Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41020
Entry Year 2020
Acreage: 1,751
County Schoolcraft
Management Area: Seney Manistique Swamp

Revision Date: 2018-07-16

Stand Examiner: Scott Kentner

Legal Description:

T45N R16W Sections 31, 32, 33

Identified Planning Goals:

The main goal in this compartment is to conduct multiple resource management for current and future generations.

Soil and topography:

The topography in this compartment is mainly flat or low marsh areas with slight elevation changes where the birch and hardwoods occur. Soil types found in the compartment are Markey Muck Peat and Carbondale-Lupton-Tawas Mucks in the low areas where the higher ground is classified as Seney-Deford Complex and Rubicon sands. The LTA's for this compartment are Shingleton Fen on the west side and the Channel Fens south to the east; they almost split in the middle of the compartment.

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

Ownership around the compartment is mainly State lands and to the west it is Federal lands. There are three private 40's with the compartment.

Unique Natural Features:

Michigan Natural Features Inventory (MNFI) has some listings of species that have the potential to be within the compartment.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

The compartment contains stretches of the Stutts, Hickey creek and West Branch Hickey creek.

Watershed and Fisheries Considerations:

The southwestern region of this compartment contains an unnamed stream which serves as a tributary to the North Branch of the Stutts Creek. This unnamed stream reach is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended for this unnamed stream reach in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices.

The northcentral and northeastern regions of this compartment contain unnamed waterbodies. 100' plus 5' per 1% increase in slope; buffers are recommended to protect shoreland areas adjacent to these unnamed waterbodies in accordance with Best Management Practices (specifically stand 19).

The eastern region of this compartment contains a network of stream reaches associated with Hickey Creek. Hickey Creek, including this network of stream reaches, is a designated Type 1 trout stream less than 50' width. A 300' buffer is recommended, for this network of stream reaches and Hickey Creek, in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices.

Wildlife Habitat Considerations:

This compartment lies in the Seney Sand Lake Plain ecological sub-subsection approximately eight miles southeast of Shingleton. Hickey Creek flows through the eastern half of the compartment. The majority of this compartment is wetland swamp, consistent with presettlement land cover. Wildlife objectives include maintaining the current integrity of the habitat in the compartment by allowing natural processes to take place.

Mineral Resource and Development Concerns and/or Restrictions

: Surface sediments consist of lacustrine (lake) sand & gravel and peat & muck. There is insufficient data to determine the glacial drift thickness. The Ordovician Trenton Group subcrops below the glacial drift. The Trenton is quarried for dolostone in the UP. Gravel pits at not found in the general area and potential appears to be limited. There is no commercial oil and gas production in the UP.

Vehicle Access:

Is very poor. Access to the south is through Federal and private lands. Once on private land the road is gated. The State does not hold an easement on this road. However, the property owner allows us access for inventory and in the past timber harvesting.

Survey Needs:

none

Recreational Facilities and Opportunities:

none

Fire Protection:

Fire response to the area will be extended due the access issues. The timbered islands surrounded by marsh are somewhat contusive to good fire behavior.

Additional Compartment Information:

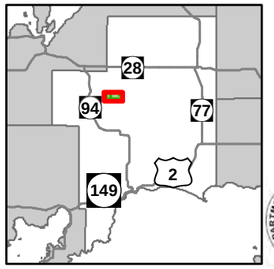
The following reports from the Inventory are attached:

- **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**

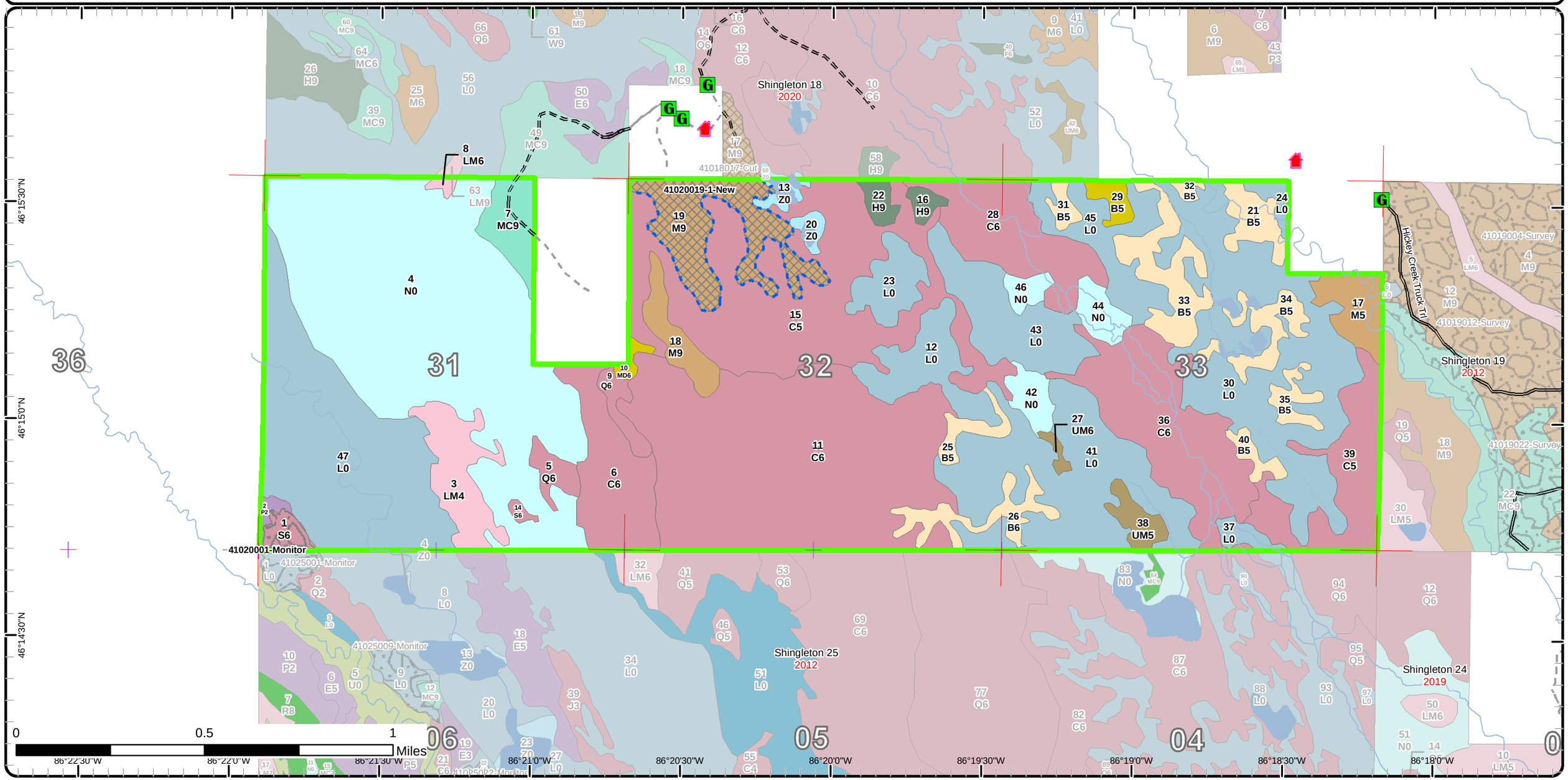
Cover Type & Treatments Map



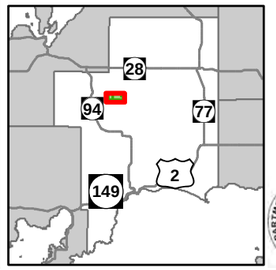
N

Compartment: 20
T45N, R16W, Sec: 31-33
County: Schoolcraft
Unit: Shingleton
Mgmt Area: Seney Manistique Swamp
YOE: 2020
Acres: 1,751 GIS Calculated
Examiner: Scott Kentner
Map Revised: 12/17/2018
Map Phase: Post Review

- Miris Corners
- Remonumented Section Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Private - Dirt / Gravel Road
- Unspecified Structure
- Gate
- Structures
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Treatments with Site Conditions
- Selection (Group, Single Tree)
- Regeneration Survey
- 411 - Northern Hardwood
- 414 - Other Upland Deciduous
- 419 - Mixed Upland Deciduous
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes



Stand Boundary Map



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Gate
Structures
Intermittent Stream
Lake/Pond
Perennial River
Lakes and Rivers All
Compartment Boundary

Stand Boundaries
411 - Northern Hardwood
414 - Other Upland Deciduous
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423 - Other Upland Conifers
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613 - Lowland Mixed Forest
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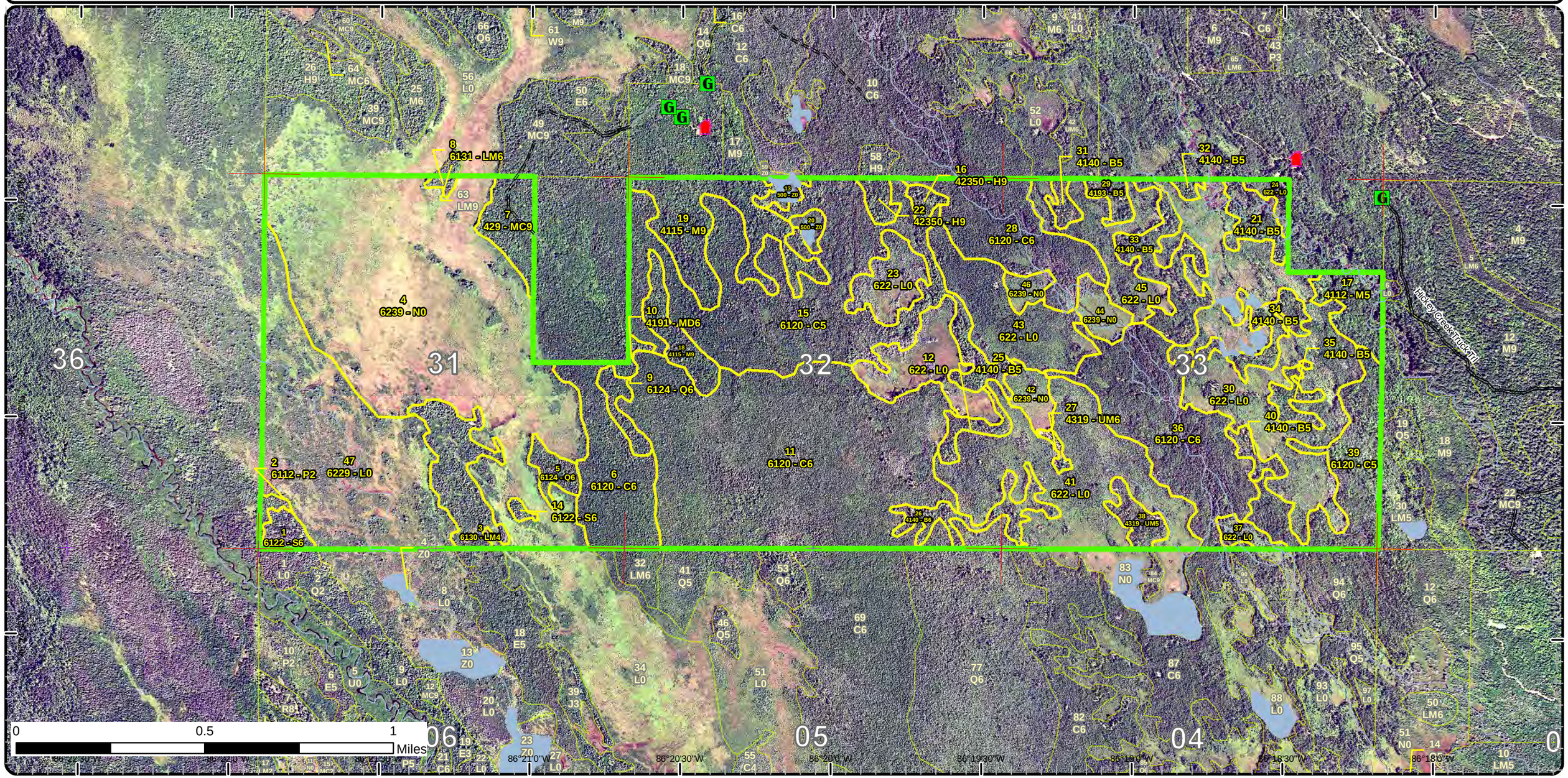
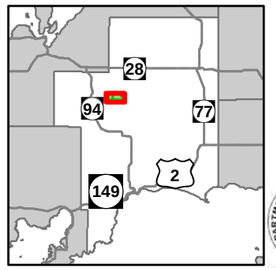


Special Conservation Areas & Site Conditions Map



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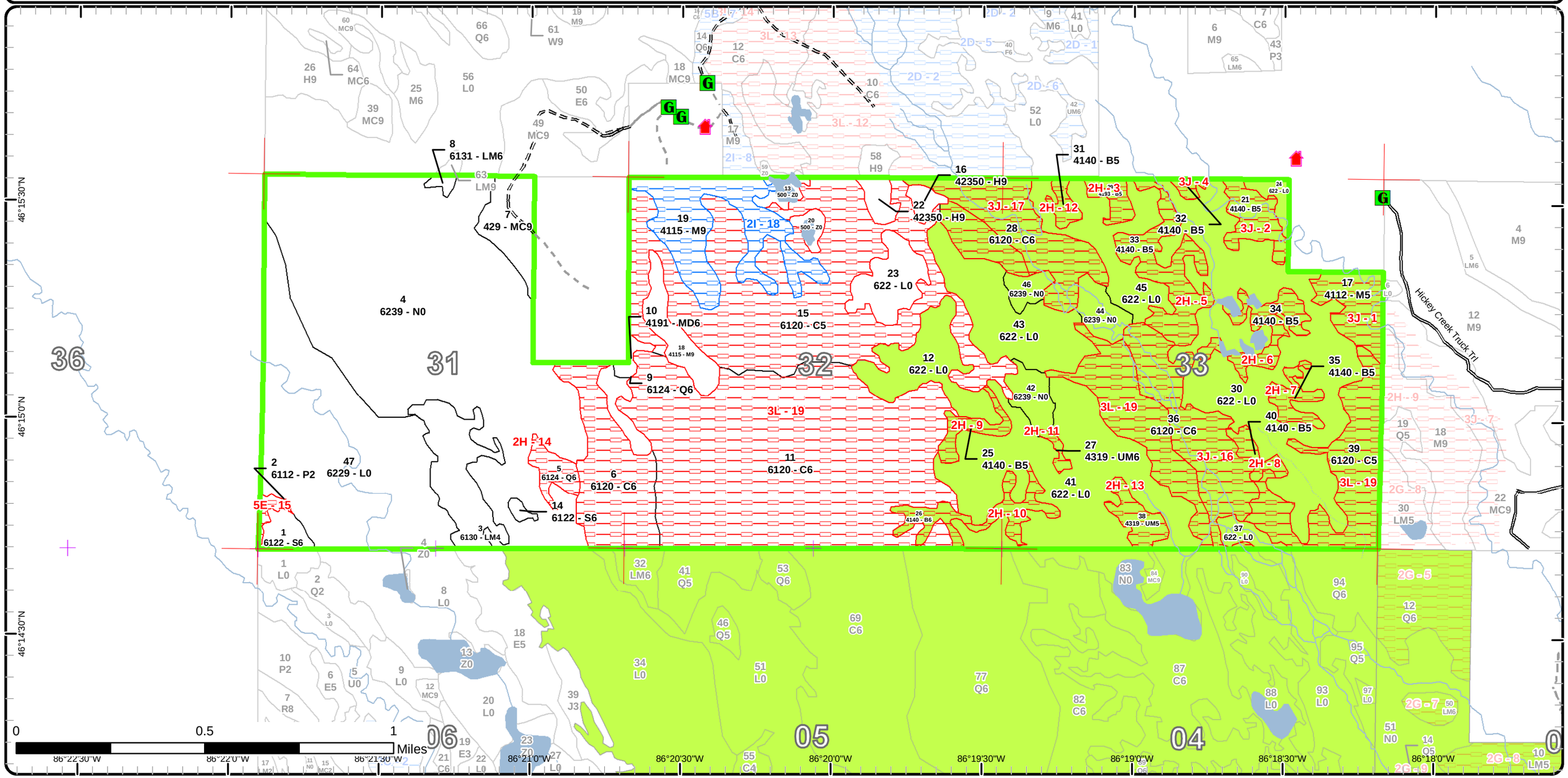
- Structures
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 2I: Survey needed
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3J: Water quality / BMPs (stream, river, or lake)
- 3L: Other wildlife concerns
- 5E: Long-Term Retention
- Stand Boundaries
- Cold Water Streams
- Possible Type 2 Old Growth



Report 1 – Total Acres by Cover Type and Age Class

Shingleton Mgt. Unit **Compartment 20** **Year of Entry 2020**

Scott Kentner : Examiner

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	49	0	84	0	438	52	0	0	0	0	0	0	**623**
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	**10**
Lowland Aspen/Balsam Poplar	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Lowland Conifers	0	0	0	0	0	0	8	0	8	0	0	0	0	0	0	0	0	0	**16**
Lowland Mixed Forest	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	2	**33**
Lowland Shrub	517	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**516**
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	2	7	0	0	0	0	0	0	0	0	**9**
Marsh	311	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**311**
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	**3**
Northern Hardwood	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	64	**83**
Paper Birch	0	0	0	0	0	0	0	0	106	0	0	0	0	0	0	0	0	0	**105**
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	**19**
Upland Mixed Forest	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	**11**
Water	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
Total	**837**	**0**	**0**	**0**	**0**	**3**	**57**	**0**	**261**	**7**	**438**	**52**	**0**	**0**	**0**	**0**	**0**	**98**	**1751**

Report 2 – Treatment Summary

Shingleton Mgt. Unit

Year of Entry: 2020

Acres of Harvest

Compartment 20

Total Compartment Acres: 1,751

Commercial Harvest -

Harvests with Site Condition - 48

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
Northern Hardwood		0	49	0	0	0	0	0	0	0	**49**
	Total	**0**	**49**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**49**

Proposed and Next Step Treatments by Method

		Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current		49	0	0	0	0	0	7	0	0	**55**
Next Step		0	0	0	0	0	0	49	0	0	**49**
	Total	**49**	**0**	**0**	**0**	**0**	**0**	**55**	**0**	**0**	**104**

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
1	41020001-Monitor	6.5	6122 - Black Spruce	Poletimber Well	80	81-110	Monitoring	Natural Regen (Re-Inventory)	6125 - Lowland Black Spruce, Jack Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition:**

Prescription Specs: Manage for current species mix of black spruce, jack pine and aspen.

Next Step Treatments:

Acceptable Regen: Manage for current species mix of black spruce, jack pine and aspen.

Other Comment: Percent to Treat = 100%

Proposed Start Date: 10/1 /2027

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
19	41020019-1-New	48.5	4115 - Y.Birch, Hemlock NH	Sawtimber Well	88	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition: Survey Needed**

Prescription Specs: Diameter limit harvest: all species that are 8" in DBH or larger shall be harvested, excpet for white pine and hemlock if present.

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

Acceptable Regen: Any native species/

Other Comment:

Proposed Start Date: 10/1 /2019

Total Treatment Acreage Proposed: 55.0

Report 4 – Site Conditions

Shingleton Mgt. Unit

Scott Kentner : Examiner

Compartment: 20

Year of Entry: 2020

Availability for Management

Total Acres	Acres Available	*Acres Avail With Condition*	Acres Not Available		Dominant Site Conditions *2I*	2H	3J	3L	5E
623	0	***0***	623	**Cedar**			85	538	
10	10	***0***	0	**Hemlock**					
3	0	***0***	3	**Lowland Aspen/Balsam Poplar**					3
16	8	***0***	8	**Lowland Conifers**		8			
33	33	***0***	0	**Lowland Mixed Forest**					
517	517	***0***	0	**Lowland Shrub**					
9	9	***0***	0	**Lowland Spruce/Fir**					
311	311	***0***	0	**Marsh**					
3	3	***0***	0	**Mixed Upland Deciduous**					
83	16	***48***	19	**Northern Hardwood**	***48***		19		
106	0	***0***	106	**Paper Birch**		90	15		
19	19	***0***	0	**Upland Conifers**					
11	0	***0***	11	**Upland Mixed Forest**		11			
9	9	***0***	0	**Water**					
1,751	933	***48***	769	Total Forested Acres	***48***	110	119	538	3
	53%	***3%***	44%	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)**	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
2	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	13	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

3	**Unavailable**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	**Unavailable**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	27	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	**Unavailable**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	16	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	**Unavailable**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	**Unavailable**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

9	**Unavailable**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
10	**Unavailable**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	17	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
11	**Unavailable**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
12	**Unavailable**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
13	**Unavailable**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

14	**Unavailable**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
15	**Unavailable**	**5E: Long-Term Retention**	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
16	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	46	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
17	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	39	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
18	**Available**	**2I: Survey needed**	49	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
19	**Unavailable**	**3L: Other wildlife concerns**	538	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: WLD does not want to cut cedar.						

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

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.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6122 - Black Spruce	Poletimber Well	7.0	80	81-110	[7/31/12 bb} Stand was included Out of Entry with Comp 25 at the 2012 Compartment Review. The stand is now on proposal 41-013-12-01 Pieces O Nomad. Part of Unit 1. Retention on edges which will never be cut since there will be no timber left in the area.
2	6112 - Lowland Aspen	Sapling Medium	2.7	45	1-50	7/31/12 bb Stand was added Out of Entry with Comp 25 to south at the 2012 Compartment Review but when it was prepared it was found to be mostly tag alder. Therefore the stand was not included and will likely be typed something else next entry.
3	6130 - Fir, Aspen, Maple	Poletimber Poor	31.2	73	81-110	Access is extremely poor.
5	6124 - Lowland Spruce-Fir	Poletimber Well	7.9	78	81-110	Island in Marsh.
6	6120 - Lowland Cedar	Poletimber Well	46.9	99	81-110	Difficult access.
7	429 - Mixed Upland Conifers	Sawtimber Well	19.2	100	81-110	Stand was picked through hard in 1985 with the majority of the logs being removed.
8	6131 - Hemlock, White Pine, Maple, Birch	Poletimber Well	1.8	74	81-110	Small island surrounded by low/marsh.
9	6124 - Lowland Spruce-Fir	Poletimber Well	7.6	58	81-110	
10	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	2.9	88	81-110	Stand was picked through hard in 1985 with the majority of the logs being removed.
11	6120 - Lowland Cedar	Poletimber Well	228.9	93	111-140	Area is similar to stand 6 however, this stand has more conifer type islands with more low areas mixed in.
14	6122 - Black Spruce	Poletimber Well	1.6	78	81-110	Island in a Marsh.
15	6120 - Lowland Cedar	Poletimber Medium	162.0	93	111-140	Hemlock, Yellow birch and red maple are located in clumps on higher patches within the stand. Patches are scattered and too variable to map out from stand as a whole. Black ash mixed in with cedar throughout entire stand as understory.
16	42350 - Upland Hemlock	Sawtimber Well	4.1	108	81-110	
17	4112 - Maple, Beech, Cherry Association	Poletimber Medium	18.6	73	51-80	Decnet hardwood stand, poor Access, with river running thru stand.
18	4115 - Y.Birch, Hemlock NH	Sawtimber Well	15.7	88	81-110	Stand was picked through hard in 1985 with the majority of the logs being removed. Access is going to be difficult.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
19	4115 - Y.Birch, Hemlock NH	Sawtimber Well	48.5	88	81-110	Stand was thinned in 85. Most of the logs were removed. The quality is fair with some pockets of poor quality timber.
21	4140 - Other Upland Deciduous	Poletimber Medium	13.2	73	51-80	River runs thru stand.
22	42350 - Upland Hemlock	Sawtimber Well	5.7	107	81-110	
25	4140 - Other Upland Deciduous	Poletimber Medium	7.3	73	51-80	
26	4140 - Other Upland Deciduous	Poletimber Well	16.5	73	51-80	
27	4319 - Mixed Upland Forest	Poletimber Well	2.1	73	51-80	
28	6120 - Lowland Cedar	Poletimber Well	52.3	108	111-140	
29	4193 - Birch, Aspen	Poletimber Medium	6.1	73	51-80	
31	4140 - Other Upland Deciduous	Poletimber Medium	4.4	73	51-80	
32	4140 - Other Upland Deciduous	Poletimber Medium	2.1	73	51-80	
33	4140 - Other Upland Deciduous	Poletimber Medium	27.4	73	51-80	
34	4140 - Other Upland Deciduous	Poletimber Medium	15.7	73	51-80	
35	4140 - Other Upland Deciduous	Poletimber Medium	7.6	73	51-80	
36	6120 - Lowland Cedar	Poletimber Well	83.9	78	141-170	
38	4319 - Mixed Upland Forest	Poletimber Medium	9.2	73	51-80	
39	6120 - Lowland Cedar	Poletimber Medium	48.8	58	51-80	
40	4140 - Other Upland Deciduous	Poletimber Medium	5.3	73	51-80	Cedar on the edges of the stand.

Report 8 – Nonforested Stands

Stand	Cover Type	Acres	Managed Site	General Comments:
4	6239 - Mixed Emergent Wetland	284.8	No	stand has some scattered stunted tamarack and aspen, mostly found on the west side of creek. There are a couple pockets of 3-4 trees in one place sometimes consisting of white pine. In 1980 typed out as a F4, but due to water table trees have died out and left a low area.
12	622 - Lowland Shrub	31.5	No	
13	500 - Water	4.7	No	
20	500 - Water	3.9	No	
23	622 - Lowland Shrub	19.5	No	
24	622 - Lowland Shrub	5.1	No	
30	622 - Lowland Shrub	131.7	No	
37	622 - Lowland Shrub	5.6	No	
41	622 - Lowland Shrub	106.9	No	
42	6239 - Mixed Emergent Wetland	9.8	No	
43	622 - Lowland Shrub	45.2	No	
44	6239 - Mixed Emergent Wetland	10.2	No	
45	622 - Lowland Shrub	34.0	No	
46	6239 - Mixed Emergent Wetland	5.9	No	
47	6229 - Mixed lowland shrub	137.0	No	stand has some scattered stunted tamarack and aspen, mostly found on the west side of creek. There are a couple pockets of 3-4 trees in one place sometimes consisting of white pine. In 1980 typed out as a F4, but due to water table trees have died out and left a low area.