

## **Compartment Review Presentation**

**Shingleton Forest Management Unit** 

Compartment 41044 Entry Year 2019 Acreage: 2,042

**County Schoolcraft** 

Management Area: Seney Manistique Swamp

Revision Date: 2017-02-23

Stand Examiner: Adam Petrelius

**Legal Description:** 

T42N R16W Sections 3, 10, 11, 14, and 15

### **Identified Planning Goals:**

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

### Soil and topography:

The topography within the compartment is mostly flat. Slight elevation changes occur in the forested areas. About 60% of the compartment is unproductive forest with the majority of that acreage classified as treed bog. Approximately half of the remaining acreage is dominated by lowland conifers, and the other half is a mixture of red pine, jack pine, and white pine. The major soil types found within the compartment, in order of abundance, are Dawson-Greenwood-Loxley, Spot-Finch Complex, CarbondaleLupton-Tawas, and Rousseau-Neconish-Finch. Habitat types within the compartment, in order of abundance, are unclassified wetland, PVE, and PArVAa.

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

State land within this compartment was acquired between 1927 and 2010. Approximately half of the compartment boundary is bordered by state land. One interior private 40 acre parcel has been acquired from Plum Creek since previous inventory period. Numerous private landowners border the compartment on the south and east edges. Most of these owners have a camp on their property. Access to the compartment is limited and it is mostly used by these adjacent landowners.

### **Unique Natural Features:**

None known.

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

None known.

#### **Special Management Designations or Considerations:**

A portion of this compartment, located in the northeast corner, is designated as a Special Conservation Area. The reason for this designation is deeryard.

### **Watershed and Fisheries Considerations:**

The Sturgeon Hole Creek is found within this compartment. A warm-water stream, it supports resident fish and fish that migrate from the Manistique River. Yellow perch, northern pike, suckers and minnows have all been documented through fisheries surveys. Standard BMP's should be implemented to control sediment sources from adjacent uplands. Woodruf Lake is also found within this compartment. No files exist for this body of water, therefore, information regarding the aquatic community is not known.

#### Wildlife Habitat Considerations:

The eastern portion of this compartment is part of the Sturgeon Hole Deer Yard. The wildlife habitat management regime consist of maintaining closed canopy coniferous cover within the deer yard and promoting species and size class diversity within and between the forested islands of the marsh complex.

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

Surface sediments consist of lacustrine (lake) sand and gravel and peat & muck. There is insufficient data to determine the glacial drift thickness. The Silurian Cabothead Shale and Manitoulin Dolomite subcrop below the glacial drift. The Manitoulin could be used for stone/dolostone. A clay pit is located to the north and a gravel pit is located in Section 24, but there appears to be limited potential. There is no commercial oil and gas production in the UP.

#### **Vehicle Access:**

State highway M-94 travels through the eastern portion of the compartment. Two forest roads enter the main portion of the compartment. Both roads are in decent shape and will support vehicle traffic. However, both roads are gated and vehicle access to the majority of the compartment is limited to those private landowners. Spruceville Road travels southeast from M-94 for a short distance through the

compartment and eventually reaches the Haywire Grade.

### **Survey Needs:**

Survey work is needed.

### **Recreational Facilities and Opportunities:**

There are no recreational facilities located within the compartment. The Haywire Grade, a designated snowmobile trail, is located ½ mile east of the compartment.

Opportunities for hunting and other forms of recreational activity exist within the compartment.

#### **Fire Protection:**

Response time to fires within this compartment will be slow to moderate. Although there are 2 main forest roads entering the compartment, much of the compartment is low ground. Some areas of the compartment are more than 1 mile from the nearest road. A combination of organic soils, limited access, drought conditions, and lightning activity could make firefighting efforts difficult here. The compartment has only 1 surface water source that is easily accessible, the Sturgeon Hole Creek. Numerous other water sources are available a few miles away.

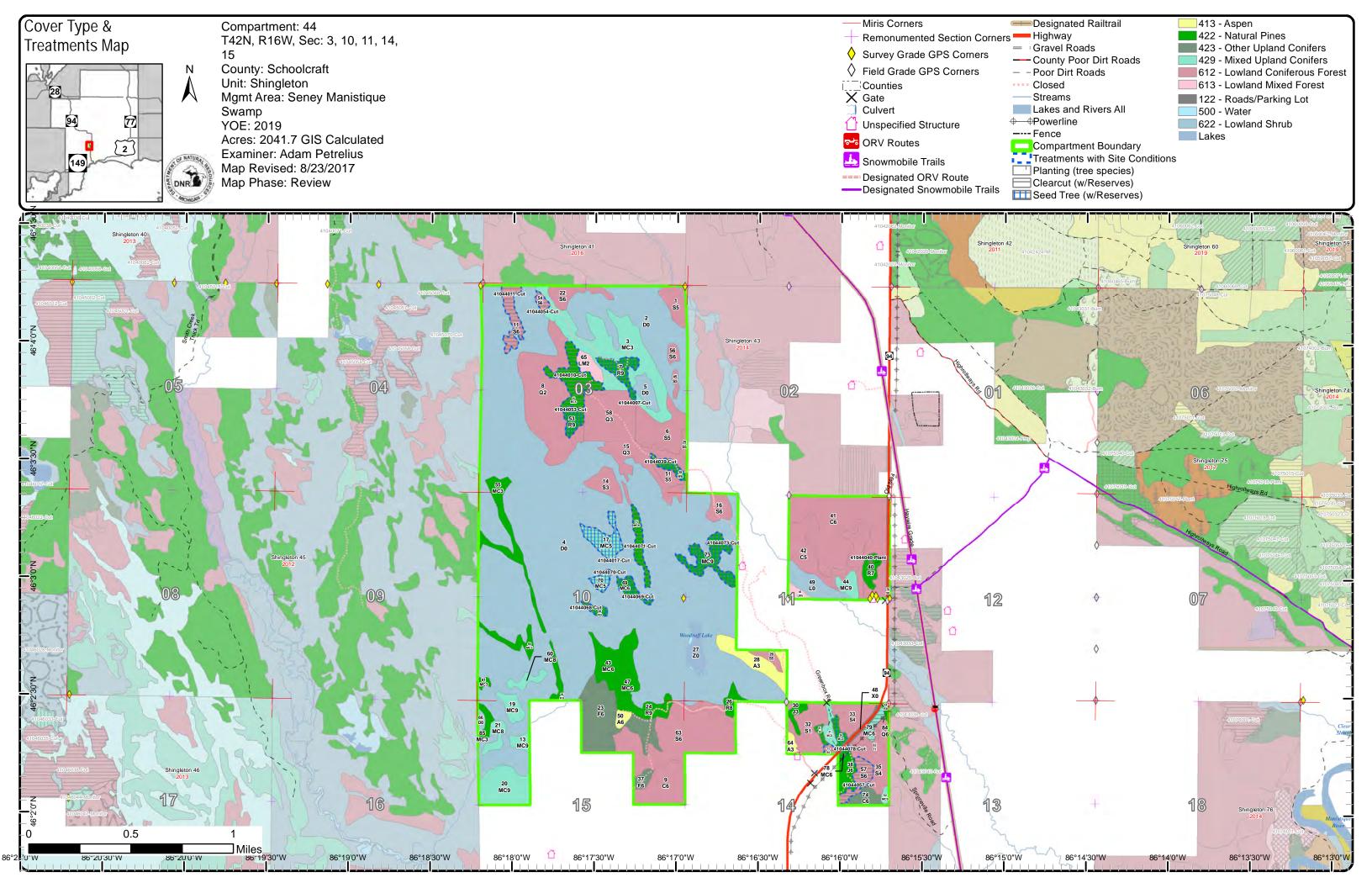
### **Additional Compartment Information:**

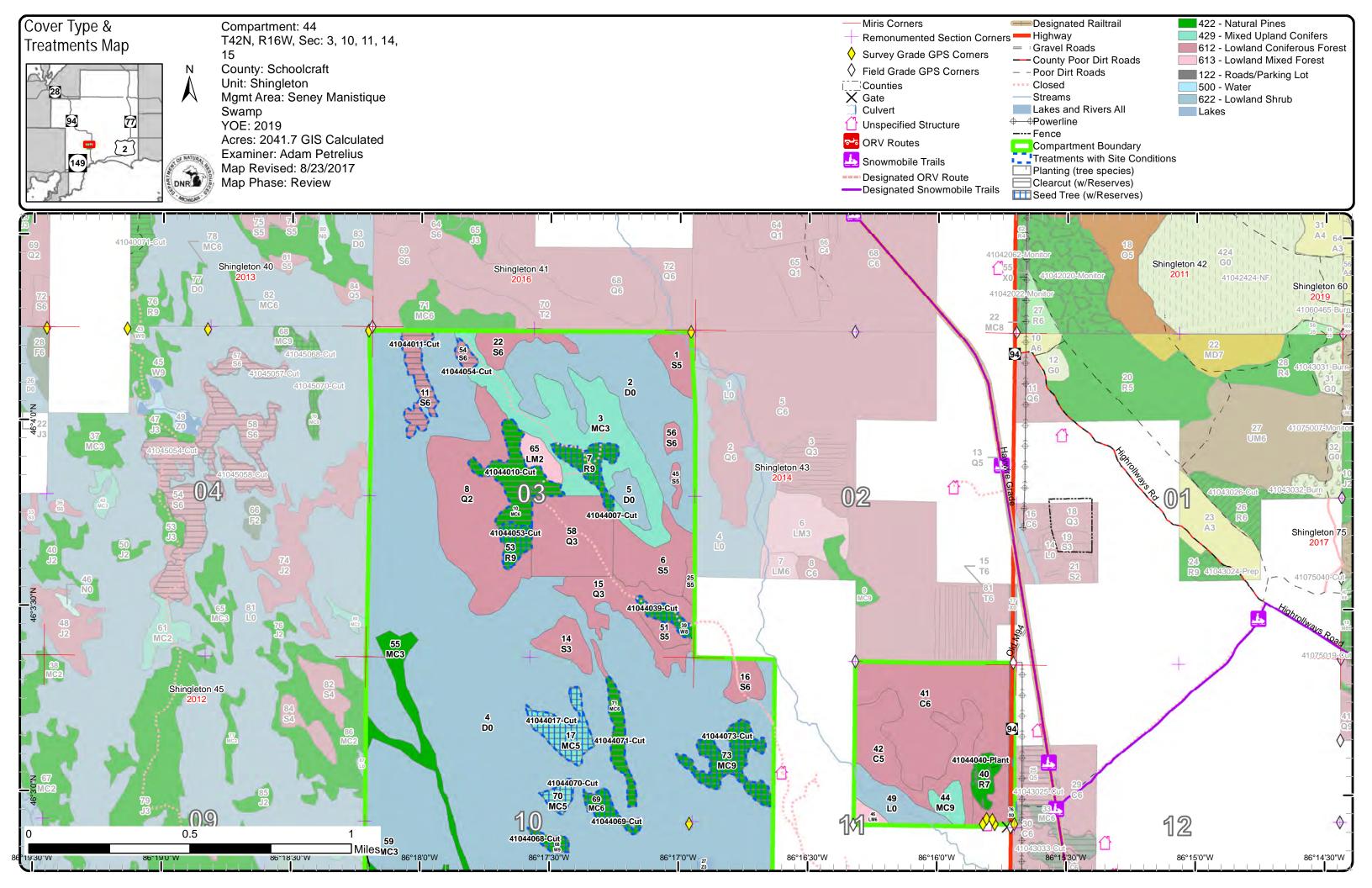
The following reports from the Inventory are attached:

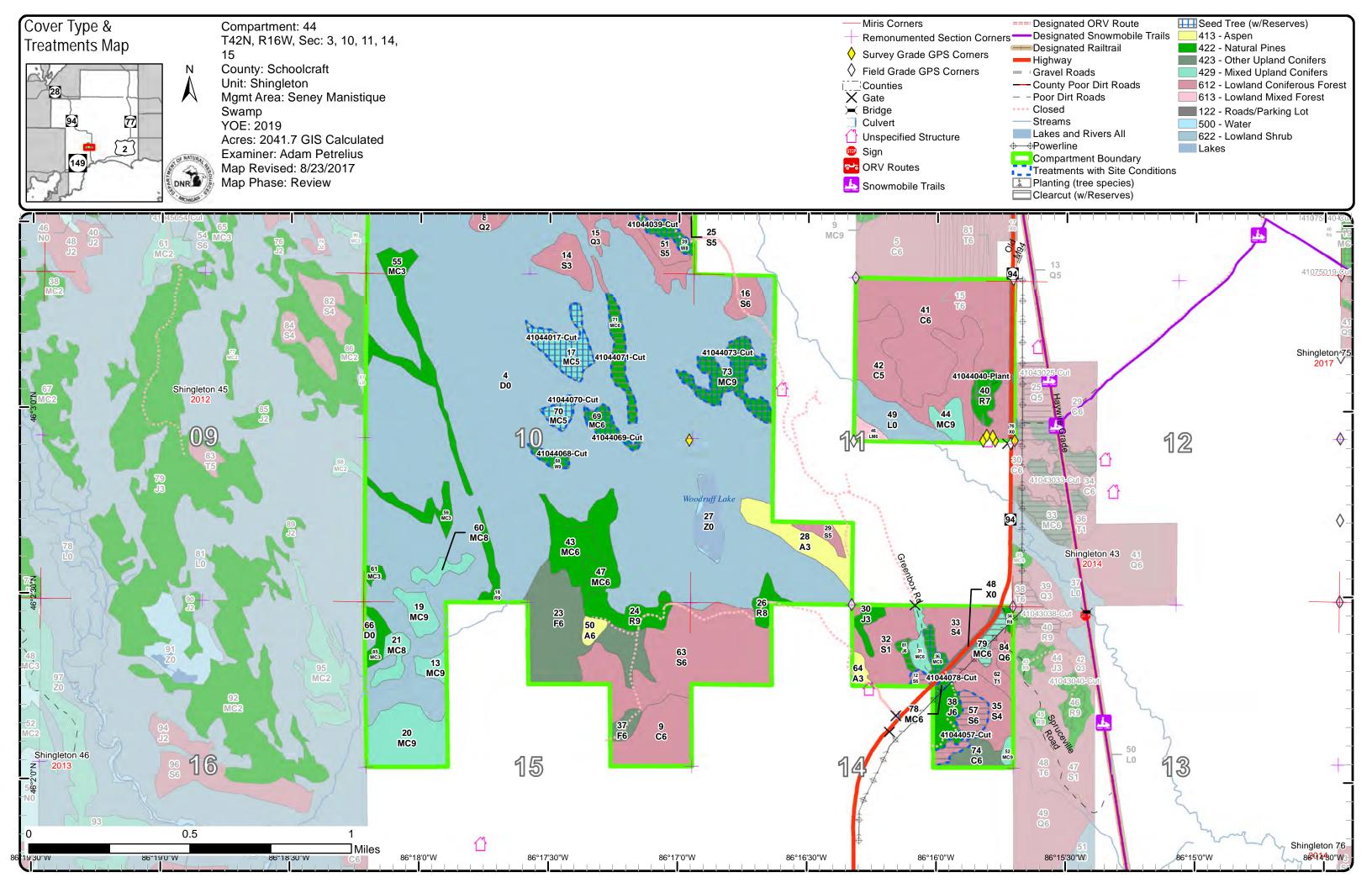
Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

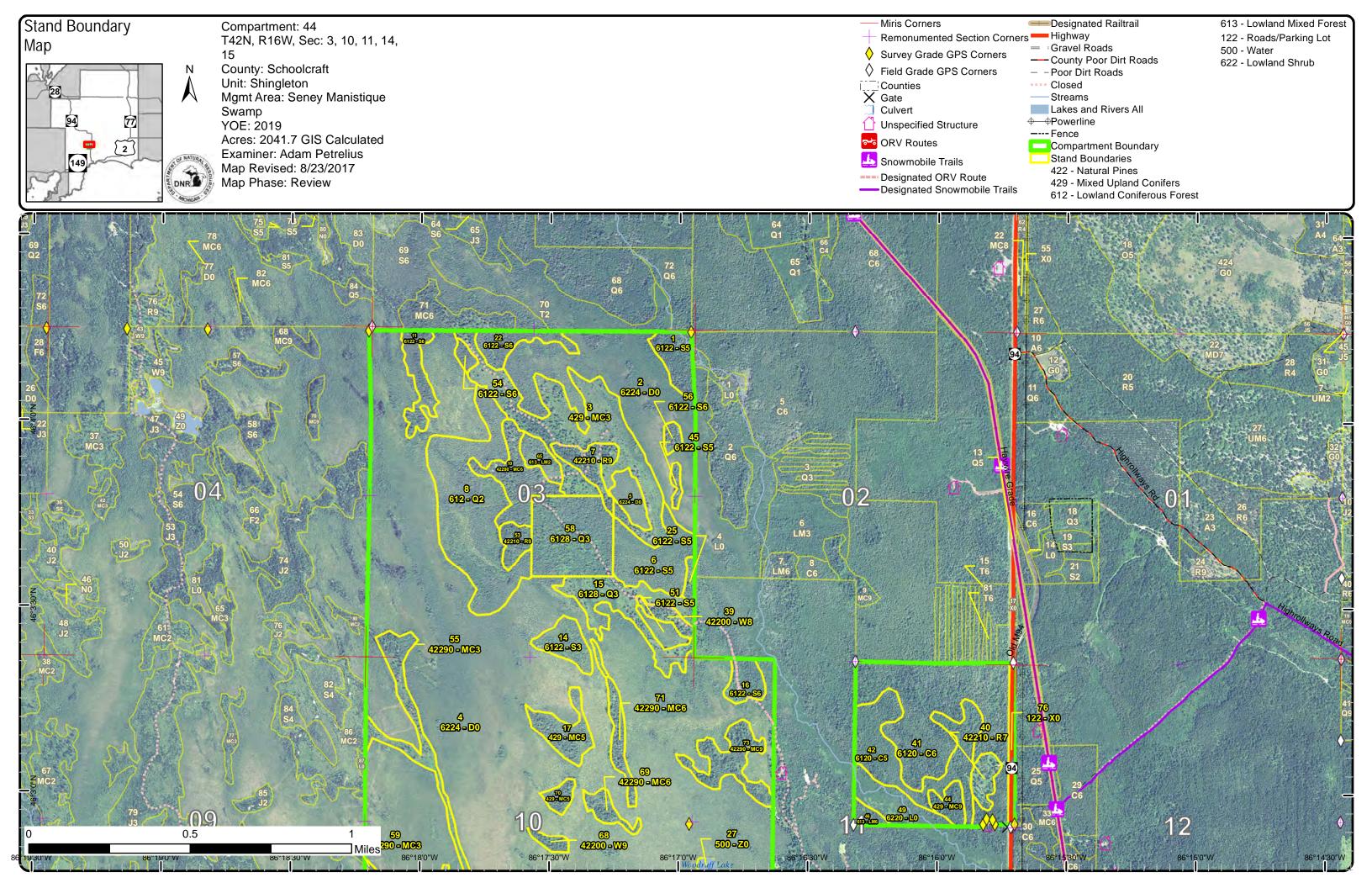
The following information is displayed, where pertinent, on the attached compartment maps:

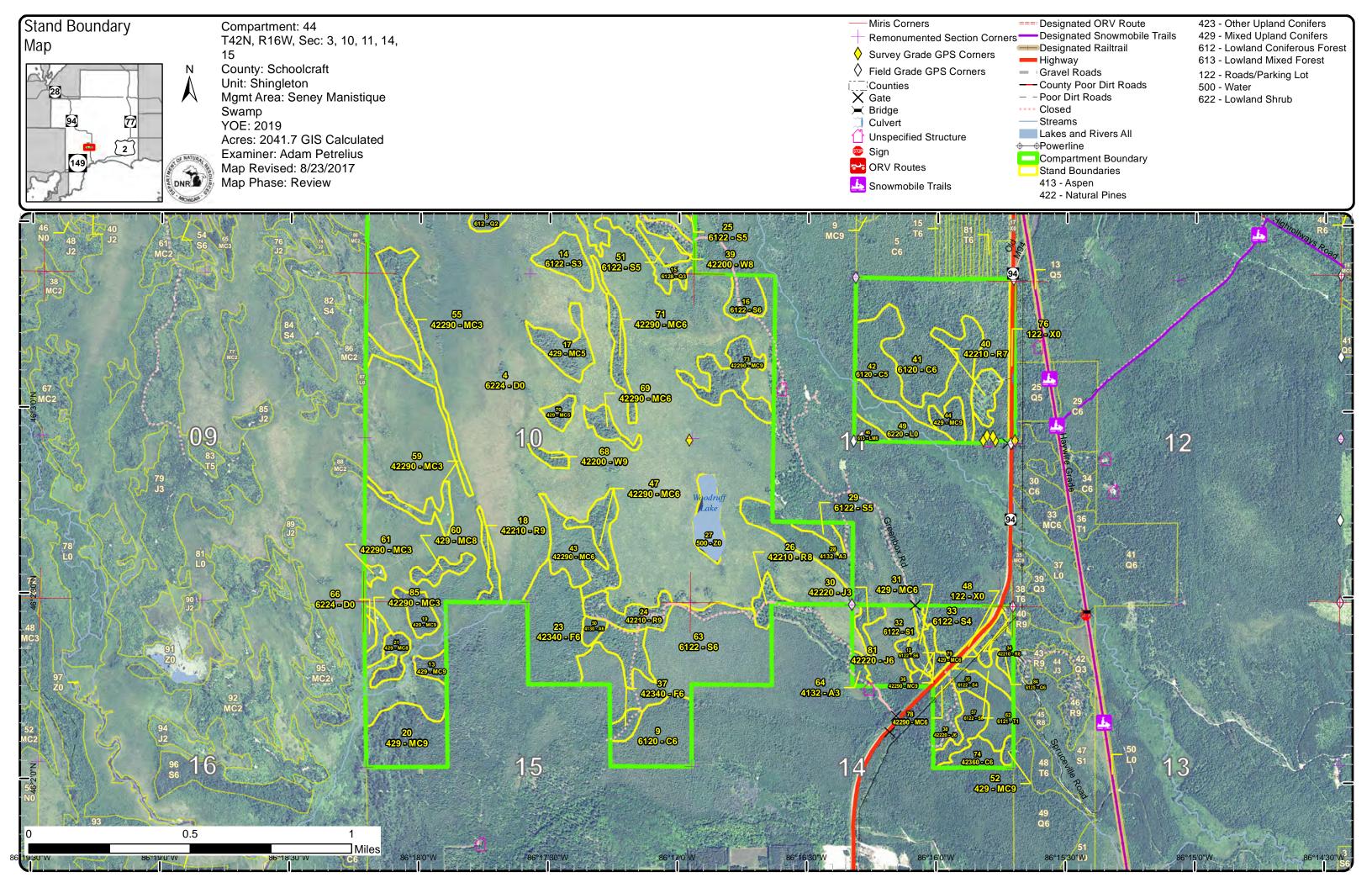
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

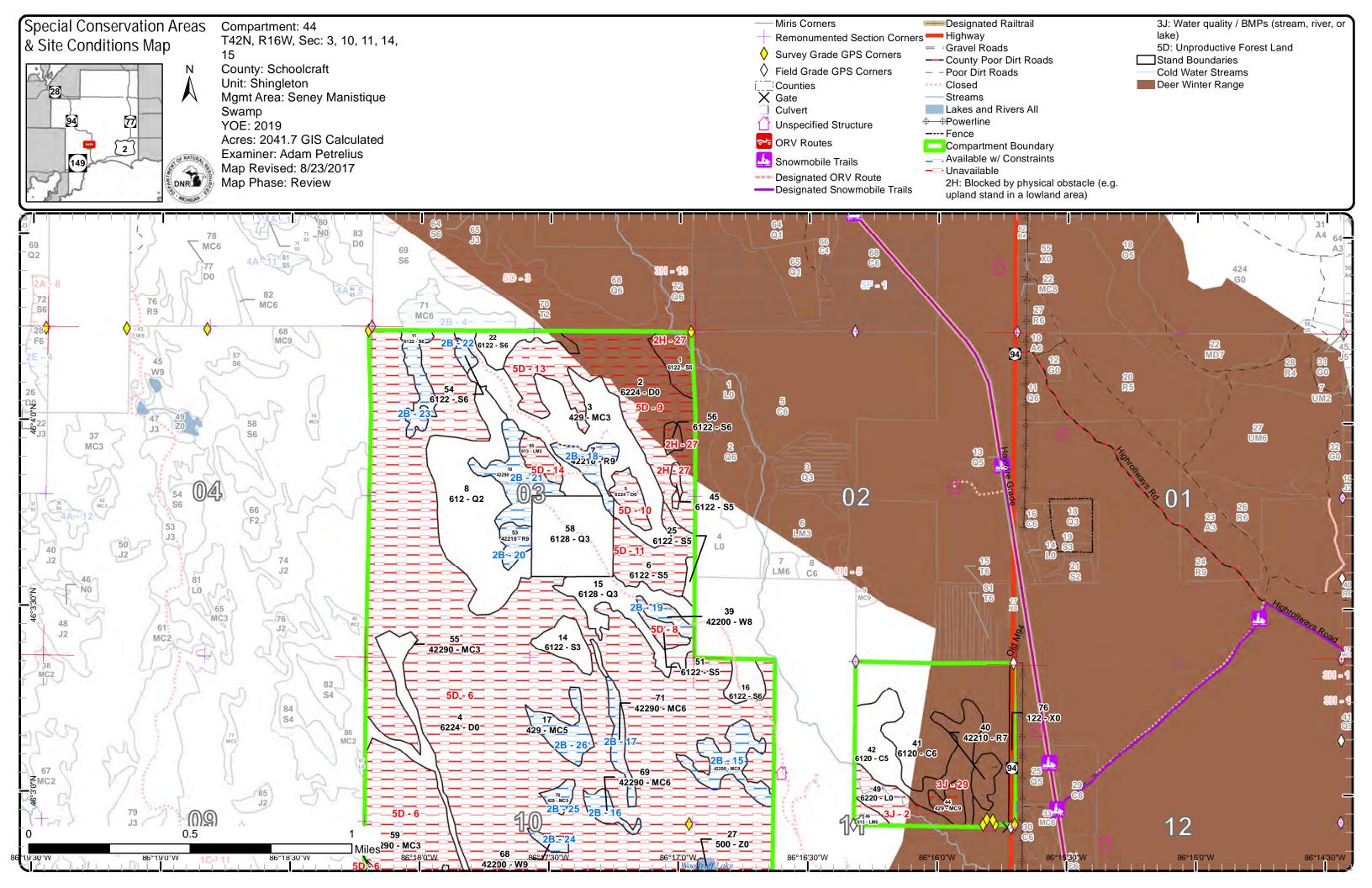


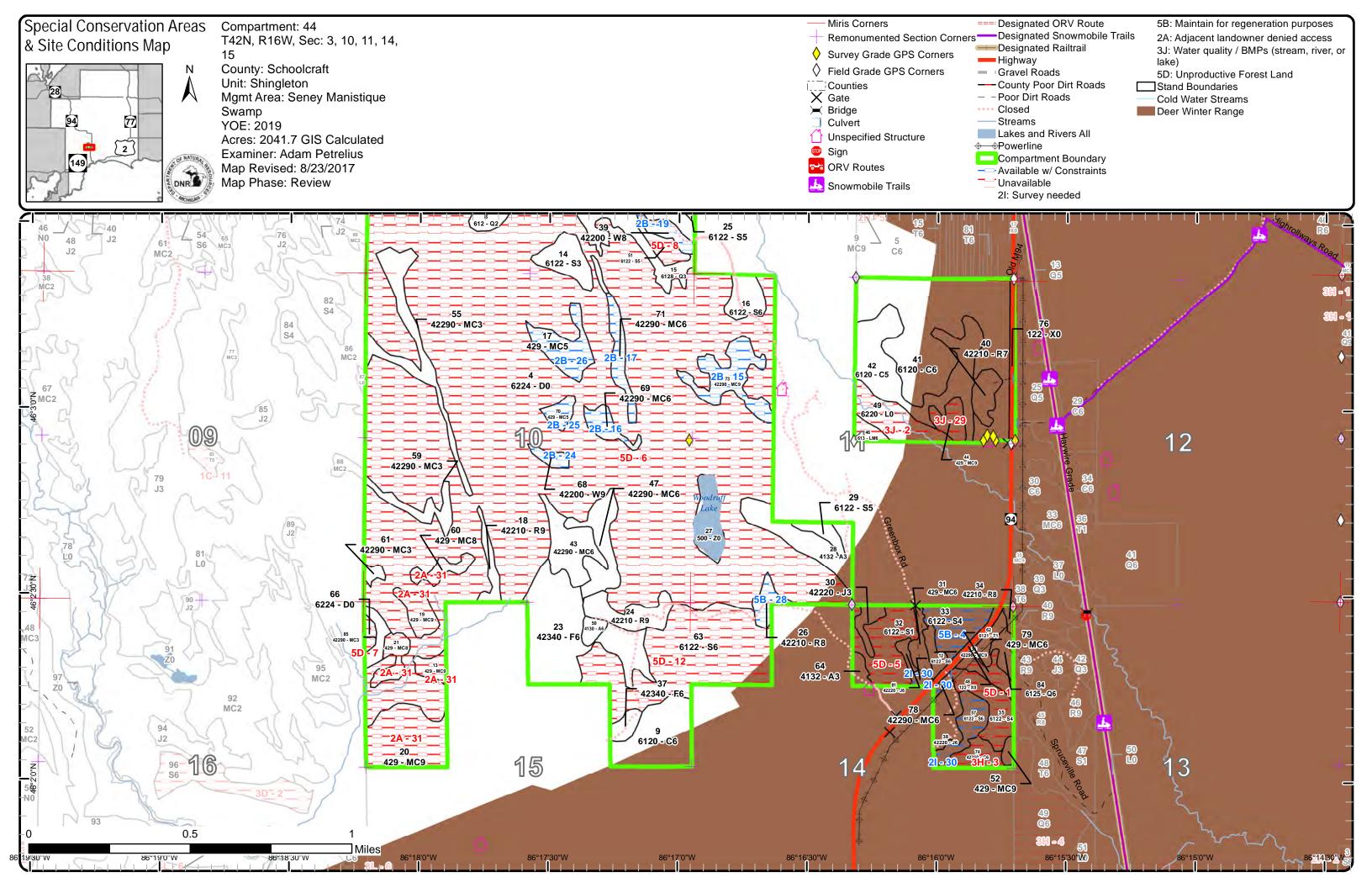












Shingleton Mgt. Unit

Compartment 44 Year of Entry 2019

Adam Petrelius : Examiner

## Age Class

	No.		3 / 2	\$ \ \	\$\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	8 / 4	18 18 18 18 18 18 18 18 18 18 18 18 18 1	, % / %	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	8 8	\$ / <sub>0</sub> /	20,00	81 /8.	\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	S. L.	Lis Li	St Jug	N. N
Aspen	0	0	0	22	3	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Cedar	0	0	0	0	26	0	0	0	0	0	122	7	0	0	0	0	0	0	155
Jack Pine	0	0	0	14	0	0	2	0	0	0	0	0	0	0	0	0	0	0	16
Lowland Conifers	0	0	28	40	0	75	0	0	0	0	0	0	0	0	0	0	0	0	142
Lowland Mixed Forest	0	0	0	0	0	0	4	0	7	0	0	0	0	0	0	0	0	0	11
Lowland Shrub	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Lowland Spruce/Fir	0	0	0	12	0	3	21	84	66	15	38	0	0	0	0	0	0	0	239
Natural Mixed Pines	0	0	35	0	31	0	1	0	18	0	40	0	0	0	0	0	0	0	125
Red Pine	0	0	0	0	0	0	0	0	18	1	30	0	0	0	0	0	0	0	49
Tamarack	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	6
Treed Bog	1023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1023
Upland Conifers	0	0	68	5	0	0	4	0	11	18	47	0	0	0	0	0	0	0	153
Upland Spruce/Fir	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0	52
Urban	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Water	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
White Pine	0	0	0	0	0	0	0	0	5	0	3	0	0	0	0	0	0	0	8
Total	1060	0	131	93	112	78	39	84	125	34	280	7	0	0	0	0	0	0	2041



## **Report 2 – Treatment Summary**

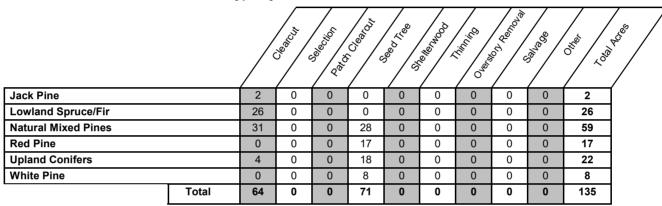
# Shingleton Mgt. Unit Year of Entry: 2019

#### **Acres of Harvest**

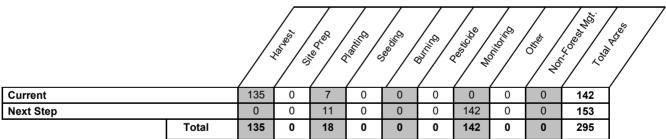
Compartment 44
Total Compartment Acres: 2,042

Commercial Harvest - 10 Harvests with Site Condition - 125 Next Step Harvest - 0 Habitat Cut - 0

### **Cover Type by Harvest Method**



## **Proposed and Next Step Treatments by Method**



Compartment: 44 Year of Entry: 2019

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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	41044007-Cut	10.6	42210 - Natural Red Pine	Sawtimber Well	90	81-110	Harvest	Seed Tree with Retention	4221 - Natural Red Pine	Even-Aged	Proposal

**Habitat Cut: No** Site Condition: Unknown Access

Prescription Leave some red pine and white pine for seed. This will be the retention. Do not cut hemlock and oak if present.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Maintaining red pine as the main species in this stand will be difficult due to stand size and location. It is expected that red pine will still be a

component of the stand, and any species mixture is acceptable. Regen:

Other Comment:

**Proposed Start Date:** 10/01/2018

10 41044010-Cut 213 42290 - Natural Poletimber 90 51-80 Harvest Clearcut with 429 - Mixed Proposal Even-Aged Mixed Pine Well Retention **Upland Conifers** 

**Habitat Cut:** No Site Condition: Unknown Access

Prescription Leave a few red pine and white pine for seed. Western finger can be saved as retention. Do not cut hemlock and oak if present. Harvest stand in Specs:

winter, frozen ground, or snow covered conditions only for T & E species protection.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any species present.

Regen:

**Other** Comment:

**Proposed Start Date:** 10/01/2018

41044011-Cut 12.2 6122 - Black Spruce Poletimber 80 81-110 Harvest Clearcut with 6122 - Black Even-Aged Proposal Retention Spruce

**Habitat Cut: No** Site Condition: Unknown Access

Prescription Leave some red pine and white pine for seed. Do not cut hemlock and oak if present. This will be the only retention left.

Specs:

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable Any species onsite.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

41044012-Cut 1.7 6122 - Black Spruce Poletimber 111-Harvest Clearcut 6122 - Black Even-Aged Proposal Well 140 Spruce

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

Prescription Cut all species except hemlock and oak. Less than 3% retention acceptable due to small stand size. Harvest stand in winter, frozen ground, or Specs:

snow covered conditions only for T & E species protection.

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Any species present.

Regen:

Other No buffer along M94. Safety concern with trees blowing over into highway.

Comment:

**Proposed Start Date:** 10/01/2018 Next Step Monitoring, Natural Regen (Re-Inventory)

<u>Treatments:</u>

Acceptable Red pine and white pine are desired, however due to small stand size and location they may end up being just a component of stand. Any species present is acceptable.

Other Comment:

Proposed Start Date: 10/01/2018

36 41044036-Cut 3.9 42290 - Natural Sawtimber 71 81-110 Harvest Seed Tree with 429 - Mixed Even-Aged Proposal Mixed Pine Well Retention Upland Conifers

Habitat Cut: No Site Condition:

Prescription Cut all species except hemlock and oak if present. Less than 3% retention is acceptable due to small stand size. Identify locations where oak was planted in past and exclude as retention areas if possible. Timbersale spec may be needed to protect planted oak if Green Box road is used as a landing area.

Next Step Planting, Initial Plant; Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable While red pine is desired, small stand size may dictate that it is only a component of stand. Any species present is acceptable.

Regen:

Other No buffer along M94. Safety concern with trees blowing over into highway.

Comment:

Proposed Start Date: 10/01/2018

39 41044039-Cut 5.3 42200 - Natural Sawtimber 75 111- Harvest Seed Tree with 429 - Mixed Even-Aged Proposal White Pine Medium 140 Retention Upland Conifers

<u>Habitat Cut:</u> No <u>Site Condition:</u> Unknown Access

<u>Prescription</u> Leave some red pine and white pine for seed. Do not cut hemlock and oak if present. Harvest stand in winter, frozen ground, or snow covered <u>Specs:</u> conditions only for T & E species protection.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable White pine and red pine regeneration is desired, however it may just end up being a component of the stand due to stand size and accessibility.

Regen: Any species mixture is present.

Other Comment:

Proposed Start Date: 10/01/2018

40 41044040-6.9 42210 - Natural Sawtimber 90 1-50 Planting Initial Plant 4319 - Mixed Two-Aged Proposal Poor Red Pine **Upland Forest** Plant

Habitat Cut: No Site Condition:

Prescription Plant oak and/or white spruce per WLD recommendations.

Specs:

Next Step Monitoring, Artificial Regen(1yr)

Treatments:

Acceptable Any species mixture onsite. Stand will be supplemented with white spruce and / or oak.

Regen: Other

Comment:

Proposed Start Date: 10/01/2018

Harvest

Seed Tree with

Retention

4221 - Natural

Red Pine

Even-Aged

Proposal

Red Pine Well **Habitat Cut: No** Site Condition: Unknown Access

42210 - Natural

Prescription Leave some red pine, white pine, and pockets of cedar for seed. This may be the only retention due to small stand size. Do not cut hemlock and oak if present. Harvest stand in winter, frozen ground, or snow covered conditions only for T & E species protection. Specs:

81-110

Next Step Monitoring, Natural Regen (Re-Inventory)

6.5

**Treatments:** 

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d 53 Name

41044053-Cut

Maintaining red pine as the main species in this stand will be difficult due to stand size and location. It is expected that red pine will still be a <u>Acceptable</u>

component of the stand, and any species mixture is acceptable. Regen:

Other Comment:

**Proposed Start Date:** 10/01/2018

2.6 6122 - Black Spruce Poletimber 54 41044054-Cut 88 81-110 Clearcut 6122 - Black Proposal Harvest Even-Aged

Spruce

Well Site Condition: Unknown Access

Sawtimber

Prescription Cut all trees except hemlock and oak if present. Less than 3% retention is acceptable due to small stand size.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

**Habitat Cut: No** 

Acceptable Any species present.

Regen:

**Other** Comment:

**Proposed Start Date:** 10/01/2018

41044057-Cut 9.9 6122 - Black Spruce Poletimber 93 81-110 Harvest Clearcut with 6122 - Black Even-Aged Proposal Well

Retention Spruce

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

Prescription Cut all trees except hemlock and oak if present. Exclude any dense pockets of cedar. Retention will be these exclusions, mainly in the SW

Specs: portion of the stand. Harvest stand in winter, frozen ground, or snow covered conditions only for T & E species protection.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any species present is acceptable

Regen:

RDR has been generated for access road off M94. Failed culvert in place that may be in M94 ROW. Access through private may be possible **Other** 

Comment:

Proposed Start Date: 10/01/2018

41044068-Cut 3.1 42200 - Natural Sawtimber 90 81-110 Seed Tree with 429 - Mixed Harvest Even-Aged Proposal

White Pine Well Retention **Upland Conifers** 

Site Condition: Unknown Access **Habitat Cut: No** 

Prescription Leave some red pine and white pine for seed. Do not cut any hemlock and oak if present. Less than 3% retention is acceptable due to small Specs:

stand size. Harvest stand in winter, frozen ground, or snow covered conditions only for T & E species protection.

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Red pine and white pine are desired, however due to small stand size and location they may end up just being a component of the stand. Any Acceptable

Regen: species present is acceptable.

Other Comment:

**Proposed Start Date:** 10/01/2018

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	0/
69	41044069-Cut	5.8	42290 - Natural Mixed Pine	Poletimber Well	70	81-110	Harvest	Seed Tree with Retention	429 - Mixed Upland Conifers	Even-Aged	Proposal	

Habitat Cut: No Site Condition: Unknown Access

<u>Prescription</u> Leave some red pine and white pine for seed. Do not cut any hemlock and oak if present, Less than 3% retention is acceptable due to small <u>Specs:</u> stand size. Harvest stand in winter, frozen ground, or snow covered conditions only for T & E species protection.

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

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Acceptable Red pine and white pine are desired, however due to small stand size and location they may end up just being a component of the stand. Any species present is acceptable.

Other Comment:

Proposed Start Date: 10/01/2018

70 41044070-Cut 4.2 429 - Mixed Upland Poletimber 85 51-80 Harvest Seed Tree with 429 - Mixed Even-Aged Proposal Retention Upland Conifers

Habitat Cut: No Site Condition: Unknown Access

Prescription Leave some red pine and white pine for seed. Do not cut any hemlock and oak if present. Less than 3% retention is acceptable due to small Specs: stand size. Harvest stand in winter, frozen ground, or snow covered conditions only for T & E species protection.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Red pine and white pine are desired, however due to small stand size and location they may end up just being a component of stand. Any

Regen: species present is acceptable.

Other Comment:

Proposed Start Date: 10/01/2018

71 41044071-Cut 8.6 42290 - Natural Poletimber 75 51-80 Harvest Clearcut 4222 - Natural Even-Aged Proposal Mixed Pine Well Jack Pine

Habitat Cut: No Site Condition: Unknown Access

<u>Prescription</u> Cut all species except hemlock and oak. Less than 3% retention is acceptable due to stand size and shape. Harvest stand in winter, frozen ground, or snow covered conditions only for T & E species protection.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any species is acceptable due to stand size and location.

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

73 41044073-Cut 18.5 42290 - Natural Sawtimber 90 51-80 Harvest Seed Tree with 429 - Mixed Even-Aged Proposal Retention Upland Conifers

Habitat Cut: No Site Condition: Unknown Access

<u>Prescription</u> Leave some red and white pine for seed. Do not cut any hemlock and oak if present. Harvest stand in winter, frozen ground, or snow covered conditions only for T & E species protection.

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Red pine and white pine regeneration are desired, however due to stand size and location they may just be a component of stand. Any species

Regen: present are acceptable.

Other Comment:

Proposed Start Date: 10/01/2018

Compartment: 44 Year of Entry: 2019

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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
78	41044078-Cut	1.3	42290 - Natural	Poletimber	59	81-110	Harvest	Clearcut with	4222 - Natural	Even-Aged	Proposal

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

Prescription Cut all trees except hemlock and oak if present. Less than 3% retention is acceptable due to small stand size. Harvest stand in winter, frozen Specs:

ground, or snow covered conditions only for T & E species protection.

Monitoring, Natural Regen (Re-Inventory); Planting, Initial Plant

Next Step **Treatments:** 

Acceptable Jack pine is preferred, however due to small stand size any species will be acceptable.

Regen:

Other No buffer along M94. Safety concern with trees blowing over into highway.

Comment:

**Proposed Start Date:** 10/01/2018

4222 - Natural 79 41044079-Cut 4.0 429 - Mixed Upland Poletimber 59 81-110 Harvest Clearcut with Even-Aged Proposal Conifers Well Retention Jack Pine

**Habitat Cut: No** Site Condition:

Prescription Cut all trees except hemlock and oak if present. Less than 3% retention is acceptable due to small stand size. Harvest stand in winter, frozen

ground, or snow covered conditions only for T & E species protection. Specs:

Next Step Planting, Initial Plant, Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Jack pine is preferred, however due to small stand size any species present will be accepted.

Regen:

Other No buffer along M94. Safety concern with trees blowing over into highway.

Comment:

10/01/2018 Proposed Start Date:

41044081-Cut 1.9 42220 - Natural Poletimber 51 81-110 Harvest Clearcut 4222 - Natural Even-Aged Proposal Jack Pine Well Jack Pine

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

Prescription Cut all species except hemlock and oak. Less than 3% retention is acceptable due to small stand size. Harvest stand in winter, frozen ground, or

snow covered conditions only for T & E species protection. Specs:

Next Step Planting, Initial Plant; Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any species onsite. Stand will likely regenerate to jack pine. FTP will be generated to supplement site with oak if available.

Regen:

Other Comment:

**Proposed Start Date:** 10/01/2018

**Total Treatment** 141.8 **Acreage Proposed:** 

Shingleton Mgt. Unit

Compartment: 44 Year of Entry: 2019 **Adam Petrelius : Examiner** 

Availa	ability for	Managemei	nt									
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Con	dition	s			
Acres	Available	With Condition	Not Available		2B	21	5B	2A	2H	3H	3J	5D
25	25	0	0	Aspen								
155	148	0	7	Cedar						7		
15	15	0	0	Jack Pine								
143	143	0	0	Lowland Conifers								
11	0	0	11	Lowland Mixed Forest							3	7
16	0	0	16	Lowland Shrub							16	
239	39	41	160	Lowland Spruce/Fir	15	12	14		17			143
125	70	55	0	Natural Mixed Pines	54	1						
48	26	23	0	Red Pine	17		5					
6	0	0	6	Tamarack								6
1023	0	0	1023	Treed Bog								1,023
153	79	18	57	Upland Conifers	18			50			6	
52	52	0	0	Upland Spruce/Fir								
10	10	0	0	Urban								
11	11	0	0	Water								
8	0	8	0	White Pine	8							
2,042	618	145	1,279	Total Forested Acres	112	13	20	50	17	7	26	1,179
	30%	7%	63%	Relative Percent								

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

le 5D: Unproductive Forest Land	20	2G: Too wet (sensitive soils, does not include	Unspecified	Unspecified	Unspecified
		access issues)		·	2
le 3J: Water quality / BMPs (stream, river, or lake)	19	Unspecified	Unspecified	Unspecified	Unspecified
				· · · · · · · · · · · · · · · · · · ·	

Shingleton Mgt. Unit
Adam Petrelius : Examiner

3	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	7	3L: Other wildlife concerns	Unspecified	Unspecified	Unspecified
	Comments: Stand is pretty muc	h pure cedar. It is located at the	e southe	ern end of the deer winterir	ng area.		
4	Available	5B: Maintain for regeneration purposes	14	4A: No Markets Available for these Forest Products	Unspecified	Unspecified	Unspecified
	Comments: Canopy has mature	e trees but is sparse. Not enoug	jh volum	ne to cut. Being replaced b	y similar species. Rutting ri	sk also if harvested due to	lack of tops to drive on.
5	Unavailable	5D: Unproductive Forest Land	21	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	5D: Unproductive Forest Land	923	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	5D: Unproductive Forest Land	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Unavailable	5D: Unproductive Forest Land	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

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Commen  11 Unav  Commen	vailable nts: vailable	5D: Unproductive Forest Land 5D: Unproductive Forest Land	8 27	Unspecified	Unspecified	Unspecified	Unspecified
Commen  11 Unav  Commen	nts: vailable	Land  5D: Unproductive Forest		Unspecified	Unspecified	Unspecified	Unspecified
11 Unav Commen	vailable		27				
Commen			27				
	nts:			Unspecified	Unspecified	Unspecified	Unspecified
12 <b>Unav</b>							
	vailable	5D: Unproductive Forest Land	76	Unspecified	Unspecified	Unspecified	Unspecified
Commen	nts:						
13 Unav	vailable	5D: Unproductive Forest Land	20	Unspecified	Unspecified	Unspecified	Unspecified
Commen	nts:						
14 <b>Unav</b>	vailable	5D: Unproductive Forest Land	7	Unspecified	Unspecified	Unspecified	Unspecified
Commen	nts:						

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Available	2B: Unknown if access through adjacent landowner(s) is possible	19	Unspecified	Unspecified	Unspecified	Unspecified
omments:						
Available	2B: Unknown if access through adjacent landowner(s) is possible	6	Unspecified	Unspecified	Unspecified	Unspecified
omments:						
Available	2B: Unknown if access through adjacent landowner(s) is possible	9	Unspecified	Unspecified	Unspecified	Unspecified
omments:						
Available	2B: Unknown if access through adjacent landowner(s) is possible	11	Unspecified	Unspecified	Unspecified	Unspecified
omments:						
Available	2B: Unknown if access through adjacent landowner(s) is possible	5	Unspecified	Unspecified	Unspecified	Unspecified
omments:						
	Available  Available  Available  Available  Available  Available  Available	through adjacent landowner(s) is possible omments:  Available 2B: Unknown if access through adjacent landowner(s) is possible omments:  Available 2B: Unknown if access through adjacent landowner(s) is possible omments:  Available 2B: Unknown if access through adjacent landowner(s) is possible omments:  Available 2B: Unknown if access through adjacent landowner(s) is possible omments:	through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible	through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Available 2B: Unknown if access 11 Unspecified through adjacent landowner(s) is possible  Available 2B: Unknown if access 5 Unspecified through adjacent landowner(s) is possible	through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible	through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Available 2B: Unknown if access through adjacent landowner(s) is possible  Domments:  Available 2B: Unknown if access 9 Unspecified Unspecif

Shingleton Mgt. Unit
Adam Petrelius : Examiner

20 <b>Av</b>	/ailable	2B: Unknown if access through adjacent landowner(s) is possible	7	Unspecified	Unspecified	Unspecified	Unspecified
Comme	ents:						
21 <b>Av</b>	/ailable	2B: Unknown if access through adjacent landowner(s) is possible	21	Unspecified	Unspecified	Unspecified	Unspecified
Comme	ents:						
22 <b>Av</b>	/ailable	2B: Unknown if access through adjacent landowner(s) is possible	3	Unspecified	Unspecified	Unspecified	Unspecified
Comme	ents:						
23 <b>Av</b>	/ailable	2B: Unknown if access through adjacent landowner(s) is possible	12	Unspecified	Unspecified	Unspecified	Unspecified
Comme	ents:						
24 <b>A</b> v	/ailable	2B: Unknown if access through adjacent landowner(s) is possible	3	Unspecified	Unspecified	Unspecified	Unspecified
Comme	ents:						
Comme	ents:	iandowner(s) is possible					

Shingleton Mgt. Unit

Adam Petrelius : Examiner

25	Available	2B: Unknown if access through adjacent landowner(s) is possible	4	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							
26	Available	2B: Unknown if access through adjacent landowner(s) is possible	14	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							
27	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	17	3J: Water quality / BMPs (stream, river, or lake)	2B: Unknown if access through adjacent landowner(s) is possible	4A: No Markets Available for these Forest Products	Unspecified	
Comments: Small isolated islands, Sturgeon Hole Creek Buffer.								
28	Available	5B: Maintain for regeneration purposes	6	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: harvested last entry	y, hold till other stands are read	y for ha	arvest				
29	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	6	2I: Survey needed	Unspecified	Unspecified	Unspecified	
	Comments:  Large wet area/drainage would need to be crossed to access stand along with survey needs. These 2 factors combined with the small acreage and steep ridge make this stand undesirable to harvest alone.							
30	Available	2I: Survey needed	13	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							

Shingleton Mgt. Unit
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Compartment: 44 Year of Entry: 2019

31 Unavailable 2A: Adjacent landowner 50 2H: Blocked by physical Unspecified Unspecified

#### **Comments:**

Access to these stands involves crossing 3 different private landowners. One landowner who controls the main access expressed concerns with a timbersale since he did not want his road tore up. Access to some units would also involve a stream crossing and multiple marsh crossings.

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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
Comments				

Shingleton Mgt. Unit Compartment: 44
Year of Entry 2019



# 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.

Conservation Area	ı Туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions stocked trout populations and those of other coldwater fish spectyear to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	ies (e.g., slimy sculpin) to persist from ese conditions due to substantial
and Waterfowl Production Areas, deer wi openings and savannas. Habitat areas a endangered or threatened species (such general in nature, are not primarily assoc		An area that provide some specific need for the life cycle of wild and Waterfowl Production Areas, deer wintering complexes in lo openings and savannas. Habitat areas are distinct from critical hendangered or threatened species (such as Kirtland's warbler or general in nature, are not primarily associated with threatened o covered by species recovery plans that are developed in cooper	wland conifer communities, grassland habitat designated for recovery of piping plover areas) in that they are more r endangered species, and are not

S t	Shingletor	Shingleton Mgt. Unit			- Forested	Stands Compartment: 44 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6122 - Black Spruce	Poletimber Medium	11.7	70	1-50	
3	429 - Mixed Upland Conifers	Sapling Well	67.7	14	1-50	OPIC - FMD: [7-24-03BB] 20-99 Sturgeon Hole Sale, Cut winter 2003 (5/24/06 AP) Stand was planted in spring 2006. A total of 19,000 jack pine were planted in this stand and stand 5. Regen check needed in 2007. (5/8/07 AP) 2007 regen check: 470 jack pine, 200 black spruce, 30 white pine, 20 fir, 60 tamarack. High ground that was planted was counted only. The majority of the stand is low ground and is regenerating excellent to black spruce and tamarack. For this reason, the cover type and management objective will be changed to spruce. Close FTP C41-920.
6	6122 - Black Spruce	Poletimber Medium	26.9	70	1-50	
7	42210 - Natural Red Pine	Sawtimber Well	10.6	90	81-110	Stand was set up in 2011 and never sold, Oversize snowmachine. Canopy data was generated from cruise cards.
8	612 - Lowland Coniferous Forest	Sapling Medium	70.4	40	Unspecified	Stand may be classified as unproductive in many areas. Difficult to determine.
9	6120 - Lowland Cedar	Poletimber Well	25.9	35	51-80	
10	42290 - Natural Mixed Pine	Poletimber Well	21.3	90	51-80	OPIC - FMD: Stand is mostly black spruce with some jack pine and tamarack present. White pine and red pine logs are found throughout stand. Mark red pine and white pine to cut, leaving some good seed trees. Alternative management objectives include any species mixture currently found onsite.
						Retention: Do not cut hemlock and oak. Leave some white pine and red pine for seed. Northwest portion of stand can be excluded and saved as a retention patch.
						Access: Easiest access is through private land along the Green Box Road. I spoke with one private owner, and he deined us permission to cross his land. The only other route to this stand would be down the Smith Creek Road (7 mile snow plow, about 1 mile is along snowmobile trail). Approximately 1/4 mile of new road would need to be constructed over a very steep ridge. Harvesting operations would need to be limited to the winter since a portion of the road would need to be frozen.
						4/5/11 BB Stand has been prepared and is on proposal 41-015-11-01 Oversize Snowmachine, an easement has been attained and we are attempting to sell timber, factors have been removed. Actual acres = 14, Unit 4. Residual Basal Area = red pine 8 sq ft, white pine 6 sq ft (14 total)
11	6122 - Black Spruce	Poletimber Well	12.2	80	81-110	Stand was set up in 2011, Oversize snowmachine timbersale.  Never offered for sale. access issues. Canopy data was derived from cruise cards.
12	6122 - Black Spruce	Poletimber Well	1.7	77	111-140	

s t	Shingleto	Shingleton Mgt. Unit			<ul><li>Forested</li></ul>	Stands Compartment: 44 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
13	429 - Mixed Upland Conifers	Sawtimber Well	4.4	75	81-110	
14	6122 - Black Spruce	Sapling Well	12.1	28	Immature	
15	6128 - Lowland Coniferous, Mixed Deciduous	Sapling Well	28.2	14	1-50	[7-24-03BB] 20-99 Sturgeon Hole Sale, Cut winter 2003
16	6122 - Black Spruce	Poletimber Well	8.5	62	1-50	
17	429 - Mixed Upland Conifers	Poletimber Medium	13.5	85	51-80	Mixture of jack pine, black spruce, red pine and white pine logs.  Spruce and jack pine are only a couple sticks tall. Logs are sparse.
18	42210 - Natural Red Pine	Sawtimber Well	5.1	70	111-140	Only got a quick look at stand from distance.
19	429 - Mixed Upland Conifers	Sawtimber Well	7.4	90	51-80	
20	429 - Mixed Upland Conifers	Sawtimber Well	27.1	90	51-80	
21	429 - Mixed Upland Conifers	Sawtimber Medium	6.3	90	51-80	
22	6122 - Black Spruce	Poletimber Well	11.2	70	51-80	Stand was not scheduled last year of entry because diameters were to small and it is borderline unproductive. If management occurs it should be in conjunction with spruce stand in adjacent compartment.
23	42340 - Upland Spruce/Fir	Poletimber Well	47.8	35	1-50	OPIC - FMD: OI Stand Year Origin was 1982
24	42210 - Natural Red Pine	Sawtimber Well	12.6	73	51-80	3/21/11 bb Stand is now on proposal 41-005-11 Wet Foot Sale, factors will be removed for stand access may still be an issue for the purchaser but if landowner will not allow access a road around on State land will be built. Stand is Unit 3 and actual acreage is 10. Residual Basal Area = Red Pine 30 sq ft and white pine 23 sq ft. Notes indicate basal area needed to be reduced due to operability on steep slopes. FTP W41-1486 submitted to under-plant white spruce and white pine also.  [12/27/2013 TI] Sale is closed. TCR Date of 9/24/2013.
						Stands were not previously planted under WLD FTP. Possibly do an overstory removal harvest in future when adjacent stands are ready.
25	6122 - Black Spruce	Poletimber Medium	2.6	40	1-50	Small upland portion of stand 6 that was delineated after field work was complete. May serve as a better location for new harvest roads in future.

s t	Shingleton	Shingleton Mgt. Unit			– Forested	Stands Compartment: 44 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
26	42210 - Natural Red Pine	Sawtimber Medium	5.5	90	51-80	3/21/11 bb Stand is now on proposal 41-005-11 Wet Foot Sale, factors will be removed for stand, access may still be an issue for the purchaser but if landowner will not allow access a road around on State land will be built. Stand is Unit 2 and actual acreage is 4. Residual Basal Area = Red Pine 24 sq ft and white pine 16 sq ft. FTP W41-1486 submitted to under-plant white spruce and white pine also.
						[12/27/2013 TI] Sale is closed. TCR date 9/24/2013.
						Stands were not previously planted under WLD FTP and prescription specs from last year stated "Acceptable alternative management objectives included any species mixture currently found onsite." Stand is currently fully regenerated, mostly aspen, but could have a harvest in the future since overstory is still 50 basal area.
28	4132 - Aspen, Jack Pine	Sapling Well	19.3	23	1-50	
29	6122 - Black Spruce	Poletimber Medium	4.2	70	1-50	poor quality site borderline unproductive. Unsure if it will ever be cut.
30	42220 - Natural Jack Pine	Sapling Well	4.3	23	1-50	
31	429 - Mixed Upland Conifers	Poletimber Well	5.0	25	1-50	Oak saplings were planted by wildlife division in May 2011. noticed there were some still present and doing well in 2016
32	6122 - Black Spruce	Sapling Poor	21.4	51	1-50	
33	6122 - Black Spruce	Poletimber Poor	14.4	93	1-50	not enough canopy to be worth harvesting. being replaced by similar species.
34	42210 - Natural Red Pine	Sawtimber Medium	1.3	84	51-80	Cut in spring 2016
35	6122 - Black Spruce	Poletimber Poor	13.8	93	1-50	poor site, wet and stunted
36	42290 - Natural Mixed Pine	Sawtimber Well	3.9	71	81-110	Oak saplings were planted by wildlife division in May 2011. These were mostly along the edges of this stand and more in 31.
37	42340 - Upland Spruce/Fir	Poletimber Well	4.0	35	1-50	OPIC - FMD: OI Stand Year Origin was 1982
38	42220 - Natural Jack Pine	Poletimber Well	9.2	27	1-50	Oak saplings were planted by wildlife division in May 2011.
39	42200 - Natural White Pine	Sawtimber Medium	5.3	75	111-140	

S t	Shingletor	Shingleton Mgt. Unit			– Forested	Stands Compartment: 44 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
40	42210 - Natural Red Pine	Sawtimber Poor	6.9	90	1-50	Previous inventory notes stated WLD would like to plant white spruce and oak in this stand. Unsure if this ever got done, but stand needs some regeneration work. Carry treatment forward for planting of white spruce and oak.
						3/21/11 bb Stand is now on proposal 41-005-11 Wet Foot Sale, factors will be removed for stand, access may still be an issue for the purchaser for other unit sbut not this one. Stand is Unit 1 and actual acreage is 7. Residual Basal Area = Red Pine 13 sq ft and white pine 13 sq ft and cedar 20 sq ft FTP W41-1486 submitted to under-plant white spruce.
						[12/27/2013 TI] Sale closed. TCR Date 9/24/2013
41	6120 - Lowland Cedar	Poletimber Well	82.0	90	81-110	OPIC - FMD: The southern boundary of this stand appears to have some items in trespass which include: propane tank, fire pit, clothesline, blind, storage shed, outhouse, illegal 4 wheeler trail, 55 gallon empty drum. Adjacent landowner appears to have built a portion of road (100 feet long) across state land, and cut at least 14 trees in the parking area. The site is currently being checked by our surveyors.  (3/15/07 AP) Site was surveyed, and items were found in trespass. Landowner was contacted and he agreed to move the items by June 1, 2007.  Area was surveyed and a portion of the land was sold. See compartment boundary adjustment.
42	6120 - Lowland Cedar	Poletimber Medium	39.7	90	51-80	
43	42290 - Natural Mixed Pine	Poletimber Well	15.9	35	1-50	
44	429 - Mixed Upland Conifers	Sawtimber Well	6.3	75	81-110	
45	6122 - Black Spruce	Poletimber Medium	2.2	70	51-80	
46	613 - Lowland Mixed Forest	Poletimber Well	3.5	57	51-80	
47	42290 - Natural Mixed Pine	Poletimber Well	15.5	35	1-50	
50	4130 - Aspen	Poletimber Well	3.1	35	51-80	
51	6122 - Black Spruce	Poletimber Medium	5.2	70	1-50	
52	429 - Mixed Upland Conifers	Sawtimber Well	1.8	90	81-110	Small island of pine surrounded by low ground. If it is ever managed it should go with adjacent compartment to east.
53	42210 - Natural Red Pine	Sawtimber Well	6.5	92	81-110	Stand was set up in 2011 and never sold, Oversize snowmachine. Canopy data was generated from cruise cards.

Shingle t		on Mgt. Unit		Report 7	– Forested	Stands Compartment: 44 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
54	6122 - Black Spruce	Poletimber Well	2.6	88	81-110	
55	42290 - Natural Mixed Pine	Sapling Well	20.5	16	1-50	2007 comment: Part of Buck sale. Stand has regenerated well to a mixture of red pine and white pine seedlings.
56	6122 - Black Spruce	Poletimber Well	2.9	70	1-50	
57	6122 - Black Spruce	Poletimber Well	9.9	93	81-110	slow growing. tree size decreases as you head east.
58	6128 - Lowland Coniferous, Mixed Deciduous	Sapling Well	39.5	25	1-50	Stand was purchased in 2010 from Plum Creek. It contains an easement along the Greenbox road also. it is estimated that all species were harvested about 25 years ago except some red pine and white pine were left on the higher ridges.
59	42290 - Natural Mixed Pine	Sapling Well	7.8	16	1-50	2007 Comment: Part of Buck sale. Stand has regenerated well to a mixture of red pine and white pine seedlings.
60	429 - Mixed Upland Conifers	Sawtimber Medium	5.1	90	51-80	
61	42290 - Natural Mixed Pine	Sapling Well	1.8	16	1-50	2007 Comment: Part of Buck sale. Stand has regenerated well to a mixture of red pine and white pine seedlings.
62	6121 - Tamarack	Sapling Poor	6.5	51	1-50	
63	6122 - Black Spruce	Poletimber Well	75.6	60	1-50	Previous age was 35 since it was thought to have been harvested 35 years ago according to cutting records. However, upon further inspection of the old timbersale this stand was not harvested and was excluded on multiple old maps as a D type.  Will be factor limited as unproductive.
64	4132 - Aspen, Jack Pine	Sapling Well	3.0	23	1-50	
65	613 - Lowland Mixed Forest	Sapling Medium	7.1	70	1-50	
68	42200 - Natural White Pine	Sawtimber Well	3.1	90	81-110	
69	42290 - Natural Mixed Pine	Poletimber Well	5.8	70	81-110	Stand was set up in 2011 and never sold, Oversize snowmachine. Canopy data was generated from cruise cards.
70	429 - Mixed Upland Conifers	Poletimber Medium	4.2	85	51-80	Mixture of jack pine, black spruce, red pine and white pine logs.  Spruce and jack pine are only a couple sticks tall. Logs are sparse.

s t	Shingleton Mgt. Unit			Report 7	– Forested	Stands Compartment: 44 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
71	42290 - Natural Mixed Pine	Poletimber Well	8.6	75	51-80	OPIC - FMD: Stand is a long, narrow ridge of jack pine. Access to stand will have to be through about 100 feet of D0 cover type. Acceptable alternative management objective includes any species mixture currently found onsite. Scarification is impractical, and stand regeneration will be checked according to the regeneration timeclock.
						Retention: Leave some red pine and white pine for seed. These can be marked with green paint to leave, or incorperated into the boundary line. Do not cut hemlock and oak. No retention patches will be left due to the stands size and shape.
						Access: Easiest access is through private land along the Green Box Road. I spoke with one private owner, and he deined us permission to cross his land. The only other route to this stand would be down the Smith Creek Road (7 mile snow plow, about 1 mile is along snowmobile trail). Approximately 1/4 mile of new road would need to be constructed over a very steep ridge. Harvesting operations would need to be limited to the winter since a portion of the road would need to be frozen.
						4/5/11 BB Stand has been prepared and is on proposal 41-015-11-01 Oversize Snowmachine, an easement has been attained and we are attempting to sell timber, factors have been removed. Actual acres = 8, Unit 5. Residual Basal Area = red pine 3 sq ft, white pine 9 sq ft (12 total)
73	42290 - Natural Mixed Pine	Sawtimber Well	18.5	90	51-80	Stand was set up but never offered in 2011, Oversize snowmachine sale. Access issues with private landowners. Canopy data was generated from cruise cards and residual basal areas.
74	42360 - Upland Cedar	Poletimber Well	7.4	102	81-110	
78	42290 - Natural Mixed Pine	Poletimber Well	1.3	59	81-110	cut all.
79	429 - Mixed Upland Conifers	Poletimber Well	4.0	59	81-110	
81	42220 - Natural Jack Pine	Poletimber Well	1.9	51	81-110	
84	6125 - Lowland Black Spruce, Jack Pine	Poletimber Well	4.5	45	51-80	Some jack pine and red pine present on higher ground along with paper birch.
85	42290 - Natural Mixed Pine	Sapling Well	4.7	16	1-50	2007 Comment: Part of Buck sale. Stand has regenerated well to a mixture of red pine and white pine seedlings.

Shingleton Mgt. Unit

# Report 8 - Nonforested Stands



Stand	Cover Type	Acres	Managed Site	General Comments:
2	6224 - Treed Bog	89.6	No	OPIC - FMD: SCA-Deeryard
4	6224 - Treed Bog	923.1	No	
5	6224 - Treed Bog	8.2	No	
27	500 - Water	11.4	No	OPIC - FMD: Woodruff Lake
48	122 - Road/Parking Lot	4.7	No	OPIC - FMD: M94
49	6220 - Alder/willow	15.7	No	OPIC - FMD: Sturgeon Hole Creek buffer
66	6224 - Treed Bog	2.2	No	
76	122 - Road/Parking Lot	5.2	No	OPIC - FMD: M94