

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF FORESTRY
NORTHERN REGION

FAIRBANKS AREA

FOREST LAND USE PLAN

*Nenana Ridge Mixed #4 Resale
NC-1402-F*

ADL 418054

May 2009

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Resource Management Forester

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I. INTRODUCTION

A. Purpose

The purpose of this Forest Land Use Plan (FLUP) is to provide sufficient information for reviewers to ensure that the best interest of the State will be served by the Department of Natural Resources, Division of Forestry, Fairbanks Area, offering this proposed timber sale. This FLUP deals with site specific considerations of the sale. The boundaries and precise volume of the sale may be refined if and when the sale is developed. Site specific research has been completed on title considerations, land classifications, applicable land management plans, appropriate silvicultural techniques, regulatory and statutory requirements, and physical conditions that apply to the proposed sale area. The proposal is for the harvest of approximately (+/- 30%) 38 acres of land that is predicted to yield approximately (+/- 30%) 25,200 CF of spruce sawlogs and 46,200 CF of birch fuelwood. The sale design may be altered to mitigate potential conflicts. It will be the responsibility of the Forester-In-Charge to ensure that any purchaser of this sale harvests timber per the sale design and sale contract provisions and adheres to Alaska Forest Resources and Practices Act (AFRPA) best management practices.

The public is invited to comment on any aspect of this proposed timber sale with regards to the Preliminary Finding and Decision (AS 38.05.035). Comments should be mailed to the Division of Forestry, 3700 Airport Way, Fairbanks, Alaska 99709 or by email at [jeremy.douse@alaska.gov](mailto:jerry.douse@alaska.gov). Comments must be received at the Division of Forestry no later than May 1, 2009 in order to be considered in the Final Decision of whether the sale will be held in whole or in part. To be eligible to appeal the final decision, a person must have provided written comment by May 1, 2009.

B. Five-Year Sale Schedule

The general area and timber type that this proposed sale occupies has been shown as a potential sale area in the current Five-Year Schedule of Timber Sales (FYSTS) for Fiscal Years 2008-2012 as required by AS 38.05.113. It has been listed in previous schedules.

C. Location

The proposed sale is located approximately 33 miles southwest of Fairbanks. At milepost 328 on the Parks Highway turn South on the Nenana Ridge Road. Approximately 8.8 miles southwest on the Nenana Ridge Road turn west on the Ruffed Grouse Road. This unit starts approximately 1.6 miles west on Ruffed Grouse Road. The proposed sale area is located within Sections 15 and 16 of Township 3 South, Range 6 West Fairbanks Meridian. The sale area is shown on the attached map and is within the United States Geological Survey 1:63,360 Quadrangle map titled Fairbanks C-4.

D. Title, Classification and Other Active or Pending Interests

The acquisition for the land upon which the sale is proposed is based on General Selection 1131. The title was transferred by Patent 50-86-0070. There are no title restrictions on the area. The primary land classification for the area is Forestry per Classification Order NC-82-065. The proposed sale area is within Unit 5A of the Tanana Valley State Forest (TVSF).

E. General Timber Sale Program Objectives

1. **Develop the State's Renewable Resources.** To follow the DNR's constitutional mandate to encourage the development of the State's renewable resources, making

- them available for maximum use consistent with the public interest. Sustain and promote a healthy, long-term timber industry in the State, through providing a secure source of timber for harvest that produces raw materials for local manufacturing plants when practical while protecting other resources such as fish and wildlife.
2. **Improve the State's Economy.** To help the State's economy by providing royalties to the State in the form of stumpage receipts, as well as contributions to local economies through wages, purchases, jobs and business.
 3. **Improve Forest Health.** To improve forest growth and vigor by harvesting and replacing mature stands and stands with declining vigor with new healthy regenerating stands, while protecting and maintaining other resource values. The actions authorized under this decision will follow the constitutional mandate of sustained yield and shall adhere to multiple use management as described in the TVSF Management Plan.
 4. **Improve Wildlife Habitat.** Meet the statutory wildlife management objective for the TVSF (AS 41.17.400(e)) that provides for the production of wildlife for a high level of sustained yield human use through habitat improvement techniques, while allowing for timber management and other beneficial uses of public land and resources.

II. LEGAL AUTHORITY

This Division of Forestry is taking this action under the authority of AS 38.05.035 (e) (Best Interest Finding); AS 38.05.110-120 (Alaska Land Act Statutes); 11 AAC 71 (Timber Sale Statutes and Regulations); AS 41.17.010-.950 and 11 AAC 95 (Forest Resources and Practices Statutes and Regulations).

III. ADMINISTRATIVE RECORD

The case file ADL 418054 and the Tanana Valley State Forest Management Plan constitute the administrative record for this finding.

IV. DISCUSSION OF ISSUES

A. Physical Characteristic of the Sale Area

1. **Topography.** This unit is on a moderately north facing slope at the top of a drainage that leads to Little Goldstream Creek. The elevation range of the unit is approximately 700 to 900 feet.
2. **Soils.** The soils in this unit are classified as Fairbanks series. Fairbanks soils are relatively productive soils with an approximate site index rating for birch of 60. Erosion potential is only severe on these soils when the slope angle is steep and when disturbance occurs during spring break-up.
3. **Waterbodies.** This unit is south of Little Goldstream Creek. A tributary of Little Goldstream Creek exists north of the proposed sale area, however, water in these creeks is seasonal during wet periods of the year. The State Department of Environmental Conservation had no comment on this sale. The sale area presents no obstacles that would prevent implementation of the best management practices of the AFRPA to maintain water quality.
4. **Stand Conditions.** The timber stand and proposed harvest unit consists primarily of birch and spruce. Approximate age of stand is 90 years. The size class consists primarily of pole and saw timber. There is an estimated 10% defect in the stand. The birch component of the stand ≥ 6 " diameter breast height (dbh) comprises

approximately 180 trees/acre, an average dbh of 8.15" and an average height of 57'. Basal area is 71 square feet/acre. The spruce component of the stand ≥ 9 " diameter breast height (dbh) comprises approximately 20 trees/acre, an average dbh of 12.61" and an average height of 83'. Basal area is 20.22 square feet/acre.

B. Historic and Current Land Use

The historic uses of land in the general area have been logging, hunting, trapping, mining and general trail use. The current uses of the area are recreation, wood cutting, hunting and trapping.

C. Wildlife Habitat

Wildlife typical of the interior are found here and during ground reconnaissance moose sign was observed. No critical wildlife habitat has been identified for this area (TVSF Management Plan), nor has any become apparent during ground reconnaissance.

Treatments proposed for this stand are projected to enhance habitat conditions for ruffed grouse, moose, voles, hares, and ultimately, lynx, marten and fox. In the past, Alaska Department of Fish and Game, Division of Wildlife Conservation have recommended managing for as much diversity as possible when prescribing harvest unit size, shape and position to mimic the results of wildfire or other stand replacement phases such as insect outbreaks or flood events. To accomplish these objectives snags will be retained to provide late-successional wildlife habitat for hole nesting birds, woodpeckers, small mammals, and other species requiring perching habitat. The unit will be laid out with an uneven edge, along and between timber types. This will create varied edge effect beneficial to many wildlife species.

D. Fisheries and Water Quality

Best management practices will be implemented to ensure water quality standards in all water courses. During review of the FY 2008-2012 FYSTS OHMP did not have particular fish or wildlife concerns with the proposed road or harvest area. There is no expectation that this harvest will have negative impacts on Little Goldstream Creek.

This unit is can be accessed in the summer months through existing all season roads. Erosion will be mitigated by backfilling skid trails with debris and through the installation of water bars if necessary. Harvest operations will be avoided during spring break-up and extremely wet time periods to mitigate erosion issues.

Road construction will not be necessary to access this unit, however, some maintenance of the existing road may be required. Operations will be suspended during thaw periods and water bars will be installed if necessary.

E. Subsistence

The tract has not been designated as a subsistence zone. The proposed sale of timber is anticipated to have no deleterious effects on subsistence activities. Subsistence activities of fishing, trapping, hunting and gathering of berries and other non timber forest products may occur on State owned lands.

F. Recreation and Tourism

Recreation use of this area is moderate, but not inconsistent with a timber sale. Primarily it consists of hunting and trapping activity, as well as some recreational snowmachining, ATV riding and dogmushing. Where trail use utilizes existing winter roads needed for access, sufficient snow cover will be left on the roads to enable continued winter recreational use. Cross trails will be kept free of either snow filled or brush filled berms.

G. Scenic Resources

The sale is located north of the Tanana River and south of the Parks highway. It will not be visible from the Tanana River but may be visible from the Parks highway in certain sections. It will also be visible from Ruffed Grouse road and may be visible from ridge line and valley bottom trails. Leave trees and residuals will somewhat obscure the harvest area and help blend the cut border with existing landscape.

H. Cultural Resources

The TVSF Management Plan does not list cultural sites in the same management unit as this proposed harvest. The State Office of History and Archaeology (OHA) do not list any sites on its inventory and had no comment during its review of the FY 2008-2012 FYSTS. During the course of activities associated with this timber sale, cultural and/or paleontological resources may be inadvertently discovered. Should such discovery occur, these sites shall be protected from further disturbance and OHA contacted immediately so that compliance with state laws governing cultural resources may begin.

Under the Alaska Historic Preservation Act (AS 41.35), all burials on state land are protected. If burials or human remains are found, all land altering activities that would disturb the burial or remains shall cease and measures taken to protect it in place. OHA and a law enforcement officer will be notified immediately to ensure that proper procedures for dealing with human remains are followed.

I. Sustained Yield and Allowable Cut

The Alaska Forest Resources and Practices Act (AS 41.17.060 (c)) and Article VIII Sec. 4 of the State Constitution require that the State forest land be managed on a sustained yield basis. Sustained yield is defined in the Alaska Forest Resources and Practices Act (AS 41.17.950(25)):

“Sustained Yield” means the achievement and maintenance in perpetuity of a high level annual or regular periodic output of the various renewable resources of forest land and water without significant impairment of the productivity of the land and water, but does not require that timber be harvested in a non-declining yield basis over a rotation period.

The Annual Allowable Cut (AAC) is the amount that can be harvested from forest land managed for forestry purposes in a year under sustained yield management. The AAC in the Fairbanks Area is based on a ten-year average as determined by the Parsons and Associates, Inc. report titled “Tanana State Forestry Lands Periodic Sustained Yield Analysis”. This sale complies with sustained yield/allowable cut principles outlined in the Fairbanks Area Five-Year Schedule of Timber Sales for FY

2008-2012. The AAC for the Fairbanks Management Area is approximately 6,260 acres. The AAC will not be exceeded for this proposed sale.

J. Silvicultural Prescription

1. **Stand Silvics.** The normally merchantable species of trees here are white spruce and birch. Data and research on regeneration and growth characteristics of these species are compiled within the Resource Analysis of the Tanana Valley State Forest (TVSF) Management Plan. The harvest and reforestations systems available in Interior Alaska are also reviewed and listed in the Resource Analysis. The results of the public and agency discussions for harvest and reforestation are discussed in the TVSF Management Plan. Silvicultural harvest systems that facilitate even-aged (natural) management are generally preferred. They mimic the ecological impact of wildfire and other disturbances and result in the greatest increase in site productivity. Even-aged management is normally accomplished through clear cuts, patch cuts and heavy partial cuts (such as seed tree or shelterwood systems), which opens up the site to maximum solar gain. This results in the greatest production of both young hardwood that is important to wildlife and the spruce understory valuable years later as timber. Even-aged management techniques are utilized to provide young, vigorously growing stands in juxtaposition to older, undisturbed stands. Such placement of harvest units can optimize natural seedling and the edge effect. The proposed sale is a seed tree partial cut with reserves.
2. **Specific Management Objectives.** The overall goal for this stand is to harvest the birch component before further degradation occurs resulting in an overmature birch stand with significant forest health issues. This site is comprised primarily of birch with a patchy aspen component. Birch occupies 65% and spruce 35% of the stand. It is expected with the treatments proposed that the birch component will increase initially after harvest. It is reasonable to assume that these objectives will be realized under the recommended prescription with some scarification and supplemental planting if necessary.
3. **Harvest Methods.** The sale will be harvested by a seed tree partial cut with reserves silvicultural system. All birch 6" or greater and spruce 9" or greater will be removed. Snags, birch less than 6" and spruce less than 9" will not be cut. Residual birch and spruce will be protected from damage during harvest operations. Harvesting will be by the whole tree yarding system. Slash disposal at the landings will be by burning or by salvage for fuelwood use.
4. **Regeneration.** Birch can regenerate vegetatively or by seed and spruce regenerates only by seed. Adjacent sites are composed of mixed birch and spruce stands that will provide seed to this unit as will the residual tree's left on site. A regeneration survey will be conducted three years after the harvest. If the survey indicates inadequately stocked areas greater than ½ acre and totaling 3.8 acres than hand planting of white spruce seedlings will be performed on non-stocked areas. The goal for regeneration is to achieve a minimum of 450 evenly distributed trees per acre.

K. Transportation

The planned access to the proposed sale is by existing and proposed all season road. Starting at milepost 328 on the Parks Highway turn South on the Nenana Ridge Road. Approximately 8.8 miles southwest on the Nenana Ridge Road turn west on the Ruffed Grouse Road. This unit starts approximately 1.6 miles west on Ruffed Grouse Road. The 8.8 miles of Nenana Ridge Road will be maintained to all season forest primary road standards set out in the AFRPA and Appendix F of the TVSF management plan. The 1.6 miles of Ruffed Grouse Road will be maintained to forest secondary all season road standards set out in the AFRPA and Appendix F of the TVSF management plan.

L. Erosion

There are two soil erosion concerns: surface erosion and mass wasting of soil and debris. Road construction and poor maintenance of roads primarily causes surface erosion. To avoid erosion, debris will be placed back onto skid trails and water bars installed if necessary. Harvesting will be suspended during periods of thawing soil conditions to assure there is minimal soil disturbance. The location of skid trails will optimize skidding distances and provide for adequate landing areas. The other aspect of erosion (mass wasting and debris avalanches) normally occurs on slopes of more than 70 percent. In the area of the proposed timber sale slopes do not reach this grade.

M. Mining

This sub-unit of the TVSF has historically seen moderate levels of mining activity, however, there are no current mining claims within the sale area. More detailed information on subsurface resource use is found in the TVSF Management Plan. Other than providing access, and sharing some of the same access roads, this sale will have no impact on the potential mining resources or mining activity in this area.

N. Materials

No rock materials will be required for the construction of access roads.

O. Economics

In addition to generating royalties to the State's general fund, the proposed sale will create economic benefits to the Fairbanks North Star Borough and to other locations in Alaska. The Borough business community will receive direct economic benefits from providing support services for the operators through sales of fuel, food, housing, medical and miscellaneous supplies. The residents of the Borough will receive an indirect benefit through taxes paid to cities and the Borough by the operator and employees during the course of the timber harvest operation.

The sale is expected to benefit the local economy by providing jobs. It will have a positive impact on local employment by generating numerous man-hours of work associated with the harvest and transportation of wood products from this sale.

Additionally the public may benefit from access to additional personal use fuelwood areas.

V. MARKET CONDITIONS

Counter to the current economic downturn, demand for housing and construction materials as well as fuelwood is expected to remain strong in part through a projected increase in

population over the next 25 years and a fluctuating oil market. Local logging operations are in need of a reliable supply of timber to meet this demand. This sale is expected to contain timber well suited for lumber and fuelwood production.

More importantly, the current recession has affected the job market throughout the country. Timber sales such as this create jobs within the forest products industry. High fuelwood prices may also make merchandising the tops worthwhile. Home heating continues to be expensive in interior Alaska even though fuel prices have reduced in the rest of the country. Homeowners continue to look for supplemental ways to heat their homes and fuelwood continues to be the most popular and cost effective method.

VI. ALTERNATIVE ACTIONS

There are four possible alternatives to consider for this sale. A discussion of each of the four alternatives follows:

1. To continue the sale(s) as proposed.

This alternative meets the objectives of the Five-Year Schedule of Timber Sales and DNR'S constitutional mandate. It also meets the silvicultural objective of improving forest vigor, provides for a value-added end product and creates additional jobs in Alaska due to the combination of road building, logging, and trucking. This alternative also complies with the management objectives of the TVSF Management Plan for Unit 5A.

2. To modify the sale(s) by making them smaller or larger.

The proposed sale unit is a logical setting for typical commercial logging equipment in Interior Alaska. The size of the sale is designed to be large enough to be economically viable considering access development and mobilization costs and distance to processing facilities. Sales of this size are appropriately balanced to maintain other resource values as well as provide economic benefits to the Tanana Valley.

3. Defer the sale of this timber to a later date.

Deferring harvest to a later date would fail to meet many of the objectives of the sale program. One of the main objectives is to make State-owned timber consistently available to the timber industry.

4. Do not offer this timber for sale.

This alternative would result in not meeting any of the objectives outlined for this management action. Utilization of the forest resource would not be achieved. There would be no significant contribution to the State and local economies. This alternative would delay the management objectives planned for the area, deny making a source of raw materials available to the local wood products industry, and would delay the harvest of mature trees, prior to the onset of disease or insect infestation. Decay and infestation of sawtimber birch results in the loss of economic value.

VII. FINAL FINDING AND DECISION

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF FORESTRY
BEST INTEREST FINDING
NC-1402-F, "Nenana Ridge Mixed #4"

I. Formal review and response to objections, comments, or alternatives (summarized):

The Agency and Public review of the Forest Land Use Plan (FLUP) started on March 27, 2009 and ended on May 1, 2009. Advertisement was published in the Fairbanks Daily News-Miner on March 29, 2009 and April 5, 2009. The FLUP review advertisement was posted on the Department of Natural Resources, Division of Forestry web site on March 27, 2009. In addition, 144 requests for comments were either e-mailed or sent to various agencies, organizations and members of the public. No individual public comments were received, either for or against this particular proposed sale.

The Alaska DEC, Division of Water had no specific concerns for this sale. The ADF&G, Division of Habitat had no specific concerns for this sale but made a general comment that the FLUPs should reference the road type and standards found in Appendix F of the TVSF management plan. No Divisions within DNR had any comments on this sale.

II. Final Finding and Decision:

The purpose of this decision is to determine if the Department of Natural Resources, Division of Forestry, shall make available approximately 38 acres of spruce sawtimber located and birch fuelwood in Sections 15 and 16, Township 3 South Range 6 West, Fairbanks Meridian, Alaska.

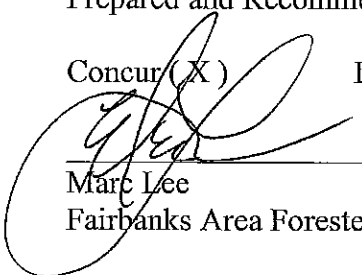
1. The sale meets the objectives of the Five-Year Schedule of Timber Sales and DNR'S constitutional mandate.
2. The sale meets the silvicultural objective of improving forest vigor, provides for a value-added end product and creates additional jobs in Alaska due to the combination of road building, logging, and trucking.
3. The sale complies with the management objectives of the TVSF Management Plan for Unit 6, which allows for commercial and personal use timber production while managing for dispersed and developed recreation.
4. Sale layout and design adhere with Region-III Riparian Standards. This sale is consistent with all statutes and plans.
5. The sale has undergone agency and public review and concerns have been resolved in the preparation, documentation and design of the sale.

The finding presented above has been reviewed and considered. The case file has been found to be complete. The requirements of all applicable statutes have been satisfied. Therefore, it is the finding of the Director that it **is in the best interest of the state** to approve this action under the authority of AS 38.05.035(e) and AS 38.05.110-120.

A person affected by this decision who provided timely written comment may appeal it, in accordance with 11 AAC 02. Any appeal must be received by June 5, 2009, and may be mailed or delivered to Tom Erwin, Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918, or sent by electronic mail to dnr.appeals@alaska.gov. If no appeal is filed by that date, this decision goes into effect as a final order and decision on June 8, 2009. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources. It is the Division of Forestry's intent to offer this timber sale by auction on or after June 9th, 2009. If no qualified bid is received within the time specified during the auction, the Division of Forestry may offer the sale for purchase over-the-counter without re-advertisement for not less than the advertised minimum bid.

Prepared and Recommended by: Jeremy Douse, Resource Management Forester

Concur () Do Not Concur ()



Marc Lee
Fairbanks Area Forester

05/06/09
(Date)