



# Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41031

Entry Year 2018

Acreage: 2,389

County Schoolcraft

Management Area: Seney Manistique Swamp

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**Revision Date:** 2016-08-31

**Stand Examiner:** Tori Irving

**Legal Description:**

T44N R15W Sections 21-23, 28

**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:**

The soils in Schoolcraft County are currently being mapped by the Soil Survey. Preliminary soils information including Habitat Types can be found in the specific stand comments. In general, the soils are moderately drained sandy soils on the uplands and poorly drained organic soils on the low ground. The terrain in the area is flat to rolling. The compartment lies 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.

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

Ownership within the compartment is mostly a contiguous block of State land; however there is a minor component of private fragmentation, including corporate land. The private land is either forest or marsh and it is currently used mainly for hunting. The Seney National Wildlife Refuge lies directly east of the compartment.

**Unique Natural Features:**

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

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

None known.

**Special Management Designations or Considerations:**

This compartment includes an Ecological Reference Area (ERA). ERA's are designated by Michigan Natural Resources Inventory (MNFI) and are high quality examples of functioning ecosystems that are primarily influenced by ecological processes. In this case the designation is for a Patterened Fen.

**Watershed and Fisheries Considerations:**

Duck Creek is found within this compartment and is classified as warm-water. 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 with the larger marsh/low pine ridge complex of Schoolcraft County. Surveyor notes showed the pre-settlement vegetation within the wetland to be a mixture of open grassy marsh and tamarack/black spruce swamp. The ridges were fairly well dominated by conifers including hemlock, white pine, red pine and, to a lesser extent, jack pine. The deciduous species recorded included beech, red maple, sugar maple, white birch and aspen. Current conditions show the marshes to be fairly well intact. However, the dominant tree species on the ridges has shift to jack pine. The wildlife habitat management goals in this compartment include providing travel corridors, protecting the remaining closed canopy hemlock stands, and enhancing the early successional conifer habitat for potential use by species such as Kirtland's warbler. Additionally, the clearcut areas will be temporally usable by openland species. Variable retention principles will be utilized to enhance species and structural diversity within and between stands. 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 and gravel. There is insufficient data to determine the glacial drift thickness. The Ordovician Stonington Formation and Utica Shale subcrop below the glacial drift. The Stonington 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 to the Highwater Truck Trail which is the only road running through the compartment. The Highwater Truck Trail is also a snowmobile trail. The lands east of Duck Creek were roaded following the Seney Fire of 1976 for salvage operations. Since that time the roads have grown over and the bridge crossing Duck creek has dilapidated.

**Survey Needs:**

None needed at this time.

**Recreational Facilities and Opportunities:**

The Highwater Truck Trail is a snowmobile trail and is the only recreational facility in the compartment. The other recreational opportunities include hunting, fishing and trapping. Duck Creek is considered warm water therefore fishing opportunities are limited but it does have a fair amount of beaver activity for trapping. Due to the lack of roads in the compartment there is good potential for remote deer and bear hunting. The area does receive a fair amount of dispersed camping during the firearm deer season.

**Fire Protection:**

Response times to fires within the compartment will be relatively slow due to its location. Fire operations will be challenging in some areas due to the lack of roads and the number of creeks present as well as the organic soils in these areas. The compartment is comprised mainly of jack pine in varying age classes which could potentially lead to some larger fires due response times, location and this volatile fuel type given the proper weather conditions. As mentioned earlier the area east of Duck Creek burned in 1976 during the great Seney Fire which was caused by a lightning strike and burned for over a month.

**Additional Compartment Information:**

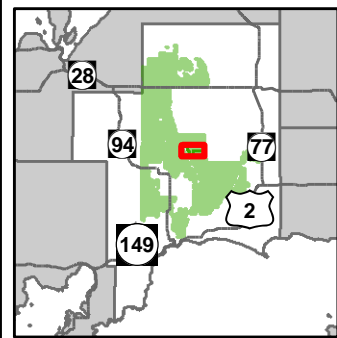
The following reports from the Inventory are attached:

- 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:

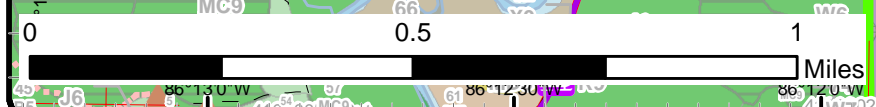
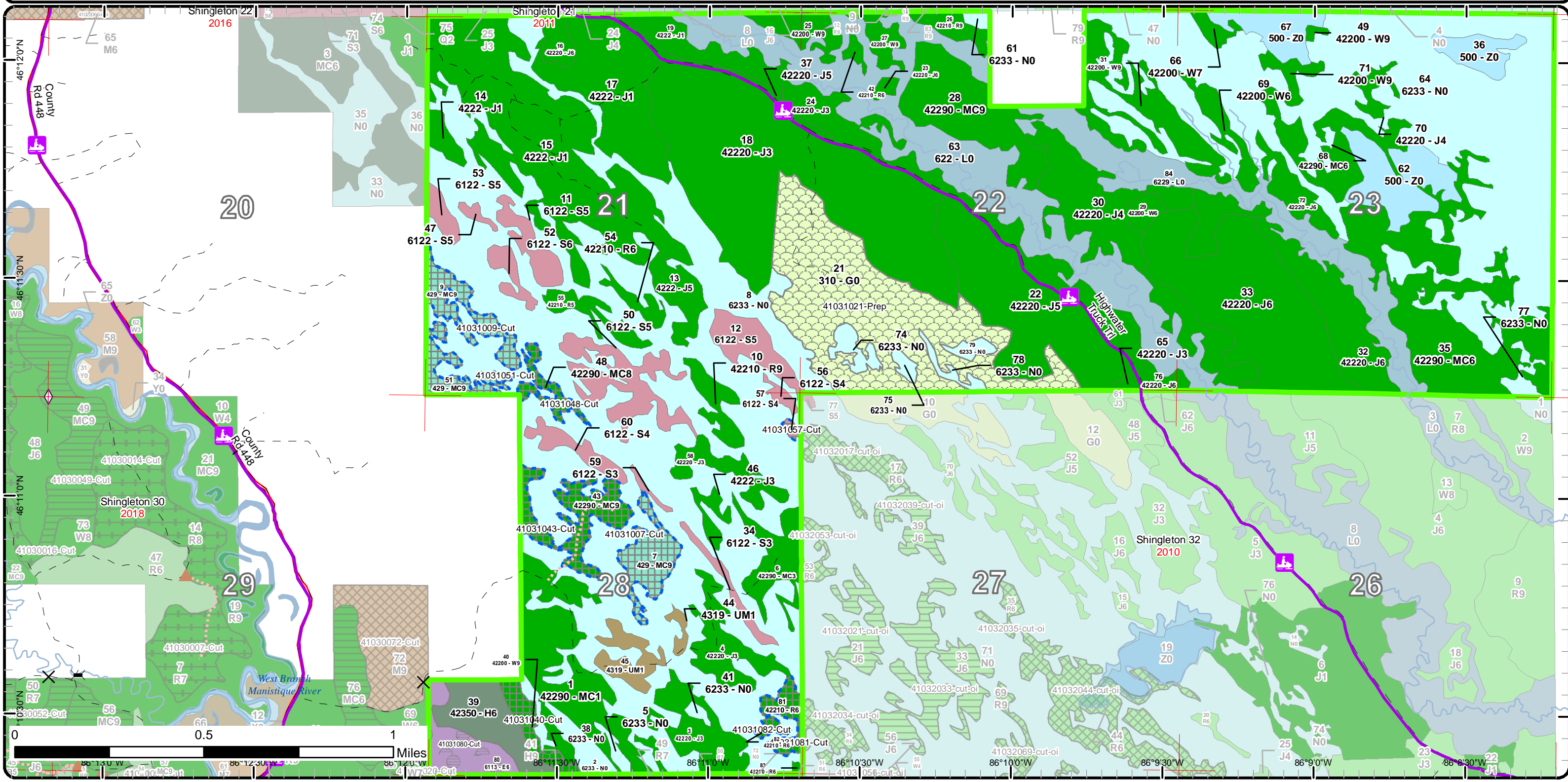
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map



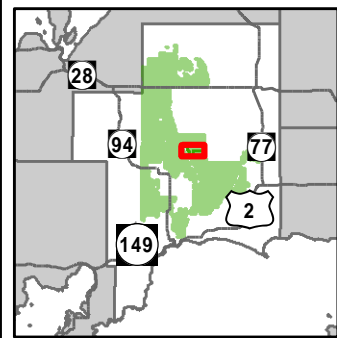
Compartment: 31  
 T44N, R15W, Sec: 21-23, 28  
 County: Schoolcraft  
 Unit: Shingleton  
 Mgmt Area: Seney Manistique Swamp  
 YOE: 2018  
 Acres: 2,389 GIS Calculated  
 Examiner: Tori Irving  
 Map Revised: 12/6/2016  
 Map Phase: Post Review

- Miris Corners
- Remonumented Section Corners
- Field Grade GPS Corners
- Gate
- Berms
- Bridges
- Snowmobile Trails
- Designated Snowmobile Trails
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Closed Roads
- Rivers
- Compartment Boundary
- Treatments with Site Conditions
- Patch/Strip Cut (Femelschlag)
- Site Prep
- Clearcut (w/Reserves)
- Seed Tree (w/Reserves)
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes



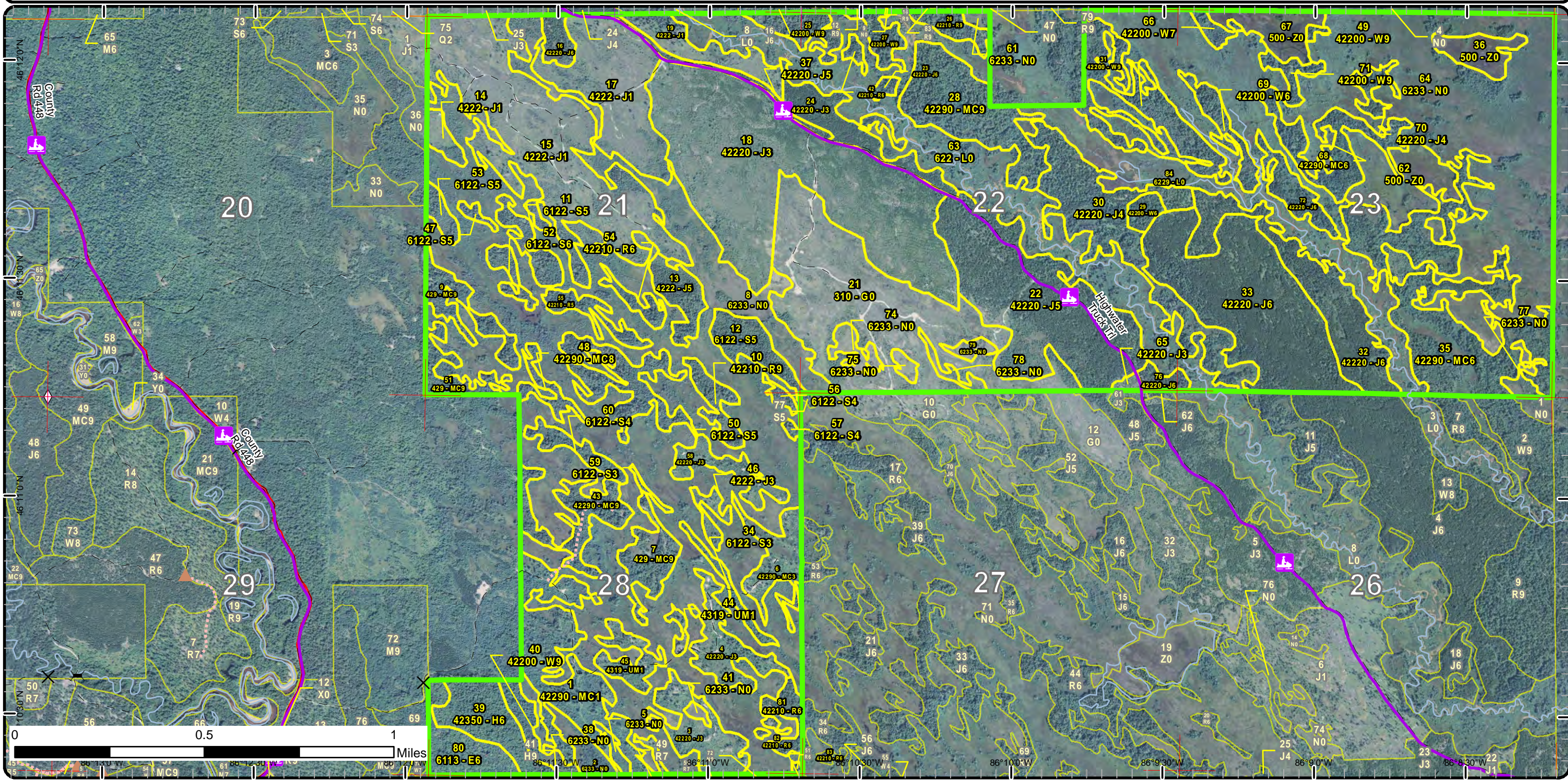


# Stand Boundary Map



Compartment: 31  
 T44N, R15W, Sec: 21-23, 28  
 County: Schoolcraft  
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 Mgmt Area: Seney Manistique Swamp  
 YOE: 2018  
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 Map Revised: 12/6/2016  
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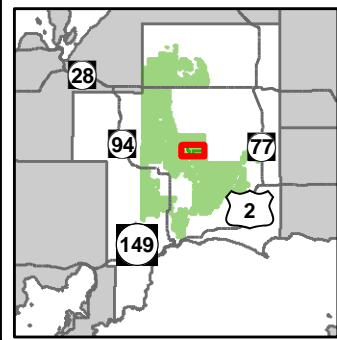
- Miris Corners
  - + Remonumented Section Corners
  - ◇ Field Grade GPS Corners
  - X Gate
  - ▲ Berms
  - ≡ Bridges
  - 🚙 Snowmobile Trails
  - Designated Snowmobile Trails
  - County Gravel Roads
  - Gravel Roads
  - - Poor Dirt Roads
  - - - Closed Roads
  - Rivers
  - ▭ Compartment Boundary
- ▭ Stand Boundaries
  - 422 - Natural Pines
  - 423 - Other Upland Conifers
  - 429 - Mixed Upland Conifers
  - 430 - Upland Mixed Forest
  - 611 - Lowland Deciduous Forest
  - 612 - Lowland Coniferous Forest
  - 310 - Herbaceous Openland
  - 500 - Water
  - 622 - Lowland Shrub
  - 623 - Emergent Wetland



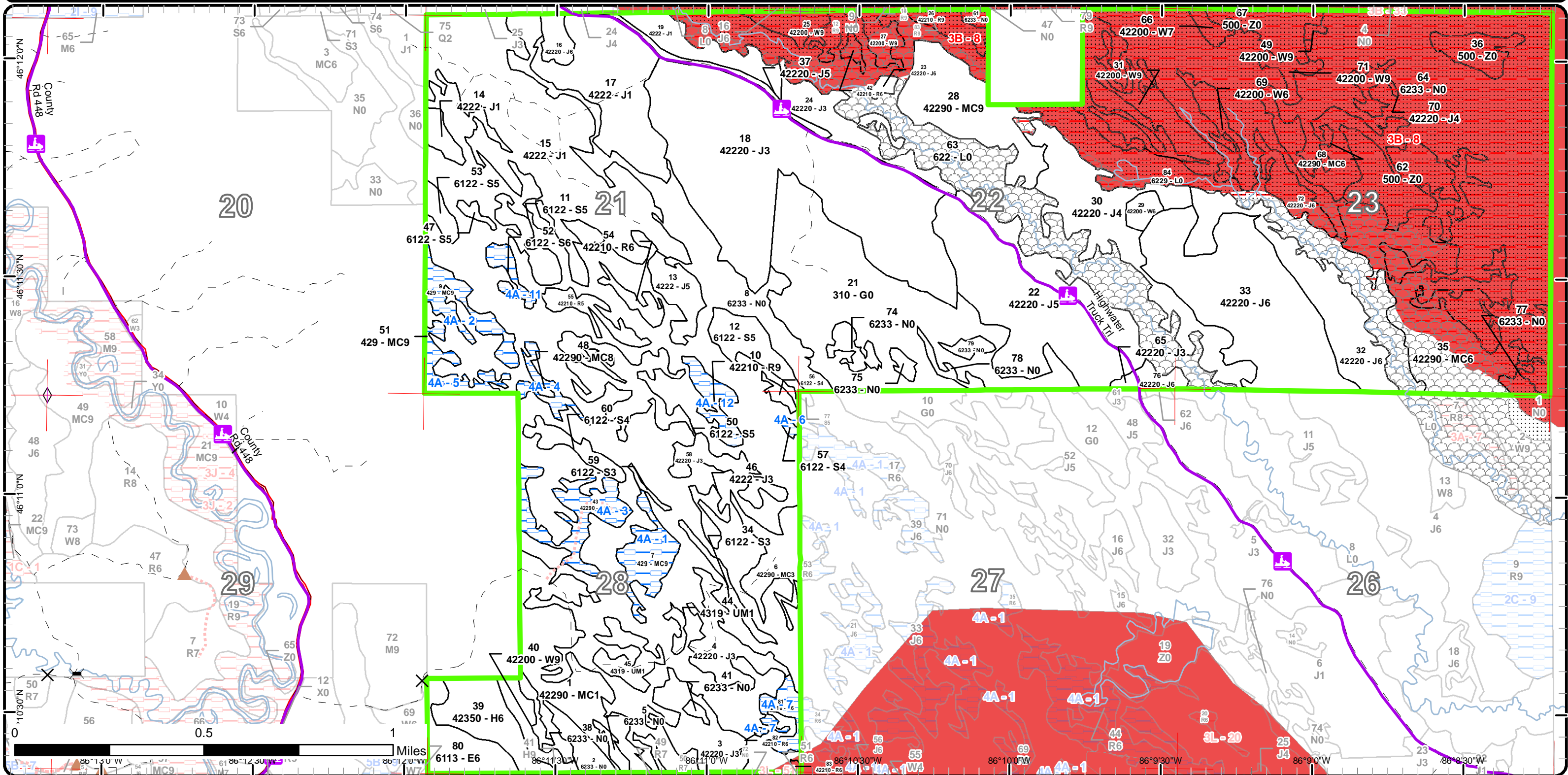


# Special Conservation Areas & Site Conditions Map

Compartment: 31  
 T44N, R15W, Sec: 21-23, 28  
 County: Schoolcraft  
 Unit: Shingleton  
 Mgmt Area: Seney Manistique Swamp  
 YOE: 2018  
 Acres: 2,389 GIS Calculated  
 Examiner: Tori Irving  
 Map Revised: 12/6/2016  
 Map Phase: Post Review



- Miris Corners
- + Remonumented Section Corners
- ◇ Field Grade GPS Corners
- X Gate
- ▲ Berms
- ▲ Bridges
- ⬇ Snowmobile Trails
- Designated Snowmobile Trails
- County Gravel Roads
- Gravel Roads
- - - Poor Dirt Roads
- - - Closed Roads
- Rivers
- ▭ Compartment Boundary
- Available w/ Constraints
- ▭ Unavailable
- 4A: No Markets Available for these Forest Products
- 3B: Threatened, endangered, and special concern species/communities
- ▭ Stand Boundaries
- ▭ Ecological Reference Areas
- Cold Water Streams



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
Hemlock	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	22
Herbaceous Openland	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116
Jack Pine	0	184	212	21	0	263	59	0	0	2	0	0	0	0	0	0	0	0	741
Lowland Deciduous	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	17
Lowland Shrub	187	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	187
Lowland Spruce/Fir	0	0	0	0	0	8	51	0	9	6	0	0	0	0	0	0	0	0	74
Marsh	764	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	764
Natural Mixed Pines	0	0	17	0	0	110	0	0	0	0	20	6	40	0	0	0	0	50	243
Red Pine	0	0	0	0	0	8	14	0	0	0	9	2	7	0	0	0	0	0	40
Upland Conifers	0	0	0	0	0	0	0	0	0	10	28	0	0	0	0	0	0	0	38
Upland Mixed Forest	0	0	10	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	12
Water	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
White Pine	0	0	0	0	0	0	5	0	16	0	32	31	0	0	0	0	0	0	82
<b>Total</b>	<b>1120</b>	<b>184</b>	<b>239</b>	<b>21</b>	<b>0</b>	<b>389</b>	<b>129</b>	<b>0</b>	<b>42</b>	<b>20</b>	<b>89</b>	<b>61</b>	<b>47</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>2389</b>



## Report 2 – Treatment Summary

Shingleton Mgt. Unit  
Year of Entry: 2018

Acres of Harvest

Compartment 31  
Total Compartment Acres: 2,389

Commercial Harvest - 26  
Harvests with Site Condition - 73  
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
Lowland Deciduous	0	0	17	0	0	0	0	0	0	17
Lowland Spruce/Fir	1	0	0	0	0	0	0	0	0	1
Natural Mixed Pines	0	0	0	26	0	0	0	0	0	26
Red Pine	0	0	0	9	0	0	0	0	0	9
Upland Conifers	0	0	0	38	0	0	0	0	0	38
White Pine	0	0	0	9	0	0	0	0	0	9
<b>Total</b>	<b>1</b>	<b>0</b>	<b>17</b>	<b>81</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	100	116	0	0	0	0	0	0	0	215
Next Step	0	0	116	0	0	331	0	0	0	446
<b>Total</b>	<b>100</b>	<b>116</b>	<b>116</b>	<b>0</b>	<b>0</b>	<b>331</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>662</b>



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
7	41031007-Cut	14.9	429 - Mixed Upland Conifers	Sawtimber Well	95	81-110	Harvest	Seed Tree with Retention	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary

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

Prescription Seed tree the stand. Cut all species except the red and white pine. Leave enough scattered red and white pine to provide seed and protection for  
Specs: future regeneration.

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

Acceptable A mix of current species found on site.  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2017

9	41031009-Cut	13.1	429 - Mixed Upland Conifers	Sawtimber Well	95	81-110	Harvest	Seed Tree	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary
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**Habitat Cut: No**      **Site Condition: No Markets**

Prescription Seed tree the stand. Cut all species except the red and white pine. Leave enough scattered red and white pine to provide seed and protection for  
Specs: future regeneration.

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

Acceptable A mix of species currently found on site.  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2017

21	41031021- Prep	115.6	310 - Herbaceous Openland	Nonstocked	0	Unspec ified	SitePrep	Trenching	42120 - Planted Jack Pine	Even-Aged	Draft Field Boundary
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**Habitat Cut: No**      **Site Condition:**

Prescription Trench and plant jack pine in all accessible areas.  
Specs:

Next Step Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)  
Treatments:

Acceptable Jack pine and black spruce.  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2017

40	41031040-Cut	8.8	42200 - Natural White Pine	Sawtimber Well	100	51-80	Harvest	Seed Tree with Retention	4220 - Natural White Pine	Even-Aged	Draft Field Boundary
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**Habitat Cut: No**      **Site Condition:**

Prescription Manage the stand to perpetuate white pine. Green tree some scattered white pine and some super canopy trees. Do not cut hemlock and oak. Stand  
Specs: will need some survey work. Treat this stand with the adjacent compartment.

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

Acceptable A mix of species currently found on-site  
Regen:

Other To access the stand, a road will need to be built across stand 39. Cross at the narrowest point in the stand, which is located at the southern end.  
Comment:

Proposed Start Date: 10/01/2017





S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
43	41031043-Cut	19.8	42290 - Natural Mixed Pine	Sawtimber Well	96	81-110	Harvest	Seed Tree	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary

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

Prescription Seed tree the stand. Cut all species except the red and white pine. Leave enough scattered red and white pine to provide seed and protection for  
Specs: future regeneration. Do not cut any oak.

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

Acceptable A mix of species currently found on site.  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2017

48	41031048-Cut	6.1	42290 - Natural Mixed Pine	Sawtimber Medium	100	51-80	Harvest	Seed Tree with Retention	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary
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**Habitat Cut: No Site Condition: No Markets**

Prescription Seed tree the stand. Cut all species except the red and white pine. Leave enough scattered red and white pine to provide seed and protection for  
Specs: future regeneration.

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

Acceptable A mix of species currently found on site.  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2017

51	41031051-Cut	10.0	429 - Mixed Upland Conifers	Sawtimber Well	85	81-110	Harvest	Seed Tree with Retention	429 - Mixed Upland Conifers	Even-Aged	Draft Field Boundary
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**Habitat Cut: No Site Condition: No Markets**

Prescription Seed tree the stand. Cut all species except the red and white pine. Leave enough scattered red and white pine to provide seed and protection for  
Specs: future regeneration.

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

Acceptable A mix of species currently found on site.  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2017

57	41031057-Cut	1.0	6122 - Black Spruce	Poetimber Poor	84	1-50	Harvest	Clearcut	6122 - Black Spruce	Even-Aged	Draft Field Boundary
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**Habitat Cut: No Site Condition: No Markets**

Prescription Cut all species. No retention due to small stand size.  
Specs:

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

Acceptable A mix of species currently found on site.  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2017



Stand Name	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
80	41031080-Cut	17.4	6113 - Lowland Maple	Poletimber Well	76	81-110	Harvest	Strip/Patch/Gap Cut (Femelschlag)	6119 - Mixed Lowland Deciduous Forest	Even-Aged	Draft Field Boundary

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

Prescription Create large groups up to one half of an acre in size to encourage regeneration of mid tolerant species. Mark access trails between the groups and cut all trees within them. Protect hemlock pockets, beech with evidence of bear activity and any oak, if found. Stand will need survey work. Treat this stand with the adjacent compartment.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable A mix of species currently found on site.

Regen:

Other  
Comment:

Proposed Start Date: 10/01/2017

81	41031081-Cut	8.1	42210 - Natural Red Pine	Poletimber Well	59	111-140	Harvest	Seed Tree with Retention	42210 - Natural Red Pine	Even-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition: No Markets**

Prescription Seed tree the stand. Cut all species except the red and white pine. Leave enough scattered red and white pine to provide seed and protection for future regeneration.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable A mix of species currently found on site.

Regen:

Other  
Comment:

Proposed Start Date: 10/01/2017

82	41031082-Cut	0.4	42210 - Natural Red Pine	Poletimber Well	59	111-140	Harvest	Seed Tree with Retention	42210 - Natural Red Pine	Even-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition: No Markets**

Prescription Seed tree the stand. Cut all species except the red and white pine. Leave enough scattered red and white pine to provide seed and protection for future regeneration.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable A mix of species currently found on site.

Regen:

Other  
Comment:

Proposed Start Date: 10/01/2017

10	41032010-Prep	22.6	310 - Herbaceous Openland	Nonstocked	0	Unspecified	SitePrep	Trenching	42120 - Planted Jack Pine	Even-Aged	Draft Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Trench and plant jack pine in all accessible areas.

Specs:

Next Step Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable Jack pine and black spruce.

Regen:

Other  
Comment:

Proposed Start Date: 10/01/2017





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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
12 41032012-Prep	17.1	310 - Herbaceous Openland	Nonstocked	0	Unspecified	SitePrep	Trenching	4212 - Planted Jack Pine	Even-Aged	Draft Proposal

**Habitat Cut:** No

**Site Condition:**

Prescription Trench and plant jack pine on the ridges of the stand.

Specs:

Next Step Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable Jack pine and black spruce

Regen:

Other

Comment:

Proposed Start Date: 10/01/2009

**Total Treatment  
Acreage Proposed: 254.9**

## Report 4 – Site Conditions

Shingleton Mgt. Unit

Tori Irving : Examiner

Compartment: 31

Year of Entry: 2018

### Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	4A	3B
		With Condition	Not Available			
22	22	0	0	Hemlock		
116	116	0	0	Herbaceous Openland		
741	724	0	16	Jack Pine		16
17	17	0	0	Lowland Deciduous		
187	111	0	76	Lowland Shrub		76
74	68	6	0	Lowland Spruce/Fir	6	
764	474	0	289	Marsh		289
244	125	26	93	Natural Mixed Pines	26	93
40	13	18	9	Red Pine	18	9
38	0	38	0	Upland Conifers	38	
12	12	0	0	Upland Mixed Forest		
53	0	0	53	Water		53
82	13	0	69	White Pine		69
2,389	1,696	88	605	Total Forested Acres	88	605
	71%	4%	25%	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 Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	4A: No Markets Available for these Forest Products	15	2E: Road needed	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Stand was set up as part of Tatrow's Marsh Sale # 41-007-10-01. The sale never sold and went no-bid three times.							
2	Available	4A: No Markets Available for these Forest Products	13	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Stand was set up as part of Tatrow's Marsh Sale # 41-007-10-01. The sale never sold and went no-bid three times.							



Report 4 – Site Conditions

Shingleton Mgt. Unit

Tori Irving : Examiner

Compartment: 31

Year of Entry: 2018

3	Available	4A: No Markets Available for these Forest Products	20	2E: Road needed	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Stand was set up as part of Tatrow's Marsh Sale # 41-007-10-01. The sale never sold and went no-bid three times.</p>							
4	Available	4A: No Markets Available for these Forest Products	6	2E: Road needed	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b></p>							
5	Available	4A: No Markets Available for these Forest Products	10	2E: Road needed	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Stand was set up as part of Tatrow's Marsh Sale # 41-007-10-01. The sale never sold and went no-bid three times.</p>							
6	Available	4A: No Markets Available for these Forest Products	1	2E: Road needed	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Stand was set up as part of Tatrow's Marsh Sale # 41-007-10-01. The sale never sold and went no-bid three times.</p>							
7	Available	4A: No Markets Available for these Forest Products	9	2E: Road needed	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Stands are part of Tatrow's Marsh Sale #41-007-10-01. The sale has gone 'No Bid' three times.</p>							
8	Unavailable	3B: Threatened, endangered, and special concern species/communities	605	Unspecified	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b></p>							

Report 4 – Site Conditions

Shingleton Mgt. Unit

Tori Irving : Examiner

Compartment: 31

Year of Entry: 2018

11	Available	<b>4A: No Markets Available for these Forest Products</b>	5	2E: Road needed	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Area adjacent to this stand was set up for sale and went 'No Bid' three times.							
12	Available	<b>4A: No Markets Available for these Forest Products</b>	9	2E: Road needed	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Area adjacent to this stand was set up for sale but went 'No Bid' three times.							





**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
<b>Comments</b> sliver along ERA boundary, does not meet current SCA criteria				
	Potential Old Growth		SCA Removal	4
<b>Comments</b> sliver along ERA boundary, does not meet current SCA criteria				
	Potential Old Growth		SCA Removal	5
<b>Comments</b> Outside of ERA, does not meet current SCA criteria.				
	Potential Old Growth		SCA Removal	91
<b>Comments</b> Outside of the ERA boundary, does not meet current SCA criteria.				
	Potential Old Growth		SCA Removal	109
<b>Comments</b> Outside of ERA boundary. Doesn't meet current SCA criteria.				



**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
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	General Comments:
1	42290 - Natural Mixed Pine	Sapling Poor	50.2	14	1-50	Stand was cut during the winters of 1998 and 2002. Stand is regenerating to mostly white pine with some red pine and also some scattered oak. The regeneration is very thick in some areas.
3	42220 - Natural Jack Pine	Sapling Well	20.7	14	Immature	
4	42220 - Natural Jack Pine	Sapling Well	17.7	14	Immature	
6	42290 - Natural Mixed Pine	Sapling Well	16.8	14	Immature	Stand was cut during the winters of 1998 and 2002.
7	429 - Mixed Upland Conifers	Sawtimber Well	14.9	95	81-110	Stand was part of sale number 41-007-10, Tatrow's Marsh Sale. The sale was offered and went no bid three times.
9	429 - Mixed Upland Conifers	Sawtimber Well	13.1	95	81-110	
10	42210 - Natural Red Pine	Sawtimber Well	9.1	96	81-110	
11	6122 - Black Spruce	Poletimber Medium	8.8	76	51-80	East side of stand was cut in the 60's and has regenerated well, west side is mature.
12	6122 - Black Spruce	Poletimber Medium	13.7	51	1-50	Stand was cut through in the 60s. However, it was not very thorough, more like a salvage cut resulting in pockets of mature trees being left. Majority of the stand is younger spruce.
13	4222 - Natural Jack Pine	Poletimber Medium	11.7	50	1-50	Stand was cut in the 60's however it was not real thorough so there are older residual pockets. Spruce is throughout and the pine is thicker on the south end.
14	4222 - Natural Jack Pine	Sapling Poor	5.1	5	1-50	<p>OPIIC - FMD: South end of stand was cut through in 60's if stand is prepared lop south end off. The north end was not cut through in 60's and jack pine is over-mature. Leave some red and white pine for seed. Soils are Neconish-Kinross-Wainola Complex and the Habitat type is PVE. Retention will be met by leaving red pine and white pine as well as the exclusions of spruce on the fringes.</p> <p>[9/22/08 BB] Stand is now on proposal 19-08-01 Lots a Line Pine Actual Stand acres = 4</p> <p>[1/17/2012 TSI] Sale # 41-019-08-01 Lots Line Pine was closed on 11/21/2011</p> <p>(2/2/15 AP) Stand was scarified and has passed regeneration counts in 2015. 909 jack pine, 411 black spruce, and 75 white pine. FTP 1381 is closed. Possible work under wildlife FTP for oak planting remains.</p>





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
15	4222 - Natural Jack Pine	Sapling Poor	112.8	5	1-50	<p>[1/8/07 BB] As agreed at the compartment review, in addition to scarifying the stand after it is cut plant acorns on the knobs.</p> <p>[9/22/08 BB] Stand is now on proposal 19-08-01 Lots a Line Pine Residual BA = Red Pine 3 sq ft, White Pine scattered</p> <p>(11/24/2011 AP) Stand was scarified in summer of 2011. Regen count to occur in 2015. Units 1,2,3 were scarified in 2011, Units 4, 5, 6 were done in 2010.</p> <p>[1/17/2012 TSI] Sale #41-019-08-01 Lots A Line Pine was closed on 11/21/2011.</p> <p>(2/2/15 AP) Stand was scarified and has passed regeneration counts in 2015. 909 jack pine, 411 black spruce, and 75 white pine. FTP 1381 is closed. Possible work under wildlife FTP for oak planting remains.</p>
16	42220 - Natural Jack Pine	Poletimber Well	6.0	45	1-50	
17	4222 - Natural Jack Pine	Sapling Poor	50.0	6	1-50	<p>[1/8/07 BB] As agreed at the compartment review, in addition to scarifying the stand after it is cut plant acorns on the knobs.</p> <p>[9/22/08 BB] Stand is now on proposal 19-08-01 Lots a Line Pine Residual BA = Red Pine 1 sq ft</p> <p>(9/15/2010 AP) Stand scarified summer 2010. Regen count scheduled 2014. Only upland portions of Units 4,5,6 were completed, 54 acres total.</p> <p>[1/17/2012 TSI] Sale #41-019-08-01 Lots A Line Pine was closed on 11/21/2011.</p>
18	42220 - Natural Jack Pine	Sapling Well	155.5	16	Immature	This stand was cut as part of the Broken Compass sale. Twenty five acres of it was scarified in September 2000.
19	4222 - Natural Jack Pine	Sapling Poor	16.4	6	Immature	<p>OPIC - FMD: Stand has some drainages that will need to be protected as well as proper river buffers. Red and white pine are present but not showing up on plots as a large component, leave most of near the creek buffer to provide diversity. Stand could hold if needed. Soils are Kinross-Augres-Rubicon Complex and habitat type is PArV. Retention will be met by leaving the red and white pine.</p> <p>[9/22/08 BB] Stand is now on proposal 19-08-01 Lots a Line Pine Residual BA = Red Pine 6 sq ft, White Pine 4 sq ft</p> <p>(9/15/2010 AP) Stand scarified summer 2010. Regen count scheduled 2014. Only upland portions of Units 4,5,6 were completed, 54 acres total.</p> <p>[1/17/2012 TSI] Sale #41-019-11-01 Lots A Line Pine was closed 11/21/2011</p> <p>(2/2/15 AP) Stand was scarified and has passed regeneration counts in 2015. 909 jack pine, 411 black spruce, and 75 white pine. FTP 1381 is closed. Possible work under wildlife FTP for oak planting remains.</p>
22	42220 - Natural Jack Pine	Poletimber Medium	90.8	41	1-50	Stand underwent a shelterwood cut from 1959-1961. Little natural seeding occurred so stand was disked and seeded in 1970. The remaining jack pine was removed in 1971. Nice jack pine which is transitioning to poles nicely.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	42220 - Natural Jack Pine	Poletimber Well	1.9	81	51-80	
24	42220 - Natural Jack Pine	Sapling Well	20.9	26	Immature	Stand was cut in 1990 as part of the North Duck Sale.
25	42200 - Natural White Pine	Sawtimber Well	10.6	102	51-80	Stand could be treated with compartment 21 stand 16 to north but that stand was dropped at the last compartment review due to poor access and no markets for charred wood. The Seney fire bumped up to some of these stands. Access from east is across multiple creeks.
26	42210 - Natural Red Pine	Sawtimber Well	7.1	110	81-110	Stand was originally cut after Seney Fire but not heavy enough. Regen is a mix of white pine and advanced E. Pine near the fringes has now died and again will likely not warrant the cost of a bridge. This is not enough wood to tie up one of the department's portable bridges. White pine will do ok with the amount of shade present. Stand was prepared in 1998, 2 Chains Short Sale but was never cut because the purchaser was responsible for installing a portable bridge across Duck Creek. [1/8/07 BB] The cut was dropped at the compartment review because of the potential negative impacts to the patterned fen.
27	42200 - Natural White Pine	Sawtimber Well	7.1	102	51-80	Much of the stand was salvaged after Seney Fire. There is at least one major stream crossing to get to stand. Many of the trees are water stressed and or killed by beaver.
28	42290 - Natural Mixed Pine	Sawtimber Well	40.2	110	81-110	Stand was prepared in 1998, 2 Chains Short Sale but was never cut because the purchaser was responsible for installing a portable bridge across Duck Creek. Stand was originally cut after Seney Fire but not heavy enough. Regen is a mix of white pine and advanced E. Pine near the fringes has now died and again will likely not warrant the cost of a bridge. This is not enough wood to tie up one of the department's portable bridges. White pine will do ok with the amount of shade present.
29	42200 - Natural White Pine	Poletimber Well	4.5	58	111-140	
30	42220 - Natural Jack Pine	Poletimber Poor	55.1	40	1-50	
31	42200 - Natural White Pine	Sawtimber Well	31.5	91	81-110	
32	42220 - Natural Jack Pine	Poletimber Well	42.5	56	51-80	
33	42220 - Natural Jack Pine	Poletimber Well	88.9	40	1-50	
34	6122 - Black Spruce	Sapling Well	5.0	41	Unspecified	



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	42290 - Natural Mixed Pine	Poletimber Well	87.2	40	1-50	Also large block of old growth blocks in well with Seney National Wildlife Refuge. Stand was burned through and salvaged after Seney Fire. There is a lot of residual red pine logs that are surviving as mother trees. Regen is all over the board including re pine, white pine, spruce, tamarack, jack pine, hardwood and aspen. There are also some small pockets of mature trees not cut in the 70's. Soils are Rubicon-Croswell-Deford Complex and the Habitat type is PVE.
37	42220 - Natural Jack Pine	Poletimber Medium	6.1	41	1-50	Stand originated during Seney Fire when a fuel break was put in for a control line along the Highwater Truck Trail. Stand regenerated very well and is transitioning nicely to poles.
39	42350 - Upland Hemlock	Poletimber Well	21.6	100	141-170	
40	42200 - Natural White Pine	Sawtimber Well	8.8	100	51-80	
42	42210 - Natural Red Pine	Poletimber Well	2.0	102	81-110	
43	42290 - Natural Mixed Pine	Sawtimber Well	19.8	96	81-110	Stand was set up under sale #41-007-10, Tatrow's Marsh Sale. The sale never sold and went 'no-bid' three times.
44	4319 - Mixed Upland Forest	Sapling Poor	2.1	85	1-50	Stand was cut during the winters of 1998 and 2002. There is decent regeneration of white pine and some red pine. The regeneration is very tick in some areas.
45	4319 - Mixed Upland Forest	Sapling Poor	10.2	14	1-50	Stand was cut as during the winters of 1998 and 2002. The stand is regenerating to mostly white pine and some red pine. The regeneration is very thick in some areas.
46	4222 - Natural Jack Pine	Sapling Well	4.5	14	Immature	[1/17/03 BB] Stand was cut between the winters of 1998 and 2002, Original cultural codes called for scarification but due to the location and residual trees left a regen count will be conducted in the summer of 2004 to determine stocking.  [8/11/06 BB] Stand was never counted. New Stand Comments: Stand has patchy residual overstory thicker in some areas. Manage for the understory, walk through regen plots indicate a decent amount of jack, red and white pine regen much the same as it was originally. There is also a good amount of spruce, oak and aspen regen. Oak is regenerating from the residual trees in the stand. Appx 800 tpa of conifer spp with the most in jack pine. Red pine is regenerating very well along the old roads and landings.
47	6122 - Black Spruce	Poletimber Medium	1.8	51	51-80	Stand was cut in the 60s but it was more of a salvage cut since it wasn't thorough.
48	42290 - Natural Mixed Pine	Sawtimber Medium	6.1	100	51-80	Stand was set up under sale #41-007-10, Tatrow's Marsh Sale. The sale never sold and went 'no-bid' three times.
49	42200 - Natural White Pine	Sawtimber Well	1.0	72	51-80	Stand was burned through but not cut or salvaged due to very poor access.





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
50	6122 - Black Spruce	Poletimber Medium	23.2	52	1-50	OPIC - FMD: Stand was partially cut through in the 60's which led to this two aged stand. There is some tamarck on lower ground that is over mature.
51	429 - Mixed Upland Conifers	Sawtimber Well	10.0	85	81-110	Stand was set up under sale #41-007-10, Tatrow's Marsh Sale. The sale never sold and went 'no-bid' three times.
52	6122 - Black Spruce	Poletimber Well	5.2	87	81-110	OPIC - FMD: Soils are Markey Mucky Peat
53	6122 - Black Spruce	Poletimber Medium	4.7	52	51-80	OPIC - FMD: Stand was partially cut in the 60s resulting in this two aged stand, managing for the younger age class.
54	42210 - Natural Red Pine	Poletimber Well	4.7	51	51-80	OPIC - FMD: Stand was cut through in the 60's, likely a diameter limit cut. Stand is now two aged, manage for the understory of Spruce, White pine and jack pine.
55	42210 - Natural Red Pine	Poletimber Medium	8.2	46	51-80	
56	6122 - Black Spruce	Poletimber Poor	2.1	48	1-50	Stand was cut through in the 60's, lots of spruce and tamarack regen.
57	6122 - Black Spruce	Poletimber Poor	1.0	84	1-50	Stand was cut through in the 60s, lots of spruce and tamarack regen.
58	42220 - Natural Jack Pine	Sapling Well	11.6	14	Immature	[1/17/03 BB] Stand was cut between the winters of 1998 and 2002, Original cultural codes called for scarification but due to the location and residual trees left a regen count will be conducted in the summer of 2004 to determine stocking.  [8/11/06 BB] Stand was never counted. New Stand Comments: Stand has patchy residual overstory thicker in some areas. Manage for the understory, walk through regen plots indicate a decent amount of jack, red and white pine regen much the same as it was originally. There is also a good amount of spruce, oak and aspen regen. Oak is regenerating from the residual trees in the stand. Appx 800 tpa of conifer spp with the most in jack pine. Red pine is regenerating very well along the old roads and landings.
59	6122 - Black Spruce	Sapling Well	1.2	41	Unspecified	Stand was cut in 70s as the Marsh Ridge Block, it was an R9 stand at the time and was cut due to windthrow concerns. Regenerating good to a mix of species including red pine, spruce, tamarack, white pine and aspen but predominately spruce.
60	6122 - Black Spruce	Poletimber Poor	7.7	50	1-50	The stand was cut through in the 60's leaving a two aged stand behind. Spruce is coming along nicely and red pine logs look good.
65	42220 - Natural Jack Pine	Sapling Well	1.6	16	Immature	Stand was cut as part of Broken Compass.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
66	42200 - Natural White Pine	Sawtimber Poor	3.8	100	1-50	Stand was cut through after Seney Fire which resulted in the E understory.
68	42290 - Natural Mixed Pine	Poletimber Well	23.2	40	1-50	Also large block of old growth blocks in well with Seney National Wildlife Refuge. Stand was burned through and salvaged after Seney Fire. There is a lot of residual red pine logs that are serving as mother trees. Regeneration is all over the board including re pine, white pine, spruce, tamarack, jack pine, hardwood and aspen. There are also some small pockets of mature trees not cut in the 70s.
69	42200 - Natural White Pine	Poletimber Well	9.6	78	1-50	
70	42220 - Natural Jack Pine	Poletimber Poor	5.2	40	1-50	
71	42200 - Natural White Pine	Sawtimber Well	5.4	72	51-80	
72	42220 - Natural Jack Pine	Poletimber Well	11.2	40	51-80	Stand was burned through and salvaged after Seney Fire. There is a lot of residual red pine logs that are serving as mother trees. Regen is all over the board including red pine, white pine, spruce, tamarack, jack pine, hardwood and aspen. There are also some small pockets of mature trees not cut in the 70s.
76	42220 - Natural Jack Pine	Poletimber Well	4.5	58	51-80	Stand is used by dispersed campers during hunting season and there is a hunter-made trail that has been made to access the interior of the stand. At this point, attempts to close the trail would be futile since it is likely that another trail would be made.  Hold the stand until next entry and treat with stand 22 in this compartment or with stand 62 in the adjacent compartment.
80	6113 - Lowland Maple	Poletimber Well	17.4	76	81-110	
81	42210 - Natural Red Pine	Poletimber Well	8.1	59	111-140	Stand was set up last entry as part of the Tatrow's Marsh Sale #41-007-10-01. The sale went no bid three times.
82	42210 - Natural Red Pine	Poletimber Well	0.4	59	111-140	Stand was part of Tatrow's Marsh Sale #41-007-10-01. The sale went no bid three times.
83	42210 - Natural Red Pine	Poletimber Well	0.5	59	111-140	



Stand	Cover Type	Acres	Managed Site	General Comments:
2	6233 - Wet Meadow	7.7	No	
5	6233 - Wet Meadow	2.4	No	
8	6233 - Wet Meadow	446.0	No	
21	310 - Herbaceous Openland	115.6		Stand was part Broken Compass Left-Over Sale #41-20-08-01. The stand was scarified during the summer of 2011 and the fall of 2012.  Regeneration was counted in June 2016 and the stand failed. There is very little regeneration and the stand will need to be planted.
36	500 - Water	10.6	No	
38	6233 - Wet Meadow	3.1	No	OPIC - FMD: Stand has areas that could be typed L instead of N. Soils are Markey Mucky Peat.
41	6233 - Wet Meadow	1.3	No	OPIC - FMD: Stand has areas that could be typed L instead of N. Soils are Markey Mucky Peat.
61	6233 - Wet Meadow	1.9	No	
62	500 - Water	27.9	No	
63	622 - Lowland Shrub	127.8	No	
64	6233 - Wet Meadow	283.4	No	
67	500 - Water	14.7	No	
74	6233 - Wet Meadow	5.6	No	OPIC - FMD: Soils are Markey Mucky Peat.
75	6233 - Wet Meadow	2.2	No	OPIC - FMD: Soils are Markey Mucky Peat.
77	6233 - Wet Meadow	4.1	No	
78	6233 - Wet Meadow	3.2	No	OPIC - FMD: Soils are Markey Mucky Peat.
79	6233 - Wet Meadow	2.9	No	OPIC - FMD: Soils are Markey Mucky Peat.





Stand	Cover Type	Acres	Managed Site	General Comments:
84	6229 - Mixed lowland shrub	58.8	No	