



Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41073

Entry Year 2018

Acreage: 1,470

County Schoolcraft

Management Area: Seney Manistique Swamp

Revision Date: 2016-08-31

Stand Examiner: Tori Irving

Legal Description:

T42N, R15W, Sections 3, 10 & 15

Identified Planning Goals:

The goals in this compartment include conducting multiple resource management for current and future generations. Forest Health, Recreation, Biodiversity Stewardship, Wildlife and Timber Management are some of the key management components within this compartment.

Soil and topography:

In general, most of the compartment consists of poorly drained organic soils on low ground. The terrain in the area is flat with a few rolling ridges. The compartment lies almost entirely within the Seney Lake Plain Subsection under Cleland's Ecological Land Classification System which is being used in the Eastern Upper Peninsula Eco-Regional Planning Process. A small portion on the extreme southern edge of the compartment along the Manistique River falls within the Escanaba Lake Plain and Thin Till subsection.

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

Ownership within the compartment is an entirely contiguous block of State land. Land Use in the compartment is very minimal due to the lack of roads of wet ground.

Unique Natural Features:

Currently under review by Michigan Natural Features Inventory (MNFI).

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

The Manistique River Habitat Corridor is along the southern edge of the compartment. The reason for their designation is to provide an intact corridor along the Manistique River for late successional forests and the species that occur within them.

Watershed and Fisheries Considerations:

This compartment contains the Manistique River and its warm-water fish community. Standard BMP's should be implemented to control sediment sources from adjacent uplands. Fine sediments such as silt and sand negatively affect natural reproduction of fish, decrease the diversity of aquatic invertebrate and fish taxa, and result in lower overall fish populations.

Wildlife Habitat Considerations:

This compartment lies to the north of the Manistique River and east of the High Rollways. The General Land Office surveyors (circa 1850) noted the major upland tree species included hemlock, birch, and balsam fir. Sugar maple, beech, oak, elm, ash, and white pine were present in smaller amounts. Lowlands at that time were dominated by spruce, cedar, hemlock and white birch. Current conditions show that sugar maple has become a more important component in the northern hardwoods with a corresponding reduction in yellow birch and hemlock. The lowlands appear to be similar in species composition to the pre-settlement forest. In past decades, this area provided food and cover for white-tailed deer during the winter months. Over the years, the food availability within the lowland complex has deteriorated. Deer no longer are found within the compartment during winter months. The wildlife habitat goals within this compartment center upon rejuvenating the swamp conifer stands and developing habitat that can be used by yarding deer. Variable retention guideline will be utilized both for visual and green-up purposes. This compartment lies within the Seney/Manistique Swamp Management Area and the featured species within this MA are American 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 (lake) sand & gravel and peat & muck. The glacial drift thickness varies up to 10 feet in thickness. The Silurian Manitoulin Dolomite and Cabothead Shale subcrop below the glacial drift. The Manitoulin could be used for stone. Gravel pits are not located in the area and potential appears to be limited. There is no commercial oil and gas production in the UP.

Vehicle Access:

Access to the compartment is limited since there are no roads within the compartment.

Survey Needs:

None needed at this time.

Recreational Facilities and Opportunities:

There are no Recreational Facilities within the compartment. The other recreational opportunities include hunting, fishing, canoeing/kayaking and trapping. The Manistique River is considered warm water; therefore, fishing opportunities are limited. Due to its size, it does receive a fair amount of canoeing and kayaking. It also has some unique trapping opportunities. The lack of roads in the compartment provide potential for remote deer and bear hunting.

Fire Protection:

Response times to fires within the compartment will be relatively slow due to its location. Fire operations will be extremely challenging due to the lack of roads, number of creeks present as well as the organic soils in these areas. The compartment is comprised mainly of swamp conifers and marshes.

Additional Compartment Information:

The following reports from the Inventory are attached:

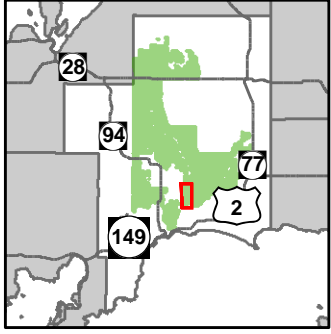
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

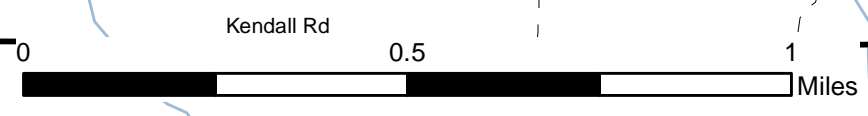
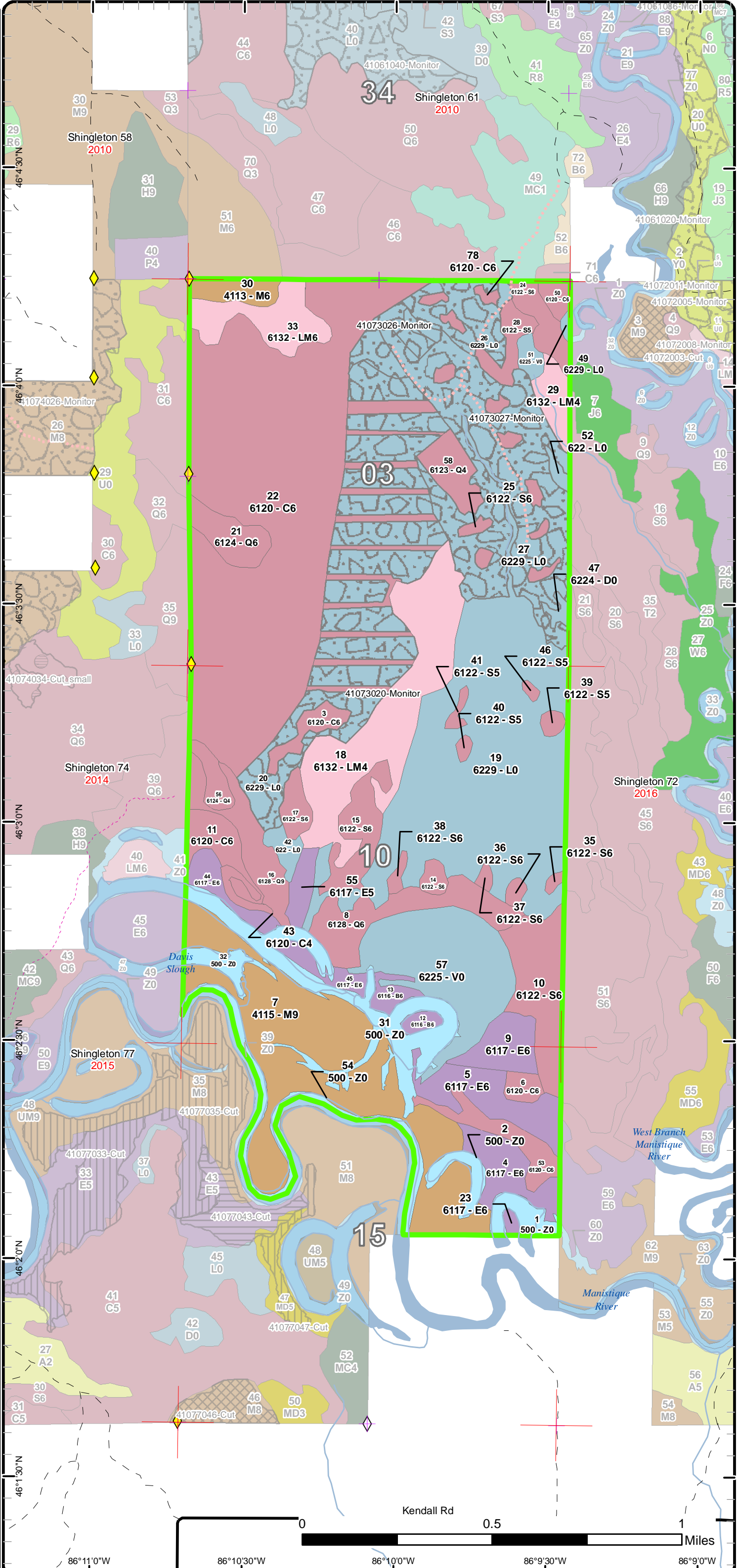
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 73
 T42N,R15W, Sec: 03, 10, 15
 County: Schoolcraft
 Unit: Shingleton
 Mgmt Area: Seney Manistique Swamp
 YOY: 2018
 Acres: 1,470 GIS Calculated
 Examiner: Tori Irving
 Map Revised: 12/6/2016
 Map Phase: Post Review



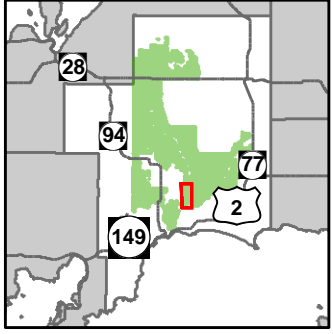
- Miris Corners
- Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Paved Roads
- - - Poor Dirt Roads
- - - Trail (Non-Recreation)
- - - Closed Roads
- Rivers
- Compartment Boundary
- Regeneration Survey
- 411 - Northern Hardwood
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 500 - Water
- 622 - Lowland Shrub
- Lakes



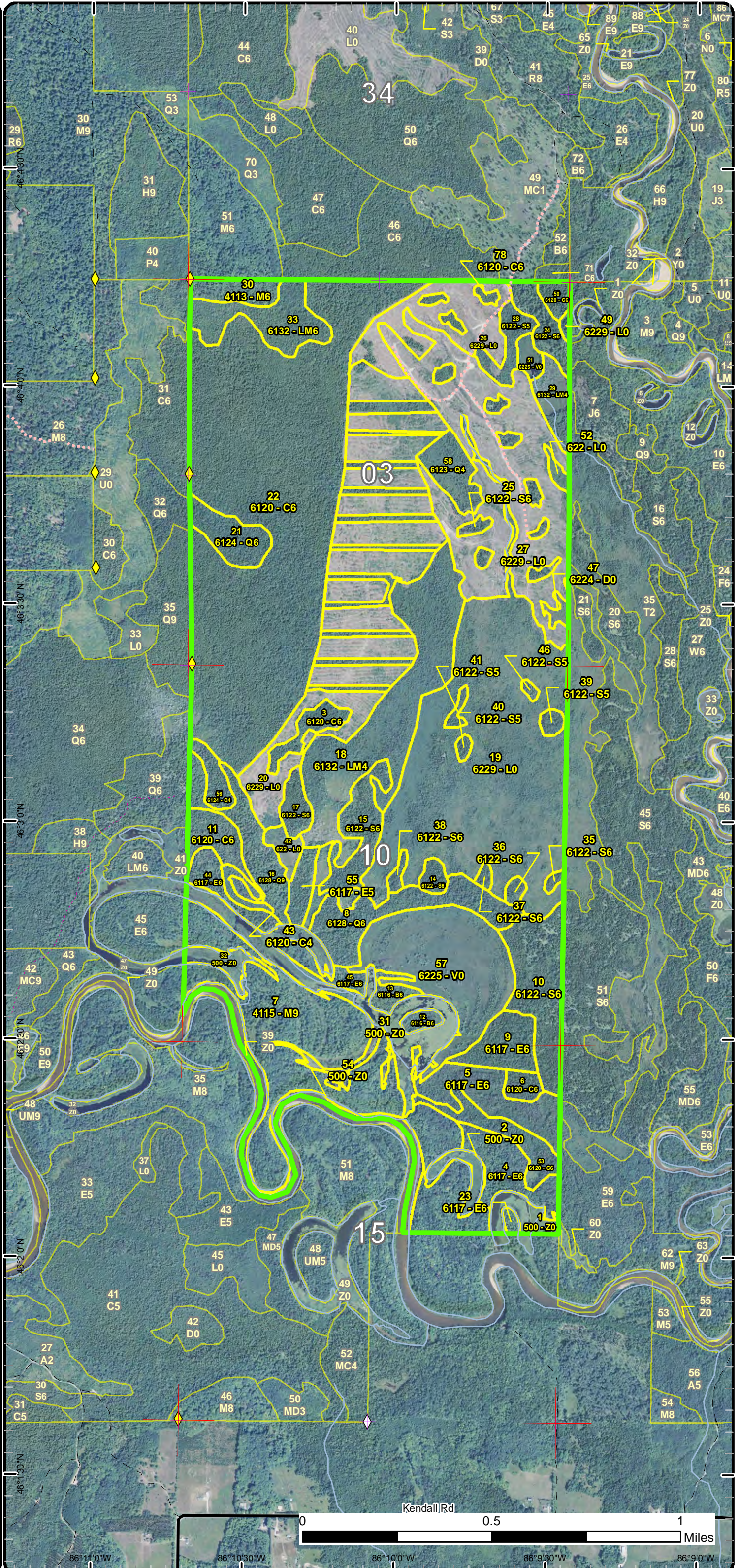
86°11'0"W 86°10'30"W 86°10'0"W 86°9'30"W 86°9'0"W

Stand Boundary Map

Compartment: 73
 T42N,R15W, Sec: 03, 10, 15
 County: Schoolcraft
 Unit: Shingleton
 Mgmt Area: Seney Manistique Swamp
 YOY: 2018
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- Miris Corners
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- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Paved Roads
- - Poor Dirt Roads
- - - Trail (Non-Recreation)
- - - - Closed Roads
- Rivers
- Compartment Boundary
- Stand Boundaries
- 411 - Northern Hardwood
- 611 - Lowland Deciduous Forest
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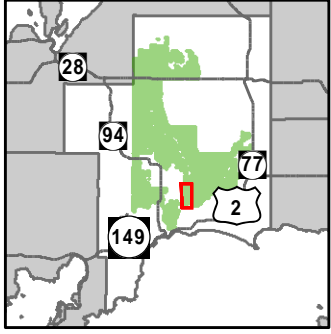
Kendall Rd



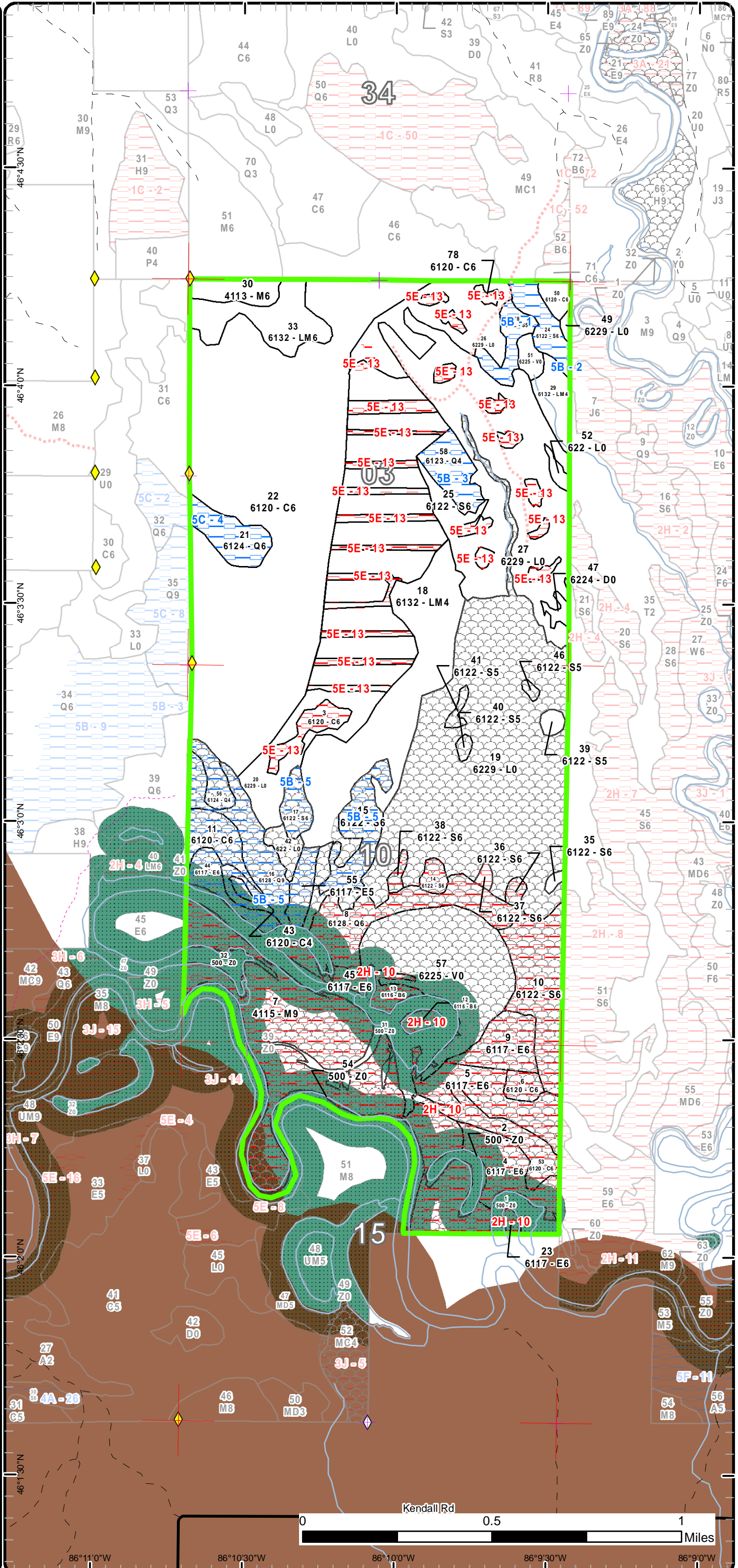
86°11'0"W 86°10'30"W 86°10'0"W 86°9'30"W 86°9'0"W

Special Conservation Areas & Site Conditions Map

Compartment: 73
 T42N,R15W, Sec: 03, 10, 15
 County: Schoolcraft
 Unit: Shingleton
 Mgmt Area: Seney Manistique
 Swamp
 YOE: 2018
 Acres: 1,470 GIS Calculated
 Examiner: Tori Irving
 Map Revised: 12/6/2016
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- Miris Corners
- Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Paved Roads
- - - Poor Dirt Roads
- - - Trail (Non-Recreation)
- - - Closed Roads
- Rivers
- Compartment Boundary
- SCA Proposed
- Available w/ Constraints
- Unavailable
- 5B: Maintain for regeneration purposes
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 5E: Long-Term Retention
- Stand Boundaries
- Deer Winter Range
- Habitat Corridor



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
Bog	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64
Cedar	0	0	0	0	0	0	0	0	0	36	13	27	4	0	262	0	0	0	342
Lowland Conifers	0	0	0	0	0	6	0	0	13	43	0	0	0	0	0	21	0	0	82
Lowland Deciduous	0	0	0	0	0	7	0	0	15	0	0	0	0	0	0	0	60	0	82
Lowland Mixed Forest	0	0	0	0	0	0	0	0	24	74	0	10	0	0	0	0	0	0	108
Lowland Shrub	465	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	465
Lowland Spruce/Fir	0	0	0	0	0	0	0	11	44	42	0	9	0	0	0	0	0	0	106
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	127	0	127
Paper Birch	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	8
Treed Bog	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Water	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84
Total	616	0	0	0	0	13	0	11	104	195	13	46	4	0	262	21	187	1470	



Report 2 – Treatment Summary

Shingleton Mgt. Unit
Year of Entry: 2018

Acres of Harvest

Compartment 73
Total Compartment Acres: 1,470

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

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	0	0	0	0	0	0	264	0	0	264
Next Step	0	143	143	0	0	0	155	0	0	440
Total	0	143	143	0	0	0	419	0	0	704



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
20	41073020-Monitor	121.4	6229 - Mixed lowland shrub	Nonstocked	0	Unspecified	Monitoring	Natural Regen (Intermediate)	6120 - Lowland Cedar	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**Prescription Count regeneration.Specs:Next Step Monitoring, Artificial Regen(3yr)Treatments:Acceptable Cedar, Black SpruceRegen:OtherComment:Proposed Start Date: 10/01/2019

26	41073026-Monitor	33.3	6229 - Mixed lowland shrub	Nonstocked	0	Unspecified	Monitoring	Natural Regen (Re-Inventory)	6120 - Lowland Cedar	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**Prescription Count regeneration.Specs:Next Step Monitoring, Artificial Regen(3yr); SitePrep, Trenching; Planting, Initial PlantTreatments:Acceptable Northern White Cedar, Black spruceRegen:OtherComment:Proposed Start Date: 10/01/2018

27	41073027-Monitor	109.2	6229 - Mixed lowland shrub	Nonstocked	0	Unspecified	Monitoring	Natural Regen (Intermediate)	6120 - Lowland Cedar	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**Prescription Count regenerationSpecs:Next Step SitePrep, Trenching; Planting, Initial PlantTreatments:Acceptable Black spruceRegen:OtherComment:Proposed Start Date: 10/01/2018

**Total Treatment
Acreage Proposed: 263.9**

Report 4 – Site Conditions

Shingleton Mgt. Unit

Tori Irving : Examiner

Compartment: 73

Year of Entry: 2018

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions			
		With Condition	Not Available		5B	5C	2H	5E
64	64	0	0	Bog				
341	269	16	56	Cedar	16		19	37
83	0	54	29	Lowland Conifers	40	14	29	
82	0	16	66	Lowland Deciduous	16		66	
107	107	0	0	Lowland Mixed Forest				
465	459	0	5	Lowland Shrub				5
105	9	45	51	Lowland Spruce/Fir	45		41	10
127	9	0	118	Northern Hardwood			118	
8	0	0	8	Paper Birch			8	
2	2	0	0	Treed Bog				
84	84	0	0	Water				
1,470	1,004	132	334	Total Forested Acres	118	14	281	52
	68%	9%	23%	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	Available	5B: Maintain for regeneration purposes	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Available	5B: Maintain for regeneration purposes	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Available	5B: Maintain for regeneration purposes	13	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Shingleton Mgt. Unit

Tori Irving : Examiner

Compartment: 73

Year of Entry: 2018

4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Available	5B: Maintain for regeneration purposes	86	4A: No Markets Available for these Forest Products	Unspecified	Unspecified	Unspecified
Comments: Over 1.5 miles of road building would be required to access this timber. There is also not a lot of products available to cut.							
10	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	281	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
13	Unavailable	5E: Long-Term Retention	52	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							



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
	Potential Old Growth		SCA Removal	1
Comments Manistique River corridor SCA re-mapped using new criteria.				
	Potential Old Growth		SCA Removal	3
Comments Manistique River Corridor, remapped using new criteria.				
	Potential Old Growth		SCA Removal	627
Comments Manistique River corridor, remapped using new criteria.				
Manistique River Habitat Corridor	Habitat Areas or Corridors	Habitat Corridor	Proposed SCA	4423
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	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
3	6120 - Lowland Cedar	Poletimber Well	36.0	96	Unspecified	This stand was left as retention in the Little Buddy Sale #41-002-12-01. The sale was prepped by Upper Michigan Land Management and Wildlife Services as part of the Pilot Project. The stands have a site condition for long term retention.
4	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	18.2	85	81-110	
5	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	24.3	85	51-80	
6	6120 - Lowland Cedar	Poletimber Well	4.5	108	171-200	
7	4115 - Y.Birch, Hemlock NH	Sawtimber Well	118.1	85	81-110	
8	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	28.9	94	51-80	
9	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	15.0	86	51-80	
10	6122 - Black Spruce	Poletimber Well	32.5	84	81-110	
11	6120 - Lowland Cedar	Poletimber Well	12.7	111	111-140	
12	6116 - Lowland Birch	Poletimber Well	3.0	85	51-80	
13	6116 - Lowland Birch	Poletimber Well	5.2	86	51-80	
14	6122 - Black Spruce	Poletimber Well	3.4	90	111-140	
15	6122 - Black Spruce	Poletimber Well	18.5	93	111-140	
16	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	21.1	151	81-110	
17	6122 - Black Spruce	Poletimber Well	6.9	93	111-140	
18	6132 - Mixed Lowland Forest with Cedar	Poletimber Poor	73.5	93	1-50	
21	6124 - Lowland Spruce-Fir	Poletimber Well	13.6	94	141-170	



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	6120 - Lowland Cedar	Poletimber Well	262.3	140	171-200	Stand had extensive cuttings occur in the 50s and 60s. The cuttings were narrow strip cuts. Most of the regeneration is fir and some cedar.
23	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	1.6	85	81-110	
24	6122 - Black Spruce	Poletimber Well	10.6	78	51-80	
25	6122 - Black Spruce	Poletimber Well	11.1	88	Unspecified	This stand was left as retention in the Little Buddy Sale #41-002-12-01. The sale was prepped by Upper Michigan Land Management and Wildlife Services as part of the Pilot Project. The stands have a site condition for long term retention.
28	6122 - Black Spruce	Poletimber Medium	9.1	116	1-50	
29	6132 - Mixed Lowland Forest with Cedar	Poletimber Poor	10.0	116	1-50	Most of stand is dead due to beaver activity.
30	4113 - R.Maple, Conifer	Poletimber Well	9.1	179	51-80	Stand cut under contract 34-00, Mad Hawk Sale. Stand was cut winter 2003.
33	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	23.5	88	111-140	
35	6122 - Black Spruce	Poletimber Well	1.2	90	111-140	
36	6122 - Black Spruce	Poletimber Well	2.0	90	111-140	
37	6122 - Black Spruce	Poletimber Well	1.4	90	111-140	
38	6122 - Black Spruce	Poletimber Well	2.0	90	111-140	
39	6122 - Black Spruce	Poletimber Medium	2.3	90	51-80	
40	6122 - Black Spruce	Poletimber Medium	1.4	90	51-80	
41	6122 - Black Spruce	Poletimber Medium	1.9	90	51-80	
43	6120 - Lowland Cedar	Poletimber Poor	3.8	108	1-50	Stand is an old cutting from the 50's or 60's that failed and all that is left is some residual stunted cedar.

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Shingleton Mgt. Unit

Report 7 – Forested Stands

Compartment: 73
Year of Entry: 2018

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	9.2	80	81-110	
45	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	6.9	80	81-110	
46	6122 - Black Spruce	Poletimber Medium	1.0	90	51-80	
50	6120 - Lowland Cedar	Poletimber Well	4.1	100	111-140	
53	6120 - Lowland Cedar	Poletimber Well	14.3	111	141-170	
55	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	7.0	56	51-80	
56	6124 - Lowland Spruce- Fir	Poletimber Poor	6.4	52	1-50	
58	6123 - Lowland Fir	Poletimber Poor	12.9	80	1-50	Very poor quality stand.
78	6120 - Lowland Cedar	Poletimber Well	3.8	121	Unspecified	This stand was left as retention in the Little Buddy Sale #41-002-12-01. The sale was prepped by Upper Michigan Land Management and Wildlife Services as part of the Pilot Project. The stands have a site condition for long term retention.



Stand	Cover Type	Acres	Managed Site	General Comments:
1	500 - Water	8.3	No	Oxbow lake
2	500 - Water	6.4	No	Oxbow lake
19	6229 - Mixed lowland shrub	192.5	No	
20	6229 - Mixed lowland shrub	121.4		This stand is part a Pilot Project and is finally on proposal, 41-002-12-01 Little Buddy Sale prepared by Upper Michigan Land Management & Wildlife Services. Sale is complete. TCR date 8/25/2014. The stand was seeded by UMLMWS under FTP C41-1547.
26	6229 - Mixed lowland shrub	33.3	No	The stand is part a Pilot Project and was cut as part of the Little Buddy Sale # 41-002-12-01 prepared by Upper Michigan Land Management & Wildlife Services. The stand was seeded under FTP C41-1547 in 2014. The follow-up monitoring will be conducted by UMLMWS per the Pilot Project Contract.
27	6229 - Mixed lowland shrub	109.2	No	The stand is part a Pilot Project and was cut as part of the Little Buddy Sale # 41-002-12-01 (TCR 8/25/2014) prepared by Upper Michigan Land Management & Wildlife Services.
31	500 - Water	44.5	No	Oxbow lake
32	500 - Water	6.9	No	Oxbow Lake
42	622 - Lowland Shrub	4.9	No	
47	6224 - Treed Bog	2.5	No	
49	6229 - Mixed lowland shrub	1.1	No	
51	6225 - Bog	3.8	No	
52	622 - Lowland Shrub	2.2	No	
54	500 - Water	18.0	No	Manistique River
57	6225 - Bog	60.4	No	