

MATANUSKA-SUSITNA BOROUGH
FIVE-YEAR TIMBER HARVEST SCHEDULE
MSB 007621

February 16, 2021 – December 31, 2025



Prepared by
Community Development Department
Land and Resource Management Division
Adopted February 16, 2021

BACKGROUND: In 1990 the Matanuska-Susitna Borough (Borough) received approximately 365,000 acres of land as part of the Municipal Land Entitlement Act and various associated land exchanges. Management of these lands was critical; therefore, the Borough adopted a Forest Management Plan in August 1990. The adopted Plan was found to be inadequate for use in managing broad-based resource areas with varying purposes. Public concerns emerged with regard to the need for better public notice, the need to establish “Best Management Practices” (BMP) for timber harvests on Borough land, the manner in how some timber harvests were being conducted in existing Borough management units, and the lack of a field verified forest inventory on Borough land. In response to these concerns, the Borough Assembly placed a moratorium on commercial timber harvests on Borough land in 2005.

In 2006 the Borough received a Timber Inventory¹ identifying eleven Forest Management Units. In 2009, the Borough received an updated Timber Inventory² identifying twenty-two Natural Resource Management Units (NRMU’s), although only sixteen units were inventoried. The Assembly subsequently adopted a Natural Resource Unit Management Plan (NRMU Plan) in 2010 that replaced the 1990 Forest Management Plan and included removal of the timber sale moratorium.

Pursuant to the Plan and Title 23 of Borough code (MSB 23.20.100); developing a Five Year Timber Harvest Schedule (Schedule) was required prior to the Borough offering commercial timber sales. The Assembly adopted the first Schedule in 2011. An updated Schedule was adopted by the Assembly in June of 2013, offering 960 acres of timber resources for commercial timber harvest. There was one commercial timber sale in 2014. An updated Schedule was adopted by the Assembly in August 2017. There have been no commercial timber sales since 2014 that have resulted in timber harvests. The Assembly adopted an update to the NRMU Plan in October 2019.

MANAGEMENT INTENT OF THE BOROUGH TIMBER SALE PROGRAM: The short- and long-term management of the borough-owned forest resources shall be based on the principles of multiple-use and sustained yield to promote a healthy forest, provide forest products, create economic opportunities, and enhance multiple-use opportunities.

PURPOSE OF THE SCHEDULE: The Schedule is meant to inform the public, timber industry, state government, and other agencies of proposed Borough timber sales. The Schedule provides a basis for public comment and identification of issues. **It is not developed as a decision for any particular timber sale.** Timber harvest contracts will contain additional terms and conditions of the sale. It is important to note that upon adoption of this Schedule, with or without amendments, the LMD will follow the process to create, finalize, and notice an Implementation Schedule on the Borough website prior to implementing future timber sales not previously offered.

2021-2025 SCHEDULE: Borough code requires the Schedule be updated every three years. This is the fourth update to the Schedule since 2011. This Schedule proposes an eighty-year rotation and annual allowable cut (AAC) in accordance with the standard rotation in the Susitna Forestry Guidelines. A shorter rotation may be necessary to manage Borough forests, which are predominantly over-mature and have a high defect rate and/or are experiencing severe insect-related mortality. Given the relatively small acreage included in each harvest area, a majority of the NRMU will retain the old growth timber stands. Borough timber harvests are managed on a ten-year cycle. This Schedule begins the second decadal period (2020-

¹Matanuska-Susitna Borough: Forest Inventory Report-Sanders Forestry Consulting December 2006

²Forest Inventory Report Phase II, Sanders Forestry Consulting and Alaska Map Company, June 2009

2030) as outlined in the NRMU plan. It is important to note that the NRMU plan recognizes and allows harvests in excess of the AAC during one or more years, provided the AAC is not exceeded for the ten-year period.

This Schedule reflects the management intent of the Borough timber sale program by providing a sustained yield to promote a healthy forest, provide forest products, enhance multiple-use opportunities, to recognize the needs and interests of timber resource requests, create economic development opportunities, and provide public access for public recreation. This Schedule meets the legislative requirements of MSB Code 23.20.070, 23.20.090 and 23.20.100, and acts as a basis for allocating Borough resources in considering, designing and conducting timber sales. Yearly proposed harvest units and schedules are at the end of this section. The Borough develops the Schedule for commercial timber sales based on management intent of land within a Natural Resource Management Unit.

TIMBER BASE: Timber resource estimates are based on the Matanuska-Susitna Borough Forest Inventory Report Phase II, Sanders Forestry Consulting, June 2009 (Inventory). The AAC standing timber volume on Commercial Forestland is based on the Inventory. The Inventory is an average of the Borough Commercial Forestland within the natural resource management units (NRMUs) inventoried at the time. However, additional timber cruises specific to each harvest unit may be used to adjust the volume of timber resources prior to small timber sale contracts being offered. Large scale timber sales will require an independent third party scaling company hired by the timber purchaser to account for all timber removed for purchase, processing and/or export.

TIMBER SPECIES, VOLUME, TREES PER ACRE, AND SIZE CATEGORY: Of the 16 NRMU commercial forestland acres, approximately 80% is mixed forest sawtimber (spruce > 9", birch >11"); approximately 10% is hardwood sawtimber (Cottonwood >11"); and approximately 10% is pole timber (spruce 5-9", birch 5-11"). The 2009 timber inventory indicates an average net volume of 1,653 cubic feet of wood per acre or 190 logs per acre. The poletimber and sawtimber size categories (both mixed and hardwood) are proposed for the harvests.

SUSTAINED YIELD: All commercial and non-commercial borough-owned forestland is managed on a sustained yield basis to provide forest timber products based on the rotation period for the dominant timber type. The dominant timber type in the proposed units is birch.

AUTHORIZATION FOR THE SALE, LEASE OR PERMIT OF FOREST PRODUCTS: Forest product sales from the approved Implementation Schedule may be offered by competitive bid or competitive request for proposals (RFP). Forest product sales in excess of 500 cords of wood per transaction must be approved by the Assembly prior to contract execution. Forest product sales less than 500 cords of wood may be approved by the Manager. Firewood sales, timber sales, salvage sales, and non-timber product sales, leases, or permits for less than five years in duration, and for less than 100 cords of wood and salvage sales, or less than \$25,000 for non-timber product sales may, after public notice (MSB Code 23.05.025) be offered by the manager over the counter without competitive bid.

Salvage and personal use permit sales are exempt from the Schedule requirements, except that personal use harvest areas shall be included in the Schedule for informational purposes. Timber harvest volumes sold, leased or permitted, and harvested for personal use shall not count against the annual allowable cut limitations established in MSB Code 23.20.040.

All Borough timber harvest sales must comply with the Alaska Forest Resources and Practices Act and MSB Code. Timber harvest contracts include requirements to limit or avoid negative effects on public health, safety, and welfare concerns. Timber harvesting requires an approved detailed plan of operations.

PROPOSED UNIT DESCRIPTIONS: The Borough is proposing commercial timber harvests within the **Kashwitna, Point MacKenzie, Rabideux Creek, Sheep Creek, and Susitna River NRMU's** for inclusion in the 2021-2025 Schedule.

PROPOSED HARVEST UNIT LOCATIONS: Following are written descriptions and maps for each of the proposed harvest units. Each description and map indicates the Township, Range, and Section, nearest road name and approximate road milepost. Community Councils are noted where applicable. All units will be located within areas identified in the NRMU plan as Commercial Forest Land; and are identified by dark grey shading with black outlines on unit maps.

Items required for the Five-Year Timber Harvest Schedule in accordance with Borough Code, MSB 23.20.100(C) (1-14), are included in the attached unit descriptions. The unit descriptions include acreage of the harvest area, timber species, volume, development patterns, surrounding land use, water bodies, buffers, and estimated minimum price based on current market value.

ACRES: The Inventory indicates that there are 79,363 acres of commercial forestland within the 16 NRMU units that have been inventoried. This acreage has been reduced by the timber volume harvested in 2014 and 2016 as well as the estimated timber volume burned during the McKinley Fire in 2019. The estimated volume of wood on the commercial forestland is 122,626,957 cubic feet of wood.

EXISTING LAND USE PLANS: Included below are plans that may apply to most if not all proposed units. See individual proposed harvest units for additional applicable local land use plans.

- MSB Borough Wide *Comprehensive Plan* (2005 update)
- MSB Point MacKenzie Community Comprehensive Plan (2011)
- MSB Willow Community Comprehensive Plan (2013)
- MSB *Natural Resource Management Unit Plan* (2019)
- MSB *Recreational Trails Plan* (2016)
- MSB *Parks Recreation and Open Space Plan* (2001)

Borough staff will consult adopted Alaska Department of Natural Resources Area Plans as part of the review of regional management goals and guidelines. State Area Plans do not apply to Borough land.

- *Susitna Matanuska Area Plan* (2011)
- *Southeast Susitna Area Plan* (2009)

PUBLIC HEALTH, SAFETY, and WELFARE CONCERNS: The Borough has not identified any public health, safety, or welfare concerns at this time. To the extent they are identified later, the Borough will attempt to address them through the individual timber sale contract provisions for the harvest area, or the permits that address the operation. Timber harvest contracts exceeding 40 acres in size require a Borough approved plan of operations that must address noise, lighting, truck traffic, and road maintenance; and may require a Timber Harvest/Transportation Permit, Borough Code MSB 28.60.080.

WATER BODIES AND BUFFERS: Borough Code MSB 23.20.070 and the NRMU Plan provide guidelines for buffers to reduce the visibility and off-site effects on roads, private property, scenic highways, trails and water bodies during timber harvests. Riparian buffers are required by the Alaska Forest Resources and Practices Act and Regulations for Region II. Additional agency requirements will be implemented as necessary. See individual proposed harvest units for specific buffer information. All-season access and harvest (OA) is allowed in some timber sale areas. However, additional access restrictions such as winter access required (OWA) is required for some of the units, or portions thereof. The Schedule and vicinity maps reflect the access requirements for each harvest area.

SOILS AND TERRAIN: The United States Department of Agriculture, Natural Resource Conservation Service, Soil Survey, Matanuska-Susitna Valley and Yentna Area were used to provide soil descriptions for each NRMU. See individual proposed harvest units for specific soil information.

COST REVENUE ANALYSIS: The Borough's current fees are; \$25 per cord for **personal use** firewood and \$1.75 per lineal foot saw-timber and/or house-logs. The FMV for Borough **commercial value** timber varies significantly between NRMU's due to type, size, access, and other mitigating factors. Personal use harvest areas will require additional administration by staff (office and field), additional site preparation (access, parking), and additional contracting for site remediation (mechanical scarification) after harvest. These additional requirements will create additional costs to the Borough because personal use sales may not cover costs that are normally born by the purchaser in commercial sales. Both commercial and personal use timber harvests on forestland require seven years of follow up for compliance with the Alaska Forest Resources Practices Act requirements for regeneration.

PERIODIC IMPLEMENTATION SCHEDULE: The Borough will conduct more detailed fieldwork to assess site conditions and design the proposed timber harvest areas. For those areas covered under an approved Schedule, the Borough will prepare a Periodic Timber Harvest Implementation Schedule (Implementation Schedule). Each proposed timber harvest area will be evaluated prior to preparing the Implementation Schedule. This fieldwork will allow a thorough review of the conditions on the ground and provide site-specific information for each sale offering describing the location, estimated timber volume, harvest methods, reforestation plan, access and other potential uses of the sale area. Much of this fieldwork has already been completed for the areas identified in the Schedule. Harvest units included in previous implementation schedules are included in this Schedule. The Periodic Implementation Schedule will ensure that local resident timber needs for personal use are made available for personal use firewood before and during any other timber harvest activities.

ANNUAL ALLOWABLE CUT: The AAC for the decadal period at the 80-year rotation length is 959 acres or 1,585,356 cubic feet. For this Schedule, average cubic feet per acre was applied to existing data to arrive at an estimate of AAC. The rotation is based on the dominant timber type and condition of the forest health. The units contain over mature birch and spruce. Defect and disease (beetle kill and birch leafminer) are present in both birch and spruce, respectively. Due to the age and declining value of the predominant timber type on commercial forestland, an 80-year rotation could help reverse some of the degenerating forest conditions and provide for more early succession wildlife habitat and forage. The 80-year rotation length is the standard rotation length for birch in the Susitna Forestry Guidelines. The NRMU Plan allows for flexibility in management of the Units. Management will be in compliance with guidelines and intent of the NRMU and Borough code. The goal is to provide for diverse forestland by utilizing multiple tools and resource management techniques to foster diverse and productive forestland. Some

portions of the over mature stands will be allowed to regenerate naturally, to provide wildlife habitat for animals that require more open areas, tree cavity nesting, and other benefits of a climax stand.

The proposed five-year harvest schedule represents **788 acres** of Commercial Forest Land. Harvest volumes in an individual management unit may be above or below the AAC to allow for efficient management, and responsiveness to market fluctuations. The proposed Schedule is within the ten-year AAC estimated acres. However, most of these areas have not had a commercial timber harvest since the 2006 inventory. Although the proposed Schedule may exceed the AAC; actual timber harvests have not. This Schedule is designed to bring portions of these NRMU's into a new rotation period, reduce forest fuels and improve forest health. This five-year harvest schedule includes **788 acres** of land and approximately **1,345,083** cubic feet of wood. The proposed five-year harvest schedule for 2021-2025 is only about 82% of one year's volume of annual allowable cut utilizing the 80-year rotation and substantially less than the five years AAC of 7,926,780 cubic feet of wood.

MARKET TRENDS: This Schedule was drafted in response to recent changes in the local timber industry and the overwhelming volume of timber available from state and privately owned land. Local timber businesses are often paid to clear the over-mature trees and insect damaged spruce and birch. Discussions with local businesses suggest there is little demand for timber from Borough forestland. This Schedule was prepared in response to the lack of any commercial timber sales on borough forestland since 2014. Previous commercial timber harvest schedules were geared towards larger harvest units. This Schedule includes smaller harvest units located throughout accessible borough commercial forestland.

It is important to note that commercial salvage sale opportunities became abundant in the Point MacKenzie, Big Lake, Wasilla, Knik, Houston, Talkeetna and Butte area beginning in 2012 and lasting into 2016; as a result of clearing for the PMRE project, the port project, conversions of land use for material extraction included support for road realignments, fuel reduction projects, new school and library sites, airports and other public facilities construction. In conjunction with State timber sales and conversion projects, the timber market is inundated. Since that time, timber sales (both State and Borough) have been dramatically reduced. Although large Borough timber sales were offered in 2017, 2018, and 2019, there have been no sales.

This schedule reflects the Borough's objective to offer timber for the small local market, salvage dead timber, and reduce the wildfire hazard by harvesting spruce beetle killed trees. Sales are broken up into numerous units. Small to medium size sales will be offered to meet current demand for sawlogs, house logs and fuel wood. Where possible, sales within the wildland-urban interface will be designed to reduce the risk of wildfire to the communities. The minimum bids are proposed to be based on the net cubic feet of merchantable timber subtracting the cubic feet of defective timber from the price. The harvests would be required to cull the defective and over-mature trees to promote regeneration and improve forest health.

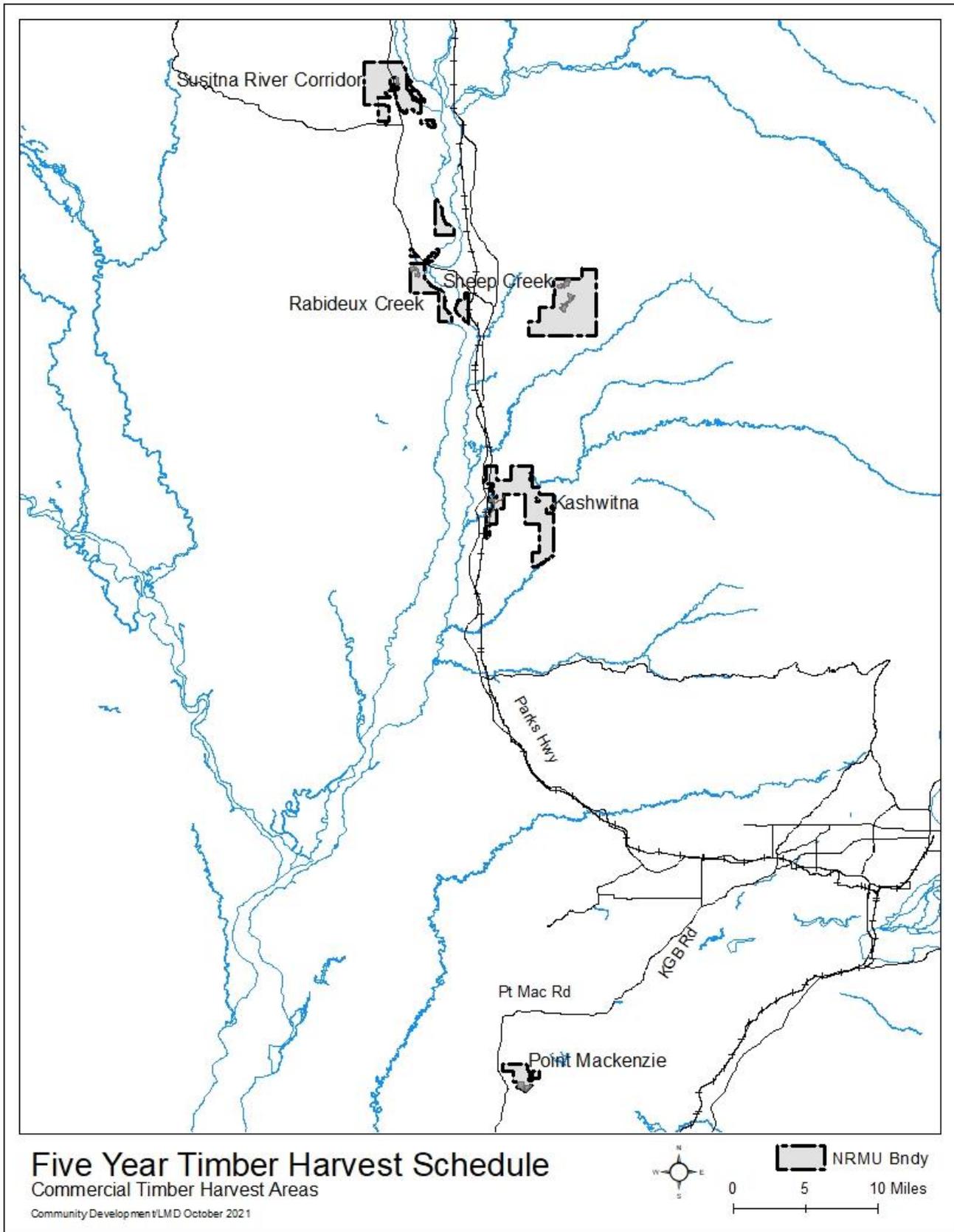
The Borough plans to offer a variety of timber products providing for commercial and personal use opportunities simultaneously during this Schedule. This schedule will be subject to public review and comment.

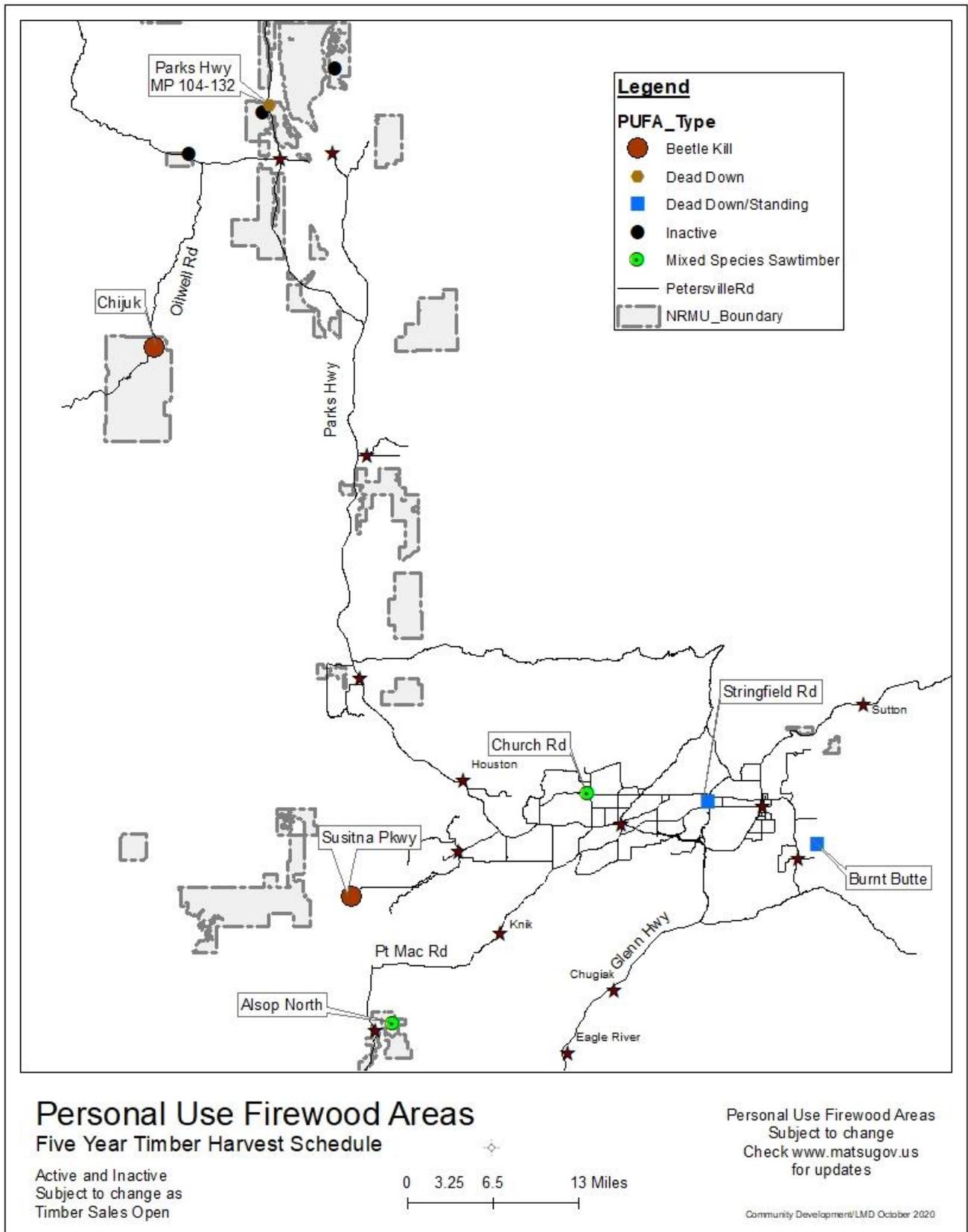
**PROPOSED FIVE YEAR TIMBER HARVEST SCHEDULE TABLES
HARVEST SCHEDULE YEARS 2021-2025 (ESTIMATES ONLY)**

Year	HARVEST UNIT	SALE NUMBER	ACRES	NET CUNITS	NET MBF	GREEN TONS	ACCESS
2021	Kashwitna C	MSB007676	40	688	179	2,069	OWA
	Alsop – A	MSB006569 A	119	2,020	524	6,297	OA
	Sheep Creek B	MSB006790 B	60	1,046	261	3,281	OWA
	Susitna River	MSB006573	54	800	205	2,497	OA/OWA
Subtotal			272	4,562	1,169	14,145	
2022	Rabideux Cr A	MSB006743	39	659	170	2,034	OWA
	Alsop B	MSB006569 B	75	1,278	330	3,969	OA
Subtotal			114	1,937	500	6,003	
2023	Sheep Creek C	MSB006790 C	100	1,744	436	5,469	OWA
Subtotal			100	1,744	436	5,469	
2024	Sheep Creek – E	MSB006790 E	79	1,378	344	4,320	OWA
Subtotal			79	1,378	344	4,320	
2025	Rabideux Cr – B	MSB006743 B	80	1,353	348	4,173	OWA
	Sheep Creek – G	MSB006790 G	117	2,040	510	6,399	OWA
	Sheep Creek – F	MSB006790 F	25	436	109	1,367	OWA
Subtotal			222	3,829	967	11,393	
Total			788	13,451	3,416	41,877	

ACTIVE PERSONAL USE FIREWOOD AREAS	ACRES	Description	TIMBER TYPE
Burnt Butte UNITS 1, 2, 3 (MSB006803)	100	Dead down / standing	ALL
Chijuk Creek (MSB007484)	6	Dead down / standing	Beetle Kill Spruce
Church Road (MSB007182)	19	Mixed Sawtimber	All
Parks Highway MP 104-137 (MSB006582)	24	Dead down / standing	Beetle Kill
Alsop North (MSB006578)	37	SEE PUFA PERMIT	Mixed Sawtimber
Stringfield Road (MSB007682)	26	Dead down / standing	Mixed Sawtimber
West Susitna Parkway (MSB007683)			
INACTIVE PERSONAL USE FIREWOOD AREAS	ACRES	Description	TIMBER TYPE
Chase Remote (MSB003092)	225	Dead Down / Standing	All
Moose Creek (MSB006806)	10	Mixed Sawtimber	All
Susitna River Corridor (MSB006580) A-C	25	Dead Down/Standing, or Sawtimber	All

Items required for the Schedule contents per Borough Code, MSB 23.20.100(C) (1-14), are found in the following unit descriptions. The required information includes the acreage of the harvest area, timber species, volume, development patterns and surrounding land use, water bodies and buffers, and estimated minimum price based on current market value and inventory volumes.





FIVE-YEAR TIMBER HARVEST SCHEDULE

UNIT DESCRIPTION

Kashwitna NRMU

One timber harvest is being proposed in the Kashwitna River Natural Resource Management Unit (NRMU) for inclusion in the Five Year Timber Harvest Schedule. The purpose of this sale is to provide an opportunity for the harvest of timber products.

PROPOSED HARVEST UNIT LOCATION AND ACCESS: Section 5, Township 21 North, Range 04 West, S.M. Alaska, and lying east of the Parks Highway at milepost 83. The proposed harvest is within the Willow Area Community Organization area. Access to this timber harvest area would be from the Parks Highway and via existing timber roads. Kashwitna C harvest unit includes 40 acres of commercial forest land on MSB Parcel Tax ID 21N04W05A004.

ACRES, VOLUME AND SPECIES: The NRMU contains 9,360 acres including approximately 5,038 acres of commercial forestland. The commercial forestland is comprised of (39%) of mixed forest sawtimber (spruce > 9", birch >11"), 4% hardwood sawtimber, and 57% poletimber (spruce 5-9", birch 5-11"). One timber harvest is proposed in the Unit for inclusion in the Five Year Timber Harvest Schedule and includes approximately 5% of the proposed Schedule acreage.

The proposed timber harvest would be for all dead or live birch, spruce, aspen and cottonwood timber greater than 7" at breast height (dbh) (See Table pg.6 volumes). Timber resources are comprised of (84%) of mixed forest sawtimber (spruce > 9", birch >11"), 11% hardwood sawtimber (Cottonwood > 11"), and 5% pole timber (spruce 5-9", birch 5-11") diameter at breast height dbh.

INFRASTRUCTURE: The Kashwitna NRMU has access from the Alaska Railroad and the Parks Highway. The Talkeetna Mail (Herning) Trail meanders through the unit, generally in a north/south direction through the portion of the center of the unit mainly in wetlands and low areas. The Kashwitna Trespass Trail runs from southwest to northeast through the unit, generally paralleling the Kashwitna River to the north. This trail is the primary access to the harvest area.

SURROUNDING LAND USE: The adjoining land is owned by the State of Alaska. Timber harvests have taken place on these lands and general dispersed recreational uses also occur. Privately owned land exists outside of the unit to the west along the highway corridor and some to the north of the unit and north of the Kashwitna River. Two large active gravel pits are nearby along the highway.

EXISTING LAND USE PLANS: The harvest unit location is addressed in the following land use plans:

- MSB *Natural Resource Management Unit Plan* (2019)
- MSB Willow Community Comprehensive Plan (2013)
- MSB Comprehensive Plan (2005)
- Alaska Department of Natural Resources, *Southeast Susitna Area Plan* (2009), the State land adjoining the unit has been designated as forestry. This plan does not apply to Borough land.

OPERABLE WINTER ONLY (OWA): The management intent for the Kashwitna East Natural Resource Management subunit is for general resource management, primarily to protect water resources

and encourage continued recreational uses of the area, while meeting some wood product and earth material needs. Seasonal operations restrictions occur in some areas in the subunit, including in the Kashwitna C Harvest Unit. Seasonal timber operations may be opened, closed, limited and/or suspended by the Borough at any time determined necessary by the Borough to protect and/or preserve Borough property, resources, soils, water quality, fish, wildlife, fish & wildlife habitat, wetlands and waterbodies.

COMMUNITY COUNCIL: The proposed Kashwitna harvest unit is within the Willow Area Community Organization area.

PUBLIC HEALTH, SAFETY, and WELFARE: The Borough has not identified any public health, safety, or welfare concerns at this time. To the extent they are identified later, the Borough will attempt to address them through the individual timber sale contract provisions for the harvest area, or the permits that address the operation. Timber harvest contracts include requirements to limit or avoid negative effects on public health, safety and welfare. Timber harvesting requires an approved detailed plan of operations that addresses noise, lighting, truck traffic, scarification and road maintenance. The Mat-Su Borough Natural Resource Management Unit Plan (2019) outlines buffer distances required to protect water bodies, wetlands, trails and wildlife habitat during and after timber harvest. Appropriate buffers will be required. The sites will be thoroughly evaluated prior to preparing an Implementation Schedule.

SOILS and TERRAIN: The United States Department of Agriculture lists the soils as Nancy silt loam, 0-3 percent. The profile is 0-3 inches grayish brown silt loam; 3-24 inches dark reddish brown and dark grayish brown silt loam, and 24-60 inches of variegated very gravelly sand. General management considerations; the soil is well suited for forestry. When the canopy is removed and the ground surface disturbed, bluejoint reedgrass could potentially dominate this soil and inhibit successful tree regeneration. Some soil related factors are wind erosion, water erosion, frost action, low fertility, depth to gravel and cobbles, cutbank instability, excess surface fines, and excessive permeability.

COST REVENUE ANALYSIS: 40 acres of land in the Kashwitna NRMU are available for commercial timber harvest through this offering. The Borough proposes one offering for the harvest unit scheduled for one year.

The commercial value of Borough timber varies greatly dependent on location, access, road building costs, type, size, strata and seasonal access restrictions. Some of the recent State and Borough timber harvest offerings located with much easier access did not receive any bids. The Borough had offered minimum bids as low as \$5.00 per cunit for birch and \$50 per MBF for Spruce sawtimber. However, the Borough did not receive any bids on ten Over-the-Counter timber sales at those prices. Recent State timber sales were offered for virtually the cost of building logging roads into the areas offered. Actual minimum bids will be addressed prior to competitive offering.

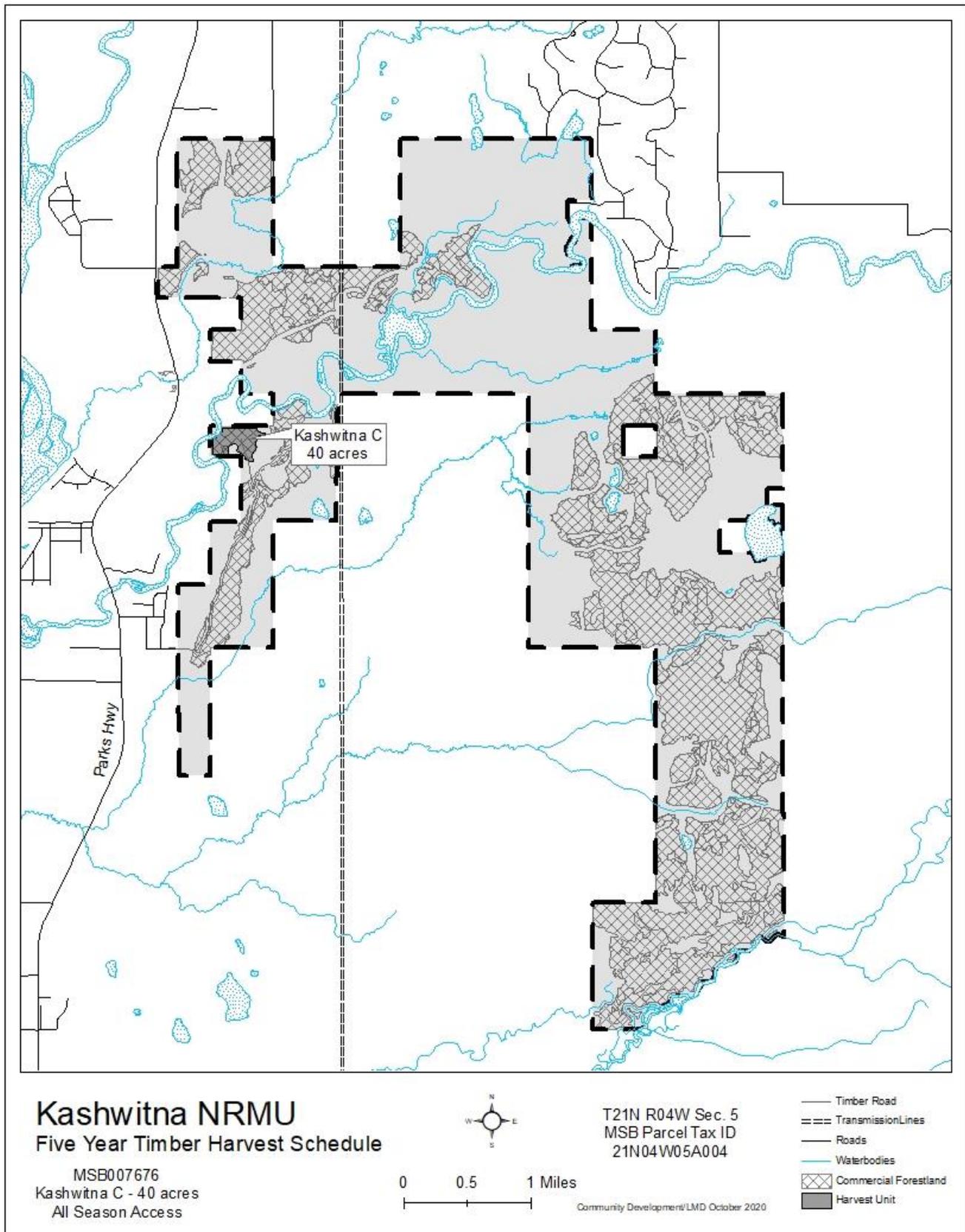
Borough code requires timber be sold by volume (cubic feet, cunit, green tons, board feet or a combination) not acreage. The Borough may use a competitive Request for Proposal (RFP) or competitive sealed bid sale process to solicit offers. The RFP process requires certain measurable criteria that provide sufficient information to make an informed decision to select a proposal in the best interest of the Borough. All timber sale contracts in this Schedule must be approved by the Assembly prior to execution.

ESTIMATED MINIMUM BIDS:

Beetle-kill spruce saw logs (greater than 9” dbh) to be sold at no cost. Removal of the dead trees from the forest is considered to be in the best interest of the Borough and a public service.

All birch, cottonwood, and aspen greater than 7” will be sold by the green ton (\$2.00 green ton), and all live spruce 7”-9” dbh will be sold by the green ton (\$2.00 green ton).

PERSONAL USE FIREWOOD AREAS (PUFA’s): PUFA’s may be available either in or adjacent to the Kashwitna Unit after a timber harvest (MSB 23.20.110).



FIVE-YEAR TIMBER HARVEST SCHEDULE
UNIT DESCRIPTION
Point MacKenzie NRMU

PROPOSED HARVEST UNIT LOCATION AND ACCESS: The Point MacKenzie NRMU is located east of and along West Point MacKenzie Road beginning just north of Alsop Road and ending at the Port MacKenzie Port District near the southern terminus of Point MacKenzie Road. The NRMU is divided into three subunits. There are several potential transportation routes to access and/or remove the timber resources for processing and/or export, including Point MacKenzie Road, Knik Goose Bay Road, and Port MacKenzie. Primary access to the Alsop Road subunit harvest area is from Alsop Road. Alsop Road subunit is classified Resource Management with a primary designation of Habitat, Resource Management, and Water Resources. The subunit is available for forest management and commercial timber harvest. The two harvest units within the Alsop subunit are located in T15N R04W Sections 27 and 34, Seward Meridian. Both harvest units occur on MSB Parcel Tax IDs 6822000T00A and 6313000T00A-2.

ACRES, VOLUME AND SPECIES: The Point MacKenzie NRMU contains 3,174 acres of commercial forestland. The Alsop subunit contains 1,774 acres of commercial forestland, comprised of 63% of mixed forest sawtimber (spruce > 9", birch >11"), 15% hardwood sawtimber, and 22% poletimber (spruce 5-9", birch 5-11"). The timber inventory of the Point MacKenzie NRMU indicates a net volume of 1,704 cubic feet of wood per acre. The proposed timber harvest would be for all dead or live birch, spruce, aspen, and cottonwood timber greater than 7" dbh and comprises 25% of the Schedule acreage.

INFRASTRUCTURE: The Point MacKenzie Road runs north/south along the west boundary of the Alsop subunit. Alsop Road runs east/west through the middle of the subunit.

SURROUNDING LAND USE: There are numerous trails and undedicated pioneer type roads intersecting Point MacKenzie Road. These are used for winter and summer recreation and hunting, or for access to private property. Most of these trails, except for the Figure 8 Loop Trail, are not dedicated and are not in the *Recreational Trails Plan*. The Figure 8 Loop Trail is identified in the *Recreational Trails Plan*, but is not dedicated. Numerous privately owned parcels exist around the East Lake, Lost Lake, Twin Island Lakes and other various lakes in the vicinity. Other private land, mostly undeveloped, also exists along Alsop Road. There are some dispersed residential and recreational cabins on the adjacent state land. The area is currently used for a variety of dispersed recreational uses.

The Alsop/Point MacKenzie Road intersection has seen large scale development. The Alsop Interim Material District occupies 40 acres west of the intersection and has provided nearly one million tons of gravel for road and port projects. The Goose Creek Correctional Facility is built on the northeast corner of the intersection. A water/wastewater facility that services the Facility is built on the southeast corner of the intersection. A commercial sawmill operates on a parcel just north of the proposed sale area at the intersection of Alsop and Rex Bell Road. Except for the developed sites, dispersed recreation occurs in this area.

EXISTING LAND USE PLANS: The harvest unit boundaries are within the following land use plans:

- Mat-Su Borough *Natural Resource Management Unit Plan* (2019)
- Mat-Su Borough, *Recreation Trails Plan* (2016)

- Point MacKenzie Comprehensive Plan, (2011)
- Alaska Department of Natural Resources, *Southeast Susitna Area Plan* (2009) with designated uses for Forestry, Public Recreation and Water Resources. This plan does not apply to Borough land.

OPERABLE ALL SEASON: The Alsop Road subunit is managed to support development activities while protecting important habitat and watershed land. Development activities include, but are not limited to, such things as sewer and water facilities, public safety buildings and other public facilities, and any related commercial and residential development. Any land that the Assembly approves for commercial, industrial, residential or public facilities shall be reclassified and removed from the management subunit.

Rock, sand, and gravel extraction, and timber harvest are permitted in areas outside of the wildlife corridor and watershed areas. Timber harvests are allowed on commercial forestland. Salvage of timber resources shall occur prior to any public facility, settlement, road, utility or similar construction. Seasonal timber operations may be opened, closed, limited and/or suspended by the Borough at any time determined necessary by the Borough to protect and/or preserve Borough property, resources, soils, water quality, fish, wildlife, fish & wildlife habitat, wetlands and waterbodies.

PUBLIC HEALTH, SAFETY, and WELFARE: The Borough has not identified any public health, safety, or welfare concerns at this time. To the extent they are identified later, the Borough will attempt to address them through the individual timber sale contract provisions for the harvest area, or the permits that address the operation. Timber harvest contracts include requirements to limit or avoid negative effects on public health, safety, and welfare. Timber harvests require an approved detailed plan of operations that address noise, lighting, truck traffic, scarification and road maintenance. A Timber Transport Permit may be required for timber harvests greater than 40 acres in size. The MSB Natural Resource Management Unit Plan (2019) outlines buffer distances required to protect water bodies, wetlands, trails and wildlife habitat during and after timber harvest. Appropriate buffers are required. The sites will be thoroughly evaluated prior to preparing an Implementation Schedule.

COMMUNITY COUNCIL: The proposed Point MacKenzie harvest units are within the Point MacKenzie Community Council area.

SOILS and TERRAIN: The United States Department of Agriculture (USDA) has classified soils nationwide to evaluate agricultural potential. These classifications are based on soil characteristics including depth, composition and drainage. The Point Mackenzie NRMU has areas identified as having Class III and Class IV soils dispersed throughout each subunit. The United States Department of Agriculture lists the soils as Estelle silt loam, sloping and Yohn silt loam, rolling. Both soils have 0-60 inches of silts, loams, and sandy loams before encountering cobble and gravelly soils.

Both soils are well suited for forestry and agriculture. Some soil related concerns are wind erosion, water erosion, frost action, low fertility, depth to gravel and cobbles, cutbank instability, excess surface fines, and excessive permeability. Agricultural activity takes place throughout the unit.

COST REVENUE ANALYSIS: Approximately 194 acres of timber resources are available in the Point MacKenzie NRMU in this Schedule that include 330,576 cubic feet of wood. The Borough proposes two offerings encompassing two harvest units scheduled over one or more years.

The commercial value of Borough timber varies greatly dependent on location, access, road building costs, type, size, strata and seasonal access restrictions. The Borough just completed a salvage sale of standing timber (all species greater than 6" dbh) in the same area of the Alsop subunit. The 58 acre parcel salvage sale was offered with a minimum bid of \$14,790 (about \$15 per cunit). The highest bid received was \$16,000 (about \$16 per cunit).

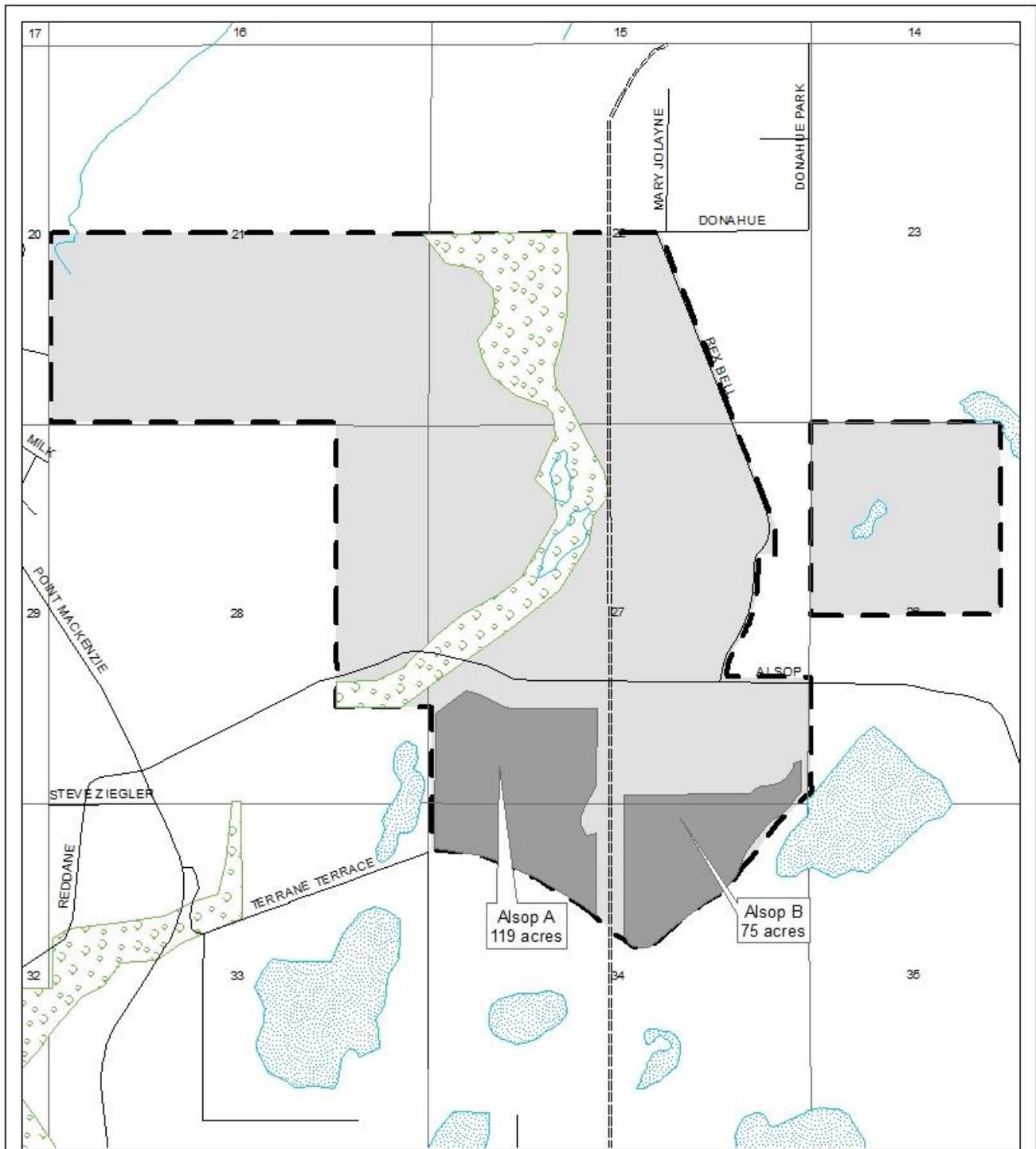
Borough code requires timber be sold by volume (cubic feet, cunit, green tons, board feet or a combination) not acreage. The Borough may use a competitive Request for Proposal (RFP) or competitive sealed bid sale process to solicit offers. The RFP process requires certain measureable criterion that provides sufficient information to make an informed decision to select a proposal in the best interest of the Borough. All timber sale contracts in this Schedule must be approved by the Assembly prior to execution.

ESTIMATED MINIMUM BIDS:

Beetle kill spruce saw logs (greater than 9" dbh) to be sold at no cost. Removal of the dead trees from the forest is considered to be in the best interest of the borough and a public service.

All birch, cottonwood, and aspen greater than 7" will be sold by the green ton (2.00 green ton).
All live spruce 7"-9" dbh will be sold by the green ton (2.00 green ton)

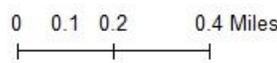
PERSONAL USE FIREWOOD AREAS (PUFA's): PUFA's will be available either in or adjacent to the Point MacKenzie NRMU before and during any timber harvest (MSB 23.20.110).



Alsop Subunit, Point MacKenzie NRMU
Five Year Timber Harvest Schedule

MSB006569
 Alsop A - 119 acres Alsop B - 75 acres
 All Season Access

T15N R04W Sec's 28, 34
 MSB Parcel Tax ID
 6822000T00A
 6313000T00A-2



- ==== Transmission Lines
- Roads
- Waterbodies
- Wildlife Corridor
- Harvest Unit

Community Development/LMD October 2020

FIVE-YEAR TIMBER HARVEST SCHEDULE UNIT DESCRIPTION Sheep Creek NRMU

PROPOSED HARVEST UNIT LOCATION AND ACCESS: The Sheep Creek NRMU is located within Sections 19, 20, 29, 30 & 31, Township 24 North, Range 03 West, SM Alaska, lying east of the Talkeetna Spur Road at approximately milepost 3. The proposed harvest units are within the Susitna Community Council Area. Access to this proposed harvest areas is from South Southfork Road. This unit is located approximately four miles east of the Susitna River, and between Sheep Creek to the south and the North Fork of Montana Creek to the north.

The Borough is proposing five timber harvest units in the Sheep Creek NRMU for inclusion in the Five Year Timber Harvest Schedule. The purpose of these sales is to provide opportunities for the harvest of timber products.

The harvest units lie within Sections 19, 20, 29, 30 & 31, Township 24 North, Range 03 West, SM Alaska, lying east of the Talkeetna Spur Road at approximately milepost 1. The harvest units are within MSB Parcel Tax IDs 24N03W19A001, 24N03W20A001, 24N03W29A001, 24N03W30A001, and 24N03W31A001.

ACRES, VOLUME AND SPECIES: Sheep Creek NRMU contains 9,700 acres, of which 4,924 acres is commercial forestland. The commercial forestland is comprised of (88%) of mixed forest sawtimber (spruce > 9", birch >11"), 8% hardwood sawtimber, and 4% poletimber (spruce 5-9", birch 5-11"). The timber inventory of the Sheep Creek NRMU indicates a volume of 1,744 cubic feet of wood per acre. The proposed timber harvests would be for all dead or live birch, spruce, aspen, and cottonwood timber greater than 7" dbh and comprise 48% of the Schedule acreage. The five timber harvest areas include a total of 381 acres anticipated to produce a net 2,372 cunits of merchantable timber.

INFRASTRUCTURE: The Montana Creek Road and South Southfork Road provide access to the edge of the unit on the west side. The Sunshine Creek and Montana Creek Dog Musers 50-Mile Trails are located within the unit. The South Fork Montana Creek Trail is adjacent to the northern boundary of the unit.

SURROUNDING LAND USE: Both state and private land surrounds the unit. On the state land general dispersed recreational use occurs. The private land is a mix of native land where logging has occurred and other private land that has residential, cabins, and agricultural uses. Sheep Creek Harvest Unit A was logged several years ago with a total of 141,295 cubic feet of wood removed from the NRMU.

EXISTING LAND USE PLANS: The harvest unit boundaries are within the following land use plans:

- MSB Natural Resource Management Unit Plan (2019)
- MSB Recreational Trails Plan (2016)
- MSB Parks, Recreation and Open Space Plan (2001)
- Susitna Comprehensive Plan (2007)

- Alaska Department of Natural Resources, Susitna Matanuska Area Plan (2011) designated uses for Forestry, Public Recreation and Water Resources. This plan does not apply to Borough land.

OPERABLE WINTER ONLY: The harvest units primary borough classification is for resource management and watershed lands. It is important to note that the harvests units are restricted to winter access. Winter timber operations may be opened, closed, limited and/or suspended by the Borough at any time determined necessary by the Borough to protect and/or preserve Borough property, resources, soils, water quality, fish, wildlife, fish & wildlife habitat, wetlands and waterbodies. Typical winter operations require a certain depth of frozen ground/ice and sufficient snow depth to protect wetland vegetation.

Timber harvesting is an authorized use. Timber harvests, harvest units and cutting areas shall protect the water resource values and not significantly reduce the areas recreational opportunities.

Timber harvests shall only be held after consultation with the Alaska Department of Fish and Game. Harvest units should be laid out to improve wildlife habitat, especially winter habitat for moose to reduce transportation related fatalities in the area and improve public safety.

These harvest units could be designated as a Special Management Area and designated as a suitable as a Forest Education and Improvement Study Area

PUBLIC HEALTH, SAFETY, and WELFARE: The Borough has not identified any public health, safety, or welfare concerns at this time. To the extent they are identified later, the Borough will attempt to address them through the individual timber sale contract provisions for the harvest area, or the permits that address the operation. Timber harvest contracts include requirements to limit or avoid negative effects on public health, safety, and welfare. Timber harvests require an approved detailed plan of operations that address noise, lighting, truck traffic, scarification and road maintenance. A Timber Transport Permit may be required for timber harvests greater than 40 acres in size. The MSB Natural Resource Management Unit Plan (2019) outlines buffer distances required to protect water bodies, wetlands, trails and wildlife habitat during and after timber harvest. Appropriate buffers are required. The sites will be thoroughly evaluated prior to preparing an Implementation Schedule.

COMMUNITY COUNCILS: The harvest units are within the Susitna Community Council.

SOILS and TERRAIN: The United States Department of Agriculture lists the soils as Tokositna, hilly and undulating Chuginla complex. The profile is 0-2 inches grayish brown silt loam; 2-28 inches dark reddish brown, strong brown and brown silt loam, and 28-60 inches of very dark grayish brown and dark grayish brown very cobbly loam and sandy loam. The soil is well suited for forestry. Some soil related factors are wind throw hazard, which is moderate, plant competition is severe, and that with removal of the canopy coupled with ground disturbance, Bluejoint reedgrass tends to dominate and inhibits seedling growth. The Chuginla soil is not well suited for forestry.

COST REVENUE ANALYSIS: Approximately 664,464 cubic feet of wood are available on 381 acres of land. The Borough proposes to offer five commercial timber sales in this unit during this Schedule. The 2014 commercial timber sale was for \$0.12/cubic foot (\$12/cunit) based on the minimum bid and the 2009 Inventory data. The volume estimate of timber per acre is about 1,744 cubic feet, dependent on location, type size and strata.

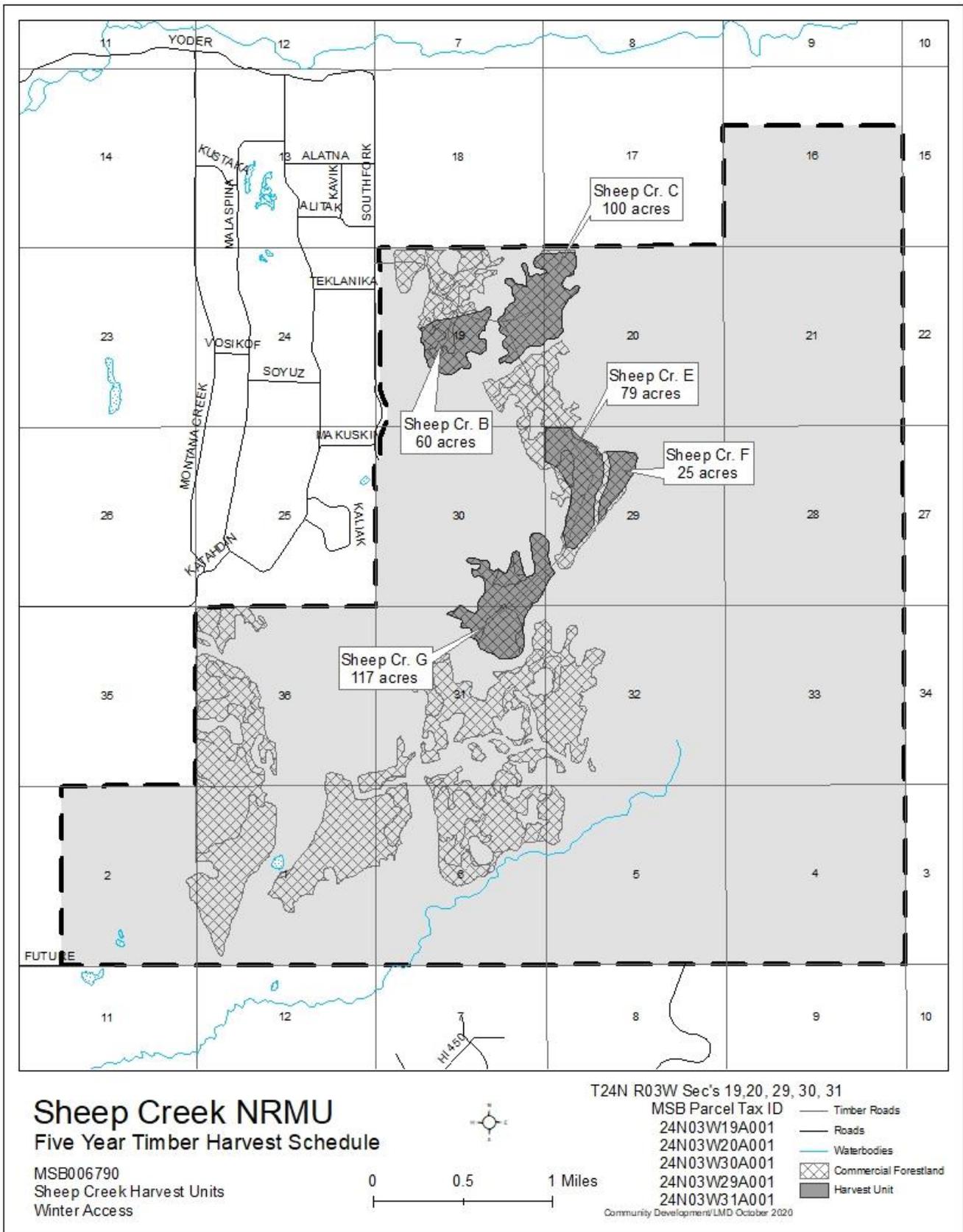
ESTIMATED MINIMUM BIDS:

Beetle kill spruce saw logs (greater than 9” dbh) to be sold at no cost. Removal of the dead trees from the forest is considered to be in the best interest of the borough and a public service.

All birch, cottonwood, and aspen greater than 7” will be sold by the green ton (2.00 green ton).

All live spruce 7”-9” dbh will be sold by the green ton (2.00 green ton)

PERSONAL USE FIREWOOD AREAS (PUFA’s): PUFA’s will be available either in or adjacent to the Sheep Creek NRMU before and during any timber harvest (MSB 23.20.110).



FIVE-YEAR TIMBER HARVEST SCHEDULE
UNIT DESCRIPTION
Susitna River Corridor NRMU

The Borough is proposing a timber harvest in the Trapper Creek area and within the Susitna River Corridor Natural Resource Management Unit (NRMU) for inclusion in the Five Year Timber Harvest Schedule. The purpose of this sale is to provide an opportunity for the harvest of timber products.

PROPOSED HARVEST UNIT LOCATION AND ACCESS: The Susitna River Corridor NRMU is located within Sections 5, 6, 7, 8, 9, 10, 16, 17, 18, 19, 20, 21, 27, & 30 Township 26 North, Range 05 West, and Sections 1, 12 & 13 Township 26 North, Range 6 West, SM Alaska, lying east of the Parks Highway approximately between milepost 115 and 119. Access to the proposed timber harvest area would be from the Parks Highway. The best access to the harvest area may be through State land at milepost 118. Authorization for access across State land would need to be obtained if alternate access is not easily accessible.

The harvest unit is within Section 8, Township 26 North, Range 05 West, SM Alaska, lying east of the Parks Highway near milepost 18. The harvest units are within MSB Parcel Tax IDs 26N05W08B001 and 26N05W08A001.

ACRES, VOLUME AND SPECIES: The NRMU contains 4,690 acres of commercial forestland comprised of (80%) of mixed forest sawtimber (spruce >9", birch >11"), 7% hardwood sawtimber, and 13% poletimber (spruce 5-9", birch 5-11"). The proposed 54-acre timber harvest would be for all dead or live birch, spruce, aspen, and cottonwood timber greater than 7" dbh and accounts for about 7% of the proposed Schedule. Harvest volumes will be more closely estimated after a site inspection and prior to submitting a Periodic Timber Harvest Implementation Schedule.

INFRASTRUCTURE: The majority of the unit has direct access from the Parks Highway that runs in a north/south direction, generally through the center of the unit. The Petersville Road and East Susitna River Road run east/west and provide road access to the southern portion of the unit. The Chulitna Bluff Trail is located east of and generally parallels the Parks Highway. This trail lies east of the proposed harvest unit. Some trails exist to and through the timber harvest area.

SURROUNDING LAND USE: Both state and private land surround the unit. On the state land general dispersed recreational use occurs. The state land between the harvest unit and the Parks Highway was used as a material site for highway construction and maintenance. The private land has residential and recreation cabins and some agricultural uses. The NRMU has had some timber harvest for birch and spruce in the last 11 years. Both the Parks Highway and Petersville Road provide year round access to the area. The Chulitna Bluff Trail is a winter-only trail used primarily by snowmobilers. Because of the easy access, the area receives a significant amount of general dispersed recreational use.

EXISTING LAND USE PLANS: The harvest unit boundaries are within the following land use plans:

- MSB Natural Resource Management Unit Plan (2019)
- MSB Recreational Trails Plan (2016)
- MSB Parks, Recreation and Open Space Plan (2001)

- Alaska Department of Natural Resources, Susitna Matanuska Area Plan (2011) designated uses for Forestry, Public Recreation and Water Resources. This plan does not apply to Borough land.

OPERABLE SUMMER AND WINTER: The primary borough classification is for resource management and watershed lands. It is important to note that a portion of the harvest unit may be restricted to winter access. Winter timber operations may be opened, closed, limited and/or suspended by the Borough at any time determined necessary by the Borough to protect and/or preserve Borough property, resources, soils, water quality, fish, wildlife, fish & wildlife habitat, wetlands and waterbodies. Typical winter operations require a certain depth of frozen ground/ice and sufficient snow depth to protect wetland vegetation.

Timber harvesting is an authorized use. Small to medium timber harvests are allowed in those areas determined to be commercial forestland and where it does not significantly reduce the areas recreational activities. The proposed harvest unit meets this requirement.

PUBLIC HEALTH, SAFETY, and WELFARE: The Borough has not identified any public health, safety, or welfare concerns at this time. To the extent they are identified later, the Borough will attempt to address them through the individual timber sale contract provisions for the harvest area, or the permits that address the operation. Timber harvest contracts include requirements to limit or avoid negative effects on public health, safety, and welfare. Timber harvests require an approved detailed plan of operations that address noise, lighting, truck traffic, scarification and road maintenance. A Timber Transport Permit may be required for timber harvests greater than 40 acres in size. The MSB Natural Resource Management Unit Plan (2019) outlines buffer distances required to protect water bodies, wetlands, trails and wildlife habitat during and after timber harvest. Appropriate buffers are required. The sites will be thoroughly evaluated prior to preparing an Implementation Schedule.

COMMUNITY COUNCILS: The harvest unit is within the Trapper Creek Community Council.

SOILS and TERRAIN: The United States Department of Agriculture lists the soils as Nancy silt loam, 0-3 percent. The profile is 0-3 inches grayish brown silt loam; 3-24 inches dark reddish brown and dark grayish brown silt loam, and 24-60 inches of variegated very gravelly sand. General management considerations; the soil is well suited for forestry. Some soil related factors are wind erosion, water erosion, frost action, low fertility, depth to gravel and cobbles, cutback instability, excess surface fines, and excessive permeability.

COST REVENUE ANALYSIS: Approximately 79,974 cubic feet of wood are available on 54 acres of land. The Borough proposes to offer one commercial timber sale in this unit during this Schedule. Access is anticipated to be feasible to a portion of the unit in the summer, which could facilitate a partial harvest during the summer with the remainder of the harvest occurring the following winter.

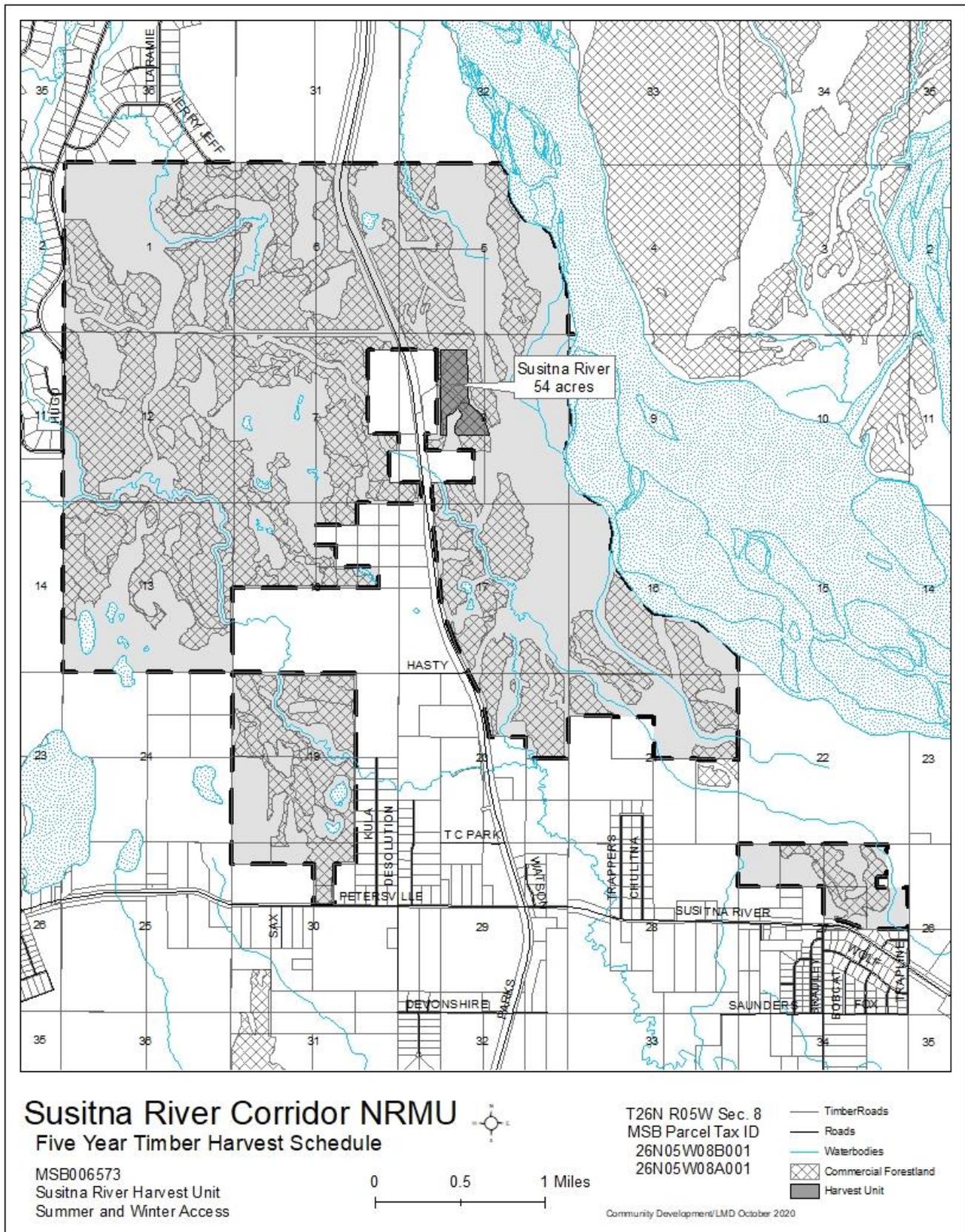
ESTIMATED MINIMUM BIDS:

Beetle kill spruce saw logs (greater than 9” dbh) to be sold at no cost. Removal of the dead trees from the forest is considered to be in the best interest of the borough and a public service.

All birch, cottonwood, and aspen greater than 11” will be sold by the green ton (2.00 green ton).

All live spruce >9” dbh will be sold by the green ton (2.00 green ton)

PERSONAL USE FIREWOOD AREAS (PUFA's): PUFA's may be available either in or adjacent to the Susitna River Corridor NRMU before and during any timber harvest (MSB 23.20.110).



FIVE-YEAR TIMBER HARVEST SCHEDULE
UNIT DESCRIPTION
Rabideux Creek NRMU

PROPOSED HARVEST UNIT LOCATION AND ACCESS: The Rabideux Creek NRMU is located within Section 1, Township 23 North, Range 05 West; Sections 9, 10, 16, 21-23, 25-26, 35-36 Township 24 North, Range 05 West; Sections 23, 26, 35-36 Township 25 North, Range 05 West; all lying within the Seward Meridian. The Unit contains 4,500 total acres, of that, 2,692 are commercial forestland.

The Borough is proposing two timber harvest units in the Rabideux NRMU for inclusion in the Five Year Timber Harvest Schedule. The purpose of these sales is to provide opportunities for the harvest of timber products.

The harvest units lie within Section 16, Township 24 North, Range 05 West, SM Alaska, lying west of the Parks Highway at approximately milepost 104. The harvest units are within MSB Parcel Tax ID 24N05W16A001.

ACRES, VOLUME AND SPECIES: Rabideux Creek NRMU contains 4,447 acres, of which 2,692 acres is commercial forestland. The commercial forestland is comprised of (60%) of mixed birch and spruce sawtimber (spruce >9", birch >11") with ages ranging from 60 years to greater than 100 years. The proposed timber harvest would be for the mixed forest sawtimber (spruce > 9", birch >11") and accounts for about 13% of the proposed Schedule.

INFRASTRUCTURE: The Parks Highway and Alaska Railroad provide general access to the unit. The Rabideux Trail runs north/south and passes to the east of the harvest units.

SURROUNDING LAND USE: Land ownership adjacent to the unit is primarily state land. There are some areas that are privately owned in the general area. The primary use of these lands is dispersed recreation. State timber and firewood sales have occurred in the vicinity.

EXISTING LAND USE PLANS: The harvest unit boundaries are within the following land use plans:

- MSB Natural Resource Management Unit Plan (2019)
- MSB Recreational Trails Plan (2016)
- MSB Parks, Recreation and Open Space Plan (2001)
- Alaska Department of Natural Resources, Susitna Matanuska Area Plan (2011) designated uses for Forestry, Public Recreation and Water Resources. This plan does not apply to Borough land.

OPERABLE WINTER ONLY: The harvest units primary borough classification is for resource management and watershed lands. It is important to note that the harvests units are restricted to winter access. Winter timber operations may be opened, closed, limited and/or suspended by the Borough at any time determined necessary by the Borough to protect and/or preserve Borough property, resources, soils, water quality, fish, wildlife, fish & wildlife habitat, wetlands and waterbodies. Typical winter operations require a certain depth of frozen ground/ice and sufficient snow depth to protect wetland vegetation.

Timber harvesting is an authorized use. Timber harvests, harvest units and cutting areas shall protect the water resource values and not significantly reduce the areas recreational opportunities.

These harvest units could be designated as a Special Management Area and designated as a suitable as a Forest Education and Improvement Study Area

PUBLIC HEALTH, SAFETY, and WELFARE: The Borough has not identified any public health, safety, or welfare concerns at this time. To the extent they are identified later, the Borough will attempt to address them through the individual timber sale contract provisions for the harvest area, or the permits that address the operation. Timber harvest contracts include requirements to limit or avoid negative effects on public health, safety, and welfare. Timber harvests require an approved detailed plan of operations that address noise, lighting, truck traffic, scarification and road maintenance. The MSB Natural Resource Management Unit Plan (2019) outlines buffer distances required to protect water bodies, wetlands, trails and wildlife habitat during and after timber harvest. Appropriate buffers are required. The sites will be thoroughly evaluated prior to preparing an Implementation Schedule.

COMMUNITY COUNCILS: The harvest units are not within a Community Council.

SOILS and TERRAIN: The United States Department of Agriculture lists the soils as Whitsol silt loam, till substratum and similar soils. The profile is 0-2 inches gray silt loam; 2-26 inches dark reddish brown silt loam, and 26 to 55 inches dark brown stratified silt loam, fine sandy loam, and fine sand; 55 to 60 inches dark grayish brown very gravelly sandy loam. The soil is well suited for forestry. Windthrow hazard is considered moderate for shallow rotted trees. Plant competition may be severe with high available moisture, and competitive species.

COST REVENUE ANALYSIS: Approximately 201,229 cubic feet of wood are available on 119 acres of land. The Borough proposes to offer two commercial timber sales in this unit during this Schedule. The volume estimate of timber per acre is about 1,691 cubic feet, dependent on location, type size and strata. The Inventory estimate of cubic feet in the harvest areas is 283,974.

ESTIMATED MINIMUM BIDS:

Beetle kill spruce saw logs (greater than 9” dbh) to be sold at no cost. Removal of the dead trees from the forest is considered to be in the best interest of the borough and a public service.

All birch, cottonwood, and aspen greater than 11” will be sold by the green ton (2.00 green ton).
All live spruce 7”-9” dbh will be sold by the green ton (2.00 green ton)

PERSONAL USE FIREWOOD AREAS (PUFA’s): Personal use harvest of firewood is **not** proposed to be offered in the Rabideux Creek NRMU. Access would be sufficiently challenging for public firewood gathering.

