

MATANUSKA-SUSITNA BOROUGH

FIVE-YEAR

TIMBER HARVEST SCHEDULE

June 18, 2013 – December 31, 2017



Prepared by

Community Development Department

Land and Resource Management Division

Adopted June 18, 2013

This is the first update to the Five-Year Timber Harvest Schedule (Schedule) of the Matanuska-Susitna Borough (Borough), since adoption of the Schedule on December 7, 2011. There were not any commercial timber sales in 2012 due to vacancies and staffing levels in the Land and Resource Management Division (LMD). As such, the schedule adopted in 2011 is already outdated. Additionally, due to the recent exemption of Chijuk Creek, the actual volume of operable timber to calculate the annual allowable cut (AAC) has been reduced; thus reducing the AAC. This Schedule proposes an aggressive AAC during the first five years of the Schedule to address Borough forests which are predominantly over-mature and could be declining in operable forest land at a faster rate than they are growing. Borough timber harvests are managed on a ten-year cycle. It is important to note that the Asset Management 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, create economic opportunities, and enhance multiple-use opportunities.

It is important to note that salvage sale opportunities for commercial use and personal use firewood permits may become available in the Point MacKenzie, Big Lake, and Butte area beginning this spring and continuing throughout 2013 and into 2014; and longer as a result of clearing for the rail project, conversions of land use for material extraction and other land use conversions such as road realignments, fuel reduction projects, new school sites in the Knik area; and clearing of the KABATA ROW within the Port District. As a result of the above mentioned salvage sale opportunities, this Schedule puts more focus in the first and second year on Commercial Timber Sales located in the northern one-half of the Susitna Valley.

PURPOSE OF THE FIVE-YEAR TIMBER HARVEST SCHEDULE:

This 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 publicly notice a Periodic Timber Harvest Implementation Schedule (Implementation Schedule) to implement timber harvests for 2013 and 2014.

The 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 schedules are at the end of this section.

The Borough compiles the Schedule for commercial timber sales on Borough-owned land classified as “forest management land” or “resource management land” from land that has been determined to be operable timber land; has a primary or secondary land use designation for forest management; and is located within a natural resource management unit subject to the NRMU.

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.

TIMBER BASE: Timber resource estimates are based on the Matanuska-Susitna Borough Timber Inventory Report, Phase II, Sanders Forestry Consulting, June 2009 (Report).

SUSTAINED YIELD: All commercial and non-commercial borough-owned forest land will be managed on a sustained yield basis to provide forest timber products based on the rotation period for the dominant timber type.

METHODS AND AUTHORIZATION FOR THE SALE, LEASE, OR PERMIT OF FOREST PRODUCTS:

Forest product sales from the approved Implementation Schedule may be offered for competitive bid. Forest product sales in excess of 500 cords of wood per transaction shall 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 over the counter by the manager without competitive bid.

All Borough timber harvest sales must comply with the Alaska Forest Resources Practices Act and MSB Code. Timber harvest contracts have permit requirements to limit or avoid impacting public health, safety, and welfare concerns. Timber harvesting requires an approved detailed plan of operations. All timber sales that are 40 acres or greater in size require a Timber Harvest/Timber Transportation Permit, MSB Code 28.60.

PROPOSED UNIT DESCRIPTIONS: The Borough is providing several timber harvest area proposals within adopted Natural Resource Management Units for inclusion in the Five Year Timber Harvest Schedule.

PROPOSED HARVEST UNIT LOCATION:

Attached are written descriptions and maps for each of the proposed harvest units. Each description and map indicates the Township, Section, and Range, nearest road name and approximate road milepost. Community Council Areas will be noted where applicable. All units will be located within areas identified in the Report as Operable Acres; and are identified by cross hatching on unit maps.

Items required for the Contents of the Five-Year Timber Harvest Schedule per Borough Code, MSB 23.20.100(C) (1-14), are found in the attached unit descriptions, included below. Some of the information that is included is; 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.

ACRES: The Report¹ indicates that there are 41,708 acres of operable commercial forest land within the 15 NRMU units that are currently inventoried. The volume of standing timber within the operable acres is 72,879,200 cubic feet of wood.

There are approximately 40,000 acres within NRMU's that are not part of the Inventory; including over 5,511 acres within the Fish Creek Unit alone. The LMD is addressing the items above as well as the Annual Allowable Cut (AAC) on Borough commercial forest land.

TIMBER SPECIES, VOLUME, TREES PER ACRE, AND SIZE CATEGORY: Of the 15 NRMU's operable acres approximately 77% is mixed forest sawtimber (spruce > 9", birch >11");

¹*Operable Forest Land Analysis Report Phase II, Sanders Forestry Consulting and Alaska Map Company, June 2009 adjusted February 2013 per Chijuk Creek exemption from the Annual Allowable Cut, MSB 23.20.40(E)*

approximately 7% is hardwood sawtimber (birch >11”); and approximately 16% is poletimber (spruce 5-9”, birch 5-11”). The timber inventory indicates an average net volume of 1,718 cubic feet of wood per acre or 194 trees per acre. In general, the sawtimber size category (both mixed and hardwood) will be proposed for most harvests, except where noted.

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)
- Mat-Su Borough *Natural Resource Management Unit Plan* (2010)
- Mat-Su Borough , *Recreational Trails Plan* (2007)
- Mat-Su Borough, *Parks Recreation and Open Space Plan* (2001)
- *Fish Creek Management Plan* (2009)

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

- *Susitna Matanuska Area Plan (SMAP)* August 2011
- *Southeast Susitna Area Plan* (2009)
- *Fish Creek Management Plan* (2010)

PUBLIC HEALTH SAFETY AND WELFARE CONCERNS: Timber harvest requirements for avoiding or impacting public health safety and welfare concerns will be provided in the harvest Implementation Schedule and addressed in individual timber sale contracts. 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.

WATER BODIES AND BUFFERS: Borough Code MSB 23.20.070 and the NRMU provide guidelines for buffers required for the protected of various resources such as; 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 will be investigated and 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) are required for many 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: (including general description of recent state sales):

The Borough’s current fees are; \$25 per cord for **personal use** firewood and \$1.75 per lineal foot for saw-timber and/or house-logs. The FMV for Borough **commercial value** timber varies significantly between NRMU’s due to type, size and access to the resource; and other mitigating factors. Recent state timber sale offerings in the Rabideux Creek area received bids as high as \$15.99 per CCM for birch and a bid of \$86 per MBF for spruce.

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 forest land require seven years of follow up for compliance with the Alaska Forest Resources Practices Act for regeneration.

The Borough will do 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 field work 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. Some of this field work has already been completed for some areas identified in the first five-year Schedule.

ANNUAL ALLOWABLE CUT: The AAC (volume) for one year at the 80 year rotation length is 910,990 cubic feet, of wood or approximately 531 acres. The AAC for a five-year period is 4,554,950 cubic feet equaling approximately 2,655 acres. Borough Code requires an 80 year rotation based on the dominant timber type. Due to the age and declining value of the predominant timber type on commercial forest land; a more aggressive rotation could help reverse some of the degenerating forest conditions and provide for more early succession of wildlife habitat and forage. The NRMU Plan allows for flexibility in management of the Units. Management will be in compliance with guidelines of the NRMU and borough code. The goal is to provide for a diverse forest by utilizing multiple tools and resource management techniques. Some significantly over mature stands may be managed on a more aggressive rotation (50 year) to bring that area back into a diverse and productive forest. Some portions of the over mature stands will be allowed to cycle naturally, regenerating naturally, and to provide for wildlife habitat for animals that require more open areas, tree cavity nesting, and other benefits of a climax stand.

The proposed Schedule represents **3,292 acres** of operable forest land, amounting to a little more than **5,655,656** cubic feet of wood. The proposed Schedule exceeds the five-year AAC by about 12% (637 acres). It is important to note that the AAC on all Borough commercial forest land shall be managed on a decadal (ten-year) basis. Harvest volumes in an individual management unit may be above or below the AAC to allow for efficient management, and responsiveness to market fluctuations. This Schedule is consistent with Borough intent to maximize the AAC to the extent possible using Best Management Practices (BMP) to:

- Enhance multiple-use opportunities
- Increase acres of forests under intensive management
- Increase acres converted to regeneration cycle
- Increase acres for wildlife habitat and forage improvement
- Increase annual growth rate, increase wood volume
- Increase public access and opportunities to use public land
- Promote healthy and productive forest land
- Provide timber resources for economic development of the commercial timber industry; and
- Increase economic development opportunities for local businesses.

We will offer a variety of timber products providing for commercial and personal use opportunities simultaneously wherever possible. This schedule will be subject to public review and comment.

PROPOSED FIVE YEAR TIMBER HARVEST SCHEDULE TABLES

HARVEST SCHEDULE YEAR ONE-2013

HARVEST UNIT NAME	SALE NUMBER	ACRES	CUBIC FT	ACCESS
Kashwitna – A,B,C	MSB 006566 A-C	134	230,212	OA &OWA
Moose Creek	MSB 006567 A	36	61,848	OA
Rogers Creek -A	MSB 006571 A	39	67,002	OWA
Sheep Creek - A	MSB 006572 A	77	132,286	OWA
Sheep Creek - H	MSB 006790 H	30	51,540	OWA
Sheep Creek - I	MSB 006791 I	30	51,540	OWA
Susitna River Corridor	MSB 006573 A	320	549,760	OWA
		666	1,144,188	

HARVEST SCHEDULE YEAR TWO-2014

HARVEST UNIT NAME	SALE NUMBER	ACRES	CUBIC FT	ACCESS
Rabideux Creek	MSB006743 (SVHS)	39	67,002	OWA
Kashwitna D	MSB 006792 D	80	137,440	OA
Rogers Creek -B	MSB 006793 B	470	807,460	OWA
Sheep Creek - J	MSB 006794 J	35	60,130	OWA
Sheep Creek - K	MSB 006795 K	35	60,130	OWA
		659	1,132,162	

HARVEST SCHEDULE YEAR THREE-2015

HARVEST UNIT NAME	SALE NUMBER	ACRES	CUBIC FT	ACCESS
Rabideux Creek	MSB006743 (SVHS)	39	67,002	OWA
Parks Highway	MSB006743 (SVHS)	25	42,950	OA
Pt. MacKenzie-Alsop	MSB 006569 A	600	1,030,800	OA
		664	1,140,752	

HARVEST SCHEDULE YEAR FOUR-2016

HARVEST UNIT NAME	SALE NUMBER	ACRES	CUBIC FT	ACCESS
Parks Highway	MSB006796 SELECT	25	TBD	OA
Rabideux Creek	MSB006797 SELECT	78	TBD	OWA
Pt. Mac.-Mule Creek	MSB 006798 B	598	1,027,364	OA
Sheep Creek - L	MSB 006799 L	35	60,130	OWA
		736	+1,087,494	

HARVEST SCHEDULE YEAR FIVE-2017

HARVEST UNIT NAME	SALE NUMBER	ACRES	CUBIC FT	ACCESS
Rabideux Creek	MSB006743 (SVHS)	39	67,002	OWA
Sheep Creek - M	MSB 006572 M	35	60,130	OWA
Susitna River Corridor	MSB 006801 B	596	1,023,928	OWA
		670	1,151,060	

FIVE-YEAR TIMBER HARVEST SCHEDULE UNIT DESCRIPTION

Kashwitna River NRMU

The Kashwitna River NRMU is located within Sections 29, 32, & 33 Township 22 North, Range 03 West, SM Alaska, and lying east of the Parks Highway at approximately milepost 86. The proposed harvests are within the Susitna Community Council and Willow Area Community Organization areas. Access to this proposed timber harvest area would be from the Parks Highway and via timber roads. It is important to note that a portion of the timber harvest allowed within the Kashwitna Unit may be restricted to winter access. Final determination will be made upon a more detailed analysis and will be included in the site evaluation prior to being listed on the Periodic Timber Harvest Implementation Schedule.

The Unit contains 9,360 total acres, of that, 3,429 are considered to be operable. The operable acres are comprised of (39%) of mixed forest sawtimber (spruce > 9", birch >11"), 4% hardwood sawtimber, and 57% poletimber (spruce 5-9", birch 5-11"). Two timber harvests are being proposed in the Unit for inclusion in the Five Year Timber Harvest Schedule. The proposed timber harvest would be for mixed pole timber (spruce 5-9", birch 5-11") and includes approximately 6% of the proposed Schedule.

The purpose of these sales is to provide an opportunity for the harvest of timber products. Personal and community needs may be served by the sale of firewood and timber products. The community would also benefit from the opportunity for jobs and sales of fuel and food from timber harvest activities; and fill the need for local personal use firewood, crafts and woodworking, and house logs. The Borough expects its timber harvest offerings will help meet the needs of small commercial logging operators as well. Other uses of the proposed timber harvest area could be hunting, recreation, watershed, and wildlife habitat improvement.

The Unit has a variety of dispersed recreational uses, mainly in the winter when access to the area is easier. There has been some timber harvest within the unit. The Unit has access from the Alaska Railroad and the parks Highway. The Talkeetna Mail (Herning) Trail and Kashwitna Trespass Trail meander through the unit.

The Unit boundaries are within the following land use plans:

- Mat-Su Borough Natural Resource Management Unit Plan (2010)
- 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.
- The Susitna Comprehensive Plan (2007)
- The Susitna Matanuska Area Plan (SMAP) August 2011
- The Willow Area Community Organization is currently working on a comprehensive plan.

The adjoining land is owned by the State of Alaska. Timber harvests have taken place on these lands and general dispersed recreational use also occurs. Zoning exists for private land development for several circumstances such as; structures, roads and subdivisions. Zoning also exists for gravel extraction for barter or sale that is greater than 2,000 cubic yards per year.

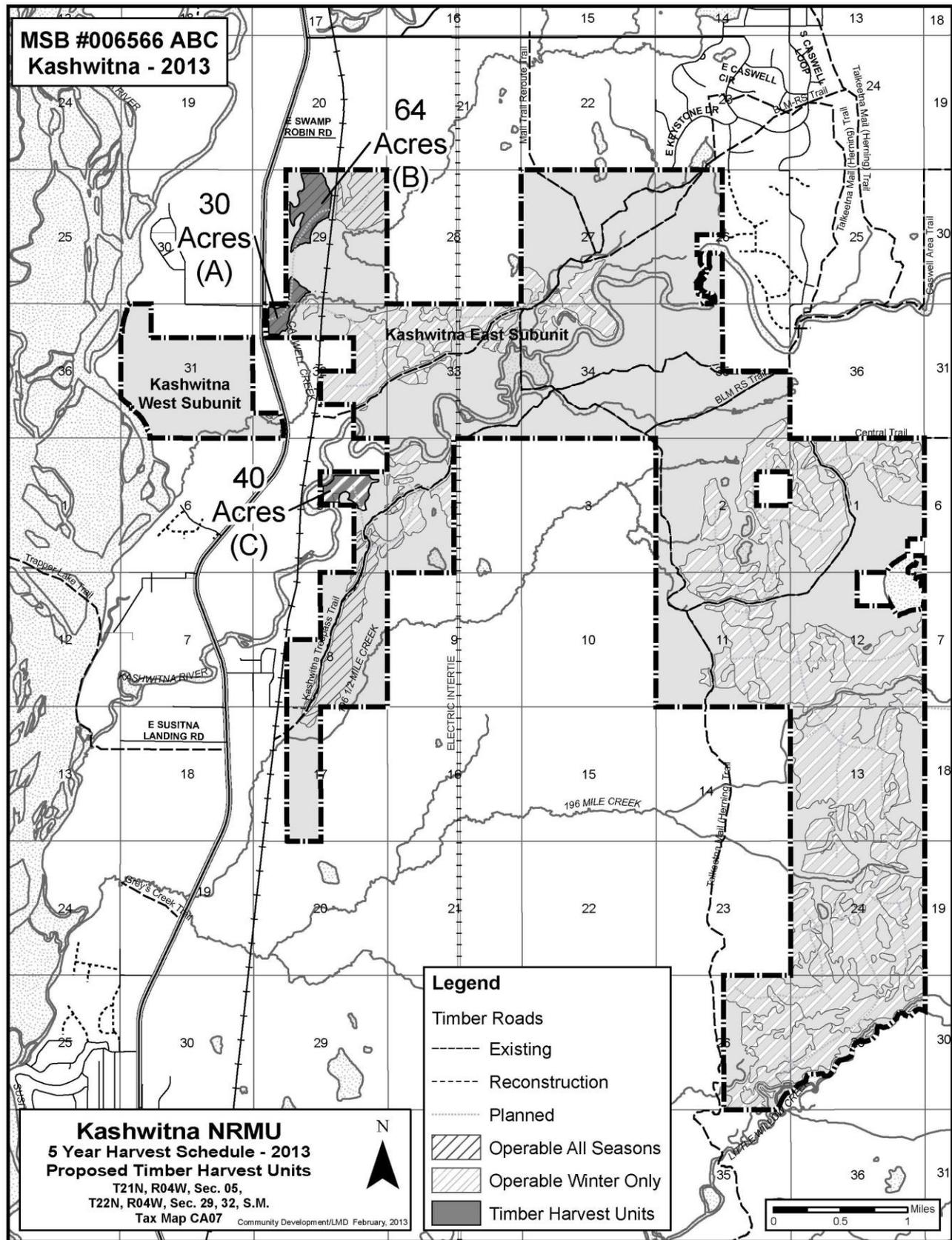
Timber harvests have permit requirements to limit or avoid impacting public health safety and welfare concerns. Timber harvesting requires an approved plan of operations that addresses noise, lighting, truck traffic, scarification and road maintenance. A Timber Transport Permit may be required for timber harvests greater than 40 acres in size. The Mat-Su Borough Natural Resource Management Unit Plan (2010) outlines buffers required for water bodies for timber harvest. Flowing streams and water bodies will be considered in this proposed harvest area and appropriate buffers will be imposed. The site will be thoroughly evaluated prior to preparing and including in a Periodic Timber Harvest Implementation Schedule.

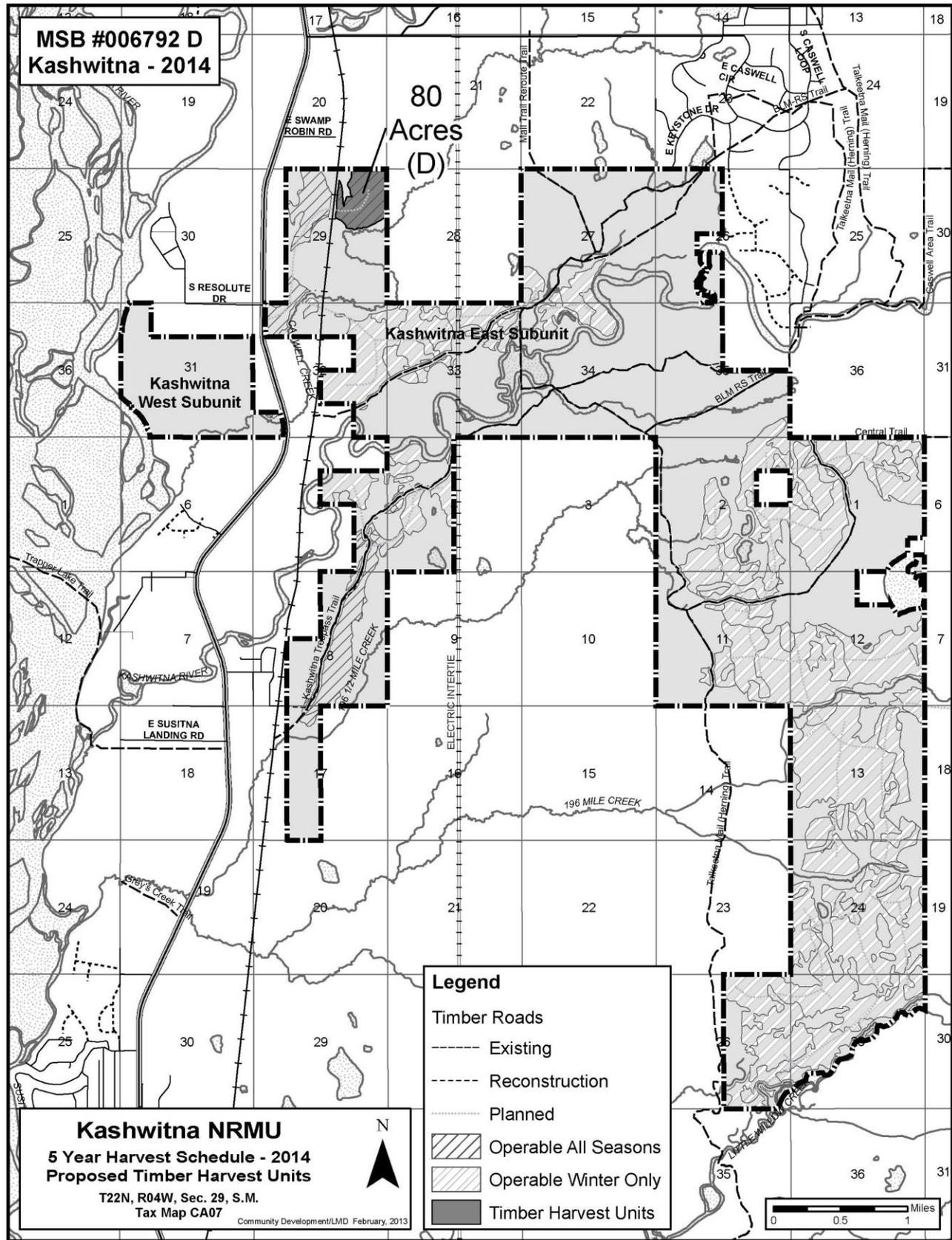
The United States Department of Agriculture lists the soils as Nancy silt loam, 0-3 percent. The profile is 0-3 inches grayish brown silt loam; 3-24 inches dark reddish brown and dark grayish brown silt loam, and 24-60 inches of variegated very gravelly sand. General management considerations; the soil is well suited for forestry. When the canopy is removed and the ground surface disturbed, blue-joint reed-grass 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, cut-bank instability, excess surface fines, and excessive permeability.

Approximately 367,652 cubic feet of wood are available on 214 acres of land. The Borough proposes to offer two commercial timber harvests. The commercial value of Borough timber is currently between \$6 and \$15 per CCF for birch and between \$50-\$86 MBF for spruce based on recent State timber harvest offerings. The average estimate of timber per acre is about 1,718 cubic feet, dependent on location, type size and strata. The proposed minimum bids range between \$6.00 - \$8.00 per CCF and are based on the size of the parcel, location, access, and timber type/size being offered.

<u>Sale Number</u>	<u>Acres</u>	<u>Cubic Feet</u>	<u>CCF</u>	<u>YEAR</u>	<u>Proposed Min Bid</u>
MSB 006566 A-C	134	230,212	2,302	2013	\$6.00 per CCF = \$13,812
MSB 006566 D	80	137,440	1,374	2014	\$8.00 per CCF = \$10,992

A more detailed analysis will be included in the site evaluation prior to being listed on the Periodic Timber Harvest Implementation Schedule.





FIVE-YEAR TIMBER HARVEST SCHEDULE UNIT DESCRIPTION

Moose Creek NRMU

The Moose Creek NRMU is located in Section 30, Township 26 N, Range 06W, SM Alaska, located south of Petersville Road at approximately milepost 7. Access would be directly from Petersville Road. A state driveway permit would be required

The Unit contains about 1,230 total acres, of that, 732 are considered to be operable. A 36 acre timber harvest area is proposed for the NE1/4 of Parcel B001 and has approximately 61,848 cubic feet of wood. The Moose Creek NRMU operable acres are comprised mostly (99%) of mixed forest sawtimber (spruce > 9", birch >11"). The proposed timber harvest is for the mixed saw-timber (spruce > 9", birch >11") and is about 1% of the Schedule. Harvest volumes will be more closely estimated after a site inspection and prior to submitting a Periodic Timber Harvest Implementation Schedule.

The purpose of this sale is twofold; one is to provide an opportunity for the harvest of timber products and two, is to begin preparing an area for development of a material (gravel) mining site. Gravel amounts cannot be determined at this point without ground investigation. MSB Code 17.30 will require a gravel extraction permit. Personal needs may be served by the sale and/or salvage of firewood and provide a source for personal use gravel sales. Community needs will be served by a nearby gravel source (if developed) for the local road service area. The community would also benefit from the opportunity for jobs and sales of fuel and food from timber and gravel extraction activities. The local market (request from the RSA board members and private citizens) have indicated through written and oral requests to the Borough Manager and the CDD a desire for both resources be made available; timber for fuelwood and gravel.

Other uses of the proposed timber/gravel extraction area could be public recreation, wildlife habitat improvement, and watershed. Moose Creek NRMU has a variety of dispersed recreational uses. The Moose Creek NRMU is bisected north from south by the Petersville Road. This portion of the road is a scenic highway. The proposed Petersville Roadside Trail parallels the northern portion of Petersville Road. Trail Ridge Road also bisects the unit in a north south direction. There are some adjacent private land to the south and east of the unit. The majority of the adjoining land is owned by the State of Alaska. The land to the north is within the Moose Creek Unit of the Susitna Recreational Rivers. Other than the private land outside of the unit there is little development in the area. The Petersville Road Corridor Management Plan (1998) identifies a 150 foot wide scenic buffer along the Petersville Road within the Moose Creek unit. The plan states the buffer is to remain in a natural, undeveloped state. Reasonable rights of access are allowed from the highway to land on either side of the road. Access should be limited to a single driveway and not be closer than 500 foot intervals.

The Unit boundaries are within the following land use plans:

- Mat-Su Borough Natural Resource Management Unit Plan (2010)
- The Susitna Matanuska Area Plan (SMAP) August 2011
- Petersville Road Corridor Management Plan (1998)

Both timber harvest and gravel pit development have permit requirements to limit or avoid impacting public health safety and welfare concerns. Timber harvesting requires an approved plan of operations

that addresses noise, lighting, truck traffic, scarification and road maintenance. Gravel extraction requires a land use permit that addresses noise, lighting, truck traffic, road maintenance, dust and rehabilitation after cessation of mining. The gravel extraction site could be reclassified for another purpose after mining. The Mat-Su Borough Natural Resource Management Unit Plan (2010) outlines buffers required for water bodies for timber harvest. Flowing streams and water-bodies are not expected in this proposed harvest area.

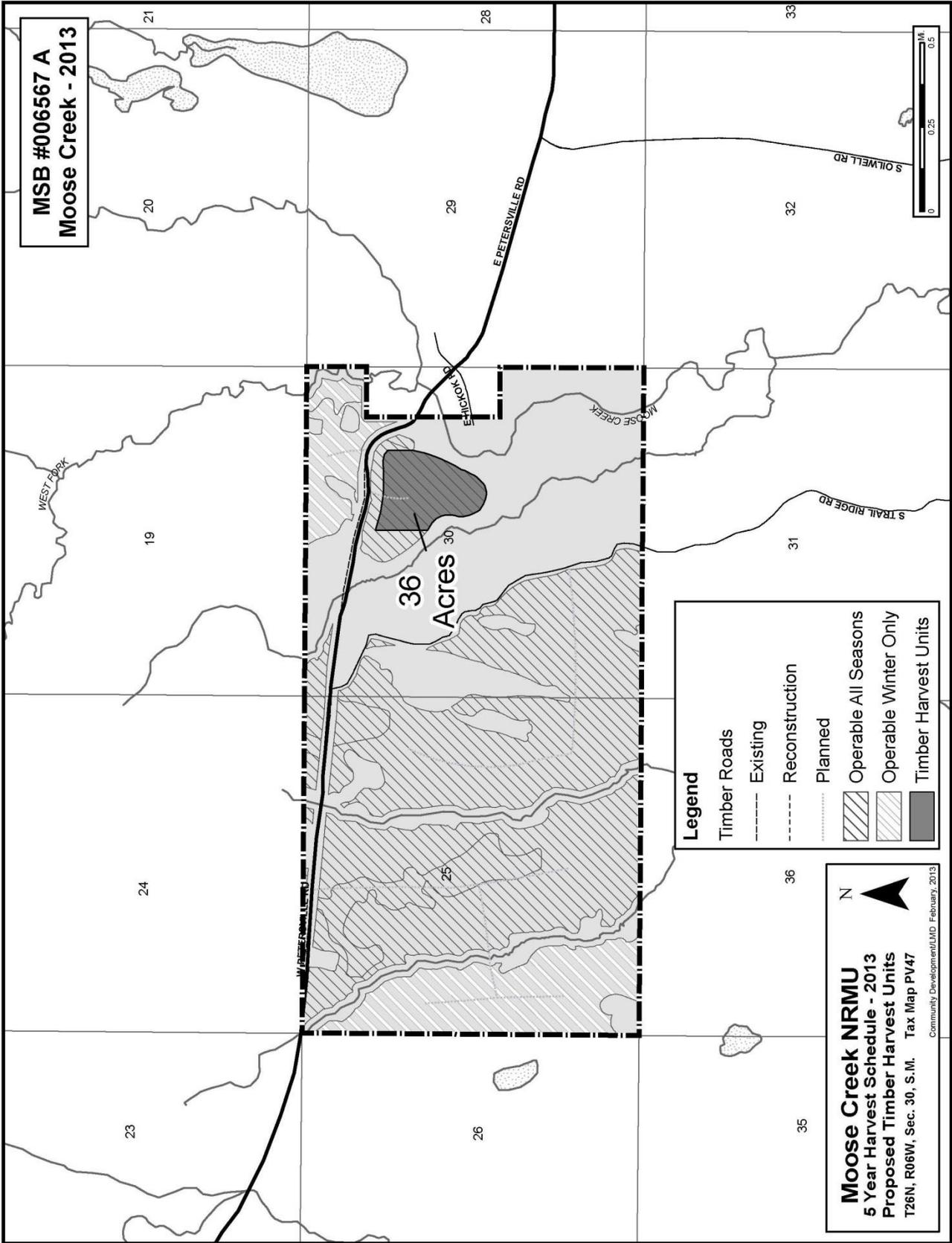
The United States Department of Agriculture lists the soils as Nancy silt loam, undulating. The profile is 0-3 inches grayish brown silt loam; 3-24 inches dark reddish brown and dark grayish brown silt loam, and 24-60 inches of variegated very gravelly sand. General management considerations; the soil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

Approximately 61,848 cubic feet of timber is available on 36 acres of land. The Borough proposes to offer the 36 acres for a commercial cut for the mixed saw timber. Personal use firewood will be made available in the commercial harvest area upon removal of the mixed saw timber. In addition, there will be a personal use firewood harvest offering directly across Petersville Road simultaneously with this offering.

The current Borough fee schedule for personal use firewood is \$25 per cord, \$1.75 per lineal foot for sawlogs. The current price for personal use gravel is \$3 per cubic yard. The commercial value of Borough timber is currently between \$6 and \$15 per CCF for birch and between \$50-\$86 MBF for spruce based on recent State timber harvest offerings. The average estimate of timber per acre is about 1,718 cubic feet, dependent on location, type size and strata. The proposed minimum bid is \$10 per CCF and is based on the size of the parcel, location, access, and timber type/size being offered.

<u>Sale Number</u>	<u>Acres</u>	<u>Cubic Feet</u>	<u>CCF</u>	<u>YEAR</u>	<u>Proposed Min Bid</u>
MSB 006567 A	36	61,848	618	2013	\$10.00 per CCF = \$6,180

The site will be thoroughly evaluated and a more detailed cost/revenue analysis will be included in the site evaluation prior to being listed on the Periodic Timber Harvest Implementation Schedule.



FIVE-YEAR TIMBER HARVEST SCHEDULE UNIT DESCRIPTION

Rogers Creek NRMU

The Rogers Creek NRMU is located within Sections 24 & 25, Township 20 North, Range 04 West, SM Alaska, lying north of the Willow/Fishhook Road at approximately milepost 43. The proposed harvest is within the Willow Area Community Organization boundaries. Access to this proposed timber harvest area would be from the Willow-Fishhook Road, Deneki Drive, Michelle Drive, Kelley Circle, Shadoc Lane, W. Kenny Boulevard, Willer-Kash Road and Jim Carter Road. The Borough is proposing two timber harvests in the Rogers Creek Natural Resource Management Unit (NRMU) for inclusion in the Five Year Timber Harvest Schedule. It is important to note that a portion or all of the timber harvest allowed within the Rogers Creek Unit may be restricted to winter access. Final determination will be made upon a more detailed analysis and will be included in the site evaluation prior to being listed on the Periodic Timber Harvest Implementation

The Unit contains 1,025 operable acres that are comprised of 16% of mixed forest sawtimber (spruce > 9", birch >11"), 7% hardwood sawtimber, and 77% poletimber (spruce 5-9", birch 5-11"). The proposed timber harvest would be for the mixed pole timber (spruce 5-9", birch 5-11") and is about 15% 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.

The purpose of this sale is to provide an opportunity for the harvest of timber products. Personal and community needs may be served by the sale of firewood and timber products. The community would also benefit from the opportunity for jobs and sales of fuel and food from timber harvest activities. The Borough expects its timber harvest offerings will help meet the needs of small commercial logging operators and the need for local personal use firewood, crafts, and woodworking. Rogers Creek NRMU receives a variety of uses, mainly dog mushing, snow machining, ATV use, fishing, hunting and trapping. Other uses of the proposed timber area could be other forms of public recreation, watershed, and wildlife habitat improvement.

The Unit boundaries are within the following land use plans:

- Mat-Su Borough Natural Resource Management Unit Plan (2010)
- The Susitna Matanuska Area Plan (SMAP) 2011-This plan does not apply to Borough land.
- Mat-Su Borough Recreational Trails Plan (2007)
- Mat -Su Borough Parks, Recreation and Open Space Plan (2001), currently being updated.

Timber harvests have permit requirements to limit or avoid impacting public health safety and welfare concerns. Timber harvesting requires an approved plan of operations that addresses noise, lighting, truck traffic, scarification and road maintenance. A Timber Transport Permit is required for timber harvests greater than 40 acres in size. The Mat-Su Borough Natural Resource Management Unit Plan (2010) outlines buffers required for water bodies for timber harvest. The site will be thoroughly evaluated prior to preparing and including in a Periodic Timber Harvest Implementation Schedule.

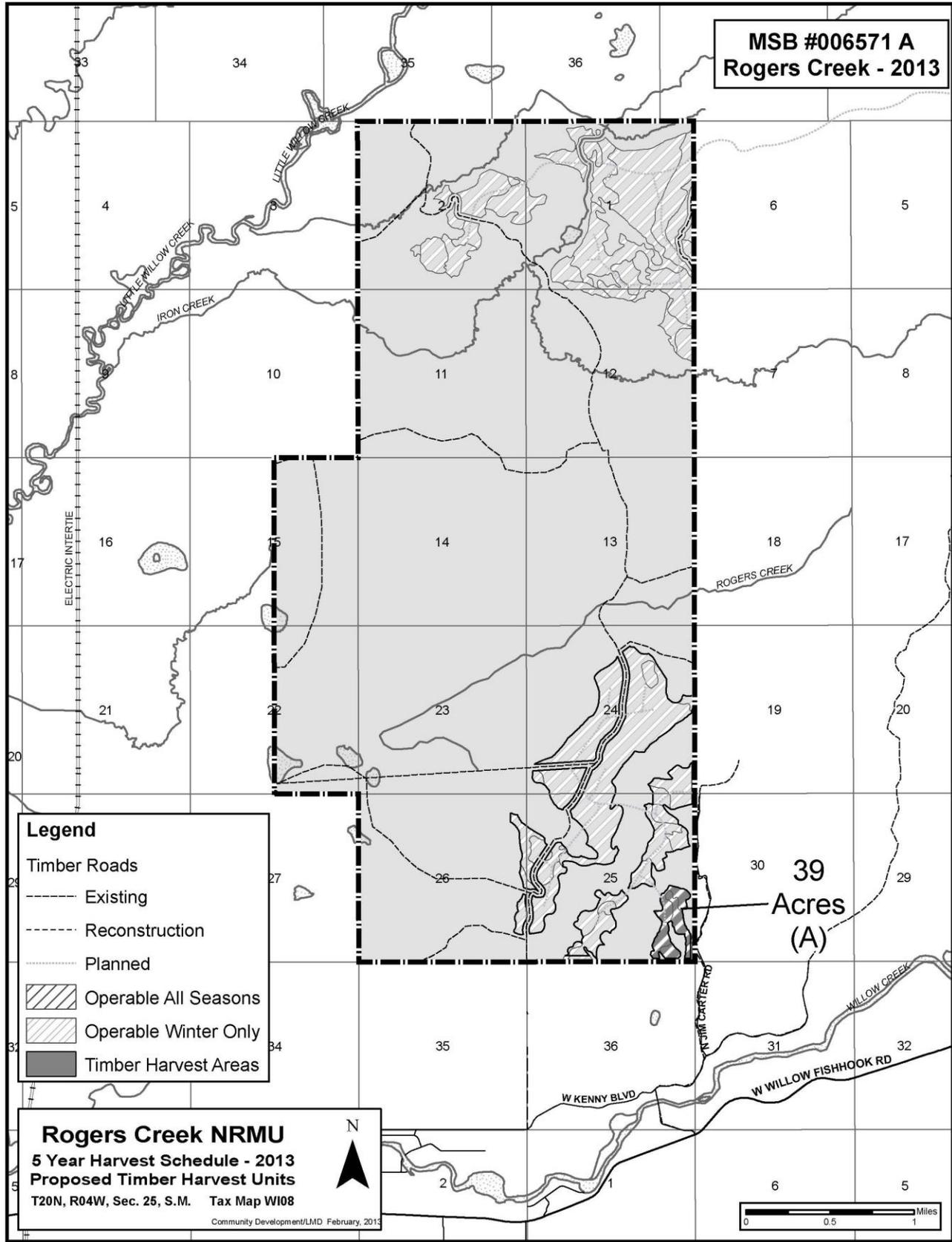
The adjoining land is owned by the State of Alaska where the same uses occur. There have also been timber harvests in the area to the east of the proposed unit. Scattered private land is also located throughout the surrounding area.

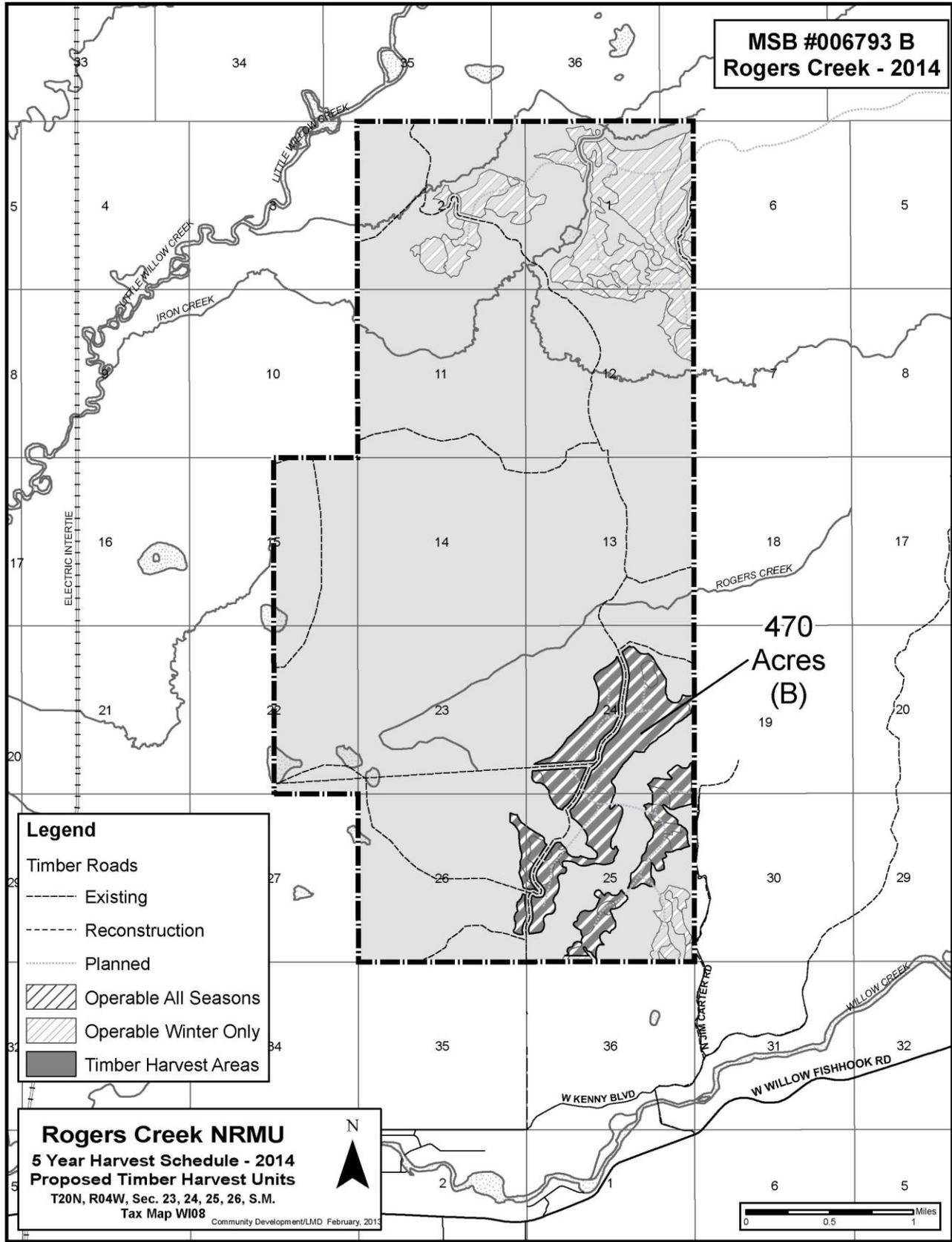
The United States Department of Agriculture lists the soils as Nancy Cryaquepts complex and Nancy silt loam. The Nancy silt loam profile is 0-3 inches grayish brown silt loam; 3-24 inches dark reddish brown and dark grayish brown silt loam, and 24-60 inches of variegated very gravelly sand. General management 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, cut-bank instability, excess surface fines, and excessive permeability. The cryaquepts complex contains wet shallow soils and is not well suited for forestry.

Approximately 874,462 cubic feet of wood are available on 509 acres of land. The Borough proposes to offer two commercial timber sales in this unit during this Schedule. The commercial value of Borough timber is currently between \$6 and \$15 per CCF for birch and between \$50-\$86 MBF for spruce based on recent State timber harvest offerings. The average estimate of timber per acre is about 1,718 cubic feet, dependent on location, type size and strata. The proposed minimum bid is \$6.00 per CCF and is based on the size of the parcel, location, access, and timber type/size being offered.

<u>Sale Number</u>	<u>Acres</u>	<u>Cubic Feet</u>	<u>CCF</u>	<u>YEAR</u>	<u>Proposed Minimum Bid</u>
MSB 006571 A	39	67,002	670	2013	\$6.00 per CCF = \$4,020
MSB 006571 B	470	807,460	8,074	2014	\$6.00 per CCF = \$ 48,444

The site will be thoroughly evaluated and a more detailed cost/revenue analysis will be included in the site evaluation prior to being listed on the Periodic Timber Harvest Implementation Schedule.





FIVE-YEAR TIMBER HARVEST SCHEDULE UNIT DESCRIPTION

Sheep Creek NRMU

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 is within the Susitna Community Council Area. Access to this proposed timber harvest area would be from Yoder Road and Montana Creek Road. The Borough is proposing seven timber harvests in the Sheep Creek Natural Resource Management Unit (NRMU) for inclusion in the Five Year Timber Harvest Schedule.

The Unit contains 1,549 acres of operable forest land and those acres are comprised of (88%) of mixed forest sawtimber (spruce > 9", birch >11"), 8% hardwood sawtimber, and 4% poletimber (spruce 5-9", birch 5-11"). The proposed timber harvests would be for the mixed forest sawtimber (spruce > 9", birch >11"), and is about 8% 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. A borough timber harvest area was logged approximately eight years ago in Section 2.

The purpose of these sales is to provide opportunities for the harvest of timber products. Personal and community needs may be served by the sale of firewood and timber products. The community would also benefit from the opportunity for jobs and sales of fuel and food from timber harvest activities. The Borough expects its timber harvest offerings will help meet the needs of small commercial logging operators and the need for local personal use firewood, crafts, woodworking, and saw timber and house logs.

Other uses of the proposed timber harvest area could be hunting, dog mushing, and a variety of dispersed forms of public recreation, watershed, and wildlife habitat improvement. 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.

The Unit boundaries are within the following land use plans:

- Mat-Su Borough Natural Resource Management Unit Plan (2010)
- The Susitna Matanuska Area Plan (SMAP) 2011-This plan does not apply to Borough land.
- Mat-Su Borough Recreational Trails Plan (2007)
- Mat -Su Borough Parks, Recreation and Open Space Plan (2001), currently being updated.

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. Zoning exists for public and private land development for several circumstances such as; building structures, roads, and subdivisions.

Timber harvests have permit requirements to limit or avoid impacting public health safety and welfare concerns. Timber harvesting requires an approved plan of operations that addresses 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 Mat-Su Borough Natural Resource Management Unit Plan

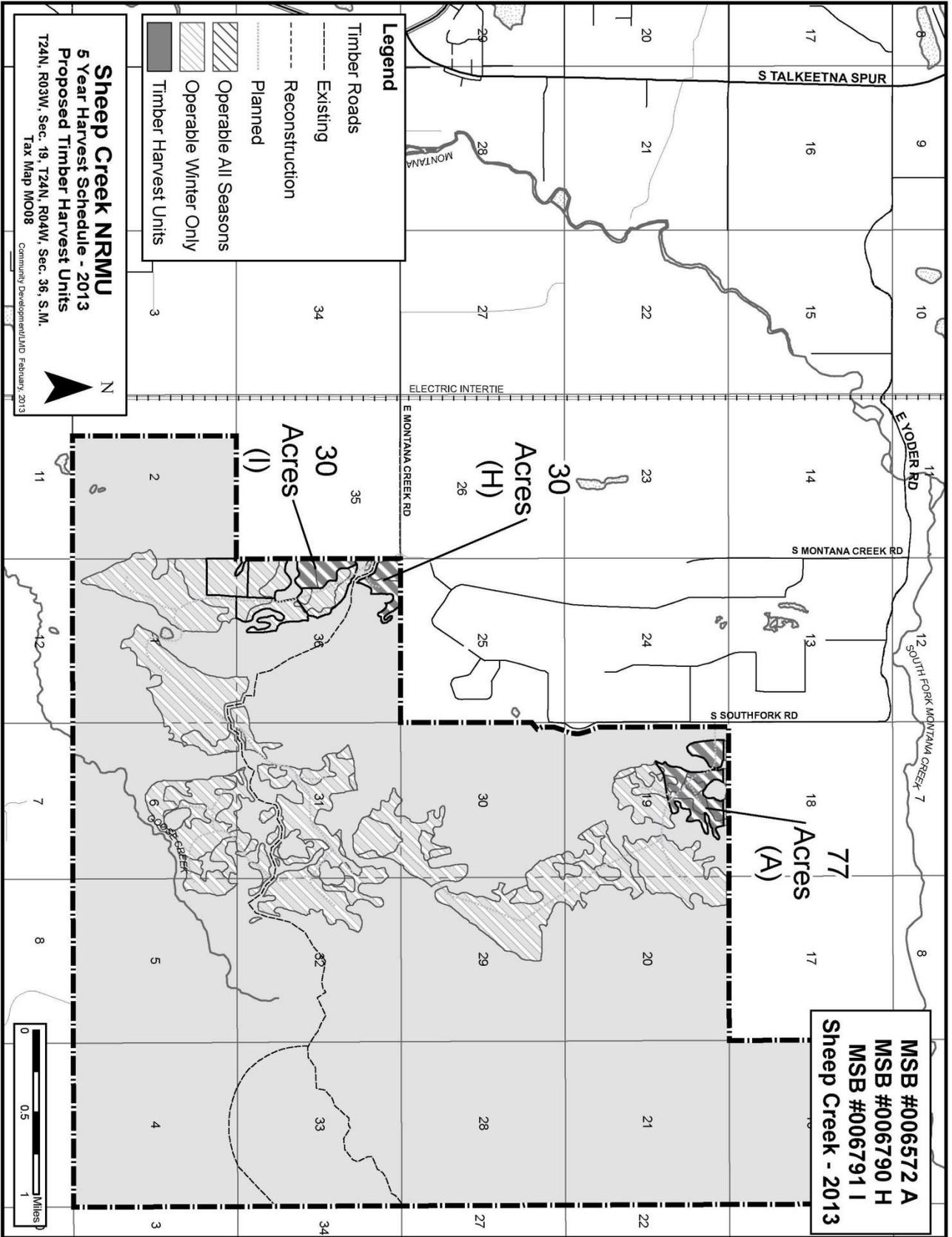
(2010) outlines buffers required for water bodies for timber harvest. The site will be thoroughly evaluated prior to preparing and including in a Periodic Timber Harvest Implementation Schedule.

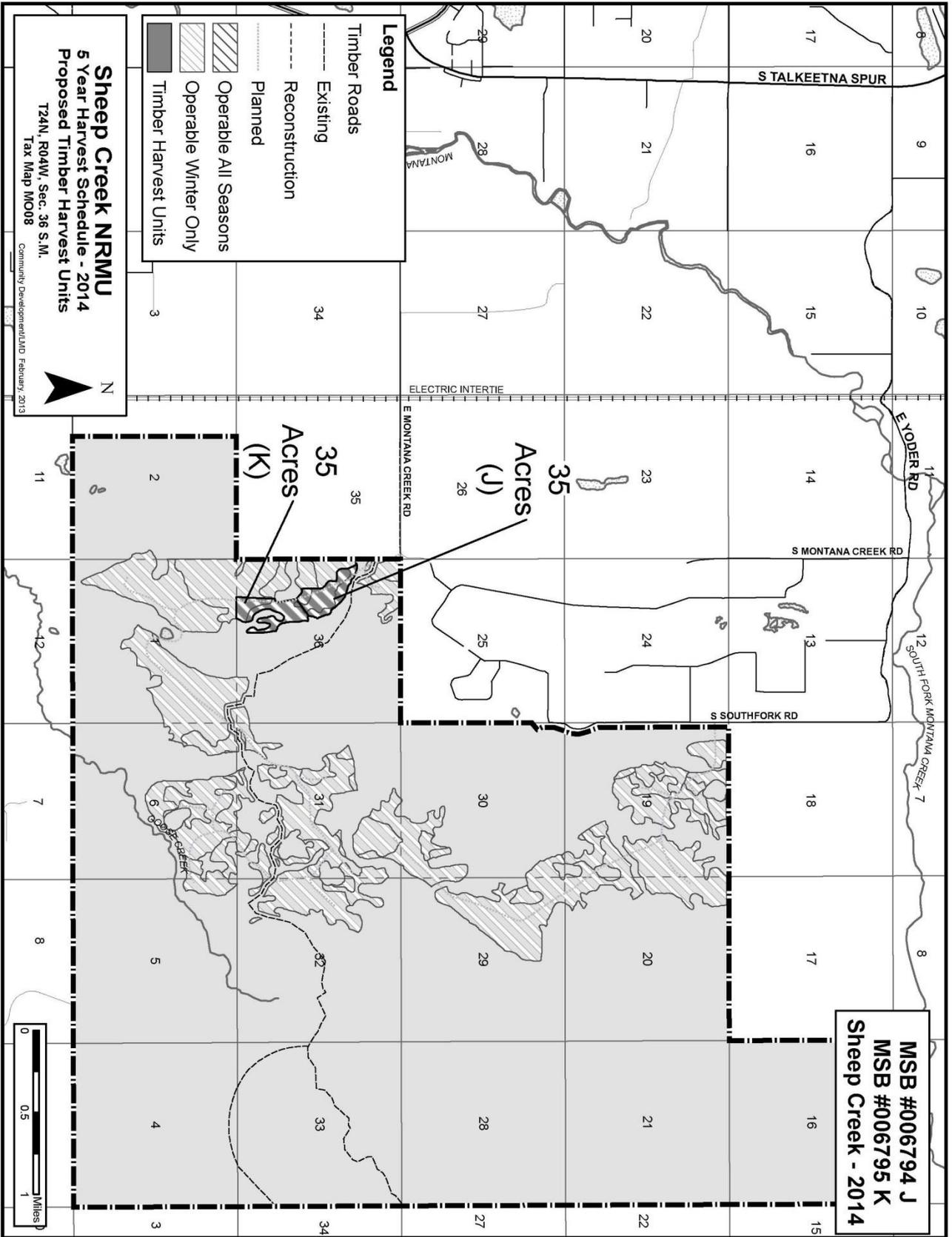
The United States Department of Agriculture lists the soils as Tokositna, hilly and undulating Chunilna complex. The profile is 0-2 inches grayish brown silt loam; 2-28 inches dark reddish brown, strong brown and brown silt loam, and 28-60 inches of very dark grayish brown and dark grayish brown very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

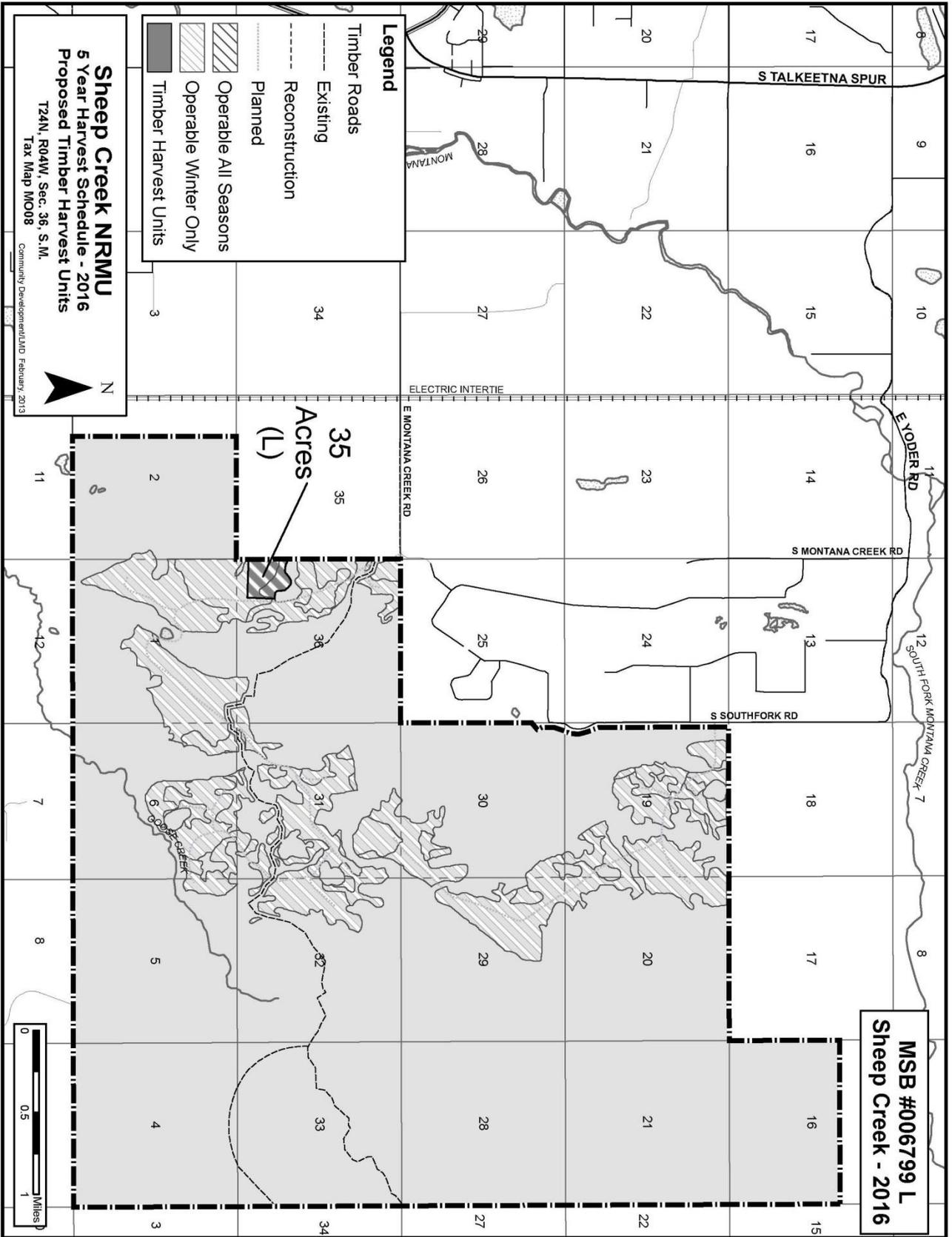
Approximately 475,886 cubic feet of wood are available on 277 acres of land. The Borough proposes to offer seven commercial timber sales in this unit during this Schedule. The commercial value of Borough timber is currently between \$6 and \$15 per CCF for birch and between \$50-\$86 MBF for spruce based on recent State timber harvest offerings. The average estimate of timber per acre is about 1,718 cubic feet, dependent on location, type size and strata. The proposed minimum bids range between \$8.00 - \$9.00 per CCF and are based on the size of the parcel, location, access, and timber type/size being offered.

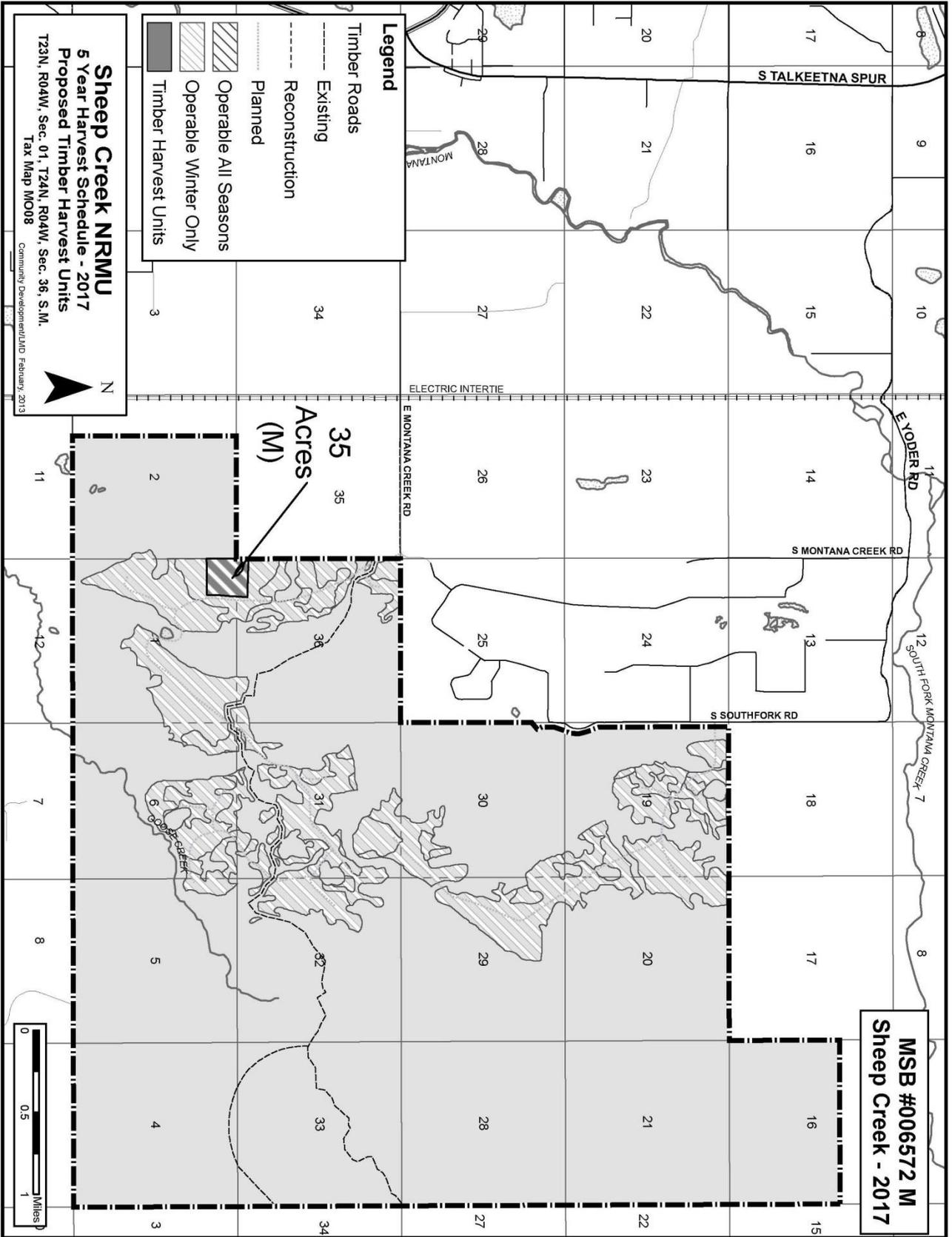
<u>Sale Number</u>	<u>Acres</u>	<u>Cubic Feet</u>	<u>CCF</u>	<u>YEAR</u>	<u>Proposed Minimum Bid</u>
MSB 006571 A	77	132,286	1,322	2013	\$9.00 per CCF = \$11,898
MSB 006571 H	30	51,540	515	2013	\$9.00 per CCF = \$ 4,635
MSB 006571 I	30	51,540	515	2013	\$8.00 per CCF = \$ 4,120
MSB 006571 J	35	60,130	601	2014	\$8.00 per CCF = \$ 4,808
MSB 006571 K	35	60,130	601	2014	\$8.00 per CCF = \$ 4,808
MSB 006571 L	35	60,130	601	2016	\$8.00 per CCF = \$ 4,808
MSB 006571 M	35	60,130	601	2017	\$8.00 per CCF = \$ 4,808

The site will be thoroughly evaluated and a more detailed cost/revenue analysis will be included in the site evaluation prior to being listed on the Periodic Timber Harvest Implementation Schedule.









FIVE-YEAR TIMBER HARVEST SCHEDULE UNIT DESCRIPTION

Susitna River Corridor NRMU

The Susitna River Corridor NRMU is located within Sections 9, 10 & 20 Township 26 North, Range 05 West, SM Alaska, lying east of the Parks Highway approximately between milepost 115 and 119. The Borough is proposing two timber harvests in the Trapper Creek area and within the Susitna River Corridor Natural Resource Management Unit (NRMU) for inclusion in the Schedule. The proposed harvests are within the Trapper Creek Community Council Area. Access to this proposed timber harvest area would be from the Parks Highway. The purpose of this sale is to provide an opportunity for the harvest of timber products. The best access to these harvests may be through State land. Authorization for access across State land would need to be obtained if alternative access is not easily accessible.

The Unit contains 3,032 operable acres and are 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 timber harvests would be for the mixed forest sawtimber (spruce > 9", birch >11"), and accounts for about 27% 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.

The Trapper Creek Community has requested personal use firewood is made available. The proposed Schedule identifies several personal use firewood areas to ensure a sufficient wood supply is accessible and available for personal use during the Schedule. Personal and community needs may be served by the sale of firewood and timber products. The community would also benefit from the opportunity for jobs, sales of fuel, and other ancillary items associated with timber harvest activities. The Borough expects its timber harvest offerings will help meet the needs of small commercial logging operators and the need for personal use firewood, wood products for crafts and woodworking, and house logs.

Other uses of the proposed timber harvest area could be hunting, dog mushing, snow machining, ATV use and other public recreation activities, watershed, and wildlife habitat improvement. The unit has had some timber harvest for birch and spruce in the last 5-7 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.

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. The proposed Petersville Roadside Trail is located north and parallels the Petersville and East Petersville Roads in the southern portion of the unit. The Moon Lake Trail heads west from the Parks Highway at about Mile 118.2 and the September Lake Trail heads west from the Parks Highway at about Mile 121.

The Unit boundaries are within the following land use plans:

- Mat-Su Borough Natural Resource Management Unit Plan (2010)
- The Susitna Matanuska Area Plan (SMAP) 2011-This plan does not apply to Borough land.
- Mat-Su Borough Recreational Trails Plan (2007)

- Petersville Road Corridor Management Plan (1998)
- Mat -Su Borough Parks, Recreation and Open Space Plan (2001), currently being updated.
- A Scenic Highways Plan is currently being developed along the Parks Highway starting at the Susitna River Bridge crossing and continuing north through Denali State park. In October 2009 the Parks Highway north from the Chulitna River Bridge was designated as a National Scenic Byway.

The majority of the surrounding land is owned by the State of Alaska. A variety of dispersed public recreation also occurs on this land. There are some scattered private lands. The private land is used for recreational cabins, private residences, and some agricultural uses. The Petersville Road Corridor Management Plan (1998) identifies a 150 foot wide scenic buffer along the Petersville Road within the Moose Creek unit. The plan states the buffer is to remain in a natural, undeveloped state. Reasonable rights of access are allowed from the highway to land on either side of the road. Access should be limited to a single driveway and not be closer than 500 foot intervals. Zoning exists for public and private land development for several circumstances such as; building structures, roads, and subdivisions.

Timber harvests have permit requirements to limit or avoid impacting public health safety and welfare concerns. Timber harvesting requires an approved plan of operations that addresses noise, lighting, truck traffic, scarification and road maintenance. Timber harvests greater than 40 acres or that have anadromous streams must submit a plan of operations to the state in compliance with the Alaska Forest Resources Practices Act and Regulations to ensure impacts to water quality and fish habitat are avoided or minimized.

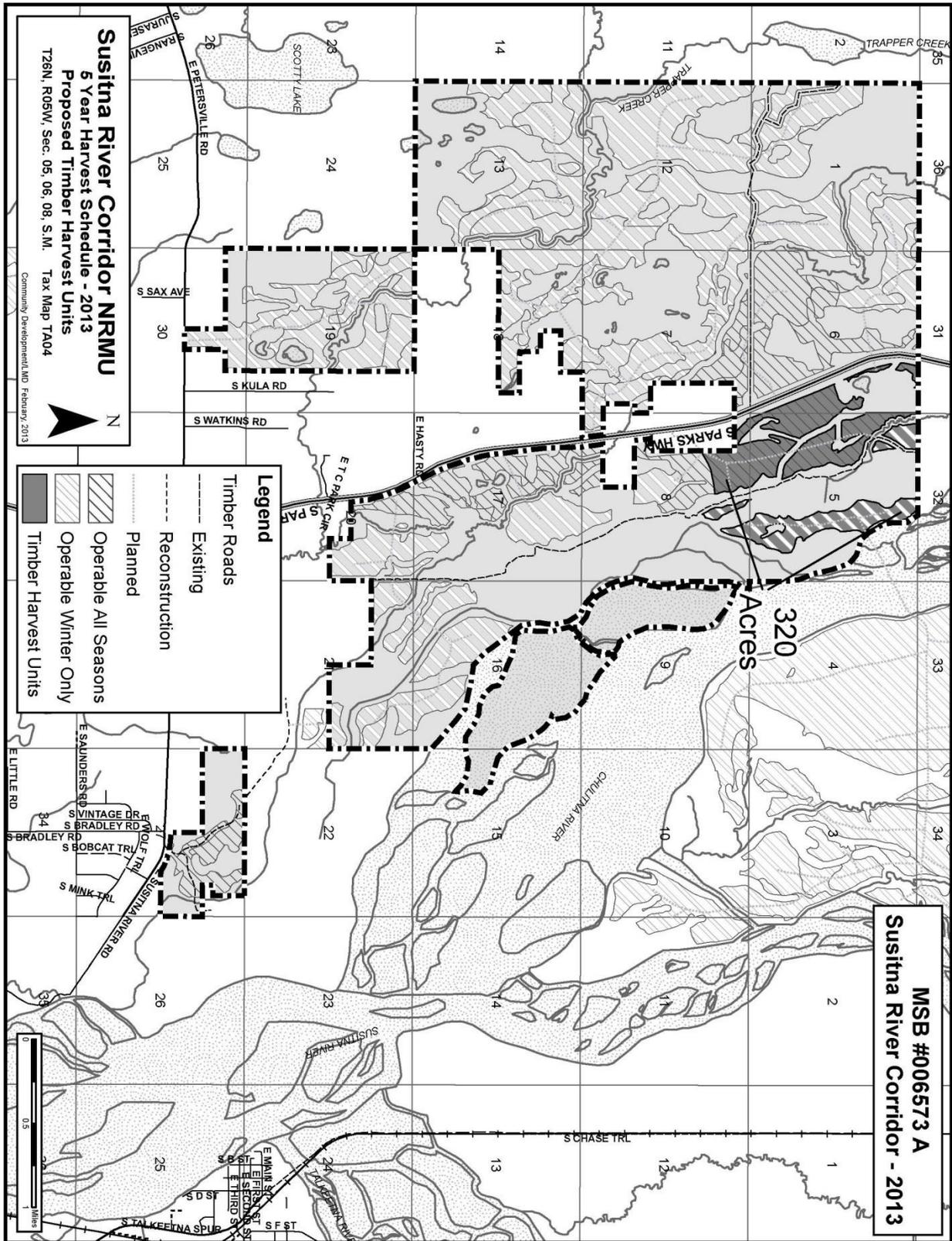
The Mat-Su Borough Natural Resource Management Unit Plan (2010) outlines buffers required for water bodies for timber harvest. Flowing streams and water bodies will be considered in this proposed harvest area and appropriate buffers will be imposed.

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.

Approximately 1,573,688 cubic feet of wood are available on 916 acres of land. The Borough proposes to offer two commercial timber sales in this unit during this Schedule. The commercial value of Borough timber is currently between \$6 and \$15 per CCF for birch and between \$50-\$86 MBF for spruce based on recent State timber harvest offerings. The average estimate of timber per acre is about 1,718 cubic feet, dependent on location, type size and strata. The proposed minimum bids are \$6.00 per CCF and are based on the size of the parcels, location, access, and timber type/size being offered.

<u>Sale Number</u>	<u>Acres</u>	<u>Cubic Feet</u>	<u>CCF</u>	<u>YEAR</u>	<u>Proposed Minimum Bid</u>
MSB 006573 A	320	549,760	5497	2013	\$6.00 per CCF = \$32,982
MSB 006573 B	596	1,023,928	10,239	2017	\$6.00 per CCF = \$61,434

The site will be thoroughly evaluated and a more detailed cost/revenue analysis will be included in the site evaluation prior to being listed on the Periodic Timber Harvest Implementation Schedule.



FIVE-YEAR TIMBER HARVEST SCHEDULE UNIT DESCRIPTION

Rabideux Creek NRMU

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, 1,584 are considered to be operable.

Per Ordinance Serial No. 11-144(AM) that was adopted on December 6, 2011, "All commercial and personal use firewood sales be eliminated from the Rabideux Creek and Parks Highway Natural Resource Management Units. These units in combination are to be dedicated as a Susitna Valley High School fuel wood forest to supply the anticipated fuel wood needs of the Susitna Valley High School wood heat project. Future sales within both of these units will only be conducted within the scope of the harvest and business plan, which will be developed specifically for the Susitna Valley High School wood heat project".

This Unit and the Parks Highway Unit are being included in the Schedule in anticipation of the design and construction of a cord-wood fired boiler for which the MSB received approval of a grant in the amount of \$830,000. The design has not been started to date; and therefore the Unit does not reflect any harvest until the second year of the Schedule. Pre-planning the harvests are imperative to ensure sufficient quantities of dry and/or seasoned wood that is cut and prepared for use when the boiler(s) are ready to be fired up.

At the time of the drafting of this Schedule; legislation is being simultaneously drafted for Assembly consideration (March meeting) of creating a Special Management Zone for timber harvests and for the development of a Forest Education and Improvement Study Area within the Parks Highway and Rabideux Creek NRMU's and to allow select cut. The Planning Commission adopted a resolution in support of the legislation.

The Borough is proposing several timber harvests in the vicinity of Susitna Valley High School. The timber harvests will accomplish several goals in addition to Assembly direction regarding the use of timber resources for the SVHS cord-wood fired boiler project. The Special Management Zone would:

- Allow for a sustainable yield supply of wood for the cord-wood fired boiler for SVHS as required by the grant and necessary to facilitate a readily available timber resource to fire the boiler(s);
- Allow for the development of a Forest Education and Improvement Study Area within the two NRMU's; and
- Allow for intensive management to maximize the timber resource value and improve forest health by allowing select cut timber sales within the two NRMU's.

The Unit contains 1,584 operable acres and are comprised of (60%) of mixed forest sawtimber (spruce > 9", birch >11"), 4% hardwood sawtimber, and 36% poletimber (spruce 5-9", birch 5-11") and accounts for about 4% of the proposed Schedule. The proposed harvests will be structured to accommodate the needs of the boiler for efficient operation and may include a variety of size and type of timber resource.

Harvest volumes and types will be adjusted as necessary to accomplish the primary purpose of supplying sustainable yield of timber resource for the SVHS cord-wood fired boiler(s).

Personal and community needs may be served by the sale of select cut timber products and the Susitna Valley High School Cord-wood fired boiler project. The community would also benefit from the opportunity for jobs, sales of fuel, and other ancillary items associated with timber harvest activities. The Borough expects its timber harvest offerings will help meet the needs of small commercial logging operators and the need for personal use firewood, wood products for crafts and woodworking, and house logs.

Other uses of the proposed timber harvest area could be public recreation activities, watershed, wildlife habitat improvement and a Forest Education and Improvement Study Area. The unit has had some timber harvest in the area on State land.

The Parks Highway and Alaska Railroad provide general access to the unit. The Rabideux Trail runs north/south and intersects briefly with the western area of the unit. The Amber Lake Trail runs east/west and briefly intersects the western are of the unit. This trail is a main corridor for access to lakes and recreational cabins outside of the unit to the west.

The Unit boundaries are within the following land use plans:

- Mat-Su Borough Natural Resource Management Unit Plan (2010)
- The Susitna Matanuska Area Plan (SMAP) 2011-This plan does not apply to Borough land.
- Mat-Su Borough Recreational Trails Plan (2007)
- The Susitna Community Comprehensive Plan (2007)
- Mat -Su Borough Parks, Recreation and Open Space Plan (2001), currently being updated
- A Scenic Highways Plan is currently being developed along the Parks Highway starting at the Susitna River Bridge crossing and continuing north through Denali State Park.

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 occur in this area. Zoning exists for private land development for several circumstances such as; structures, roads and subdivisions.

Timber harvests have permit requirements ensuring compliance with the Alaska Forest Resources Practices Act and Regulations to ensure impacts to water quality and fish habitat are avoided or minimized. Timber harvesting requires an approved plan of operations that addresses noise, lighting, truck traffic, scarification and road maintenance. Timber harvests greater than 40 acres may require a Timber Harvest/Transport Permit.

The Mat-Su Borough Natural Resource Management Unit Plan (2010) outlines buffers required for water bodies for timber harvest. Flowing streams and water bodies will be considered in this proposed harvest area and appropriate buffers will be imposed. Recreational trails will receive appropriate buffers where encountered.

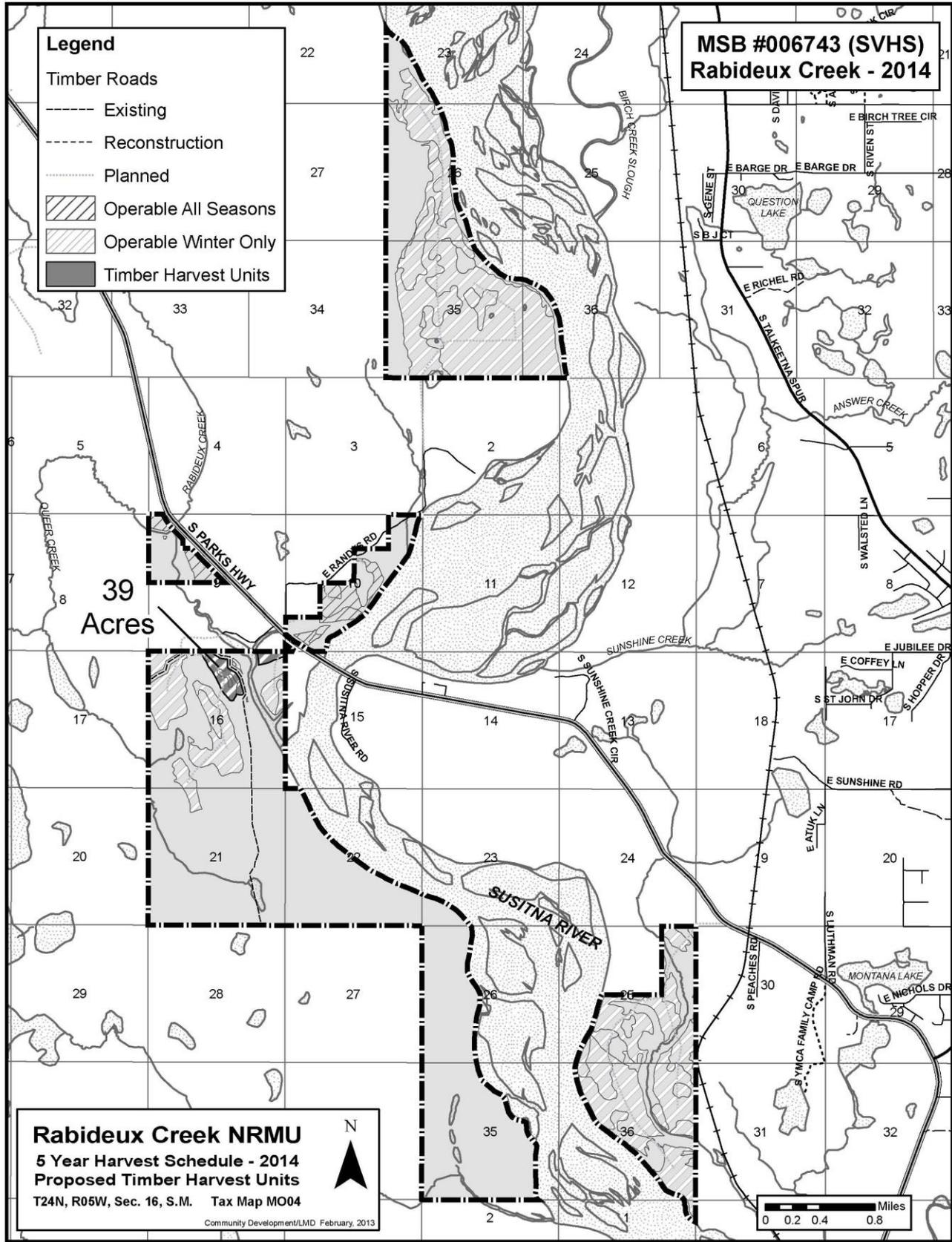
The United States Department of Agriculture lists the soils as Whitsol silt loam, till substratum and similar soils. The profile is 0-2 inches gray silt loam; 2-26 inches dark reddish brown silt loam, and 26 to 55 inches dark brown stratified silt loam, fine sandy loam, and fine sand; 55 to 60 inches dark grayish brown very gravelly sandy loam. General management considerations; the soil is well suited for forestry.

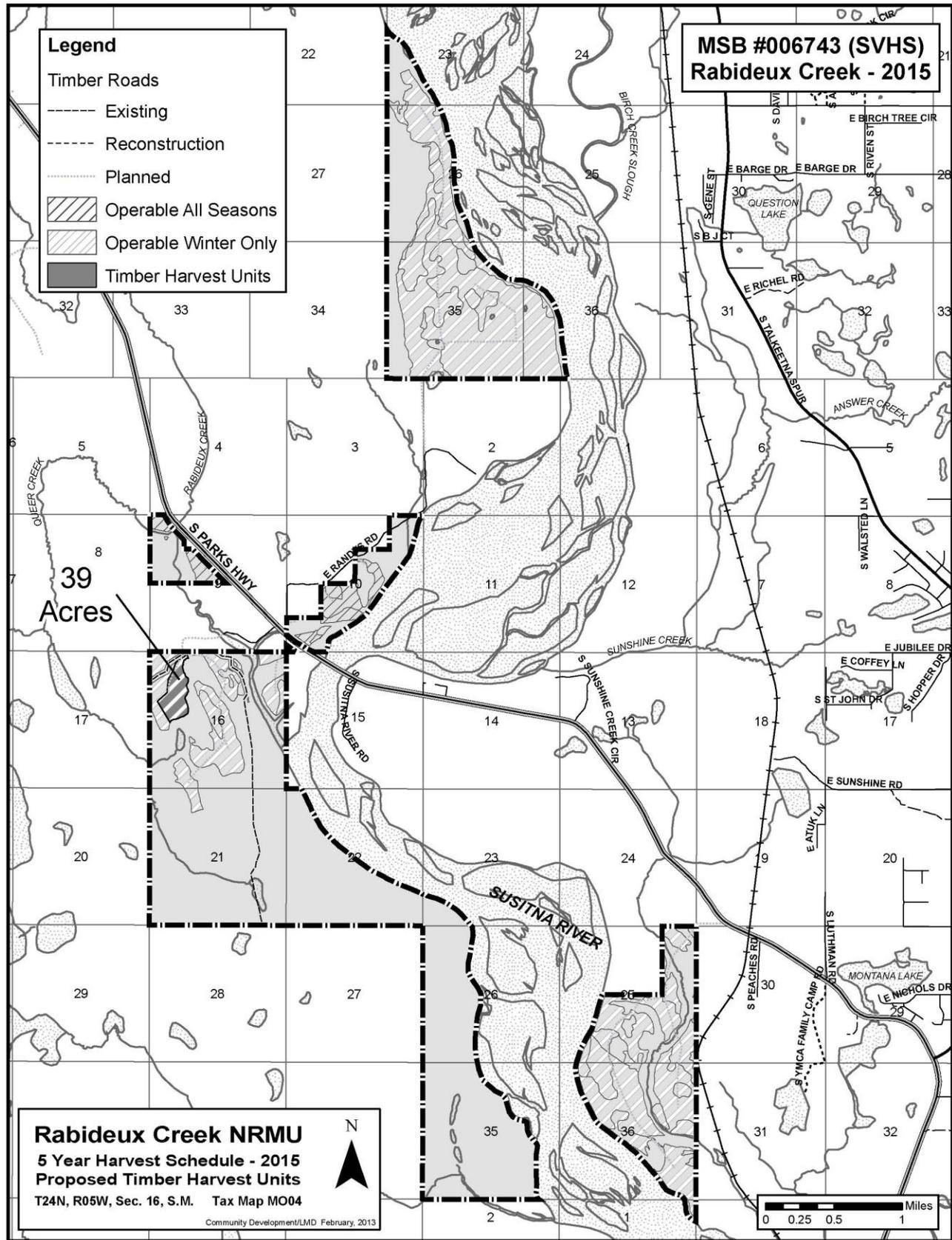
Windthrow hazard: moderate for shallow rotted trees. Plant competition may be severe with high available moisture, and competitive species.

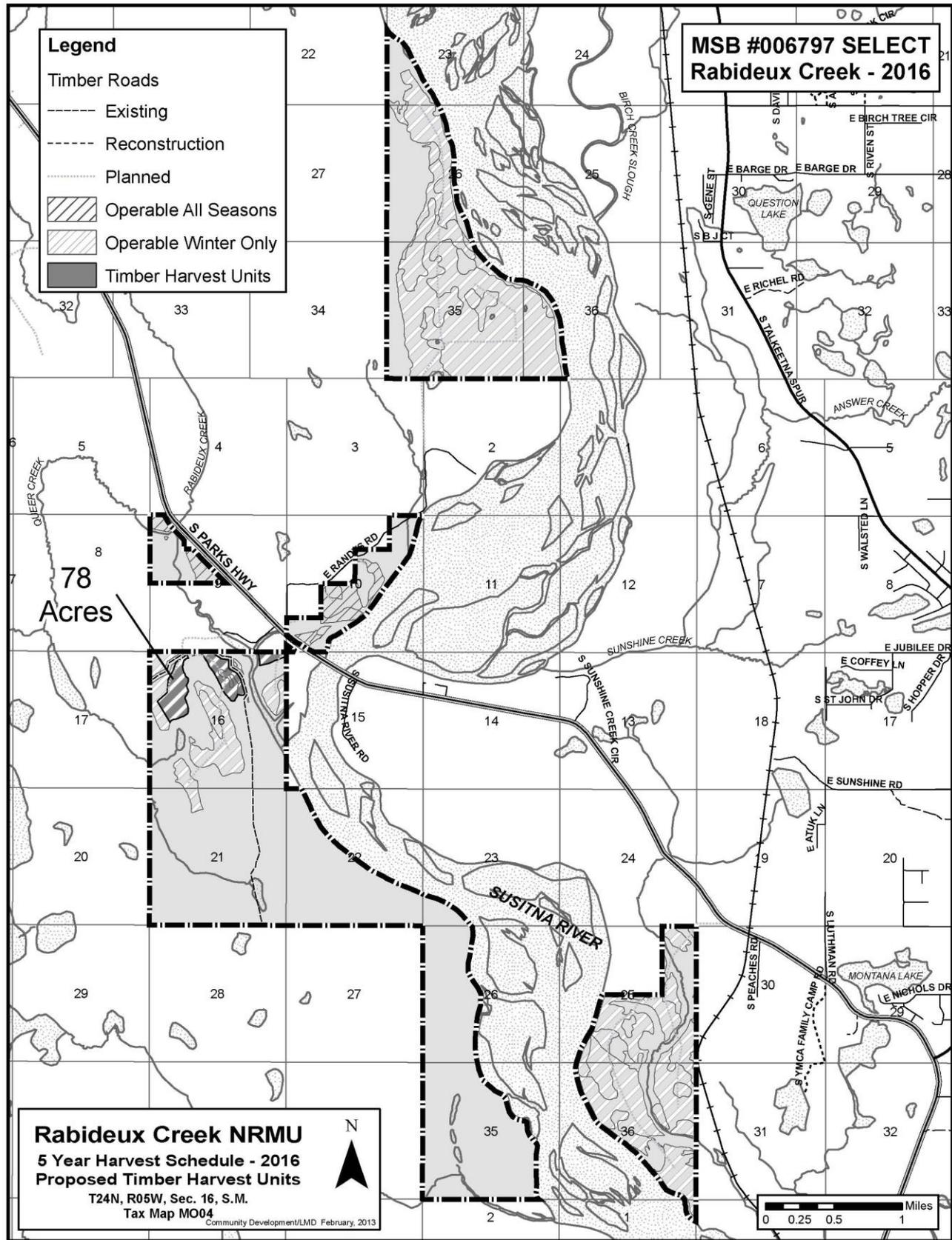
Approximately 201,006 cubic feet of wood are available on 117 acres of land. The Borough proposes to offer three cutting units over 3 years in one contract for SVHS as required by the granting agency. We will also offer one or more select cut timber sales in this unit during this schedule. The commercial value of Borough timber is currently between \$6 and \$15 per CCF for birch and between \$50-\$86 MBF for spruce based on recent State timber harvest offerings. The average estimate of timber per acre is about 1,718 cubic feet, dependent on location, type size and strata. The Borough proposes a minimum price of \$10 per CCF for the SVHS cord-wood fired boiler project.

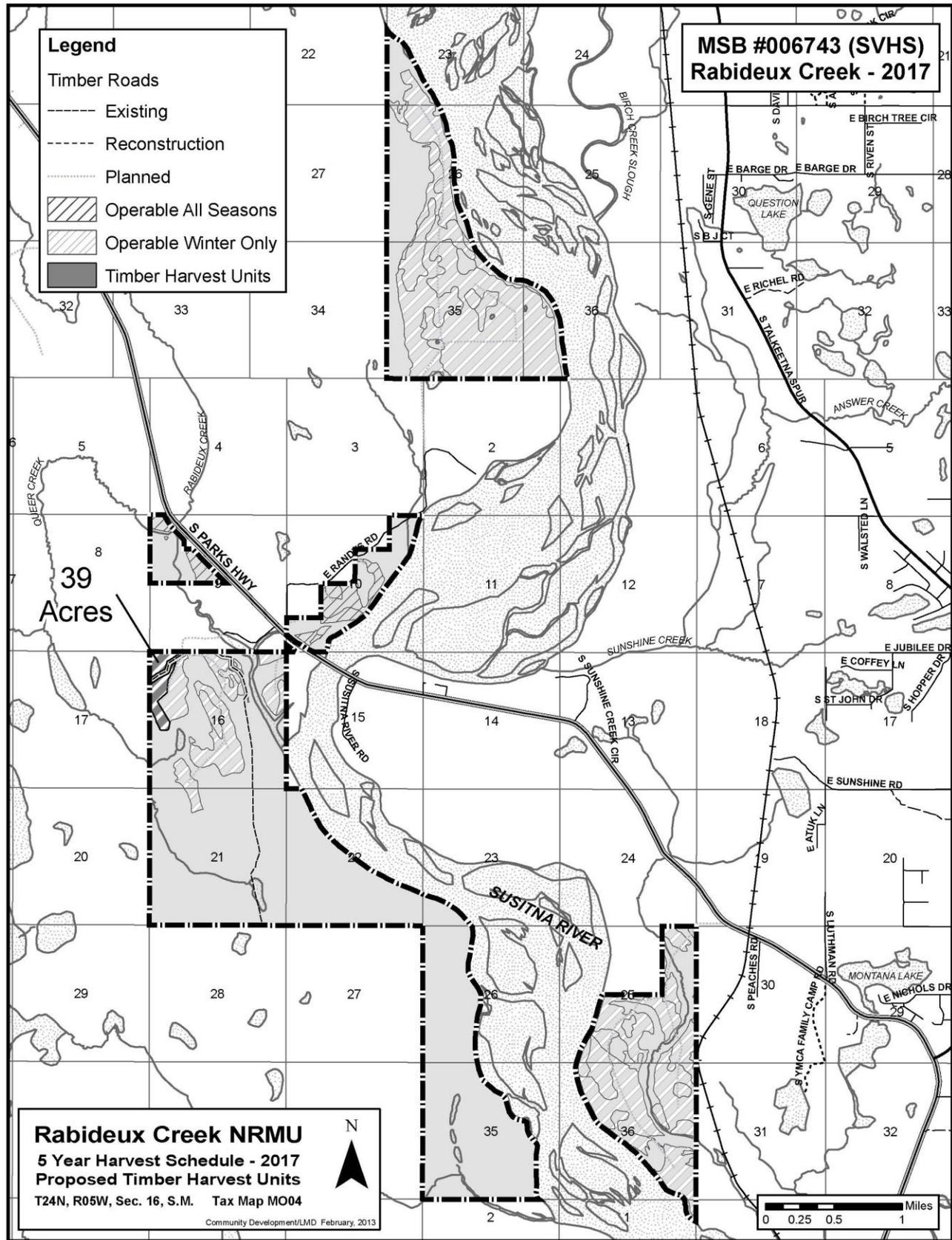
<u>Sale Number</u>		<u>Acres</u>	<u>Cubic Feet</u>	<u>CCF</u>	<u>YEAR</u>	<u>Proposed Minimum Price</u>
MSB 006743	SVHS	39	67,002	670	2014	\$6,700
MSB 006743	SVHS	39	67,002	670	2015	\$6,700
MSB 006743	Select	78	TBD	TBD	2015	TBD
MSB 006743	SVHS	39	67,002	670	2017	\$6,700

The site will be thoroughly evaluated and a more detailed cost/revenue analysis will be included in the site evaluation prior to being listed on the Periodic Timber Harvest Implementation Schedule.









FIVE-YEAR TIMBER HARVEST SCHEDULE UNIT DESCRIPTION

Parks Highway NRMU

The Parks Highway NRMU is located within Sections 5-8, 17-20, 29-32 Township 25 North, Range 05 West; Sections 23-26 Township 25 North, Range 06 West; Sections 30-32 Township 26 North, Range 05 West; all lying within the Seward Meridian. The Unit contains 10,280 total acres, of that 1,534 are considered to be operable.

Per Ordinance Serial No. 11-144(AM) that was adopted on December 6, 2011, "All commercial and personal use firewood sales be eliminated from the Rabideux Creek and Parks Highway Natural Resource Management Units. These units in combination are to be dedicated as a Susitna Valley High School fuel wood forest to supply the anticipated fuel wood needs of the Susitna Valley High School wood heat project. Future sales within both of these units will only be conducted within the scope of the harvest and business plan, which will be developed specifically for the Susitna Valley High School wood heat project".

This Unit and the Rabideux Creek Unit are being included in the Schedule in anticipation of the design and construction of a cord-wood fired boiler for which the MSB received approval of a grant in the amount of \$830,000. The design has not been started to date; and therefore the Unit does not reflect any harvest until the third year of the Schedule. Pre-planning the harvests are imperative to ensure sufficient quantities of dry and/or seasoned wood that is cut and prepared for use when the boiler(s) are ready to be fired up.

At the time of the drafting of this Schedule; legislation is being simultaneously drafted for Assembly consideration (March meeting) of creating a Special Management Zone for timber harvests and for the development of a Forest Education and Improvement Study Area within the Parks Highway and Rabideux Creek NRMU's. The Planning Commission adopted a resolution in support of the legislation.

The Borough is proposing several timber harvests in the vicinity of Susitna Valley High School. The timber harvests will accomplish several goals in addition to Assembly direction regarding the use of timber resources for the SVHS cord-wood fired boiler project. The Special Management Zone would:

- Allow for a sustainable yield supply of wood for the cord-wood fired boiler for SVHS as required by the grant and necessary to facilitate a readily available timber resource to fire the boiler(s);
- Allow for the development of a Forest Education and Improvement Study Area within the two NRMU's; and
- Allow for intensive management to maximize the timber resource value and improve forest health by allowing select cut timber sales within the two NRMU's.

The Unit contains 1,584 operable acres and are comprised of 79% of mixed forest sawtimber (spruce > 9", birch >11"), 15% hardwood sawtimber, and 6% poletimber (spruce 5-9", birch 5-11") and accounts for less than 1% of the proposed Schedule. The proposed harvests will be structured to accommodate the needs of the boiler for efficient operation and may include a variety of size and type of timber

resource. Harvest volumes and types will be adjusted as necessary to accomplish the primary purpose of supplying sustainable yield of timber resource for the SVHS cord-wood fired boiler(s).

Personal and community needs may be served by the sale of select cut timber products and the Susitna Valley High School Cord-wood fired boiler project. The community would also benefit from the opportunity for jobs, sales of fuel, and other ancillary items associated with timber harvest activities. The Borough expects its timber harvest offerings will help meet the needs of small commercial logging operators. Other uses of the proposed timber harvest area could be public recreation activities, watershed, wildlife habitat improvement and a Forest Education and Improvement Study Area. The unit has had some timber harvest in the area on State land.

The Parks Highway NRMU has direct access from the Parks Highway that runs in a north/south direction through the unit. The Rabideux Trail is primarily a winter trail that is located east of and generally parallels the Parks Highway, transecting the eastern portion of the unit.

The Unit boundaries are within the following land use plans:

- Mat-Su Borough Natural Resource Management Unit Plan (2010)
- The Susitna Matanuska Area Plan (SMAP) 2011-This plan does not apply to Borough land.
- Mat-Su Borough Recreational Trails Plan (2007)
- Mat -Su Borough Parks, Recreation and Open Space Plan (2001), currently being updated
- A Scenic Highways Plan is currently being developed along the Parks Highway starting at the Susitna River Bridge crossing and continuing north through Denali State Park. In October 2009 the Parks Highway north from the Chulitna River Bridge was designated as a National Scenic Byway.

The majority of the adjoining land is owned by the State of Alaska. A variety of dispersed public recreation occurs on this land as well. There are some scattered private lands in the area. The private land is used for recreational cabins, private residences and some agricultural uses. Zoning exists for public and private land development for several circumstances such as; building structures, roads, and subdivisions.

Timber harvests have permit requirements ensuring compliance with the Alaska Forest Resources Practices Act and Regulations to ensure impacts to water quality and fish habitat are avoided or minimized. Timber harvesting requires an approved plan of operations that addresses noise, lighting, truck traffic, scarification and road maintenance. Timber harvests greater than 40 acres may require a Timber Harvest/Transport Permit.

The Mat-Su Borough Natural Resource Management Unit Plan (2010) outlines buffers required for water bodies for timber harvest. Flowing streams and water bodies will be considered in this proposed harvest area and appropriate buffers will be imposed. Recreational trails will receive appropriate buffers where encountered.

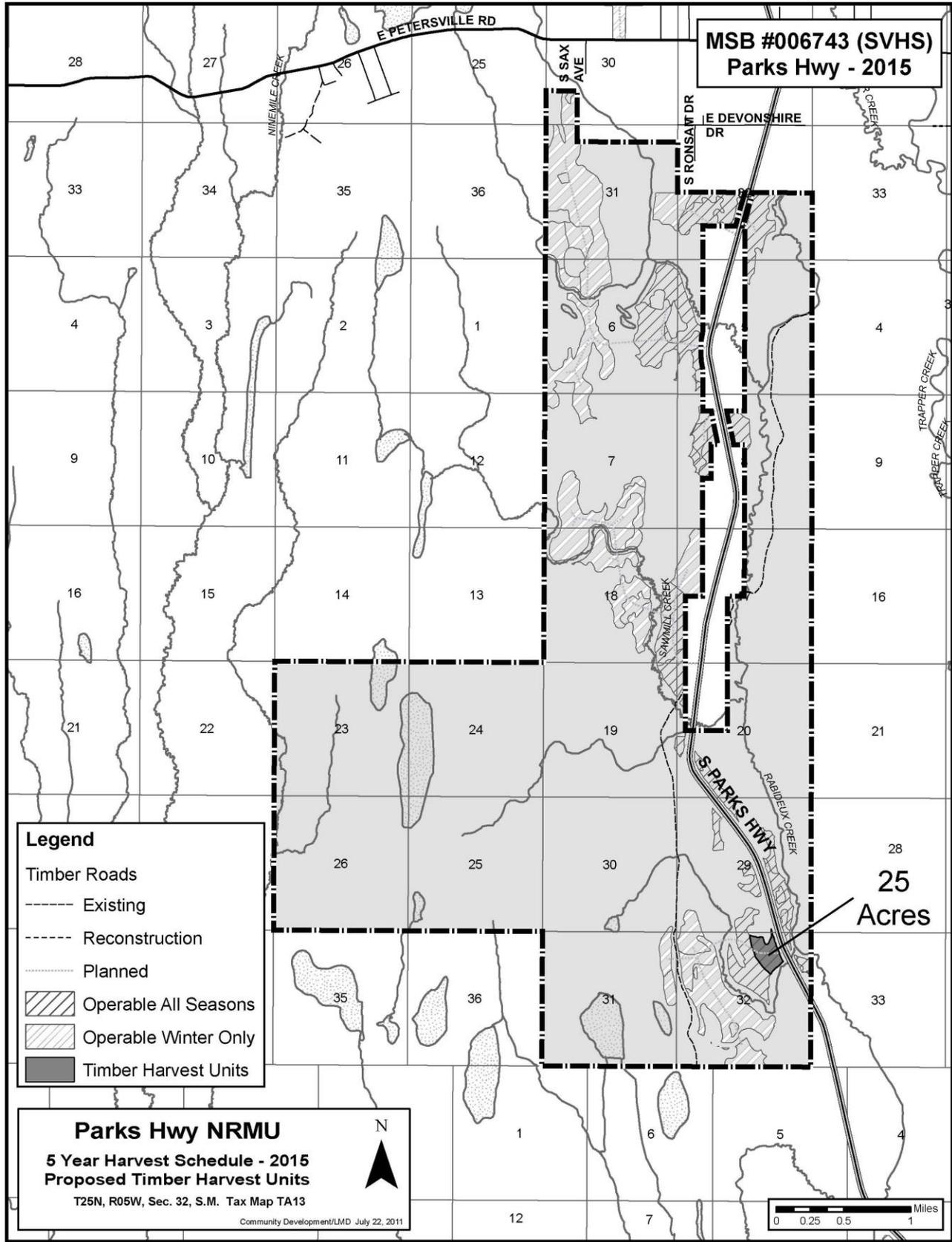
The United States Department of Agriculture lists the soils as Tokositna-undulating Chunilna complex. The profiles vary. Tokositna is loamy to a depth of five feet and is well suited for forestry. Chunilna contains muck, is not well drained and the soils are not well suited for forestry.

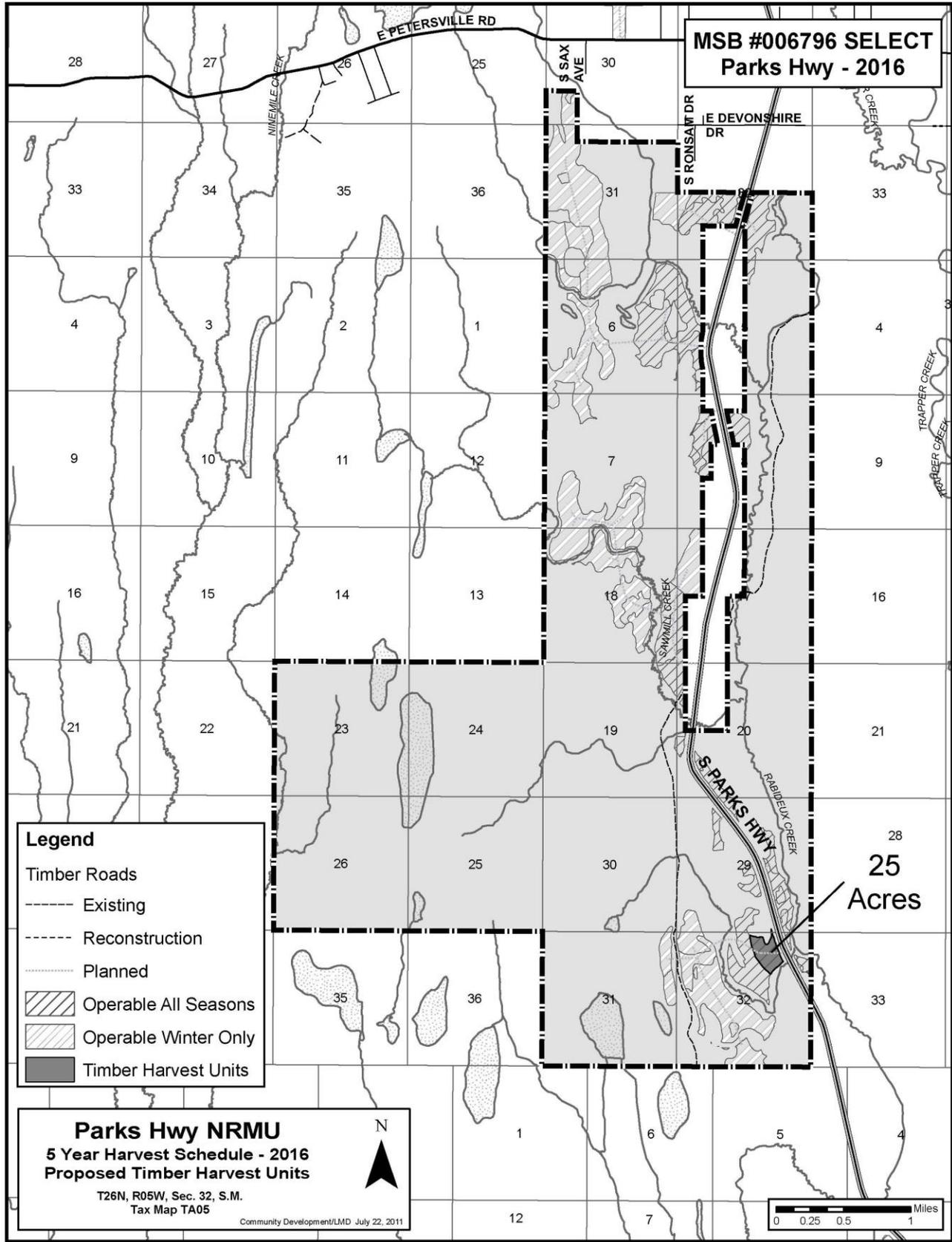
Approximately 42,950 cubic feet of wood are available on 25 acres of land. The Borough proposes to offer two commercial timber sales for SVHS and 1 commercial sale for select cut of timber in this unit

during this Schedule. The commercial value of Borough timber is currently between \$6 and \$15 per CCF for birch and between \$50-\$86 MBF for spruce based on recent State timber harvest offerings. The average estimate of timber per acre is about 1,718 cubic feet, dependent on location, type size and strata. The Borough proposes a minimum price of \$10 per CCF for the SVHS cord-wood fired boiler project.

<u>Sale Number</u>		<u>Acres</u>	<u>Cubic Feet</u>	<u>CCF</u>	<u>YEAR</u>	<u>Proposed Minimum Price</u>
MSB 006743	SVHS	25	42,950	430	2015	\$4,300
MSB 006743	Select	78	TBD	TBD	2016	TBD

The site will be thoroughly evaluated and a more detailed cost/revenue analysis will be included in the site evaluation prior to being listed on the Periodic Timber Harvest Implementation Schedule.





FIVE-YEAR TIMBER HARVEST SCHEDULE UNIT DESCRIPTION

Point MacKenzie NRMU

The Point MacKenzie NRMU is located within Townships 14 North, Range 04 West, and 15 North Range 04 West, SM Alaska. The Unit is The unit is located east of and along the Point MacKenzie Road beginning just north of Alsop Road and ending at the Port MacKenzie Port District near the southern terminus of the Point MacKenzie Road and is broken into three subunits.

The Alsop Road Subunit totals about 1,540 acres. It is comprised of two blocks of land includes all the borough land to the north of Alsop Road and the land approximately ½ mile south of Alsop Road (this distance is an average with the actual boundary following natural terrain features as shown on the Physical Features map at the beginning of this section). This subunit has 2 unconnected parcels. The Alsop Road Subunit is comprised of a mixture of flat poorly drained soils, with some hilly well drained areas.

The Mule Creek Subunit totals approximately 1,940 acres and is the remaining borough land south of the Alsop Road Subunit and north of the Port District. The subunit contains a mixture of flat poorly drained soils, with some hilly well drained soils.

The Point MacKenzie Road Subunit totals about 1,690 acres and lies on either side of the Point MacKenzie Road and generally parallels the Elmendorf Moraine Ridge. The terrain is comprised of a combination of wet and well drained soils. The subunit is generally flat except the land to the west of the Point MacKenzie Road which is hilly with shallow to moderately deep soils. Underneath these soils is a glacier moraine material (rock, sand, and gravel) which aids in the drainage of the soils. This Subunit is not included in the Schedule.

The Borough is proposing two timber harvests in the Point MacKenzie NRMU. The proposed harvests are within the Point MacKenzie Community Council Area. One harvest is proposed for the Alsop Road Sub Unit and one harvest for the Mule Creek Subunit. Access to the proposed timber harvest areas would be from Alsop Road. The purpose of this sale is to provide an opportunity for the harvest of timber products.

The entire unit contains 2,631 operable forest land acres and are comprised of 63% of mixed forest sawtimber (spruce > 9", birch >11"), 15% hardwood sawtimber, and 22% poletimber (spruce 5-9", birch 5-11") and accounts for about 36% of the proposed Schedule. The proposed timber harvest would be for the mixed sawtimber. Harvest volumes will be more closely estimated after a site inspection and prior to submitting a Periodic Timber Harvest Implementation Schedule.

Personal and community needs may be served by the sale of firewood and timber products. The community would also benefit from the residual firewood and opportunity for jobs and sales of fuel and food from timber harvest activities. The Borough expects its timber harvest offerings will help meet the needs of small-to-medium commercial logging operators and the need for local personal use firewood, crafts and woodworking, and house logs. Other uses of the proposed timber harvest area could be hunting, public recreation activities, watershed, and wildlife habitat improvement. A 25 acre parcel for

personal use firewood harvest is located north of Alsop Road. This acreage does not count against the AAC. Access to the personal use firewood area is from Alsop Road in, Section 27, T15N, R04W, SM. The Point MacKenzie Road runs north/south through the unit and then east/west through the southern part of the unit. Alsop Road runs east/west through the northern part of the unit. Numerous trails and pioneer type roads take off from the point MacKenzie Road that is used for winter and summer recreation and hunting, or for access to private property. Because of the easy access, the area receives a significant amount of general dispersed recreational use. Of these trails, only the Figure 8 Lake Loop Trail is identified in the *Recreational Trails Plan*; however, it is not dedicated.

The Unit boundaries are within the following land use plans:

- Mat-Su Borough Natural Resource Management Unit Plan (2010)
- The Susitna Matanuska Area Plan (SMAP) 2011-This plan does not apply to Borough land.
- Mat-Su Borough Recreational Trails Plan (2007)
- Point MacKenzie Comprehensive Plan, currently in review draft format (2011)

Numerous parcels of private property 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 Alsop /Point MacKenzie Road intersection has seen large scale development. The Alsop Pit materials extraction site 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 and the water/wastewater facility is built on the southeast corner of the intersection. A commercial sawmill operates on a parcel just east 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.

Zoning exists for private land development for several circumstances such as; structures, roads and subdivisions. Zoning also exists for gravel extraction for barter or sale that is greater than 2,000 cubic yards per year.

Timber harvests have permit requirements to limit or avoid impacting public health safety and welfare concerns. Timber harvesting requires an approved plan of operations that addresses noise, lighting, truck traffic, scarification and road maintenance. Timber harvests greater than 40 acres or that have anadromous streams must submit a plan of operations to the state in compliance with the Alaska Forest Resources Practices Act and Regulations to ensure impacts to water quality and fish habitat are avoided or minimized.

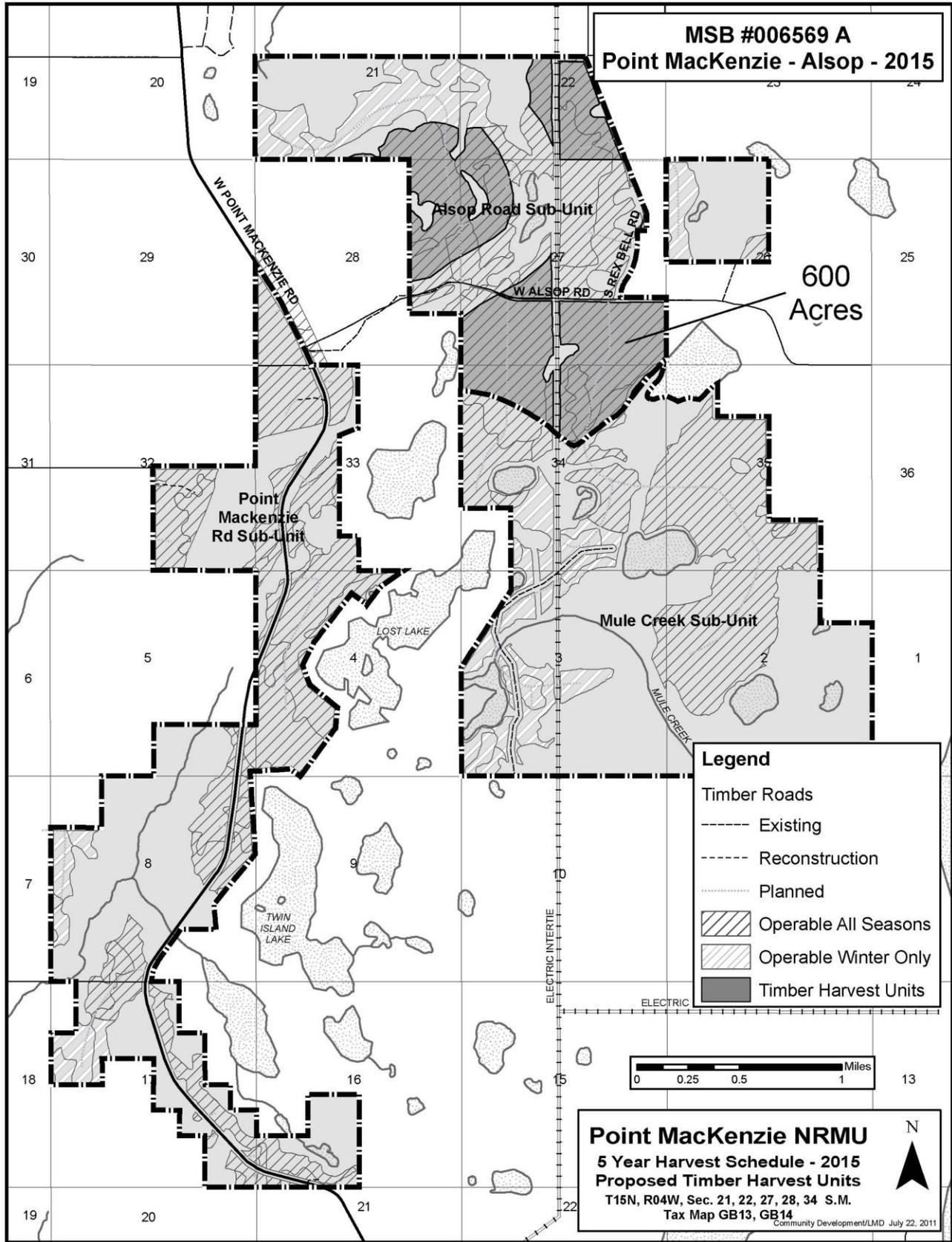
The Mat-Su Borough Natural Resource Management Unit Plan (2010) outlines buffers required for water bodies for timber harvest. Flowing streams and water bodies will be considered in this proposed harvest area and appropriate buffers will be imposed.

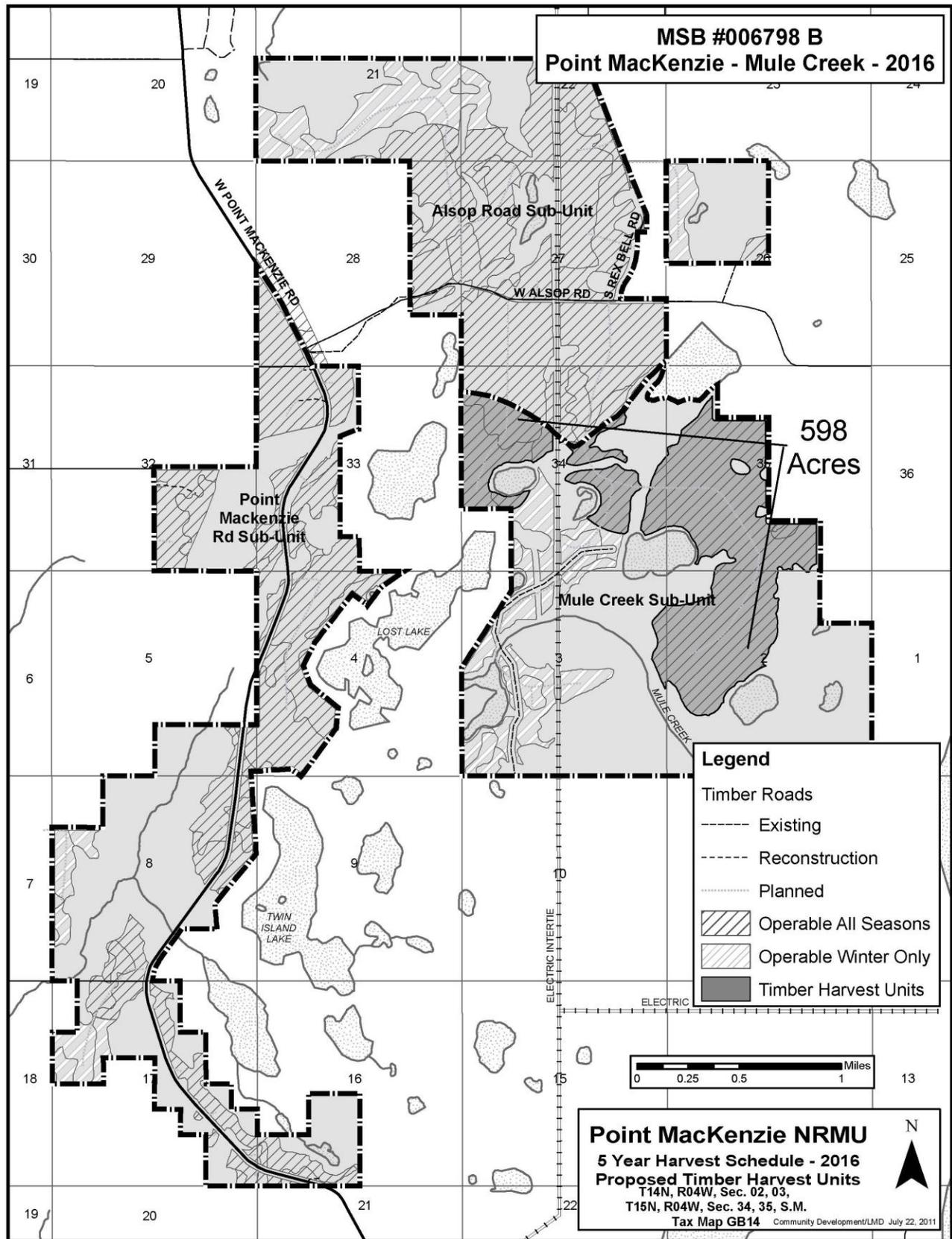
The United States Department of Agriculture lists the soils as Estelle silt loam, sloping and Yohn silt loam, rolling. Both soils have 0-60 inches of silts, loams, and sandy loams before encountering cobble and gravelly soils. General management considerations; both soils are well suited for forestry. Some soil related factors are wind erosion, water erosion, frost action, low fertility, depth to gravel and cobbles, cut bank instability, excess surface fines, and excessive permeability.

Approximately 2,058,164 cubic feet of wood are available on 1,198 acres of land. The Borough proposes to offer two commercial timber sales in this unit during this Schedule. The commercial value of Borough timber is currently between \$6 and \$15 per CCF for birch and between \$50-\$86 MBF for spruce based on recent State timber harvest offerings. The average estimate of timber per acre is about 1,718 cubic feet, dependent on location, type size and strata. The proposed minimum bids are \$9.00 per CCF and are based on the size of the parcels, location, access, and timber type/size being offered.

<u>Sale Number</u>	<u>Acres</u>	<u>Cubic Feet</u>	<u>CCF</u>	<u>YEAR</u>	<u>Proposed Minimum Bid</u>
MSB 006569 A	600	1,030,800	10,308	2015	\$10.00 per CCF = \$103,080
MSB 006569 B	598	1,027,364	10,273	2016	\$8.00 per CCF = \$82,184

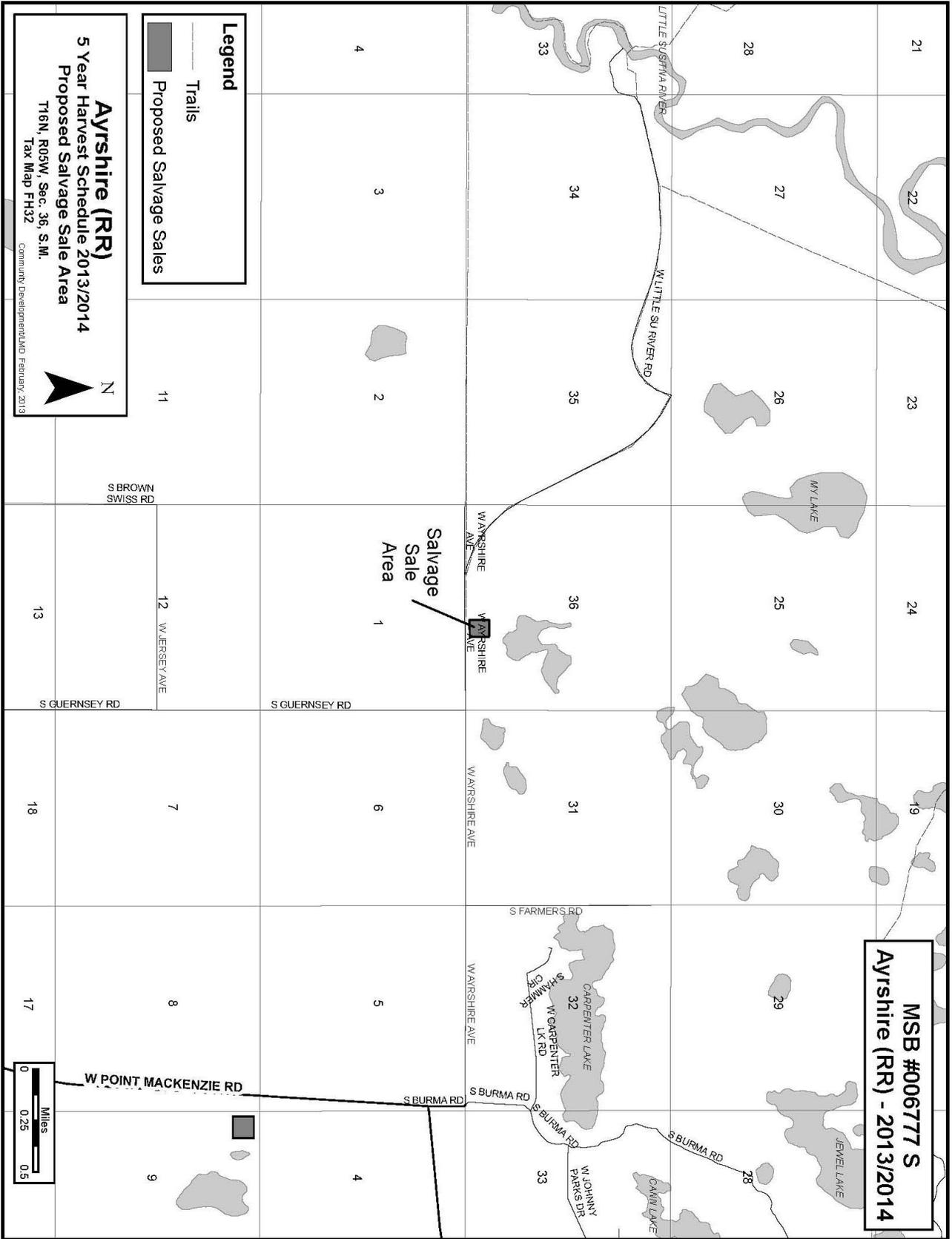
The site will be thoroughly evaluated and a more detailed cost/revenue analysis will be included in the site evaluation prior to being listed on the Periodic Timber Harvest Implementation Schedule.

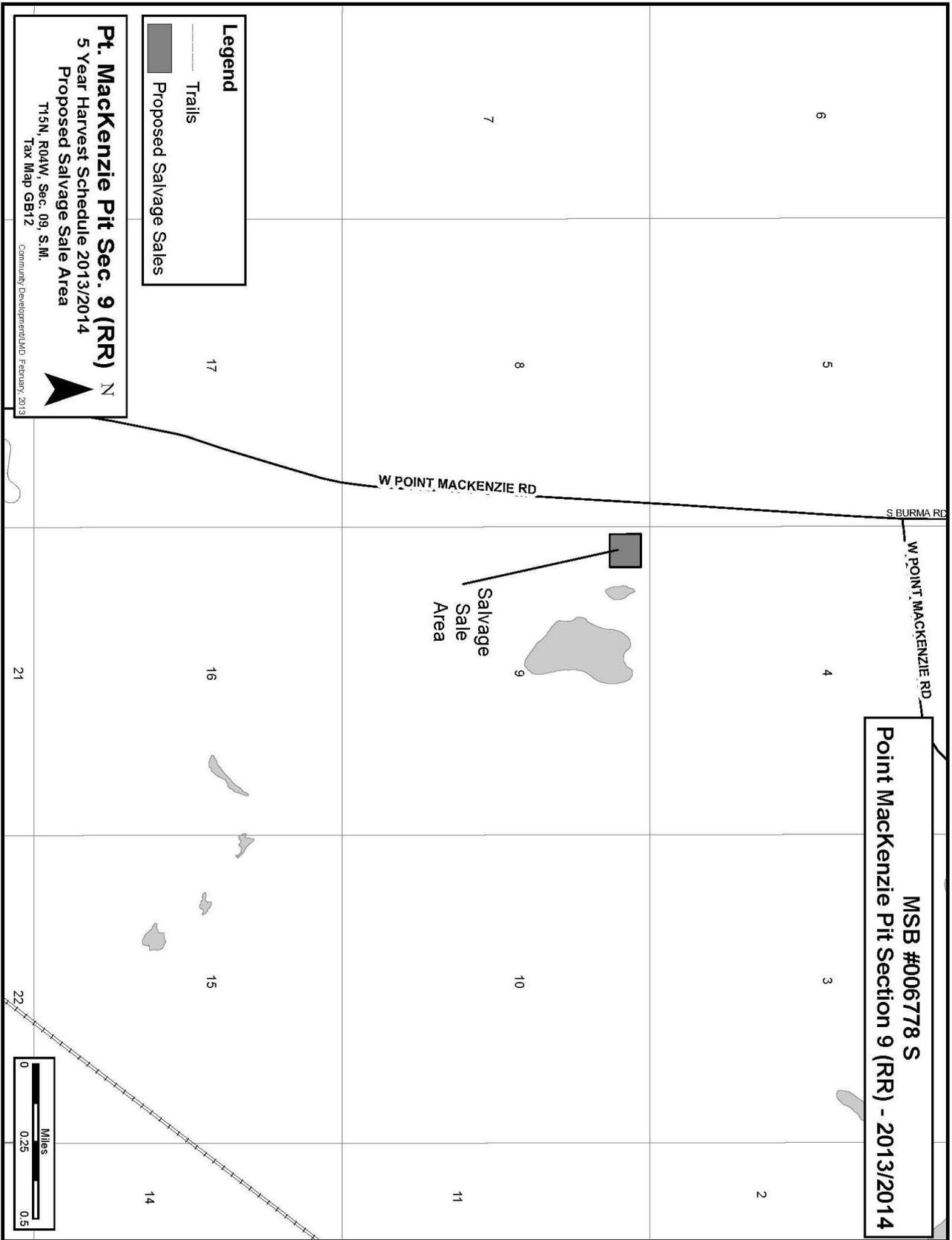




PROPOSED SALVAGE SALES (COMMERCIAL) 2013/2014: Salvage sales and personal use permit sales are exempt from the Schedule requirements except that personal use firewood harvest areas shall be included in the Schedule for informational purposes. Timber harvest volumes sold, leased or permitted and harvested for personal use and/or salvage sales shall not count against the annual allowable cut limitations established in MSB Code 23.20.040.

Sale Area	Sale Number	Cords/estimate	Lot Size	Timber Type
Ayrshire (RR)	MSB006777 S	200	10 cords & up	Tree Length Mixed
Pt. Mac. Pit Sec 9 (RR)	MSB006778 S	1000-1500	10 cords & up	Tree Length Mixed
Susitna Pkwy Pit Sec 6	MSB006779 S	500-1000	10 cords & up	Tree Length Mixed
S Big Lake Road Realign	MSB006785 S	300-500	10 cords & up	Tree Length Mixed





PERSONAL USE HARVEST AREAS: Land that is not classified as “forest management land” may be utilized for firewood sales, salvage sales, personal use, or for non-forest products. In November 2012, the LMD presented legislation to the Assembly requesting the annual allowable harvest of personal use firewood on Borough land be raised from three cords per year to six cords per year. The legislation was adopted. The LMD has identified sufficient personal use firewood areas with reasonable access to accommodate the increased quantities throughout the Borough for the next five years. This land does not have to be located within a natural resource management unit and does not need to be subject to an adopted natural resource management plan. The Land Management Division will maintain and manage the personal use firewood areas to ensure personal use firewood is available and accessible throughout the Borough.

Personal Use Firewood	Sale Number	Acres Cords (C)	Permit Required	Timber Type
Glenn Hwy North Conv.	MSB006802	50 (C)	Cut/limbed/stacked	Tree Length Mixed
Burnt Butte Fuel/Unit 2	MSB003092	10-15 (C)	Cut/limbed/stacked	All
Burnt Butte Fuel/Unit 3	MSB003092	50 (C)	Dead Down/Stand	All
Burnt Butte Fuel/Health	MSB006803	70 Acres	Dead Down/Stand	All
Pt. Mac. Alsop North	MSB006578 P	100 Acres	*S>9"-B>11" dbh	Mixed Sawtimber
Ayrshire (RR)	MSB006777 P	300-500 (C)	Cut/limbed/stacked	10' Length Mixed
Susitna Pkwy Pit Sec 6	MSB006779 P	300-500 (C)	Cut/limbed/stacked	10' Length Mixed
S Big Lake (realign)	MSB006785 P	100-200 (C)	Cut/limbed/stacked	10' Length Mixed
South Big Lake	MSB006575	20 Acres	*S>9"-B>11" dbh	Mixed Sawtimber
Millers Reach (RR)	MSB006804 P	250-500 (C)	Cut/limbed/stacked	Mixed
Parks Highway MP92	MSB006582	24 Acres	*S>9"-B>11" dbh	Mixed Sawtimber
South Beaver Road	MSB006805	50 acres	*S>9"-B>11" dbh	Mixed Sawtimber
Susitna Riv. MP118 W.	MSB006580	10 Acres	*S>9"-B>11" dbh	Mixed Sawtimber
Moose Creek MU	MSB006806	24 Acres	*S>9"-B>11" dbh	Mixed Sawtimber
Chulitna River MU	MSB006807	35 Acres	*S>9"-B>11" dbh	Mixed Sawtimber

***All dead-down Birch and all dead-down or dead-standing Spruce, excluding all natural vegetative buffer requirement areas; in addition to the mixed sawtimber.**

