



Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41013

Entry Year 2024

Acreage: 1,567

County Schoolcraft

Management Area: Seney Manistique Swamp

Stand Examiner: Steve Touvila

Legal Description:

T45N R16W Sections 5, 8 and 17

Identified Planning Goals:

In the northern end of the compartment, timber management focuses primarily on conifers appropriate to relatively wet terrain (e.g., jack pine/black spruce/tamarack) while maintaining wildlife cover and travel corridors. The southern end is difficult to work in due to access problems.

Soil and topography:

The terrain in this compartment is flat, and drainage is relatively slow; a significant portion of the area south of the West Branch of the Manistique River is marshland too wet to support commercially viable timber. Soils are sandy and typical of flood plains in the eastern U.P.

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

Private lands in sections 8 and 17 have very limited development; the primary uses are for outdoor recreation and timber production.

Unique Natural Features:

There is an area in the southwest quarter of Section 8 that is classified as a dry-mesic northern forest.

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

This compartment contains the West Branch Manistique River. The West Branch Manistique River is a non-designated river less than 50' width with a predicted mean July temperature of 65.3 °F (cold stream). This compartment is adjacent to where elemental occurrences of Wood Turtle (State Special Concern) are documented. Forestry activities that occur from April 1 through October 31 (active period) should accommodate a 300' buffer along the West Branch Manistique River to protect Wood Turtle during nesting, post-nesting, and pre-hibernation periods. For forestry activities that occur outside of the active period, 100' plus 5' per 1% increase in slope; buffers are recommended for the West Branch Manistique River to protect these areas in accordance with Best Management Practices.

Wildlife Habitat Considerations:

This compartment lies within the Seney Sand Lake Plain ecological sub-subsection. The growing season in this area is less than 100 days with extreme minimum winter temperatures of -46o F. Annual snowfall in this area averages approximately 150 inches.

The compartment falls within the Seney Manistique Swamp Management Area which highlights the following Featured Species: Moose, sharp-tailed grouse, snowshoe hare and white-tailed deer. The West Branch of the Manistique River runs diagonally across this compartment. The majority of the compartment is lowland coniferous forest. General Land Office Surveyor notes show that conifer swamps circa 1850 consisted of primarily cedar, tamarack, and spruce. Other species present included jack pine, white pine, hemlock, birch, and black ash. Upland forests were difficult to differentiate by land form, but contained different tree species. Upland species included hemlock, red maple, white pine, red pine, white birch, yellow birch, spruce, cedar, and balsam fir. Windthrow, fire, flooding, and beaver ponding were all likely contributors to the natural disturbance regime. Current upland forest stands in this compartment are dominated by jack pine. Lowland stands are similar in species composition to pre-settlement forest. Stand structure is substantially altered compared to circa 1850 conditions. Wildlife habitat objectives in this compartment include maintaining closed canopy conifer forests, providing age and structural diversity between conifer stands, and protecting the river corridor. Moose (Michigan special concern) use this compartment extensively. There are no other known rare species within this

compartment. Other wildlife species of interest that may utilize this compartment include black-backed woodpecker, spruce grouse, fisher and bobcat.

Mineral Resource and Development Concerns and/or Restrictions

No known potential exists for commercial oil & gas production in this part of the state, and there is no known metallic mineral potential in this area. The State-owned Star Siding Road #3 sand/gravel pit is less than four miles to the northwest. The compartment is dominated by wetlands, and potential for sand & gravel development is limited. No current mineral leasing activity exists in the area.

Vehicle Access:

This compartment is gated at the railroad crossing and is only accessible by walk-in traffic to the public.

Survey Needs:

Survey corners in Section 8 will be needed.

Recreational Facilities and Opportunities:

No developed facilities. The area is used for deer hunting by adjacent landowners and members of the public.

Fire Protection:

Poor access due to flooded or non-existent roads/bridges would hinder fire suppression efforts throughout much of this compartment

Additional Compartment Information:

The following reports from the Inventory are attached:

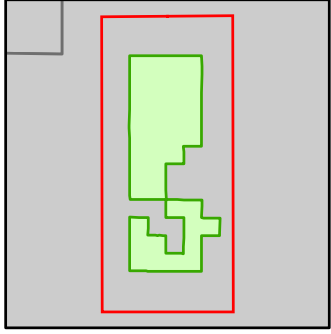
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

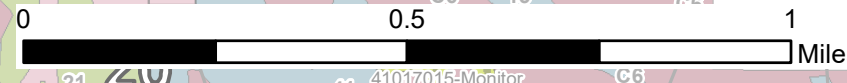
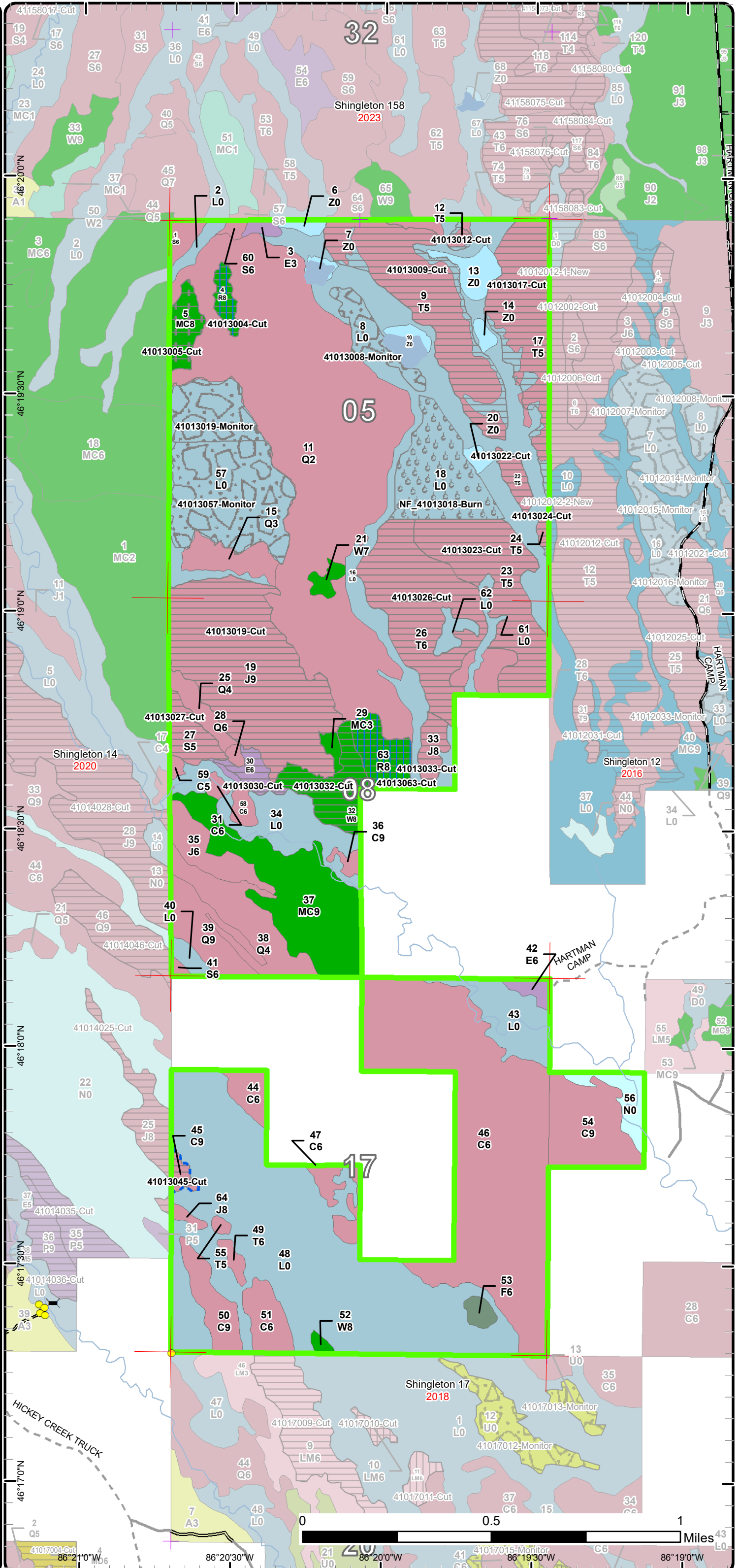
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 13
 T45N,R16W, Sec: 5, 8, 16, 17
 County: Schoolcraft
 Unit: Shingleton
 Mgmt Area: Seney Manistique Swamp
 YOE: 2024
 Acres: 1567.4 GIS Calculated
 Examiner: Steve Touvila
 Map Revised: 8/17/2022
 Map Phase: Web Post



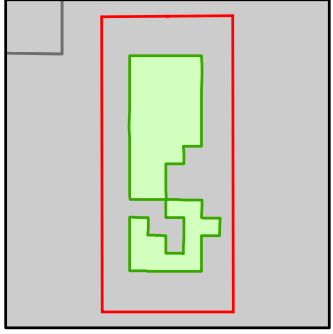
- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- Counties
- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Private - Paved Road
- Private - Dirt / Gravel Road
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Bridges
- Compartment Boundary
- Treatments with Site Conditions
- Clearcut (w/Reserves)
- Harvest, Overstory Removal
- Prescribed Burn
- Seed Tree (w/Reserves)
- Regeneration Survey
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland



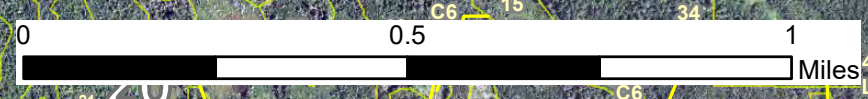
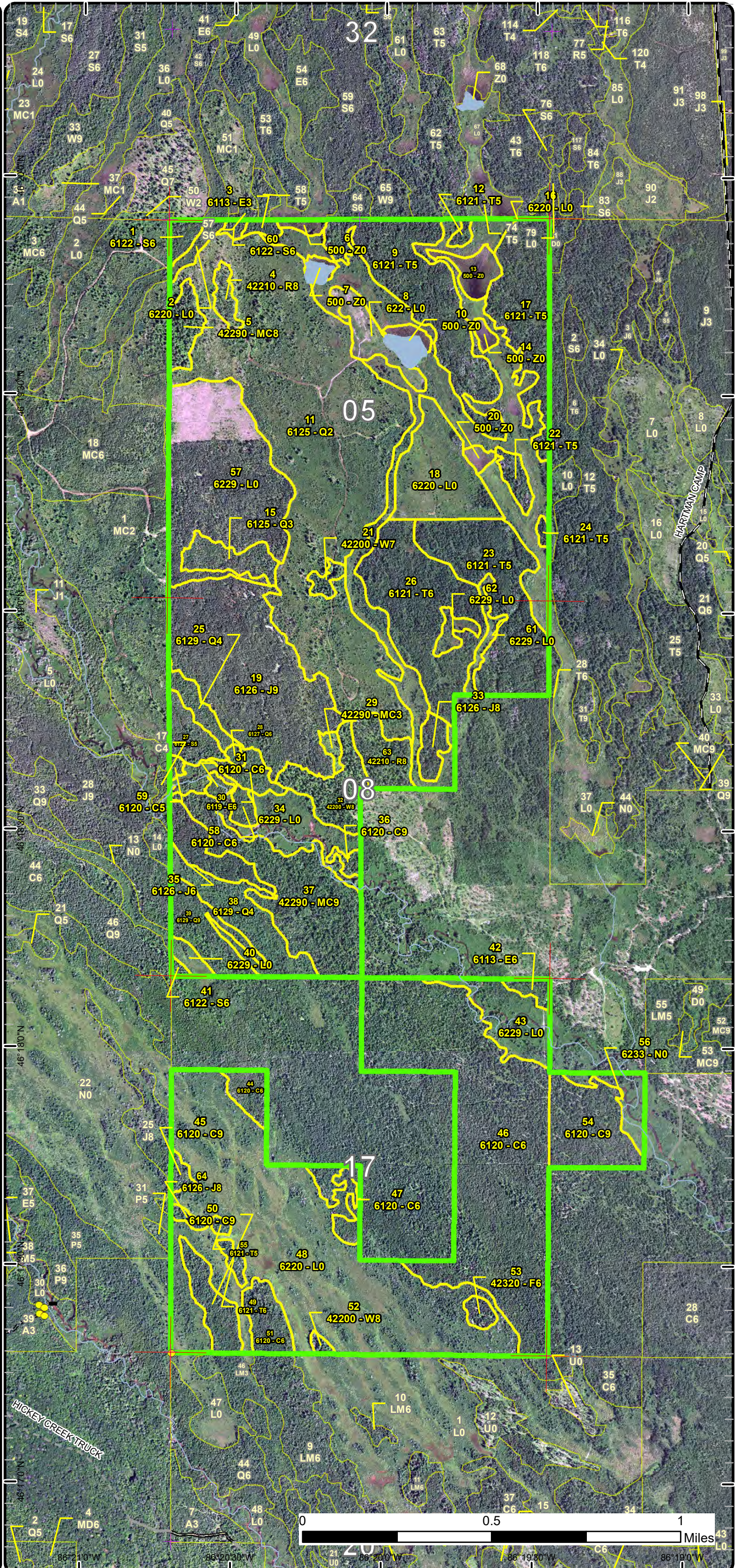
86°21'0"W 86°20'30"W 86°20'0"W 86°19'30"W 86°19'0"W

Stand Boundary Map

Compartment: 13
 T45N,R16W, Sec: 5, 8, 16, 17
 County: Schoolcraft
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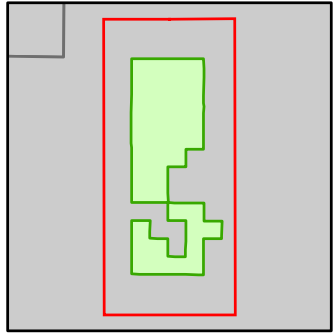
- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- Counties
- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Private - Paved Road
- Private - Dirt / Gravel Road
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Bridges
- Compartment Boundary
- Stand Boundaries
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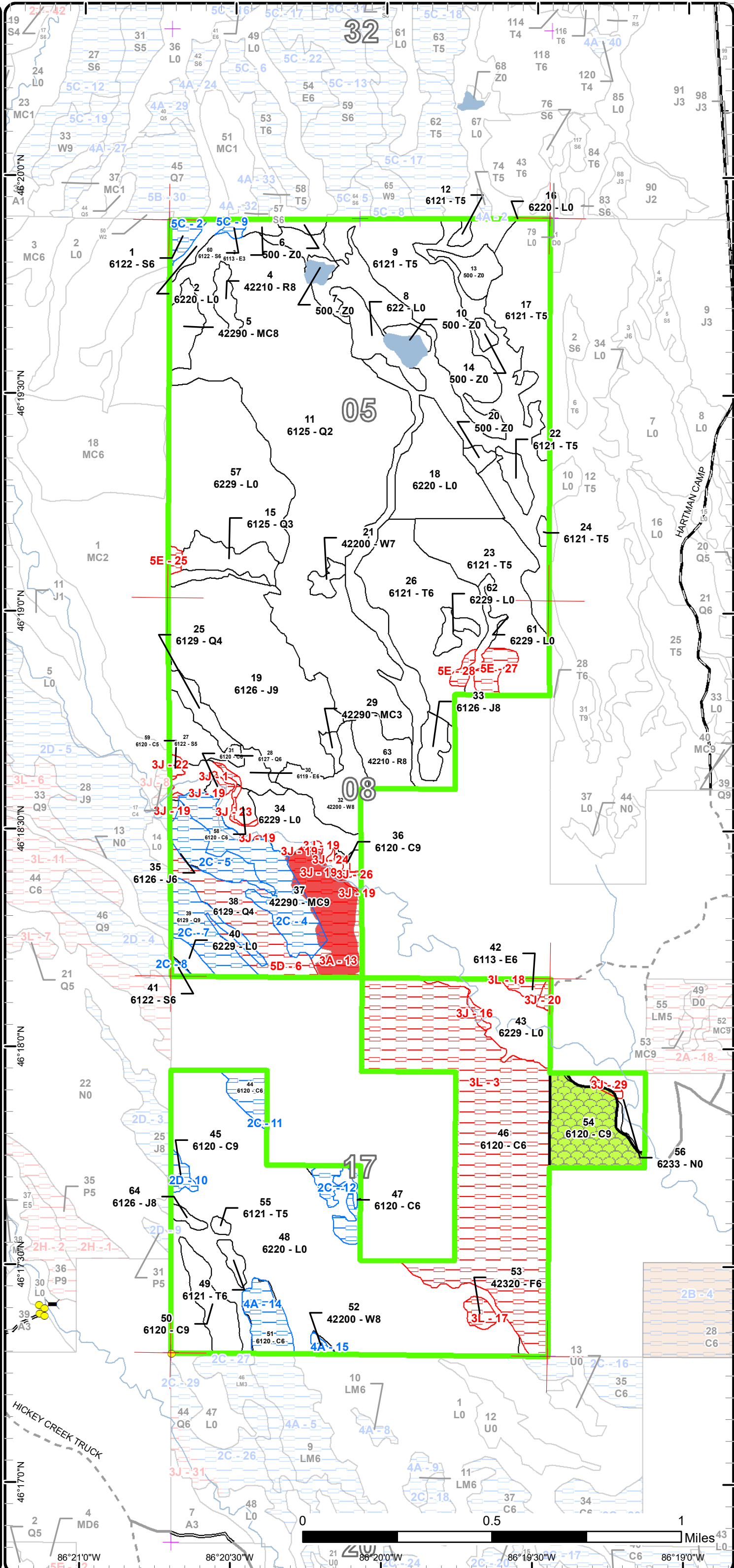
46°17'0"N 86°21'0"W 46°18'0"N 86°20'30"W 46°19'0"N 86°20'0"W 46°20'0"N 86°19'30"W 46°21'0"N 86°19'0"W

Special Conservation Areas

Compartment: 13
 T45N,R16W, Sec: 5, 8, 16, 17
 County: Schoolcraft
 Unit: Shingleton
 Mgmt Area: Seney Manistique Swamp
 YOE: 2024
 Acres: 1567.4 GIS Calculated
 Examiner: Steve Touvila
 Map Revised: 8/17/2022
 Map Phase: Web Post



- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- Counties
- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Private - Paved Road
- - Private - Dirt / Gravel Road
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Bridges
- Compartment Boundary
- Available w/ Constraints
 - 2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)
 - 2D: Portable Bridge Needed (Dept. bridge will be adequate)
 - 4A: No Markets Available for these Forest Products
 - 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable
 - 3A: Conservation Values incompatible with harvest at this time
 - 3J: Water quality / BMPs (stream, river, or lake)
 - 3L: Other wildlife concerns
 - 5D: Unproductive Forest Land
 - 5E: Long-Term Retention
- Stand Boundaries
- SCA Removal
- Ecological Reference Areas
- Cold Water Streams
- Type 1 and Type 2 Old Growth
- Possible Type 2 Old Growth



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
Cedar	0	0	0	0	0	0	0	0	0	4	2	205	1	30	2	0	0	0	244
Jack Pine	0	0	0	0	0	0	0	0	0	0	0	2	115	0	0	0	0	0	117
Lowland Conifers	0	0	0	233	20	0	0	0	27	19	0	0	0	0	0	0	0	0	298
Lowland Deciduous	0	0	0	0	2	0	0	0	0	11	0	0	0	0	0	0	0	0	13
Lowland Shrub	510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	510
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	1	6	0	10	0	0	0	0	0	17
Marsh	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Natural Mixed Pines	0	0	0	2	0	0	0	0	0	0	0	0	10	0	55	0	0	0	67
Red Pine	0	0	0	0	0	0	0	0	0	0	0	0	5	14	0	0	0	0	19
Tamarack	0	0	0	0	0	0	0	0	0	0	0	4	216	0	0	0	0	0	220
Upland Spruce/Fir	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
Water	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	19	0	0	24
Total	543	0	0	235	22	0	0	0	27	38	8	211	360	46	57	19	0	0	1564



Report 2 – Treatment Summary

Shingleton Mgt. Unit

Year of Entry: 2024

Acres of Harvest

Compartment 13

Total Compartment Acres: 1,567

Commercial Harvest - 385
 Harvests with Site Condition - 3
 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
Cedar	3	0	0	0	0	0	0	0	0	3
Jack Pine	101	0	0	0	0	0	0	0	0	101
Lowland Deciduous	6	0	0	0	0	0	0	0	0	6
Lowland Spruce/Fir	10	0	0	0	0	0	0	0	0	10
Natural Mixed Pines	0	0	0	0	0	10	0	0	0	10
Red Pine	0	0	0	19	0	0	0	0	0	19
Tamarack	220	0	0	0	0	0	0	0	0	220
White Pine	19	0	0	0	0	0	0	0	0	19
Total	359	0	0	19	0	0	10	0	0	388

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	388	0	0	0	35	0	86	0	0	508
Next Step	0	130	0	0	0	0	413	0	0	543
Total	388	130	0	0	35	0	499	0	0	1051



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	Habitat Cut
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Proposed Treatments:

4	41013004-Cut	5.1	42210 - Natural Red Pine	Sawtimber Medium	110	81-110	Harvest	Seed Tree	42210 - Natural Red Pine	Even-Aged	No
<p><u>Prescription</u> Cut all merchantable species except hemlock and cedar if found. Leave 20-30 BA red pine for seed trees. Cut the merchantable species to 2" DBH for scarification. Pile all tops outside of treatment area to prep for scarification. Make the piles 4-5' tall to provide for rabbit habitat.</p> <p><u>Next Step</u> SitePrep, Scarification; Monitoring, Natural Regen (Intermediate)</p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u> red pine</p> <p><u>Other Comment:</u> Another option to try other than scarification is a tractor plow training day. Make lots of random small plow trenches for a seed bed and/or scuff to mineral soil with the blade.</p> <p><u>Site Condition:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>											
5	41013005-Cut	9.5	42290 - Natural Mixed Pine	Sawtimber Medium	110	81-110	Harvest	Overstory Removal	42260 - Natural Pine, Mixed Deciduous	Even-Aged	No
<p><u>Prescription</u> Cut all merchantable species except for hemlock and cedar if found. No retention blocks are necessary due to the small size. Leave up to a total BA of 10 between the red and white pine for structural diversity, wildlife, and for potential seed source to supplement the current regeneration.</p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u> white pine, red pine, red maple, balsam fir, paper birch, hemlock, white spruce, black spruce; in any combination</p> <p><u>Other Comment:</u></p> <p><u>Site Condition:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>											
19	41013019-Cut	93.9	6126 - Lowland Jack Pine	Sawtimber Well	112	111-140	Harvest	Clearcut with Retention	6126 - Lowland Jack Pine	Even-Aged	No
<p><u>Prescription</u> Clearcut with retention. Cut all species to 2" DBH to facilitate scarification. Don't cut white and red pine, and don't cut hemlock if found. Winter cut or dry summer conditions only. Cutting in the spring time is also not possible due to significant access road flooding. The old redline will need to be refreshed, and add an area of retention per guidelines.</p> <p><u>Next Step</u> SitePrep, Scarification; Monitoring, Natural Regen (Intermediate)</p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u> jack pine, black spruce, white pine, red pine, balsam fir, paper birch, red maple; in any combination, should come back as jack pine with a component of black spruce</p> <p><u>Other Comment:</u> Scarification seems to be the better option to burning. The low ground would likely present equipment access issues for burning.</p> <p><u>Site Condition:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>											



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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23	41013023-Cut	48.2	6121 - Tamarack	Poletimber Medium	112	51-80	Harvest	Clearcut with Retention	6121 - Tamarack	Even-Aged	No
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Prescription Specs: Cut all merchantable species except leave white pine, red pine, and cedar/hemlock if found. Leave a retention area in the southwest part of the stand as shown on the map.

The red line will need refreshing and updated for the retention area. There's still visible blue line to refresh.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: tamarack, black spruce, jack pine, balsam fir, white pine, white spruce, red maple, paper birch, aspen; all in any combination

Other Comment: The retention area contains an area of dead tamarack that has regeneration such as red maple coming in. The southwest part of the retention area contains healthy tamarack and a mix including some younger paper birch.

Site Condition:

Proposed Start Date: 10/1 /2023

26	41013026-Cut	56.0	6121 - Tamarack	Poletimber Well	112	81-110	Harvest	Clearcut with Retention	6121 - Tamarack	Even-Aged	No
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Prescription Specs: Clearcut with retention all merchantable species except for white pine, red pine, and cedar if found.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: tamarack, black spruce, jack pine, white pine, red pine, balsam fir, white spruce, red maple, paper birch, aspen; in any combination

Other Comment:

Site Condition:

Proposed Start Date: 10/1 /2023

27	41013027-Cut	10.2	6122 - Black Spruce	Poletimber Medium	112	111-140	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	No
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Prescription Specs: Clearcut with retention. Cut all species to 2" DBH to facilitate scarification. Don't cut white and red pine, and don't cut hemlock if found. Winter cut or dry summer conditions only. Cutting in the spring time is also not possible due to significant access road flooding. The old redline will need to be refreshed, and add an area of retention per guidelines.

Next Step Treatments: SitePrep, Scarification; Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: black spruce, jack pine, white pine, red pine, balsam fir, red maple, paper birch; in any combination, most likely will be dominated by black spruce with a jack pine component

Other Comment: Scarification seems to be the better option to burning. Wet ground would likely result in equipment access issues for burning.

Site Condition:

Proposed Start Date: 10/1 /2023



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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30	41013030-Cut	6.2	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	83	81-110	Harvest	Clearcut	6119 - Mixed Lowland Deciduous Forest	Even-Aged	No
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Prescription Specs: Clearcut all merchantable species except for white pine and cedar. The overall size of the maple is on the smaller side. The paper birch is larger than the maple and starting to die off. The standing dead are being highly utilized by wildlife.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: red maple, paper birch, quaking aspen, white pine, red pine, balsam fir, black spruce; in any combination

Other Comment: Acreage may vary depending on ground conditions in the southern part of the stand. Maintain a 100' buffer for the river.

Site Condition:

Proposed Start Date: 10/1 /2023

32	41013032-Cut	19.2	42200 - Natural White Pine	Sawtimber Medium	142	51-80	Harvest	Clearcut with Retention	42201 - Natural White Pine, Mixed Deciduous	Even-Aged	No
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Prescription Specs: Cut all merchantable species but leave hemlock and cedar. Leave up 20 BA of white and red pine as seed source to supplement the existing regeneration. The leave trees will serve as the retention.

Next Step Treatments: Monitoring, Natural Regen (Intermediate)

Acceptable Regen: white pine, red pine, black spruce, balsam fir, red maple, quaking aspen, paper birch, hemlock, cedar; in any combination

Other Comment:

Site Condition:

Proposed Start Date: 10/1 /2023

33	41013033-Cut	6.7	6126 - Lowland Jack Pine	Sawtimber Medium	112	51-80	Harvest	Clearcut	6126 - Lowland Jack Pine	Even-Aged	No
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Prescription Specs: Cut all all species to 2" DBH to facilitate scarification. Don't cut white pine, red pine, or cedar if found. No retention needed due to small acreage

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

Acceptable Regen: jack pine, tamarack, balsam fir, white spruce, white pine, red pine, red maple, paper birch, aspen; in any combination

Other Comment: The old red line will need refreshing.

Site Condition:

Proposed Start Date: 10/1 /2023



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
63 41013063-Cut	14.2	42210 - Natural Red Pine	Sawtimber Medium	128	141-170	Harvest	Seed Tree	42111 - Planted Red Pine, Mixed Deciduous	Even-Aged	No
<p><u>Prescription</u> Cut all merchantable species but leave hemlock and cedar. Leave 20-30 BA of red pine as seed source. Designate the dense areas of red pine as areas for the slash to be removed; this may be roughly about 1/2 the stand acreage. These areas will be scarified or tractor/plow work to prepare a red pine seedbed.</p> <p><u>Specs:</u></p> <p><u>Next Step</u> SitePrep, Scarification; Monitoring, Natural Regen (Intermediate)</p> <p><u>Treatments:</u></p> <p><u>Acceptable</u> red pine, white pine, balsam fir, red maple, black spruce, quaking aspen; in any combination</p> <p><u>Regen:</u></p> <p><u>Other</u> The more open areas have thicker red maple regeneration and we will leave that as is.</p> <p><u>Comment:</u> Place the slash from the thicker red pine areas outside the sale in 4-5' piles for rabbit cover.</p> <p><u>Site Condition:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>										

Approved Treatments:

8 41013008-Monitor	12.2	622 - Lowland Shrub	Nonstocked	0	Unspecified	Monitoring	Natural Regen (Re-Inventory)	6126 - Lowland Jack Pine	Even-Aged	No
<p><u>Prescription</u></p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable</u> any species.</p> <p><u>Regen:</u></p> <p><u>Other</u> Percent to Treat = 100%</p> <p><u>Comment:</u></p> <p><u>Site Condition:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2020</p>										
9 41013009-Cut	61.6	6121 - Tamarack	Poletimber Medium	112	51-80	Harvest	Clearcut with Retention	6121 - Tamarack	Even-Aged	No
<p><u>Prescription</u> CC with reserves - reserve any red & white pine, hemlock and cedar.</p> <p><u>Specs:</u></p> <p><u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Treatments:</u></p> <p><u>Acceptable</u> Any mix of the current species on-site is acceptable.</p> <p><u>Regen:</u></p> <p><u>Other</u> Old next step comments: Natural regeneration - All conifer spp. plus aspen and birches are acceptable regeneration. Consider burning as needed to stimulate natural regeneration.</p> <p><u>Comment:</u></p> <p><u>Site Condition:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2014</p>										



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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12	41013012-Cut	2.0	6121 - Tamarack	Poletimber Medium	112	51-80	Harvest	Clearcut with Retention	6121 - Tamarack	Even-Aged	No
<p><u>Prescription Specs:</u> Clearcut w/reserves - reserve all white pine plus any hemlock & cedar encountered in this stand. Due to the small size of the stand, no other retention is necessary.</p> <p><u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Acceptable Regen:</u> Any mix of the current species on site is acceptable.</p> <p><u>Other Comment:</u> Consider adding stand 41158074 (prescribed for harvest in YOE 2013) when preparing this stand for harvest if it has not already been prepped for sale. Old next step comments: Natural regeneration is expected - all conifer spp. are acceptable. Natural regeneration - All conifer spp. plus aspen and birches are acceptable regeneration. Consider burning as needed to stimulate natural regeneration.</p> <p><u>Site Condition:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2014</p>											

17	41013017-Cut	44.6	6121 - Tamarack	Poletimber Medium	112	51-80	Harvest	Clearcut with Retention	6121 - Tamarack	Even-Aged	No
<p><u>Prescription Specs:</u> CC with reserves - reserve any red & white pine, hemlock and cedar.</p> <p><u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Acceptable Regen:</u> Any mix of current species on-site is acceptable.</p> <p><u>Other Comment:</u> Old next step comments: Natural regeneration - All conifer spp. plus aspen and birches are acceptable regeneration. Consider burning as needed to stimulate natural regeneration.</p> <p><u>Site Condition:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2014</p>											

57	41013019-Monitor	20.7	6229 - Mixed lowland shrub	Nonstocked	0	Unspecified	Monitoring	Natural Regen (Intermediate)	6126 - Lowland Jack Pine	Even-Aged	No
<p><u>Prescription Specs:</u> scarified in 2016. monitor according to work instructions</p> <p><u>Next Step Treatments:</u></p> <p><u>Acceptable Regen:</u> Jack pine, black Spruce. Tamarack</p> <p><u>Other Comment:</u> Acceptable regeneration includes all conifer spp. plus aspen and birches. Old next step comments: Regenerate jack pine etc. using acceptable practices for natural regeneration.</p> <p><u>Site Condition:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>											

22	41013022-Cut	5.5	6121 - Tamarack	Poletimber Medium	112	51-80	Harvest	Clearcut with Retention	6121 - Tamarack	Even-Aged	No
<p><u>Prescription Specs:</u> CC with reserves - reserve any red & white pine, hemlock and cedar.</p> <p><u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Acceptable Regen:</u> Any mix of current species on-site</p> <p><u>Other Comment:</u> Old next step comments: Natural regeneration - All conifer spp. plus aspen and birches are acceptable regeneration. Consider burning as needed to stimulate natural regeneration.</p> <p><u>Site Condition:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2014</p>											



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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24	41013024-Cut	1.8	6121 - Tamarack	Poletimber Medium	112	51-80	Harvest	Clearcut with Retention	6121 - Tamarack	Even-Aged	No
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Prescription CC with reserves - reserve any red & white pine, hemlock and cedar.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any mix of current species on-site is acceptable.

Regen:

Other Old next step comments: Natural regeneration - All conifer spp. plus aspen and birches are acceptable regeneration. Consider burning as needed to stimulate natural regeneration.

Site Condition:

Proposed Start Date: 10/1 /2014

45	41013045-Cut	3.0	6120 - Lowland Cedar	Sawtimber Well	102	141-170	Harvest	Clearcut	612 - Lowland Coniferous Forest	Even-Aged	No
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Prescription Cut all species within stand, Retention should be in pocket.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any species currently on site

Regen:

Other

Comment:

Site Condition: Portable Bridge Needed

Proposed Start Date: 10/1 /2019

57	41013057-Monitor	52.6	6229 - Mixed lowland shrub	Nonstocked	0	Unspecified	Monitoring	Natural Regen (Intermediate)	6126 - Lowland Jack Pine	Even-Aged	No
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Prescription regen check.

Specs:

Next Step

Treatments:

Acceptable Jack pine, black Spruce. Tamarack

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition:

Proposed Start Date: 10/1 /2023

18	NF_41013018-Burn	34.8	6220 - Alder/willow	Nonstocked			Burn	Slash	6126 - Lowland Jack Pine	Even-Aged	No
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Prescription Burn under FTP C41-1180

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Acceptable regeneration: Jack pine/black spruce are desirable, but all conifer spp. plus aspen & birches are acceptable.

Regen:

Other Old next step comments: See FTP C41-1180 - Acceptable regeneration: Jack pine/black spruce are desirable, but all conifer spp. plus aspen & birches are acceptable. Follow up with regen survey per the work instructions.

Comment:

Site Condition:

Proposed Start Date: 10/1 /2019



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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Total Treatment
Acreage Proposed: 508

Report 4 – Site Conditions

Shingleton Mgt. Unit
Steve Touvila : Examiner

Compartment: 13
Year of Entry: 2024

Availability for Management

Total Acres	Acres Available	Acres Avail		Acres Not Available		Dominant Site Conditions									
		With Condition				2C	2D	4A	5C	3A	3J	3L	5D	5E	
245	48	30		166		Cedar	16	3	12			7	160		
116	103	13		1		Jack Pine	13					1			
299	254	19		26		Lowland Conifers	19							26	
13	9	0		5		Lowland Deciduous						2	3		
510	508	0		2		Lowland Shrub	0		0		0	0			2
17	10	7		0		Lowland Spruce/Fir	1			6					
10	10	0		0		Marsh									
66	12	29		26		Natural Mixed Pines	29				25	1		0	
19	19	0		0		Red Pine									
220	213	0		8		Tamarack									8
3	0	0		3		Upland Spruce/Fir							3		
23	23	0		0		Water									
24	23	1		0		White Pine			1						
1,567	1,231	100		236		Total Forested Acres	78	3	13	6	25	10	166	26	9
	79%	6%		15%		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	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: 100' buffer for West Branch Manistique River.							
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Shingleton Mgt. Unit
Steve Touvila : Examiner

Compartment: 13
Year of Entry: 2024

3	Unavailable	3L: Other wildlife concerns	160	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Available	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)	29	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Available	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)	13	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	5D: Unproductive Forest Land	26	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)	Unspecified	Unspecified	Unspecified
Comments:							
7	Available	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)	19	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Shingleton Mgt. Unit
Steve Touvila : Examiner

Compartment: 13
Year of Entry: 2024

8	Available	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Available	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Available	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Shingleton Mgt. Unit
Steve Touvila : Examiner

Compartment: 13
Year of Entry: 2024

13	Unavailable	3A: Conservation Values incompatible with harvest at this time	25	Unspecified	Unspecified	Unspecified	Unspecified
Comments: ERA - Dry mesic northern forest							
14	Available	4A: No Markets Available for these Forest Products	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
15	Available	4A: No Markets Available for these Forest Products	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
16	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: 100' buffer for West Branch Manistique River.							
17	Unavailable	3L: Other wildlife concerns	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
18	Unavailable	3L: Other wildlife concerns	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Shingleton Mgt. Unit
Steve Touvila : Examiner

Compartment: 13
Year of Entry: 2024

19	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: 100' buffer for West Branch Manistique River.							
20	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: 100' buffer for West Branch Manistique River tributary.							
22	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Manistique River.							
23	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: 100' Buffer for Manistique River.							
24	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	0	Unspecified	Unspecified	Unspecified	Unspecified
Comments: 100' buffer for West Branch of Manistique River.							
25	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Long term retention from Lucky 13 harvest.							
26	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: 100' buffer for West Branch Manistique River.							

Report 4 – Site Conditions

Shingleton Mgt. Unit
Steve Touvila : Examiner

Compartment: 13
Year of Entry: 2024

27	Unavailable	5E: Long-Term Retention	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Long term retention for harvest of larger part of the stand.							
28	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Long term retention for harvest of larger part of the stand.							
29	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: 100' buffer for West Branch Manistique River.							

Mgt. Unit

Compartment: #Type!

Year of Entry:



Report 5 – 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
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Comments



Report 6 – 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.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																										
1	6122 - Black Spruce	Poletimber Well	4.5	95	81-110	N/A	Small stand that is healthy with no current signs of breaking up.																																										
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Black Spruce	Medium	Variable	Sapling																																														
2	6220 - Alder/willow	Nonstocked	4.0		Unspecified	No	Lowland brush with scattered black spruce and tamarack.																																										
3	6113 - Lowland Maple	Sapling Well	2.3	35	81-110	N/A	The larger tamarack has died off. The stand is dominated by young red maple with scattered mature tamarack and black spruce.																																										
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4	42210 - Natural Red Pine	Sawtimber Medium	5.1	110	81-110	N/A	Large diameter red pine that was thinned in 2000. Moderately stocked mixed regeneration that would be released with a treatment. The black spruce regeneration is in clumpy patches. There's more volume here than the imagery indicates.																																										
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5	42290 - Natural Mixed Pine	Sawtimber Medium	9.5	110	81-110	N/A	Large diameter red and white pine that was thinned in 2000. There's a medium amount of regeneration that could be released and merged with the adjoining stand with a treatment.																																										
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6	500 - Water	Nonstocked	2.4		Unspecified	No	Water levels vary seasonally.																																										
7	500 - Water	Nonstocked	2.7		Unspecified	No	Water levels vary seasonally.																																										
8	622 - Lowland Shrub	Nonstocked	12.2	0	Unspecified	613 - Lowland Mixed Forest	contract TS 41-015-10-01 Moosetrack Tamarack. unit 4 cut in 2015.																																										



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments	
9	6121 - Tamarack	Poletimber Medium	55.9	112	51-80	N/A	This stand is primarily tamarack with varying amounts of black spruce and jack pine mixed in. The site is wet, and slight elevation changes within the stand dramatically alter the stand composition, crown closure and site indices. Scattered birches, aspen and fir are also present.	
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		
Black Spruce		25	Pole/Sapling	8		Black Spruce		
Tamarack		55	Log/Pole	10	112	Tamarack		
Jack Pine		15	Log/Pole	10		Jack Pine		
White Pine		3	Log	14		Tag Alder		
Red Maple		2	Pole	6		Balsam Fir		
						White Pine		
						Density		
						Avg. Height		
						Size		
10	500 - Water	Nonstocked	4.9		Unspecified	No	Water levels vary seasonally.	
11	6125 - Lowland Black Spruce, Jack Pine	Sapling Medium	233.0	22	Immature	N/A	The regeneration is growing fairly well in the areas of higher ground. The wetter areas are more sparse and feature more deciduous shrubs.	
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		
White Pine		16	Sapling	3		Black Spruce		
Red Pine		3	Sapling	2		White Pine		
Jack Pine		40	Sapling	3	22	Deciduous Shrubs		
Paper Birch		3	Sapling	2				
White Pine		2	Log/XLog	16				
Black Spruce		18	Sapling	2				
Quaking Aspen		1	Sapling	2				
Tamarack		8	Sapling	3				
Red Maple		8	Sapling	2				
Red Pine		1	Log/XLog	16				
						Density		
						Avg. Height		
						Size		
12	6121 - Tamarack	Poletimber Medium	1.8	112	51-80	N/A	Island of tamarack w/jack pine & black spruce mixed in. Generally wet ground	
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		
Paper Birch		2	Pole/Sapling	7		Black Spruce		
Black Spruce		20	Pole	9		Balsam Fir		
Tamarack		60	Pole	9	112	Tag Alder		
White Pine		3	Log	14		Red Maple		
Jack Pine		15	Log/Pole	10				
						Density		
						Avg. Height		
						Size		
13	500 - Water	Nonstocked	8.0		Unspecified	No	Water levels vary seasonally.	
14	500 - Water	Nonstocked	2.1		Unspecified	No	Water levels vary seasonally.	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																															
15	6125 - Lowland Black Spruce, Jack Pine	Sapling Well	11.9	35	1-50	N/A	This area is somewhat lower and wetter than the surrounding stands. The black spruce is small diameter for it's age. The jack pine and white pine are growing well at this site.																																															
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16	6220 - Alder/willow	Nonstocked	117.4		Unspecified	No	Lowland brush complex that includes areas of open marsh and scattered trees.																																															
17	6121 - Tamarack	Poletimber Medium	40.0	112	51-80	N/A	Wet site featuring tamarack with black spruce and jack pine mixed in. A few white pine and red maple are also present. The understory is a mix of lowland brush and conifer saplings. Slight elevation changes dramatically affect the site indices and crown closure.																																															
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18	6220 - Alder/willow	Nonstocked	34.9			4212 - Planted Jack Pine																																																
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19	6126 - Lowland Jack Pine	Sawtimber Well	93.9	112	111-140	N/A	1/5/2022 Stand was not cut Lucky 13 was not completed and sale was returned and closed. This stand is dying back and should be treated now for regeneration.																																															
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
21	42200 - Natural White Pine	Sawtimber Poor	3.3	119	81-110	N/A	Healthy large-diameter pine - thinned in 2000. Age is an estimate based on comparison to similar stands nearby. The overall regeneration is well stocked.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
White Pine		65	XLog/Log	18	119	Red Maple		Medium	Variable	Sapling
Red Pine		35	Log/XLog/Pole	16		Black Spruce		Low	10 - 20 feet	Sapling
						White Pine		Medium	5 - 10 feet	Sapling
						Jack Pine		Low	10 - 20 feet	Sapling
						Red Pine		Low	5 - 10 feet	Sapling
22	6121 - Tamarack	Poletimber Medium	5.4	112	51-80	N/A	Tamarack & spruce with other spp mixed in. The terrain features slight elevation changes which greatly affect the site indices and also species composition within the stand. Overall the site is fairly wet.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Jack Pine		15	Log/Pole	10		Black Spruce		Low	Variable	Sapling
Red Maple		2	Pole	8		Tamarack		Low	Variable	Sapling
Black Spruce		20	Pole/Log	9		Tag Alder		Medium	Variable	Tall Shrub
Tamarack		60	Pole/Log	10	112	Balsam Fir		Low	Variable	Sapling
White Pine		3	Log	14		Red Maple		Medium	Variable	Sapling
23	6121 - Tamarack	Poletimber Medium	53.8	112	51-80	N/A	Remained untreated from TS 41-015-10-01 Moosetrack Tamarack. The stand should be treated now as the tamarack is dying off. The basal area varies because of the dieback.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Maple		1	Pole	8		Paper Birch		Low	>20 feet	Sapling
Black Spruce		16	Pole	8		Deciduous Shrubs		Medium	< 5 feet	Tall Shrub
Paper Birch		2	Pole/Sapling	6		Tag Alder		Low	5 - 10 feet	Tall Shrub
Jack Pine		10	Log/Pole	10		Black Spruce		Low	Variable	Sapling
White Pine		5	Log/XLog	16						
Tamarack		66	Pole	9	112					
24	6121 - Tamarack	Poletimber Medium	1.3	112	51-80	N/A	Tamarack/spruce/jack pine with other spp mixed in. The site is fairly wet.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Tamarack		60	Log/Pole	10	112	Black Spruce		Medium	Variable	Sapling
Black Spruce		20	Pole/Log	8		Tag Alder		Medium	Variable	Tall Shrub
Jack Pine		20	Log/Pole	10		Balsam Fir	Low	Variable	Sapling	
25	6129 - Mixed Coniferous Lowland Forest	Poletimber Poor	7.3	37	Unspecified	N/A	Wet site that contains small diameter slow growing black spruce. The scattered white pine is growing well here and more advanced saplings are filling in.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Black Spruce		45	Sapling/Pole	4		Black Spruce		Medium	>20 feet	Sapling
Jack Pine		3	Pole/Sapling	5		Red Maple		Low	10 - 20 feet	Sapling
Paper Birch		2	Sapling	3		Deciduous Shrubs		Medium	5 - 10 feet	Tall Shrub
Tamarack		5	Pole/Sapling	5		White Pine		Low	Variable	Sapling
White Pine		45	Pole/Sap/Log	7	37					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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26	6121 - Tamarack	Poletimber Well	58.0	112	81-110	N/A	The tamarack is healthier in this stand as compared to the stand to the east. There's some dieback and it will continue as it has throughout this compartment.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Black Spruce	17	Pole	8		Black Spruce	Low	Variable	Sapling
Red Maple	2	Pole	8		Paper Birch	Low	>20 feet	Sapling
Red Pine	1	Log	14		White Pine	Trace	5 - 10 feet	Sapling
Paper Birch	3	Pole/Sapling	6		Deciduous Shrubs	Medium	5 - 10 feet	Tall Shrub
Quaking Aspen	1	Log/Pole	10		Tag Alder	Low	5 - 10 feet	Tall Shrub
White Pine	1	Log/XLog	16		Red Maple	Low	>20 feet	Sapling
Jack Pine	5	Log/Pole	10					
Tamarack	70	Pole	9	112				

27	6122 - Black Spruce	Poletimber Medium	10.2	112	111-140	N/A	Jack pine/black spruce mix - somewhat wetter than the large jp/spruce mix to the north. The growth isn't as good in this stand, there's more sub-merchantable black spruce than the stand to the north. The majority of the jack pine is in the south half of the stand.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Tamarack	2	Pole/Log	9		Red Maple	Low	Variable	Sapling
White Pine	3	Log/XLog	16		White Pine	Low	Variable	Sapling
Jack Pine	26	Pole/Log	9	112	Deciduous Shrubs	Medium	Variable	Tall Shrub
Red Pine	1	Log	16		Black Spruce	Medium	>20 feet	Sapling
Black Spruce	68	Pole/Sapling	7	112				

28	6127 - Lowland Pine	Poletimber Well	1.3	37	51-80	N/A	Thick regeneration with the white pine growing well.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Black Spruce	35	Sapling/Pole	4	53	Red Maple	Low	>20 feet	Sapling
Red Maple	5	Sapling	3		Paper Birch	Low	>20 feet	Sapling
White Pine	60	Pole/Sapling	7	37	Black Spruce	High	>20 feet	Sapling
					White Pine	Medium	>20 feet	Sapling

29	42290 - Natural Mixed Pine	Sapling Well	2.3	23	Immature	N/A	Regeneration filling in good on this site with jack pine and white pine becoming the dominate species.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	9	Sapling	2		Black Spruce	Low	5 - 10 feet	Sapling
Black Spruce	8	Sapling	2		Jack Pine	Low	5 - 10 feet	Sapling
White Pine	23	Sapling	3		White Pine	Low	5 - 10 feet	Sapling
Red Pine	1	Sapling	2					
Jack Pine	58	Sapling	3	23				
Paper Birch	1	Sapling	2					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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30 6119 - Mixed Lowland Deciduous Forest Poletimber Well 7.0 83 81-110 N/A The aspen is dying back and the paper birch is beginning to die back. Treating now will help regenerate and preserve aspen and paper birch as a component of this stand.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Quaking Aspen	7	Log	12		Black Spruce	Low	Variable	Sapling
Paper Birch	39	Pole	8		Red Maple	Medium	Variable	Sapling
Black Spruce	3	Pole	6		Balsam Fir	Full	5 - 10 feet	Sapling
Balsam Fir	2	Pole	6					
Red Maple	45	Pole	7	83				
White Pine	3	Log/XLog	16					
Northern White Cedar	1	Pole	8					

31 6120 - Lowland Cedar Poletimber Well 2.0 90 141-170 N/A Cedar poles along the south side of the West Branch Manistique River.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Paper Birch	5	Pole	8		Northern White Cedar	Low	>20 feet	Sapling
Red Maple	1	Pole	8		Paper Birch	Trace	>20 feet	Sapling
Northern White Cedar	94	Pole	8	90				

32 42200 - Natural White Pine Sawtimber Medium 19.2 142 51-80 N/A Last thinned in 2000. Canopy more open than adjacent red pine stand. Large diameter white pine brings the BA up into this range. A pocket of aspen saplings are located in the southwest corner, as well as a few mature cedar. Overall regeneration is medium stocked.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Northern White Cedar	1	Pole/Log	9		Red Maple	Medium	10 - 20 feet	Sapling
Red Pine	5	Log/XLog	16		Beech	Trace	5 - 10 feet	Sapling
White Pine	93	XLog/Log	18	142	Quaking Aspen	Low	>20 feet	Sapling
Hemlock	1	Log	14		Black Spruce	Low	5 - 10 feet	Sapling
					White Pine	Low	Variable	Sapling

33 6126 - Lowland Jack Pine Sawtimber Medium 6.7 112 51-80 N/A Mature jack pine that is starting to break up.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Tamarack	4	Pole	8		Black Spruce	Low	Variable	Sapling
Paper Birch	5	Pole/Sapling	6		White Pine	Trace	5 - 10 feet	Sapling
Red Maple	2	Pole	8		Red Maple	Low	>20 feet	Sapling
Black Spruce	10	Pole	8		Paper Birch	Low	>20 feet	Sapling
Jack Pine	78	Log/Pole	10	112				
White Pine	1	Log/XLog	16					

34 6229 - Mixed lowland shrub Nonstocked 29.8 Unspecified No

Sub-Canopy Species	Density	Avg. Height	Size
Northern White Cedar	Low		Pole
Deciduous Saplings	Medium		Tall Shrub
Conifers	Low		Pole



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
35	6126 - Lowland Jack Pine	Poletimber Well	13.9	119	111-140	N/A	Some dieback of the jack pine is now occurring.
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Red Pine		5	Log/Pole	12		Red Maple	
White Pine		5	Log	12		Paper Birch	
Jack Pine		90	Pole/Log	9	119	Black Spruce	
						Northern White Cedar	
						Density	Avg. Height
						Low	Variable
						Low	>20 feet
						Low	Variable
						Low	5 - 10 feet
							Sapling
36	6120 - Lowland Cedar	Sawtimber Well	2.4	130	111-140	N/A	Stand of cedar logs along the West Branch of the Manistique River.
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Red Maple		5	Pole	9		Balsam Fir	
Northern White Cedar		90	Log	12	130	Northern White Cedar	
Tamarack		5	Pole/Log	9			
						Density	Avg. Height
						Trace	< 5 feet
						Trace	Variable
							Sapling
							Sapling
37	42290 - Natural Mixed Pine	Sawtimber Well	54.7	130	81-110	N/A	Large white pine with a variety of other spp. mixed in.
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Red Maple		2	Pole	8		Balsam Fir	
Jack Pine		2	Pole	9		Northern White Cedar	
Black Spruce		5	Pole	7		Beech	
White Pine		58	Log/XLog/Pole	16	130	Red Maple	
Red Pine		10	XLog/Log	18			
Paper Birch		7	Pole	6			
Northern White Cedar		8	Pole	8			
White Spruce		8	Pole	8			
						Density	Avg. Height
						Low	5 - 10 feet
						Trace	5 - 10 feet
						Trace	5 - 10 feet
						Low	Variable
							Sapling
38	6129 - Mixed Coniferous Lowland Forest	Poletimber Poor	26.5	70	1-50	N/A	Wet ground with tamarack being the dominant species and evenly distributed throughout the stand.
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Black Spruce		35	Sapling/Pole	4		Black Spruce	
Jack Pine		5	Pole	8		Red Maple	
Quaking Aspen		4	Log/Pole	10		Deciduous Shrubs	
Northern White Cedar		5	Sapling	3		Jack Pine	
White Pine		3	Log/Pole	14		Tamarack	
Tamarack		48	Pole	7	70		
						Density	Avg. Height
						Low	Variable
						Low	Variable
						Medium	5 - 10 feet
						Trace	Variable
						Low	Variable
							Sapling
							Sapling
39	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	18.9	85	81-110	N/A	Mix of black spruce, pine, cedar, and a few scattered aspen.
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	
Red Pine		10	Log/XLog	16		Red Maple	
White Pine		31	Log/XLog	16		Black Spruce	
Black Spruce		45	Pole/Sapling	7	85		
Northern White Cedar		10	Log/Pole	10			
Quaking Aspen		4	Log	11			
						Density	Avg. Height
						Medium	Variable
						Medium	Variable
							Sapling
							Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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40 6229 - Mixed lowland shrub Nonstocked 3.9 Unspecified No

41 6122 - Black Spruce Poletimber Well 1.1 85 81-110 N/A

This is a small continuation from the stand in the compartment to the west. Here it turns to a black spruce dominated stand.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
White Pine	30	Log/Pole	14		Black Spruce	Medium	Variable	Sapling
Jack Pine	10	Pole	9					
Black Spruce	60	Pole	8	85				

42 6113 - Lowland Maple Poletimber Well 3.8 80 51-80 N/A

The maple is denser starting in the central part of the stand and continuing west. The jack pine is scattered in the east side of the stand.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	68	Pole	8	80	Red Maple	Medium	>20 feet	Sapling
Balsam Fir	15	Pole/Sapling	5		Balsam Fir	High	10 - 20 feet	Sapling
Northern White Cedar	2	Pole	8					
Jack Pine	6	Log	10					
Paper Birch	2	Pole	8					
White Pine	2	Log/Pole	10					
Black Spruce	5	Pole	5					

43 6229 - Mixed lowland shrub Nonstocked 21.7 Unspecified No

Some widely scattered cedar and drainages into the river.

44 6120 - Lowland Cedar Poletimber Well 7.7 102 111-140 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Northern White Cedar	54	Pole	8	102	Balsam Fir	Low	Variable	Sapling
Black Spruce	25	Pole	8		Red Maple	Low	Variable	Sapling
Tamarack	20	Pole	8					
Paper Birch	1	Pole	8					

45 6120 - Lowland Cedar Sawtimber Well 3.0 102 141-170 N/A

The tamarack had died. The cedar is dense within the stand. Openings have advanced paper birch regeneration.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Northern White Cedar	98	Log/Pole	10	102	Paper Birch	Low	>20 feet	Sapling
Paper Birch	2	Pole/Sapling	7					

46 6120 - Lowland Cedar Poletimber Well 161.2 102 141-170 N/A

Large slow growing cedar stand with many swales throughout. BA varies and the swales contain a mix of paper birch, red maple, and tag alder.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	5	Pole/Sapling	5		Balsam Fir	Low	Variable	Sapling
Northern White Cedar	75	Pole	8	102	Northern White Cedar	Low	Variable	Sapling
Blue Spruce	10	Pole	8		Tag Alder	Low	5 - 10 feet	Tall Shrub
Tamarack	5	Pole	8					
Paper Birch	5	Pole/Sapling	5					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
47	6120 - Lowland Cedar	Poletimber Well	8.5	102	81-110	N/A			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Northern White Cedar		55	Pole	8	102	Paper Birch	Low	>20 feet	Sapling
Tamarack		40	Pole	8		Red Maple	Low	>20 feet	Sapling
Black Spruce		5	Pole	7		Balsam Fir	Low	Variable	Sapling
48	6220 - Alder/willow	Nonstocked	196.1		Unspecified	No			
49	6121 - Tamarack	Poletimber Well	2.8	102	81-110	N/A	Healthy tamarack island.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Pine		1	Log/Pole	10		Tamarack	Low	Variable	Sapling
Jack Pine		3	Pole	8					
Tamarack		78	Pole	8	102				
Black Spruce		10	Pole	7					
Northern White Cedar		8	Log/Pole	10					
50	6120 - Lowland Cedar	Sawtimber Well	13.2	102	111-140	N/A	The basal area varies as there are some locations with thick cedar within this stand.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Tamarack		35	Log/Pole	11		Black Spruce	Low	Variable	Sapling
Black Spruce		8	Pole	8		Black Ash	Medium	5 - 10 feet	Sapling
Black Ash		2	Log/Pole	10		Balsam Fir	Low	Variable	Sapling
Northern White Cedar		55	Log/Pole	10	102				
51	6120 - Lowland Cedar	Poletimber Well	11.7	102	111-140	N/A	Cedar stand with some areas of dense black spruce. Good combined amount of balsam fir and red maple saplings.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Tamarack		15	Pole	8		Balsam Fir	Medium	Variable	Sapling
Red Pine		1	Log	14		Red Maple	Medium	Variable	Sapling
White Pine		1	Log/XLog	16					
Paper Birch		1	Pole	7					
Black Spruce		32	Pole	7					
Northern White Cedar		50	Pole	8	102				
52	42200 - Natural White Pine	Sawtimber Medium	1.5	120	51-80	N/A	Isolated upland island containing mostly white pine with a moderate amount of regeneration.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
White Pine		83	Log/XLog	16	120	Black Spruce	Medium	Variable	Sapling
Northern White Cedar		10	Pole	9		Beech	Trace	5 - 10 feet	Sapling
Black Spruce		5	Pole	7		White Pine	Medium	Variable	Sapling
Paper Birch		1	Pole	9					
Red Pine		1	Log	12					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																							
53	42320 - Upland Spruce	Poletimber Well	3.4	82	111-140	N/A	Small island that is 75% upland. Healthy and unique stand.																																																							
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54	6120 - Lowland Cedar	Sawtimber Well	30.3	120	171-200	N/A	Some open areas containing red maple and paper birch advanced regeneration.																																																							
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55	6121 - Tamarack	Poletimber Medium	1.2	102	51-80	N/A	Small grouping containing mainly tamarack and jack pine.																																																							
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56	6233 - Wet Meadow	Nonstocked	10.0		Unspecified	No																																																								
57	6229 - Mixed lowland shrub	Nonstocked	81.0	0	Unspecified	612 - Lowland Coniferous Forest	Lowland jack pine ready to cut now - evidence of stand break-up is appearing. TS: 41-013-14-01 Lucky 13. FTP: 41-1601 Unit 1 was cut then scarified by Holli: 7/15/16, no other units cut at this time. Units 1-3 were cut and a little section of unit 4. Units 2 and 3 were scarified summer 2019.																																																							
58	6120 - Lowland Cedar	Poletimber Well	3.6	85	51-80	N/A	Cedar with paper birch overtopping it. A few open areas.																																																							
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59	6120 - Lowland Cedar	Poletimber Medium	1.4	119	81-110	N/A																																																								
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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60	6122 - Black Spruce	Poletimber Well	1.6	98	81-110	N/A	Small healthy black spruce stand.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
White Pine	2	Log/XLog	16		Red Maple	Low	Variable	Sapling
Red Pine	1	XLog	20		Tamarack	Low	Variable	Sapling
Tamarack	5	Pole	8		Black Spruce	Medium	Variable	Sapling
Black Spruce	92	Pole	7	98				

61	6229 - Mixed lowland shrub	Nonstocked	5.0	0	Unspecified	No	
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62	6229 - Mixed lowland shrub	Nonstocked	4.3	0	Unspecified	No	A few scattered black spruce and tamarack.
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63	42210 - Natural Red Pine	Sawtimber Medium	14.2	128	141-170	N/A	Last thinned in 2000. BA is high and up to 210. Open areas have thick red maple regeneration as well as a combined medium amount of mixed regeneration under the red pine.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Pine	90	Log/XLog	16	128	Red Maple	Medium	10 - 20 feet	Sapling
White Pine	10	XLog/Log	18		Black Spruce	Low	5 - 10 feet	Sapling
					Red Pine	Trace	5 - 10 feet	Sapling
					White Pine	Low	5 - 10 feet	Sapling
					Beech	Low	5 - 10 feet	Sapling
					Paper Birch	Trace	10 - 20 feet	Sapling

64	6126 - Lowland Jack Pine	Sawtimber Medium	1.9	102	51-80	N/A	
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Northern White Cedar	10	Pole	8		Balsam Fir	Low	Variable	Sapling
Jack Pine	60	Log/Pole	10	102	Black Spruce	Low	Variable	Sapling
Tamarack	20	Pole/Log	9					
Black Spruce	10	Pole	8					