

CHAPTER 3

FOREST MANAGEMENT POLICIES FOR EACH MANAGEMENT UNIT

INTRODUCTION

This chapter presents land management policies for specific areas within the Tanana Valley State Forest. The text is divided into 14 sections that address each of the State Forest's management units.

Each section presents four types of information:

- A. **Summary of Management Intent.** This summary identifies in general terms which resource values or uses will be emphasized in different parts of the management unit.
- B. **Existing Resources and Uses.** The resources present in each management unit are briefly described. This information provides the rationale for the guidelines and planned activities discussed below. The resources are listed in alphabetical order.
- C. **Management Guidelines and Activities.** This subsection states how DNR will react to proposed uses for specific areas and describes which resource uses the state intends to protect or foster.
- D. **Land Management Summary.** This table provides a quick overview of policies for each subunit.

The large map shows the location of the management units and provides some detail on roads and other features. Larger scale maps show where research natural areas (Figures 1, 2, 5, 6, 7, 8) and the Bonanza Creek Experimental Forest (Figure 4) occur in the management unit areas.

All planned management activities described in this chapter are contingent on funding. Text which states that an activity such as road construction “will” occur is meant to convey DNR's long-term intentions.

MANAGEMENT UNIT 1

DUGAN HILLS

A. SUMMARY OF MANAGEMENT INTENT

- This unit encompasses the Dugan Hills and a smaller portion of state land on the Hutlinana River south of the Elliot Highway.

Subunit 1A, which includes sections of Baker Creek and the Hutlinana River, will be managed for local commercial and personal use timber production while protecting recreation and habitat values near the streams. The Dugan Hills (subunits 1B and 1C) will be managed for general use. Current levels of recreation, mineral and timber use are quite low, but could increase due to recent improvements to the Elliot Highway between Livengood and Manley Hot Springs. There is limited demand for personal use timber and fuelwood production in portions of the unit closer to the Elliot Highway and in the southern portion near areas included in past land disposal programs.

B. EXISTING RESOURCES AND USES

1. Cultural Resources. None identified.
2. Fish and Wildlife Habitat. Lowland areas near the Tolovana and Hutlinana Rivers and Baker Creek provide prime moose and furbearer habitat. The streams provide habitat for salmon and resident fish species, and support sport fisheries. The Tolovana River, which drains the Minto Flats complex and its tributary systems, passes through several miles of Subunit 1C. The Tolovana River has high fisheries values. The portion flowing through Subunit 1C is an important migratory pathway for anadromous and resident fish species, and is a rearing and feeding area for resident species. Though big game hunting is moderate, the area supports intensive trapping activity. The Minto Flats State Game Refuge is east of Subunit 1C.
3. Private Land and Leaseholds. None identified in this unit.
4. Recreation and Tourism. Numerous undocumented trails are located within this unit and are used by dogmushers and snowmachiners. The Commissioner's Trail, at the southwestern edge of Unit 1B, is a popular snowmachining trail. Baker Creek and the Hutlinana River have moderate value for boating and fishing, and several hunting guides work in this area. Several "pothole" lakes that have recreational value are located along a creek in T. 3 N., R. 11 W. The Tolovana River, important for boating, paddling, fishing, and hunting, passes through several miles of Subunit 1C. The Tolovana is used for tourism operations that include fishing, duck hunting, and wildlife viewing. The Innoko and Nowitna Rivers are used for pike fishing charters, and there are some local chartered trips in the Minto Flats and on the Baker, Fish, and Kantishna Rivers.
5. Scientific Resources. None identified in this unit.

6. Subsurface Resources. Current information suggests that the area has low mineral values except in Subunit 1A, located near the Eureka Mining District. No significant sources of gravel are apparent in this unit.
7. Timber. Most of this unit contains extensive pole-sized hardwood stands that are currently uneconomic because of remoteness and low demand for hardwood. Small stands of mixed spruce-hardwood in Subunit 1A, accessible from the Elliot Highway, are an important source of fuelwood and spruce sawtimber for local residents.
8. Transportation and Access. Access to Subunit 1A is provided by the 2-mile-long Hutlinana woodcutting road that connects to the Elliot Highway. Major access to the Dugan Hills is via the Fairbanks - Manley Hot Springs Trail, trails from the Elliot Highway and the Tolovana River. The Fairbanks-Manley Trail is comprised of three documented RS 2477 segments, serialized by the Division of Mining, Land and Water as RST 70, Ester – Dunbar; RST 152, Nenana Tanana Trail; and RST 1595, Dunbar-Minto-Tolovana. These trails are listed on the 1995 Historic Trails Atlas and Database, and have been documented as valid RS 2477 rights-of-way. Portions of the Fairbanks - Manley Hot Springs and Baker Trails over Bean Ridge Corporation land are reserved for public use by a 17(b) right-of-way. The easements are 25 feet wide and allow winter off-road-vehicle and non-motorized use.

C. MANAGEMENT GUIDELINES AND ACTIVITIES

1. Minerals. All of this unit will remain open to mineral location and leasing.
2. Recreational Facilities. Construction of one public use cabin will be allowed in Subunit 1A near Baker Creek. Trails may also be maintained in this subunit.
3. Streamside and Lakeshore Management. Guidelines for special management zones (see the Riparian and Instream Flow Management section of Chapter 2) apply to the following waterbodies, including their side channels, sloughs, and backwaters:
 - Baker Creek
 - Hutlinana River
 - Lake 303 in T. 2 N., R. 11 W.
 - Pothole lakes in T. 3 N., R. 11 W.
 - Tolovana River
4. Tolovana Corridor Withdrawal. Several sections of State Forest land near the Tolovana River are recommended for withdrawal from the State Forest to consolidate the state-owned corridor into the Tanana Basin Area Plan management unit (2H1) that includes Minto Flats. See the “Recommendations for Additions to and Withdrawals from the Tanana Valley State Forest and other Legislative Changes” section of Chapter 4 for more detail.
5. Timber Sales. Timber within Subunit 1A will be managed for local personal use and commercial production. Because of low demand and limited access, timber sales have not been scheduled for Subunits 1B and 1C. Timber will be made available in these subunits if warranted by a change in demand or accessibility. Timber sales in this unit are within the Kantishna Area.

For more detail when specific proposals are developed, see the Kantishna Area Five Year Schedule of Timber Sales and Forest Land Use Plans. The Schedule and FLUPs are not contained within the Plan, but can be obtained from the Division of Forestry.

6. Trails. Guidelines for trail corridors of regional or statewide significance (see the Trails section of Chapter 2) apply to the following trails within the State Forest:

Baker Trail
Country Trail

Development activities will be sited and designed to minimize disruption of the many undocumented trails in this unit to the extent feasible and prudent.

7. Transportation. Some secondary roads may be constructed to provide timber access in Subunit 1A. If timber harvest becomes feasible in Subunits 1B and 1C, primary access to Subunit 1B will likely be a winter road on the flats west of the Dugan Hills or a road from the Elliot Highway. Access to Subunit 1C will likely be a winter road on the western margin of Minto Flats, west of the Tolovana River. Both roads will tie into the primary roads that access Unit 2. Management of state land west and east of Unit 1 should allow for development of access to Subunits 1B and 1C.

LAND-USE SUMMARY
MANAGEMENT AREA: Fairbanks
UNIT 1 Dugan Hills

Subunit / Acres	Summary of Management Intent	Summary of Management Activities	Potential Access Roads: 1°/2° (primary/secondary)	Subsurface Designation		Prohibited Surface Uses*	Comments
				Locatable	Leaseable		
1A 6,735 acres	Timber production, stream & lake values, recreation	Commercial and personal use timber sales, trail maintenance, public use cabin	Some 2° roads may be constructed	Open to mineral entry	Available for leasing	Remote cabins	
1B 71,945 acres 1C 82,370 acres	General use	None planned.	None planned, but if harvest becomes feasible, 1°/2° access will be by winter roads.	Open to mineral entry	Available for leasing	Remote cabins	Recommended legislative withdrawal of Tolovana R. corridor

*Other uses, such as material sales or land leases, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement and management guidelines of this unit and with the relevant management guidelines in Chapter 2.

MANAGEMENT UNIT 2 LOWER TANANA

NOTE: DNR has agreed to do more detailed planning for Unit 2 before offering additional timber sales in this unit. This planning will follow completion of the current (2001) TVSF Management Plan update. The Unit 2 planning process will cover the whole unit and will consider all uses within the unit. It will also specifically address the Oblique Lake Research Natural Area in terms of ADF&G's stocking Oblique (Tschute) Lake with rainbow trout. DNR will work with the TVSF Citizens' Advisory Committee, ADF&G, local communities, and other interests when planning for Unit 2. Issues to be addressed include forest management; roads, trails, and other access issues; impacts of timber harvesting on other land uses; and the introduction of rainbow trout to Oblique Lake. When the Unit 2 planning is finished, proposed changes to the TVSF Management Plan will be included in the plan through an amendment. The Oblique Lake issue may be addressed separately, and sooner, than the rest of the issues in the unit.

A. SUMMARY OF MANAGEMENT INTENT

This unit consists of land that fronts on about 60 miles of the lower Tanana River and about 40 miles of the lower Kantishna River.

Most of the land within this unit will be managed for commercial timber production while protecting recreation and habitat values near the Tanana and Kantishna Rivers. Subunits 2B and 2C will be managed in their natural states for research and educational use.

B. EXISTING RESOURCES AND USES

1. Cultural Resources. The Tolovana Roadhouse, located on a privately owned inholding, is eligible for the National Register of Historic Places. The Roadhouse is used for tourism. Probability of cultural sites is low to medium along the Kantishna River and low along the Tanana River. The old village site, known as Old Minto (within T1N, R8W) is the site of seasonal cultural activities. This site is under a state land lease issued to the Interior Athabaskan Cultural Heritage and Education Institute (ADL 414434). The lease expires May 14, 2052. Please check Chapter 2, Cultural Resources, for a list of the cultural site codes in this unit. Further information on the cultural sites can be obtained from the Office of History and Archaeology.

2. Fish and Wildlife Habitat. This unit is prime moose and furbearer habitat except for dune and upland areas west and north of the Kantishna River confluence. Low elevation areas of both the Kantishna and the Tanana Rivers are prime habitat for black bear. The Tanana and Kantishna Rivers are important migratory routes for king, coho, and chum salmon. The area is heavily used by residents of Minto, Nenana, and Fairbanks for subsistence and sport hunting, trapping, and fishing. The Minto Flats State Game Refuge is to the north and south of Subunit 2E.

3. Private Land and Leaseholds. Numerous privately-owned tracts and leaseholds are adjacent to and within this unit. Several Native allotments are located near Old Minto Village in Subunit 2E, and many remote parcels are located along the Kantishna River west of Subunit 2A. Much of

the Iksgiza Lake Subdivision and the lake are surrounded by State Forest land. The Tolovana Lodge, a privately-owned inholding, is operated commercially.

4. Recreation and Tourism. The Tanana, Kantishna, and Tolovana Rivers are heavily used for recreational camping, boating, fishing, hunting and access to surrounding land. A number of operators from Nenana and Manley Hot Springs take people camping, fishing, wildlife viewing and hunting for ducks, bear and moose. The Tolovana River is used for canoeing, as is the Tanana in this unit. The Yukon 800, a powerboat race that goes from Fairbanks to Galena and back, covers the Tanana in this unit. In the winter, dog mushing and snowmachining are common on the Fairbanks - Manley Hot Springs and Nenana Trails. The Tanana River is also a popular route for snowmachining, cross-country skiing and ski plane landing.

5. Scientific Resources. The Oblique Lake Research Natural Area (Subunit 2B) includes a deep, undeveloped upland lake in a depression between low, horseshoe-shaped dunes and a contrasting oxbow lake on the floodplain of the Kantishna River. South-facing sand bluffs support hill prairies greatly reworked by ant colonies.

The Caribou Crossing Research Natural Area (Subunit 2C) includes an undisturbed, mature white spruce forest, a hill prairie, a bottomland of permafrost, and a wetland marsh. The area appears to be optimum habitat for late-succession, snag cavity-dependent birds and small mammals. The hill prairie is a scientifically interesting sagebrush grassland. See also Appendix E, Research Natural Area Report, for more information.

6. Subsurface Resources. Despite the existence of a few active mining claims near Old Minto Village, mineral potential in this unit appears low. Oil and gas potential is not known. The only upland source of gravel in this unit appears to be rock outcrops along the Tanana River opposite the Kantishna confluence.

7. Timber. Bottomlands along the Tanana and Kantishna Rivers contain a patchwork of mature spruce stands and productive, younger, mixed hardwood-spruce stands. Muskeg is predominant further away from the rivers. Harvestable stands lie on both sides of the Tanana River in Subunit 2E. Unburned uplands north of the Kantishna River confluence contain high volumes of spruce sawtimber. Many late successional white spruce stands in the floodplain are underlain by shallow permafrost. These stands are losing productivity, as evidenced by perched water tables, leaning trees, windthrow and rot, and dramatic loss of basal area. Extensive sand dune areas west of the confluence are forested with productive hardwood stands. Doyon Limited lands south of Subunit 2A hold significant quantities of mature spruce. Subunits 2B and 2C are research natural areas, which are closed to timber harvest.

8. Transportation and Access. Because this unit is not accessed by all-season roads, summer access to the area is via the Tanana and Kantishna Rivers. Barge service out of Nenana offers possibilities for log transport to the rail and highway system. Winter access is via the Fairbanks - Manley Hot Springs and Nenana Trails, the Commissioner's Line, and the clearing for the planned agriculture road from Nenana to near the Kantishna River (the Nenana-Tochaket Road).

C. MANAGEMENT GUIDELINES AND ACTIVITIES

1. Development Activities Near Private Land. Because of the relatively large number of private land holdings in this unit, roads, timber harvest, and other development activities will be sited and designed to avoid trespass and harm to scenery near private cabins and settlement to the extent feasible and prudent.

2. Minerals. Subunits 2A, 2D, and 2E will remain open to mineral location and leasing. Within Subunits 2B and 2C, the research natural areas, mineral exploration or development will be restricted if it conflicts with the overriding scientific values. Within the RNAs, rights to locatable minerals may be acquired only under the leasehold location system, AS 38.05.205, and may not be acquired by locating a mining claim under AS 38.05.195. The stipulations used in approving plans of operations per Leasehold Location Order #24 (See Appendix C.) will also be included in any miscellaneous land use permits issued for exploration activities within the RNAs.

3. Recreational Facilities. Construction of a public use cabin will be allowed near the Kantishna River or Tanana River in Subunit 2A or 2E. Public use cabins will be located away from existing private land and will be spaced so as to provide convenient overnight stops for boaters traveling from Nenana to Manley Hot Springs.

4. Research Natural Areas. RNAs within subunits 2B and 2C will be managed in their natural states for research and education. Guidelines for research natural areas in the Scientific Resources section of Chapter 2 will apply to these subunits.

Roads and landings for timber harvest in Subunit 2D may be located in the narrow strip between the bluff and the drainage in Subunit 2C.

5. Streamside Management. Guidelines for special management zones (see the Riparian and Instream Flow Management section of Chapter 2) apply to the following waterbodies, including their side channels, sloughs, and backwaters:

- Iksgiza Lake
- Kantishna River
- Oblique Lake
- Tanana River
- Tolovana River

6. Timber Sales. Suitable lands will be managed for commercial timber production in accordance with other policies stated in this plan. Forest stands in decline from permafrost or other factors will be priorities for harvest where feasible and prudent. Firewood, house logs, and other products will be made available to local residents as requested. As inventories are updated and demand increases, levels of commercial harvest may increase. Timber sales in this unit are within the Kantishna Area. For more detail when specific proposals are developed, see the Kantishna Area Five Year Schedule of Timber Sales and Forest Land Use Plans.

7. Timber Development Cooperation with Doyon Ltd. The state will seek cooperative agreements with Doyon Limited to share timber development costs and ensure that the timing and size of timber sales offered by the state and Doyon are in the general interest of the public.

8. Trails. Guidelines for trail corridors of regional or statewide significance (see the Trails section in Chapter 2) apply to the following trails within the State Forest:

Fairbanks - Manley Hot Springs Trail (RST 70 and RST 1595)
Nenana-Tanana Trail (RST 152)
Baker Creek Trail

None of these trails will be upgraded permanently to primary forest roads; however, crossing and temporary use of sections of the trails will be necessary.

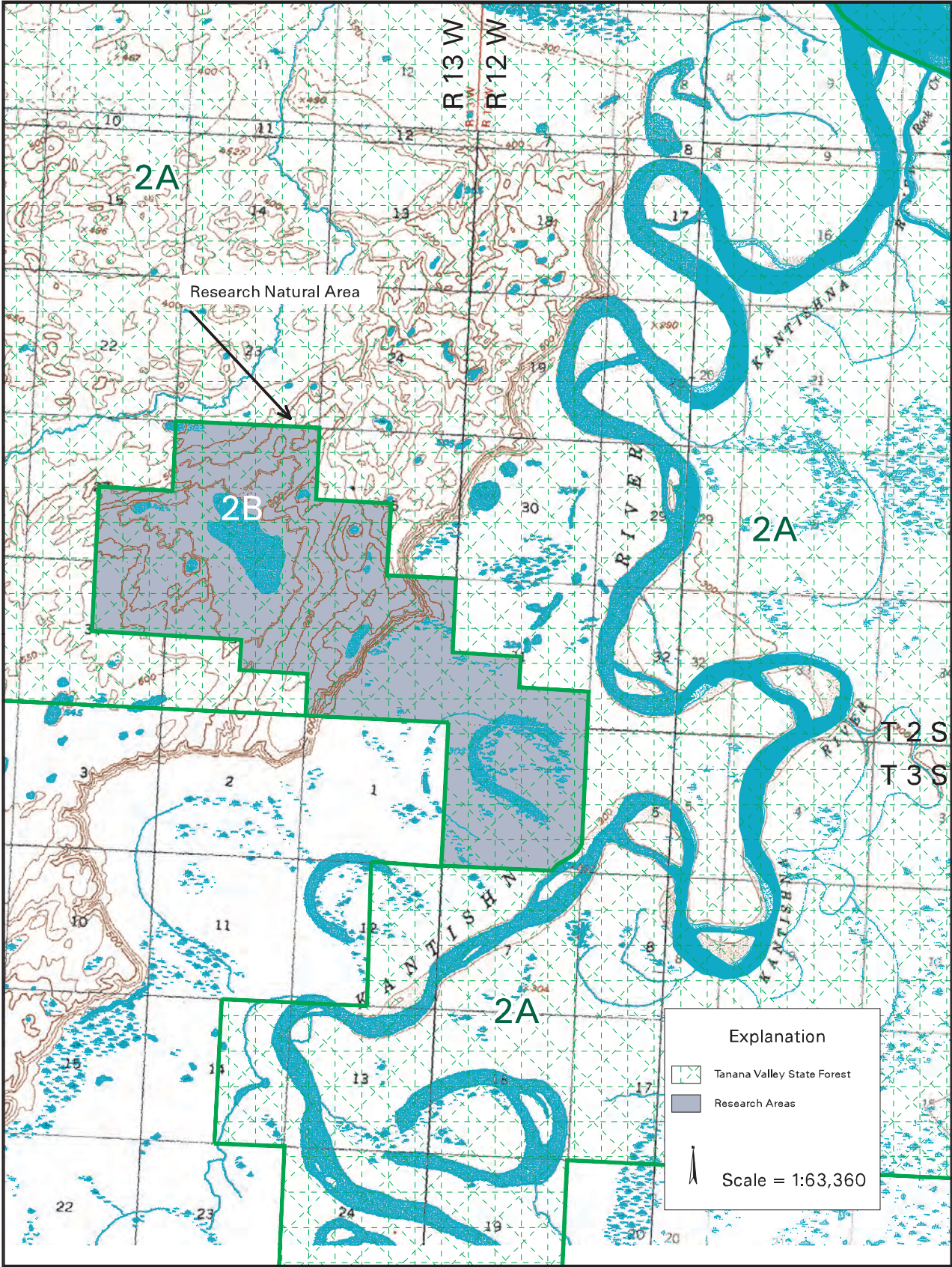
9. Transportation. Timber in this unit will be accessed by winter roads and ice bridges. Where feasible and prudent the state will seek cooperative agreements or easements with Doyon Ltd. or village corporations to reduce costs of access roads. Thirty miles of the Commissioner's Line may be upgraded to a primary winter road. An ice bridge may be constructed over the Nenana River for log truck use. The Nenana-Tochaket Road clearing may also be used for access to the southern portion of Subunit 2A. Subunit 2E may be accessed by constructing approximately 34 miles of primary winter road north from the Commissioner's Line. The road would pass through the Minto Flats State Game Refuge. Subunit 2D may be accessed by this road or the Commissioner's Line. Barging timber to Nenana on the Tanana River will also be considered, though currently it appears less cost effective than roading. Approximately 55 miles of secondary winter road may be constructed in these subunits for timber management. Major access to the unit is via the Fairbanks - Manley Hot Springs Trail, which is comprised of three documented RS 2477 segments, serialized by the Division of Mining, Land and Water as RST 70, Ester – Dunbar; RST 152, Nenana Tanana Trail; and RST 1595, Dunbar-Minto-Tolovana. These trails are listed on the 1995 Historic Trails Atlas and Database, and have been documented as valid RS 2477 rights-of-way.

LAND-USE SUMMARY
MANAGEMENT AREA: Fairbanks
UNIT 2 Lower Tanana

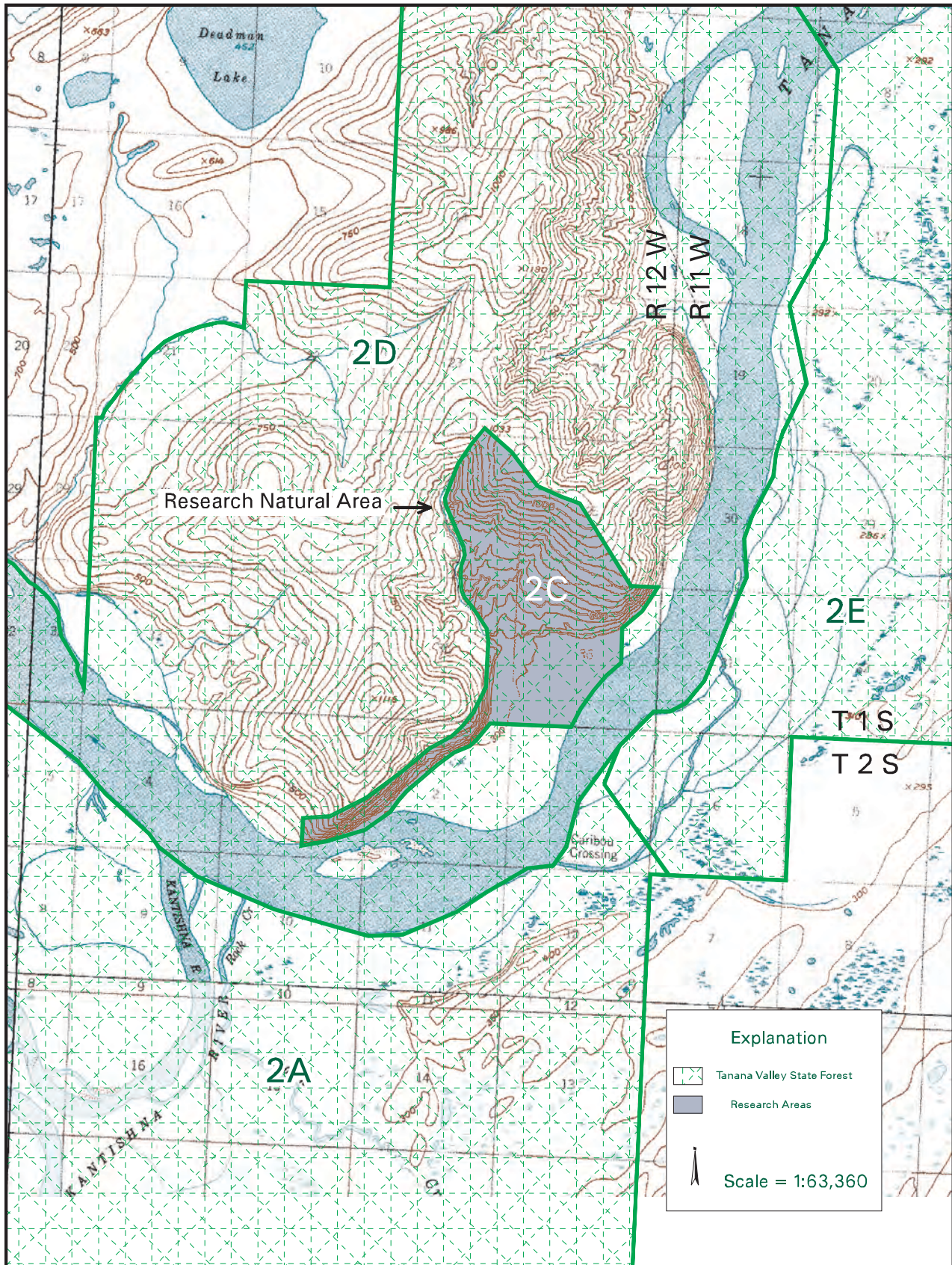
Subunit / Acres	Summary of Management Intent	Summary of Management Activities	Potential Access Roads: 1°/2° (primary/secondary)	Subsurface Designation		Prohibited Surface Uses*
				Locatable	Leaseable	
2A 62,425 acres 2D 17,030 acres 2E 76,300 acres	Commercial timber production, habitat and recreation near Tanana and Kantishna Rivers and other waterbodies.	Public use cabin (in 2A or 2E), long-term commercial timber sales	Mostly 1° and 2° winter roads will be used for additional access. Unit 2A: Nenana-Tochaket Rd. may be used. Unit 2D: Nenana-Tochaket Rd. or Commissioner's Line may be used. Unit 2E: Construct 34 miles of 1° winter road from Commissioner's Line.	Open to mineral entry	Available for leasing	Remote cabins
2B 2,990 acres 2C 1,251 acres	Research natural area	Research	No new road construction planned.	Open under leasehold location	Available for leasing	Commercial leases, developed recreation, material extraction, remote cabins, timber harvest, trapping cabins, introduction of non-endemic species

*Other uses, such as material sales or land leases, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement and management guidelines of this unit and with the relevant management guidelines in Chapter 2.

Oblique Lake Research Natural Area Subunit 2B



Caribou Crossing Research Natural Area Subunit 2C



MANAGEMENT UNIT 3 TATALINA RIVER

A. SUMMARY OF MANAGEMENT INTENT

This unit encompasses the State Forest land in between the Tolovana River and the Tatalina River.

This unit will be managed for general use. Current levels of recreation and timber use are very limited, but may increase in the future. Land adjacent to the Tolovana and Tatalina Rivers will be managed to protect the recreation and habitat values of the stream corridors.

B. EXISTING RESOURCES AND USES

1. Cultural Resources. None identified in this unit.
2. Fish and Wildlife Habitat. Lowlands near the Tolovana and Tatalina Rivers contain prime moose, black bear, and furbearer habitat. Both rivers support sport fisheries, and the Tolovana provides salmon habitat. Portions of the Minto Flats within Subunit 3B contain trumpeter swan habitat. The unit supports moderate to heavy hunting and trapping and borders the Minto Flats State Game Refuge.
3. Private Land and Leaseholds. None identified in this unit.
4. Recreation and Tourism. The Tolovana River and stretches of the Tatalina River are used for sport fishing and canoeing. There is a trail from the Elliot Highway to Tolovana Hot Springs just west of this unit, which is used for tourism activities. The Dunbar-Livengood Trail, which passes through a portion of this unit near the Tatalina River, is used by dogmushers, skiers and snowmachiners.
5. Scientific Resources. None identified in this unit.
6. Subsurface Resources. Mineral potential is moderate to high, and especially high in Subunit 3A, which is near the Livengood-Tolovana mining district. Exposed bedrock on ridges and mining tailings provide sources of material. There is some mining exploration occurring in Unit 3A.
7. Timber. Upland portions of this unit contain primarily hardwood stands. Productive mixed hardwood-spruce stands occur on lower slopes adjacent to Minto Flats and the Tatalina and Tolovana Rivers.
8. Transportation and Access. Access to Subunit 3A is provided by a gated pipeline access road that parallels Wilber Creek. The Trans-Alaska Pipeline and Elliot Highway form the northern boundary of this unit. Subunit 3B is not accessed by an all-season road, but instead by an unnamed trail that continues south from the pipeline to Slate Creek and by the Dunbar-Livengood Trail. The Dunbar – Livengood Trail is a documented RS 2477 trail and has been serialized by the Division of Mining, Land and Water as RST 66, Dunbar – Brooks.

Designations of identified RS 2477 trails should be coordinated with the Division of Mining, Land and Water.

C. MANAGEMENT ACTIVITIES AND GUIDELINES

1. Minerals. All of this unit will remain open to mineral location and leasing, except for the Trans-Alaska Pipeline right-of-way, which will remain closed to mineral location to protect existing and future utility uses.
2. Minto Flats Areas Withdrawal. Two areas in Subunit 3B that include portions of the Minto Flats are recommended for withdrawal to consolidate the flats into the adjacent Tanana Basin Area Plan management unit (M). See the “Recommendations for Additions to and Withdrawals from the Tanana Valley State Forest and other Legislative Changes” section of Chapter 4 for more detail.
3. Streamside Management. Guidelines for special management zones (see the Riparian and Instream Flow Management section of Chapter 2) apply to the following waterbodies, including their side channels, sloughs, and backwaters:
 - Tatalina River
 - Tolovana River
4. Timber Sales. Timber sales have not been scheduled in Subunit 3A or 3B. Timber for commercial and personal use will be made available if warranted by a change in demand or accessibility. Timber sales in this unit would be within the Fairbanks Area. For more detail if specific proposals are developed, see the Fairbanks Area Five Year Schedule of Timber Sales and Forest Land Use Plans.
5. Trails. Guidelines for trails or corridors of regional or statewide significance (see the Trails section of Chapter 2) apply to the Dunbar-Livengood Trail within the State Forest.
6. Transportation. No further primary access development is planned to this unit because of its currently low timber and recreation values. However, if demand changes for timber, all-season access from the Elliot Highway will be considered. Additionally, upgrading of the Dunbar-Livengood Trail to a primary winter road will be considered for access if timber harvest becomes feasible in Subunit 3B.

LAND-USE SUMMARY
 MANAGEMENT AREA: Fairbanks
 UNIT 3 Tatalina River

Subunit / Acres	Summary of Management Intent	Summary of Management Activities	Potential Access Roads: 1°/2° (primary/secondary)	Subsurface Designation		Prohibited Surface Uses*	Comments
				Locatable	Leaseable		
3A 14,865 acres	General use	None planned	None planned, but if harvest becomes feasible, Dunbar-Liven. Trail may be upgraded to 1° winter road.	Open to mineral entry, except oil pipeline ROW	Available for leasing	Remote cabins	No timber harvest scheduled
3B 79,890 acres	General use	None planned	None planned, but if harvest becomes feasible, Dunbar-Liven. Trail may be upgraded to 1° winter road.	Open to mineral entry	Available for leasing	Remote cabins	No timber harvest scheduled

*Other uses, such as material sales or land leases, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement and management guidelines of this unit and with the relevant management guidelines in Chapter 2.

MANAGEMENT UNIT 4

CHATANIKA RIVER, CACHE CREEK, GOLDSTREAM VALLEY

A. SUMMARY OF MANAGEMENT INTENT

This area includes most of the uplands between Washington and Goldstream Creeks northwest of Fairbanks.

Subunit 4A will be managed for general use. Current levels of recreation, mineral development and timber use are low, but could increase in the future. Subunit 4B, the Chatanika River corridor, will be managed to protect its high recreational and habitat values. Subunit 4C, the Murphy Dome highlands, will be managed for dispersed and developed recreation and for commercial and personal use timber production. Subunit 4D will be managed primarily for commercial timber production.

B. EXISTING RESOURCES AND USES

1. Cultural Resources. A railroad bridge over Goldstream Creek is recognized as an historic site. Please check Chapter 2, Cultural Resources, for a list of the cultural site codes in this unit. Further information on the cultural sites can be obtained from the Office of History and Archaeology.

2. Fish and Wildlife Habitat. Prime moose, black bear, and furbearer habitat are found at lower elevations near Minto Flats, the Chatanika River, and Goldstream Creek. Highlands near Murphy Dome provide prime furbearer and small game habitat. The Chatanika River provides important habitat for spawning salmon as well as for resident fish species. Because this area is easily accessed and close to Fairbanks, it is heavily used for hunting, trapping, and sportfishing, as well as bird watching, wildlife photography and wildlife viewing. The Minto Flats State Game Refuge is west of this unit.

3. Private Land and Leaseholds. Numerous privately owned tracts and leaseholds are adjacent to and within this unit. Concentrations of inholdings exist along the Chatanika River and Left Fork Creek. The Hayes Creek, McCloud, and Lincoln Creek Subdivisions abut this unit.

4. Recreation and Tourism. Land within Subunits 4B and 4C has high recreational value because of its diversity and easy access from Fairbanks. The highlands near Murphy Dome are used for moose, black bear and grouse hunting, trapping, viewing scenery, and berry picking. The Chatanika River and nearby land are heavily used for fishing, hunting, camping, and recreational cabins. The end of the Murphy Dome Extension is used as a boat launch site for the Chatanika River and point of entrance to Minto Flats. Trails and forest roads are used by dogmushers, cross-country skiers, and motorized vehicles. The logging roads in the area create a connection to the Dunbar Trail, which is popular for snowmachining and dog mushing. Runners use the Lincoln Creek Subdivision area. Mountain bikers race and tour in the Standard Creek area, on Cache Creek Road, and on Lincoln Creek Ridge, and there is a mountain bike ride series that goes through the eastern part of Unit 4C. One person operates a dogsled tourism business in Subunit 4C. Logging roads have created access for many of these activities.

A small-scale tourism business operates in Left Fork valley on private land. Tourism growth is expected throughout the area due to easy access to the Fairbanks community. The Left Fork Trail and the Cache Creek Road are used by tourism operations.

5. Scientific Resources. None identified in this unit.

6. Subsurface Resources. Mineral potential appears low to moderate in the northern part of this subunit but higher in the hills above the Goldstream Valley, which are part of the mineralized Cleary Sequence. Mining claims are staked on Hard Luck, Shovel, and Left Fork Creeks. Most of Washington Creek was staked at one time. Though an oil and gas lease is current over most of Subunit 4D, development potential is not known.

7. Timber. This unit contains productive, mature stands of mixed spruce-hardwood in lower, unburned side drainages of the major creeks and Minto Flats. Uplands are stocked with pole-sized hardwood stands. Timber values are especially high on the lower slopes above the Goldstream Valley which have been logged through state timber sales since the early 1960s. Most of Subunit 4A is currently uneconomical to access because of its remoteness and the low demand for hardwood.

A variety of Interior forest types exist, including the range of age classes and species that contribute to biodiversity. However, forest age classes younger than forty years old are rare. Habitat enhancement projects have been proposed to increase diversity.

8. Transportation and Access. Subunits 4B and 4C are accessible by all-season roads and numerous trails. Access to timber harvest areas near Standard Creek is via the 24-mile-long Standard Creek Road from the Old Nenana Highway. Access to the Cache Creek drainage from Murphy Dome Road is via the Cache Creek woodcutting road. An extension of the Cache Creek Road to the Standard Road has been surveyed and cleared. The Murphy Dome Extension provides access to the Luck Dome highlands that surround Murphy Dome and is a direct link between Fairbanks and the heavily used Minto Flats and Chatanika River. Other recreational and settlement access routes include the Old Murphy Dome Road and the Allen Creek - Dunbar, Martin-Dunbar, and Left Fork Creek Trails. Some of these routes are RS 2477s. The Allen Creek - Dunbar Trail is one RS 2477 route, serialized as RST 70, and the Dunbar – Brooks Terminal another, serialized RST 66. The Fairbanks-Manley Hot Springs Trail is serialized as RST 70 and RST 1595.

Most of Subunit 4A is not accessed by all-season roads. A public right-of-way connects the Elliot Highway to the Hayes Creek Subdivision on the eastern end of the subunit.

C. MANAGEMENT GUIDELINES AND ACTIVITIES

1. Commercial Leases and Grazing. Commercial leases and grazing are prohibited in Subunit 4B because of overriding recreational, habitat, timber and human use values.

2. Cultural Site Protection. Guidelines for cultural site protection (see the Cultural Resources section of Chapter 2) apply to site FBX-95, which is moderately sensitive.

3. Development Activities Near Private Land. Because of the relatively large number of private holdings in or near Subunits 4B and 4C, roads, timber harvest, and other development activities will be sited and designed to minimize negative impacts on private land. See the Private Lands section of Chapter 2 for guidelines on avoiding conflicts with landowners. Forest Land Use Plans shall address roads and other impacts to private lands. DOF will consider landowner comments as they relate to the type and location of roads.

4. Minerals. Subunit 4B will be closed to mineral entry, coal leasing, and material sales. Oil and gas exploration and development activities will be sited or timed to mitigate impacts on the fish and wildlife habitat and public use values of the Chatanika River corridor. Specific mitigation measures necessary to protect the values for which the river corridor was established will be developed as part of the lease-sale process. Mitigation measures will be developed case-by-case and will consider timing, topography, vegetation, and other factors that affect the impact of oil and gas exploration and development activities on fish and wildlife habitat and public-use values. The rest of Unit 4 will remain open to mineral location and leasing.

5. Proposed State Forest Withdrawal. The eastern portion of Subunit 4B should be withdrawn from the State Forest and included in the adjoining Tanana Basin Area Plan management unit (1-E1), which is recommended for designation as a State Recreation River. See the “Recommendations for Additions to and Withdrawals from the Tanana Valley State Forest and other Legislative Changes” section of Chapter 4 for more detail.

6. Recreational Facilities. Construction of three public use cabins will be allowed in Subunits 4B and/or 4C for use associated with the Chatanika River, Murphy Dome highlands, or trails. Recreational facilities at the end of the Murphy Dome Extension will be designed and managed to prevent degradation of the site from overuse, but not to encourage more use. The site will be designed to accommodate 30 vehicles with trailers and 10 campsites and is planned as follows: refuse containers and toilets will be placed on the site, gravel will be applied to the parking area, and small improvements will be made to the boat launch.

A scenic turnout may be developed along the highland portion of Murphy Dome Extension.

7. Scenic Quality. Development activities on the western side of Unit 4 will be sited and designed to enhance or minimize harm to scenic quality of State Forest land visible from heavily used areas in Minto Flats to the extent feasible and prudent. Chapter 2 guidelines for management of visual resources will apply to these areas. The Scenic Values guideline of the Recreation section of Chapter 2 contains scenic value guidelines, as does the Silviculture and Harvest Practices part of the Timber Management section of Chapter 2.

8. Streamside Management. Guidelines for special management zones (see the Riparian and Instream Flow Management section of Chapter 2) apply to the following watercourses, including their side channels, sloughs, and backwaters:

Goldstream Creek
Washington Creek

9. Timber Sales. Suitable land will be managed for timber production in Subunits 4C and 4D in accordance with other policies stated in this plan. The State will offer timber sales in Cache, Fortune, Left Fork, and Standard Creek drainages and other smaller drainages that empty into Minto Flats.

Timber sales have not been scheduled in Subunit 4A, but will be made available if warranted by a change in demand or accessibility. Minor amounts of timber may be offered in Subunit 4B if overriding recreational, habitat, and public use values are not significantly affected.

DOF will plan the sinuosity of cut shapes to increase edge effect to benefit wildlife as well as reduce impacts to viewsheds, to the extent feasible.

The Division of Forestry will coordinate activities with the Alaska Department of Fish and Game in order to maintain naturally occurring mineral licks. Habitat enhancement projects and timber sales are planned to diversify forest age classes.

Timber sales in this unit are within the Fairbanks Area. For more detail when specific proposals are developed, see the Fairbanks Area Five Year Schedule of Timber Sales and Forest Land Use Plans.

10. Trails. Guidelines for trail corridors of regional or statewide significance (see the Trails section of Chapter 2) apply to the following trails within the State Forest, some of which are RS 2477 routes (designated by RST #):

- Allen Creek - Dunbar Trail (RST 70)
- Dunbar - Livengood Trail (RST 66—called the Dunbar Brooks Terminal)
- Fairbanks - Manley Hot Springs Trail (RST 70 and RST 1595)
- Keystone Ridge Trail
- Left Fork Trail
- Lincoln Creek Trail
- Martin - Dunbar Trail

Approximately 2 miles of the Lincoln Creek Loop Trail may be constructed along Keystone ridge in accordance with the Fairbanks North Star Borough Lincoln Creek Subdivision plans. Details of siting, design, and management will be developed jointly with the Fairbanks North Star Borough. On non-motorized trails on State Forest lands within this unit, signs may be posted on or near the trail indicating that they are for non-motorized use. Where conditions for conflict among motorized and non-motorized users exist, parallel trails may be considered. Safety for all users will be considered in construction of intersections.

Future trails will be considered for protection as the need arises per Trail Management Guidelines (see the Trails section of Chapter 2).

11. Transportation. Timber in Subunits 4C and 4D will be accessed by all-season roads. Twelve miles of primary road may be constructed north of Dunbar for permanent access to Subunit 4D.

Approximately 30 miles of secondary road may be constructed in Subunits 4C and 22 miles in Subunit 4D for timber management.

Roads in State Forest land near the Minto Lakes will be sited and designed to retain a visual barrier between the roads and the Minto Lakes. The objective of the barrier is to prevent unauthorized roads and trails that may harm recreational, habitat, and public use values of Minto Flats.

Extension of the Cache Creek Road is intended for timber transportation and incidental recreational use. Significant additional use, such as that associated with a subdivision, will require funds for road maintenance in addition to those funds or resources available from timber development. In the short term, specific road improvement could be made via contract requirement at two places: at the overflow and at the ninety-degree turn near the beginning of Cache Creek Road. In addition, turnouts at strategic points could be constructed where necessary for safety purposes. When a conflict or safety concern exists with private land owners, road closures will be considered along with other options (see the "Road Use Restrictions part of the Transportation section of Chapter 2).

Primary access to Subunit 4A is not currently anticipated because of low timber and recreation values, but this may change in the future. If timber harvest becomes feasible, primary access will be developed from the Hayes Creek Subdivision right-of-way or from the end of the Murphy Dome Extension, crossing the Chatanika River with an ice bridge. Additional road development will be minimized in Subunit 4B to maintain the undeveloped character of the Chatanika River corridor.

D. MANAGEMENT GUIDELINES AND ACTIVITIES SPECIFIC TO THE CACHE CREEK AREA

NOTE: The Cache Creek drainage is shown on the forest-wide map and on the small map in this section of Chapter 3.

A subcommittee of the Citizens' Advisory Committee concluded a two-year study in August 1999 to resolve multiple use issues in a 37,000 acre area west of Fairbanks. The area includes all or portions of the Cache Creek, Lincoln Creek, Fortune Creek, Keystone Creek, Dawson Creek, Left Fork, and some lesser drainages. The area also included other State lands, University lands, and Fairbanks North Star Borough lands. The following management guidelines and activities, however, only apply to that part of the Cache Creek Area within the Tanana Valley State Forest.

In addition to the management guidelines and activities in Section C above, the following management guidelines and activities apply to that portion of Unit 4 known as the Cache Creek Area. See the map, Figure 3.

1. Development Activities Near Private Land. Forest Land Use Plans shall address roads and other impacts to private lands. DOF will consider landowner comments as they relate to the type and location of roads. Forest Land Use Plans shall address these issues.

Adjacent to private lands, a 200-foot buffer will be established where harvest will occur when necessary to maintain forest health. Road construction within the buffer will be avoided, but if necessary, secondary winter roads will be used.

2. Recreational Facilities. Forests represented by healthy and diverse vegetation types are highly desired by recreationists, residents, tourists, and the timber industry. Therefore, the Cache Creek Area should be maintained through responsible management to allow for the continued use and enjoyment of these stand types by users and to ensure adequate biodiversity in the forest.

3. Timber Sales. Timber sales in the Cache Creek Area should be offered in small sales rather than large sales, where possible.

The first time a sale appears in the Five Year Schedule of Timber Sales, it will be located on a map in as much detail as is known.

The Division of Forestry will plan timber sales to avoid using roads in the Lincoln Creek Subdivision where feasible and prudent.

Secondary winter roads will be used, where feasible and prudent, to access Keystone Valley.

4. Tourism. ~~Tourism operators within the Cache Creek area will be notified when new roads are planned.~~ If a road is proposed in the Cache Creek Area that is not part of a timber sale, and therefore does not require notice under AS 38.05.945, a separate public courtesy notice will be given.

NOTE: The CAC changed the Cache Creek Subcommittee's original wording to what appears above (now stricken) and added the following note in its decision: "The intent of the committee was that this notification was to be public notification, not a requirement for individual notification." During the discussion with the Planning Team on 12/7/99, it was agreed to change the text as shown above.

5. Trails. On non-motorized trails in DNR or FNSB plans on State Forest lands within the Cache Creek Area, signs may be posted on or near the trail indicating that they are for non-motorized use. Where conditions for conflict among motorized and non-motorized users exist, parallel trails will be considered. Safety for all users will be considered in construction of intersections.

Future trails will be considered for addition to the trails of statewide significance in Chapter 2 as the need arises (see the Trails section of Chapter 2).

6. Transportation. When a conflict or safety concern exists with private land owners, road closures will be considered along with other options. See the Road Use Restrictions part of the Transportation section of Chapter 2.

Over the long-term, improvement of the first three miles of the Cache Creek Road to Title 17 standards should be initiated by the Keystone Road Service Area, working with the Division of Forestry, the Fairbanks North Star Borough, the University of Alaska, the Army Corps of Engineers, and the Alaska Department of Fish and Game.

7. Fish and Wildlife Habitat. The Division of Forestry will coordinate activities with the Alaska Department of Fish and Game in order to maintain naturally occurring mineral licks.

Habitat enhancement projects will initially be located in Fortune Creek due to Lincoln Creek Subdivision residents' concerns regarding recreational use as well as visual impacts to the Subdivision. Habitat enhancement projects, such as felling aspen and crushing, are proposed in the Cache Creek area. These projects are designed to increase the age class diversity of the forest, which lacks younger age classes.

LAND-USE SUMMARY

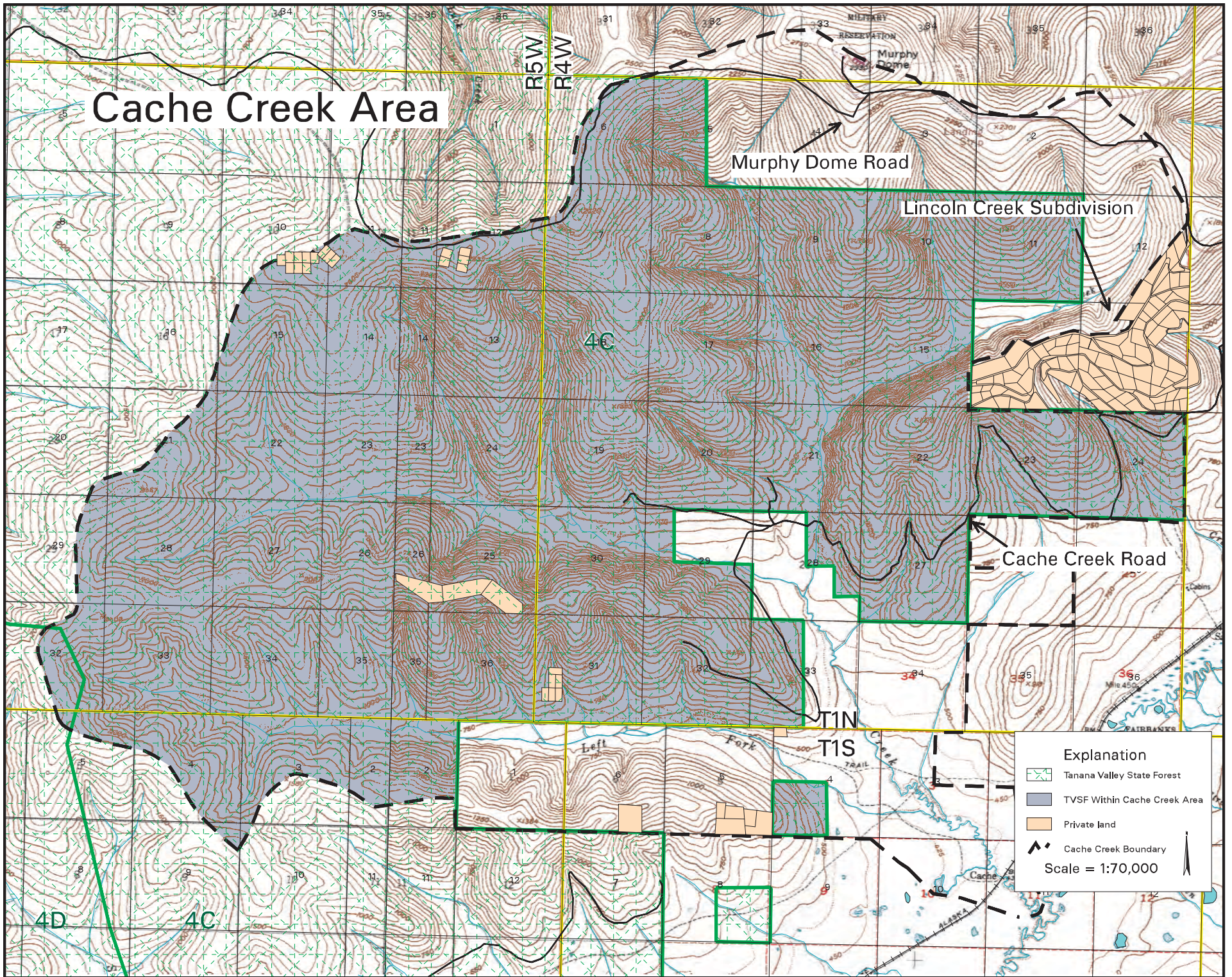
MANAGEMENT AREA: Fairbanks

UNIT 4 Chatanika River, Cache Creek, Goldstream Valley

Subunit / Acres	Summary of Management Intent	Summary of Management Activities	Potential Access Roads: 1°/2° (primary/secondary)	Subsurface Designation		Prohibited Surface Uses*	Comments
				Locatable	Leaseable		
4A 52,220 acres	General use	None planned	None planned, but if harvest becomes feasible, 1° access will be from Hayes Cr. Subdivision or from Murphy Dome Extension.	Open to mineral entry	Available for leasing	Remote cabins	
4B 3,450 acres	Fish and wildlife habitat, recreation	Boat launch/campground, public use cabin	Road development will be minimized in this unit.	Closed to mineral entry	Closed to coal leasing	Commercial leases, grazing, material sales, remote cabins	Recommended for legislative withdrawal of eastern portion
4C 66,670 acres	Recreation and tourism, timber production	Public use cabin(s), scenic turnout, trail construction, timber sales	Will be accessed by all-season roads.	Open to mineral entry	Available for leasing	Remote cabins	See D. Management Guidelines specific to the Cache Creek area, above.
4D 26,210 acres	Timber production, stream values	Timber sales	Will be accessed by all-season roads.	Open to mineral entry	Available for leasing	Remote cabins	

*Other uses, such as material sales or land leases, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement and management guidelines of this unit and with the relevant management guidelines in Chapter 2.

Cache Creek Area



Explanation

- Tanana Valley State Forest
- TVSF Within Cache Creek Area
- Private land
- Cache Creek Boundary

Scale = 1:70,000

MANAGEMENT UNIT 5 NENANA RIDGE

A. SUMMARY OF MANAGEMENT INTENT

This unit encompasses much of the state land on Nenana Ridge and includes about 50 miles of the Tanana River. Management intent varies by subunit.

Subunit 5A will be managed for timber production, habitat and recreation while retaining scenic values along the Parks Highway by using silvicultural methods described in Management Guideline E, Management of Commercial Forest Types, and Guideline M, Silviculture and Harvest Practices, in the Timber Management section in Chapter 2. Subunit 5B, the Bonanza Creek Experimental Forest, will be managed to protect research activities and to maintain its value for manipulative and observational research.

Legislation to address the University of Alaska land entitlement might establish a research and demonstration forest under University ownership and management within subunits 5A and 5B. Active timber management would continue in this forest. Implementation of legislation establishing such a forest will not require an amendment to the TVSFMP management plan.

B. EXISTING RESOURCES AND USES

1. Cultural Resources. A number of cultural sites have been identified in this unit. Please check Chapter 2, Cultural Resources, for a list of the cultural site codes in this unit. Further information on cultural sites can be obtained from the Office of History and Archaeology.
2. Fish and Wildlife Habitat. The Tanana River and Goldstream Creek bottomlands are prime moose, black bear, and furbearer habitat. Peregrine falcon nesting sites are present on the Tanana floodplain. The Tanana River serves as a staging area and migration corridor for waterfowl and as a migration route for salmon. Because this unit is easily accessed from Fairbanks and Nenana, it is used intensively for hunting and trapping.
3. Private Land and Leaseholds. None identified in this unit.
4. Recreation and Tourism. The Tanana River is important for recreational boating, camping, snowmachining, and access to surrounding areas for hunting and fishing. The clearwater tributaries of the Tanana are also important for fishing and hunting. In the winter, the Tanana is used for cross-country skiing, dog mushing and ski plane landing. The many logging roads in this unit provide excellent access to this area for recreational activities. A bluff that overlooks the river and is accessed by the Bonanza Creek Road has been used for years as a campsite. The Bonanza Creek Road ends at an active bank of the Tanana River, which is used as an undeveloped boat launch site. The Rosie Creek Trail, the Powerline Trail, and numerous logging roads and trails in the Rosie Creek area are used by many mountain bikers and runners and hikers in the summer, grouse and moose hunters in the fall, and by dogmushers, snowmachiners, and cross-country skiers in the winter. Views of the Alaska Range and Tanana River are especially good from the Parks Highway in this unit. One dogmushing tourism business operates

in the Rosie Creek area. A number of operators take people out on the Tanana and its tributaries for fishing, hunting for bear, moose, and birds, and camping, fishing, and wildlife viewing.

Zasada Road, Bonanza Creek, Nenana Ridge, and Skinny Dick's Road and associated logging trails are heavily used by berry-pickers and campers in the summer, grouse and moose hunters in the fall, trappers and dogmushers and snowmachiners in the winter, and bear hunters in the spring. The Nenana Ridge and Skinny Dick's Road are part of the route for the Fireplug 500 Sled Dog race. Nenana Ridge Road is used by birch bark basket-makers to collect birch bark for baskets.

5. Scientific Resources. The Bonanza Creek Experimental Forest has been used for forest research since the late 1950s. Use of the Experimental Forest is guided by a 55-year lease (ADL 21408) granted by the state to the USDA Forest Service Institute of Northern Forestry, now known as the Boreal Ecology Cooperative Research Unit (Appendix D). The current lease runs until June 30, 2018.

6. Subsurface Resources. Though mineral potential in this unit has been rated moderate to low, the highly mineralized Cleary Sequence underlies most of the unit. Consequently, potential for lode and placer mineralization is high. Though an oil and gas lease is current south of Dunbar, development potential is not known. Existing quarries and bedrock outcrops provide sources of material near the Parks Highway.

7. Timber. Subunit 5B contains some of the most intensively managed timberlands in Interior Alaska. This land is especially valuable for timber production because of its relatively high productivity, high existing spruce sawtimber volume, and easy access. The Rosie Creek fire burned a significant portion of Subunits 5A and 5B. The burn resulted in a large effort to sell partially burned timber within and outside the Experimental Forest.

8. Transportation and Access. All of Unit 5 is accessible from the Parks Highway. The Bonanza Creek, Rosie Creek, Halfway House, and Standard forest road networks total about 45 miles. Recreational access is provided by the Tanana River and the Cripple Creek-Rosie Creek and Rosie Creek Trails. A number of RS 2477 routes provide access to the unit. The Allen Creek - Dunbar Trail is one RS 2477 route, serialized as RST 70, and the Dunbar - Brooks Terminal another, serialized RST 66. The Fairbanks - Manley Hot Springs Trail is serialized as RST 70 and RST 1595. The Old Mail Trail, RST 264, goes through the southwestern corner of the unit.

C. MANAGEMENT GUIDELINES AND ACTIVITIES

1. Habitat Enhancement in Bonanza Creek Experimental Forest. Habitat enhancement will be conducted in Subunit 5B only as part of research projects.

2. Minerals. All of this unit will remain open to mineral entry and leasing. The Bonanza Creek Experimental Forest is open to mineral development subject to leasehold location. Mineral activity will be restricted within the Bonanza Creek Experimental Forest (Subunit 5B) if it conflicts with the overriding scientific values. Alaska Administrative Code 11 AAC 96.140(10) prohibits mineral exploration in Subunit 5B without an agreement with the lessee. In addition,

clause 12 of the lease allows mineral activities within the experimental forest only if they are in compliance with stipulations agreed upon by the State and the lessee.

3. Recreational Facilities and Activities.

- a. Public use Cabins. Construction of three public use cabins will be allowed in Subunit 5A along the Tanana River or in upland areas for use associated with boating or trail use.
- b. Nenana Ridge Recreation Site. A site may be developed in Subunit 5A along the Parks Highway for recreational and interpretive use. Development may take place in two phases:
 - i. Self-guiding trail for interpretation of forest ecosystems and management activities.
 - ii. Picnic site with toilets and refuse containers.
- c. Tanana River Boat Launch. The boat launch site at the end of the Bonanza Creek Road may be relocated to a stable bank. Design and management of the launch and parking area may provide for day use at existing levels. Management of the facility will not encourage additional use.
- d. Bluff Campsite. The bluff camping area will be maintained as an undeveloped campsite.
- e. Bonanza Creek Experimental Forest. Developed recreational sites will not be established in Subunit 5B outside of the Parks Highway corridor because of likely conflicts with research values. DNR will maintain Experimental Forest boundary signs along the Parks Highway. The U.S. Forest Service's Boreal Ecology Cooperative Research Unit should maintain signs along the Bonanza Creek road system listing activities that require authorization.

4. Research Activity. The following guidelines apply to research activities that occur within the Bonanza Creek Experimental Forest (Subunit 5B):

- a. Safety. During the study, the principal investigator will ensure that the study site remains clean and free of refuse and unnecessary material or structures. All soil pits will be filled after use. Study sites will be posted to ensure the safety of researchers and visitors using the site. Studies that involve potentially hazardous chemicals or equipment will be posted according to USDA Forest Service regulations. After the study is completed, the principal investigator will remove all material and structures from the site.
- b. Record Keeping. The principal investigator will notify the U.S. Forest Service's Boreal Ecology Cooperative Research Unit when the study is completed, will provide

a complete copy of any reports or publications that result from the work, and will indicate the location and availability of archived data.

The U.S. Forest Service's Boreal Ecology Cooperative Research Unit will maintain files on all active research projects including the request for use of a study site, any status reports, and a current map of study sites in use. The Research Unit will also maintain a system for archiving data from resource management and research activities.

The U.S. Forest Service's Boreal Ecology Cooperative Research Unit will establish and maintain permanent weather stations at sites representative of floodplain and upland ecosystems.

5. Scenic Quality. Timber, road, mining, and other development activities in this unit will be sited and designed to enhance views or minimize adverse impacts on scenic views from the Parks Highway.

6. Streamside Management. Guidelines for special management zones (see the Riparian and Instream Flow Management section of Chapter 2) apply to the following waterbodies, including their side channels, sloughs, and backwaters:

Goldstream Creek
Tanana River

7. Timber Sales.

a. Subunit 5A. Suitable lands will be managed for commercial and personal use timber production in accordance with other policies stated in this plan.

c. Subunit 5B. The primary goal of timber management in the Bonanza Creek Experimental Forest is to enhance research values. Timber sales will be designed to accompany specific research projects. A long-term objective of timber management will be to represent every age class within each major ecosystem. The secondary goal of timber management will be for salvage and the prevention of further damage from insects and disease.

Timber within this subunit will not be included in the forestwide sustained yield base. In general, timber will be harvested by commercial operators, not by the public, so that harvest activities will be more controlled. All timber sales within this subunit will be designed and conducted under the written approval of the team leader, Boreal Ecology Cooperative Research Unit. A Forest Land Use Plan (FLUP) will be prepared jointly by DNR and the Research Unit for each timber sale. Each report will include a description of the research or forest protection objectives of the timber sales and other conditions agreed on by DNR and the U.S. Forest Service's Boreal Ecology Cooperative Research Unit. Design of timber sales will ensure that activities do not conflict with existing research and will provide coordinated data collection. Although

DNR and the U.S. Forest Service's Boreal Ecology Cooperative Research Unit will be responsible for monitoring compliance with timber sale contracts, only DNR will administer the contract and convey instructions to the operator.

Timber sales in this unit are within the Fairbanks Area. For more detail when specific proposals are developed, see the Fairbanks Area Five Year Schedule of Timber Sales and Forest Land Use Plans.

8. Trails. Guidelines for trail corridors of regional or statewide significance (see the Trails section of Chapter 2) apply to the following trails within the State Forest:

- Cripple Creek - Rosie Creek Trail
- Rosie Creek Trail
- Old Mail Trail (RST 264)
- Allen Creek-Dunbar Trail (RST 70)
- Fairbanks-Manley Hot Springs Trail (RST 70 and RST 1595)

Research activities in Subunit 5B will be sited or designed not to conflict with use of these trails.

One to two miles of the proposed 100-mile-long Loop Trail in the Fairbanks North Star Borough will pass through Subunit 5A.

9. Transportation.

- a. Subunit 5A. All-season roads will provide access to timber in upland portions of this unit; winter roads and ice bridges will provide access to stands near the Tanana River. Up to 49 miles of secondary road may be constructed in Subunit 5A. However, considerably less road is likely to be necessary in these subunits because of existing roads and the relatively concentrated timber resources.
- b. Subunit 5B. No new primary roads will be constructed within the Bonanza Creek Experimental Forest. Additional secondary roads and spur roads on the Bonanza Creek, Zasada, and Argyle Roads will be developed as necessary for research and timber management. Secondary roads that access fire salvage areas will be closed after harvest and reforestation.

DNR will maintain the Bonanza Creek Road. The surface of the road will be improved as material and funds become available. No changes will be made to the current alignment of the Bonanza Creek Road within this subunit.

The Division of Forestry and the Boreal Ecology Cooperative Research Unit will cooperate with each other regarding the maintenance, construction, upgrading, and gating of roads within the Bonanza Creek Experimental Forest and may enter into a memorandum of understanding to address road issues.

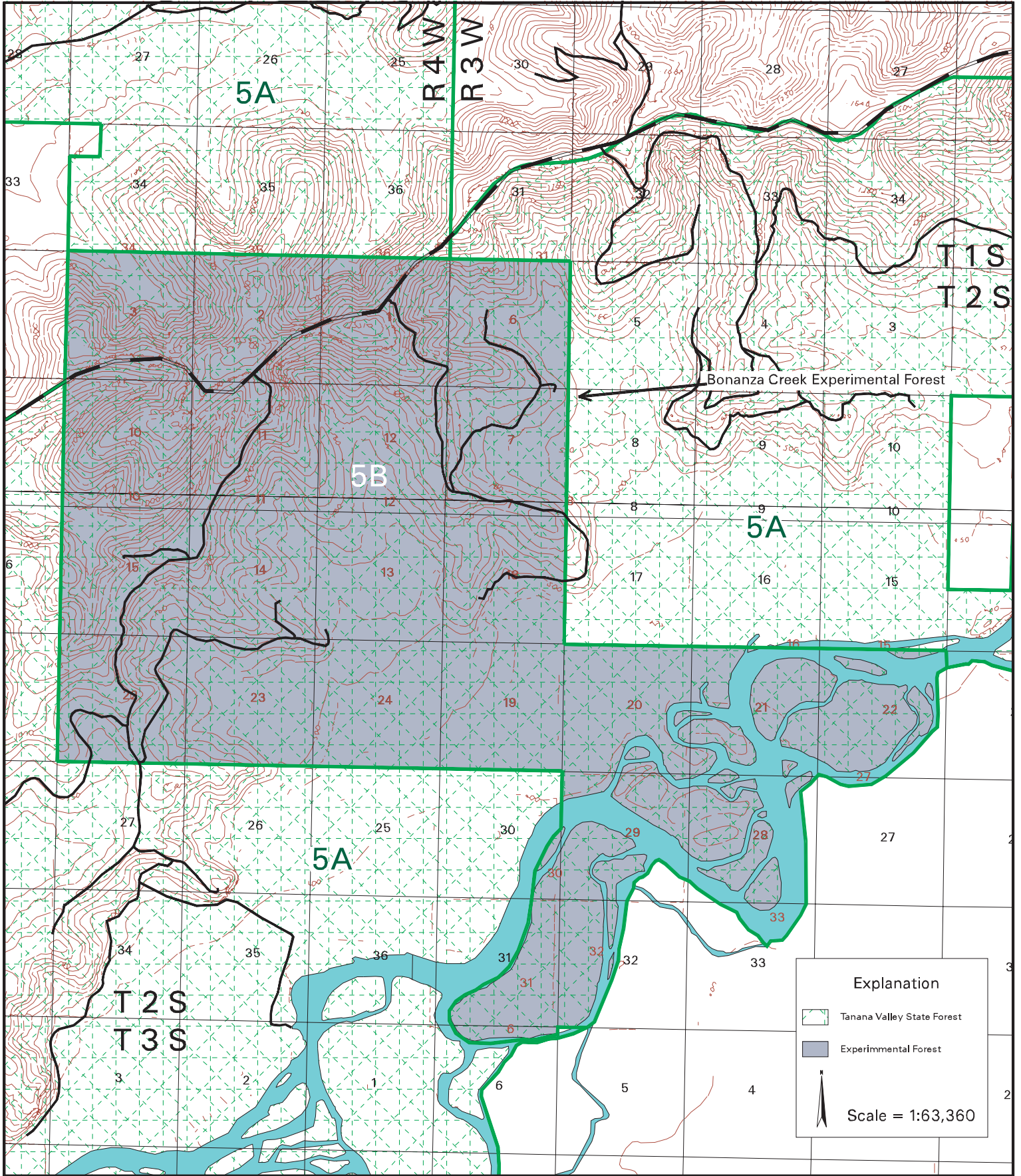
The U.S. Forest Service's Boreal Ecology Cooperative Research Unit will close the Old Sawmill Road to prevent further soil erosion.

LAND-USE SUMMARY
MANAGEMENT AREA: Fairbanks
UNIT 5 Nenana Ridge

Subunit / Acres	Summary of Management Intent	Summary of Management Activities	Potential Access Roads: 1°/2° (primary/secondary)	Subsurface Designation		Prohibited Surface Uses*
				Locatable	Leaseable	
5A 108,540 acres	Scenery on Parks Hwy, timber production, wildlife habitat, recreation near Tanana R.	Public Use Cabin(s), boat launch, interpretive site, picnic site, trail, timber sites	All-season roads will access uplands, winter roads will access stands near Tanana River.	Open to mineral entry	Available for leasing	Remote cabins
5B 13,852 acres	Experimental forest	Research, interpretive site, campground, visitor center	No new 1° roads will be constructed. 2° roads will be developed as necessary for research and timber mgmt. 2° roads to fire salvage areas will be closed after harvest/ reforestation.	Open under leasehold location.	Available for non-coal leasing only	Commercial leases Trapping cabins Remote cabins

*Other uses, such as material sales or land leases, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement and management guidelines of this unit and with the relevant management guidelines in Chapter 2.

Subunit 5B, Bonanza Creek Experimental Forest



MANAGEMENT UNIT 6 CHENA

A. SUMMARY OF MANAGEMENT INTENT

This unit consists of one of the largest areas of state-owned land near Fairbanks and fronts 10 miles of the Chena and Little Chena Rivers.

The unit will be managed for dispersed and developed recreation and commercial and personal-use timber production.

B. EXISTING RESOURCES AND USES

1. Cultural Resources. The prehistoric Chena Bluff site and a site that includes historic cabins and mining debris are recognized in this unit. Both sites may be eligible for the National Register of Historic Places.

2. Fish and Wildlife Habitat. Much of this unit contains prime habitat for moose, black bear, and furbearers. Easy access from Fairbanks and other population centers has resulted in heavy hunting, trapping, and wildlife viewing use. The Chena River system provides critical spawning and rearing habitat for salmon and supports the most heavily used sport fishery in the Tanana Basin. Critical nesting habitat for peregrine falcons has been identified along the Chena River. Several other raptor species are also present in this unit.

3. Private Land and Leaseholds. Numerous privately-owned or leased tracts are located within or near this unit. About 10 inholdings are located along the Chena River, and a notable cluster of remote parcel leases is located on Anaconda and Caribou Creeks just north of the State Forest boundary. A residential and agricultural area is located between the Chena Hot Springs Road and this unit.

4. Recreation and Tourism. This unit is of particular value for recreation because it is near Fairbanks, fronts on the Chena and Little Chena Rivers, and contains an extensive system of trails and roads that are heavily used by snowmachiners, equestrians, mountain bikers, hikers, skiers, and dogmushers. The Two Rivers woodcutting road was constructed by DOF in the early 1980s, and receives intense recreational use. The Chena River is easily accessed by roads and is important for motorboating, paddling, and recreational cabin use.

5. Scientific Resources. None identified in this unit.

6. Subsurface Resources. Mineral potential is moderate to high in this unit because of the presence of the Cleary Sequence in the northern portion, potential for silver and zinc in the southern portion, existing mining claims, and access. Large mining claim blocks are located in drainages north of the unit. Mining claims within the State Forest are located near Iowa and Potlatch Creeks.

7. Timber. The Chena and Little Chena River floodplains contain productive, high-value spruce sawtimber; warmer slopes are covered with hardwood. Moderate levels of timber harvest have

occurred in this unit for the last 80 years. Easy access makes this unit important as a firewood and house log supply for the Fairbanks area.

8. Transportation and Access. This unit is accessed by numerous roads and trails. The Two Rivers and Pheasant Farm Roads provide the major access routes to the northern and southern portions of this unit. Other access is provided by the Big Bend and Grange Hall Roads. Mining trails north of the State Forest are potential access to mining and timber harvest areas in the northern portion of the unit. Numerous documented and undocumented trails are used in winter and summer for recreation. The Two Rivers Road and Colorado Creek Trail are also used for access to the Anaconda - Caribou Creek settlement area. Access into the Smallwood and Iowa Creek drainages is likely to originate from Gilmore Trail or Gilmore Dome to the west or the Apple Horse Farm to the south. Gilmore Trail - Smallwood Creek trail is an RS 2477 route, and has been serialized as RST 144. The Chena Lakes Trail, also an RS 2477, is serialized as RST 1598.

C. MANAGEMENT GUIDELINES

1. Cultural Site Protection. Guidelines for cultural site protection (see the Cultural Resources section of Chapter 2) apply to sites FBX-165 and 211, which are highly sensitive.

2. Mineral. All of this unit will remain open to mineral location and leasing.

3. Recreational Facilities. Construction of three public use cabins will be allowed in this unit. One cabin may be developed in conjunction with the new trail system described below. Two cabins may be developed on the Chena River and will be accessible by boat. Public use cabins will be sited near the river in a way that trespass and other negative impacts are minimized on privately owned inholdings nearby. A boat launch site may be constructed on the Chena River at the end of the Grange Hall Road. The Grange Hall Road should be improved before the boat launch site is constructed.

4. Streamside Management. Guidelines for special management zones (see the Riparian and Instream Flow Management section of Chapter 2) apply to the following waterbodies, including their side channels, sloughs, and backwaters:

Anaconda Creek
Chena River
Little Chena River

5. Timber Sales. Suitable lands will be managed for commercial timber production in accordance with other policies stated in this plan. Commercial timber sales will continue to be offered in the area, along with public-use harvest. Timber sales in this unit are within the Fairbanks Area. For more detail when specific proposals are developed, see the Fairbanks Area Five Year Schedule of Timber Sales and Forest Land Use Plans.

6. Trails. Guidelines for trail corridors of regional or statewide significance (see the Trails section of Chapter 2) will apply to the following trails:

Anaconda Creek Trail
Flat Creek Trail
Iowa Creek Trail
Lyrad Creek Trail
Jenny M. Trails (East and West)
Smallwood Creek Trail (RST 144)

Approximately 6 miles of trail may be constructed and maintained for cross-country skiing and horseback riding near Lyrad Creek. The trail will tie in to a trail system within the adjacent Chena River Recreation Area.

The Chena Hot Springs Winter Trail (RST 278) may be relocated to the southern portion of this unit if efforts to maintain the current alignment are unsuccessful. If this trail is relocated, the current alignment shall be vacated.

7. Transportation. Timber access may require the construction of up to 15 miles of secondary road. However, it is likely that less road will be constructed because of the existing road system and the relatively concentrated timber resources. When feasible, roads will be constructed to all-season standards to provide access for public firewood and house log cutting. Land south of the Chena River will be accessed by ice bridges and winter roads.

LAND-USE SUMMARY
 MANAGEMENT AREA: Fairbanks
 UNIT 6 Chena

Subunit / Acres	Summary of Management Intent	Summary of Management Activities	Potential Access Roads: 1°/2° (primary/secondary)	Subsurface Designation		Prohibited Surface Uses*
				Locatable	Leaseable	
6 52,495 acres	Recreation, timber production	Public use cabins, boat launch site, timber sales, trails	Some 2° road may be constructed. When possible, all-season roads will be constructed to provide for public wood-cutting.	Open to mineral entry	Available for leasing	Remote cabins

*Other uses, such as material sales or land leases, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement and management guidelines of this unit and with the relevant management guidelines in Chapter 2.

MANAGEMENT UNIT 7

SALCHA

A. SUMMARY OF MANAGEMENT INTENT

This unit consists of 20 miles of bottomland of the Tanana River and forested uplands and valleys north of the river.

Subunit 7A will be managed for commercial and personal use timber production while protecting fish and wildlife habitat and recreation values of the Tanana River and the mouth of the Salcha River. Subunits 7B and 7C will be managed for commercial timber production and mineral production while protecting fish and wildlife values near Redmond Creek.

B. EXISTING RESOURCES AND USES

1. Cultural Resources. A number of pre-historic and historic cultural sites in the Richardson Mining District have been identified in this unit. Probability is high for occurrence of other cultural resources along creeks in this unit. Please check Chapter 2, Cultural Resources, for a list of the cultural site codes in this unit. Further information on cultural sites can be obtained from the Office of History and Archaeology.

2. Fish and Wildlife Habitat. The lowlands of this unit are generally prime moose and furbearer habitat; upland areas are prime black bear habitat. Redmond and McCoy Creeks and side creek valleys are trapped heavily and hunted at moderate levels. The Salcha River supports the largest population of king salmon in the entire Yukon River drainage and contains critical spawning habitat for king and chum salmon in its upper sections.

3. Private Land and Leaseholds. None identified in this unit.

4. Recreation and Tourism. Although this unit is adjacent to 12 miles of the Richardson Highway and Old Valdez Trail, most people are drawn to nearby Birch and Harding Lakes. Roadside views are generally restricted. Potential for Tanana River access is high within Subunit 7A, but this is a difficult section of the river to boat, so few people take air boats and jet boats on the Tanana through this unit. The mouth of the Salcha River, a popular motorboating river, is in this unit. The Mosquito Creek logging road and the Canyon Creek logging road receive moderate recreational use, primarily by hunters in the fall. Logging roads have created access for recreationists in the area. There is also a fair amount of fishing activity in the Richardson/Clearwater area of the Tanana. This unit is sometimes used to access recreational cabins on the Salcha River, and many people use this area for recreational snowmachining and four-wheeling. One person operates a dog mushing tourism business in parts of Subunit 7C and much of Unit 8.

5. Scientific Resources. None identified in this unit.

6. Subsurface Resources. Numerous active mining claims, both placer and hard rock, located along Banner and Canyon Creeks are part of the Richardson Mining District. Recent studies suggest at least moderate mineral potential in other parts of Subunits 7B and 7C.

Active and abandoned floodplains of the Tanana River are a likely source of materials.

7. Timber. Bottomlands along the Tanana River contain a patchwork of mature spruce and productive, younger mixed hardwood-spruce stands. Ridges north of the Tanana are forested with mixed hardwood-spruce stands.

8. Transportation and Access. The Richardson Highway and the Old Valdez Trail provide primary access to Subunits 7A and 7B. Subunit 7C is not accessed by an all-season road. The Redmond Creek and Gilles Creek Trails are used for mining and recreational access. The Salcha-Caribou Sled Road (RST 322) and Wrong Way Lane (Harding Lake Trail—RST 20) provide access to the unit, although they do not pass through the unit. The Trans-Alaska Pipeline System passes through the middle of the unit.

C. MANAGEMENT GUIDELINES

1. Cultural Site Protection. Guidelines for cultural site protection (see the Cultural Resources section of Chapter 2) apply to the following sites:

XBD 67 and 124 (Highly sensitive)

XBD 11, 12, 27, 28, 42, 88, and 102 (Moderately sensitive)

2. Minerals. All of this unit is open to mineral location and leasing, except for the Trans-Alaska Pipeline System right-of-way, which will remain closed to mineral location to protect existing and future utility uses.

3. Scenic Quality. Timber, road, and other development activities in Subunits 7A and 7B will be sited and designed to enhance or minimize harm to scenic views from the Richardson Highway.

4. Streamside management. Guidelines for special management zones (see the Riparian and Instream Flow Management section of Chapter 2) apply to the following waterbodies, including their side channels, sloughs, and backwaters:

Tanana River

Salcha River

Redmond Creek

McCoy Creek

5. Timber Sales. Subunits 7A and 7B will be managed for commercial timber production in accordance with other policies stated in this plan. Within the floodplain of the Tanana River in subunit 7B, DNR will only offer timber sales where the Department of Fish and Game agrees that the sale adequately protects salmon habitat. Timber sales in Subunit 7C have not been scheduled. Timber will be made available if warranted by a change in demand or accessibility. Timber sales in this unit are within the Fairbanks Area. For more detail if specific proposals are developed, see the Fairbanks Area Five Year Schedule of Timber Sales and Forest Land Use Plans.

6. Trails. Guidelines for trail corridors of regional or statewide significance (see the Trails section of Chapter 2) apply to the following trails within the Tanana Valley State Forest:

Redmond Creek Trail
Gilles Creek Trail
Flag Hill Trail

7. Transportation. Subunits 7A and 7B will be accessed by secondary roads from the Richardson Highway and Old Valdez Trail. Approximately 13 miles of secondary all-season winter road may be constructed in Subunits 7A and 7B for timber access. Three possible alignments exist for a winter primary road that accesses Subunit 7C and the Redmond Creek drainage in Subunit 7B: 1) upgrade the trail west of Birch Lake and the extension over Gunnysack Creek, 2) use a 200-foot-long floating easement 1.5 miles east of Birch Lake, or 3) construct a winter road east of the end of the Mosquito Creek Road. Routes 1 and 2 would cross land owned by the Fairbanks North Star Borough and would necessitate cooperative planning. Road planning will consider the access needs of existing and potential mining claims in Subunits 7B and 7C.

When Subunit 7C is accessed, its access road and 11 miles of the existing Redmond Creek Trail will be upgraded into primary winter road.

LAND-USE SUMMARY
 MANAGEMENT AREA: Fairbanks
 UNIT 7 Salcha

Subunit / Acres	Summary of Management Intent	Summary of Management Activities	Potential Access Roads: 1°/2° (primary/secondary)	Subsurface Designation		Prohibited Surface Uses*
				Locatable	Leaseable	
7A 14,740 acres	Timber production, habitat and recreation near Tanana River	Timber sales	2° roads from Richardson Hwy and Old Valdez trails will access this unit.	Open to mineral entry	Available for leasing	Remote cabins
7B 62,920 acres	Mineral production, timber production, habitat and recreation near Tanana River and other streams	Timber sales	2° roads from Richardson Hwy and Old Valdez trails will access this unit.	Open to mineral entry	Available for leasing	Remote cabins
7C 95,125 acres	General use	Timber sales	Will be accessed by 1° winter road.	Open to mineral entry except oil pipeline ROW	Available for leasing	Remote cabins

*Other uses, such as material sales or land leases, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement and management guidelines of this unit and with the relevant management guidelines in Chapter 2.

MANAGEMENT UNIT 8 SHAW CREEK

A. SUMMARY OF MANAGEMENT INTENT

This unit includes the upland area north of Shaw Creek Flats and about 8 miles of the Tanana River.

Because of the high mineral resource values in this unit, Subunits 8A, 8C and 8D will be managed for commercial timber production and mineral exploration and production. These and other activities in these subunits will be managed to protect fish and wildlife values near the Tanana River and Shaw and Caribou Creeks. Timber salvage prior to mining development opportunities will be evaluated as per AS 41.17.083. Subunit 8B, the Rosa - Keystone Dunes Research Natural Area, will be managed in its natural state for research and educational use.

B. EXISTING RESOURCES AND USES

1. Cultural Resources. A number of prehistoric and historic sites are recognized in this unit. Probability is high that other cultural resources are present at Campbell Lake and promontories that overlook waterbodies or large vistas. Please check Chapter 2, Cultural Resources, for a list of the cultural site codes in this unit. Further information on cultural sites can be obtained from the Office of History and Archaeology.

2. Fish and Wildlife Habitat. Moose and furbearers occur throughout this unit. The unit contains prime black bear habitat, primarily in lower elevations, and brown bear habitat in upper elevations. The unit is used by the Fortymile caribou herd, primarily as winter habitat. Spawning coho and chum salmon are found in Shaw Creek, at and downstream of the Richardson Highway bridge, although the status of the specified reach is currently being reviewed by ADF&G. Rearing coho and chinook salmon have been found in Shaw Creek and lower Caribou Creek, along with several resident fish species. The mouth of Shaw Creek is used intensively for sport grayling fishing in the spring. Adjacent areas of Shaw Creek Flats support waterfowl.

3. Private Land and Leaseholds. The Tenderfoot Subdivision is located south of the Parks Highway in Subunit 8A.

4. Recreation and Tourism. Recreational values are low throughout this unit. However, people take air boats and jetboats on the Tanana River through this unit. People also use this unit for berry-picking. One person operates a dog mushing tourism business in much of Unit 8 and in Subunit 7C.

5. Scientific Resources. The Rosa Keystone Dunes Research Natural Area contains a series of high "fossil" sand dunes and dune-impounded ponds. Temperature inversions have formed an inverted tree line in deep, undrained hollows between 200-foot-tall dune crests. See also Appendix E, Research Natural Area Report, for more information.

6. Subsurface Resources. Land along Tenderfoot Creek in Subunit 8A is actively being mined for placer gold, and other areas are being explored for hard rock mining. Depending on the results of exploration activities in the area, some areas could be cleared and mined.

7. Timber. This unit is forested extensively with productive, pole-sized hardwood. Warmer slopes in Unit 8 contain significant areas of mature mixed stands with moderate levels of spruce sawtimber. Pockets of spruce sawtimber are located south of the Richardson Highway in Subunit 8A. Timber harvest activities in mining areas should focus on utilization of the resource prior to mine development or as part of mine development.

8. Transportation and Access. Eight miles of the Richardson Highway provide primary access to Subunit 8A. Secondary access to Subunit 8A is provided by the the Tenderfoot Subdivision roads, and several mining roads that spur off the highway. Two trails are used for mining, hunting, and trapping access to the upper Gilles and Caribou Creeks. Future access into Unit 8 is planned from the Shaw Creek Road.

C. MANAGEMENT GUIDELINES AND ACTIVITIES

1. Cultural Site Protection. Guidelines for cultural site protection (see the Cultural Resources section of Chapter 2) apply to the following sites:

XBD 4, 13, 31, 63, 65 and 71. (Highly sensitive)

2. Minerals. Subunits 8A, 8C, and 8D will remain open to mineral location and leasing, except for the Trans-Alaska Pipeline System, which will remain closed to mineral location to protect existing and future utility uses. Within Subunit 8B, a research natural area, mineral exploration or development will be restricted if it conflicts with the overriding scientific values. Within the RNA, rights to locatable minerals may be acquired only under the leasehold location system, AS 38.05.205, and may not be acquired by locating a mining claim under AS 38.05.195. The stipulations used in approving plans of operations per Leasehold Location Order #24 (See Appendix C.) will also be included in any miscellaneous land use permits issued for exploration activities within the RNA.

3. Research Natural Area. Subunit 8B will be managed in its natural state as a research natural area. Guidelines for research natural areas in the Scientific Resources section of Chapter 2 will apply to this subunit. A number of pipeline right-of-way leases and applications run through and adjacent to this Research Natural Area. Management of the Research Natural Area is subject to valid existing rights.

4. Streamside Management. Guidelines for special management zones (see the Riparian and Instream Flow Management section of Chapter 2) apply to the following waterbodies, including their side channels, sloughs, and backwaters:

Caribou Creek
Keystone Creek
Rosa Creek
Shaw Creek

Tanana River

Roads in this unit and in Shaw Creek Flats will be located to avoid whenever possible crossing or closely paralleling Shaw and Caribou Creeks to protect identified salmon spawning and rearing habitats (see the Mitigation part of the Fish and Wildlife Habitat section of Chapter 2).

6. Timber Sales. Lands in Subunits 8A, 8C, and 8D will be managed for commercial timber production in accordance with other policies stated in this plan. Within the floodplain of the Tanana River in subunit 8A, DNR will only offer timber sales where the Department of Fish and Game agrees that the sale adequately protects salmon habitat. Subunit 8B is a research natural area and is closed to timber harvest.

Timber sales in this unit are within the Delta Area. For more detail when specific proposals are developed, see the Delta Area Five Year Schedule of Timber Sales and Forest Land Use Plans.

7. Trails. Guidelines for trail corridors of regional or statewide significance (see the Trails section of Chapter 2) apply to the following trails within the State Forest.

- Caribou Creek Trail
- Gilles Creek Trail
- Rosa Creek Trail
- Short Independent Trail

8. Transportation. The state has developed a portion of the winter trail on the north margin of Shaw Creek Flats to a primary winter road for timber access to Subunit 8C. Additional development of this winter access route will occur to access timber sales in Subunit 8C and 8D.

Primary all-season access is planned for development into Unit 8 from the existing Shaw Creek Road (Fowler's Farm Road). Extension of this road may occur as a result of proposed timber harvest activities in the Keystone and Rosa Creek Drainage.

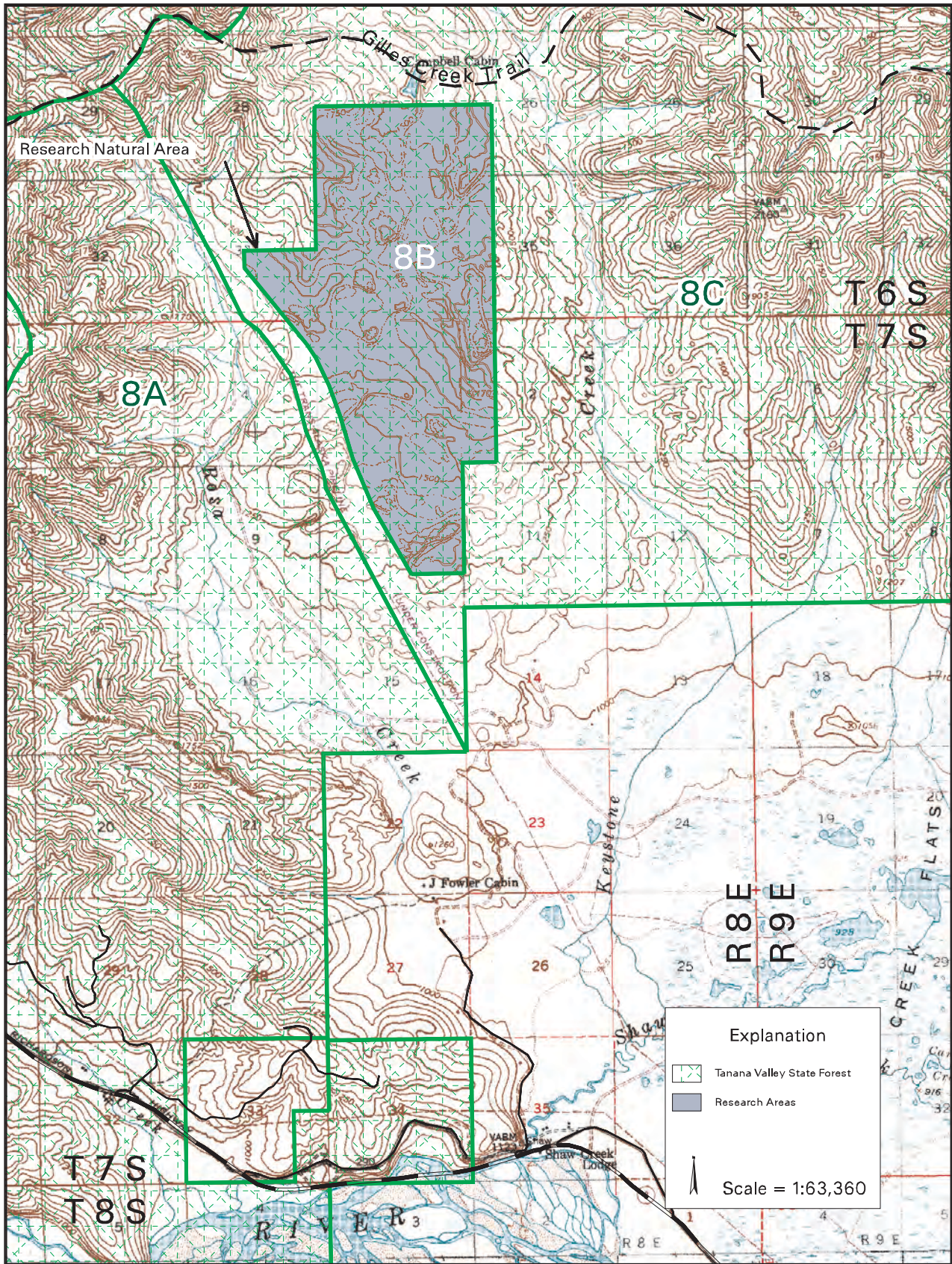
If roads on public rights-of-way within subdivisions are used for timber or other resource management activities, they will be maintained by the state as secondary all-season roads during periods of use. Use of subdivision roads will be coordinated to minimize conflict with private land values.

LAND-USE SUMMARY
MANAGEMENT AREA: Delta
UNIT 8 Shaw Creek

Subunit / Acres	Summary of Management Intent	Summary of Management Activities	Potential Access Roads: 1°/2° (primary/secondary)	Subsurface Designation		Prohibited Surface Uses*
				Locatable	Leaseable	
8A 19,060 acres	Mineral production, timber production, fish and wildlife habitat and recreation near Caribou Creek	Timber sales	1° all-season access is planned from Shaw Creek Rd	Open to mineral entry, except oil pipeline ROW	Available for leasing	Remote cabins
8B 2,337 acres	Research Natural Area	Research	No new road construction planned.	Open under leasehold location	Available for leasing	Commercial leases, developed recreation, material extraction, remote cabins, timber harvest, trapping cabins, introduction of non-endemic species
8C 31,948 acres	Timber production, fish and wildlife habitat, recreation near Tanana River and Shaw Creek, mineral production	Timber sales	1° winter road will be extended to access timber sales. 1° all-season access is planned from Shaw Creek Rd	Open to mineral entry	Available for leasing	Remote cabins
8D 20,630 acres	General use	Timber sales.	1° winter road may be extended to access timber sales. All season access is planned from Shaw Creek.	Open to mineral entry	Available for leasing	Remote cabins

*Other uses, such as material sales or land leases, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement and management guidelines of this unit and with the relevant management guidelines in Chapter 2.

Rosa Keystone Dunes Research Natural Area Subunit 8B



MANAGEMENT UNIT 9

RAPID CREEK

A. SUMMARY OF MANAGEMENT INTENT

This unit includes most of the uplands between Shaw Creek and the Goodpaster River.

Subunit 9A will be managed for commercial timber production while protecting fish and wildlife values near Liscum Slough and Rapid Creek. Subunit 9B, the Shaw Creek Tamarack Research Natural Area, will be managed in its natural state for research and educational use. Subunit 9C will be managed for general use while additional information is gathered about access development and resource potential.

B. EXISTING RESOURCES AND USES

1. Cultural Resources. Although no cultural sites have been identified in this unit, probability of sites is high on promontories that overlook waterbodies or large vistas.
2. Fish and Wildlife Habitat. Moose and furbearers occur throughout this unit. The unit contains prime black bear habitat, primarily in lower elevations, and brown bear habitat in upper elevations. This unit is used by the Fortymile caribou herd, primarily as winter habitat. Lowland areas are used intensively for trapping.
3. Private Land and Leaseholds. None identified in this unit.
4. Recreation and Tourism. Most recreation in this area occurs outside of the State Forest near Quartz Lake or in the Goodpaster River Valley. The ridge that bisects the unit offers a good view and is accessed by trails used by local residents. "Lake 992" in Subunit 9B has low recreational value. Snowmachiners use this area for day trips. People who have cabins along the Goodpaster River access their cabins through this unit on the Liscum Slough/Central Creek Trail.
5. Scientific Resources. Subunit 9B, the Shaw Creek Tamarack Research Natural Area, used to contain representative upland and lowland stands of tamarack suitable for research uses. However, the tamarack have been killed by repeated defoliation over a five year period by the larch sawfly and there are no longer any live tamarack present in the uplands. Several live tamarack trees were located on the west side of Lake 992 on lowland sites. There are two cabins within the Research Natural Area, along the east side of the lake. Two active traplines were observed and a trail circles the lake. See also Appendix E, Research Natural Area Report, for more information.
6. Subsurface Resources. Mineral potential is low to moderate within this unit. No mining claims currently exist in the area.
7. Timber. The Rapid Creek drainage contains substantial stands of spruce sawtimber; hills north of the Goodpaster River support moderate levels of spruce. A 40,000-acre fire destroyed much of the mature forest in the Liscum Slough drainage, but site productivity remains high.

Timber values are lower in most of Subunit 9C because of remoteness.

8. Transportation and Access. Winter trails provide the only access to this unit. The historic Fortymile-Big Delta Trail and two spur trails are used chiefly in winter for access to traplines and cabins on the Goodpaster River. The Goodpaster Trail from Quartz Lake was built in the 1930s to access mines in the upper drainage. Spur trails lead up Central Creek and to the lower mile of the Goodpaster. In the past, it was used chiefly in winter to access traplines, cabins and mines, but was upgraded during the winter of 1997/1998 to improve the grade into the Liscum Slough to haul mining equipment and fuel to the Pogo Mine near Central Creek on the Goodpaster River. The Goodpaster Trail is listed as an RS 2477 route (RST 449). The North Fork Fortymile-Big Delta Trail, another RS 2477 route, does not pass through the unit, but provides access to the area (RST 379). Access to Rapid Creek is via the Indian Creek Trail that links to an old army maneuver trail in Shaw Creek Flats. The army trail is currently being used as a winter road to haul timber from Subunit 9A.

C. MANAGEMENT GUIDELINES AND ACTIVITIES

1. Minerals. Subunits 9A and 9C will remain open to mineral location and leasing. Within Subunit 9B, the research natural area, mineral exploration or development will be restricted if it conflicts with the overriding scientific values. Within the RNA, rights to locatable minerals may be acquired only under the leasehold location system, AS 38.05.205, and may not be acquired by locating a mining claim under AS 38.05.195. The stipulations used in approving plans of operations per Leasehold Location Order #24 (See Appendix C.) will also be included in any miscellaneous land use permits issued for exploration activities within the RNA.

2. Research Natural Area. Subunit 9B will be managed in its natural state as a research natural area. Guidelines for research natural areas in the Scientific Resources section of Chapter 2 will apply to this subunit.

3. Streamside and Lakeshore Management. Guidelines for special management zones (see the Riparian and Instream Flow Management section of Chapter 2) will apply to the following waterbodies, including their side channels, sloughs, and backwaters:

- Lake 992
- Liscum Slough
- Rapid Creek
- Shaw Creek

4. Timber Sales. Suitable lands in Subunit 9A will be managed for commercial timber production. Harvest activities during this period will occur chiefly within the Rapid, Indian, and Progressive Creek drainages.

When authorizing development activities, measures will be taken to minimize visual impacts to the scenic values of the Goodpaster River Corridor. Such measures should consider: seen areas, duration and location of views from traveling or fixed viewpoints, type and degree of human use, natural landscape characteristics, sight profiles, and importance of fore, mid, and background scenery. Techniques to use include screening harvests from view, varying their shape and size, staging multiple harvest entries over time, minimizing impacts of access routes, varying

silvicultural systems, and performing restoration, reforestation, and view enhancement. Visual impacts will be analyzed prior to authorizing a development project.

To protect the scenic and recreational values of the Goodpaster River Corridor, timber sales over 10,000 board feet are prohibited in a 160-acre parcel near Jolly's Cabin (T8S, R11E, Sec. 27 SW¹/₄). To minimize the impacts of timber harvest on the Goodpaster River Corridor, timber sales in this parcel will be small and dispersed. Timber harvest in this parcel may also be allowed to reduce insect, disease, fire, or other hazards to public safety. These special harvest conditions must show a high probability of tree mortality in this parcel or adjacent land, based on the best available information.

Timber sales are not scheduled in Subunit 9C. Timber will be made available in Subunit 9C if warranted by a change in demand or accessibility. Subunit 9B is a research natural area and is closed to timber harvest.

Timber sales in this unit are within the Delta Area. For more detail when specific proposals are developed, see the Delta Area Five Year Schedule of Timber Sales and Forest Land Use Plans.

5. Trails. Guidelines for trail corridors of regional or statewide significance (see the Trails section of Chapter 2) apply to the following trails within the State Forest:

- Indian Creek Trail
- Prospect Trail
- Jolly's Cabins Trail
- North Fork Fortymile - Big Delta Trail (RST 379)
- Goodpaster Trail (RST 449)

To minimize impacts on the scenic and recreational values of the Goodpaster River, and to maintain the roadless character of the river, the Goodpaster Winter Trail (Fortymile-Big Delta Trail) should be managed for winter-only use by road vehicles. DNR will adjudicate land actions, including timber sales, consistent with this intent. DNR will not upgrade this trail to an all-season road.

6. Transportation. Subunit 9A will probably be accessed by a primary road. A trail developed by the army on the south side of Shaw Creek has been used to access timber salvaged from the Rapid Creek fire. This trail has also been used to access timber sales to the east and north of Quartz Lake. This access route will continue to be used for timber management. If an all-season road is constructed, it will be routed on the hillsides north of the Goodpaster Winter Trail.

One and a half miles of primary all-season access has been developed from the south side of Quartz Lake. This access route is planned to be extended to access timber in Unit 9A.

To minimize impacts on the scenic and recreational values of the Goodpaster River, and to maintain the roadless character of the river, winter roads in this unit will be designed and managed to minimize possible use by all-terrain vehicles in the summer.

The following guideline applies to new access in a 160-acre parcel near Jolly's Cabin (T8S R11E, Sec. 27 SW 1/4). To protect the scenic and recreational values of the Goodpaster River Corridor, new road access is allowed only by special exception where necessary to provide feasible access to adjacent units. For example, a road could cross the edge of this parcel to skirt a ridge extending into the parcel. A road designed under a special exception must minimize the distance within the parcel, and must not provide new road access to the river. See Chapter 4, Plan Modification, for a description of the special exception process. Access routes to mining claims should avoid this parcel unless no feasible and prudent alternative exists.

7. Public Notice

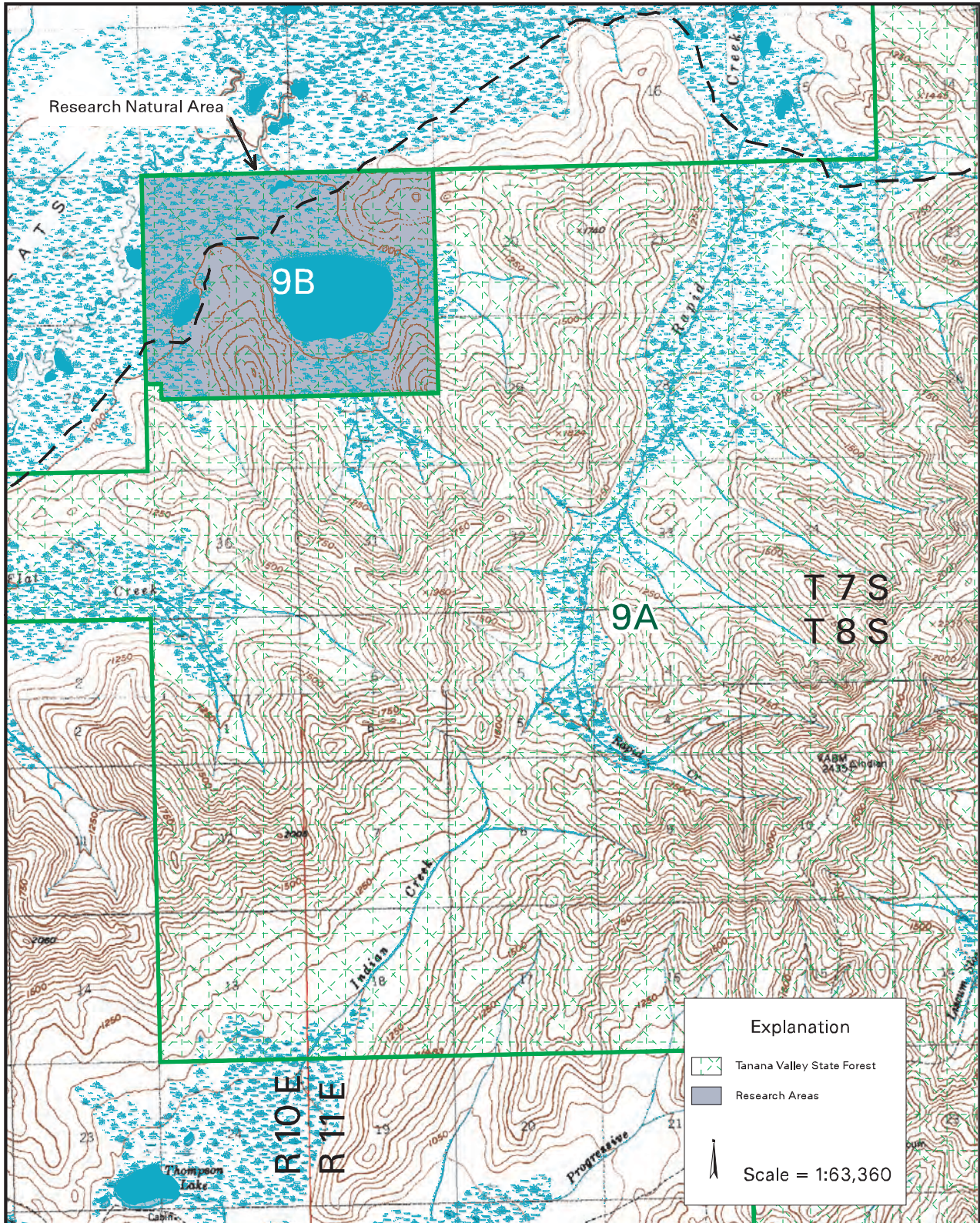
To continue involvement by groups concerned with development in the Goodpaster River area, DNR will consult with organizations on the Goodpaster Review Working Group in reviewing proposed timber harvest, access plans, and other activities requiring public notice. See Tanana Basin Area Plan Appendix G for a list of the organizations on this group; see Tanana Basin Area Plan Appendix A for a definition of consultation. The Division of Forestry will also send notice each year of the draft Delta Five-Year Schedule of Timber Sales to the Goodpaster Review Working Group members and to DPOR. DPOR will notify the Delta and Fairbanks Area Parks Advisory Boards of the review schedule. The Five-Year Schedule contains the proposals for timber sales, access, and reforestation in this area.

LAND-USE SUMMARY
MANAGEMENT AREA: Delta
UNIT 9 Rapid Creek

Subunit / Acres	Summary of Management Intent	Summary of Management Activities	Potential Access Roads: 1°/2° (primary/secondary)	Subsurface Designation		Prohibited Surface Uses*
				Locatable	Leaseable	
9A 57,280 acres	Commercial timber production, habitat and recreation near waterbodies	Timber sales	Probably access by 1° road. All-season access road is planned to be extended.	Open to mineral entry	Available for leasing	Remote cabins
9B 1,887 acres	Research Natural Area	Research	None planned.	Open under leasehold location	Available for leasing	Commercial leases, developed recreation, material extraction, remote cabins, timber harvest, trapping cabins, introduction of non-endemic species
9C 16,360 acres	General use	None planned	None planned. Area may be accessed by all-season road.	Open to mineral entry	Available for leasing	Remote cabins

*Other uses, such as material sales or land leases, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement and management guidelines of this unit and with the relevant management guidelines in Chapter 2.

Shaw Creek Tamarack Research Natural Area Subunit 9B



MANAGEMENT UNIT 10

GERSTLE RIVER

A. SUMMARY OF MANAGEMENT INTENT

This unit consists of 65 miles of bottomland along the Tanana River between Big Delta and Dot Lake and includes the highlands that surround Volkmar Lake.

Most of Subunit 10A will be managed for timber and wildlife habitat. The Bluff Cabin Ridge area will be managed to protect its high recreational, fisheries habitat, and cultural values. Subunits 10B and 10D will be managed in their natural states as research natural areas. Subunit 10C will be managed for commercial and personal use timber production while protecting fish and wildlife habitat and recreation use near the Tanana and Volkmar Rivers and other waterbodies.

B. EXISTING RESOURCES

1. **Cultural Resources.** This unit contains a number of historic and prehistoric cultural sites, including one site that is eligible for the National Register of Historic Places. The Bluff Cabin Ridge area is particularly rich in cultural resources, and UAF is using the Gerstle River quarry site for an archaeological field school. Please check Chapter 2, Cultural Resources, for a list of the cultural site codes in this unit. Further information on cultural sites can be obtained from the Office of History and Archaeology.
2. **Fish and Wildlife Habitat.** Moose and furbearers occur throughout this unit. The unit contains prime black bear habitat, primarily in lower elevations, and brown bear habitat in upper elevations. This unit is used by the Fortymile caribou herd, primarily as winter habitat. A substantial number of peregrine falcon nests have been identified along the Tanana River, and many eagles and other raptors are known to nest in bottomlands. Large numbers of sandhill cranes and other birds migrate through the area. The Tanana River supports salmon and whitefish fisheries. Sloughs along the Tanana River near Bluff Cabin are important fall chum salmon spawning areas.
3. **Private Land and Leaseholds.** None identified in this unit.
4. **Recreation and Tourism.** The Tanana and Volkmar Rivers are used for recreational access. Subunit 10A includes a small amount of frontage on the south fork of the Goodpaster River and on Volkmar Lake between private inholdings. The scenic Bluff Cabin Ridge area is easily accessed by snowmachines and dog teams from Delta Junction. The Goodpaster Historical Trail connects the ridge area to Rika's Roadhouse, a state historic site. Other trails in the area are used for horseback riding, hiking, and hunting. The boat ramp near Delta Junction is used heavily by hunters in the fall, and there is a lot of hunting in the sloughs of the Tanana. The Tanana is also used for recreational boating, paddling, snowmachining, dog mushing, and cross-country skiing. Many snowmachiners travel through Subunit 10B on their way to Volkmar Lake.
5. **Scientific Resources.** Subunit 10B, the Volkmar Bluffs Research Natural Area, includes portions of the largest contiguous set of hill prairies in central interior Alaska. Hill prairie slopes are uniquely gentle and contain uncommon plants pollinated by a specialized species of bee.

Subunit 10D, the Johnson Slough Bluffs Research Natural Area, contains hill prairie surrounded by open aspen forest. Rare species of plants adapted to warm sites and others adapted to high elevations occur together in prairie areas. See also Appendix E, Research Natural Area Report, for more information.

6. Subsurface Resources. Mineral potential is moderate east of Volkmar Lake and low elsewhere. No mining claims are located in this unit.

7. Timber. As early as 1920 a sawmill has operated at or near the State historical site at Rika's Roadhouse. Selective harvest methods were used to select the very best timber for houselogs, lumber, and bridge/mining beams.

Forested lands in Subunit 10C have been harvested since the 1940s. Subunit 10C has served as the only all-season accessible harvest area to the Delta timber industry. Stands of white spruce occur along the Gerstle and Tanana river corridors and side channels.

8. Transportation and Access. Subunit 10C is accessed by the Alaska Highway, the New Cummings Road, and other all-season roads. The Tanana River provides important access for recreational and subsistence activities during the summer, winter, and hunting seasons. An unimproved, unmaintained public boat launch off of the New Cummings Road provides access to Healy Lake and George Lake. Trails and logging roads provide hunting and trapping access. 17(b) right-of-way easements are reserved over the Healy Lake and George Lake (RST 688) Trails. The easements are 25 feet wide and allow winter off-road vehicle and non-motorized use. Other RS 2477 routes in the area include Tanana Crossing-Grundler Trail (RST 333) (passes through parts of the unit), Hadjukovich-Horn Mountain (RST 613), Hadjukovich-Macomb Plateau (RST 3), Little Gerstle River – Sheep Creek (480) Trails (access Subunit 10C from the south), and Trail #52, Black Mountain (RST 392) (passes close to the north edge of Subunit 10B). Portions of the Tanana River remain open throughout the winter in Subunit 10A.

C. MANAGEMENT GUIDELINES AND ACTIVITIES

1. Cultural Site Protection. Guidelines for cultural site protection (see the Cultural Resources section of Chapter 2) apply to the following sites:

XMH-246, XBD-74, 75, 76, 77, 81 (Highly sensitive)

XMH-228, 248 (Moderately sensitive)

2. Minerals. Subunits 10A and 10C will remain open to mineral location and leasing. Within Subunits 10B and 10D, the research natural areas, mineral exploration or development will be restricted if it conflicts with the overriding scientific values. Within the RNAs, rights to locatable minerals may be acquired only under the leasehold location system, AS 38.05.205, and may not be acquired by locating a mining claim under AS 38.05.195. The stipulations used in approving plans of operations per Leasehold Location Order #24 (See Appendix C.) will also be included in any miscellaneous land use permits issued for exploration activities within the RNAs.

3. Recreational Facilities. Construction of an undeveloped campsite or a public use cabin will be allowed in Subunit 10C along George Creek for use associated with boating and fishing on George Lake.

An undeveloped campsite may be established near the shore of Volkmar Lake. The campsite will be sited to avoid conflicts such as trespass with nearby private land.

4. Research Natural Areas. Subunits 10B and 10D will be managed in their natural states for research. Guidelines for research natural areas in the Scientific Resources section of Chapter 2 will apply to these subunits.

5. Scientific Resources. The northeast ¼ of Section 28, T9S, R13E of Subunit 7D4 within the Tanana Basin Area Plan is recommended to be added to the Tanana Valley State Forest. It encompasses part of a hill prairie feature for which the adjacent Volkmar Bluffs Research Natural Area was designated. If this portion of land within the Tanana Basin planning area is added to Subunit 10B, it will be managed according to intent and guidelines specified in this plan.

6. Streamside and Lakeshore Management. Guidelines for special management zones (see the Riparian and Instream Flow Management section of Chapter 2) apply to the following waterbodies, including their side channels, sloughs, and backwaters:

- Black Lake
- George Creek
- Goodpaster River, South Fork
- Tanana River
- Twelvemile Lake
- Volkmar River

7. Timber Sales. Suitable lands in Subunits 10A and 10C will be managed for commercial timber production in accordance with policies stated in this plan. Public firewood cutting areas will be provided in easily accessed portions of these subunits.

Timber harvest will be prohibited within the research natural areas in Subunits 10B and 10D.

The area immediately surrounding Volkmar Lake will be managed to provide firewood, house logs, and other products to cabin owners.

When authorizing development activities, measures will be taken to minimize visual impacts to the scenic values of the Goodpaster River Corridor (Tanana Basin Area Plan, Subunit 7D1). Such measures should consider: seen areas, duration and location of views from traveling or fixed viewpoints, type and degree of human use, natural landscape characteristics, sight profiles, and importance of foreground, mid-ground, and background scenery. Techniques to use include screening, shaping, size, routing, staged entries, silvicultural systems, restoration, reforestation, and view enhancement. Visual impacts will be analyzed prior to authorizing a development project.

To protect scenic and recreational values of the Goodpaster River corridor, timber sales over 10,000 board feet are prohibited on a 480-acre parcel in the Goodpaster Flats (T9S, R12E, Sec. 20 NE ¼, Sec. 21 N ½). To minimize the impacts of timber harvest on the Goodpaster River Corridor, timber sales in this parcel will be small and dispersed. Timber harvests in this parcel may also be allowed to reduce insect, disease, fire hazard, or other hazards to public safety. These special harvest conditions must show a high probability of tree mortality in this parcel or adjacent land, based on the best available information.

Timber sales in this unit are within the Delta Area. For more detail when specific proposals are developed, see the Delta Area Five Year Schedule of Timber Sales and Forest Land Use Plans.

8. Trails. Guidelines for trail corridors of regional or statewide significance (see the Trails section of Chapter 2) apply to the following trails within the State Forest:

- Blue Trail
- George Lake Trail (RST 688)
- Sand Creek Trail
- Goodpaster Historical Trail

9. Transportation. Unit 10A is accessed by a secondary winter road crossing the Tanana from the Delta Agricultural Tracts at the end of Sawmill Creek Road. Most of the timber on the south side of the Tanana in Subunit 10C has an access road within two miles. Timber on the west side of the Gerstle River will be accessed through easements between agricultural tracts or by crossing the Gerstle River during the winter. Timber north and east of the Tanana River will be accessed by ice bridges and winter roads. Roads will be sited to avoid causing trespass problems on land owned by Mendas Chaag Corporation, Dot Lake Village Corporation, and local residents.

To minimize impacts on the scenic and recreational values of the Goodpaster River, and to maintain the roadless character of the river, winter roads in Unit 10 will be designed and managed to minimize possible use by all-terrain vehicles in the summer.

The following guideline applies to new access in a 480-acre parcel in the Goodpaster Flats (T9S, R12E, Sec. 20 NE ¼, Sec. 21 N ½). To protect the scenic and recreational values of the Goodpaster River Corridor, new road access is allowed only by special exception where necessary to provide feasible access to adjacent units. For example, a road could cross the edge of this parcel to skirt a ridge extending into the parcel. A road designed under a special exception must minimize the distance within the parcel, and must not provide new road access to the river. See Chapter 4, Plan Modification, for a description of the special exception process. Access routes to mining claims should avoid this parcel unless no feasible and prudent alternative exists.

10. Public Notice. To continue involvement by groups concerned with development in the Goodpaster River area, DNR will consult with organizations on the Goodpaster Review Working Group in reviewing proposed timber harvest, access plans, and other activities requiring public

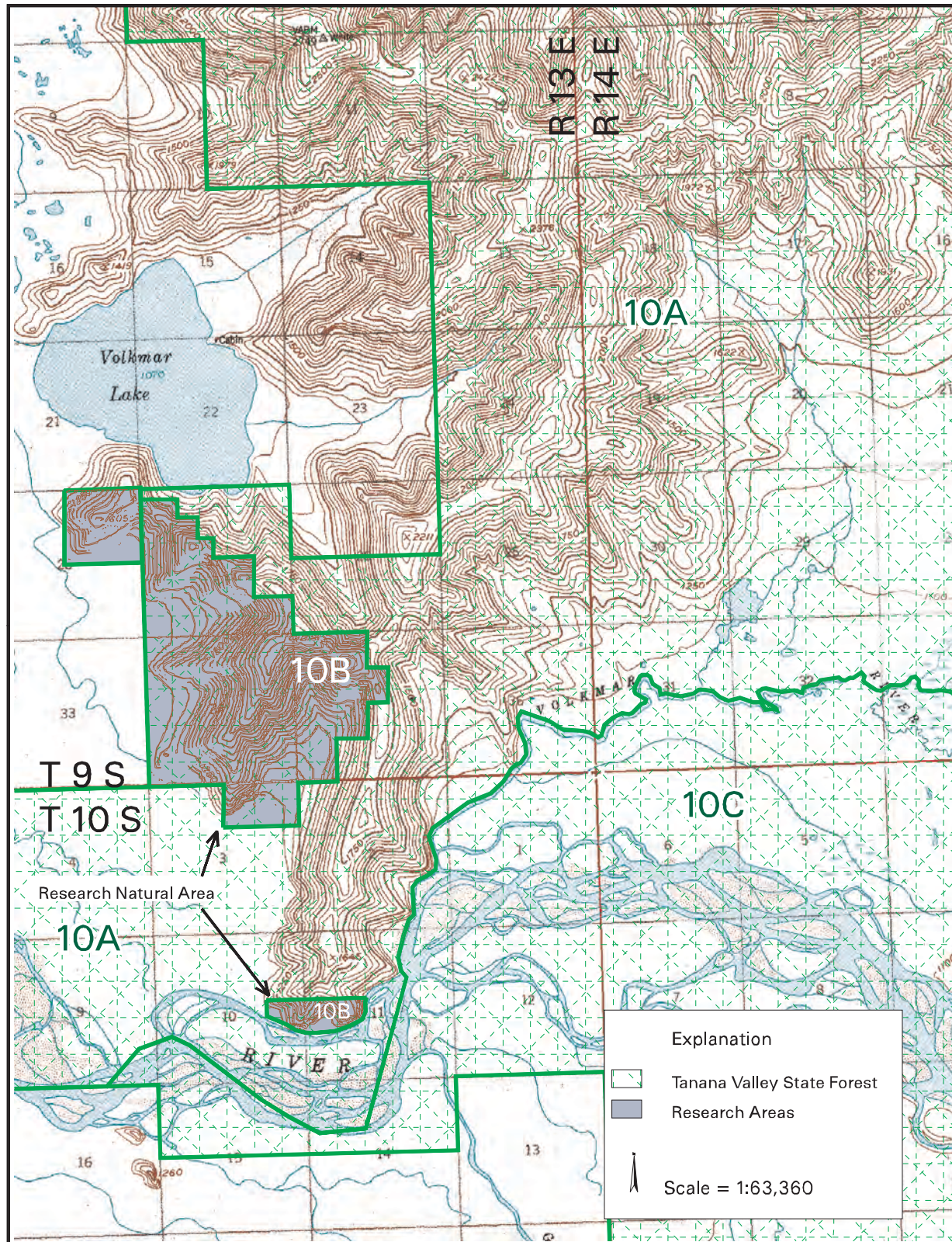
notice. See Tanana Basin Area Plan Appendix G for a list of the organizations on this group; see Tanana Basin Area Plan Appendix A for a definition of consultation. The Division of Forestry will also send notice each year of the draft Delta Five-Year Schedule of Timber Sales to the Goodpaster Review Working Group members and to DPOR. DPOR will notify the Delta and Fairbanks Area Parks Advisory Boards of the review schedule. The Five-Year Schedule contains the proposals for timber sales, access, and reforestation in this area.

LAND-USE SUMMARY
MANAGEMENT AREA: Delta
UNIT 10 Gerstle River

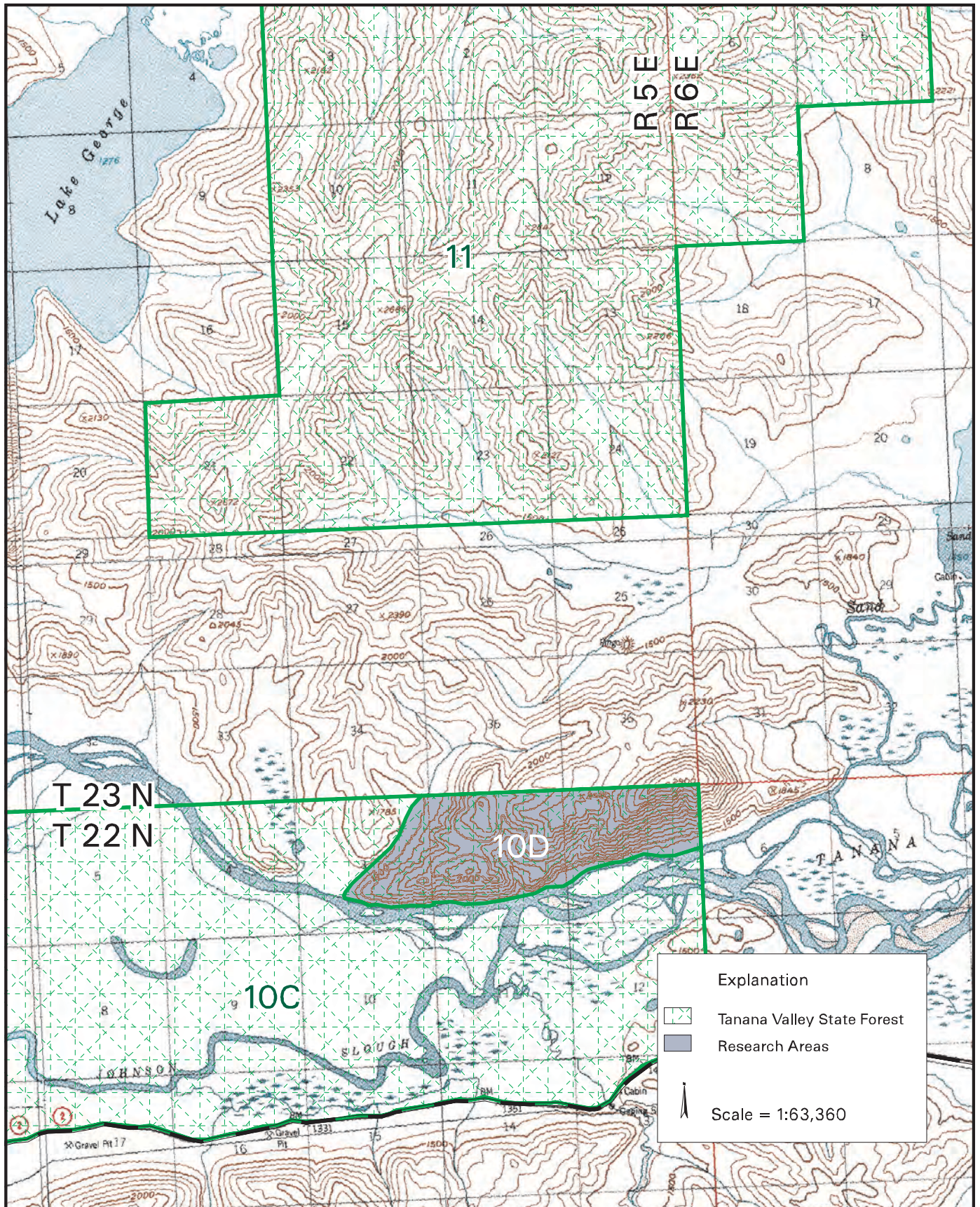
Subunit / Acres	Summary of Management Intent	Summary of Management Activities	Potential Access Roads: 1°/2° (primary/secondary)	Subsurface Designation		Prohibited Surface Uses*
				Locatable	Leaseable	
10A 61,225 acres	Timber, wildlife habitat, recreation, cultural values	Campsite	Some 2° winter roads may be constructed. Additional 1° and 2° roads may also be constructed.	Open to mineral entry	Available for leasing	Remote cabins
10B 1,638 acres 10D 1,038 acres	Research Natural Area	Research	None planned.	Open under leasehold location	Available for leasing	Commercial leases, developed recreation, material extraction, remote cabins, timber harvest, trapping cabins, introduction of non-endemic species
10C 72,024 acres	Timber production Habitat and recreation near Tanana River and other waterbodies	Timber sales, public use cabin/campsite	Some additional all-season and winter roads are planned through the Gerstle River area.	Open to mineral entry	Available for leasing	Remote cabins

*Other uses, such as material sales or land leases, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement and management guidelines of this unit and with the relevant management guidelines in Chapter 2.

Volkmar Bluffs Research Natural Area Subunit 10B



Johnson Slough Bluffs Research Natural Area Subunit 10D



MANAGEMENT UNIT 11

HEALY RIVER

A. SUMMARY OF MANAGEMENT INTENT

This unit consists of a rugged upland area separated from the Alaska Highway by the Tanana River and private land. The unit will be managed for general use.

B. EXISTING RESOURCES AND USES

1. Cultural Resources. One cultural site, a caribou fence, was recorded in this unit. Probability of additional sites is high along bluff areas in this unit. Please check Chapter 2, Cultural Resources, for a list of the cultural site codes in this unit. Further information on cultural sites can be obtained from the Office of History and Archaeology.

2. Fish and Wildlife Habitat. Moose and furbearers occur throughout this unit. The unit contains prime black bear habitat, primarily in lower elevations, and brown bear habitat in upper elevations. This unit is used by the Fortymile caribou herd, primarily as winter habitat. Lowlands along Healy River and Billy Creek are concentration areas for moose and black bear in spring; the Healy River Valley contains wetlands that provide important waterfowl habitat. Fish and wildlife within this unit are harvested by local residents for subsistence uses. Larger valleys in the unit are extensively trapped.

3. Private Land and Leaseholds. None identified in this unit.

4. Recreation and Tourism. George Creek has high recreation value chiefly because of sport fishing and hunting. Healy River and Sand Creek have moderate recreational values for sport fishing.

5. Scientific Resources. None identified in this unit.

6. Subsurface Resources. Although a mining claim is located in a drainage that empties into Healy Lake, the unit appears to have low mineral potential.

7. Timber. This unit consists of heavily dissected uplands that are generally above 1,500 feet elevation. Higher elevation areas are of low productivity and support pole-sized hardwood forests. Mature spruce sawtimber stands are patchy and generally on lower, south-facing slopes, especially along George Creek, George Lake, and Healy River. Understories of spruce are developing in the hardwood stands.

8. Transportation and Access. This unit is separated from the Alaska Highway by the Tanana River and land owned by the Mendas Chaag and Dot Lake Native Corporations. The Healy Lake and George Lake Trails follow public 17(b) right-of-way easements and provide the only legally certain overland access to this unit. The easements are 25 feet wide and allow winter off-road vehicle and non-motorized use. The Lake George Trail has been serialized as an RS 2477 right-of-way by DNR Division of Mining, Land and Water as RST 333. The George, Michigan Creek, Sand Creek, and Tanana Crossing - Grundler Trails also provide potential winter overland access to this unit. DNR Division of Mining, Land and Water has also serialized the Tanana Crossing –

Grundler Trail as RST 333, and Trail #52, Black Mountain as RST 392. However, Doyon Limited and the Mendas Chaag and the Dot Lake Native Corporations do not recognize public rights-of-way over portions of these trails that cross their land. Summer access to this unit is via the Healy and Volkmar Rivers and George and Sand Creeks.

C. MANAGEMENT GUIDELINES AND ACTIVITIES

1. Cultural Site Protection. Guidelines for cultural site protection (see the Cultural Resources section of Chapter 2) apply to site XBD-23, which is moderately sensitive.
2. Mineral. All of this unit will remain open to mineral location and leasing.
3. Streamside Management. Guidelines for special management zones (see the Riparian and Instream Flow Management section of Chapter 2) apply to the following waterbodies, including their side channels, sloughs, and backwaters:

- Healy River
- Volkmar River
- Sand Creek
- George Creek

4. Timber Sales. Timber sales are not scheduled for Unit 11. Timber will be made available in this unit if warranted by a change in demand or accessibility. Timber sales in this unit would be within the Delta Area. For more detail if specific proposals are developed, see the Delta Area Five Year Schedule of Timber Sales and Forest Land Use Plans.

5. Trails. Guidelines for trail corridors of regional or statewide significance (see the Trails section of Chapter 2) apply to the following trails within the State Forest:

- Tanana Crossing - Grundler Trail (RST 333)
- George Trail
- Michigan Creek Trail
- Trail #52, Black Mountain (RST 392)

LAND-USE SUMMARY
 MANAGEMENT AREA: Delta
 UNIT 11 Healy River

Subunit / Acres	Summary of Management Intent	Summary of Management Activities	Potential Access Roads: 1°/2° (primary/secondary)	Subsurface Designation		Prohibited Surface Uses*
				Locatable	Leaseable	
11 191,385 acres	General use	None planned.	None planned.	Open to mineral entry	Available for mineral leasing	Remote cabins

*Other uses, such as material sales or land leases, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement and management guidelines of this unit and with the relevant management guidelines in Chapter 2.

MANAGEMENT UNIT 12 TOWER BLUFFS

A. SUMMARY OF MANAGEMENT INTENT

This unit includes wetlands in the lower Mansfield and Billy Creek drainages and fronts about 30 miles of the Tanana River. Subunit 12B is accessible during the winter from the Alaska Highway and will be managed for timber production while protecting fish and wildlife habitat values and public uses along the Tanana River. A campground may be developed on the Robertson River. The rest of the unit will be managed for general use while additional information is gathered about access development and resource potential.

B. EXISTING RESOURCES AND USES

1. Cultural Resources. One prehistoric site is recognized in this unit. Probability is high that Tower Bluffs, Cathedral Bluffs, T Lake, and other bluffs within this unit contain other cultural resources. The Eagle Trail is a historic route used by Natives and miners. Please check Chapter 2, Cultural Resources, for a list of the cultural site codes in this unit. Further information on cultural sites can be obtained from the Office of History and Archaeology.

2. Fish and Wildlife Habitat. Bottomlands along the Tanana River and flats around Billy and Mansfield Creeks contain prime moose and furbearer habitat. Much prime black bear habitat is found throughout the unit. The large lakes and wetlands provide waterfowl habitat and habitat for resident fish. Local residents use the area for subsistence hunting and fishing. All of the land within this unit is heavily trapped.

3. Private Land and Leaseholds. At least 21 privately owned tracts exist within Subunit 12A; the majority front Mansfield Lake. Two authorized trapping cabins are located near T Lake. Many of the 65 open-to-entry leaseholds in the Cathedral Bluffs area, located within Subunit 12B, will eventually become privately owned.

4. Recreation and Tourism. The Tanana and Robertson Rivers and Mansfield and T Lakes support sport fisheries. T Lake is accessed by float planes. Powerboaters use the Tanana River in this unit for fishing, hunting, and sightseeing. In the winter, the Tanana is used for snowmachining and dog mushing and trapping. Snowmachiners and dogmushers also use the logging roads. Most of the hiking and four-wheeling in this unit is associated with moose hunting in the fall.

5. Scientific Resources. None identified in this unit.

6. Subsurface Resources. Mineral potential in this unit appears low.

7. Timber. The Tanana River bottomlands in this unit support mature sawtimber stands of white spruce. Except for the south-facing slopes, the higher elevation area of this unit to the east and north of the Tanana River has generally low productivity, with only patches of sawtimber spruce on lower, warmer slopes. The lower slopes of the highlands north of the Tanana River are productive areas. DOF is actively evaluating timber resources in this area.

8. Transportation and Access. The Tanana River separates almost all of the land within this unit from the Alaska Highway. The Tanana Crossing - Grundler Trail follows a 17(b) public right-of-way over land owned by Tanacross, Inc. The easement is 25 feet wide and allows winter off-road vehicle or non-motorized use.

The Eagle Trail and portions of the Tanana Crossing - Grundler Trail near Dot Lake also access this unit from the highway. The Eagle Trail has been serialized as an RS 2477 right-of-way by DNR Division of Mining, Land and Water as RST 188 (Slana – Tanana Crossing). The DNR Division of Mining, Land and Water has also serialized the Tanana Crossing – Grundler Trail as RST 333. The Tanacross-Ketchumstuck Trail, which crosses the eastern part of Subunit 12A, has been listed as RST 391. However, the Dot Lake Native Corporation and Tanacross, Inc. do not recognize public rights-of-way over portions of trails that cross their land.

C. MANAGEMENT GUIDELINES AND ACTIVITIES

1. Cultural Site Protection. Guidelines for cultural site protection (see the Cultural Resources section of Chapter 2) apply to site TNX-4, which is highly sensitive. Structures or other evidence of historic activity near the Eagle Trail will be identified and protected consistent with these guidelines.

2. Development Activities Near Private Land. Roads, timber harvest, and other development activities near Cathedral Bluffs and Mansfield Lake will be sited and designed to avoid trespass on adjacent private land.

3. Minerals. All of this unit will remain open to mineral location and leasing. The Robertson River campground site will be closed to locatable mineral entry when funding for campground development is secured.

4. Recreational Facilities. No authorized recreational facilities are currently found on T Lake, and none are currently planned for this area.

A campground may be developed on a scenic bluff north of the Robertson River and east of the Alaska Highway in Subunit 12B. Campground siting and design will avoid negative impacts on peregrine falcon nest sites.

5. Streamside and Lakeshore Management. Guidelines for special management zones (see the Riparian and Instream Flow Management section of Chapter 2) apply to the following waterbodies, including their side channels, sloughs, and backwaters:

- Bear Creek
- Billy Creek and associated lakes
- Fish Lake
- Mansfield Creek and associated lakes
- Mansfield Lake
- Robertson River
- Round Lake
- Sand Creek

T Lake
Tanana River

6. Timber Sales. Suitable lands in Subunit 12B will be managed for commercial and personal-use timber production in accordance with other policies and guidelines stated in this plan.

Timber sales have not been scheduled in Subunit 12A. Timber will be made available in this subunit if warranted by a change in demand or accessibility. Timber sales in this unit would be within the Tok Area. For more detail if specific proposals are developed, see the Tok Area Five Year Schedule of Timber Sales and Forest Land Use Plans.

7. Trails. Guidelines for trail corridors of regional or statewide significance (see the Trails section of Chapter 2) apply to the following trails within the State Forest:

Tanana Crossing - Grundler Trail (RST 333)
Eagle Trail, Slana – Tanana Crossing (RST 188)
Tanacross-Ketchumstuck Trail (RST 391)

8. Transportation. Timber in Subunit 12B will be accessed by secondary winter roads and ice bridges from the Alaska Highway. Secondary winter roads will probably be constructed in Subunit 12B for timber management. DNR will seek agreements with the Dot Lake Corporation for cooperative timber agreements and access development near Dot Lake.

LAND-USE SUMMARY
 MANAGEMENT AREA: Tok
 UNIT 12 Tower Bluffs

Subunit / Acres	Summary of Management Intent	Summary of Management Activities	Potential Access Roads: 1°/2° (primary/secondary)	Subsurface Designation		Prohibited Surface Uses*
				Locatable	Leaseable	
12A 194,100 acres	General use	None planned	None planned.	Open to mineral entry	Available for leasing	Remote cabins
12B 70,700 acres	Recreation, fish and wildlife habitat, timber sales	Campground, timber sales	Will be accessed by 2° winter roads and ice bridges from the Alaska Hwy.	Open to mineral entry	Available for leasing	Remote cabins

*Other uses, such as material sales or land leases, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement and management guidelines of this unit and with the relevant management guidelines in Chapter 2.

MANAGEMENT UNIT 13

PORCUPINE CREEK

A. SUMMARY OF MANAGEMENT INTENT

This unit consists of a high elevation area north of the Tanana River and Tok.

Subunit 13B, accessed by the Taylor Highway and Old Alaska Highway, will be managed for commercial and personal use timber production while protecting fish and wildlife habitat and recreation values near the river. Subunit 13A will be managed for general use because of its currently low mineral, developed recreation, and timber values.

B. EXISTING RESOURCES AND USES

1. Cultural Resources. None identified in this unit.
2. Fish and Wildlife Habitat. Prime brown bear and caribou habitat is found throughout this unit. Lower elevation areas near the Tanana River and Porcupine Creek contain prime black bear and furbearer habitat. Prime raptor habitat and nesting areas exist chiefly along the Tanana River. Virtually all of the unit is heavily trapped by residents of Tanacross and Tok. Moose hunting is heavy within this unit, especially along the Taylor Highway and Tanana River.
3. Private Land and Leaseholds. None identified in this unit.
4. Recreation and Tourism. The Tanana River is used for camping, boating and fishing, especially in its clearwater tributaries. The Taylor Highway corridor is used for camping, trapping, and hunting access and offers scenic views from highlands. Powerboaters use the Tanana River in this unit for fishing, hunting, and sightseeing. In the winter, the Tanana is used for snowmachining, trapping, and dog mushing. Snowmachines and dogmushers also use the logging roads. Most of the hiking and four-wheeling in this unit is associated with moose hunting in the fall.
5. Scientific Resources. None identified in this unit.
6. Subsurface Resources. Mineral potential in this unit is low. A mining claim block exists along the Taylor Highway where it crosses Porcupine Creek.
7. Timber. Much of this unit is higher in elevation than the rest of the State Forest and is of lower productivity, except for south-facing slopes, which are productive areas. High fire frequency combined with a rugged landscape have created a patchwork of vegetation and timber types. Since 1986, about 10 to 12 million board feet of timber have been burned, and DOF is still salvaging timber from these fires.
8. Transportation and Access. The Taylor Highway, closed in the winter, and the Old Alaska Highway provide primary access to Subunit 13B. Timber salvage operations use an ice bridge to cross the Tanana River northeast of Tok. The RS 2477-listed Dennison Fork Winter Trail (RST 656) provides access within the unit, and the Tok River Road (RST 233) may provide access to Subunit 13B.

Subunit 13A is not accessed by existing roads. Winter access to the subunit is by snowmachine on the Tanana River, and summer access is via boat on the river.

C. MANAGEMENT GUIDELINES AND ACTIVITIES

1. Habitat Enhancement. Riparian and upland stands may be manipulated by ADF&G's Division of Wildlife Conservation, in cooperation with the Division of Forestry, to increase available moose browse and begin staggered rotations of hardwood forest beneficial to moose, ruffed grouse and other early- to mid-successional wildlife species. Techniques may include prescribed burning, silvicultural methods, tractor crushing of riparian willow, and bulldozer shearblading or felling of hardwoods. Habitat enhancement projects will be discussed in the Five Year Schedule of Timber Sales or by some other public process.

2. Minerals. All of this unit will remain open to mineral location and leasing.

3. Streamside Management. Guidelines for special management zones (see the Riparian and Instream Flow Management section of Chapter 2) apply to the following waterbodies, including their side channels, sloughs, and backwaters:

Tanana River
Porcupine Creek

4. Timber Sales. Suitable lands will be managed for commercial and personal use timber production in accordance with other policies and guidelines stated in this plan.

Timber sales have not been scheduled in Subunit 13A. Timber will be made available in this subunit if warranted by a change in demand or accessibility. Timber sales in this unit are within the Tok Area. For more detail if specific proposals are developed, see the Tok Area Five Year Schedule of Timber Sales and Forest Land Use Plans.

5. Trails. Guidelines for trail corridors of regional or statewide significance (see the Trails section of Chapter 2) apply to portions of Dennison Fork Winter Trail (RST 656) within the State Forest.

6. Transportation. Timber in this unit will be accessed by secondary roads from the Old Alaska Highway and by secondary all-season roads from the Taylor Highway.

LAND-USE SUMMARY
 MANAGEMENT AREA: Tok
 UNIT 13 Porcupine Creek

Subunit / Acres	Summary of Management Intent	Summary of Management Activities	Potential Access Roads: 1°/2° (primary/secondary)	Subsurface Designation		Prohibited Surface Uses*
				Locatable	Leaseable	
13A 48,450 acres	General use	None planned	None planned.	Open to mineral entry	Available for leasing	Remote cabins
13B 44,800 acres	Timber production Habitat and recreation near Tanana R. and Porcupine Cr.	Timber sales, habitat enhancement	Accessed by 2° roads from the Old Alaska Hwy and 2° all-season roads from the Taylor Hwy.	Open to mineral entry	Available for leasing	Remote cabins

*Other uses, such as material sales or land leases, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement and management guidelines of this unit and with the relevant management guidelines in Chapter 2.

MANAGEMENT UNIT 14

TOK RIVER

A. SUMMARY OF MANAGEMENT INTENT

This unit includes much of the lower Tok River Valley and adjacent highlands of the Alaska Range. It has high value for hunting, fishing, trapping, camping, scenery, and timber harvest and will be managed to maintain these uses. The Eagle Trail State Recreation Site is located in this unit, 17 miles south of Tok along the Tok Cutoff.

B. EXISTING RESOURCES AND USES

1. Cultural Resources. There are no recorded cultural sites in this unit. However, slopes above the Tok River probably contain cultural sites.
2. Fish and Wildlife Habitat. Lower elevation areas of this unit are used as winter range by moose. This area is one of the most important wintering areas in Game Management Unit 12. Moose migrate to the Tok River flats from Game Management Unit 13 and from the foothills of the Alaska Range. The resident moose population currently exists at low density but has increased substantially since 1990 due primarily to improved habitat caused by the Tok River Fire. The ADF&G Division of Wildlife Conservation has crushed about 400 acres of riparian vegetation to increase available moose browse in this area. Lower elevations also support prime black bear and furbearer habitat. Elevations above 4,000 feet contain prime sheep habitat. The unit is heavily trapped by local residents and serves as an important area for sport and subsistence hunting.
3. Private Land and Leaseholds. Two Native allotments are located over the Old Glenn Highway. One other allotment is located at the junction of the Johnny Trail and the Glenn Highway.
4. Recreation and Tourism. This unit is important for developed and dispersed recreation because of easy access and its location near the junction of two major tourist routes, the Alaska and Glenn Highways. The Eagle Trail State Recreation Site, a 60-unit campground, is located on Clearwater Creek. Steep slopes that overlook the Glenn Highway from the west provide scenic views from the highway. The Tok River is used for boating and fishing, mainly by paddlers, since it is too shallow for powerboats. People also use canoes for hunting moose in the fall. Trails in the area are used by people on four-wheelers for hunting and by snowmachiners, dogmushers, trappers, and cross-country skiers in the winter.
5. Scientific Resources. None identified in this unit.
6. Subsurface Resources. The unit has moderate mineral potential and supports mining claim blocks in the Clearwater Creek area and drainages to the Southwest.
7. Timber. This unit is the primary source of spruce sawtimber, fuelwood, and house logs for the surrounding area. Mature stands of white spruce located in the Tok River flats and productive immature stands of mixed hardwood-spruce at lower slopes in the northern portion of this unit are operable year round.

8. Transportation and Access. The Glenn Highway provides primary all-season access to this unit. Potential secondary access is via the graveled surfaces of the Eagle Trail, an RS 2477 route, and Old Glenn Highway. A portion of the Eagle Trail, Slana - Tanana Crossing (RST 188) follows a 17(b) public easement. The easement is 50 feet wide and allows all-season use. The Johny Trail provides hunting access and is a potential access route to timber in the State Forest and to massive sulfide deposits in the upper Tok River basin.

C. MANAGEMENT GUIDELINES AND ACTIVITIES

1. Cultural Site Protection. Portions of the Eagle Trail south of the northern-most junction with the Glenn Highway will be identified on the ground. Structures or other evidence of historic activity will be identified and protected consistent with guidelines for cultural site protection (see the Cultural Resources section of Chapter 2).

2. Habitat Enhancement. Riparian and upland stands may be manipulated by ADF&G's Division of Wildlife Conservation, in cooperation with the Division of Forestry, to increase available wildlife habitat, including moose browse, and begin staggered rotations of hardwood forest beneficial to moose, ruffed grouse and other early- to mid-successional wildlife species. Techniques may include prescribed burning, silvicultural methods, tractor crushing of riparian willow, and bulldozer shearblading or felling of hardwoods. Habitat enhancement projects will be discussed in the Five Year Schedule of Timber Sales or by some other public process.

3. Mineral. All of this unit will remain open to mineral location and leasing, except for the Eagle Trail State Recreation Site, which is closed to mineral entry.

4. Scenic Quality. Timber, road, mining, and other development activities visible from the Glenn Highway and in the Clearwater Creek Valley will be sited and designed to enhance or minimize impact to scenic views.

5. Streamside Management. Guidelines for special management zones (see the Riparian and Instream Flow Management section of Chapter 2) apply to the following waterbodies, including their side channels, sloughs, and backwaters:

Clearwater Creek
Little Tok River
Tok River

7. Timber Sales. Suitable lands will be managed for commercial and personal use timber production in accordance with other policies stated in this plan. Timber sales in this unit are within the Tok Area. For more detail when specific proposals are developed, see the Tok Area Five Year Schedule of Timber Sales and Forest Land Use Plans.

8. Trails. Guidelines for trail corridors of regional or statewide significance (see the Trails section of Chapter 2) apply to the following trails within the State Forest:

Eagle Trail, Slana – Tanana Crossing (RST 188)

The portion of the Eagle Trail between the Glenn and Alaska Highways is a road and will be upgraded for timber access as necessary.

9. Transportation. Approximately 4 miles of roads may be constructed in this unit for timber management.

LAND-USE SUMMARY
 MANAGEMENT AREA: Tok
 UNIT 14 Tok River

Subunit / Acres	Summary of Management Intent	Summary of Management Activities	Potential Access Roads: 1°/2° (primary/secondary)	Subsurface Designation		Prohibited Surface Uses*
				Locatable	Leaseable	
14 64,515 acres	Wildlife habitat protection and enhancement, recreation, timber production	Habitat enhancement, timber sales	1° all-season: old highway. Other 1° all-season and 2° all-season and winter roads north of the Tok River. 2° all-season south of the Tok River on seasonal ice bridge.	Open to mineral entry	Available for leasing	Remote cabins

*Other uses, such as material sales or land leases, that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement and management guidelines of this unit and with the relevant management guidelines in Chapter 2.