



# Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41039

Entry Year 2017

Acreage: 2,389

County Schoolcraft

Management Area: Seney Manistique Swamp

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**Revision Date:** 2015-08-04

**Stand Examiner:** Adam Petrelius

**Legal Description:**

T43N R16W Sections 19, 20, 29, 30

**Identified Planning Goals:**

This compartment lies within the Seney-Manistique Swamp Management Area. The main goal of this compartment is to conduct multiple resource management for current and future generations.

**Soil and topography:**

The topography in this compartment is mostly flat, with slightly higher elevations existing on the islands of pine and aspen located with the marsh. Soils in the compartment support mixed pine/aspen stands, lowland brush/marsh, and lowland conifer species. The major soil types found within the compartment, in order of abundance, are Markey Mucky Peat, Rousseau-Neconish-Spot Complex, Carbondale-Lupton-Tawas Mucks, and Deford-Augres-Rubicon Deep Water Table Complex. The major habitat types within the compartment, in order of abundance, are Unclassified Wetland, PVE, PARVAa, and PARV. The entire compartment lies within the Mint Farm Land Type Association.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:**

State land within this compartment was acquired between 1906 and 1974. Most of the land was tax reverted, but some was purchased and exchanged with both private individuals and the United States Forest Service. The entire western boundary of the compartment borders the United States Forest Service. The entire southern boundary borders state land. Approximately ¾ of the north and east compartment boundary borders state land. Adjacent land along the compartment boundary is owned by Plum Creek. A camp is located on the 120 acre parcel of private land that lies within the compartment boundary.

**Unique Natural Features:**

Under review.

**Archeological, Historical, and Cultural Features:**

None known.

**Special Management Designations or Considerations:**

A small portion of stands in this compartment are located within the deeryard, and are classified as a Special Conservation Area.

**Watershed and Fisheries Considerations:**

Smith Creek is found in this compartment and is considered to be warm-water. Previous fishery surveys have found shiners, mudminnows, and dace. BMP's should be followed as inputs of sediment and increases in sand bedload need to be prevented.

**Wildlife Habitat Considerations:**

This compartment is on the south side of an area locally known as the Mint Farm. It is dominated by marsh/ low ridge and lowland shrubs. Smith creek traverses this compartment from north to south. The first surveyors reported that tamarack, spruce, and jack pine were the most common trees in forested areas. Other species recorded included red pine, aspen, white pine, white birch, cedar, and fir. Circa 1900, a large drainage ditch (The Big Ditch) was dug to drain this area for agricultural purposes. In the western portion of the compartment these efforts resulted in a lowered water table enabling the land to support more trees. Most of the marsh and lowland shrub areas remain fairly unchanged from pre-settlement times. However, areas that may have been altered by The Big Ditch now support an aspen community. Jack pine has replaced tamarack and spruce as the dominant tree species on the ridges within the marsh. Featured species in this compartment are beaver, moose, ruffed grouse, sharp-tailed grouse, snowshoe hare, and white-tailed deer.

**Mineral Resource and Development Concerns and/or Restrictions**

Surface sediments consist of lacustrine sand and gravel and peat and muck. There is insufficient data to determine the glacial drift thickness. The Ordovician Stonington and Big Hill formations subcrop below the glacial drift. The Stonington and

Big Hill could be used for stone/dolomite. Gravel pits are not located in this area and potential appears to be limited. There is no commercial oil and gas production in the UP. A dry hole was drilled five miles to the southeast in 2005 (Trenton Formation test).

**Vehicle Access:**

The Smith Creek Truck Trail travels south through the compartment, and is the main route into state land located north of Indian Lake. This forest road is used by many landowners to access their camps. Plans are underway to replace the bridge located on Smith Creek. The western portion of the compartment is accessed from a forest road that parallels the Big Ditch. Most of the roads which branch off the 2 main forest roads into the compartment were created from past timber sales. Many of these roads are overgrown and of poor quality.

**Survey Needs:**

None

**Recreational Facilities and Opportunities:**

There are no recreational facilities within this compartment. Opportunities include hunting, hiking, berry picking, and riding ORV's.

**Fire Protection:**

Response time to fires within this compartment will be moderate to slow. Most of the old roads located within the compartment are narrow, wet, and would not support large fire equipment. This compartment has 2 water sources, Smith Creek and the Big Ditch. During dry summer conditions fires can burn in the deep organic soils found throughout most of this compartment. In the summer of 2005 a fire located on similar soil types burned 45 acres of USFS land just west of this compartment. A small lightning strike fire occurred in 2012 here also along the side of Smith Creek Road.

**Additional Compartment Information:**

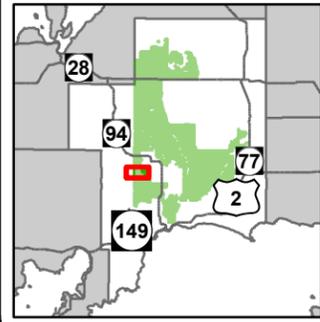
The following reports from the Inventory are attached:

- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

The following information is displayed, where pertinent, on the attached compartment maps:

- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

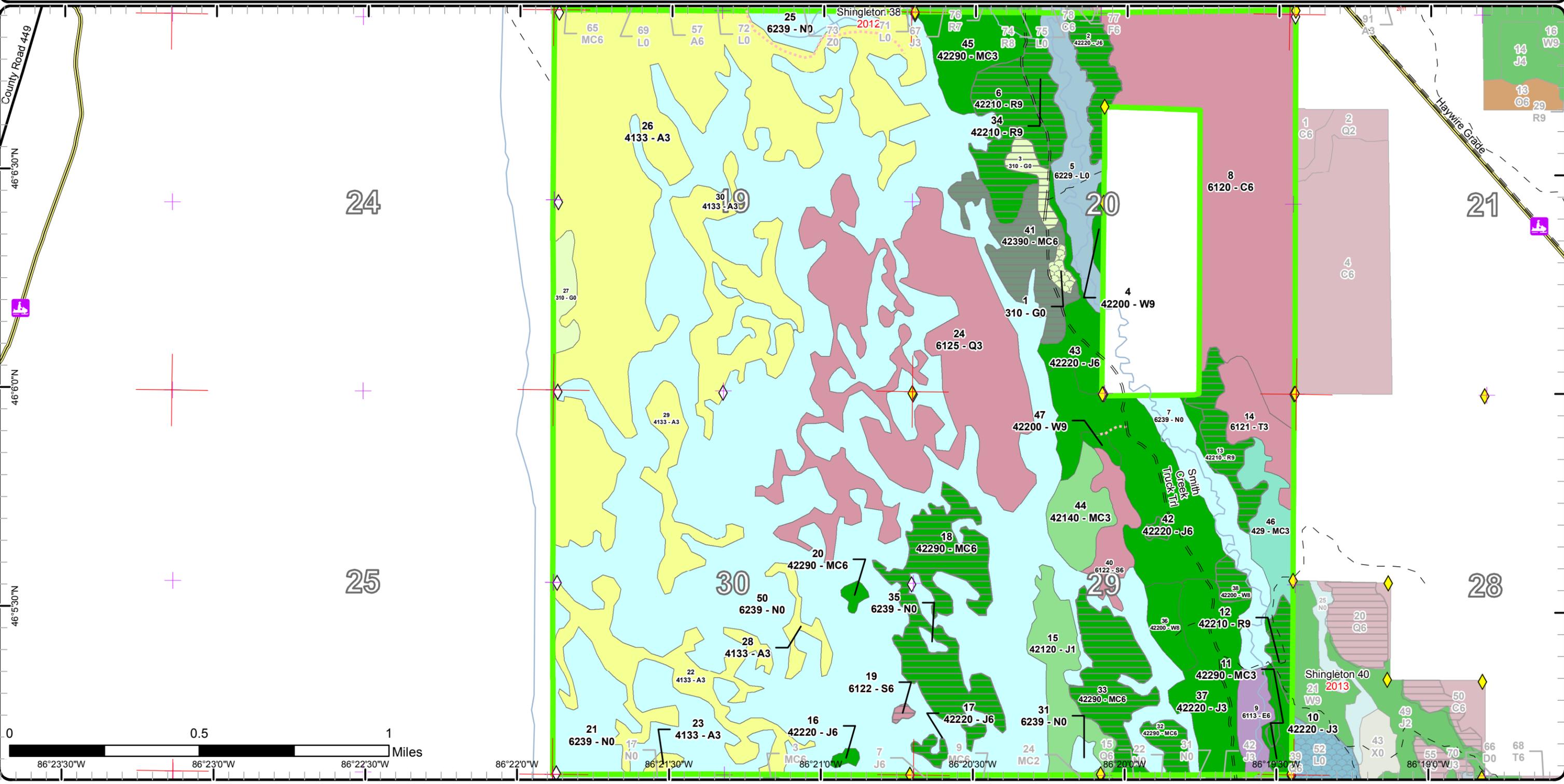
# Cover Type & Treatments



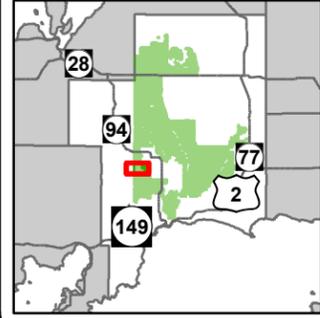
Compartment: 39  
 T43N, R16W, Sec: 19, 20, 29, 30  
 County: Schoolcraft  
 Unit: Shingleton  
 Mgmt Area: Seney Manistique Swamp  
 YOY: 2017  
 Acres: 2389 GIS Calculated  
 Examiner: Adam Petrelus  
 Map Revised: 8/25/2015  
 Map Phase: Review



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|---|---|--|
| <ul style="list-style-type: none"> <li>✚ Remonumented Section Corners</li> <li>◆ Survey Grade GPS Corners</li> <li>◇ Field Grade GPS Corners</li> <li>— Miris Corners</li> <li>— Paved Roads</li> <li>— Gravel Roads</li> <li>— Poor Dirt Roads</li> <li>— Closed Roads</li> <li>🛷 Snowmobile Trails</li> <li>— Rivers</li> </ul> | <ul style="list-style-type: none"> <li>🏠 Site Prep</li> <li>🏠 Clearcut (w/Reserves)</li> <li>🏠 Regeneration Survey</li> <li>🏠 Shelter Wood (w/Reserves)</li> </ul> <p>Forest Covertypes</p> <ul style="list-style-type: none"> <li>413 - Aspen</li> <li>421 - Planted Pines</li> <li>422 - Natural Pines</li> <li>423 - Other Upland Conifers</li> <li>429 - Mixed Upland Conifers</li> <li>611 - Lowland Deciduous Forest</li> </ul> | <p>612 - Lowland Coniferous Forest</p> <p>Non-Forest Covertypes</p> <ul style="list-style-type: none"> <li>310 - Herbaceous Openland</li> <li>622 - Lowland Shrub</li> <li>623 - Emergent Wetland</li> </ul> |
|---|---|--|



# Stand Boundary Map



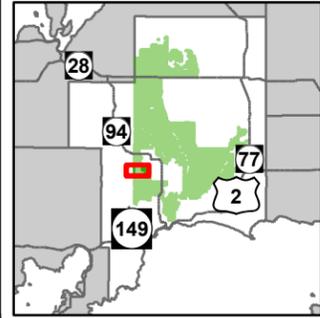
Compartment: 39  
 T43N, R16W, Sec: 19, 20, 29, 30  
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|---|--|

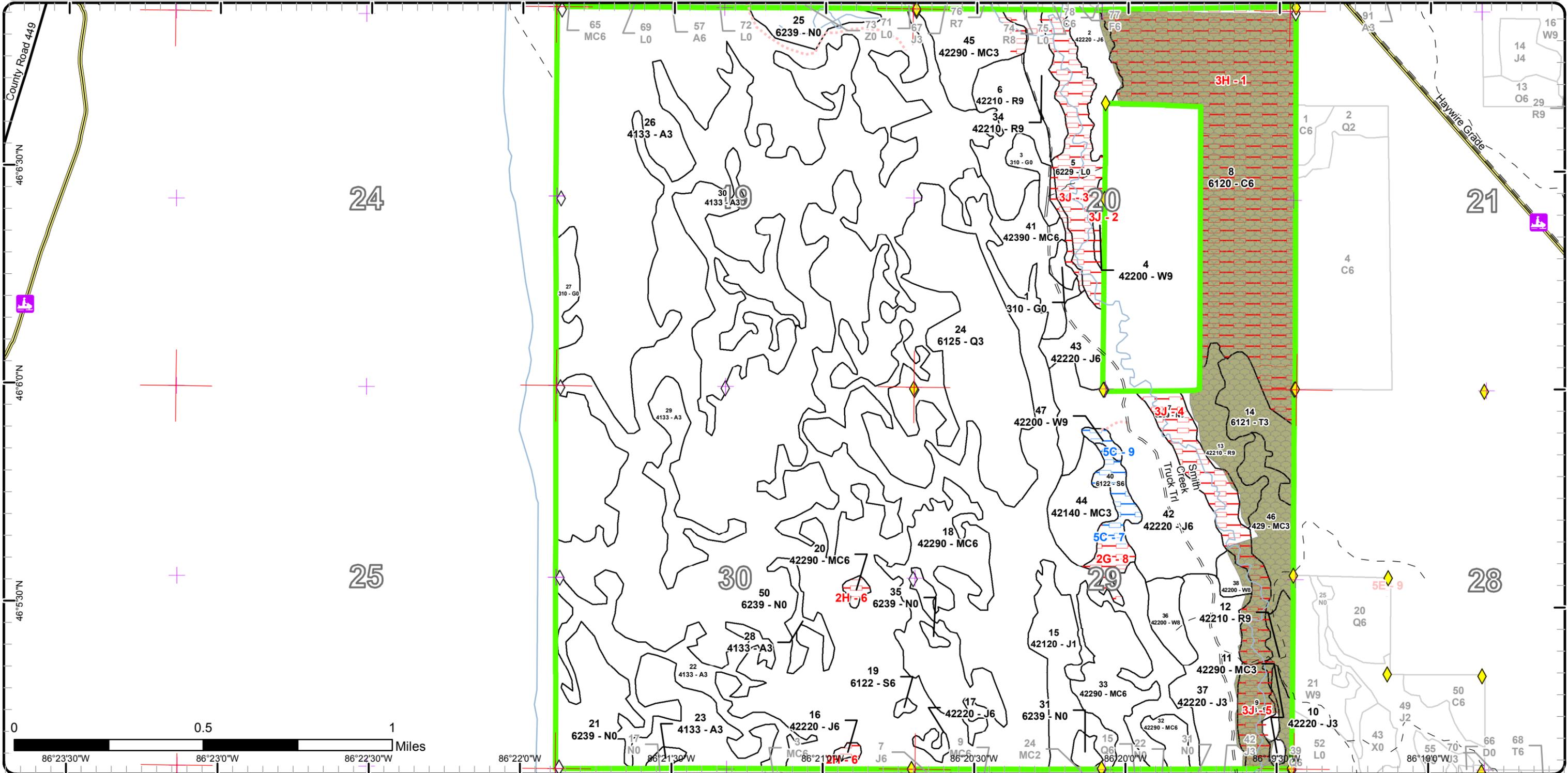


# Special Conservation Areas & Site Conditions Map

Compartment: 39  
 T43N, R16W, Sec: 19, 20, 29, 30  
 County: Schoolcraft  
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| <ul style="list-style-type: none"> <li>✚ Remonumented Section Corners</li> <li>◆ Survey Grade GPS Corners</li> <li>◇ Field Grade GPS Corners</li> <li>— Miris Corners</li> <li>— Paved Roads</li> <li>— Gravel Roads</li> <li>— Poor Dirt Roads</li> <li>⋯ Closed Roads</li> <li>🚙 Snowmobile Trails</li> <li>— Rivers</li> <li>□ Stand Boundaries</li> </ul> | <h3>Recommendation</h3> <ul style="list-style-type: none"> <li>🚧 SCA Removal Site Condition</li> <li>🔵 Available w/ Constraints</li> <li>🔴 Unavailable</li> </ul> <p>Available Factors W/ Constraints</p> <ul style="list-style-type: none"> <li>5C: Delay treatment for age/size class diversity or exceptional site quality</li> </ul> | <h3>Unavailable Factors</h3> <ul style="list-style-type: none"> <li>2G: Too wet (sensitive soils, does not include access issues)</li> <li>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</li> <li>3H: Deer Wintering Areas</li> <li>3J: Water quality / BMPs (stream, river, or lake)</li> </ul> <p>Special Conservation Areas</p> <ul style="list-style-type: none"> <li>🌊 Cold Water Streams</li> <li>🌳 Potential Old Growth</li> </ul> |
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Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	0	0	449	0	0	0	0	0	0	0	0	0	0	0	0	0	0	449
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	195	0	0	0	0	0	195
Herbaceous Openland	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Jack Pine	0	0	78	73	0	16	0	0	0	22	0	0	0	0	0	0	0	0	189
Lowland Conifers	0	0	0	187	0	0	0	0	0	0	0	0	0	0	0	0	0	0	187
Lowland Deciduous	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	14
Lowland Shrub	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	18
Marsh	935	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	935
Natural Mixed Pines	0	0	5	28	0	0	0	43	0	61	0	0	0	0	0	0	0	0	137
Planted Mixed Pines	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Red Pine	0	0	0	0	0	0	0	0	0	51	0	32	0	0	0	0	0	0	83
Tamarack	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Upland Conifers	0	0	23	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	55
White Pine	0	0	0	0	0	0	0	0	0	14	5	4	0	0	0	0	0	0	23
<b>Total</b>	<b>996</b>	<b>0</b>	<b>151</b>	<b>737</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>43</b>	<b>14</b>	<b>198</b>	<b>5</b>	<b>36</b>	<b>195</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2391</b>



## Report 2 – Treatment Summary

Shingleton Mgt. Unit  
Year of Entry: 2017

Acres of Harvest

Compartment 39  
Total Compartment Acres: 2,389

Commercial Harvest - 238  
Harvests with Site Condition - 0  
Next Step Harvest - 0  
Habitat Cut - 0

### Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Herbaceous Openland	8	0	0	0	0	0	0	0	0	8
Jack Pine	19	0	0	0	0	0	0	0	0	19
Lowland Spruce/Fir	1	0	0	0	0	0	0	0	0	1
Natural Mixed Pines	101	0	0	0	0	0	0	0	0	101
Red Pine	70	0	0	0	1	0	0	0	0	72
Upland Conifers	32	0	0	0	0	0	0	0	0	32
White Pine	5	0	0	0	0	0	0	0	0	5
<b>Total</b>	<b>237</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>238</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	238	3	0	0	0	0	2	0	0	243
Next Step	0	215	141	0	0	70	174	0	0	599
<b>Total</b>	<b>238</b>	<b>218</b>	<b>141</b>	<b>0</b>	<b>0</b>	<b>70</b>	<b>176</b>	<b>0</b>	<b>0</b>	<b>843</b>



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
2	41039_OutOfY OE-Cut	16.3	42220 - Natural Jack Pine	Poletimber Well	85	81-110	Harvest	Clearcut with Retention	42260 - Natural Pine, Mixed Deciduous	Even-Aged	Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Cut all trees except hemlock and oak. Leave a few red pine and white pine for seed.

Specs:

Next Step Planting, Initial Plant; Monitoring, Artificial Regen(1yr)

Treatments:

Acceptable Red pine will be planted following harvest, but any species mixture is acceptable due to site's location.

Regen:

Other Access to this stand will involve the installation of a temporary bridge. This could be built and placed by the logger west of this stand. Winter  
Comment: harvest may be needed. Survey work may be needed. There is a creek / drainage located in southern part of stand, it runs east/west. Buffer 50 feet. Buffer Smith creek 100 feet. These will be the retention areas. East edge of stand has some cedar. Cedar can be cut, but sale boundary should exclude the patches. Old next step comments: Plant red pine on ridges to maintain component. Low ground should regenerate to mixed species. Acceptable management objectives includes any species mixture currently found onsite.

8/6/12 BB Sale is now on proposal 27-12-01 Unit 4. Residual BA = red pine 3' and white pine 1'. Retention is the residual and edge trees. The east west drainage referred to above could not be located when prepared and ended up not being there. The logger will be responsible for building their own portable bridge. FTP C41-1530 is written for Red Pine regeneration.

Proposed Start Date: 10/1 /2011

3	41039003-2- New	3.2	310 - Herbaceous Openland	Nonstocked	0	Unspec ified	SitePrep	Trenching	4212 - Planted Jack Pine	Even-Aged	Approved Proposal
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**Habitat Cut: Yes****Site Condition:**

Prescription trench and plant jack pine. scarification was tried but failed

Specs:

Next Step

Treatments:

Acceptable jack pine, red pine, white pine

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

3	41039003-Cut	7.5	310 - Herbaceous Openland	Nonstocked	0	Unspec ified	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Cut all trees except hemlock and oak. use 2 inch spec.

Specs:

Next Step Planting, Initial Plant; SitePrep, Trenching; Planting, Initial Plant

Treatments:

Acceptable jack pine, red pine, white pine

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
6	41039006-Cut	31.8	42210 - Natural Red Pine	Sawtimber Well	84	81-110	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Cut all trees, live and dead, that are greater than 2 inches. Possible aerial herbicide applications in future. Buffer creek 100 feet. Less than 3% retention is acceptable. VBAR cruise may be needed. A drainage exists and should be delineated on ground. Save some cedar in this drainage as retention.											
<u>Specs:</u>											
WLD Comment: "This harvest will regenerate young conifer with low lying branches, creating excellent cover for snowshoe hare. Regenerating hardwood browse will bolster food availability within the stand. "											
<u>Next Step</u> SitePrep, Trenching; Pesticide, Aerial; Planting, Initial Plant; Monitoring, Artificial Regen(1yr)											
<u>Treatments:</u>											
<u>Acceptable</u> red pine only											
<u>Regen:</u>											
<u>Other</u> Stand could be cut in summer to avoid impacts to trail, however many other jobs currently exist which are winter work along this road system.											
<u>Comment:</u> Evaluate at time of sale and minimize impacts to trail. Require Chipping. Old next step comments:											
<u>Proposed Start Date:</u> 10/1 /2016											
12	41039012-Cut	8.2	42210 - Natural Red Pine	Sawtimber Well	100	81-110	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Cut all trees, live and dead, greater than 2 inches in diameter. Possible aerial herbicide operations in future. Buffer creek 100 feet. Less than 3% retention is acceptable. Survey work will be needed if corner is not present. Minimize impacts to snowmobile trail. Access may require a small stream crossing. VBAR cruising will be needed.											
<u>Specs:</u>											
<u>Next Step</u> SitePrep, Trenching; Pesticide, Aerial; Planting, Initial Plant; Monitoring, Artificial Regen(1yr)											
<u>Treatments:</u>											
<u>Acceptable</u> red pine											
<u>Regen:</u>											
<u>Other</u> Old next step comments:											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/1 /2016											
12	41039012-Cutx	1.1	42210 - Natural Red Pine	Sawtimber Well	100	81-110	Harvest	Shelterwood	4211 - Planted Red Pine	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Mark red pine and white pine to 50 sq. ft. Cut all other trees. Buffer creek 50 feet. Minimize impacts to snowmobile trail. VBAR cruising will be needed.											
<u>Specs:</u>											
<u>Next Step</u> Planting, Initial Plant; Monitoring, Artificial Regen(1yr)											
<u>Treatments:</u>											
<u>Acceptable</u> mixed deciduous and conifer trees. Due to stands small size, it will be difficult to keep it in red pine. accept any regeneration but still plant stand with red pine at time of others.											
<u>Regen:</u>											
<u>Other</u> Old next step comments:											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/1 /2016											
13	41039013-Cut	18.7	42210 - Natural Red Pine	Sawtimber Well	100	81-110	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Cut all trees, live and dead, greater than 2 inches in diameter. Possible aerial herbicide operations in future. Buffer creek 100 feet. Less than 3% retention is acceptable. Survey work will be needed if corner is not present. Minimize impacts to snowmobile trail. Access may require a small stream crossing. VBAR cruising will be needed. Require Chipping											
<u>Specs:</u>											
<u>Next Step</u> SitePrep, Trenching; Pesticide, Aerial; Planting, Initial Plant; Monitoring, Artificial Regen(1yr)											
<u>Treatments:</u>											
<u>Acceptable</u> red pine											
<u>Regen:</u>											
<u>Other</u> Old next step comments:											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/1 /2016											



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
17	41039017-Cut	2.7	42220 - Natural Jack Pine	Poletimber Well	83	81-110	Harvest	Clearcut with Retention	4222 - Natural Jack Pine	Even-Aged	Proposal

**Habitat Cut: No****Site Condition:**

Prescription Cut all trees except hemlock and oak. Leave some good quality red pine and white pine seed trees where available and located on high ground.  
Specs: Retention may be excluded along the marsh edge. Less than 3% retention is acceptable.

Next Step SitePrep, Scarification; Monitoring, Natural Regen (Intermediate)  
Treatments:

Acceptable mixed deciduous and conifer trees. Since stand is remote and access will be difficult we are willing to accept any species as regeneration.  
Regen: adjacent stands regenerated well to jack pine and I suspect the same here.

Other Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

18	41039018-Cut	58.8	42290 - Natural Mixed Pine	Poletimber Well	83	51-80	Harvest	Clearcut with Retention	429 - Mixed Upland Conifers	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Cut all trees except hemlock and oak. Leave some good quality red pine and white pine seed trees where available and located on high ground.  
Specs:

Next Step  
Treatments:

Acceptable mixed deciduous and conifer trees. Since stand is remote and access will be difficult we are willing to accept any species as regeneration.  
Regen: adjacent stands regenerated well to jack pine and I suspect the same here.

Other WLD - Retention can be placed along the marsh edge. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

19	41039019-Cut	1.2	6122 - Black Spruce	Poletimber Well	83	81-110	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Cut all trees except hemlock and oak. Less than 3% retention is acceptable and can be placed along the marsh edge.  
Specs:

Next Step  
Treatments:

Acceptable mixed deciduous and conifer trees. Since stand is remote and access will be difficult we are willing to accept any species as regeneration.  
Regen: adjacent stands regenerated well to jack pine and I suspect the same here.

Other Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

32	41039032-Cut	7.6	42290 - Natural Mixed Pine	Poletimber Well	64	81-110	Harvest	Clearcut with Retention	429 - Mixed Upland Conifers	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Cut all trees except hemlock and oak. Leave some good quality red pine and white pine seed trees where available and located on high ground.  
Specs: Retention may be excluded along the marsh edge. Attempt to build road from south during timbersale on high ground to allow for us to scarify stand.

Next Step SitePrep, Scarification; Monitoring, Natural Regen (Intermediate)  
Treatments:

Acceptable jack pine, red pine, white pine, black spruce in uplands. mixed conifer and deciduous in lowlands.  
Regen:

Other Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
33 41039033-Cut	34.9	42290 - Natural Mixed Pine	Poletimber Well	64	81-110	Harvest	Clearcut with Retention	429 - Mixed Upland Conifers	Even-Aged	Proposal

**Habitat Cut: No****Site Condition:**

Prescription Cut all trees except hemlock and oak. Leave some good quality red pine and white pine seed trees where available and located on high ground.  
Specs: Retention may be excluded along the marsh edge. Attempt to build road from south during timbersale on high ground to allow for us to scarify stand.

Next Step SitePrep, Scarification; Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable jack pine, red pine, white pine, black spruce in uplands, mixed conifer and deciduous in lowlands.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

34 41039034-Cut	11.8	42210 - Natural Red Pine	Sawtimber Well	84	81-110	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Cut all trees, live and dead, that are greater than 2 inches. Possible aerial herbicide applications in future. Buffer creek 100 feet. Less than 3% retention is acceptable. VBAR cruise may be needed. Require Chipping

Next Step SitePrep, Trenching; Planting, Initial Plant; Pesticide, Aerial; Monitoring, Artificial Regen(1yr)

Treatments:

Acceptable red pine only

Regen:

Other Stand could be cut in summer to avoid impacts to trail, however many other jobs currently exist which are winter work along this road system.

Comment: Evaluate at time of sale and minimize impacts to trail. Stand has had previous attempts at natural red pine regeneration which have all failed. Old next step comments:

Proposed Start Date: 10/1 /2016

38 41039038-Cut	5.2	42200 - Natural White Pine	Sawtimber Medium	91	1-50	Harvest	Clearcut with Retention	429 - Mixed Upland Conifers	Two-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Remove overstory and leave some pine around the edges of stand. No other retention needed. Protect regeneration. Stand will probably need  
Specs: VBAR cruising.

Next StepTreatments:

Acceptable Mixed coniferous and deciduous trees

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

41 41039041-Cut	32.5	42390 - Mixed Non-Pine Upland Conifers	Poletimber Well	83	81-110	Harvest	Clearcut with Retention	429 - Mixed Upland Conifers	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Cut all trees except hemlock, oak, and cedar. Leave good quality red pine and white pine seed trees on firm ground where applicable. Buffer creek 100 feet, this will be retention.

WLD Comment: "This harvest will regenerate young conifer with low lying branches, creating excellent cover for snowshoe hare. Regenerating hardwood browse will bolster food availability within the stand. "

Next Step SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr)

Treatments:

Acceptable mixed deciduous and conifer trees

Regen:

Other Stand could be cut in summer to avoid impacts to trail, however many other jobs currently exist which are winter work along this road system.

Comment: Evaluate at time of sale and minimize impacts to trail. Old next step comments:

Proposed Start Date: 10/1 /2016



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
42 41039042-Monitor	1.9	42220 - Natural Jack Pine	Poletimber Well	26	1-50	Monitoring	Natural Regen (Re-Inventory)	429 - Mixed Upland Conifers	Even-Aged	Proposal

**Habitat Cut: Yes**

**Site Condition:**

Prescription small fire occurred here a few years ago. monitor to see how stand regenerates  
Specs:

Next Step Planting, Initial Plant; Monitoring, Artificial Regen(1yr)  
Treatments:

Acceptable Regen: red pine, jack pine, white pine, aspen

Other Comment: Old next step comments:

Proposed Start Date: 10/1 /2024

**Total Treatment Acreage Proposed: 243.4**

## Report 5 – Site Conditions

Shingleton Mgt. Unit  
Adam Petrelius : Examiner

Compartment: 39  
Year of Entry: 2017

### Availability for Management

Total Acres	Acres Available	Acres Avail With Condition	Acres Not Available
449	449	0	0
195	0	0	195
22	22	0	0
189	187	0	2
187	187	0	0
14	0	0	14
39	0	0	39
18	1	9	7
935	900	0	36
137	132	0	5
23	23	0	0
83	76	0	7
22	22	0	0
55	55	0	0
23	17	2	4
2,389	2,069	12	308
	87%	1%	13%

### Dominant Site Conditions

				Dominant Site Conditions				
				5C	2G	2H	3H	3J
449	449	0	0	Aspen				
195	0	0	195	Cedar				
22	22	0	0	Herbaceous Openland				
189	187	0	2	Jack Pine				
187	187	0	0	Lowland Conifers				
14	0	0	14	Lowland Deciduous				
39	0	0	39	Lowland Shrub				
18	1	9	7	9	7			
935	900	0	36	Marsh				
137	132	0	5	Natural Mixed Pines				
23	23	0	0	Planted Mixed Pines				
83	76	0	7	Red Pine				
22	22	0	0	Tamarack				
55	55	0	0	Upland Conifers				
23	17	2	4	2				4
2,389	2,069	12	308	12	7	4	195	102
	87%	1%	13%	Relative Percent				

*\*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3H: Deer Wintering Areas	195	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 5 – Site Conditions

Shingleton Mgt. Unit  
Adam Petrelius : Examiner

Compartment: 39  
Year of Entry: 2017

3	Unavailable	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	47	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
4	Unavailable	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	36	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
5	Unavailable	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	15	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
6	Unavailable	<b>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</b>	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> small stand. too much effort would be needed to access. may hurt overall value of main sale if included							
7	Available	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	9	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
8	Unavailable	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	7	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> southern end of stand 40 becomes very sparse with barely merchantable trees. Not enough top material to lay down for equipment to drive on.							

## Report 5 – Site Conditions

Shingleton Mgt. Unit  
Adam Petrelius : Examiner

Compartment: 39  
Year of Entry: 2017

9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	3	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							



**Report 6 – PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS**

\* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
<b>C39 SCA removal</b>	Potential Old Growth		<b>SCA Removal</b>	301
<b>Comments</b>				
Remove SCA that was previously listed as other SCA and POG.				



**Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS**

\* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

ERA = Ecological Reference Area  
HCVA = High Conservation Value Area  
SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	42220 - Natural Jack Pine	Poletimber Well	17.3	85	81-110	Stand is on contract, two-bridge pine, 41-027-12-01, part of U4. Red pine will be planted on ridges FTP-41-1530, but overall regen will be a mix of current species.
4	42200 - Natural White Pine	Sawtimber Well	3.6	105	81-110	
6	42210 - Natural Red Pine	Sawtimber Well	35.1	84	81-110	
8	6120 - Lowland Cedar	Poletimber Well	195.2	119	111-140	
9	6113 - Lowland Maple	Poletimber Well	13.7	70	81-110	
10	42220 - Natural Jack Pine	Sapling Well	1.6	24	Immature	
11	42290 - Natural Mixed Pine	Sapling Well	5.2	14	Immature	
12	42210 - Natural Red Pine	Sawtimber Well	11.2	100	81-110	
13	42210 - Natural Red Pine	Sawtimber Well	21.2	100	81-110	
14	6121 - Tamarack	Sapling Well	22.3	15	1-50	Harvested with sale number 41-032-97-01 in winter of 2000.
15	42120 - Planted Jack Pine	Sapling Poor	33.2	14	Immature	2009 regen counts: 660 jack pine, 17 red pine, 8 white pine, 150 black spruce
16	42220 - Natural Jack Pine	Poletimber Well	1.6	83	81-110	
17	42220 - Natural Jack Pine	Poletimber Well	2.7	83	81-110	
18	42290 - Natural Mixed Pine	Poletimber Well	58.8	83	51-80	
19	6122 - Black Spruce	Poletimber Well	1.2	83	81-110	
20	42290 - Natural Mixed Pine	Poletimber Well	2.2	83	81-110	
22	4133 - Aspen, Mixed Pine	Sapling Well	54.9	24	1-50	
23	4133 - Aspen, Mixed Pine	Sapling Well	2.5	24	1-50	

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## Shingleton Mgt. Unit

## Report 8 – Forested Stands

Compartment: 39  
Year of Entry: 2017

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
24	6125 - Lowland Black Spruce, Jack Pine	Sapling Well	186.7	25	1-50	
26	4133 - Aspen, Mixed Pine	Sapling Well	302.6	24	1-50	
28	4133 - Aspen, Mixed Pine	Sapling Well	8.7	24	1-50	
29	4133 - Aspen, Mixed Pine	Sapling Well	24.1	24	1-50	
30	4133 - Aspen, Mixed Pine	Sapling Well	55.8	24	1-50	
32	42290 - Natural Mixed Pine	Poletimber Well	7.6	64	81-110	
33	42290 - Natural Mixed Pine	Poletimber Well	34.9	64	81-110	
34	42210 - Natural Red Pine	Sawtimber Well	15.4	84	81-110	previous harvests have resulted in no regeneration of red pine.
36	42200 - Natural White Pine	Sawtimber Medium	11.6	89	1-50	Stand was cut with RP Sale in 2010. residual basal areas - 11 red pine, 29 white pine
37	42220 - Natural Jack Pine	Sapling Well	44.7	16	1-50	Scarification completed in 1999.
38	42200 - Natural White Pine	Sawtimber Medium	5.2	91	1-50	Stand was cut with RP sale in spring 2010. Residual basal areas were 10 red pine, 20 white pine
40	6122 - Black Spruce	Poletimber Well	16.5	85	81-110	
41	42390 - Mixed Non-Pine Upland Conifers	Poletimber Well	32.5	83	81-110	
42	42220 - Natural Jack Pine	Poletimber Well	71.9	26	1-50	a small fire killed a couple acres of trees in this stand recently.
43	42220 - Natural Jack Pine	Poletimber Well	15.9	43	51-80	
44	42140 - Planted Mixed Pine	Sapling Well	22.6	16	Immature	2002 regen counts showed 369 red pine and 104 jack pine
45	42290 - Natural Mixed Pine	Sapling Well	28.0	25	1-50	

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Shingleton Mgt. Unit

Report 8 – Forested Stands

Compartment: 39  
Year of Entry: 2017



S t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
46	429 - Mixed Upland Conifers	Sapling Well	22.8	12	1-50	7 acres of this stand were trenched and seeded in summer 2002. Regen count in 2005 was 180 jack pine, 170 red pine, 230 white pine, 230 black spruce, 510 fir, and 400 red maple. Overall stand is diverse and many mixed species.
47	42200 - Natural White Pine	Sawtimber Well	2.5	85	51-80	



Stand	Cover Type	Acres	Managed Site	General Comments:
1	310 - Herbaceous Openland	3.2		Cut with RP Sale. Stand was supposed to be planted, but was scarified instead and failed.
3	310 - Herbaceous Openland	7.5		Cut with RP Sale. Stand was supposed to be planted, but was scarified instead and failed.
5	6229 - Mixed lowland shrub	38.8	No	
7	6239 - Mixed Emergent Wetland	35.6	No	
21	6239 - Mixed Emergent Wetland	73.6	No	
25	6239 - Mixed Emergent Wetland	13.4	No	
27	310 - Herbaceous Openland	10.8	No	
31	6239 - Mixed Emergent Wetland	3.6	No	
35	6239 - Mixed Emergent Wetland	1.6	No	
50	6239 - Mixed Emergent Wetland	807.3	No	