

Chapter 3 : Land Management Guidelines for Individual Subunits

Introduction

The following chapter describes the detailed subunit management plan for managing the Moose Range and Jonesville Public Use Area. The Moose Range and JPUA are divided into four management subunits - the Western, Middle, Eastern, and Jonesville Subunits (see Map 4 on page 3-3). Each subunit is described individually and includes a unit description with background information, a summary of planning and land management issues, a land use designation summary description, a management intent statement, and subunit specific management guidelines.

Organization of Chapter

This chapter includes the following sections for each of the four management subunits:

- Subunit Description
- Planning and Land Management Issues
- Land Use Designations
- Management Intent
- Subunit Management Guidelines

Subunit Description

Unit descriptions include background information on land status, access, use, fish and wildlife habitat, facilities, trails and easements, and cultural and historical resources.

Planning and Land Management Issues

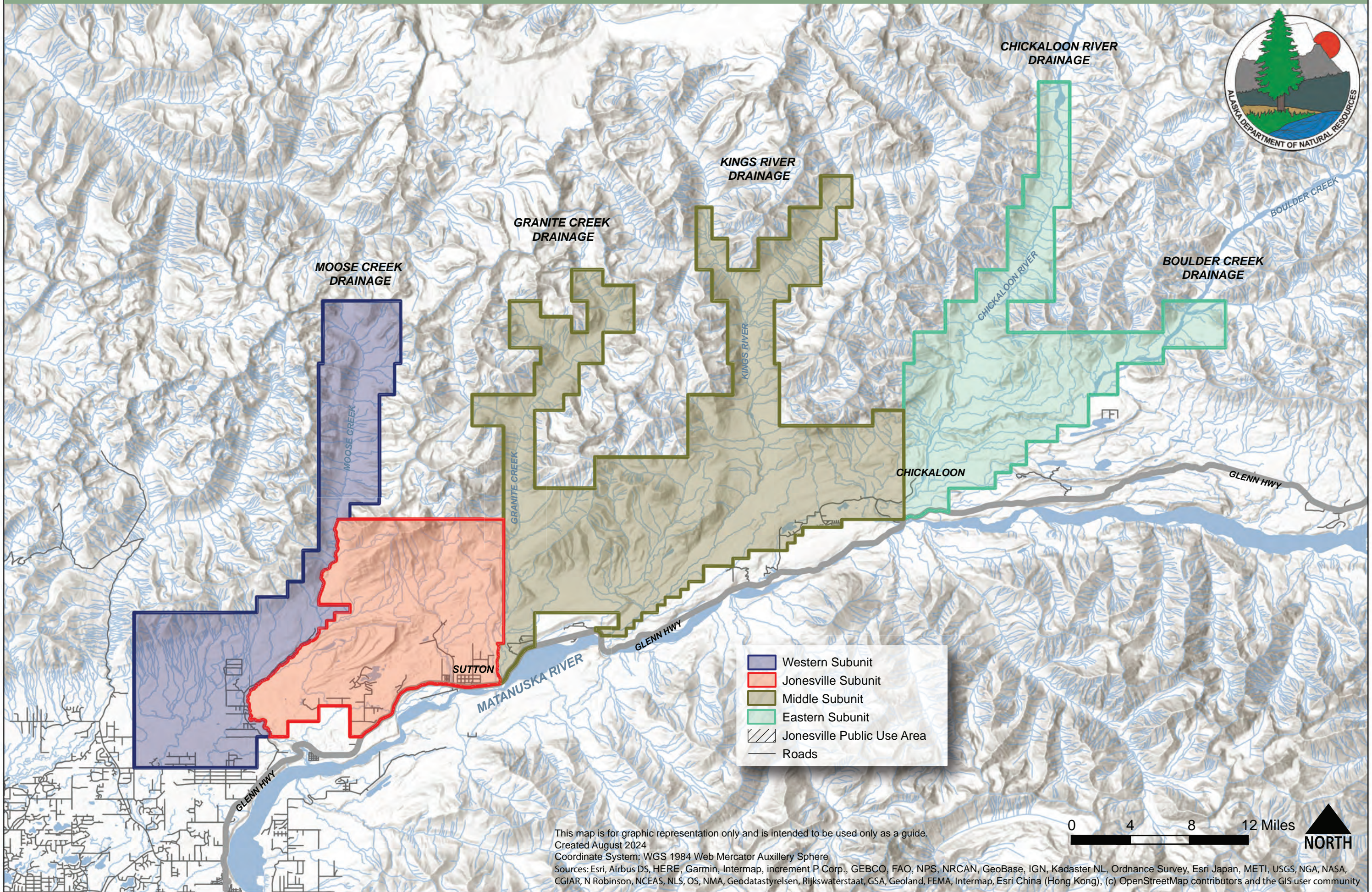
The Planning and Land Management Issues section discusses issues that are affecting management and that management guidelines are intended to address and resolve.

Land Use Designations

Land uses are designated in each subunit consistent with enabling legislation and other state statutes.

A land use designation recognizes uses or resources that are of major importance in a particular management subunit. Management subunits are broken down into smaller units for land use designation purposes. Unit designations are based on current and projected future use patterns and the most significant resources identified in each unit. DNR will manage activities in the unit to encourage, develop, or protect the uses or resources for which the unit is designated. Plan designations are more specific than the land use classifications required under 11 AAC 55.040, and such designations are

This page is intentionally blank.



- Western Subunit
- Jonesville Subunit
- Middle Subunit
- Eastern Subunit
- Jonesville Public Use Area
- Roads

This map is for graphic representation only and is intended to be used only as a guide.
 Created August 2024
 Coordinate System: WGS 1984 Web Mercator Auxillary Sphere
 Sources: Esri, Airbus DS, HERE, Garmin, Intermap, increment P Corp., GEBCO, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodastystrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, Esri China (Hong Kong), (c) OpenStreetMap contributors and the GIS user community



This page is intentionally blank.

converted to land use classifications, as required by 11 AAC 55.020. DNR will manage state land according to these designations and the equivalent land use classification.

Under AS 38.05.300, all designations are intended for multiple use. Uses other than those receiving primary designations for a given unit may still be authorized if they are not incompatible with the primary uses or resources for which a unit is designated. If DNR determines that a proposed use is incompatible with a primary designation, the proposed use will not be authorized, or will be authorized in a manner that minimizes the incompatibility. Primary designated uses cannot take precedence over disposals of interest that have already occurred. Such disposals include property rights such as mining leases, land leases, and rights-of-way, that once issued, are protected by the Constitution. A primary designation, however, may take precedence over uses authorized by permits that were issued on a revocable at will basis.

When the plan assigns a designation to a unit, the designation is accompanied by a management intent specific to that unit. These two pieces of information – designations and statement of intent – as well as subunit management guidelines, must be taken into consideration when determining how a parcel of state land is to be managed and when making authorization decisions.

Primary designated use. Most units are assigned a primary designated use, which indicates, in a general way, how state land is to be used and managed. Primary designated uses shall take precedence over other uses. Generally, however, DNR allows multiple uses. DNR initially presumes that all other uses are compatible with the primary use. However, if DNR determines that a use conflict exists and that the proposed use is incompatible with the primary use, the proposed use should not be authorized, or it should be modified so that the incompatibility no longer exists or the impacts from the proposed use have been effectively mitigated (from 11 AAC 55.040 (c)). The plan may assign a designation to ensure a future use that will best serve the public interest, even if that use is not imminent.

Co-designated use. Where a unit has two or more designated uses, DNR will avoid or minimize conflicts between designated uses by applying the management intent statement and guidelines for the unit and the Chapter 2 guidelines from this plan together with existing statutes, regulations, and procedures. Only those co-designations that are generally complementary to or compatible with each other are included in this plan. Co-designated uses should, therefore, be viewed as compatible unless specific conditions that exist at the time an agency is evaluating whether to grant an authorization indicate otherwise. In this plan, co-designated uses are often Habitat, Public Recreation Dispersed, and Forestry. Other co-designations included in the plan are Coal and Habitat. Within areas so co-designated, mineral exploration/development is an appropriate use, however such activities and projects must consider their potential impacts upon wildlife, fisheries, and habitats, and must either avoid or mitigate significant adverse impacts.

[Designations Used in This Plan](#)

Co – Coal. Areas considered to have coal potential and for which coal mining is an appropriate use, are designated Coal. This designation converts to a land use classification of Coal Land as defined by 11 AAC 55.055.

F – Forestry. Land that is or has been forested and is suited for long-term forest management because of its physical, climatic, and vegetative conditions. This land will remain in state ownership. Approving authorizations in these areas will be conducted in compliance with the Forest Resources and Practices Act (AS 41.17 and 11 AAC 95), the specific management guidelines in the Forestry section of Chapter 2, and any specific requirements that might apply at the management unit level identified for a particular management unit. Forest Land is to be retained by the state, although timber sales, a type of disposal, are recognized as appropriate.

Certain sites within the plan area contain both habitat and forestry values and, as such, are co-designated Forestry and Habitat. In these instances, while forest management projects are recognized as appropriate uses, any proposed activity must take into consideration the impacts upon wildlife, fisheries, and their associated habitats.

This designation converts to a land use classification of Forest Land as defined by 11 AAC 55.070.

Ha – Habitat. This designation applies to areas of varied size for fish and wildlife species during a sensitive life-history stage where alteration of the habitat or human disturbance could result in a permanent loss of a population or sustained yield of a species or that contain a unique or rare assemblage of a single or multiple species of regional or statewide significance. Land designated Habitat is intended to remain in state ownership, and is to be maintained in an undisturbed, natural state except for improvements related to public health, safety, habitat restoration or rehabilitation, and public recreation. Utilities and roads may be appropriate with appropriate design if habitat functions can be maintained. Authorizations within areas designated Habitat are to be considered inappropriate unless consistent with these stipulations and with the management intent for the management unit.

This designation converts to a land use classification of Wildlife Habitat Land as defined by 11 AAC 55.230.

Rd – Public Recreation-Dispersed. This designation applies to those areas that offer or have a high potential for dispersed recreation and where desirable recreation conditions are scattered or widespread rather than localized. Developed facilities are generally not necessary other than trails, trail signs, primitive campsites, and other minor improvements. This land will be retained in public ownership in an undisturbed, natural state except for improvements related to public health, safety, or recreation. Authorizations within areas designated Public Recreation-Dispersed are not to be considered appropriate unless necessary for public health, safety, or recreation. Utilities and roads may be appropriate with appropriate design if recreation functions can be maintained.

This designation converts to a land use classification of Public Recreation Land as defined by 11 AAC 55.160.

Rp – Public Recreation-Public Use Site (Developed). This designation applies to areas used by concentrations of recreationists relative to the rest of the planning area or areas with a high potential to attract concentrations of people who recreate. These areas offer localized attractions or ease of access, and in many instances, developed facilities. Examples include marinas, cabins, lodges, anchorages,

scenic overlooks, road-accessible shore locations that are used for picnicking, sports, fishing, etc. The recreation uses for which these units are designated may be either public or commercial. This land will remain in state ownership unless otherwise noted in the management intent for the unit. The primary management intent for these sites is to protect the opportunity of the public to use these sites, and their public values for recreation. Many of these sites require additional management attention because of the use they are receiving.

This designation converts to a land use classification of Public Recreation Land as defined by 11 AAC 55.160.

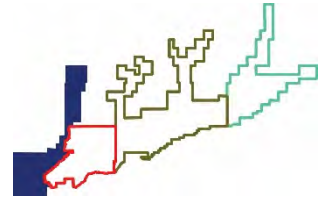
Management Intent

Management intent provides a statement about the desired future condition of state land consistent with the purposes of the enabling legislation of the Moose Range and JPUA. Specific management recommendations are found in the subunit management guidelines.

Subunit Management Guidelines

Management guidelines are intended to provide specific management direction for decisions DNR makes about the planning area. Guidelines range from giving general guidance for decision-making to identifying specific factors that need to be considered when making on-the-ground decisions. DNR will use the guidelines when adjudicating applications for the use of state lands within the planning area. In most cases, these guidelines can be implemented through the authorization of applications for proposed uses or through agency actions. In other cases, DNR may promulgate regulations to ensure that these guidelines can be implemented and are enforceable. The guidelines include recommendations for facilities and Public Use Sites.

The Western Management Subunit



Background

The Western Management Subunit includes portions of the Moose Range that lie east of Fishhook Road and west of Moose Creek. The subunit includes the entire Moose Creek drainage within the Talkeetna Mountains and the headwaters and adjacent wetlands of Wasilla Creek, an anadromous stream. The subunit is accessed by Wendt Road from the west, Buffalo Mine Road from the east, and Soapstone Road from the south. Lower elevations of this subunit have high potential for personal and commercial firewood harvest, while upper elevations, above 2,000 feet, have minimal timber value.

The Western Management Subunit is closest to the highest density residential land in Palmer resulting in increased recreational use over the past 10-15 years. Additionally, the Western Management Subunit is in proximity to other public recreation areas including Hatcher Pass Management Area, Little Su Public Use Facility, and Government Peak Recreation Area. Community groups groom a system of trails for winter use. Public lands in the Western Management Subunit are used at moderate levels for dispersed outdoor recreational activities in the summer months and higher levels in the winter. There are few existing developed outdoor recreational facilities in this subunit including an undeveloped trailhead at Wendt Road and a few bridges over Wasilla Creek. The predominant scenic values in this subunit, as viewed from the Glenn Highway, include Arkose Ridge. Although there are no active leases/permits, and there haven't been for many years, the best potential grazing lands in the Moose Range are found in this subunit.

Planning and Land Management Issues

Due to the proximity to residential development and with some of the most developed access routes, the lands in the Western Management Subunit receive some of the highest motorized and non-motorized recreational trail use. Additionally, the easy access for hunting from Buffalo Mine Road and Fishhook Road put motorized pressure on the Western Management Subunit during the fall when soil conditions are generally saturated. Conflicts between motorized and non-motorized trail users are a significant issue and solutions are required to allow multiple use to continue while protecting wetland habitat and anadromous streams.

Incompatible Uses

DNR and ADF&G must manage multiple uses consistent with the Moose Range's enabling legislation to maintain, improve, and enhance moose populations and habitat and other wildlife resources of the area. Existing damage to wetlands, streams, and wildlife habitat from motorized recreational use is significant in the Western Management Subunit and the management guidelines below are intended to mitigate the resource damage.

Land Use Designations

State land will be managed consistent with its designation(s); as specifically articulated through management intent described below and applicable goals and management guidelines found in Chapters 2 and 3. Some lands have one designation while other lands are co-designated for a variety of

uses. Table 1 provides a quick reference of the designations and co-designations used in this management subunit, and the acreages of designation(s).

Table 1: Western Management Subunit Designations and Acreages

<i>Designation or Co-Designation</i>	<i>Abbreviation</i>	<i>Acreage</i>
<i>W1: Habitat, Public Recreation-Dispersed</i>	<i>Ha, Rd</i>	<i>21,328</i>
<i>W2: Habitat, Public Recreation-Dispersed, Forestry</i>	<i>Ha, Rd, F</i>	<i>2,213</i>
<i>W3: Coal, Habitat, Public Recreation-Dispersed</i>	<i>Co, Ha, Rd</i>	<i>441</i>

Management Intent

Unit W1: Ha, Rd. The management intent for Unit W1 in the Western Management Subunit is to enhance browse-producing habitat. Manage the unit to protect and maintain fish and wildlife habitat and associated wetlands, streams and waterbodies. Additionally, Unit W1 will be managed for dispersed outdoor recreational activities. Popular activities such as hunting big and small game, trapping, wildlife viewing, horseback riding, hiking, skiing, winter biking, and fishing will continue. To protect wildlife habitat including wetlands and anadromous streams, this plan recommends restricting the use of motorized vehicles to be more restrictive than the Generally Allowed Uses on State Land (11 AAC 96.020). The plan recommends restricting motorized use to designated, hardened routes⁷ as identified in a subsequent Trails Management Plan (See Chapter 2, Trails).

Proposed recreational facility development in the subunit includes trail hardening and bridge and culvert installations to protect wetlands and habitat in the vicinity of the Wasilla Creek headwaters. Trailhead facilities should only be authorized as an access point if specific management guidelines are met.

Unit W2: Ha, Rd, F. Same intent as Unit W1 with the following addition:

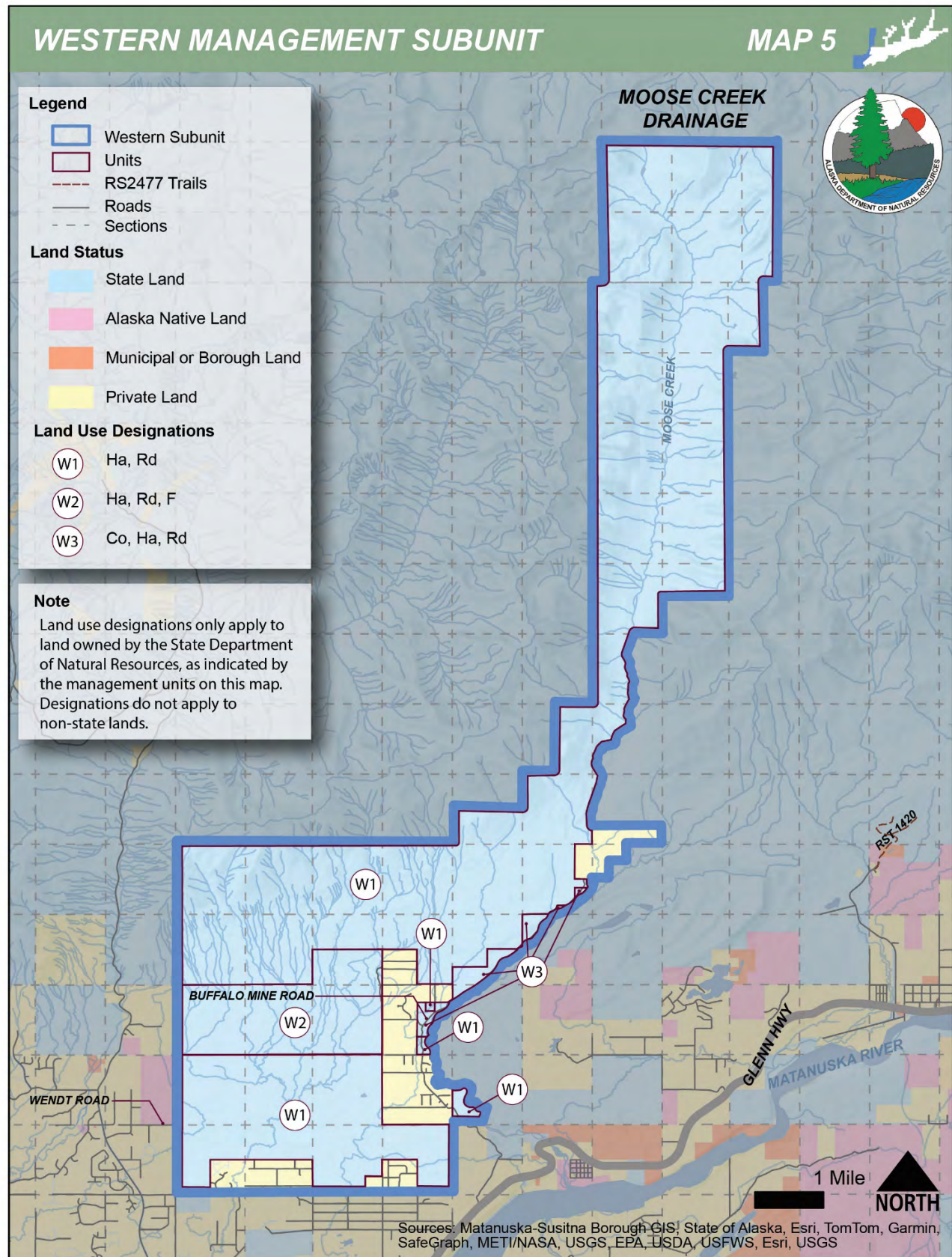
There is a local need for personal firewood, and this need may be met to the extent possible by improving fish and wildlife habitat in conjunction with timber harvest. Timber harvest is allowed only if the activity enhances fish and wildlife habitat.

Unit W3: Co, Ha, Rd. Same intent as Unit W1 with the following addition:

Coal development is allowed according to existing authorizations. The primary post-mining land use in this unit is designated as Public Recreation-Dispersed (Rd) if the location is appropriate and if the recreation use is consistent with the definition of recreation land in the Surface Mining Control and Reclamation Act and the Alaska Surface Mining Control and Reclamation Act. The secondary post-mining land use is designated as Habitat (Ha) and reclamation efforts will be directed toward producing habitat that is primarily beneficial to moose.

⁷ This management guideline requires the promulgation of regulations for implementation.

MAP 5: Western Management Subunit



Subunit Management Guidelines

1. Access and Trails

- a. Public Lands. Public access into the Western Management Subunit is necessary for maintaining multiple use. The state will maintain public rights-of-way and/or easements for public access to Moose and Wasilla Creeks, Tsadaka Canyon along Moose Creek, and to public lands along Fishhook, Wendt, Soapstone, Buffalo Mine and Murphy Roads.
- b. Public Use of Existing Access.
 - i. Areas of Open Access. Public sections of the Buffalo Mine and Wendt Roads will remain open to motorized and non-motorized uses.
 - ii. Area of Unimproved, Closed, or Revegetated Roads. To help manage potential human conflicts with habitat enhancement research efforts, the Division of Forestry (DOF&FP) timber harvest roads in the southwest corner of the Western Management Subunit will not be upgraded, improved, or posted with recreational signs. Roads or trails that are required for timber harvest and/or habitat enhancement projects are not necessarily intended for public access and may be closed or revegetated as part of the habitat maintenance or enhancement efforts.
- c. New Access.
 - i. Public input indicates upper Moose Creek drainage should be left undisturbed. No new trails or roads shall be built beyond or north of the knoll located north of the southern section line of Sec. 1 and 2, T19N, R2E, S.M., for recreation, timber management or wildlife habitat enhancement activities.
- d. Trails. In addition to the areawide management guidelines established for trails in Chapter 2, the following guidelines are specific to the Western Management Subunit.
 - i. Trail Use Restrictions. ADF&G and DNR should continue to authorize the construction of hardened routes and sustainable creek crossings. To protect wetland resources and habitat, motorized and mechanized trail use should be restricted in the Western Management Subunit during snow-free and ice-free seasons to authorized hardened routes that will be established by the Trail Management Plan (TMP) defined in Chapter 2 and further explained in Appendix C. Vehicle use restrictions may be necessary to protect habitat.⁸
 - ii. Trail Kiosks, Signage, and Wayfinding. Trailhead maps, kiosks, wayfinding signage, and trail use information may be developed. Signs should clearly display trail use information, regulatory information, and allowed trail uses. Wayfinding and trail use signs may be used to appropriately guide trails users.
- e. Trailheads. After the completion of a Trails Management Plan, DNR may consider authorizing trailhead improvements in the Western Management Subunit that are managed, maintained, consistent with adjacent land uses, and provide legal and accessible access.
 - i. Access to the Western Management Subunit is possible via Wendt Road and Murphy Road. Upgraded trailheads may be developed in these locations for multiple use access

⁸ This management guideline requires the promulgation of regulations for implementation.

to the Moose Range. DNR, DMLW and ADF&G should work cooperatively to develop trailheads designed to be consistent with the intent of the management plan. Trailheads should minimize negative impacts on neighboring private property and land uses. If a trailhead is proposed by an entity other than DNR, a management agreement for active site management, maintenance, and enforcement is required to be in place prior to authorization. Additionally, a trailhead should not be authorized until the Trail Management Plan (TMP) for the Moose Range and JPUA is complete and there is a more thorough understanding of the capacity of the trail system in the Western Management Subunit for increased use.

2. Cultural and Heritage Resources

- h. Known Sites. One heritage resource site is recorded on the Alaska Heritage Resources Survey in the Western Management Subunit. This site will be managed according to the guidelines in Chapter 2.
- i. Undiscovered Sites. The Western Management Subunit has been used historically by Alaska Native people primarily traveling along the Matanuska River and up into the Moose Creek Drainage. With the extent of past cultural use, it is likely that additional cultural resources may be located. Areas in the Western Management Subunit designated by SHPO as known and high potential areas for containing heritage resources should be surveyed for heritage values as funding and staffing allow.

3. Fish, Wildlife, and Forestry

- a. Resource Management. This subunit will be managed primarily to maintain, protect and, if necessary, enhance the following fish and wildlife resources and habitats:
 - i. Moose throughout the subunit.
 - ii. Ruffed grouse throughout the subunit.
 - iii. Brown bear in upper Moose Creek drainage.
 - iv. Black bear throughout the subunit.
 - v. Dall sheep in upper Moose Creek and in higher elevations.
 - vi. Small game and furbearers.
 - vii. Riparian habitats and instream flow along Moose and Wasilla Creeks.
 - viii. Chinook and coho salmon and Dolly Varden in Moose Creek.
 - ix. Coho and Chinook salmon, Dolly Varden and rainbow trout in upper Wasilla Creek.
 - x. Habitat for moose and other wildlife species.
 - xi. Buffer areas around Moose and Wasilla Creeks.
 - xii. Other species and habitats identified by ADF&G.
- b. Fish and Wildlife Utilization. The subunit will be managed to allow continuation of the following activities:
 - i. Hunting of big and small game and trapping throughout the subunit.
 - ii. Sportfishing for anadromous, resident, and stocked fish.

- iii. Wildlife viewing throughout the subunit.
- c. Habitat Enhancement. The Western Management Subunit may be managed to produce moose habitat. Secondly, DNR, in consultation with ADF&G, may authorize research to identify preferred methods for habitat enhancement and regeneration of browse. DNR, ADF&G, and others will work cooperatively on research efforts whenever possible. Techniques may include willow bundle planting, scarification, use of seed trees, selective cutting of spruce, and variations in the size and shape of cuts. Techniques to be tested include, but are not limited to, overstory removal, burning, pesticides, and plant trimming to promote sprouting.
- d. Fisheries. ADF&G will maintain, protect, and enhance as appropriate the fisheries and habitats of Wasilla and Moose Creeks. To accomplish this, ADF&G may conduct spawning and escapement surveys, monitor trends in harvest angler effort, and develop recommendations for field investigations and/or Board of Fisheries consideration, as time and funds allow. ADF&G will adjust stocking levels in stocked lakes based on health and survival of stocked fish and changes in use patterns and pursuant to the annual public review of the statewide stocking plan. ADF&G will manage sport fisheries for sustained yield and angler satisfaction, work closely with enforcement staff in adherence to regulations, and assist in habitat conservation and restoration.

4. Forestry

Timber harvest operations that enhance fish and wildlife habitat may be authorized in the Western Management Subunit. Specific sales locations and dates will be identified by DOF&FP in consultation with ADF&G. The criteria for determining the location of cutting units includes access on existing roads/trails to allow the public to obtain firewood. Commercial timber harvests will occur in areas where cost effectiveness and habitat enhancement methods justify such harvests.

- a. Timber Harvest and/or Habitat Enhancement Location.
 - i. Elevation. No timber may be harvested above 1,100 feet elevation.
 - ii. Schedule. The schedule for forest product harvest in the Western Management Subunit should be identified by DOF&FP in consultation with ADF&G.
 - iii. Buffers. See Buffer guidelines in Chapter 2.

5. Public Use Sites

The addition of Public Use Sites may be appropriate in the Western Management Subunit. The plan recommends completing a Trail Management Plan and through that process, DNR may identify appropriate trails, trail facilities, trailheads, and Public Use Sites.

6. Recreation

Follow the areawide management guidelines in Chapter 2.

7. Subsurface Resources

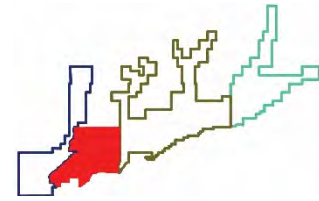
The Western Management Subunit is open to locatable and leasable mineral development. There is no known coal potential in upper Moose Creek.

8. Water, Wetlands, and Waterbodies

a. Lakeshores and Stream Corridors.

- i. Wasilla Creek. There is a 200-foot buffer on each side of Wasilla Creek above ordinary high water. Any habitat enhancement activity altering the habitat/vegetation within the buffer shall require concurrence by DNR and ADF&G. See Chapter 2 guidelines on stream corridors and lakeshores for other allowed activities within buffers.
 - ii. Other Streams and Lakes. Habitat enhancement efforts in riparian zones along Moose Creek may take place according to the Chapter 2 guidelines on buffers.
- b. Wetland Buffers. Large wetlands, more than 700 acres, exist in the southwestern end of this subunit in the headwaters of Wasilla Creek. A buffer will be retained around them as described in Chapter 2.
- c. Instream Flow Data Collection. ADF&G may collect instream flow data needed to inform its Title 16 permit decision-making process for Wasilla Creek and Moose Creek to maintain adequate flow for fish habitat. DNR DMLW shall work closely with ADF&G to identify waters where instream flow data needs to be collected associated with any work that will require permitting by either agency.

The Jonesville Management Subunit



Background

The Jonesville Public Use Area (JPUA), Alaska Statute 41.23.280, was established by the Alaska State Legislature in 2018 to address the public's safety concerns in the area and to protect a spectrum of public recreation activities while maintaining fish and wildlife habitat and allowing compatible uses. The JPUA lies almost entirely within the Moose Range.

This area extends from Buffalo Mine Road and the ordinary high-water mark of Moose Creek nearly six miles east to a north-south section line near and roughly paralleling Granite Creek. Moose Creek and Granite Creek roughly comprise the western and eastern boundaries, respectively. The Glenn Highway forms most of the unit's southern boundary, and an east-west section line between Eska Mountain and Granite Peak forms the northern boundary. The dominant features of this area are the benchlands above the Matanuska River and the alpine and subalpine terrain around Eska Mountain. The Eska Creek drainage and its tributaries are the dominant hydrologic features of the area. The area includes lands around Wishbone Hill, Seventeen Mile Lake, and the Sutton community.

This Moose Range Management Plan will provide management direction for both the Moose Range and the JPUA. The lands that are legislatively designated as the JPUA will comprise the bulk of the Jonesville Management Subunit. To ensure management consistency, additional lands within the boundary of the Moose Range that are south of the JPUA between Moose Creek and Granite Creek will also be included in the Jonesville Management Subunit. The specific management recommendations for the Jonesville Management Subunit will be consistent with the enabling legislation of both the JPUA and the Moose Range.

The subunit has moderate-to-high values for fish, wildlife, and forestry resources. Big and small game hunting, fishing, and trapping are historic uses of the area and occur throughout the subunit today. Subsistence and sport harvest both occur but cannot be readily quantified. Wildlife viewing mostly occurs in road and trail-accessible areas of the subunit. Habitat enhancement research efforts and regeneration of habitat projects have been established in this subunit and are ongoing. Moose habitat is being enhanced in the subunit to offset critical habitat being lost to development elsewhere in the Matanuska Valley. Wishbone Lake has highly valued rainbow trout sport fishing opportunities.

Jonesville Mine Road is the primary road used to access the area. Seventeen Mile Lake and Wishbone Strip Mine Trails provide primary trail access into the subunit. There is secondary access from All Elks Road, Buffalo Mine Road, and Mile 58 Road.

Moderate to high levels of recreational use occur in this unit year-round, but primarily on weekends. Both non-motorized and motorized use occurs; however, most of the recreational use is motorized.

Non-motorized uses in the area include hiking, fishing, boating, camping, wildlife viewing, fossil viewing, horseback riding, biking, swimming, recreational shooting, trapping, and hunting. This unit is the gateway for many users to access state land to the north, east, and west. When ice and snow conditions

permit, the area receives a variety of uses, including snowshoeing, winter biking, skiing, ice fishing, and dogsledding. Non-motorized boating occurs during the ice-free periods on Slipper Lake. Several creeks in and around the unit are used by canoes, kayaks, or rafts.

Motorized uses include highway, OHV, ATV, side-by-side and dirt bike operation as a means of access for fishing, hunting, trapping, camping, wildlife viewing, photography, and recreation. OHV use occurs primarily on the numerous trails throughout the subunit. During winter months, frozen ground conditions allow for increased motorized recreational opportunities and access.

Some of the highest-grade coal resources in the state are in the lower half of the Jonesville Management Subunit.

The predominant scenic values in this subunit, as viewed from the Glenn Highway, include Wishbone Hill, Eska Mountain, and Granite Peak.

Planning and Land Management Issues

The primary issues in the Jonesville Management Subunit are unsafe and unlawful activities, conflicting and incompatible uses, trespassing concerns on private land, and noise disturbing area residents. Unsafe recreational shooting throughout the subunit is one of the primary threats to public safety.

Many users of the Jonesville Management Subunit engage in activities that are unlawful or are a threat to public safety. Some issues identified by the public include dangerous and/or reckless discharge of weapons, destruction of private and public property, and the burning of automobiles. Users indicate that they do not feel safe when others are shooting in the area or discharging illegal explosives. Several public comments cited a lack of enforcement as a major issue.

The relative ease of access of the Jonesville Management Subunit from the Glenn Highway via Jonesville Mine Road contribute to the issues. Many users access the area by means of a motorized highway and OHVs to reach the unmanaged trails in the forest and sub-alpine areas. The area is popular with motorized trail users for recreation because it is adjacent to state land for hunting and fishing. The high level of use is causing negative effects on the trails such as braiding, rutting, and debris, making the trails unusable for some methods of non-motorized use. Some users suggested they are displaced from the area because of conflict with other user groups on trails.

The increased use may be negatively affecting water quality in the area. Some issues identified include camping with no sanitary method of human waste disposal, leaving shooting litter with no lead containment or cleanup, and dumping of household waste (trash, electronics, and vehicles).

Compatible Uses

The enabling legislation of the JPUA requires DNR to protect, maintain, enhance, and perpetuate the present use of the JPUA. The legislation directs the DNR Commissioner to allow the JPUA to be used for activities that are compatible with its establishment including operating all-terrain vehicles on trails or in areas designated or constructed for their use, aircraft, and watercraft; snowmachining, horseback riding, hiking, bicycling, dog sledding, cross-country skiing, skijoring, camping, hunting, fishing, trapping, wildlife

viewing, photography, berry picking; and, where permitted, rifle and pistol ranges, parking of vehicles, and lawful mineral exploration and mining⁹. All above listed activities are compatible and can occur safely, when following the management guidelines of this plan.

Incompatible Uses

The JPUA enabling legislation allows for uses to be restricted if those uses are determined to be one of the following:

1. Incompatible with the purpose of the JPUA as defined in AS 41.23.280.
2. Incompatible with one or more other uses in the JPUA.

Furthermore, the JPUA legislation does not allow the restriction of the use of weapons, including firearms, except in locations where there is a threat to public safety¹⁰. As required by AS 41.23.284(f), if the Commissioner determines that a use is incompatible with one or more other uses in a portion of the JPUA, the Commissioner shall describe:

- (1) each determination of incompatibility;
- (2) the specific area where the incompatibility is determined to exist;
- (3) the time within which the incompatibility is determined to exist; and
- (4) the reasons for the determination of incompatibility.

Incompatibility Determination

This Plan finds the use of weapons, including firearms, incompatible with one or more uses in the JPUA except if being used for lawful hunting or trapping or within a designated shooting area. The use of firearms for lawful hunting and trapping is compatible with the purpose of the JPUA and other uses in the JPUA.

1. Determination of Incompatibility. The unorganized use of weapons, including firearms, is not compatible with other recreational uses occurring in the JPUA and creates a significant threat to public safety. There are currently no designated areas or infrastructure for target shooting and weapons discharge placing other users and neighboring residential areas at significant risk of property damage, injury, and/or death. There are no lead containment or shooting debris clean-up requirements contributing to litter and pollution. Weapons discharge and target shooting produce noise at significant levels at all times of the day impacting all other uses including neighboring residential areas, wildlife, and their habitat.
2. Specific Area Where Incompatibility is Determined to Exist. The unorganized use of weapons, including firearms, is incompatible in the high-use area of the Jonesville Management Subunit near Slipper Lake, Eska Falls, Wishbone Lake, near residential areas, and other private property.

⁹ As outlined in AS 41.23.284 (d) (B)

¹⁰ See AS 41.23.284 (c) (2)

3. Time Within Which Incompatibility is Determined to Exist. The JPUA is used at all hours of the day, all days of the week, and all months of the year for recreation. The incompatibility of unorganized use of weapons, including firearms, is present at all times of the day and year.
4. Reasons for Determination of Incompatibility. The use of weapons, including firearms, is not compatible with other recreational uses in the JPUA due to the significant threat to public safety, property damage, noise, and contamination (See bullet 1 above).

Land Use Designations

State land will be managed consistent with its designation(s); as specifically articulated through management intent described below and applicable goals and management guidelines found in Chapters 2 and 3. Some lands have one designation while other lands are co-designated for a variety of uses. Table 2 provides a quick reference of the designations and co-designations used in this management subunit, and the acreages of designation(s). Refer to Map 6 on page 3-20.

Table 2: Jonesville Management Subunit Designations and Acreages

<i>Designation or Co-Designation</i>	<i>Abbreviation</i>	<i>Acreage</i>
<i>J1: Habitat, Public Recreation-Dispersed</i>	<i>Ha, Rd</i>	<i>8,065</i>
<i>J2: Coal, Habitat, Public Recreation-Dispersed</i>	<i>Co, Ha, Rd</i>	<i>5,931</i>
<i>J3: Coal, Public Recreation-Public Use Site</i>	<i>Co, Rp</i>	<i>3,332</i>

Management Intent

Unit J1: Ha, Rd. The primary management intent for Unit J1 is to manage for dispersed outdoor recreation use and mitigate conflicts between incompatible uses as necessary. In addition to outdoor public recreational use, Unit J1 should be managed to enhance browse-producing habitat. Manage the unit to protect and maintain fish and wildlife habitat including wetlands and anadromous streams and waterbodies. A subsequent Trails Management Plan (See Chapter 2, Trails) should address the impacts associated with the use and proliferation of trails in the unit. Trails should be assessed, classified, designated, and improved as identified in the TMP. Popular activities such as hunting big and small game, trapping, wildlife viewing, fossil hunting, off-road vehicle riding, overnight camping, horseback riding, hiking, biking, skiing, and fishing will continue. DNR should manage the Eska Creek Falls Public Use Site (See Map 7, page 3-25) to minimize user conflicts, ensure public safety, and mitigate damage to habitat from off-road motorized vehicle use.

Unit J2: Co, Ha, Rd. The primary management intent for Unit J2 is to manage for dispersed outdoor recreation use and mitigate conflicts between incompatible uses as necessary. In addition to outdoor public recreational use, Unit J2 should be managed to enhance browse-producing habitat. Manage the unit to protect and maintain fish and wildlife habitat including wetlands and anadromous streams and waterbodies. A subsequent Trails Management Plan (See Chapter 2, Trails) may address the impacts associated with the use and proliferation of trails in the unit. Trails should be assessed, classified,

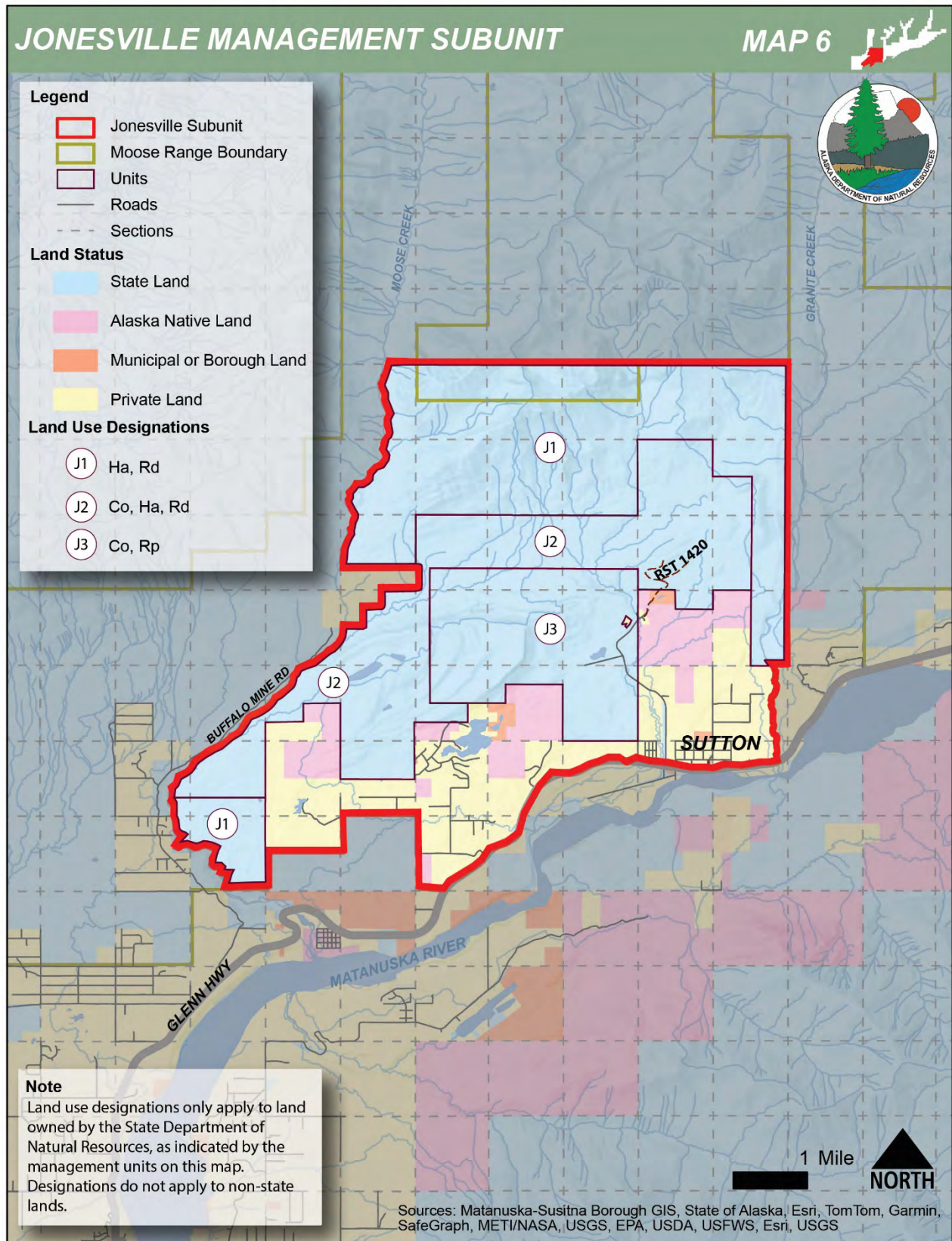
designated, and improved as identified in the TMP. Popular activities such as hunting big and small game, trapping, wildlife viewing, off-road vehicle riding, overnight camping, horseback riding, hiking, biking, skiing, and fishing will continue. DNR should manage the Wishbone Lake public use site (See Map 7, page 3-25) to minimize user conflicts and ensure public safety. Shoreline improvements such as docks may be considered at Wishbone Lake.

Coal development will proceed according to existing authorizations. The primary post-mining land use in this area is designated Rd if the location is appropriate and if the recreation use is consistent with the definition of recreation land in the Surface Mining Control and Reclamation Act and the Alaska Surface Mining Control and Reclamation Act. The secondary post-mining land use is designated as Habitat (Ha) and reclamation efforts will be directed toward producing habitat that is primarily beneficial to moose. In situations where coal development is scheduled, utilization of timber resources on lands leased for coal will be encouraged. The entire subunit will remain open for locatable mineral entry and for the leasing of coal and oil and gas. It is possible that the state will lease small tracts adjacent to the existing coal leases if it appears that they contain coal.

Unit J3: Co, Rp. The primary management intent for Unit J3 is to manage high levels of outdoor public recreational use and mitigate the conflicts between incompatible uses. DNR may manage the Slipper Lake public use site (See Map 7, page 3-25) to minimize user conflicts and ensure public safety. Developed recreation facilities constructed at key locations would enhance the public's enjoyment of the area, protect public safety, and minimize impacts on fish and wildlife habitats. A few key facilities, such as designated camping areas, once constructed, along with active management and enforcement, will greatly enhance public safety and enjoyment of Unit J3. Popular activities such as hunting big and small game, trapping, wildlife viewing, off-road vehicle riding, overnight camping, horseback riding, hiking, biking, skiing, and fishing will continue. A subsequent Trails Management Plan (See Chapter 2, Trails) may address the impacts associated with the use and proliferation of trails in the unit. Trails should be assessed, classified, designated, and improved or constructed as identified in the TMP. The development of a public shooting range that is designed for long-range shooting and that minimizes noise disturbance is allowed in Unit J3.

Coal development may proceed according to existing authorizations and coordination with public recreational use will be required. The primary post-mining land use in this area is designated Rp if the location is appropriate and if the recreation use is consistent with the definition of recreation land in the Surface Mining Control and Reclamation Act and the Alaska Surface Mining Control and Reclamation Act.

MAP 6: Jonesville Management Subunit



Subunit Management Guidelines

1. Access and Trails

- a. Public Lands. Public access into the Jonesville Management Subunit is necessary for maintaining multiple use. The state should ensure access to public rights-of-way and easements for public access to Wishbone Lake and Eska Creek.
- b. Public Use of Existing Access.
 - i. Areas of Open Access. Public sections of the Buffalo Mine Road, mining spur roads to Wishbone Lake and Seventeen Mile Lake, and the Jonesville Mine Road and mining spur roads to the east will remain open to motorized and non-motorized uses.
 - ii. Areas of Unimproved, Closed, or Revegetated Roads. Roads or trails that are required for timber harvest and/or habitat enhancement projects are not necessarily intended for public access and may be closed or revegetated as part of the habitat maintenance or enhancement efforts.
 - iii. Areas with Active Assertion. The public has been using the mining roads that connect Buffalo Mine Road, Seventeen Mile Lake, and Jonesville Road since they were constructed. DNR DMLW will continue researching the validity of a public right-of-way on roads and trails and follow Chapter 2 guidelines for making a right-of-way assertion wherever necessary and possible. This includes access to Wishbone Lake off the mining roads system.
- c. New Access. New trailheads to the Jonesville Management Subunit may be developed.
- d. Trails. In addition to the areawide management guidelines established for trails in Chapter 2, the following guidelines are specific to the Jonesville Management Subunit.
 - i. Develop Non-motorized Hiking Trails. The following non-motorized hiking trails may be developed:
 - 1) Slipper Lake parking lot to the Eska Falls hiking trail.
 - 2) Hiking trail to the top of Wishbone Hill.
 - ii. Access Improvements. The access road to the Eska Creek Falls Hiking Trail should be improved.
 - iii. Trail Kiosks, Signage, and Wayfinding. Trailhead maps, kiosks, wayfinding signage, and trail use information may be developed. Signs will clearly display trail use information, regulatory information, and allowed trail uses. Wayfinding and trail use signs may be used to appropriately guide trails users.

2. Cultural and Heritage Resources

- a. Known Sites. Three known heritage resource sites have been recorded on the Alaska Heritage Resources Survey in the Jonesville Management Subunit. These sites will be managed according to the guidelines in Chapter 2.
- b. Undiscovered Sites. The Jonesville Management Subunit has been used historically by Alaska Native people primarily traveling along the Matanuska River and up into the Moose Creek drainage. Coal mining near Jonesville/Sutton subsequently spurred the development of the non-

native communities. With the extent of past use, it is likely that additional cultural resources may be located in the future. Areas in the Jonesville Management Subunit designated by the State Historic Preservation Office (SHPO) as known and high potential areas for containing heritage resources may be surveyed for heritage values as funding and staffing allow.

3. Fish and Wildlife

- a. Resource Management. This subunit will be managed primarily to maintain, protect and, if necessary, enhance the following fish and wildlife resources and habitats:
 - i. Moose throughout the subunit.
 - ii. Ruffed grouse throughout the subunit.
 - iii. Brown bear in upper Moose Creek drainage.
 - iv. Black bear throughout the subunit.
 - v. Dall sheep in upper Moose Creek and in higher elevations.
 - vi. Small game and furbearers.
 - vii. Riparian habitats and instream flow along Eska Creek.
 - viii. Dolly Varden, Chinook, coho, and sockeye salmon in Eska Creek.
 - ix. All 5 species of Pacific salmon in Moose Creek.
 - x. Rainbow trout in Slipper and Wishbone Lakes.
 - xi. Habitat for moose and other wildlife species.
 - xii. Rainbow trout in Coyote Lake.
 - xiii. Buffer around Wishbone Lake.
 - xiv. Other species and habitats identified by ADF&G.
- b. Fish and Wildlife Utilization. The subunit will be managed to allow continuation of the following activities:
 - i. Hunting of big and small game and trapping throughout the subunit.
 - ii. Sportfishing for anadromous, resident, and stocked fish.
 - iii. Wildlife viewing throughout the subunit.
- c. Habitat Enhancement. Habitat enhancement techniques that are proven to be cost-efficient and environmentally sound may be applied.
- d. Fisheries. ADF&G will maintain, protect, and enhance, as appropriate, the fisheries and habitats of Eska and Moose Creeks and Wishbone and Slipper Lakes. To accomplish this, ADF&G may conduct spawning and escapement surveys, monitor trends in harvest angler effort, and develop recommendations for field investigations and/or Board of Fisheries consideration, as time and funds allow. ADF&G will adjust stocking levels in stocked lakes based on health and survival of stocked fish and changes in use patterns and pursuant to the annual public review of the statewide stocking plan. ADF&G will manage sport fisheries for sustained yield and angler satisfaction, work closely with enforcement staff in adherence to regulations, and assist in habitat conservation and restoration.

4. Forestry

- a. Timber Harvest. Timber harvest operations that enhance fish and wildlife habitat may be authorized in the Jonesville Management Subunit. Specific sale locations and dates will be identified by DOF&FP in consultation with ADF&G. The criteria for determining the location of cutting units includes identifying access on existing roads/trails to allow the public to obtain firewood. Commercial timber harvests will occur in areas where cost effectiveness and habitat enhancement methods justify such harvests.
 - i. Coal Leases. Timber harvest may be pursued on existing coal development leases near Wishbone Hill to utilize existing timber resources prior to coal development.
 - ii. Elevation. No timber shall be harvested above 1,100 feet elevation except for habitat enhancement purposes.
 - iii. Schedule. The schedule for forest product harvest in the Jonesville Management Subunit should be identified by DOF&FP in consultation with ADF&G.
 - iv. Buffers. See Buffer guidelines in Chapter 2.

5. Public Use Sites

- a. Public Use Sites. Public Use Sites, illustrated on page 3-25, are sites on state land that have been identified as important for public access, recreation, camping, fishing, designated shooting ranges, or other public use. These sites have high public value and therefore should receive a higher degree of management attention to preserve recreation and resource values. The designation of these sites in this management plan serves to recognize the importance of the areas for continued public use. As use patterns change, new sites may be designated. Such additions will be at the discretion of DNR. Improvements such as public facilities, docks, shooting ranges, and boat ramps may be authorized. Within a Public Use Site and based on the incompatibility determination above, uses may be restricted to protect the health and safety of the public.
 - i. The following Public Use Sites are designated in the plan: Slipper Lake, Eska Falls, and Wishbone Lake. See Map 7, page 3-25.
 - ii. Improvements such as public recreational facilities, docks, and boat ramps are encouraged in Public Use Sites.
 - iii. Within a Public Use Site camping may be restricted to a campground, identified campsites, or within a certain distance of a developed recreation facility when developed¹¹.

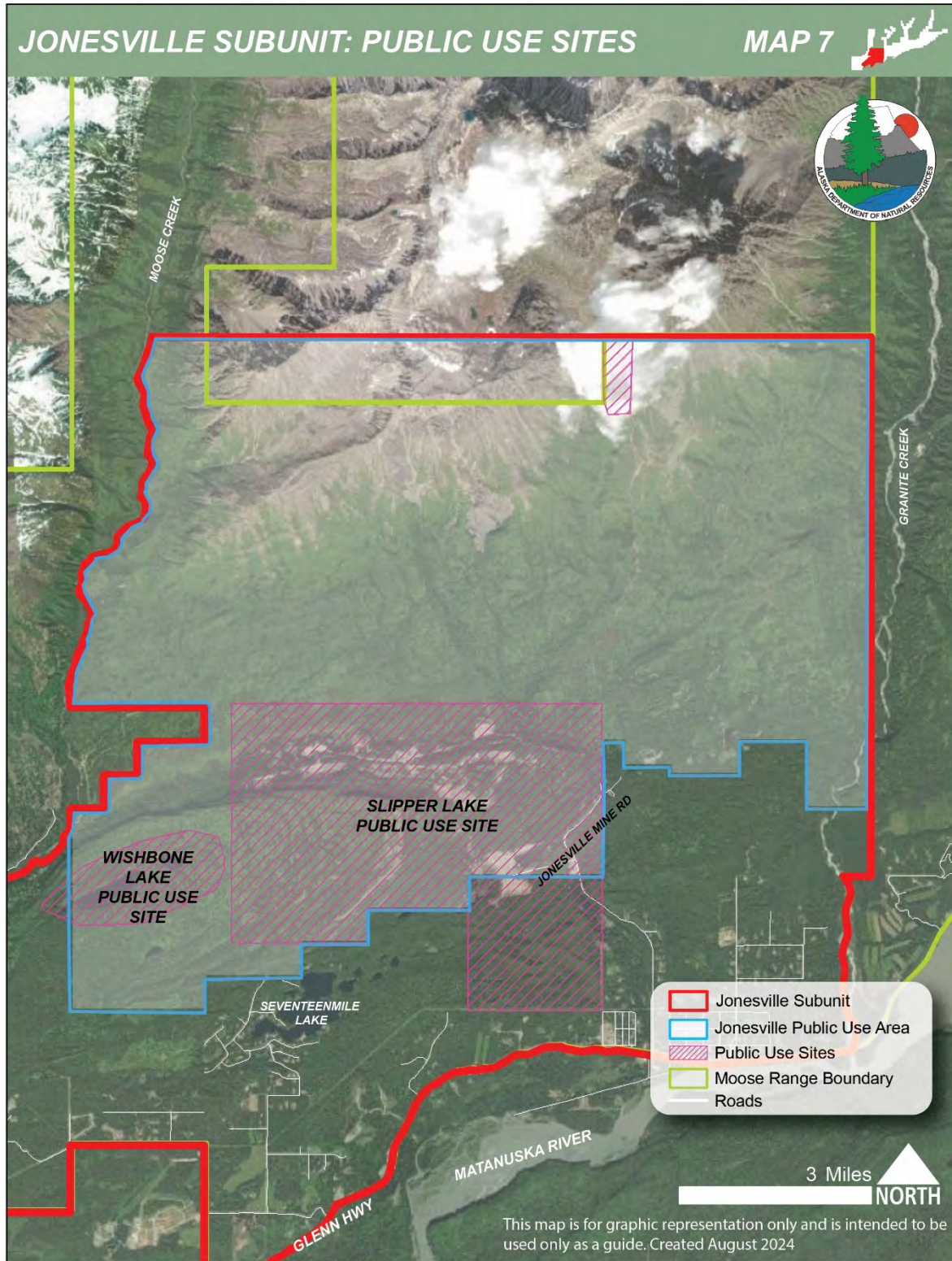
¹¹ This management guideline will require the promulgation of regulations for implementation.

- iv. Within a Public Use Site vehicle and boat speeds may be restricted¹².
- v. To protect public safety, DNR may restrict the use and discharge of weapons (including for hunting and trapping) in Public Use Sites, or within a certain distance from a developed facility¹³.
- vi. DNR may allow target shooting within a Public Use Site only within a designated and managed shooting area.

¹² This management guideline will require the promulgation of regulations for implementation.

¹³ This management guideline will require the promulgation of regulations for implementation.

MAP 7: Jonesville Subunit: Proposed Public Use Sites



6. Recreation

a. Facility Development.

- i. Slipper Lake Campground. A campground may be developed at Slipper Lake that provides restrooms. Considerations for a campground should include separate facilities for different user groups (i.e., RV/motorized, tent/motorized, tent/non-motorized, remote campground accessible by trail only). The campground should include facilities for a camp host.
 - ii. Shooting Range. A shooting range may be designated and constructed in the Jonesville Management Subunit where shooting can occur safely and where impacts to fish habitat, wildlife habitat, and other outdoor recreation activities are minimized consistent with best management practices. Planning and construction of a shooting range and necessary support facilities should conform to appropriate best management practices for shooting ranges. The shooting area should have specified hours of operation and should be staffed, managed, and maintained. The shooting range should be located in an area that is accessible year-round and provides suitable barriers or backstops to catch stray projectiles. Significant baffling should be considered for firing lanes to shield from errant bullets and noise. Map 8 on the next page identifies a potential shooting range site that appears to achieve the criteria listed above; however, a more thorough feasibility analysis should be completed.
- b. Commercial Recreational Facility Development. Commercial recreational facility development is authorized in the Jonesville Management Subunit consistent with the areawide guidelines in Chapter 2. Commercial recreational facilities that are prohibited include public use cabins, restaurants, concessions, food service, lodging buildings/facilities, and hunting camps.

MAP 8: Jonesville Subunit: Proposed Designated Shooting Area



- c. Interpretive Displays, Regulatory, & Informational Signs. Developed facilities, trails, and public use sites should include all informational and regulatory signage necessary for management and enforcement. Wishbone Lake and Slipper Lake may include interpretive displays to inform the public about the purposes of the Moose Range and JPUA, existing outdoor recreational opportunities, natural, cultural, and historic values, and unique geologic features. The displays can be used to inform the public about natural resource values and multiple use management of the natural resources. Interpretive signage along trails outside of public use sites should be limited. See the trails section in Chapter 2 for more information about trail wayfinding.
- d. Fossil Viewing. Fossil viewing is a dispersed outdoor recreational activity that is popular in the Jonesville Management Subunit. The activity may be restricted by DNR if the public's safety is endangered, if the activity interferes with coal mining operations, or if the cultural/heritage value of the resource warrants restrictions. All fossils are the property of the state, and it is unlawful to collect or remove them without the proper authorizations (AS 41.35).

6. Subsurface Resources

The Jonesville Management Subunit is open to locatable and leasable mineral development.

a. Coal Lease Location.

- i. Existing Leases. The state will follow existing procedures to allow for development of high-grade coal resources on land now leased for coal development near Wishbone Hill. Map 3 (page 2-33) shows the location of the existing leases.
 - ii. Agency/Lessee Cooperation. DMLW will work actively with the lessee on the existing Wishbone Hill coal leases. DNR and ADF&G will review the mining plans of operation when the lessee submits them to the state. State agencies will follow the intent of this plan and follow established ASCMCRA procedures in approving the plans for operation. State agencies will make recommendations to minimize impacts on fish and wildlife habitat and populations.
 - iii. Wishbone Lake. Wishbone Lake will be protected, replaced, and/or remediated if impacted because of mining.
- b. Post-Mining Land Use. Post-mining land use is designated as wildlife habitat for the Wishbone Hill area coal mined lands. Reclamation must be directed to a habitat type and density which is primarily beneficial to moose consistent with ASCMCRA. DMLW will monitor coal mining and reclamation activities at Wishbone Hill according to the ASCMCRA, including the rainbow fisheries in Wishbone Lake, water quality in Moose Creek, groundwater, and air quality of the subunit.
- c. Post-Mining Roads. The location and development of mining roads will receive interagency review during the review of any new or changes to approved mining authorizations. The determination of post-mining road use will be made at that time. Roads which are designated to be used by the public will remain open after mining operations have ceased or until an agency management decision is developed to do otherwise.

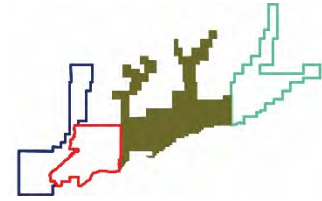
7. Water, Wetlands, and Waterbodies

- a. Lakeshores and Stream Corridors. Habitat enhancement efforts in riparian zones along Eska Creek, Wishbone, and Seventeen Mile Lakes may take place according to Chapter 2 buffer guidelines.
- b. Instream Flow Data Collection. ADF&G may collect instream flow data needed to inform its Title 16 permit decision-making process for Eska Creek and Moose Creek to maintain adequate flow for fish habitat. DNR DMLW shall work closely with ADF&G to identify waters where instream flow data needs to be collected associated with any work that will require permitting by either agency.
- c. Slipper Lake. The Alaska Dam Safety Program (ADSP) is evaluating Slipper Lake to determine if it is an artificially impounded lake. Aerial imagery strongly indicates that the lake has an artificial barrier that may be classified as a jurisdictional dam by state regulations (11 AAC 93). If Slipper Lake meets the jurisdictional definition of a dam, DNR will need to decide how to bring it into compliance with the ADSP. ADSP shall consult with DNR DMLW and ADF&G if Slipper Lake meets

the jurisdictional definition of a dam to determine how to bring the lake into compliance taking the following into consideration:

- i. Slipper Lake is heavily used by the public for recreation, including boating and fishing.
- ii. Slipper Lake is a popular camping location.
- iii. Slipper Lake is currently stocked by ADF&G.

The Middle Management Subunit



Background

The Middle Management Subunit includes portions of the following drainages in the Moose Range: Granite Creek, Young Creek, Kings River and Chickaloon River. The area has moderate-to-high values for fish and wildlife. Moose, small game, furbearers, black bear, Dall sheep and resident fish are harvested throughout the subunit by residents. Subsistence and sport harvest effort both occur but cannot be easily quantified. Wildlife viewing occurs in road or trail accessible areas of the subunit. Mature forests dominate the subunit below the 2,000-foot elevation level.

The Young Creek area and the area around Castle Mountain have known high-grade coal resources. Although the Kings River drainage contains low-grade coal, there are potentially marketable limestone deposits in the upper east side of the drainage and haydite materials near the confluence with the Matanuska River. Upper Granite Creek drainage is the only drainage in the Moose Range that does not have existing road access. This drainage also has unstable geologic conditions, rugged terrain, avalanche potential and sub-alpine and alpine vegetation.

Dispersed outdoor recreation activities occur throughout the management subunit along the Chickaloon-Knik-Nelchina Trail, Young Creek Trail, and Permanente Road. The predominant scenic resources in the subunit are Granite Peak and Castle Mountain.

Planning and Land Management Issues

Outdoor recreation use in the Middle Management Subunit is more dispersed than the Eastern or Jonesville Subunits, however as the population of the Mat-Su Valley continues to increase, the pressure for access to motorized and non-motorized recreation opportunities farther east in the Moose Range will continue to increase. Currently, there is unmanaged camping at the Kings River along the Glenn Highway. Public comments indicate that access and recreation facilities along the Glenn Highway should continue to be upgraded and improved with accompanying management and enforcement.

Land Use Designations

State land will be managed consistent with its designation(s); as specifically articulated through management intent described below and applicable goals and management guidelines found in Chapters 2 and 3. Some lands have one designation while other lands are co-designated for a variety of uses. Table 3 provides a quick reference of the designations and co-designations used in this management subunit, and the acreages of designation(s). Refer to Map 9 on page 3-32.

Table 3: Middle Management Subunit Designations and Acreages

<i>Designation or Co-Designation</i>	<i>Abbreviation</i>	<i>Acreage</i>
<i>M1: Habitat, Public Recreation Dispersed</i>	<i>Ha, Rd</i>	<i>38,305</i>
<i>M2: Habitat, Public Recreation Dispersed, Forestry</i>	<i>Ha, Rd, F</i>	<i>10,611</i>

Management Intent

Unit M1: Ha, Rd. The management intent for Unit M1 is to maintain, improve and enhance fish and wildlife habitat. The management intent for the upper Granite Creek drainage (the area north of Sec. 36, T20N, R3E) is to emphasize minimal changes in its existing condition due to the unstable geologic conditions, rugged terrain and fragile sub-alpine or alpine vegetation. There will be no new trail or road development into upper Granite Creek.

Dispersed outdoor recreational opportunities will be maintained throughout Unit M1. There are a variety of roadside recreational sites with varying levels of developed infrastructure including parking areas, trailheads, campgrounds, restrooms, and picnicking facilities that provide access to the Moose Range. The management intent is that these facilities will continue to be improved, managed, and maintained to safely accommodate users, protect habitat and natural resources, and decrease impacts to private property while serving as key access to the Chickaloon-Knik-Nelchina Trail and accessible drainages within the subunit.

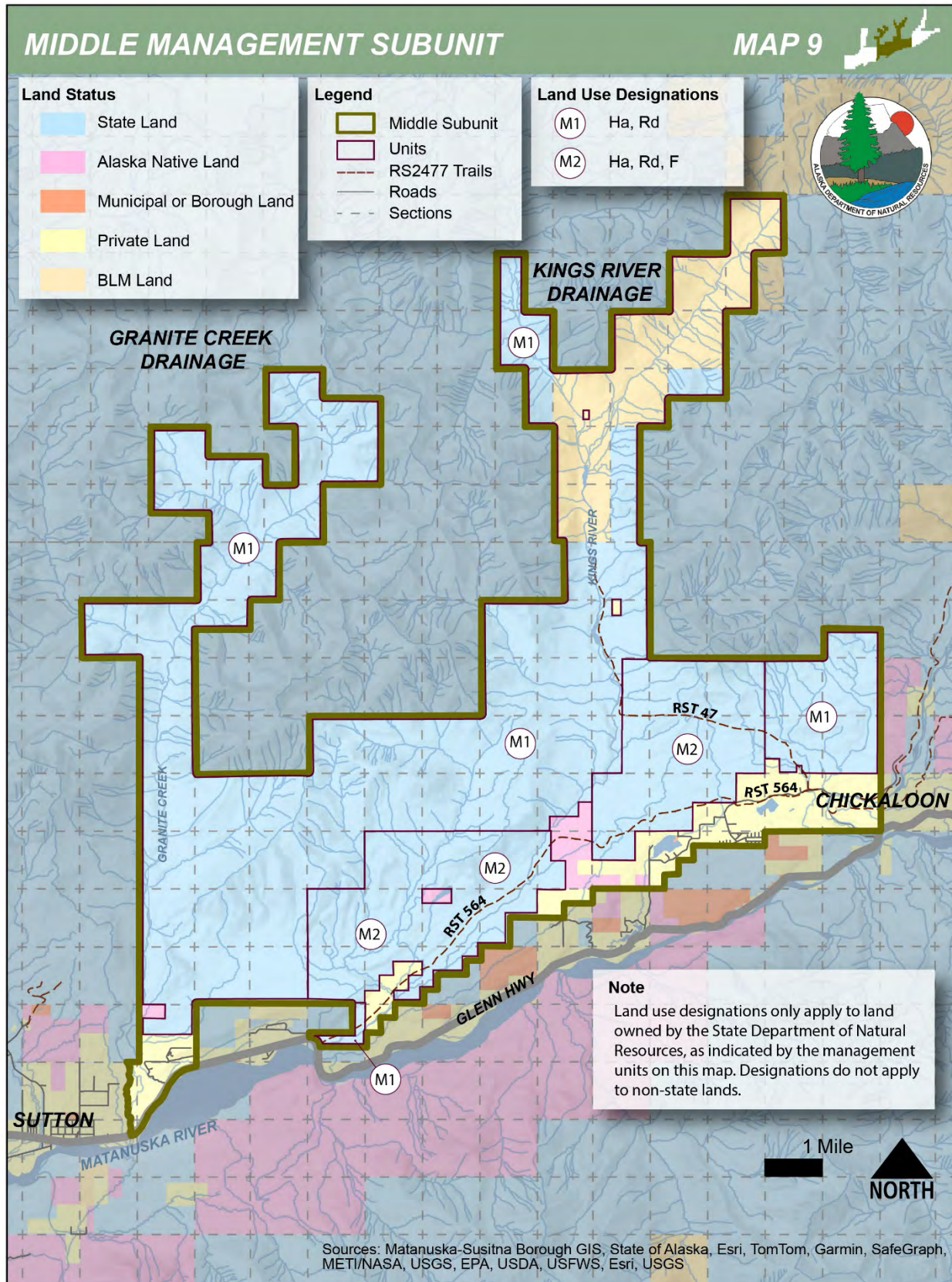
There are potentially marketable limestone and haydite materials along the Kings River. To accommodate material development, Unit M1 will remain open to locatable mineral entry and will be available for the development of leasable minerals, except for the southern face of Castle Mountain and wildlife mineral licks. The southern face of Castle Mountain is closed to locatable mineral entry and will not be available for the exploration or development of leasable minerals.

There are areas in this unit where grazing may be authorized under the guidelines of this plan, however grazing will not be authorized along a portion of the east fork of Granite Creek, north of Little Granite Creek, due to unstable slopes and possible conflicts with Dall sheep concentrations.

Unit M2: Ha, Rd, F. Same intent as Unit M1 with the following addition:

Due to the good potential for improved access, the mature forests below 2,000 feet along Young Creek, Kings River and the base of Castle Mountain will be managed for habitat enhancement through timber harvest and other applicable methods. Timber harvest is allowed only if the activity enhances fish and wildlife habitat.

MAP 9: Middle Management Subunit



Subunit Management Guidelines

1. Access and Trails

a. Public Use of Existing Access.

- i. Maintenance of Existing Access. The state should ensure access to public rights-of-way and easements for public access along the Permanente Road, the Fish Lake Subdivision Road, the Castle Mountain Mine Road, the Chickaloon River Road, the Chickaloon-Knik-Nelchina Trail, the Chickaloon River Trail and the Young Creek Trail, and to public lands along the Fish Lake Subdivision.
- ii. Access Priorities. DNR should verify legal access for the Chickaloon River Trail and the Chickaloon-Knik-Nelchina Trail according to Chapter 2 guidelines. If acquisition of access is required, DNR may pursue this process as time and staffing allows. Relocation of the Chickaloon River Trail north of private land through state lands will be allowed following the criteria outlined in 11 AAC 51.100 to provide an alternative trail if necessary.
- iii. Access to Little Granite Creek Bench. Access to trails is often blocked by private lands. Public access to the Little Granite Creek bench is important for providing outdoor recreational opportunities such as hunting, and for future moose management of the Moose Range. There is an existing private access road to the bench that is blocked to public use. Private land on the bench also blocks public access to public land beyond. Public access to the Little Granite Creek Bench should be pursued.
- iv. Areas with Active Assertion. DNR should continue researching the validity of a public right-of-way on roads and trails and follow Chapter 2 guidelines for making a right-of-way assertion wherever necessary and possible.

b. New Access. Construction of new trails and roads into the upper Granite Creek drainage (the area north of Sec. 36, T2CN, R3E) shall be prohibited for recreation, timber management, or wildlife enhancement activities¹⁴. Foot and helicopter access will be used to access the upper drainage for habitat enhancement if necessary to maintain a wildlife species.

c. Trails. In addition to the areawide management guidelines established for trails in Chapter 2, the following guidelines are specific to the Middle Management Subunit.

- i. Chickaloon-Knik-Nelchina, Chickaloon River, and Young Creek Trails. These trails should be maintained at their existing functional level and not be substantially upgraded or improved (except sustainable trail work to reestablish foot use on the Chickaloon-Knik-Nelchina and Chickaloon River Trails is allowed if necessary). Access will remain open to the public for existing uses, including hunting and trapping activities. Timber harvest or habitat enhancement activities along these trails will follow the Chapter 2 guidelines on buffers. Signs may be placed along the trails as necessary to inform the public of legal access, mark the proper trail route, and help keep the public from trespassing on private lands.
- ii. Trail Kiosks, Signage, and Wayfinding. Trailhead maps, kiosks, wayfinding signage, and trail use information may be developed. Signs will clearly display trail use information,

¹⁴ This management guideline requires the promulgation of regulations for implementation.

regulatory information, and allowed trail uses. Wayfinding and trail use signs may be used to appropriately guide trails users; however, their use should be minimal.

- d. Trailheads. After the completion of a Trails Management Plan, DNR may consider authorizing trailheads on either end of the Chickaloon-Knik-Nelchina Trail that are managed, maintained, consistent with adjacent land uses, and provide legal and accessible access.

2. Cultural and Heritage Resources

- a. Known Sites. There are seven known heritage resources on the Alaska Heritage Resources Survey Record in the Middle Management Subunit. These sites will be managed according to the guidelines in Chapter 2. There are multiple old cabins in Chickaloon and on Drill Lake. As time and funding allows, SHPO may work with private landowners to evaluate their importance and determine, alongside the property owner, if additional steps for protection are necessary.
- b. Chickaloon-Knik-Nelchina Trail. SHPO may pursue funding to review and propose the Chickaloon-Knik-Nelchina Trail and the Chickaloon River Trail for the National Register of Historic Places.
- c. Undiscovered Sites.
 - i. Newly Located Sites. The state, through DPOR and DGGs, will protect and interpret any significant cultural or historic features further identified in this subunit as funding and staffing capability permits.
 - ii. Survey Priorities. The Chickaloon townsite, the Chickaloon-Knik-Nelchina Trail corridor, and the Permanente Road all have moderate to high potential for heritage resources and should be surveyed prior to any development.
 - iii. Wickman Cabin. Working with the private owner, SHPO may evaluate the Carl Wickman cabin and barn on Drill Lake to determine its heritage resource value. Recommendations as to its use or protection should be made available to the private owner.

3. Fish & Wildlife

- a. Resource Management. This subunit will be managed primarily to maintain, protect and, if necessary, enhance the following fish and wildlife resources and habitats:
 - i. Moose throughout the subunit.
 - ii. Ruffed grouse throughout the subunit.
 - iii. Brown bear in upper Granite Creek and Young Creek.
 - iv. Black bear habitat throughout the subunit.
 - v. Dall sheep winter and summer ranges.
 - vi. Caribou in the northernmost, montane portions of the subunit.
 - vii. Mineral Licks.
 - viii. Riparian habitats and instream flow along the following drainages: Granite Creek, Young Creek, Kings River and lower Chickaloon River.
 - ix. Chinook, coho, and chum salmon and Dolly Varden in Granite Creek and Kings River.
 - x. Pink salmon in Granite Creek.
 - xi. Chinook and coho salmon in the Chickaloon River.

- xii. Rainbow trout in Chain Lakes, Kings River, Fish Lake, and Ruby Lake.
 - xiii. Bald eagle nests along lower Granite Creek.
 - xiv. Primary attention will be given to maintenance or enhancement of moose summer and winter concentration areas, fall harvest areas, and rutting concentrations area.
 - xv. And other species and habitats identified by ADF&G.
- b. Fish and Wildlife Utilization. The subunit will be managed to allow continuation of the following activities:
- i. Hunting of big and small game and trapping throughout the subunit.
 - ii. Sportfishing for anadromous, resident, and stocked fish.
 - iii. Wildlife viewing throughout the subunit.
- c. Fisheries. ADF&G will maintain, protect, and enhance, as appropriate, the fisheries and habitats of Granite Creek, Young Creek, Kings River, the Chickaloon River, and Chain Lakes. To accomplish this, ADF&G may conduct spawning and escapement surveys, monitor trends in harvest angler effort, and develop recommendations for field investigations and/or Board of Fisheries consideration, as time and funds allow. ADF&G will adjust stocking levels in stocked lakes based on health and survival of stocked fish and changes in use patterns and pursuant to the annual public review of the statewide stocking plan. ADF&G will manage sport fisheries for sustained yield and angler satisfaction, work closely with enforcement staff in adherence to regulations, and assist in habitat conservation and restoration.
- d. Habitat Enhancement. Habitat enhancement may be considered in this subunit and shall follow management guidelines in Chapter 2.

4. Forestry

- a. Timber Harvest. Timber harvest operations that enhance fish and wildlife habitat may be authorized in the Middle Management Subunit. Specific sales locations and dates will be identified by DOF&FP in consultation with ADF&G. Commercial timber harvests will occur in areas where cost effectiveness and habitat enhancement methods justify such harvests.
- i. Schedule. The schedule for forest product harvest in the Middle Management Subunit should be identified by DOF&FP in consultation with ADF&G.
 - ii. Elevation. No timber shall be harvested above 1,100 feet elevation except for habitat enhancement purposes.
 - iii. Buffers. See Buffer guidelines in Chapter 2.

5. Grazing

Grazing Prohibited. In addition to the guidelines in Chapter 2 and due to potential conflict with Dall sheep and unstable soils, livestock grazing shall be prohibited in an area north of Little Granite Creek and east of Granite Creek¹⁵.

¹⁵ This management guideline requires the promulgation of regulations for implementation.

6. Public Use Sites

There are no identified Public Use Sites in the Middle Management Subunit.

7. Recreation

a. State Recreation and Camping Roadside Facilities.

- i. Kings River Campground. DMLW should consider authorizing development, maintenance, and management of a campground facility at Kings River. The site could be at least 200 acres in size and include the bluff and usable land within the proposed site and the land that lies east of the Glenn Highway right-of-way in the NE1/4, E1/2NW1/4 and N1/2S1/2 Sec. 16, T19N, R4E S.M. Before issuing an authorization, a proposed campground site plan should be developed that analyzes the floodplain and provides for public access to the adjoining Chickaloon-Knik-Nelchina and Young Creek trail systems.
 - ii. King Mountain State Recreation Site. Although outside the boundary of the Moose Range, the King Mountain State Recreation Site provides an opportunity for camping in the vicinity of the Moose Range.
- b. Interpretive Displays. Site development plans for a campground at Kings River and King Mountain Recreation Site may provide for interpretation related to the Moose Range. Interpretive displays may also be installed at other trailheads within the subunit.
- c. Fossil Viewing. Fossil viewing is a dispersed outdoor recreational activity that is popular in the Middle Management Subunit. The activity may be restricted by DNR if the public's safety is endangered, if the activity interferes with coal mining operations, or if the cultural/heritage value of the resource warrants restrictions. All fossils are the property of the state and it is unlawful to collect or remove them without the proper authorizations (AS 41.35).
- d. Whitewater Boating. DNR may authorize the development of infrastructure to support whitewater boating on the Chickaloon River.

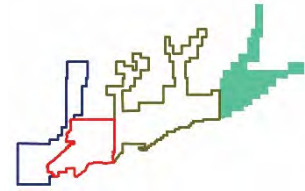
8. Subsurface Resources

Mineral Closures. The southern face of Castle Mountain is closed to locatable mineral entry and is not available for the exploration or development of leasable minerals.

9. Water, Wetlands, and Waterbodies

- a. Lakeshores and Stream Corridors. Habitat enhancement efforts in riparian zones along Granite and Young Creek and Kings River and in the vicinity of all lakes in the subunit will take place according to the Chapter 2 guidelines on buffers.
- b. Wetland Buffers. A buffer will be retained around the 160-acre wetland on Little Granite Creek Bench as described in Chapter 2 guidelines on buffers.
- c. Instream Flow Data Collection. ADF&G may collect instream flow data needed to inform its Title 16 permit decision-making process for Granite Creek, Young Creek, Kings River, and Chickaloon River to maintain adequate flow for fish habitat. DNR DMLW shall work closely with ADF&G to identify waters where instream flow data needs to be collected associated with any work that will require permitting by either agency.

The Eastern Management Subunit



Background

The Eastern Management Subunit includes the portion of the Moose Range that lies east of R5E, S.M. and includes most of the Chickaloon River drainage and a portion of the Boulder Creek drainage. The area has high-to-moderate values for fish and wildlife. Moose, small game, furbearers, black bear, Dall sheep and resident fish are harvested by residents. Subsistence and sport harvest effort both occur but cannot be readily separated or quantified. Wildlife viewing mostly occurs in road or trail accessible areas. Unlike the Western, Jonesville, or Middle Management Subunits, this subunit has low-to-moderate timber grades along the lower Chickaloon River and lower Boulder Creek. The Eastern Management Subunit has moderate coal grade, located near Anthracite Ridge.

Public lands in this subunit have moderate-to-high values for dispersed outdoor recreation. Most use occurs along the existing Chickaloon-Knik-Nelchina Trail, the Chickaloon River Trail, the Boulder Creek Trail and on the Chickaloon River. The Chickaloon River provides a highly valued remote wilderness Class II, III, and IV whitewater boating opportunity in southcentral Alaska.

Planning and Land Management Issues

Outdoor recreation use in the Eastern Management Subunit is the most dispersed in the Moose Range, however, as the population of the Mat-Su Valley continues to increase, the pressure for access to motorized and non-motorized recreation opportunities farther east in the Moose Range will continue to increase. Comments indicate that access and recreation facilities at the Glenn Highway should continue to be upgraded and improved with accompanying management and enforcement.

Land Use Designations

State land will be managed consistent with its designation(s); as specifically articulated through management intent described below and applicable goals and management guidelines found in Chapters 2 and 3. Some lands have one designation while other lands are co-designated for a variety of uses. Table 4 provides a quick reference of the designations and co-designations used in this management subunit, and the acreages of designation(s). Refer to Map 10 on page 3-39.

Table 4: Eastern Management Subunit Designations and Acreages

<i>Designation or Co-Designation</i>	<i>Abbreviation</i>	<i>Acreage</i>
<i>E1: Habitat, Public Recreation-Dispersed</i>	<i>Ha, Rd</i>	<i>22,794</i>
<i>E2: Habitat, Public Recreation Dispersed, Forestry</i>	<i>Ha, Rd, F</i>	<i>3,482</i>

Management Intent

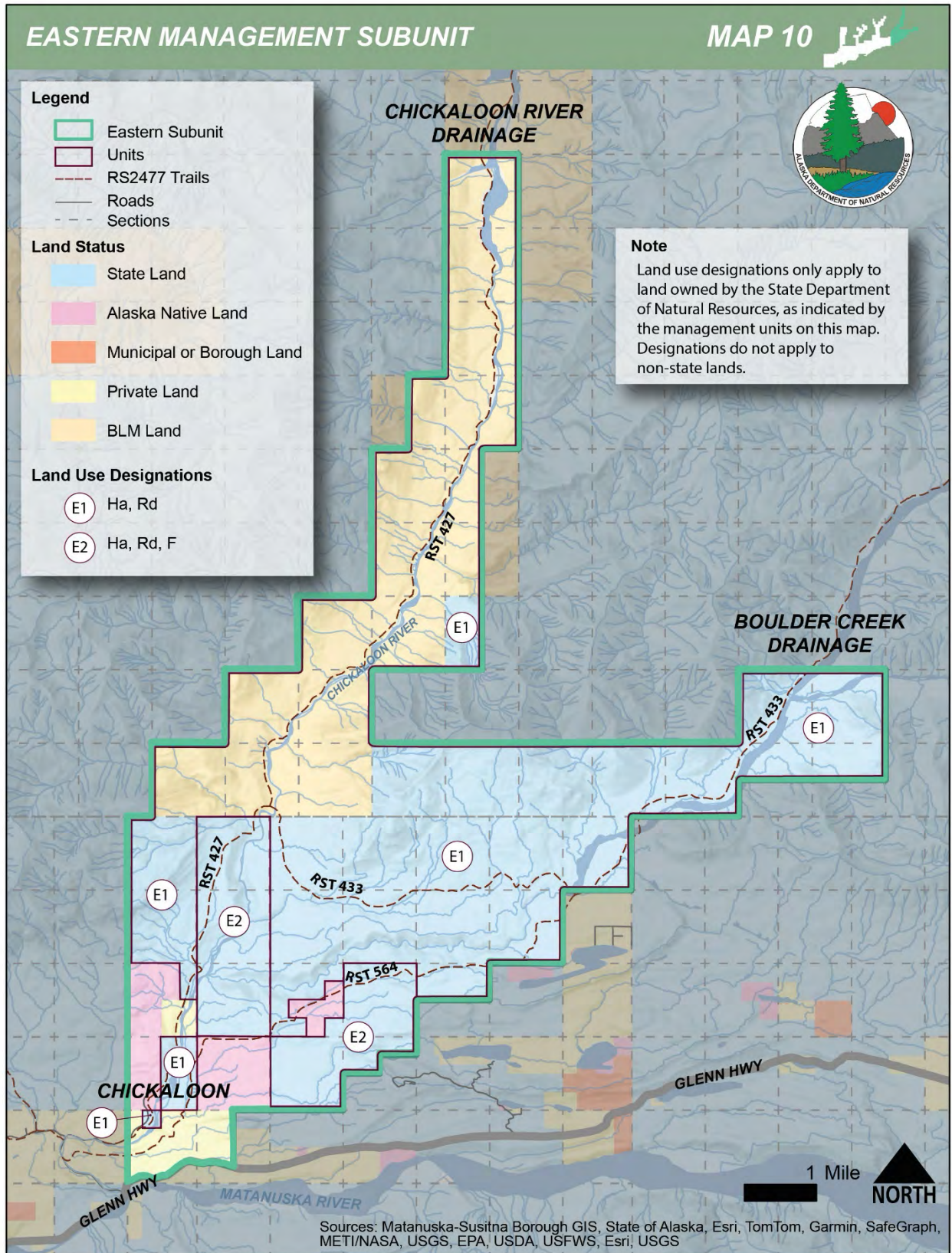
Unit E1: Ha, Rd. The management intent for Unit E1 is to maintain, improve, and enhance fish and wildlife habitat. Manage the unit to protect and maintain fish and wildlife habitat and associated wetlands, streams and waterbodies. Additionally, Unit E1 will be managed for dispersed outdoor

recreational activities. Popular activities such as hunting big and small game, trapping, wildlife viewing, horseback riding, hiking, skiing, winter biking, and fishing will continue.

Unit E2: Ha, Rd, F. Same intent as Unit E1 with the following addition:

There is a local need for personal firewood, and this need may be met to the extent possible by improving fish and wildlife habitat in conjunction with timber harvest. There is a limited supply of timber in the unit and timber harvest is allowed only if the activity enhances fish and wildlife habitat.

MAP 10: Eastern Management Subunit



Subunit Management Guidelines

1. Access and Trails

- a. Public Use of Existing Access. The state should ensure access to public rights-of-way and easements for public access to the Eastern Management Subunit from the Glenn Highway and Chickaloon River Road through a network of trail systems. The public has traditionally used these trails to access public land for outdoor recreational and commercial purposes. The state will verify and assert public rights-of-way as needed.
- b. Areas with Active Assertion. The state will continue researching the validity of a public right-of-way on roads and trails and follow Chapter 2 guidelines for making a right-of-way assertion wherever necessary and possible.
- c. Trails. The areawide management guidelines to establish a Trail Management Plan shall be followed in the Eastern Management Subunit.
 - i. Access on Native Allotments and ANCSA Lands. DNR will coordinate with the BLM to provide public access through native allotments and native selected lands.
 - ii. Chickaloon-Knik-Nelchina Trail, Old 98 Trail, and Boulder Creek Trail. Continued public access on these trails provides vital links to the public lands in the Eastern Subunit of the Moose Range and is essential to management.
- d. Trailheads. After the completion of a Trails Management Plan, DNR may consider authorizing trailheads on either end of the Chickaloon-Knik-Nelchina Trail that are managed, maintained, consistent with adjacent land uses, and provide legal and accessible access.

2. Cultural and Heritage Resources

- a. Known Sites. There is one known heritage site on the Alaska Heritage Resources Survey Record in the Eastern Management Subunit. This site will be managed according to the guidelines in Chapter 2.
- b. Chickaloon-Knik-Nelchina Trail and Chickaloon River Trail. SHPO may pursue funding to review and propose the Chickaloon-Knik-Nelchina Trail and the Chickaloon River Trail for the National Register of Historic Places.
- c. Undiscovered Sites. It is likely that there are other cultural resources in the vicinity of the Old Chickaloon townsite and along the Chickaloon River Trail, the Chickaloon-Knik-Nelchina Trail and the Old 98 Trail. Trails up the Boulder Creek drainage may also have high heritage resource values. Areas in the Eastern Management Subunit designated by SHPO as known high potential areas for containing heritage resources may be surveyed for heritage values as funding and staffing allows.

3. Fish & Wildlife Habitat

- a. Resource Management. This subunit will be managed primarily to maintain, protect and, if necessary, enhance the following fish and wildlife resources and habitats:
 - i. Moose throughout the subunit.
 - ii. Ruffed grouse throughout the subunit.
 - iii. Brown bear and black bear throughout the subunit.

- iv. Dall sheep habitat throughout the subunit and lambing in the Puddingstone Hill area.
 - v. Caribou in the middle and upper Chickaloon and Boulder Creek drainages.
 - vi. Wolves in the middle and upper reaches of the drainages.
 - vii. Chum salmon, grayling, rainbow trout, and Dolly Varden in Chickaloon River.
 - viii. Dolly Varden and grayling in the Boulder Creek drainage.
 - ix. Riparian habitats and instream flow along the Chickaloon River and Boulder Creek.
 - x. Other species and habitats identified by ADF&G.
- b. Fish and Wildlife Utilization. The subunit will be managed to allow continuation of the following activities:
- i. Hunting of big and small game and trapping throughout the subunit.
 - ii. Sportfishing for anadromous, resident, and stocked fish.
 - iii. Wildlife viewing throughout the subunit.
- c. Protection of Mineral Licks. There are mineral licks located in the Eastern Management Subunit. Verify the location with ADF&G. Mineral licks are used by significant numbers of wildlife primarily during the spring and early summer. The area around the lick should be protected for its wildlife value. Stipulations should be developed on a case-by-case basis, in consultation with ADF&G, for authorizations. The stipulations should address the following:
- i. The avoidance of direct and indirect impact on the mineral lick, the animal tracks leading to them and other areas of concentrated animal use that is associated with the mineral lick;
 - ii. Consult with ADF&G for their specific locations.
- d. Fisheries. ADF&G will maintain, protect, and enhance, as appropriate, the fisheries and habitats in the Chickaloon River, Boulder Creek, and other waters. To accomplish this, ADF&G may conduct spawning and escapement surveys, monitor trends in harvest angler effort, and develop recommendations for field investigations and/or Board of Fisheries consideration, as time and funds allow. ADF&G will adjust stocking levels in stocked lakes based on health and survival of stocked fish and changes in use patterns and pursuant to the annual public review of the statewide stocking plan. ADF&G will manage sport fisheries for sustained yield and angler satisfaction, work closely with enforcement staff in adherence to regulations, and assist in habitat conservation and restoration.
- e. Habitat Enhancement. Habitat enhancement may be considered in this subunit and shall follow management guidelines in Chapter 2.

4. Forestry

- a. Timber Harvest. The Eastern Management Subunit has small pockets of moderate timber value along the Chickaloon River, below 2,200 feet. Much of the subunit has limited timber potential. In the subunit, because of its poorer soil types, limited vegetation, and poor access, the management emphasis will be on maintenance of wildlife habitat rather than active timber management.

- i. Enhancement Considerations. Habitat enhancement is desirable for this area. The state will apply the most appropriate techniques available. Any active habitat enhancement requires DNR and ADF&G approval.
- ii. Schedule. Although timber harvest has not been a priority in the Eastern Management Subunit, any future schedules for forest product harvest in the Eastern Management Subunit should be identified by DOF&FP in consultation with ADF&G.
- iii. Buffers. See Buffer guidelines in Chapter 2.

5. Grazing

- a. Future Authorizations. Grazing authorizations will not be issued in the Eastern Management Subunit due to the limited availability of grass resources for grazing.

6. Public Use Sites

There are no identified Public Use Sites in the Eastern Management Subunit.

7. Recreation

- a. State Recreation, Camping, and Trailhead/Roadside Facilities.
 - i. Long Lake State Recreation Site. Although outside the boundary of the Moose Range, the Long Lake State Recreation Site provides an opportunity for camping in the vicinity of the Moose Range.
 - ii. Purinton Creek. Although outside of the Moose Range, one of the key access points to the Chickaloon-Knik-Nelchina Trail is Purinton Creek at the Glenn Highway. DMLW may support efforts to improve access at this location including parking, restroom facilities, and signage.
- b. Interpretive Displays. The Long Lake State Recreation Site and other roadside/trailhead facilities may provide for interpretation related to the Moose Range. Interpretive displays may also be installed at other trailheads within the subunit.
- c. Whitewater Boating. DNR may authorize the development of infrastructure to support whitewater boating on the Chickaloon River.

8. Subsurface Resources

- a. Locatable and Leasable Mineral Entry. The Eastern Management Subunit is open to locatable and leasable mineral development.
 - i. Coal. The Eastern Management Subunit contains limited pockets of moderate to high grade coal resources, which would be difficult and expensive to develop. The plan does not preclude development of this coal for the long-term; however, development is not recommended.
 - ii. Other Minerals. The Eastern Management Subunit is open to locatable and leasable mineral development, except for the mineral lick area (see 8b, below).
- b. Mineral Licks. There are mineral licks located in the Eastern Management Unit that are closed to mineral entry. DNR should consult with ADF&G to verify their location.

9. Water, Wetlands, and Waterbodies

- a. Lakeshores and Stream Corridors. Habitat enhancement efforts in riparian zones along the Chickaloon River and Boulder Creek shall take place according to Chapter 2 guidelines on buffers.
- b. Wetland Buffers. A buffer will be maintained around the wetlands in the area of Simpson's cabin on the Chickaloon-Knik-Nelchina Trail as described in the Chapter 2 Wetland buffer guidelines.
- c. Instream Flow Data Collection. ADF&G may collect instream flow data needed to inform its Title 16 permit decision-making process for the Chickaloon River and Boulder Creek to maintain adequate flow for fish habitat. DNR DMLW shall work closely with ADF&G to identify waters where instream flow data needs to be collected associated with any work that will require permitting by either agency.

This page is intentionally blank.