

# Region 1 : Middle Fork

## Regional Summary

### Background

Region 1 occupies most of the northwestern portion of the planning area. Its western boundary, which is also that of the planning area, is adjacent to the Yukon - Charley Rivers National Preserve and the eastern limit of DNR's Tanana Basin Area Plan. This region is largely comprised of the eastern portion of the calving season distribution of the Fortymile caribou herd. It also encompasses most of the post-calving season distribution that extends into the planning area. Region 1 includes the historic settlement of Joseph, which is at the confluence of the Middle Fork and Joseph Creek. There are no permanent residents in Joseph or the remainder of the region.

### State Lands

In this region, there is a larger proportion of state-selected land than state-owned land. Approximately 714,965 acres are state-selected, and approximately 231,586 acres are state-owned. For the most part, state-owned and state-selected land in this region consists of large blocks of contiguous acreage, but is divided by the Wild and Scenic River corridor along Joseph Creek and the lower Middle Fork. (For more information regarding the National Wild and Scenic River corridors, refer to the *Navigable Waterbodies* section of this chapter.)

Land that is owned by the state occupies the headwaters of Middle Fork, and almost all of the Joseph Creek drainage. State-selected land is interspersed throughout the region. Most of the land selected by the state has also been selected by Doyon, Ltd., the regional ANCSA corporation in this area (see *Land Status map* in the Appendix). Currently, Doyon, Ltd. owns approximately 75,000 acres within this region, in the Slate Creek and lower Independence Creek drainages. Land was selected by the state in this region mostly for its high mineral potential, but also for its habitat values.

### Physical Features

The northwestern edge of this region is defined mostly by the ridge along the Mertie Range, which separates the watersheds of the Fortymile and Charley Rivers. With rounded, even-topped ridges separated by broad river valleys, terrain and vegetation are representative of the Yukon-Tanana Upland physiographic province. The region is mostly made up of the Middle Fork drainage, but also includes the drainages of Slate Creek, Independence Creek, and Upper Butte Creek. The north end of the region includes most of Granite Creek and upper Mogul Creek, which drain into the Seventymile River. Prominent peaks are Mount Harper at the westernmost edge of the region, rising to 6,543 feet, and North Peak at 5,745 feet in the north.

Vegetation consists mostly of mixed and pure stands of white spruce and black spruce, with balsam poplar, birch, and aspen occurring mostly in river valleys and on alluvial flats.

### **Access**

While the other regions in the planning area have some degree of accessibility from the Taylor Highway, this region does not. Ground access is provided by the RS 2477 trails (listed below) and other trails. These trails provide access mostly to the northern portion of the region, particularly Joseph, and the headwaters of Independence Creek. Most of the access into and within the region is on the rivers or by air. Landing opportunities exist on ridges, gravel bars, and the airstrip at Joseph.

#### RS 2477 Trails in the Middle Fork Region:

*North Fork of the Fortymile–Big Delta Trail.* This trail is a historic trail that connected the Fortymile district with the Fairbanks/Valdez military road. Portions of the trail are also segments of the Washington-Alaska Military Cable and Telegraph System (WAMCATS).

*Kechumstuk Winter Trail.* Originally, this trail was part of the trail along the Washington-Alaska Military Cable and Telegraph System (WAMCATS). It was used as an access and supply route for Kechumstuk and Chicken and for mining activities in the region.

### **Resources and Uses**

*Fish and Wildlife, Habitat, and Harvest.* Much of the planning area is part of the range for the Fortymile caribou herd, and all of Region 1 is within that range. Overall, the herd's distribution currently covers an area southeast of the Steese Highway, between the Yukon River and the Alaska Highway, and extends into the Ladue and Sixtymile River drainages in Canada. This is much smaller than the historic range that existed in the early 1900's. A great deal of study and public discourse has taken place in an effort to increase the size of the herd, and game management actions are currently under way to accomplish this. (For further information, see *Habitat Management Needs Assessment for the Fortymile Caribou Herd* and *Fortymile Caribou Herd Management Plan*, developed by the Fortymile Caribou Herd Planning Team.)

To obtain adequate forage and protection from predators during calving season, the cows and calves of the Fortymile herd are concentrated in the highlands of upper Salcha River and Birch Creek, the Charley River, and the North Fork and Middle Fork of the Fortymile River. About half of this calving season distribution extends into the planning area, and occupies most of Region 1. Almost all of the post-calving distribution that extends into the planning area is also within this region.

Dall sheep in this region are concentrated in the higher elevations around Glacier Mountain, Mount Harper and the headwaters of Joseph Creek, where they can access terrain suitable for predator evasion.

This remote region is used for harvest of caribou, sheep, moose, bear, and furbearers, particularly in the upper Middle Fork drainage. Little if any fishing occurs in this area.

*Forestry.* Vegetation in this region is largely comprised of alpine tundra with a variety of forest types depending on localized factors such as slope, aspect, soils, and fire patterns. These forest communities are characteristic of interior Alaska spruce-hardwood forest, containing white and black spruce, balsam poplar, birch, and aspen in various combinations. For the planning area in general, commercial timber harvest is considered unlikely because of stand characteristics and market proximity. While this region is a considerable distance from the Taylor Highway, it is relatively close to portions of the Tanana Valley State Forest that are just west of the planning area. This may become a factor in commercial harvest feasibility if access is developed to those portions of the state forest and extended into the region.

*Heritage Resources.* There are sites reported by the Alaska Heritage Resources Survey (AHRs) in this region. Cabins, burial sites, and other remnants represent activity during the late 1800's and early 1900's, which included hunting, trapping, and construction of the WAMCATS line. Alaskan Natives have lived in the area for thousands of years. The village of Joseph was one of the largest settlements of the Upper Tanana people during the late 1800's and early 1900's. Since RS 2477 trails are historic trails, they are also considered heritage resources. Refer to the RS 2477 trails listed in this region. (Note: Few heritage resource surveys have been conducted in this area, and the database for the Alaska Heritage Resources Survey is continually being updated.)

*Materials.* Because of the remoteness of this region and absence of roads, there is no use of materials at this time.

*Mineral Resources.* The geology of this region is similar to the rest of the planning area, consisting primarily of felsic and mafic intrusive and metamorphic rock, including schist and gneiss. Mining has mostly focused on placer deposits of gold-bearing gravel and colluvium. Region 1 continues to be under exploration for minerals and is believed to have excellent potential for hard rock minerals.

*Recreation.* Because of the remoteness of this region, the level of recreational activity is not as high as the rest of the planning area. The majority of recreation is rafting and boating along Joseph Creek, and on the Middle Fork below its confluence with Joseph Creek. These streams are part of the National Wild and Scenic River system. An airstrip at Joseph provides access to the rivers and surrounding land.

*Tourism.* Unlike the other regions in the planning area that have a broad range of tourism activities facilitated by the highway system, tourism in this region is a component of harvest and recreational activity.

## **Management Constraints and Considerations**

There are no state management plans or site specific plans for this region.

A portion of the Fortymile National Wild and Scenic River corridor extends into the region along the Middle Fork and up Joseph Creek. Another portion of the corridor very briefly extends into the region along the North Fork. The Bureau of Land Management is responsible for management of these lands, which is guided by the *River Management Plan for the Fortymile River Component of the National Wild and Scenic Rivers System* (1983). There are conflicts between management of the federally owned uplands and the mining activity permitted on the adjacent state-owned shorelands. (For further information on this issue, see the discussion in the *Navigable Rivers* section of this chapter.) Resolution of this issue is outside the scope of this area plan, but it is anticipated that the Bureau of Land Management and the Department of Natural Resources will cooperate in the development of appropriate solutions.

## **Management Intent for Region 1**

Management intent in this section applies to state-owned and state-selected land. Also refer to Chapter 2, *Areawide Land Management Policies*.

Management unit R-01 consists of all lands in Region 1 that are not within the smaller management units, M-01, M-02, and M-03. Refer to the management units listed in the Resource Allocation table and delineated on the maps at the end of this section.

All lands within unit R-01 are designated Resource Management - High Value (Rh). Although this region has a number of important resource values, specific information is very limited on mineral resources, and an allocation decision between uses is not necessary at this time.

Region 1 is to be managed for multiple uses, primarily habitat, recreation, and mining. Activities in this region should avoid or minimize conflicts with caribou calving and other wildlife values. Only activities with minimal impact (i.e., mineral or land surveys conducted by a small ground based crew) should be authorized during the calving season in this region. Calving season for this herd occurs during the month of May. Since the timing of calving season can vary from year to year, the Department of Fish and Game should be consulted.

Management units M-01 and M-02 are identified for the high concentration calving areas indicated in the “Habitat Management Needs Assessment for the Fortymile Caribou Herd,” completed in 2001. These units are designated Habitat (Ha) to protect these areas (see the *Resource Allocation Table* for this region for management intent).

To maintain habitat, recreational and mineral values, and to minimize conflicts between uses, no settlement areas are designated in Region 1. The need for private ownership of land is not anticipated in this region during the planning horizon.

Commercial and residential development should be kept to a minimum in Region 1. Such development should be directed to management units near communities in Regions 2 and 4 that have appropriate land use designations and management intent. Resource development activities, most of which are likely to be related to mining, are appropriate only if the impacts from these uses can be addressed. If construction of a road is necessary for any DNR

authorization, it should use an existing RS 2477 route whenever feasible and prudent.

### **Management Intent for Mineral Licks in Region 1**

Several mineral licks within the planning area are identified in Mineral Leasehold Location Order 28 in Appendix B. Mineral licks near Merry Christmas, Joseph, and Pittsburgh creeks are used annually by a high proportion of the Fortymile caribou herd during May. Access to these licks is of particular importance to pregnant cows. The Utah Creek mineral lick is used primarily by a small, disjunct population of Dall sheep on Glacier Mountain. On a daily basis, up to 30% of that sheep population will use the lick during mid-May through June. Authorizations in the area of these licks will protect or mitigate impacts to the licks and access routes to the licks used by the wildlife. Development will minimize or avoid disturbance to the animals during May for the Merry Christmas, Joseph, and Pittsburgh Creek licks; and during May and June for the Utah Creek lick. In addition to protection of the routes themselves, activities that may divert animals from the routes or otherwise affect usage patterns shall be avoided or mitigated.

## Resource Allocation Summary for Region 1 : Middle Fork

Unit Number	Unit Name or Location	Designation	Acres	Management Intent	Resources / Uses / Additional Information
<b>R 01</b>	Predominant state land base in the Middle Fork Region	Rh	740,000	See <i>Management Intent for Region 1</i> in this chapter.	See <i>Regional Summary</i> for Region 1. This unit consists of all state-owned and state-selected lands in Region 1 that are not within specific management units listed below.
<b>M 01</b>	Upper Middle Fork	Ha	48,494	During the month of May, human activities will be avoided where calving is taking place, and limited to short term activity in unused portions of the calving grounds to minimize disturbance to calving. Refer also to <i>Management Intent for Region 1</i> in this chapter.	This management unit is one of the core calving areas for the Fortymile caribou herd. For further information regarding the herd, refer to <i>Habitat Management Needs Assessment for the Fortymile Caribou Herd</i> (2001).
<b>M 02</b>	Upper Slate Creek	Ha	101,947	During the month of May, human activities will be avoided where calving is taking place, and limited to short term activity in unused portions of the calving grounds to minimize disturbance to calving. Refer also to <i>Management Intent for Region 1</i> in this chapter.	This management unit is one of the core calving areas for the Fortymile caribou herd. For further information regarding the herd, refer to <i>Habitat Management Needs Assessment for the Fortymile Caribou Herd</i> (2001).
<b>M 03</b>	Glacier Mountain	Ha	42,554	See <i>Management Intent regarding Mineral Licks in Region 1</i> in this chapter.	Management unit includes the Glacier Mountain and Mount Eldridge area that is used by a distinct, resident population of Dall sheep, and also is a part of the post-calving season and summer range of the Fortymile caribou herd. A Mineral Leasehold Location Order affects this unit; see <i>Appendix B</i> .

## **Map - Region 1 : Middle Fork**