The Commissioner of the Department of Natural Resources finds that the Unit 2 Amendment to the Tanana Valley State Forest Management Plan Revision meets the requirements of AS 41.17.230 and AS 38.04.065 and 11 AAC 55.010 – 55.030 for land use plans, and hereby adopts the plan. The Department of Natural Resources will manage state land in the planning area consistent with the plan.

[signature on file]

______________________________  ___________________
Tom Irwin, Commissioner      Date
DEPARTMENT OF NATURAL RESOURCES

The Alaska Department of Fish and Game assisted the Department of Natural Resources in preparing the Unit 2 Amendment to the Tanana Valley State Forest Management Plan Revision. We appreciate the opportunity to represent fish and wildlife habitat, harvest, and public use values during the development of the plan amendment. The Department of Fish and Game will use the plan amendment as guidance when reviewing and commenting on proposed uses of state lands in the planning area.

[signature on file]

______________________________  ___________________
Kevin C. Duffy, Commissioner      Date
DEPARTMENT OF FISH AND GAME
Planning Team: 2003 Unit 2 Plan Amendment

This amendment was prepared by a stakeholder planning team coordinated by the Department of Natural Resources, Division of Forestry.

Stakeholders
Doug Bowers, Tolovana Lodge
Tom Bucceri, DNR Division of Oil and Gas
Jim Durst, ADFG, Division of Habitat and Restoration
Chris Foley, Department of Environmental Conservation
Nancy Fresco, Northern Alaska Environmental Center
Edna Hancock, Toghotthele Corporation
Victor Joseph, Tanana Chiefs Conference
Paul Maki, DNR Division of Forestry
Steve McGroarty, DNR Division of Mining, Land and Water
Tom Paragi, ADFG, Division of Wildlife Conservation
Eric Pyne, Timber Industry
Ron Silas, Minto
Roselynn Ressa Smith, DNR Division of Mining, Land and Water

Division of Forestry
Jeff Jahnke, Director
Alison Arians, Project Manager
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Marty Welbourn Freeman, Forest Resources Program Chief
Chris Maisch, Regional Forester
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Pete Buist
Steve Clautice
Gordon Worum
Bill Johnson

Thanks, also, to everyone who contributed information during the initial scoping process, made presentations at planning team meetings, and attended public meetings.
Amendment to the Tanana Valley State Forest Management Plan:
Unit 2 Management Guidelines

MANAGEMENT UNIT 2
LOWER TANANA

NOTE: DNR conducted a more detailed planning process for Unit 2 after completing the 2001 Tanana Valley State Forest Management Plan Update. The Unit 2 process developed management guidelines for Unit 2 that could not be accomplished in time for the 2001 Update. The Division of Forestry conducted substantial outreach before beginning a stakeholder consensus process. Stakeholders represented environmental concerns, timber industry, Native interests, tourism operators, subsistence users, hunters, dog mushers, fish and wildlife, oil and gas, mineral interests, land management, and state forestry. Amendments were made to the 2001 Update in 2003.

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 on 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, adjacent to the State Forest in the Minto Flats State Game Refuge), is the site of seasonal cultural activities for Minto residents and for people outside the village to learn about Athabascan culture. Although Minto village has been relocated to a new site approximately twenty miles north, Old Minto is still an important cultural site for the former residents, their children and grandchildren. Old Minto also is home to a year-round rehabilitation camp run by Tanana Chiefs Conference. This site is under a state land lease issued to the Interior Athabascan 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. 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.
3. 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.

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, dogmushing 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. Scenic values of the riparian zone are important to recreation and tourism activities in Unit 2.

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.

Sawmill Island, near Old Minto, offers an opportunity for research, as much of the area was harvested during the steamboat wood-cutting era, in the early 1900s. Some harvesting in the area was also done in the mid-1900s.

6. Subsurface Resources. Despite the existence of a few active mining claims near Old Minto Village, mineral potential in this unit appears low. Natural gas potential is moderate to good in the Nenana Basin, and exploration licensing has begun. The only identified 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 farther 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 and unutilized 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. Cultural Resources. The Division of Forestry intends to make firewood or other timber available to meet the needs of Old Minto programs. DOF will coordinate with Old Minto lessees when planning timber harvest activities near Old Minto.

2. 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. Other issues with respect to private land and Native allotments adjacent to the State Forest will be addressed through the Forest Land Use Plan process.

3. Fish and Wildlife Habitat. Post-logging site treatments (e.g., scarification or crushing) may be used to encourage regeneration of willows or hardwoods that provide food and cover for wildlife. Habitat enhancement projects are encouraged in Unit 2. The Department of Fish and Game, the Office of Habitat Management and Permitting, and the Division of Forestry are encouraged to pursue funding opportunities for habitat enhancement work. In addition, planning for, and obtaining funding for, habitat enhancement work that timber operators could do while on site (e.g., shear-blading) are encouraged.

Habitat enhancement projects could benefit from the knowledge and skills of local crews and community members. Habitat enhancement work could also serve as training for local fire crews, especially when the work includes fire or modifying fuels.

In areas where buffers will not provide adequate visual screening from the river, Forest Land Use Plans for each timber sale will recommend specific guidelines for post-logging site treatments.

4. 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.

5. Scientific Resources.
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.
Scientific research is also encouraged in Unit 2 outside of the Research Natural Areas, as long as the research does not conflict with other uses.


For additional information about historic erosion patterns along the Tanana River in this and other units, refer to Ott et al’s 2001 study: Bank erosion and large woody debris recruitment along the Tanana River, Interior Alaska. See Appendix G, Bibliography, for a complete citation of the study.

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

7. Subsurface Resources.
   a. 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.
   b. Oil and Gas. Oil and Gas exploration and development are guided by DNR’s existing leasing (licensing) process. However, for the two Research Natural Areas, Subunits 2B and 2C, the Oil and Gas leasing process should consider the purposes for which the RNAs were established, as well as the management guidelines for the RNAs (See the Scientific Resources section of Chapter 2).

8. 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.

Unit 2 encompasses many older riparian stands. An Old Forest Science and Technical Committee will be convened to evaluate biological functions of older forests and to identify management guidelines (see also Chapter 4: Research Needs, Silvicultural Research, Older Stands).

When designing timber sales in Unit 2, consider targeting local markets for local use and processing of timber. DOF intends to provide timber sales in a range of sizes to meet the needs of local markets and communities.
Because Unit 2 has a large unutilized timber base in a remote location, it may be an appropriate location for longer-term, negotiated timber sales.

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.

9. Timber Development Cooperation with Village Corporations. The state will seek cooperative agreements with Native village corporations to share timber development costs and ensure that the timing and size of timber sales offered by the state are in the general interest of the public.

10. Trails. Guidelines for trail corridors of regional or statewide significance (p. 2-59) 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. See also the Transportation section about limiting conflicts between forest roads and trail use.

11. Transportation. Because of extensive wet soils, and because all-season roads can add hunting pressure to some areas, current management favors winter access to Unit 2 for timber harvest. In some cases, however, sections of all-season roads may be feasible and appropriate outside the Minto Flats State Game Refuge.

Joint access is especially encouraged in Unit 2. Resource agencies authorizing any development activity requiring access through or near Unit 2 should consult with the Division of Forestry to plan access that will be beneficial for multiple uses. Where feasible and prudent the state will seek cooperative agreements or easements with regional corporations, village corporations, or other landowners to reduce costs of access roads.

Forest roads shall be sited, built, and maintained to minimize trail use conflicts. (See also Appendix F: Road Standards, for more details on road construction.)

Potential Access Roads:
The eastern part of Subunit 2E north of Nenana has already been accessed using a winter road running north from Nenana along the east side of the Tanana River and passing through a portion of the Minto Flats State Game Refuge. Use is dependent on permission of private landowners.

Primary access to the rest of Unit 2 is planned using the North Commission Line, which runs from Nenana to Subunit 2A. A right-of-way permit was issued to the Division of Forestry for the North Commission Line that expires in 2013 (ADL 414604). The Division of Forestry must also obtain a Special Area Permit from ADF&G to construct a winter road across Refuge lands.
This route may be upgraded to primary winter road standards within the Refuge, and possibly to all-season standards outside the Refuge where topography permits (see Appendix F).

The Nenana-Totchaket tractor trail branches off the North Commission Line to the west, and may be used for access to the southern portion of Subunit 2A.

The central part of Subunit 2E may be accessed by extending an existing seven-mile tractor trail that branches to the north from the North Commission Line another ten miles, and improving the trail to primary winter road standards. The northern portion of this road would cross Minto Flats State Game Refuge. Subunit 2D may also be accessed by this winter road or the North Commission Line.

Other means of transporting timber from Unit 2 have been considered. Barging timber to Nenana on the Tanana River currently appears less cost effective than using winter roads.

Portions of all routes except the Nenana-Totchaket tractor trail pass through the Refuge. Access through the Refuge will be on winter roads.

Other Trails to Unit 2 (not intended for timber access)
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.

Added to Appendix G, Bibliography:
### LAND-USE SUMMARY
**MANAGEMENT AREA:** Fairbanks  
**UNIT 2** Lower Tanana

<table>
<thead>
<tr>
<th>Subunit / Acres</th>
<th>Summary of Management Intent</th>
<th>Summary of Management Activities</th>
<th>Potential Access Roads: 1°/2° (primary/secondary)</th>
<th>Subsurface Designation</th>
<th>Prohibited Surface Uses*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2A 62,425 acres</td>
<td>Commercial timber production, habitat and recreation near Tanana and Kantishna Rivers and other waterbodies.</td>
<td>Public use cabin (in 2A or 2E), long-term commercial timber sales</td>
<td>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 1° winter road from Commissioner’s Line.</td>
<td>Open to mineral entry</td>
<td>Available for leasing</td>
</tr>
<tr>
<td>2D 17,030 acres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2E 76,300 acres</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2B 2,990 acres</td>
<td>Research natural area</td>
<td>Research</td>
<td>No new road construction planned.</td>
<td>Open under leasehold location</td>
<td>Available for leasing</td>
</tr>
<tr>
<td>2C 1,251 acres</td>
<td></td>
<td></td>
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</tbody>
</table>

*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.*