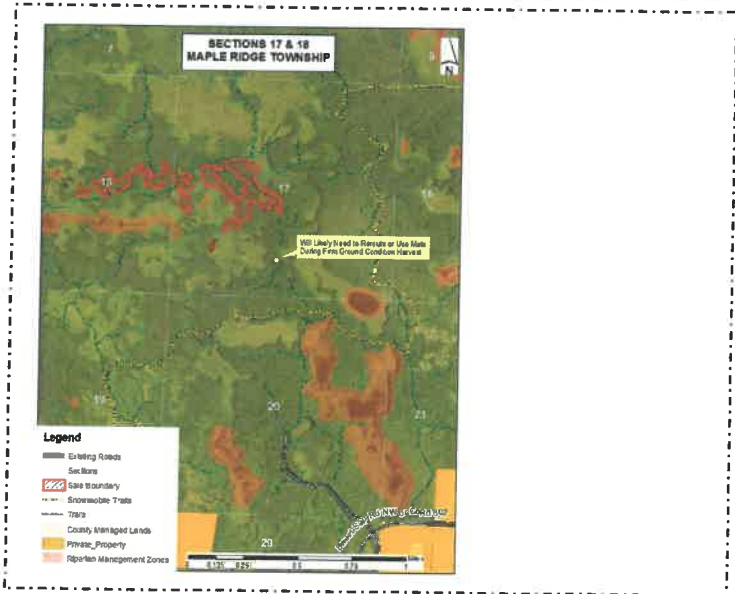


Beltrami County Natural Resource Management Timber Appraisal Report

Project Plan #	FH-19-770	TSM Permit #	219052	Bid Type:	Sealed	Access:
Township	Maple Ridge			Ownership:	Tax forfeit	Public
Expiration Date	11/1/2021		Sale Duration:	22 months		Season:
Forester	Garret DeChaine		Appraisal Date	6/14/2019		Firm or frozen

Quarter	SW -	Section	17	Township	149	Range	34	Location:
Quarter	NW -	Section	17	Township	149	Range	34	Lat. (NDD.dddd°)
Quarter	SE -	Section	18	Township	149	Range	34	N 47.724
Quarter	NE -	Section	18	Township	149	Range	34	Long. (WDD.dddd°)
Reserve Trees								W 95.036
Sale boundaries	Red Paint							



Cover Type	Harvest Acres	Treatment Method
12-Aspen	32.2	Full Harvest
20-N Hdwds	10.4	Partial Harvest
Visual Sensitivity	Low	
Management Actions to Address Visual Sensitivity		

Timber Appraisal				
Code	Species	Product/Unit	Volume	Price/Unit
†	Aspen	Pulp/Cords	300	2.50
*	Mixed Hdwds	Pulp/Cords	35	2.50
*	Mixed Conifer	Pulp/Cords	1	5.00
Total price (calculated in TSM)				\$ 842.50

Land Commissioner Review
RAM 10/22/2019
Age
Click here to enter text.
Site Index
Click here to enter text.
Basal Area
Click here to enter text.
Number of Plots
9
Standard Error
Click here to enter text.

Codes: † Area estimate, * Non-bid area estimate, # Non-bid scaled, blank=scaled

Additional Comments: High wind events within the past year have led to blowdown of timber within this portion of Maple Ridge Township. The purpose of this permit is to salvage as much of the merchantable blowdown and is safely possible while additionally helping to prepare for future reforestation via natural regeneration.

The contractor is expected to visit the sale area before placing a bid. Please note that due to the severe damage encountered within portions of this permit, and the uncertain utilization potential within these areas, that harvested volumes may vary from what is expressed in the Timber Appraisal.

Beltrami County Natural Resource Management Timber Appraisal Report

The "Aspen" species category also includes balm of Gilead. The "Mixed Hdws" species category consists of all wind damaged hardwoods and the "Mixed Hdws" species category consists of all wind damaged conifers (see Leave Tree Instruction in project plan for what constitutes wind damaged trees)

Project Planning and Instructions to Contractor(s)

Project ID FH-19-770

Sweet Sap Blowdown Salvage

Primary Contractor:

Secondary Contractor:

Forester: Chad Jacobson

PROJECT

Overall Site Objectives: High wind events within the past year have led to blowdown of timber within this portion of Maple Ridge Township. The purpose of this permit is to salvage as much of the merchantable blowdown and is safely possible while additionally helping to prepare for future reforestation via natural regeneration.

Management Objectives:	Stand	Objectives	Acres
	All	Harvest all aspen and balm of Gilead. Harvest mixed hardwoods and mixed conifer while reserving undamaged clumps of mixed hardwoods and 6-13 undamaged (See Leave Tree Instructions for what constitutes "damaged" trees) mixed hardwood trees per acre. Also reserve undamaged red and white pine.	42.6

Legal Description:	Stand ID	Township	Range	Section	Quarter
	149341761	149	34	17	SW
	149341723	149	34	17	NW & SW
	149341802	149	34	18	NE & SE
	149341742	149	34	17	SW
	149341840	149	34	18	SE
	149341802	149	34	17	NW & SW
	149341741	149	34	17	SW

Timing Additional Instructions: A trail reroute and/or the use of mats may be necessary to access the sale blocks for harvest to occur during firm conditions.

Equipment Considerations: Equipment capable of assisting with the harvest of blowdown trees currently in contact with the ground. Additionally, a dozer will likely be necessary for road improvements and maintenance.

Site Access: Public

Site Access Addit'nl Instructions: Not all portions of the potential haul routes have been seen by the forester during non-frozen conditions. Some possible routes in will likely be possible only during frozen conditions or from private property (requiring permission).

Site Geography: Sandy Loamy Clay Organic Rock Outcrop Stony

Dominant Terrain: Rolling

Soils Terrain Add'nl Instructions: As the sale was established during the winter, there may be some wetlands that were undistinguishable, or covered in blowdown, during preparation. If cut while firm, please avoid harvesting in wetlands where rutting may occur.

HARVEST SPECIFICATIONS

Number of Landings: 5

Average Size of Landings: 8000

Landing Location: Upland

Landings Addit'nl Instructions: Landing locations will be agreed upon during the pre-work visit. Landing locations may be located outside sale boundaries at locations approved by the forester. Some possible haul roads are designated snowmobile trails. Adequate snow must be maintained for snowmobiles. Decks aren't allowed within 50' of these trails. No slash is allowed on existing roads/trails. Heavy equipment may not block the snowmobile trails.

Skid Trail Parameters: **Parameter List**

Keep Primary and Secondary Skid Trails <10-15% of Timber Harvest.

Locate out of Wetland Areas.

Minimize travel off of primary and secondary skid.

No Skidder Operation in Wetlands.

Use Primary and Secondary Skid Trails.

Skid Trail Add'nl Instructions: Skid trails outside of the sale boundaries must first be approved by the forester. Skidding through wetlands will only be allowed if cut during frozen ground conditions.

Average Stump Height Must be Less Than 12 Inches!

All Non Reserved Merchantable Wood Must be Utilized!

Utilization Add'nl Instructions: The contractor is expected to salvage all merchantable blowdown that can be safely harvested. Additionally, all aspen and balm of Gilead down to 2" DBH must be cut. Sub-merchantable aspen/balm must be brushed to a depth no greater than 2'.

Slash Must be Scattered over the Harvest Area!

Slash Additional Instructions:



Project Planning and Instructions to Contractor(s)

Project ID FH-19-770

Sweet Sap Blowdown Salvage

Primary Contractor:

Secondary Contractor:

Forester: Chad Jacobson

Slash Treatment Date:..... 4/15/2021 12:00:00 AM
GuideLine Deviations:..... Incidental blowdown in proximity to the permit's trails (within county managed lands) may be salvaged, with permission granted by the forester, & paid for at the same rate as other trees of that species listed in the appraisal form. Brush must be <2' deep.

ROADS AND WATER CROSSINGS

Road Design:..... Summer **Road Type:** Forest management access **Road length in Sale Area:** 1662 ft.
Total Road Length: 15583 Ft.

Road Status Post Project:..... Open

General Comments:..... Multiple access roads are present. If accessing from Teddy Rd NW, please note that a seasonal easement is present only allowing access from 12/1 to 3/31. Additionally, some haul roads may be grant-in-aid snowmobile trails if used during the winter.

Post Activity Road Work:..... Leveling / Shaping

Responsibility:..... Contractor

Road Status Add'nl Instructions:..... The contractor is responsible for ensuring the status of all sale roads post sale is the same, or better, than the conditions noted during the pre-work visit. Unless otherwise agreed upon with the forester, all trails passing through the sale boundaries (see map) must be free of slash at sale's end.

Road GuideLine Deviations:..... **If accessed during firm conditions (likely from the south), road improvements will, in all likelihood, be necessary to better shed water.**

Water Diversion - Culverts.

Water Diversion - Lead-off Ditches.

Water Diversion Add'nl Instructions:..... If cut while firm, lead-off ditches & culverts may be necessary to divert water from the haul road at locations agreed upon during the pre-work meeting. The county will provide necessary culverts to be picked up by the contractor at the county hwy garage.

Diversion GuideLine Deviations:..... The county may, with the authorization of the forester, pay for fill at specific locations that will improve the haul route over county managed lands. The contractor is responsible for arranging the fill delivery and for spreading it.

Number of Water Crossings:.....

Water Crossings/Cross Drainages:

Type	Solution	Permanent #	Culverts Size	Temp #	Culverts Size	Temp Removal
Drainage	Culverts	1	18	0	0	

Water Crossings Add'nl Instructions:..... If cut while firm, a culvert, or culverts, may be necessary (see map for one location). At the map location, mats may be used in place of a culvert at a trail reroute location. Mats may also be used at other locations with forester approval.

Water Crossing GuideLine Deviations:.....

If cut while firm, timber harvested from the western most block (~1ac in size) will likely have to be skidded east to be removed. Mats, slash, or another crossing solution may be necessary to skid timber from this block to the ENE across a drainage.

RMZs AND FILTER STRIPS

RMZ General Comments:..... As the sale was established in the winter and blowdown was covering the ground, there may be interior wetlands that weren't detected during sale prep. If cut while firm, please avoid harvesting in any wetland that may present a potential for rutting.

Other Wetlands:	Other Water Body	Strip
	Interior wetlands	50ft
	Wetlands adjacent to sale boundaries	50ft

Wildlife Considerations

T + E Species Present:..... None Present.

Other Wildlife Species of Concern:..... None Present.

Protective Measures:..... Protective Measures Not Applicable.

Database Checked

No new identified species on site.

Other Wildlife Elements:..... Food sources reserved.



Project Planning and Instructions to Contractor(s)

Project ID FH-19-770

Sweet Sap Blowdown Salvage

Primary Contractor:

Secondary Contractor:

Forester: Chad Jacobson

Leave Tree Snags..... Re-vegetation of roads and landings to provide forest openings.
Leave All Snags EXCEPT Safety Hazards!
Leave All Snags Except Visual Not Applicable.
Leave All Snags EXCEPT those with Insects or Disease Not Applicable.

Leave Tree Instructions:..... Reserve undamaged mixed hardwood clumps greater than .25ac in size. Additionally, reserve 6-13 mixed hardwood trees/acre that aren't birch, elm, or ash, have a min. DBH of 8" and a minimum of 3 sticks with no damage. Wind damaged trees are those that have a lean exceeding 5 degrees, or have greater than 1/3 of the live crown broken or damaged, or exhibit a single patch of exposed cambium greater than 50 square inches. Undamaged red and white pine must be reserved.

Coarse Woody Debris Per Acre Not Applicable.
Leave 6-13 Scattered Leave Trees per Acre!
Understory Conifer Retention Not Applicable.
Maintenance of Oak or Other Mast Not Applicable.
Reserve Den Trees!

General - Leave Trees/Snags:..... Standing broken trees may be harvested if they appear to have been alive before the high wind events that lead to the blowdown. Those that appear to have been dead before the high wind events must be reserved as snags.

VISUAL SENSITIVITY

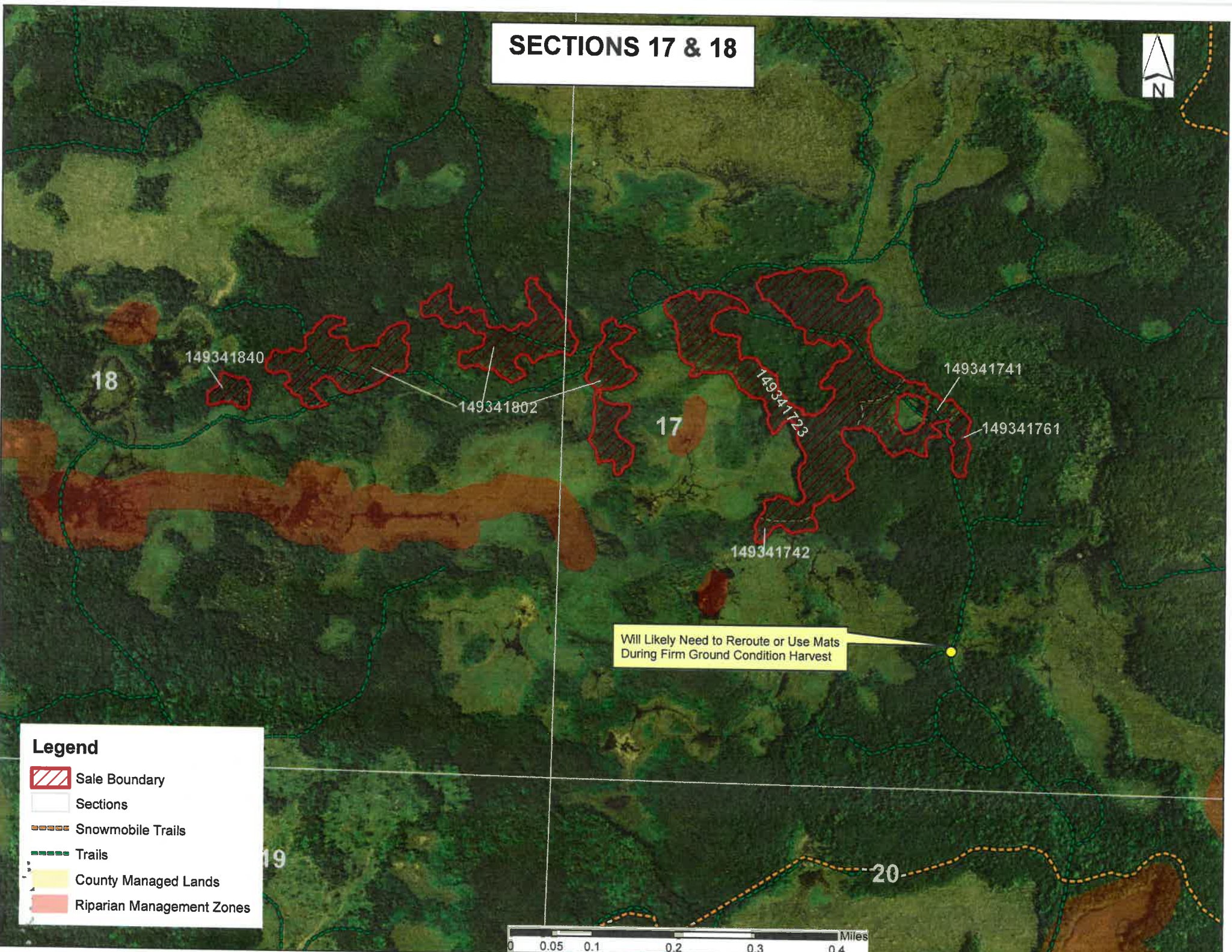
Database Checked:..... Yes
Visual Sensitivity of Site:..... Low

CULTURAL SITES







Database Checked:..... Yes
Conservation Plan:..... No conservation management plan in place at this time.
Feature Present:..... None Present.
New Identified on Site & Mapped:.. No



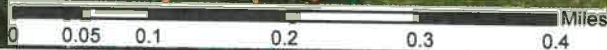
SECTIONS 17 & 18



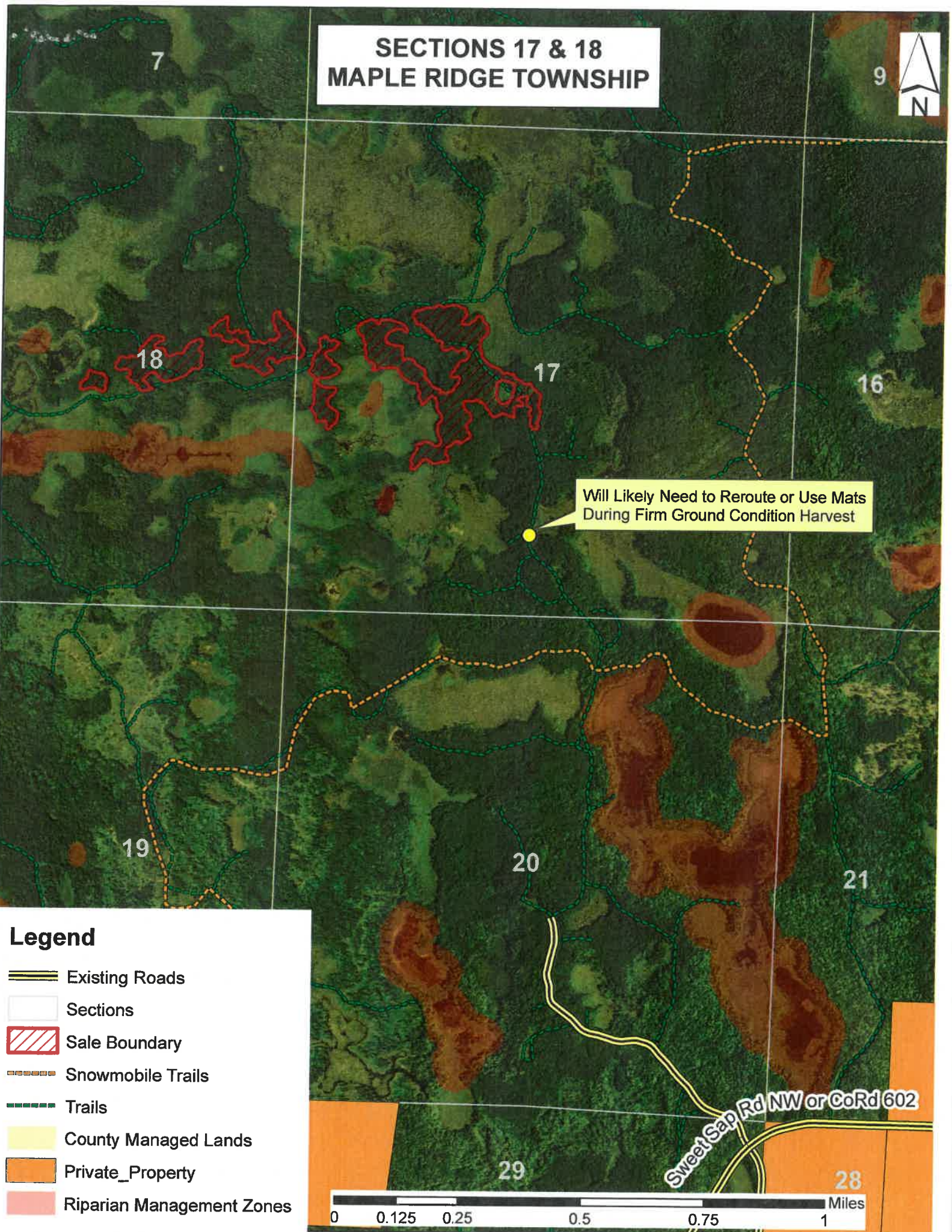
Legend

-  Sale Boundary
-  Sections
-  Snowmobile Trails
-  Trails
-  County Managed Lands
-  Riparian Management Zones

Will Likely Need to Reroute or Use Mats During Firm Ground Condition Harvest



SECTIONS 17 & 18 MAPLE RIDGE TOWNSHIP



Will Likely Need to Reroute or Use Mats During Firm Ground Condition Harvest

Legend

- Existing Roads
- Sections
- Sale Boundary
- Snowmobile Trails
- Trails
- County Managed Lands
- Private_Property
- Riparian Management Zones

Sweet Sap Rd NW or Co Rd 602

