Public Notice

The Department of Natural Resources, Division of Forestry (DOF), gives notice under AS 38.05.945 that the Preliminary Best Interest Finding prepared under AS 38.05.035(e) on DOF's intent to proceed with a Long Term Value Added Negotiated Timber Sale NC-1591-F; ADL-420346 is available for public review. DOF would negotiate with Superior Pellet Fuels, LLC a 5-year timber sale high value-added processing contract. Your comments must be received by 4:30 p.m. on Friday, January 16 2015.

Copies of the Preliminary Best Interest Finding are available for review at DOF's, Fairbanks Area Office and on DOF's web page:

http://forestry.alaska.gov/timber/fairbanks.htm#flup

For more information or to submit comments please contact Paul Maki, (907) 451-2601, Division of Forestry, 3700 Airport Way, Fairbanks, Alaska 99709; or email paul.maki@alaska.gov.

The Department of Natural Resources complies with Title II of the Americans with Disabilities Act of 1990. Individuals with disabilities who may need auxiliary aids, services, or special modifications to participate in this review may contact the number above.

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



PRELIMINARY BEST INTEREST FINDING AND DECISION FOR A LONG TERM VALUE ADDED NEGOTIATED TIMBER SALE NC-1591-F ADL – 420346

December 1, 2014

I. PROPOSED ACTION

The Division of Forestry (DOF) is proposing to offer for sale approximately 3,500 acres (700 acres/year) of mixed spruce/hardwood sawtimber and poletimber from state lands within the Fairbanks Management Area. The volume to be offered totals approximately 28.1 million board feet (8.5 million cubic feet or 164,000 tons). DOF would negotiate with Superior Pellet Fuels, LLC a 5-year timber sale high value-added processing contract.

The management objectives for the proposed timber sale are:

- Harvest the commercial sawtimber and poletimber before significant decrease in vigor occurs.
- Return the site to a young productive mixed stand forest to include balsam poplar, birch, aspen, and white spruce.
- Provide timber products for the industry and the state and local economy.
- Provide access to accessible firewood for the residential heating needs of local residents.
- Provide access to future commercial timber sales in the Fairbanks Management Area.

II. STATUTORY AND REGULATORY AUTHORITY

The Division is taking this action under the authority of

- AS 38.05.035(e) Best Interest Finding;
- AS 38.05.110-120 and 11 AAC 71, Timber Sale Statutes and Regulations; and
- AS 41.17.010-950 and 11 AAC 95 Forest Resources and Practices Act Statutes (FRPA) and Regulations; and
- AS 38.05.123 Negotiated Timber Sales For Value-Added Processing.

III. ADMINISTRATIVE RECORD

The Division will maintain an administrative record regarding the decision of whether or not to proceed with the action as proposed. This record will be maintained at the DOF's Fairbanks Area Office filed as NC-1591-F.

IV. SCOPE OF DECISION

This preliminary best interest finding (PBIF) is step two of a five-step process used to design, sell, and administer timber sales. This PBIF covers the sale of approximately 3,500 acres of mixed spruce/hardwood sawtimber and poletimber from state lands within the Fairbanks Management Area. The following list summarizes the overall process:

Step 1: Regional planning. The Department of Natural Resources (DNR) develops area plans and state forest management plans to designate appropriate uses for state land, classify the land accordingly, and establish management guidelines for multiple use. These plans determine where timber sales are an allowed use, and what other uses must be considered when designing and implementing sales. Subsequent land use decisions must be consistent with the area plans. The area in this PBIF is covered by the Tanana Valley State Forest Management Plan and the Tanana Basin Area Plan. The

finding also considers the Fairbanks North Star Borough Comprehensive Plan and the Interagency Wildland Fire Management Plan.

Step 2: Best Interest Finding. A best interest finding is the decision document that:

- Establishes the overall area within which the timber sale may occur,
- Determines the amount of timber that will be offered for sale and the duration of the sale,
- Sets the overall harvest and reforestation strategy for the sale area,
- Determines whether the sale proposal complies with the Alaska Constitutional requirement to manage for sustained yield by evaluating the amount of timber in the sale and the annual allowable cut for the affected area,
- Selects the appropriate method of sale (i.e., competitive or negotiated sale), and
- Determines the appraisal method that will be used to determine the sale price.

The Preliminary Best Interest Finding (PBIF) is intended to provide sufficient information for reviewers to ensure that the best interest of the State will be served by the proposed action.

This PBIF covers the decision to sell approximately 3,500 acres of mixed spruce/hardwood sawtimber and poletimber from state lands within the Fairbanks Management Area in the form of a value-added processing negotiated sale for commercial use. After public and agency review of the PBIF, DOF will review comments, make changes as appropriate, and issue a final best interest finding. A person affected by the final decision who provided timely written comment or public hearing testimony on the preliminary decision may appeal it, in accordance with 11 AAC 02.

Step 3: Five-year Schedule of Timber Sales (AS 38.05.113). The Fairbanks Area Office prepares a Five-year Schedule of Timber Sales every other year. The Schedule identifies proposed sales, including their location, volume, and main access routes. The Five-year Schedule is a scoping document that provides an opportunity for public, agency, and industry to identify potential issues and areas of interest for further consideration in the Forest Land Use Plan. Proposed timber sales within the area covered by this PBIF must appear in at least one of the two Five-year Schedules preceding the sale. The proposed sale of timber within the area covered by this PBIF appears on the current Fairbanks Area Office's Five-Year Schedule of Timber Sales for Fiscal Years 2014-2018.

Step 4: Forest Land Use Plans (AS 38.05.112). Prior to authorizing harvest of timber on any area greater than 10 acres, the DOF must adopt a site-specific Forest Land Use Plan (FLUP) for the harvest area. DOF will prepare FLUPs for harvest areas within the overall sale area covered by this preliminary best interest finding. FLUPs specify the site, size, timing, and harvest methods for harvest units within the sale area. FLUPs also address site-specific requirements for access construction and maintenance, reforestation, and multiple use management. Draft FLUPs will be based on additional field work, agency and community consultation, and site-specific analyses by the DOF, and will be subject to public and agency review.

<u>Step 5: Timber sales and contracts.</u> Following adoption of the final best interest finding, and completion of the FLUPs, DOF will issue a notice of intent to negotiate a value-added processing contract with Superior Pellet Fuels. A variety of contract terms can be considered for negotiation. Once negotiations are complete, a final contract can be signed. The contract will include stipulations to ensure compliance with the best interest finding, FLUP, and statutory requirements.

<u>Step 6</u>: <u>Sale administration</u>. DOF administers timber sales and conducts field inspections to ensure compliance with the final best interest finding, FLUP, timber sale contract, and applicable laws, in-

cluding the Alaska Forest Resources and Practices Act and Regulations (AS 41.17 and 11 AAC 95), and forest management statutes and regulations in AS 38.05 and 11 AAC 71.

V. PROJECT LOCATION, LAND STATUS, AND DESCRIPTION

A. Location

This PBIF covers approximately 3,500 acres of State land within the Tanana Valley State Forest (TVSF) and classified forestry lands under the Tanana Basin Area Plan (TBAP). Three distinct regions comprise the area: Nenana Ridge 30 miles west of Fairbanks, Two Rivers 24 miles northeast of Fairbanks and Harding Lake 52 miles southeast of Fairbanks. The project is located within Sections 4, 9, 10, 16 Township 1 North, Range 4 East; Sections 7, 8, 17, 18, Township 1 South, Range 4 West; Sections 10-13 Township 1 South, Range 5 West; Sections 33, 34 Township 1 South, Range 6 West; Sections 6, 7, 16, 17, 20, 21, 28 Township 2 South, Range 4 West; Sections 1, 2, 11, 12 Township 2 South, Range 5 West; Sections 3, 4 Township 2 South, Range 6 West; ; Sections 6-8 Township 5 South, Range 5 East; Sections 6-8, 13, 22-24, 26, 27 Township 6 South, Range 5 East; Sections 18, 19, 21, 22, 25-28, 33-36 Township 6 South, Range 6 East and Sections 29-32 Township 6 South, Range 7 East, Fairbanks Meridian.

This area is found on USGS quads: Fairbanks C-3, D-3, D-4 and Big Delta B-5, B-6, C-6, and D-6 (see attached maps).

B. Title status

The proposed timber harvest areas are on General Selection land in portions of ten townships. There are no title restrictions on the parcels proposed for harvest. The acquisition authority and land classification are as follows:

Township, Range,	Acquisition Authority	Classification	Land Use
Meridian		Order	Plan
T 1 N, R 4E, F	GS-12 – Patented	NC-82-065 Forest	TVSF
T 1 S, R 4W, F	GS-34 – Patented	NC-82-065 Forest	TVSF
T 1 S, R 5W, F	GS-37 – Patented	NC-82-065 Forest	TVSF
T 1 S, R 6W, F	GS-33 – Patented	NC-82-065 Forest	TVSF
T 2 S, R 4W, F	GS-540 – Patented and GS-542 –	NC-82-065 Forest	TVSF
	Patented		
T 2 S, R 5W, F	GS-17 – Tentatively Approved	NC-82-065 Forest	TVSF
T 2 S, R 6W, F	GS-25 – Patented	NC-82-065 Forest	TVSF
T 5 S, R 5E, F	GS-1147 – Patented	NC-82-065 Forest	TBAP
T 6 S, R 5E, F	GS-1145 – Patented	NC-82-065 Forest	TVSF
T 6 S, R 6E, F	GS-1137 – Tentatively Approved	NC-82-065 Forest	TVSF
T 6 S, R 7E, F	GS-1135 – Patented	NC-82-065 Forest	TVSF

C. Land use planning, classification, and management intent

Most of the proposed area is within the Tanana Valley State Forest (units 4D, 4C, 5A, 6 and 7B). One of the proposed units is within the Tanana Basin Area Plan unit 1Y1 which is classified Forestry.

Township, Range,	Sale Unit Name	Sale	Area Plan Unit	Road
Meridian		Unit	Identifier	Access Type
		Number		
T 1 S, R 4W / 5W, F	Standard East	1	TVSF 4C	All Season
T 6 S, R 5E, F	Mosquito Creek	2	TVSF 7B, 7C	Winter
T 1S / 2 S, R 6W, F	Dunbar	3	TVSF 4D	All Season
T 5 S, R 5E, F	Salcha	4	TBAP 1Y1	Winter
T 2 S, R 5W, F	Ohio Creek	5	TVSF 5A	All Season
T 6 S, R 5E / 6E, F	Mosquito Creek 2	6	TVSF 7B, 7C	Winter
T 2 S, R 4W, F	Bonanza	7	TVSF 5A	All Season
T 6 S, R 6E, F	Junction Creek	8	TVSF 7B	Winter
T 1 N, R 4E, F	Flat Creek	9	TVSF 6	All Season
T 6 S, R 6E / 7E, F	Democrat Creek	10	TVSF 7B	Winter

There are no specific restrictions stated in the TVSF Management Plan or TBAP that are applicable to this proposed project. The proposed harvest units are designed to be consistent with the intent of the two plans. All areas are open to subsurface use and mineral entry.

The Fairbanks North Star Borough Comprehensive Plan supports forest development activities while minimizing land use conflicts.

The Interagency Fire Management Plan includes these lands in the "Full" protection category.

D. Current access and land use:

The area is currently accessed via all season and winter logging roads and trails. Most of the trails are locally constructed routes that change over time. More established trail routes are present in Township 6 South, Range 6 east. In this township two old RS 2477 mining trails include Caribou Creek Trail and Redmond Creek Trail. About 41% of the proposed harvest is on the Nenana Ridge; 10% in the Two Rivers area and 49% in the Harding-Birch Lake area.

The Division of Forestry manages all the land within the harvest areas with the exception of Township 5 South, Range 5 East where the Division of Mining, Land and Water (DMLW) manages the land with guidance from the Tanana Basin Area Plan. There are no private or non-state lands adjacent to the proposed timber sale. Access will use local roads, existing timber sale roads and winter access routes where possible and then extend these as needed to reach the individual sale areas. Only the Two Rivers tract utilizes a timber sale road that is dual purpose in that the road provides access to a borough subdivision and elementary school. This road has provided wood cutting opportunities for the pubic for years on both state and Fairbanks North Star Borough lands. It is also used to provide four-wheeler and snow machine access to a fire line ridge trail that ties into the popular Compeau Trail. The proposed timber sale is not anticipated to have any adverse impacts on private property or land use along the Two Rivers road system.

Multiple trap lines and recreational trails are within the general vicinity. Local residents and hunters from throughout the state use this area for sport hunting. Berry and mushroom picking, hiking, bike riding, predator calling, snow machining and mushing are also popular activities.

An especially large number of hunters utilize the all-season logging road network during the fall moose hunting season and this continues on for grouse and hare hunting as well.

E. Background and description of proposal

1. <u>Background</u>: Superior Pellet Fuels, LLC on November 26, 2013 requested that the Division of Forestry consider offering a negotiated timber sale for value-added processing as set forth in Alaska Statute (AS) 38.05.123. DOF determined that Superior meets the requirements of AS 38.05.123 by its production of high value-added wood pellets and wood pellet fuel logs. By offering a negotiated sale, Superior would have more certainty in its resource supply and be able to expand production at its facility, a goal of the high value-added statute. Superior requested 30,000 tons of green raw material on an annual basis for up to 10 years with a species distribution of 90% spruce and 10% aspen/balsam poplar. The raw wood resource products would be in the form of logs to a minimum top of about 4-inches where they would be debarked at the facility prior to manufacturing. DOF developed a response based on review of timber stand inventory, timber sale history and transportation data sources to determine viability of the sale duration and volume requested.

Results of the assessment determined that stands of white spruce sawtimber were not found to be underutilized or available due to historic and current demand for white spruce sawtimber by local mills. Section (i) of AS 38.05.123 states that a negotiated sale does not affect other timber harvest programs. The investigation did find however, that there exists a currently underutilized volume of mixed stands that include varying compositions of white spruce, black spruce, aspen, birch and balsam poplar in poletimber and sawtimber size classes. Due to Superior's continued research into its species mix in the pellet manufacturing process, it was deemed prudent to limit the scope of the proposed negotiated sale to 700 acres per year with a single initial five year period. DOF has designed this proposal to provide as much timber as possible from state land for Superior's needs while protecting fish, wildlife, water resources, and avoiding impacts to local access, recreation uses and archaeological sites. Harvest of these mixed stands would provide a portion of the volume requested, but would not be sufficient to provide all the timber requested, especially for the spruce component. The balance of the volume would need to be procured through alternative timber sale purchases or from other timberland owners. Superior has not requested the use of birch for its facility although it continues to test the use of this species in the pellet log line. In the interim Superior will purchase birch in this sale at established appraised rates.

2. <u>Timber volume and sustained yield</u>: The project area has an estimated volume of 28.1 million board feet (8.5 million cubic feet or 164,000 tons) on approximately 3,500 acres of land. Volume estimates are based on the 2013 Tanana Valley timber inventory.

Species	Total Cubic	Total Tons	Total Board Feet
Aspen	533,075	11,461	879,678
Balsam Poplar	260,620	5,603	791,685
Birch	1,961,065	49,027	5,413,834
Black Spruce	203,290	3,456	267,755
White Spruce	5,574,330	94,764	20,711,069
Grand Total	8,532,379	164,311	28,064,021

- 3. The Fairbanks Area Annual Allowable Cut (AAC) is calculated at approximately 4,600 acres of harvest annually. The sustained yield (SY) volume is calculated at over 9.250 million cubic feet. Harvest duration for this proposal is expected to occur over a 5-year period with an annual harvest of 1.7 million cubic feet. This action alone or in combination with timber sales (proposed or sold) will not exceed the Fairbanks AAC or SY volume due to the proposed harvest size or anticipated sale schedule.
- 3. Harvest unit design: Unit size is anticipated to range between 10 acres and 350 acres. Partial cuts, shelterwood, and clearcuts will be utilized to harvest the timber volumes. The specific silviculture prescription will be identified in the FLUPs. Sale unit boundaries will be located in proximity to the existing road system and along naturally occurring vegetative type changes within the area. The units will not be laid out in a block fashion. Islands of un-cut trees will be left in the units to maximize natural regeneration, and provide for wildlife habitat and visual screening. The sale areas will be designed to encourage harvest of all species in the poletimber and sawtimber size classes within the designated harvest units. All harvests shall be managed on the landscape with the intent to minimize impacts to other land uses listed in the TBAP and TVSF Management Plan. Harvests will be subject to FRPA and regulations.
 - a. Reforestation and site preparation: The sale area will be reforested in compliance with the FRPA regulations (11 AAC 95.375-.390). Passive, natural reforestation will be used due to expected initial re-growth of the area by hardwood species. Spruce is expected to regenerate two to three years later due to the dependence on seeding from adjacent and residual white spruce. Sale areas where the stand composition is a mixture of spruce and birch will be scarified to create a more receptive seed bed for natural regeneration. Scarification will be avoided on steep slope segments or when soils are excessively wet. Machinery will be operated along the contour of sloping ground. Scarification will not be required in areas of mixed spruce and aspen because aspen is expected to rapidly regenerate from root sprouting.
 - b. Access design and construction: Access design, construction, and maintenance will comply with the Forest Resources and Practices regulations (11 AAC 95.285-.355). A total of about 30 miles of new road is proposed for access. Half of this length is winter road construction and a large portion of this is on existing unimproved pipeline/powerline and mining routes which will require rather minimal road building effort. Three streams would be crossed by access roads. All of the stream crossings will be in winter. Only the Little Salcha River is anticipated to require a Fish Habitat Permit for a winter stream crossing (AS 16.05.871 (b)). Ice may have to be thickened here by pumping water onto the frozen surface. Ice bridge construction will be made in a direction perpendicular to the direction of stream flow and at locations with gradually sloping banks. Snow or ice approach ramps will be mostly free of debris, vegetation, rock or soil to avoid the introduction of these materials into the stream at breakup. The other two streams are quite small and flow through broad black spruce covered valley bottoms. These will be frozen naturally without additional ice augmentation. Berming of trees and brush (mostly small black spruce trees) will not be permitted across water features.

Sale Unit Name	Access Location and Type	Stream Crossings
Standard East	Existing Standard East primary all season logging road and spurs. No new road construction except skid trails.	None
Mosquito Creek	Existing Mosquito Creek primary and secondary all season and Mosquito Creek secondary winter logging road. Two new winter spurs 1.2 miles total.	None
Dunbar	Existing Standard Creek primary all season logging road and spurs. One new all season spur 1.25 miles.	None
Salcha	New secondary winter road construction 3.4 miles south from Johnson Road. Note: 1.2 miles of this road is along cleared power line/old Haines pipeline right of way.	Little Salcha River, Type-IIIA. Will be crossed with ice bridge.
Ohio Creek	Existing Skinny's primary all season road, Skinny's East secondary road. New all season secondary road construction will extend Skinny's East 3.1 miles.	None
Mosquito Creek 2	Existing Mosquito Creek primary and secondary all season and Mosquito Creek secondary winter logging road. Three new winter spurs 2 miles total.	None
Bonanza	Existing Bonanza Creek primary all season logging road and spurs. One new all season spur 1.1 miles.	None
Junction Creek	Existing Mosquito Creek primary and secondary all season and Mosquito Creek secondary winter logging road. New secondary winter road 2.75 miles. New winter spur .5 miles.	Mosquito Creek, Junction Creek, Type- Other Surface Waters. Will be crossed with ice bridge or natural ice/snow.
Flat Creek	Existing Two Rivers primary all season logging road. New primary road construction 8.5 miles. Note: 4.9 miles may be already constructed for existing over the counter timber sale.	None
Democrat Creek	Existing Mosquito Creek primary and secondary all season and Mosquito Creek winter logging road. New secondary winter road 3.5 miles beyond Junction Creek unit. Three new winter spurs 1.5 miles total.	None

All season roads constructed as part of this sale are in upland areas where it is expected to have no impact to fish and water resources. Roads will be constructed mostly of native materials on site and will be out-sloped with rolling dips to control any silt runoff. Proposed forest access roads will be constructed to a secondary standard with the exception of the Two Rivers extension which will be a primary standard. Winter roads will be used in valley bottoms where associated permafrost and poorly drained soils occur. Winter roads will be constructed so as to leave the organic mat in place to avoid the melting of ground ice which can lead to ground settling and thermokarsting.

Through careful planning, the area will be reduced that is covered by skid trails, roads and landings. Timber sale contracts will require measures to prevent erosion including installation of water bars, rolling dips, and placement of culverts where needed. Following the sale all primary and secondary roads will be active and maintained. It is anticipated that these roads will be used for future timber sale access for the Fairbanks Area. If it is determined that a particular road segment will no longer be needed, it will be closed as per FRPA regulations. Generally, DOF applies for public easement rights of ways for its long-term routes. These routes include many of the all season primary forest roads in the Fairbanks Management Area. DOF will apply for a public easement right of way for the Two Rivers road extension.

- 4. <u>Appraisal method:</u> DOF will appraise the timber value in compliance with 11 AAC 71.092 and under the provisions of AS 38.05.123. Per 11 AAC 71.092 when the commissioner considers entering into a timber sale contract under AS 38.05.123,
 - the commissioner will establish a base price for timber stumpage that represents the cost to the Division of Forestry of administering the timber sale contract after purchase; the Division of Forestry may not sell the timber for less than its base price;
 - 2. the base price for timber determined under (1) of this subsection is subject to adjustment; the commissioner will, in the commissioner's discretion, establish an initial stumpage rate; the rate is set by adding adjustments to the base price based upon factors that include, but are not limited to,
 - a. the projected or actual percentage of the volume of timber sold under the contract that is locally manufactured into high value-added wood products or other value-added wood products; and
 - b. the projected or actual costs to the purchaser of the timber of establishing or improving local manufacturing facilities for the wood products.

The DOF believes that it is in the State's best interest to establish a base price and initial stumpage rate for this sale as follows:

At a minimum the DOF will cover its costs of preparing and administering the sale of timber through the price it receives for the timber. These costs will include the costs of designing, engineering, laying out the harvest and transportation systems along with estimating the timber volume and values, and developing the specific FLUPs. Other agency costs not specifically paid by the Legislature in designated or operating funds that are needed to ascertain site specific issues that affect the long term viability of the land and resources will also be included as well as the subsequent administration of the sale by DOF to protect the State's interest. At this time the DOF estimates it will require the addition of one full-time Forester II plus vehicle expense. The above items will determine the base price.

The initial stumpage rate will be established at the beginning of the five year contract period. A standard for wood utilization will be developed cooperatively with Superior Pellet Fuels that reflects the utilization in the Fairbanks area, industry standards, FRPA and other environmental requirements. The DOF will estimate the highest and best use of the products in the operating area. Based on transactional evidence and market demand, DOF will set the stumpage rate for the products used in the high value-added manufacturing process and for any fuelwood not able to be utilized. The DOF will factor in local de-

mand and economies of scale in its decision to differentiate between fuelwood products and the remainder of the stumpage in a given operating area. It is anticipated that the method of payment will be based on a weight scale basis.

F. Resources and management

1. Timber:

- a. <u>Timber stand composition and structure</u>: The forest stands are a mixture of mature white spruce, black spruce, birch and aspen. Balsam poplar occurs in some of these stands as a minor species component. There are some smaller stands of younger material interspersed in the sale area but the predominant size classes are pole and saw-timber. An estimated 12% of the stands are spruce, 56% mixed spruce-birch, and 32% mixed spruce-birch-aspen. Areas at higher elevation (above 1,200 feet) contain higher concentrations of black spruce mostly of poletimber size and smaller.
- b. <u>Stand silvics</u>: All stands have originated from fire disturbance and contain evidence of charred wood and scarred trees. The oldest mixed birch-spruce stands (150-200 years) are rather decadent and have little height growth. Some loss is occurring due to rot, bud worm and bark beetles. The mixed spruce-birch-aspen stands are generally more thrifty, show more diameter and height diversity and have more advanced spruce regeneration. These sites are generally on southerly aspects.

White spruce (*Picea glauca*) occurs in pure stands and in mixed stands with balsam poplar (*Populus balsamifera*), birch (*Betula papyrifera*), aspen (*Populus tremuloides*) and black spruce (*Picea mariana*). It attains its best development on well drained to moderately well drained silt loams. The well stocked white spruce type represents the most productive sites and is considered to be the climax vegetation on the well drained upland sites. White spruce regenerates best on mineral seed beds although seed production is erratic with good seed years up to 12 years apart.

Paper birch occurs in pure stands but also within a mix of white spruce, black spruce and other hardwoods. Birch attains its best development on well-drained silt loam soils. The stands generally result from fires where adjacent unburnt birch trees spread considerable amounts of seed on the newly exposed sites. Birch can also regenerate vegetatively via stump sprouting. Upland stands typically grow on aspects other than due north or due south.

Quaking aspen occurs in pure stands but also within a mix of white spruce, black spruce and other hardwoods. Aspen attains its best development on well-drained silt loam soils, but on areas that are warmer than the birch sites. Stand development results from fire similar to birch. Aspen can also be regenerated vegetatively via root sprouting. Root sprouting is best accomplished by totally removing the overstory which stimulates the roots to send out new aboveground shoots. These shoots become new trees as clones of the original stand.

c. <u>Topography and Soils</u>: The proposed sale will be designed and managed to prevent significant impairment of the land and water with respect to renewable resources (AS 41.17.060(c)(5)). All stand units are situated on upland sites with varying slope

steepness and aspect. There are no floodplain stands designated in the proposed timber sale. Slope steepness ranges from 5-45%. There are few rock outcrops and soils are relatively deep providing for a low risk of erosion. Soils are generally productive and include the Fairbanks and Steese soil series classification. These soils are well drained silt loam, formed in silty loess and underlain by fractured schist. The Steese soils, found at the higher elevations are somewhat shallower than the Fairbanks soil series. Permafrost is a common feature in the low areas of the tract, but it is discontinuous. Much of the proposed winter road construction is in these areas. Northfacing slopes, alluvial terraces, flat benches and depressions filled with organic matter may have ice near the soil surface. South-facing slopes generally lack permafrost.

- 2. <u>Agriculture:</u> Current agriculture activity in the area is mostly centered south and north of Johnson Road which is over 4 miles from the Salcha timber sale unit. Activities in the sale unit are not expected to affect these agricultural uses.
- 3. Wildlife habitat and harvest: Most common species of wildlife that are normally found in interior Alaska forests inhabit the area. During ground reconnaissance moose were sited and sign was observed. There were no eagle nests seen. No critical wildlife habitat has been identified for this area (TVSF Management Plan), nor has any become apparent during ground reconnaissance. Proposed harvest treatments are projected to enhance habitat conditions for ruffed grouse, moose, voles, hares, and ultimately, lynx, marten and fox. By prescribing a variety of unit sizes, shapes and un-cut inclusions, managing for wildlife habitat diversity will be accomplished and will mimic the results of wildfire or other stand replacement phases such as insect outbreaks or wind events.

Hunting and trapping occur in the area. Active trap lines are located in the vicinity of the proposed harvest areas. Historically, there has been significant hunting activity in the area due to relatively high moose density and close proximity to Fairbanks. Hunters utilize the existing logging road network and new access development will provide additional areas for hunters. Re-growth in previously logged areas provides prime wildlife habitat and hunters utilize the road system to scout and hunt in these areas.

4. Fish habitat, water resources, and water quality: The proposed sale will be designed and managed to protect fish habitat and water quality in compliance with the Forest Resources and Practices Act and regulations (AS 41.17 and 11 AAC 95). Perennial and seasonal surface waters, ponds and marshes lie within the project area. The Little Salcha River, a Type III-A non-glacial anadromous water body, is located in the southeast portion of the project area. It is a tributary of the Tanana River. A Fish Habitat Permit will likely be required from the Alaska Department of Fish and Game Division of Habitat to construct winter access across this stream to the project area.

Smaller tributaries of the Salcha River include Mosquito Creek, Redmond Creek, Junction Creek and Democrat Creek. These creeks are southeast of the Little Salcha River. These significant water bodies are along access routes but do not lie within the proposed harvest units themselves. DOF will utilize winter roads to cross these streams and employ FRPA standards at all crossing sites. If additional winter stream crossings require Fish Habitat Permits from the ADF&G Division of Habitat, they will be pursued as needed and according to statutory requirements. There are no adverse affects anticipated upon the fish resources or on water quality from the proposed project at this time. Adherence

to careful road construction and maintenance practices will be necessary to insure that water quality for fish habitat is maintained.

There is no commercial fishing in the area. Sport fishing occurs on the Little Salcha and Salcha Rivers.

5. Recreation, tourism, and scenic resources: General recreational use of the all season accessible areas is moderate to high. Much of the winter ground currently has limited access and recreation use is low. All season roads provide readily available access and are used for a variety of recreation activities. Tourism activity in the form of dog mushing is important in the Two Rivers area where a number of kennels are present along Chena Hot Springs Road. Dog mushing races also occur on trails in the area. Two Rivers Road also provides four-wheeler and snow machine access to a fire line trail that leads to the popular Compeau Trail within the Chena River State Recreation Area.

Multiple trap lines and recreational trails are within the general vicinity. If any trails are encountered during road construction, contractors will provide for trail crossings as well as post warning signs along the road.

The region's scenery includes lakes and streams that draw recreational users and views south to the Alaska Range. Typical interior Alaska views of forested vistas and mountainous horizons typify this area. Visual impacts from the proposed harvests are not anticipated to be within view of the general public. Sale area layouts will mimic the irregular borders associated with natural disturbances in areas where scenic values are of concern. The Parks Highway was designated an Alaska State Scenic Byway in 2008. The TVSF Management Plan provides guidance on timber sales in this area and specifies timber and road development be sited and designed to enhance views or minimize adverse impacts on scenic views from the Parks Highway.

- 6. <u>Cultural Resources:</u> DOF works with the State Historic Preservation Office (SHPO) to identify and avoid known cultural, historic or prehistoric sites in planning the proposed access routes and salvage areas. If additional archaeological sites are identified, proposed salvage areas and road locations will be appropriately adjusted to avoid conflicts. If any historic or archaeological sites are encountered during road construction or harvest activities, DOF will immediately inform SHPO and take action to protect the findings. DOF has consulted with the State Historic Preservation Office (SHPO) on past timber sales in proximity to the proposed area.
- 7. <u>Subsurface Resources:</u> A large block of mining claims are present east of the Democrat Creek area of the proposed sale. None of the proposed sale areas themselves are within active mining claims. There has been no recent development of mines on these claims but old mining remains are present in the area. Winter access development along the Redmond Creek Trail is not expected to effect subsurface activities in this area.

G. Costs and benefits

No significant negative economic effects are anticipated upon the timber markets, local or regional, as result of this proposed action. Harvest of the proposed timber volume is in mixed stands that are generally not favored by the current timber industry. The industry is

currently targeting spruce sawtimber stands for sawn products and house logs and birch stands for fuelwood. By providing a reliable and predictable supply to Superior Pellet Fuels the company will be able to invest in its manufacturing process and expand its production of wood pellets and wood pellet fuel logs. This has the benefit of creating jobs both in the manufacturing facility as well as in the forest. Use of the clean burning pellet products also reduces air pollution that is important for the Fairbanks area where particulate emissions often exceed winter air quality standards.

The Division of Forestry has provided personal use firewood permits and commercial sales from this area to ensure an adequate supply of firewood for local residents and sawtimber for commercial operators. This use is expected to continue during this proposed five year sale period and DOF will continue issuing permits and offering sales in this area. Road access construction for the proposed sale will facilitate this process.

VI. PUBLIC REVIEW

The public and agencies are invited to comment on this Preliminary Best Interest Finding. Objections or comments pertaining to the proposed action must be received in writing by the DOF Fairbanks Area Office by 4:30 PM on January 16, 2015, in order to ensure consideration for review. Comments should be mailed to the State of Alaska, Division of Forestry, Fairbanks Area Office, 3700 Airport Way, Fairbanks, Alaska, 99709 or by email to paul.maki@alaska.gov. Fairbanks Area Office phone number is 907-451-2601. To be eligible to appeal the final decision, a person must have provided written comment by 4:30 PM on January 16, 2015.

VII. PUBLIC NOTICE

This PBIF will be publicly noticed in compliance with AS 38.05.945. Notice will be posted on the Alaska Online Public Notice System (http://aws.state.ak.us/OnlinePublicNotices/) and the Forestry Timber website (http://forestry.alaska.gov/timber/fairbanks.htm#flup).

VIII. ALTERNATIVES AND DISCUSSION

There are four possible alternatives to consider for this project area. A discussion of each of the four alternatives follows. All alternatives are consistent with the area plan and applicable statutes and regulations.

A. Conduct the project as proposed:

This alternative meets the objectives for timber harvest under AS 38.05.123 Negotiated Timber Sales For Value-Added Processing. Timber harvest will return the site to a young productive mixed forest and provide commercial timber products. It will also provide fuelwood to the local area. Additional employment opportunities will occur associated with timber harvest operations, transportation and value-added processing.

B. Modify the project by making it smaller or larger

The estimated volume and acreage of timber to be harvested under this proposed sale as stated in this Preliminary Best Interest Finding is designed to accommodate a request from Superior Pellet Fuels for a negotiated timber sale for value-added processing while balancing the needs of other

commercial timber users and public use activities. There is little opportunity to increase the size of the proposed project because additional commercial sized timber is not in areas where access is within a reasonable working circle of the manufacturing facility. Some commercial stands were left out of the proposal or were not feasible due to access development costs. Decreasing the size of the project would not meet the needs of Superior Pellet Fuels in the utilization of the facility and potential market growth.

C. Defer the project to a later date:

Deferring harvest to a later date would result in loss of a raw resource supply for Superior Pellet Fuels. Superior has expanded its market share in each of its four years in operation. While growing its operations in the Fairbanks area, the facility is now expanding into supplying village pellet boilers along the road system. Delaying this project would not allow the timber industry to utilize the available sawtimber/poletimber, and local area residents would not have access to firewood that is in extremely high demand.

D. Cancel the project:

Canceling the project would not meet the objectives outlined for this management action. The stands of over-mature timber would not be utilized, and there would be no contribution to the State and local economies.

IX. RECOMMENDATION AND PRELIMINARY DECISION

After due consideration of all pertinent information and alternatives, the DNR has reached the following Preliminary Decision: To offer for sale approximately 3,500 acres of sawtimber/poletimber products to Superior Pellet Fuels. The company will be utilizing the material to manufacture high value-added wood pellets and wood pellet logs in the Fairbanks and surrounding area as proposed in Alternative A and described in this PBIF. The DOF finds that this preliminary decision satisfies the objectives stated in this document and it may be in the best interest of the State to proceed with this action under its authority of AS 38.05.035(e) (Powers and Duties of the Director) & AS 38.05.110-120; 11 AAC 71 (Timber Sale Statutes and Regulations).

In addition, the Division finds that this sale has been listed with respect to AS 38.05.113 (Five-year Schedule of Timber Sales) as defined by 11 AAC 71.010(d). It also has been determined that Superior Pellet Fuels qualifies for a negotiated value-added timber sale under AS 38.05.123. I find that this proposed action may be in the best interest of the State, and approve it to proceed to public notice.

A person is eligible to participate in any appeal or request for reconsideration to the final finding if s/he has submitted comment to the preliminary finding and decision during the comment period. If you have any questions, please contact Paul Maki, Acting Fairbanks Area Forester, at paul.maki@alaska.gov or 907-451-2601.

X. ATTACHMENTS

Maps:

Map 1 Proposed Project Vicinity Map

Map 2 Proposed Project Area Nenana Ridge

Map 3 Proposed Project Area Two Rivers

Map 4 Proposed Project Area Harding Lake

Appendix A: Tanana Valley State Forest Road Specifications

Appendix A - Northern Region Forest Road Standards (Tanana Valley State Forest Management Plan)

Design Considerations					
	Level of Use	Curve Radius	Grade	Drivable Surface	Turnouts
Primary all- season road ⁽¹⁾	Moderate to Heavy; Long Term; Year-round	300' normal design 100' minimum ⁽²⁾ Curve widening on minimum radius curves	8% Normal 10% Maximum	16'-20' Width and Rock Surfacing may be Required.	Not Required if Driving Surface ≥ 18'. Otherwise 1000' feet Max. interval. Intervisible. 25' ingress, 25' egress, 50' Full. 12' Width
Secondary all- season road	Light to Moderate; Long Term; Year-round	100' normal design 60' minimum ⁽²⁾	15% Max. Favorable 10% Max. Adverse	12'-16' Width.	Same as Above
Spur Road	Light; Short Term	Same as Secondary All- Season Road	20% Maximum	10'-16' Width.	Not Required
Primary Winter Road	Moderate to Heavy; Long Term	Same as Primary All- Season Road	Same as Primary All- Season Road	16' to 20' Width	Same as Primary All-Season Road
Secondary Winter Road	Light to Moderate; Medium to Long Term	Same as Secondary All- Season Road	Same as Secondary All- Season Road	Same as Secondary All- Season Road	Same as Primary All-Season Road

Note (1) - Higher construction standards may be needed for site specific projects and conditions.

Note (2)- To be applied only under topographically limiting conditions.

Appendix A - Northern Region Forest Road Standards (Tanana Valley State Forest Management Plan)

Construction Considerations					
	Cut and Fill	Clearing ³	Grubbing	Debris Disposal	Permafrost
Primary all- season road ⁽¹⁾	Fill slope 1.5: 1 Max. Cut slope 1:1 Max. excepting Loess soils where vertical cuts are acceptable See also 11 AAC 95.290c.	5' beyond cut and fills or min. 35' width. Merch. Timber cut and decked ahead of Construction.	Removal of Stumps, roots, and organics from road bed to outside of ditches unless tops of stumps under 2' of fill	If ≥ 2' beyond ditches, windrow or place in pushouts. If ≤ 2' bury under min. 1' of fill.	Avoid exposing thaw unstable permafrost through routing or using raised fill construction. If exposed, min. sedimentation w/ effective erosion controls. See 11 AAC 95.290c.
Secondary all- season road	Same as above	5' beyond cut and fills or min. 30' width. Merch. Timber cut and decked ahead of Construction.	Same as above	Same as above	Same as above
Spur Road	Avoid where reasonable and prudent	Min. 12' width. Merch. Timber cut and decked ahead of Construction.	Under Drivable Surface	Use Windrowing or Push- out techniques as appropriate	Avoid exposing thaw unstable permafrost. If exposed, stabilize by treating w/ effective and appropriate measures, sp. Recovering, seeding, drainage struct. And settling basins. See 11 AAC 95.290c., g.; 295 g.
Primary Winter Road	Minimize cuts and fills in thaw-unstable permafrost. Avoid where feasible and prudent, cuts in thaw unstable permafrost; exceptions will be identified in FLUP.	Minimum 16'	Partial removal of surface organics only as needed to provide a level running surface.	Same as Spur Road	Same as Spur Road
Secondary Winter Road	Avoid where feasible and prudent, cuts in thaw unstable permafrost; exceptions will be identified in FLUP.	Minimum 12'	Same as Primary Winter road Road	Same as Spur Road	Same as Spur Road

Note (1) - Higher construction standards may be needed for site specific projects and conditions.

Note (3)- Minimum is used for safety and snow storage reasons

Appendix A- Northern Region Forest Road Standards (Tanana Valley State Forest Management Plan)

Maintenance Considerations					
	Ditches	Culverts	Maintenance		
Primary all- season road ⁽¹⁾	1.0' Min. Depth; 2.0 Min width. Block Ditch on Down hill Side of culvert inlet where needed.	Min.Dia 12" except as stated in 11 AAC 95.295. Installed at or below natural ground line and natural stream gradient.	Grading and Ditching as Necessary		
Secondary all- season road	Block Ditch on Down hill Side of culvert inlet where needed.	Same as Above	Grading and Ditching as Necessary. Maintained or Closed after logging use.		
Spur Road	As Needed	Same as Above	Closed or treated as per 11 AAC 95.315(c) after logging use		
Primary Winter Road	None	Same as Above	Open drainages before breakup.		
Secondary Winter Road	None	Same as Above	Closed or treated as per 11 AAC 95.315(c) after logging use. Open Drainages before breakup.		

Note (1) - Higher construction standards may be needed for site specific projects and conditions.