STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES **DIVISION OF FORESTRY**



FAIRBANKS-DELTA AREA FORESTRY

PRELIMINARY BEST INTEREST FINDING AND **DECISION FOR**

NENANA RIVER AREA TIMBER HARVESTS

NC-1801-F, NC-1802-F, NC-1803-F, NC-1804-F

SEPTEMBER 2021

I. PROPOSED ACTION

Alaska Division of Forestry (DOF) is proposing to offer for sale approximately 200 acres of white spruce timber from state lands in the area along the Nenana River, southwest of the community of Nenana. The volume to be offered totals approximately 400,000 cubic feet or about 1,680,000 board feet. DOF would sell the timber as negotiated, competitive bid, or value-added timber sales for commercial use. Some of the land covered by this Preliminary Best Interest Finding (PBIF) appeared in the Northern Region Five Year Schedule of Timber Sales (FYSTS) as Nenana Spruce #3, 4, 9, 10, and 16. For the timber sales NC-1801-F and NC-1802-F, the PBIF and FLUP are being issued at the same time. DOF has previously issued final decisions on other nearby timber sales and maintains copies of those documents and the timber harvest contracts that followed.

The management objectives for the proposed timber sales are:

- Provide timber products for the industry and the state and local economy.
- Return the site to a young productive mixed stand forest to include balsam poplar, birch, aspen, and white spruce.
- Provide access for firewood for the residential heating needs of interior Alaska communities
- Protect valuable non-timber resources by applying Best Management Practices for Timber Harvest Operations (BMPs) to all timber harvest activities.

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 Statutes and Regulations.

III. ADMINISTRATIVE RECORD

The Division will maintain an administrative record regarding the decision of whether to proceed with the action as proposed. This record will be maintained at DOF's Fairbanks Office filed as NENANA RIVER TIMBER HARVESTS NC-1801-F, NC-1802-F, NC-1803-F, NC-1804-F.

IV. SCOPE OF DECISION

This preliminary best interest finding (PBIF) is the first part of step three of a six-step process to design, sell, and administer timber sales. 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 Yukon-Tanana Area Plan (YTAP). The finding also considers the Interagency Wildland Fire Management Plan. There are no Community Wildfire Protection Plans in this area. The proposed area is not within a municipality; therefore no municipal plans apply.

Step 2: Five-year Schedule of Timber Sales (AS 38.05.113). DOF'S Northern Region Office (NRO) prepares a Five-year Schedule of Timber Sales once every two years. The Schedule identifies proposed sales, including their location, volume, and main access routes. The Five-year Schedules are scoping documents that provide an opportunity for public, agency, and industry to identify potential issues and areas of interest for further consideration in the best interest finding and Forest Land Use Plan. A proposed timber sale must appear in at least one of the two Five-year Schedules preceding the sale.

<u>Step 3: Best Interest Finding</u>. 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 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.

After public and agency review of the PBIF, DOF will review comments, make changes as appropriate, and issue a final best interest finding (BIF). DOF must adopt a final BIF before selling timber. 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 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 the harvest areas within the overall sale area covered by this best interest finding. FLUPs specify the site, size, timing, and harvest methods for harvest unit 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 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 FLUP(s), DOF will offer the timber for sale by auctioning competitive sales and/or negotiating some sales with purchasers. The Division will sign a contract with the winning bidder for each sale. The contract will include stipulations to ensure compliance with the best interest finding, FLUP, and statutory requirements.

<u>Step 6: 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, including 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

The proposed sale area is located within Sections 3 and 4, Township 5 South Range 8 West, Fairbanks Meridian. The sale area is shown on the attached map and is within United States Geological Survey 1:63,360 Quadrangle map titled Fairbanks C-5.

B. Title status

The acquisition for the land upon which the sale is proposed is based on General Selection 20. The land estate is Tentatively Approved; thus the State has management authority.

C. Land use planning, classification, and management intent

The primary land classifications for the area are Forestry and Wildlife Habitat per Classification Order NC-90-002. The proposed sale area is within Unit P-48 of the Yukon Tanana Area Plan (YTAP). There are no other special conditions noted in the plan for this area. A Native allotment is located adjacent to the proposed road route and a second allotment is located south of the Teklanika River ½ mile south of the proposed secondary winter road route.

The sale areas are open with respect to mining.

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

This area is not within a municipality; no municipal plans apply.

D. Current access and land use: The access to the proposed sale is by secondary winter road north of the Teklanika River. This existing road will not require reconstruction other than snow plowing. An ice bridge will be required to cross the Teklanika River and a Fish Habitat Permit for the river crossing will be required to access the area. Access routes will be maintained to the secondary winter road standards set out in the TVSF Management Plan and in the AFRPA.

E. Background and description of proposal

1. <u>Background</u>: Recent harvest activity as well as the completion of a bridge over the Nenana River has led to some renewed interest in timber stands along the Teklanika and Nenana Rivers. To continue to supply the local industry here in Fairbanks, logs are being transported longer distances than they have in the past, with logs already being hauled as far away as Delta Junction and Nenana.

DOF is implementing "geographic area" Best Interest Findings in some areas, which allows a broader geographic area management opportunity. Specific and detailed management actions will be detailed in successive FLUP(s), written in areas where a BIF has been completed.

- 2. <u>Timber volume and sustained yield</u>: 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 outlined in the publication Timber Inventory of State Forest Lands in the Tanana Valley (Hanson, 2013). This sale complies with sustained yield/allowable cut principles outlined in the Fairbanks Area Five-Year Schedule of Timber Sales for FY 2020-2024. The AAC for the Fairbanks Management Area is approximately 4,606 acres, and this sale is 200 acres. This action alone and in combination with other timber sales that are sold will be within the allowable cut and comply with sustained yield requirements.
- 3. <u>Harvest unit design</u>: Harvest units were designed along natural timber type changes and followed other natural features. The sale will be harvested by the seed tree silvicultural system. White spruce trees nine inches dbh and larger will be removed. Snags, residual white spruce and all birch will not be cut. Residual trees will be protected from damage during harvest operations although over mature birch may be used as bumper trees to protect patches of advanced spruce regeneration. Harvesting will be by the whole tree yarding system. Slash disposal at the landings will be by burning or by salvage for fuelwood use.
 - a. Reforestation and site preparation: The sale area will be reforested in compliance with the Forest Resources and Practices regulations (11 AAC 95.375-.390) Natural regeneration will be utilized initially for regeneration. Opening the site will cause a large vegetative release especially in the more productive sites closer to the water-courses. Residual and adjacent birch and spruce will provide a seed source. Under this harvesting system natural regeneration of spruce and hardwoods should be increased due to increased light and soil warmth. Further inland where moss depths are thicker, hand planting of white spruce may be required. A regeneration survey will be conducted three years after any harvest. If the survey indicates inadequately stocked areas greater than ½ acre and totaling 6 acres then hand planting of white spruce seedlings will be performed on non-stocked areas. The goal for regeneration is to achieve a minimum of 450 stems per acre of mixed species.
 - b. Access design and construction: Access design, construction, and maintenance will comply with the Forest Resources and Practices regulations (11 AAC 95.285-.355). The planned access to the proposed sale is by secondary winter road extending from an existing winter road north of the Teklanika River. This existing road will not require reconstruction other than snow plowing. An ice bridge will be required to cross the Teklanika River and a Fish Habitat Permit for the river crossing will be required to access the area. Access routes will be maintained to the secondary winter road standards set out in the TVSF Management Plan and in the AFRPA.
 - c. <u>Appraisal method</u>: DOF will appraise the timber value in compliance with 11 AAC 71.092. Based on transactional evidence and market demand for saw logs/ cabin logs and fuelwood volume, DOF will apply a likely value for those delivered products. The State will be compensated based on that market rate minus the estimated total harvest cost. DOF will factor in local demand, timber type, amount of decay, and

economies of scale in its decision to differentiate the cordwood from the sawlog volumes in the FLUP(s). The method of payment will be determined by DOF as either lump sum or possibly multiple payment units.

F. Resources and management

1. <u>Timber</u>

- a. Timber stand composition and structure: This is a mixed species river bottom stand containing both white spruce and birch and widely scattered balsam poplar. Spruce vigor is good near the slough and tributary. The stand deteriorates north of the active watercourses and becomes more defective with increased moss depth and permafrost incursion. There is an accumulation of slash from windthrow and broken tops due to wind and snow load. Birch occupies less than 20% of the site and is mostly over mature although within some of the natural openings more vigorous birch of a younger age class is present. Understory vegetation is thick and includes alder, willow, high bush cranberry and rose. There is an estimated 10% defect in the white spruce with most of the defect in the form of broken tops, sweep and butt rot. The white spruce component of the stand > 9" diameter breast height (dbh) is fairly even aged of 120 years and has about 100 trees/acre, an average dbh of 15 inches and an average height of 79 feet. Basal area per acre is 105 square feet/acre. Budworm is light to moderate in this stand. Only small amounts of spruce are present that are less than 9 inches in diameter. This stand component including advanced spruce regeneration averages about 20 trees per acre.
- b. Stand silvics: The normally merchantable species of trees in the Tanana Valley are white spruce, birch, aspen and balsam poplar. 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 reforestation 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 clearcuts, 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 seeding and the edge effect.

- Topography and Soils: 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)). The site is on a level ground within the flood plains of the Teklanika and Nenana Rivers. The elevation is approximately 350 feet. There are numerous terrace features, potholes, and abandoned slough channels across the area. Soils in the sale area are classified as the Salchaket Series and the Tanana Series. Salchaket soils are productive bottomland alluvial soils consisting of nearly level, stratified silty and sandy material over a substratum of water-deposited gravel and sand. Depth to substratum ranges from less than a foot, to over six feet. They are well drained soils that originated from water-deposited material along the Nenana and Teklanika Rivers. Tanana soils consist of nearly level, somewhat poorly drained soils that form in silty and sandy sediments on flood plains. These soils are perennially frozen at a depth of 30 inches or more, though this depth varies greatly, depending upon the thickness of the organic mat on the surface (i.e. moss layer) and the frequency of flooding. These soils typically occur in various depressions across the floodplain and depending on the amount of permafrost can support commercial tree species. They are prevalent more distant from the active water courses and occur in the northwest portions of the sale area.
- 2. <u>Agriculture</u>. No known or anticipated future agricultural activity is expected in the proposed harvest areas.
- 3. Wildlife habitat and harvest. Wildlife typical of the Interior are found here and during ground reconnaissance moose, fox and beaver sign were observed. There are no known raptor nests within the proposed sale area. Should an eagle nest tree be discovered in the sale area, the nest tree will be marked on the ground and a 330 foot no-harvest radius will be established to protect the tree. The Tanana Basin Area Plan identifies the area as important to moose and furbearers.
 - 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 (ADFG) and now OHMP 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 units will be laid out with uneven edges, along and between timber types. This will create varied edge effect beneficial to many wildlife species.
- 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). Best management practices will be implemented to ensure water quality standards in all water courses. OHMP commented that the multiple channels of the Seventeen Mile Slough/Nenana River system are extensively used by Chinook, chum and coho salmon and include some coho spawning areas. Closely related to the salmon presence is the fact that the area provides critical black bear fall feeding habitat, where the bears utilize the spawned out salmon carcasses along the banks and gravel bars. The presence of riparian buffers along

the flowing waterbodies should minimize adverse effects to fisheries. Game trails along the watercourses are contained within the riparian buffers and will not be disturbed. While fish populations are always a consideration, there is no reasonable expectation that operations on this level will have deleterious effects on fish habitat in the Nenana River or its tributaries. There is no reasonable expectation that operations on this level will have deleterious effects on fish habitat downstream in the Tanana River or its tributaries.

- 5. Recreation, tourism, and scenic resources. Recreation use of this particular area has been fairly limited. Primarily it consists of hunting and trapping activity, but on the particular site is limited due to access limitations. A wood cutting trail is present within portions of the sale area and scattered firewood and possibly houselogs have been removed over a period of about 30 years. This removal has taken place in the winter when the Nenana River is able to be crossed. Recreational use of the Nenana River itself occurs in the summer through boat use and occasional river rafting and canoeing float trips. Due to its position off a side channel, this sale will not be visible from the Nenana River. It will also not be visible from the Parks Highway. Leave trees of smaller white spruce and birch will somewhat obscure the harvest area and help blend the cut border with existing landscape.
- 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. The TVSF Management Plan does not list any historic cultural or archaeological sites in the vicinity of the proposed harvest. The State Office of History and Archaeology (OHA) do not list any sites on its inventory.

About a mile and a half to the northeast is one of Nenana's cemetery sites. 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.

7. <u>Subsurface Resources</u>. State status plats show mining claims throughout the area. There are no known developed subsurface resources in the sale area. No adverse impacts are expected to occur to these mining leases. All location or staking monuments found within the sale areas will be protected and preserved.

G. Costs and benefits

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, including Nenana. The 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 sale is expected to benefit the local economy by providing jobs. It will have a positive impact on local employment by generating significant 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.

VI. PUBLIC AND AGENCY REVIEW

Both the public and State 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 Monday November 1, 2021 to ensure consideration for review. Comments should be mailed to the State of Alaska, Division of Forestry, 3700 Airport Way, Fairbanks, AK 99709 or by email to kevin.meany@alaska.gov For more information you may contact Matthew Stevens, Fairbanks-Delta Area Forester, (907) 451-2601, or Kevin Meany, Resource Forester, (907) 451-2602. To be eligible to appeal the final decision, a person must have provided written comment by 4:30 pm Monday November 1, 2021.

VII. PUBLIC NOTICE

This PBIF was publicly noticed in compliance with AS 38.05.945. Notice was posted on the Alaska Online Public Notice System, The State DOF public website, and Electronic and physical mailing lists

VIII. ALTERNATIVES AND DISCUSSION

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

A. Continue the sale as proposed:

This alternative meets the objectives of DNR's constitutional mandate and is consistent with the land classification. Additional employment opportunities will occur associated with harvest operations, saw milling and value-added processing. The sale boundaries are designed to minimize the potential for loss of timber from wind-throw, maximize the feasibility of the sale to the State, and provide for natural reforestation of the harvest area.

B. Modify the sale by making it smaller or larger:

The estimated volume and acreage of timber to be harvested as stated in this Best Interest Finding is designed to accommodate the existing and emerging markets in Fairbanks. The sale area is of an adequate size to cover the costs to construct access and cover the mobilization costs for operation. The sale boundaries are located in a manner to minimize the potential for wind-throw. Moving the boundaries inward would increase the risk of mortality in the units predominated by white spruce. Decreasing the size of the sale would make the sale(s) less feasible to the State and the Purchaser. Extending the boundaries of the birch and

aspen units is an option if warranted by the market.

C. <u>Defer the sale to a later date:</u>

Deferring harvest to a later date would fail to meet many of the objectives of the sale. In addition to the economic loss to the State and the local timber industry there would be an extended risk to the timber in the sale from wildfire, insect infestations, windthrow and other natural processes associated with over-mature timber.

D. Take no action:

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 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 200 acres of white spruce saw and pole timber to provide sawtimber, fuelwood, and biomass while improving habitat as proposed in **Alternative A** and described in this PBIF. DOF finds that this preliminary decision satisfies the objectives stated in this document and it is 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).

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 Matthew Stevens, Fairbanks-Delta Area Forester (907) 451-2601, or Kevin Meany, Resource Forester, (907) 451-2602.

Jeremy Douse	Date
Alaska Division of Forestry	

X. ATTACHMENTS

Maps of the proposed project area follow.

