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



FAIRBANKS-DELTA AREA FORESTRY

PRELIMINARY BEST INTEREST FINDING AND **DECISION FOR**

CARIBOU – GLACIER TIMBER HARVEST AREA

NC-1374-D

April 6, 2018

I. PROPOSED ACTION

Alaska Division of Forestry (DOF) is proposing to offer for sale approximately 470 acres of white spruce timber from state lands in the Caribou Creek and Glacier Creek drainages. The volume to be offered totals approximately 5,000,000 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 Delta Area Five Year Schedule of Timber Sales (FYSTS) as Rowland #1. A combined BIF/FLUP, "Rowland #1", under went Agency review in August of 2006. Due to the large fire salvage operations that occurred from the Camp Creek fire and archeological concerns, completion of the public review on the Rowland #1 proposal did not occur. Given the significant amount of time that has passed and excluding one of the harvest units that had previously been proposed, DOF is reissuing a PBIF and a draft FLUP for the proposed harvest area.

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 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 NC 1374-D.

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 Tanana Valley State Forest Plan (TVSFP) and the Tanana Basin Area Plan (TBAP). 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). Delta Area Forestry (DAF) 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 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.

Step 3: 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 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.

Step 5: Timber sales and contracts. 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

This PBIF covers approximately 2,400 acres of State land lying between the Caribou and Glacier Creek drainages. The upland area is bounded by Glacier Creek (south and east) and Caribou Creek (north and west). One unit, number 10, is north of Caribou Creek and has proposed access by crossing Caribou Creek. Approximately 1,000 acres are Forest Classified, Subunit 7A2, and are managed under the TBAP guidelines. Approximately 1,500 acres are with in the TVSF, Subunit 8C, and are managed under the TVSF guidelines. All the proposed sale areas have been listed in at least two Delta Area FYSTS.

The project area is located within Sections 25,26,35,36 Township 6 South, Range 9 East; Sections 30, 31 Township 6 South, Range 10 East; Section 1,2 Township 7 South, Range 9 East; Sections 6, 7 Township 7 South, Range 10 East Fairbanks Meridian, Alaska.

B. Map Location

This area is found on USGS quads: Big Delta B-4 (see attached maps).

C. Title status

The proposed timber harvest areas are on Forest Classified State land in portions of two townships; the remaining harvest areas lie within two other townships in the TVSF management area. The acquisition authority and land classification is as follows;

Township & Range	Acquisition Authority	Classification Order
T 6 S, R 9E, FMR	GS-3702- General Grant	NC-82-065
T 6 S, R 10E, FMR	GS-3703- General Grant	NC-82-065
T 7 S, R 9E, FMR	GS-1161- General Grant	NC-90-002
T 7S, R 10E, FMR	GS-1134 – General Grant	NC-90-002

Multiple subsurface mineral claims exist through out the area. Alaska Division of Forestry (DOF) does not anticipate any adverse impacts to mineral claims; all claim markers or signage that is found will be protected during harvest operations. Removal of the timber from the proposed harvest locations as well as roads created during harvest may facilitate mineral extraction activities.

D. Land use planning, classification, and management intent

The proposed area is within the TVSF in the following unit(s): Shaw Creek - Subunit 8C commercial timber management. Proposed harvest areas located in the TBAP management area is located in the Delta-Salcha sub-region, subunit 7A2, designated for Forestry (primary use), Public Recreation, and Wildlife Habitat.

Highly sensitive cultural sites exist in the Shaw Creek area and are noted in the TVSF management guidelines. None of the proposed timber sales impact these highly sensitive areas. Most of the area is open for and has been placed under lease, for mining activity. Caribou Creek is listed as a special management zone and subject to streamside management requirements.

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

This area is outside of any organized borough or municipality and is not subject to any municipal plans.

E. Current access and land use:

Existing access is via all season Pogo Mine Road to mile 12 where sale access begins. There are 6 approaches planned to the Pogo Road that have been approved. Approximately 8.5 miles of roads are anticipated to be constructed to access all of the proposed sale areas. All sale units are anticipated to be accessible year-round and as such all-season road construction methods will be utilized.

Current land use in the area has been primarily timber harvesting. No know trap lines exist in the area. Due the Pogo road use regulations; very limited hunting, if any, occurs.

F. Background and description of proposal

Background: A smaller timber harvest proposal, Rowland #1, underwent initial agency scoping in August of 2008. During this initial scoping, cultural resource concerns resulted in the initiation of an archaeological reconnaissance survey. This survey, "Archaeological Reconnaissance Survey of Units 1 and 6 of "Rowland #1 Timber Sale NC-1374-D Shaw Creek Drainage, Alaska" was completed in September of 2007. DOF is excluding the harvest unit previously labeled Unit 1. Due to excessive timber salvage opportunities resulting from the Camp Creek and Gilles Creek wildland fires, little to no activity occurred on completing the Rowland #1 timber sale package.

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 anticipated harvest acreage is approximately 480 acres. The expected harvest volumes are expected to be approximately 5,000,000 board feet (5,000 MBF) or approximately 1,500,000 cubic feet (15,000 CCF).

The Delta Area Annual Allowable Cut (AAC) is calculated at approximately 2,747 acres of harvest annually. The Sustained Yield (SY) volume is calculated at over 5,200,000 cubic feet annually. Harvest duration for this proposal is expected to occur over a 10-year period. This action alone or in combination with timber sales (proposed or sold) will not exceed the Delta AAC or SY volume due to the proposed harvest duration or anticipated sale schedule.

3. <u>Harvest unit design</u>: The sale consists of 10 units with a total of approximately 470 acres. The boundaries of units 1-5 are located along naturally occurring vegetative type changes. The boundaries of units 6-10 have not been marked on the ground, but will eventually be located using vegetative types, harvest systems, access, wildlife, archaeological and silvicultural considerations. The location of boundaries and access routes for units 6-10 will avoid any obvious geological formations that would potentially have prehistoric use, like the ridge that is adjacent to the north side of unit 7.

Mature aspen, birch and spruce will be left around the sale periphery to serve as future seed tree sources. Clearcut and partial cut harvest methods will be utilized to harvest the timber sale units. Initial sale design (Rowland#1) is to harvest all the white spruce larger than 9 inches DBH in units 1-5, aspen and birch over 6 inches DBH in units 6 and 8 and all species to a 6" DBH for fuelwood use in units 8, 10 and 11. However, markets have evolved that could utilize the small diameter white spruce timber. Actual unit harvest methods will be determined and described in the FLUP document.

The Pogo Mine Management has requested that all the trees be harvested adjacent to the Pogo Road to limit the potential for "leave trees" falling into the road after the harvest is completed. The contract will require the purchaser to remove all trees that could fall into the road.

- a. <u>Reforestation and site preparation</u>: 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. Scarification within the harvested units will be incorporated to facilitate natural regeneration. If natural regeneration is insufficient DOF will utilize inter-planting to establish stocking sufficient to meet Forest Practice requirements.
- b. <u>Access design and construction</u>: Access design, construction, and maintenance will comply with the Forest Resources and Practices regulations (11 AAC 95.285-.355).

The proposed forest access road will be constructed to a secondary all-season road standard as described in Appendix F of the TVSFMP. Roads will be constructed by removing the trees, vegetative mat, and constructing the road using cuts and fills with earth-moving equipment. Roads will initially be constructed to a 12 to 16-foot width. Roads may be located on side slopes that vary from 5 to 35%. Road grades vary from 0 to 10% with an average of 5%. Debris from the road construction will be placed below the road.

One crossing of Caribou Creek may be created to access proposed Unit 10. The proposed crossing would be in the uppermost headwaters of Caribou Creek in Section 26 T06S R09E. Due to the anticipated need of installing a bridge, for all-season access, over this crossing; detailed economic and road layout and design considerations will need to be undertaken by DOF. Information regarding this bridge crossing, if needed, will be discussed and detailed in subsequent FLUP(s) that include this sale area.

The proposed roads have potential to erode after construction due to the road grades. Water bars will be placed in the road to prevent erosion. The contract will require gravel to be placed on the approaches to the Pogo Road. New roads are not expected to have erosion that could not be mitigated and will be left open after the sale to facilitate additional forest management of the area. DOF will be responsible for erosion control after the sale is terminated. Due to the possibility of mining operations impacting the road system, long term easements may be pursued by DOF for primary routes.

c. Appraisal method: 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. Timber

a. <u>Timber stand composition and structure</u>: The forest stand within units 1-5, is predominantly mature white spruce sawtimber, units 7 and 10 are primarily over mature pole timber. There is approximately 15-20% mixed species of aspen, birch and poplar in the sale area but the predominate species is white spruce. Units 6 and 8 are predominately birch and aspen pole and sawtimber. Unit 9 is a mixed overmature stand of poletimber spruce, birch and aspen. Portions of all the harvest units have white spruce saplings and pole-sized trees beneath the canopy of white spruce. Mature balsam poplars were found interspersed throughout the sale area. The forested stands surrounding the sale areas are comprised of a variety of stand mixtures including mature white spruce, black spruce, birch, and aspen.

Units 3 and 5 were impacted by wildland fire during the 2010 Gilles Creek incident. Approximately 6 acres from unit 3 and 3.5 acres from unit 5 were included in NC 1506-D Glacier Creek Fire Salvage. The dozer line established by the fire operations will be used as the delineation between NC 1506-D and the subsequent sale areas to be offered under this BIF. Wind throw damage (September 2012 event) was noted through out the sale areas.

b. <u>Stand silvics</u>: The Fairbanks-Delta Area goal for regenerating harvest areas that are predominantly mature white spruce or birch is to establish a mixed species forest of hardwoods and white spruce, with white spruce being the predominate species. Old stands are to be rejuvenated to a fully stocked mixed stand of young healthy trees while retaining some residual trees resulting from leave trees left in the unit. Young forests provide future crop trees and food for wildlife. Residual leave trees provide some seed sources, nesting sites, and other benefits.

A combination of environmental and economic factors has influenced the Delta Area to favor heavy partial harvests in combination with natural seeding. Partial harvests can result in a wide range of the number of sapling to pole-sized trees per acre. The average harvest area has about 20 saplings and pole-sized mixed species trees left per acre. Some acres have no trees left and other sites have up to 100 saplings and pole-sized trees per acre left after harvest. The strong winds in the Delta Area combined with summer drought which typically occurs during the summer solstice period, cause a very high mortality of white spruce seedlings that germinate in May or early June. Partial harvesting allows some shading during the 20+hour sunlight period and slows wind velocities to moderate the effect of desiccation of germinates and increases their survival rate.

These proposed sale areas will be partially harvested or clearcut. The mature sized balsam poplars will be protected from damage during the harvest to serve as cavity nesting trees and woody debris in the future. Mature white spruce will be left around the perimeters of the harvest units to provide seed sources for regeneration.

Portions of the sale may be scarified to aid in warming the soil and improving regeneration of white spruce. Scarification can also improve the regeneration of woody shrubs and deciduous trees for wildlife browse and cover. The forester will make a final determination for the need to scarify any particular area within the sale after the harvest is completed. Any areas that are expected to be deficient in meeting the Forest Practices Act standard of 450 trees established by the 7th year will be planted with white spruce seedlings.

- 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)). The proposed sale is on hilly topography above and below the Pogo Road. The elevation of the sale boundaries extends from 1150 feet to 1,600 feet. Slopes within the sale vary from 5 to 50% with the average being about 25%. Soils are anticipated to be sandy loess over fractured rock. The loess is estimated to be 3 to 10 feet in thickness.
- 2. <u>Agriculture</u>. No known or anticipated future agricultural activity is expected in the proposed harvest areas.
- 3. Wildlife habitat and harvest. Most common species of wildlife that are normally found in interior Alaska forests inhabit the area. There are no known critical or important wildlife areas in or near the proposed sale or access routes. All the mature balsam poplar trees will be protected for cavity nesting birds. Timber sale operators will be encouraged but not required to leave dead standing white spruce for cavity nesting birds.

The timber sale harvest will afford more sunlight to the forest floor and will increase the production of browse species for moose. The increase in sunlight will also enhance the production of a variety of berries and seeds eaten by grouse and other animals.

The area becomes accessible to trappers during the winter when Shaw Creek Flats freezes. People do hunt for moose in Shaw Creek Flats with all terrain vehicles and air boats. No visible evidence or documentation of recent hunting activities was noted in the sale area. There is no known subsistence, recreational or commercial fishing near the sale.

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). Caribou Creek is listed as a "sensitive" stream in the TVSFMP. No harvest activity is expected to occur directly adjacent to Caribou Creek or Glacier Creek.

A stream crossing to access unit 10 on the North side of Caribou Creek is being considered, details of this crossing will be addressed in the FLUP review process. Due to the fish habitat management considerations for Class IIIC Caribou Creek (AWC 334-40-11000-2490-3375-4015), a bridge is expected to be necessary for this crossing. No other streams or water resources are located within the sale area boundary

- 5. Recreation, tourism, and scenic resources. Recreational use of this area is minimal. Trapping and hunting are the only current recreation activities in the upper Shaw Creek Flats and surrounding hillsides and this is very limited due to the restricted access to the Pogo Road. Access to Shaw Creek Flats vicinity has been by dog sled or snow machine during the winter or by air boats and tracked vehicles during the hunting season. There is no evidence of recreation activity occurring in the sale units or along the proposed access routes. There is no known tourism in the proposed sale area.
- 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 act to protect the findings.

An archeological reconnaissance survey of units 1 through 5 was performed in September of 2007 by Charles Holmes; unit 5 was determined to have the highest likelihood of cultural significance. No cultural sites were found in unit 5. During the sale layout and systematic grid cruise of units 1-5, DOF saw no additional evidence of historic or archaeological artifacts or features. There are no other known cultural, historic or prehistoric sites in the sale or along proposed access routes.

The State Office of History and Archaeology (OHA) concurred with the original Rowland #1 sale design and had no objection to DOF proceeding with the sale in October of 2008. DOF will follow those prior recommendations and will follow the requirements of the Alaska Historic Preservation Act. If any historic or archaeological sites are encountered, DOF will immediately cease operations at the site and inform the State Historic Preservation Officer and act to protect the findings.

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

No negative economic cost impacts are anticipated with the sale of this timber resource. This proposed sale is expected to provide more than 5,000,000 board feet of timber to the forest products industry in Delta Junction and the surrounding areas. DOF anticipates direct and indirect revenues in excess of \$300,000 from the sale of the proposed timber. Typical economic multipliers for the forest industry is 5-7 times the sale revenue, thus a \$1.5 million-dollar economic impact could be expected from the sale of this timber.

Maintenance costs associated with this sale are expected to be very low due to the limited public access of the Pogo Road. Possible use of some of the timber harvest to provide pelletized biomass fuels could help reduce air quality problems in the urban areas of interior Alaska.

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 Delta Area Office **by 4:00pm, June 11, 2018** to ensure consideration for review. Comments should be mailed to the State of Alaska, Division of Forestry, 3700 Airport Way Delta Junction, AK 99737 or by email to **dnr.fordelta@alaska.gov** For more information you may contact Paul Keech, Fairbanks-Delta Area Forester, (907) 451-2601. To be eligible to appeal the final decision, a person must have provided written comment **by 4:00pm, June 11, 2018**.

VII. 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 in addition to the Delta Junction vicinity. 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 wind-throw 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. Loss of timber by wind-throw is a significant concern for the units adjacent to the Pogo Road and did occur during the wind events dating back to September of 2012. The value of the timber is anticipated to decline within the next 15 years for both the industry and the State.

D. Take no action:

Maps of the proposed project area follow.

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.

VIII. 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 470 acres of white spruce saw and pole timber to provide sawtimber, fuelwood, 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 Paul Keech, Fairbanks-Delta Area Forester (907) 451-2601.

John "Chris" Maisch, Director Alaska Division of Forestry		Date	
IX.	ATTACHMENTS		



