-of-way, could slightly exp. for identifying the types of recreati ement opportunities in those areas. from recreation are expected to be a instruction of new roads, primitive r	and the route network. The on activities that the public might Since travel management decisions minimal. Management of Beaver
	Areas open to OHV use generally avoid crucial wildlife habitats. There is a seasonal closure to motorized use in peregrine falcon nesting areas.	Since OHV use is more restricted closures to protect wildlife could opportunities than under Alternat could be impacted by seasonal could be impacted by sea	have a greater effect on travel live A. Winter use of snowmobiles losures within winter caribou nter habitat is generally very low,	Effects would be similar to Alternative A.
	The OHV designation is Limited except for RNAs, (12,600 acres) which are Closed. Some trails are managed as non-motorized recreation trails, benefitting non-motorized trail users by providing a place where only non-motorized use is allowed, but also limiting motorized users opportunities to travel in the same areas. Summer cross-country use of OHVs 1,500 pounds GVWR and less is allowed on 440,000 acres, providing many opportunities for motorized use. 563,000 acres are closed to summer OHV	The OHV designation would be Limited, except for RNAs, (12,600 acres) which are Closed. Same as Alternative A, some trails would be managed as non-motorized. Travel would be restricted to 139 miles of designated trails on 367,000 acres. The amount of area where operating an ATV is allowable would be reduced. The designated trails are generally the same trails that have existed in the White Mountains for the past 15 years. The main difference from Alternative A is that OHVs would be required to stay on the trail. Proliferation of user made trails should be significantly	The OHV designation would be Limited, except for RNAs, (12,600 acres) which are Closed. Same as Alternative A, some trails would be managed as non-motorized. Travel would be restricted to 139 miles of designated trails on 437,000 acres. Alternative C allows greater use of OHVs compared to Alternative B and allows the use of UTVs on 27 miles of trails. Proliferation of user made trails should be significantly reduced compared to Alternative A, because OHVs are restricted to designated trails except for game retrieval; trail proliferation could be higher than under Alternative B because of the allowance for	The OHV designation would be limited, except for RNAs, (12,600 acres) which are closed. Same as Alternative A, some trails would be managed as non-motorized. Summer cross-country use of OHVs 1,000 pounds curb weight and less would be allowed on 464,000 acres and 112 miles of trail would be accessible for UTVs. Somewhat fewer acres (514,000 acres) would be closed to summer OHV use, providing some additional opportunity for summer motorized use in the northern and northwestern White Mountains. Travel Management decisions would greatly increase the area where OHVs can travel and expand the type of vehicles

Program or Resource	Alternative A	Alternative B	Alternative C	Alternative D
	use, somewhat limiting opportunities in these areas.	reduced. 636,000 acres would be closed to summer OHV use, making this alternative slightly more restrictive than Alternative A.	game retrieval. Off trail use would be minimal and dispersed resulting in few effects. Similar to Alternative A, 566,000 acres would be closed to summer OHV use.	allowed compared to Alternatives B and C. This would create a greater impact on non-motorized travelers.
	The three RNAs are closed to motorized OHV use. Impacts to motorized travel would be minimal since the RNAs are relatively inaccessible to this use.	Effects from RNAs would be the same as Alternative A. Designation of the White Mountains ACEC could result in limits on seasonal use of trails and construction of new trails. Designation of Fossil Creek as a "scenic" river, would not affect modification of existing trails or development of new trails.	established to provide for easier to would not have to travel greater d	ravel management as trails could be ravel through the RNAs and users istances outside the RNA to camp.
Wild and Scenic Rivers	Not addressed.	Fossil Creek would be recommended suitable for designation as "scenic," protecting its free-flow and ORVs until Congress made a decision on designation. River values would be protected by management of this area for a Backcountry setting.	Fossil Creek would not be recommended as suitable for designation as a "scenic" river. Scenic and geologic river values would generally be protected by management of this area for a Backcountry setting.	
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 would be localized and are not expected to impact resources at the population level. No impacts to access by subsistence users are anticipated.	Alternative B would not result in significant reductions in subsistence resources or uses by residents in or adjacent to the subunit. Most impacts to subsistence resources would be beneficial, and any impacts by way of the limited amount of development allowed to occur would be minimized by the Fluid Mineral Leasing Stipulations and ROPs (Section 2.7).	Alternative C would not significantly restrict subsistence use by communities in or near the planning area. Most impacts to subsistence resources and uses would be minor; any impacts from development would be minimized by the ROPs. Impacts would be localized and temporary, and are not expected to impact resources at the population level. No impacts to access by subsistence users are expected.	Alternative D would not restrict subsistence use by communities in or near the planning area. Any impact from responses to potential locatable mineral development and cross-county summer use of OHV would not be significant. Management decisions in Chapter 2 of this RMP and the Fluid Mineral Leasing Stipulations and ROPs would mitigate impacts.

## **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 A wheeled vehicle other than a snowmobile that is defined as having a **Vehicle (ATV):** curb weight of 1,000 pounds or less, maximum width of 50-inches or less

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".

**Designated Trail:** A narrow section of developed linear travel way, with an approved

designation for traversing by means of human-powered, stock, or off-road vehicle forms of transportation. Travel on designated trails allows a 100 foot wide travel way (50 foot either side of center line of trail). Motor vehicle designations include parking along designated routes and at facilities associated with designated routes when it is safe to do so and when not causing damage to resources. This provision recognizes that from a practical standpoint, one vehicle width from the edge of the route surface may be necessary to park a vehicle, allow another party to pass, perform a repair, to allow dispersed camping off the trail, and to allow enough area to

navigate around obstacles until a trail can be repaired.

**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 (ATVs) 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.

**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 ATVs. OHV is synonymous with Off-road vehicle and ATV. 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.

personal watercraft:

An inboard engine vessel, usually driven by a jet-pump, that typically carries one to three persons, and is operated by a person sitting by straddling a seat, standing, or kneeling on the boat, rather than in the

conventional manner of sitting below the gunwale of the boat.

**RCA:** Riparian Conservation Area

**RMP:** Resource Management Plan

**RMZ:** Recreation Management Zone

**RNA:** Research Natural Area

**ROP:** Required Operating Procedure

**ROW:** Right-of-way

State Historic Preservation Office **SHPO:** 

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

United States Fish and Wildlife Service **USFWS:** 

UTV: Utility Terrain Vehicle: 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 less than 1,500 pounds or less, a maximum width of 64 inches or less. Utility type vehicles do not include vehicles specially designed

to carry a person with disabilities.

Visual Resource Management VRM:

WSR: Wild and Scenic River: A river that is part of the National Wild and Scenic

River System.

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