

Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41043 Entry Year 2024 Acreage: 1,957

County Schoolcraft

Management Area: Seney Manistique Swamp

Stand Examiner: Adam Petrelius

Legal Description:

T42N R15W, Sections 30, 31: T42N R16W, Sections 1, 2, 12, 13, 24, 25, 36

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 variable and includes some steep ridges in the northeast. The majority of the southern end of the compartment is flat and low ground. Elevation values peak at 728 feet and drop to 607 at the Manistique River edge. With the exception of a few stands, most of the compartment is forested. Most common cover types are cedar and mixed swamp conifers. Carbondale/Lupton/Tawas is the most common soil type.

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

State land within this compartment was acquired between 1926 and 1985. The compartment boundary borders private, state land, and some industry land. It is mostly used by hunters, ORV's, and snowmobiles.

Unique Natural Features:

Under Review

Archeological, Historical, and Cultural Features:

Under Review

Special Management Designations or Considerations:

Most of the land is located within a deer wintering area.

Watershed and Fisheries Considerations:

This compartment contains Sturgeon Hole Creek, the Mainstern Manistique River, and Sturgeon Hole Slough.

Sturgeon Hole Creek has split fisheries regulations in this compartment. Upstream of M94, Sturgeon Hole Creek is a designated trout stream less than 50' width with a predicted mean July temperature of 63.0 °F (cold stream). Upstream of M94, 300' buffers are recommended for Sturgeon Hole Creek in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, or areas downstream of M94, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices.

The Mainstem Manistique River is a non-designated river greater than 50' width with a predicted mean July temperature of 70.3 °F (cool stream). 100' plus 5' per 1% increase in slope; buffers are recommended for the Mainstem Manistique River to protect riparian areas in accordance with Best Management Practices.

Sturgeon Hole Slough is 47-acre inland waterbody connecting Sturgeon Hole Creek to the Mainstem Manistique River. 100' plus 5' per 1% increase in slope; buffers are recommended for Sturgeon Hole Slough to protect shoreline and shoreland areas in accordance with Best Management Practices.

Wildlife Habitat Considerations:

This compartment lies across the boundary of the Seney Sand Lake Plain and the Escanaba/Door Peninsula subsubsections. The growing season is approximately 130 days. Extreme minimum temperatures are around -35 degrees F. Annual average snowfall is 1000 inches. The compartment falls within the Seney Manistique Swamp Management Area which highlights the following Featured Species: Moose, sharp-tailed grouse, snowshoe hare and white-tailed deer. General Land Office (GLO) Surveyor notes show the circa 1850 upland forest consisted of white pine, hemlock, red pine, spruce, fir, and red maple. Lowlands were dominated by cedar, spruce, and tamarack. Windthrow, fire, flooding, and beaver ponding were likely the major forms of natural disturbance. Current upland forests are substantially altered from pre-settlement conditions. Oak, aspen, and open grasslands are now the dominant cover types. Lowlands are similar in species composition to pre-settlement conditions. This compartment is located within a major deer yard. Wildlife habitat

objectives are largely associated with maintaining closed canopy conifer forest, early successional forest for browse, and open grass lands for spring time grazing. Other wildlife species of interest that utilize this compartment include smooth green snake, red-backed salamander, great-horned owl and ruffed grouse.

Mineral Resource and Development Concerns and/or Restrictions

No known potential exists for commercial oil & gas production in this part of the state, and there is no known metallic mineral potential in this area. Active sand/gravel and limestone/dolostone quarries occur just outside the compartment on the west, but the compartment appears to be predominantly low-lying and wet, which would inhibit any surface mining. No current mineral leasing activity exists in the area. The State does not own all the mineral rights within the compartment. Because the mineral estate is the dominant estate, the surface owner must provide the owner of the mineral rights reasonable access to the surface for mineral exploration and development.

Vehicle Access:

The Haywire Grade, M94, and the Low High Rollways Road provide good access to the compartment. There is a lack of woods roads though due to the lowland soils found throughout.

Survey Needs:

Some stands are bordering private ownership and survey work may be needed.

Recreational Facilities and Opportunities:

The Haywire Grade travels through the compartment. It is a designated snowmobile trail and ORV route.

Fire Protection:

Response time to fire will be fairly fast due to good access and distance from Thompson office. Most of the fuels are low ground, dense cedar and swamp conifers. Numerous water sources exist.

Additional Compartment Information:

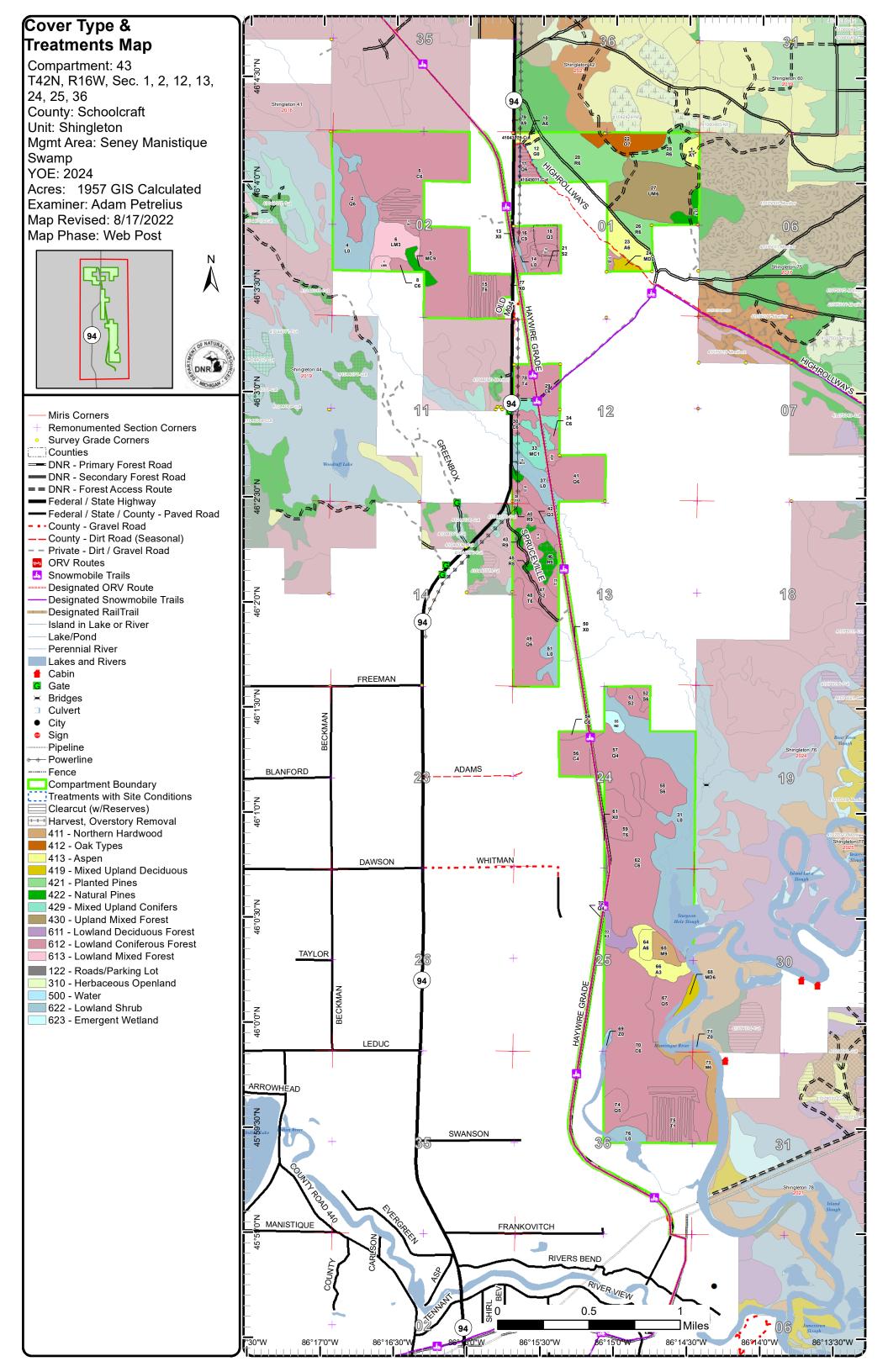
The following reports from the Inventory are attached:

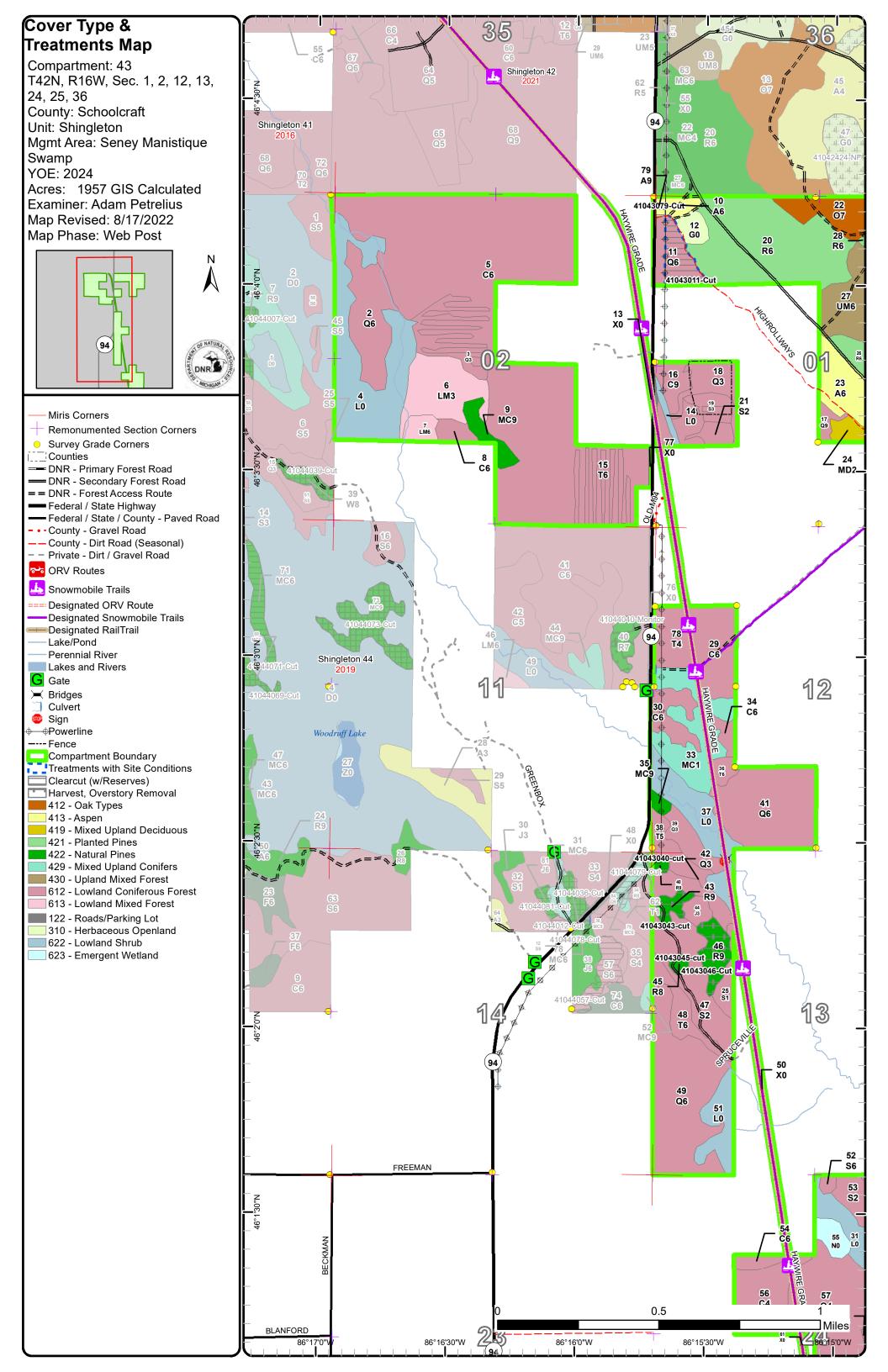
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

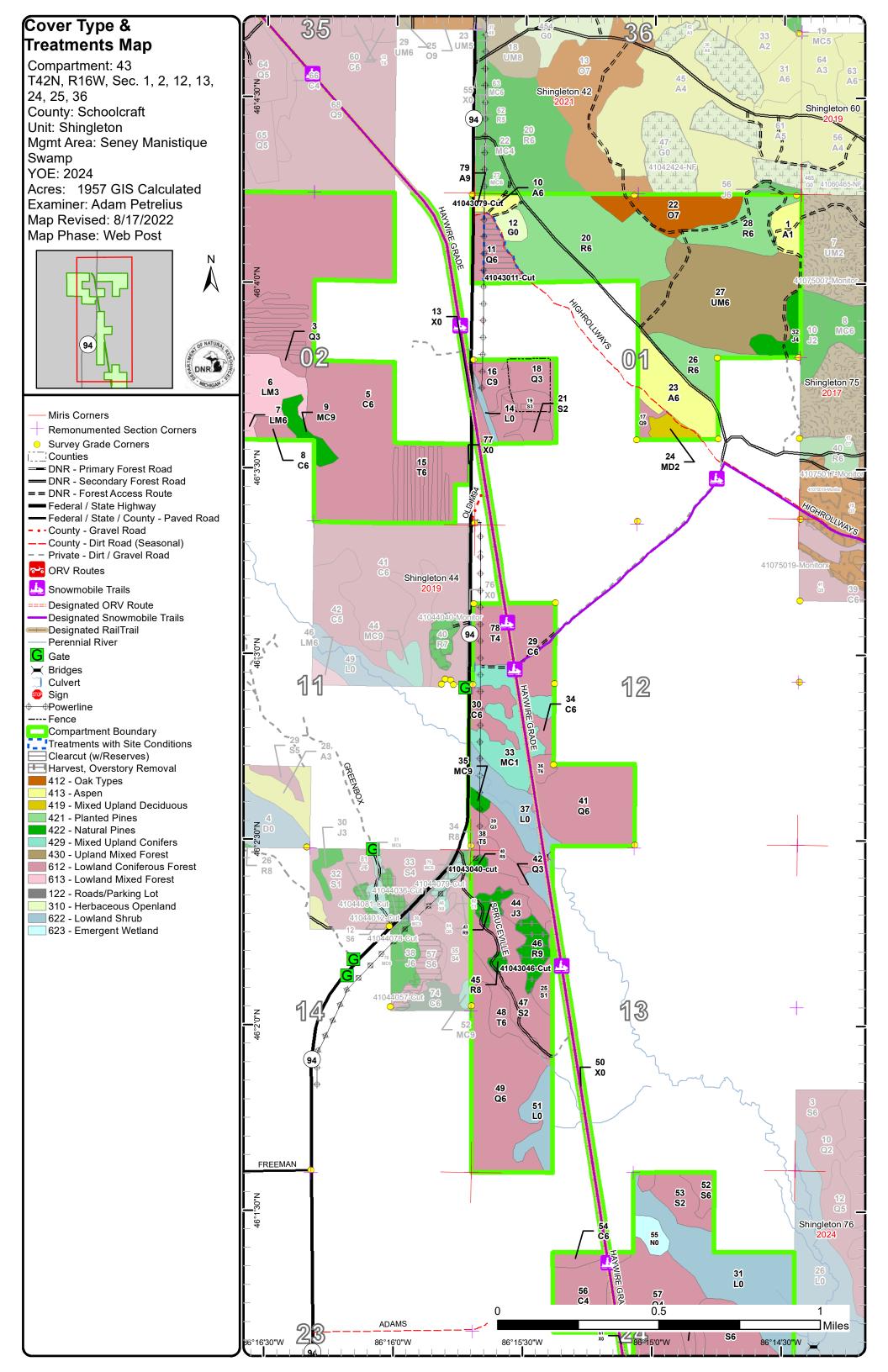
The following information is displayed, where pertinent, on the attached compartment maps:

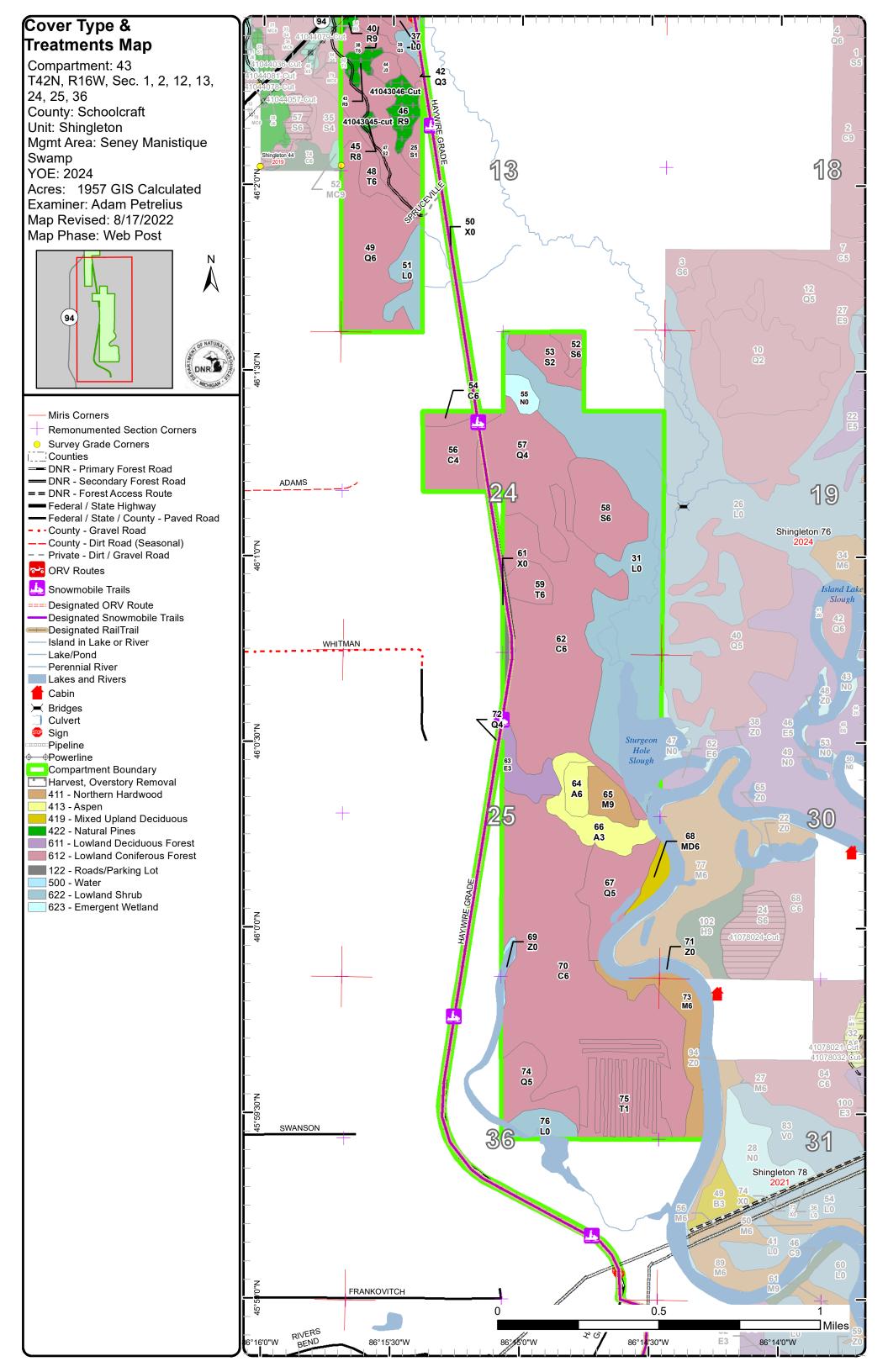
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries

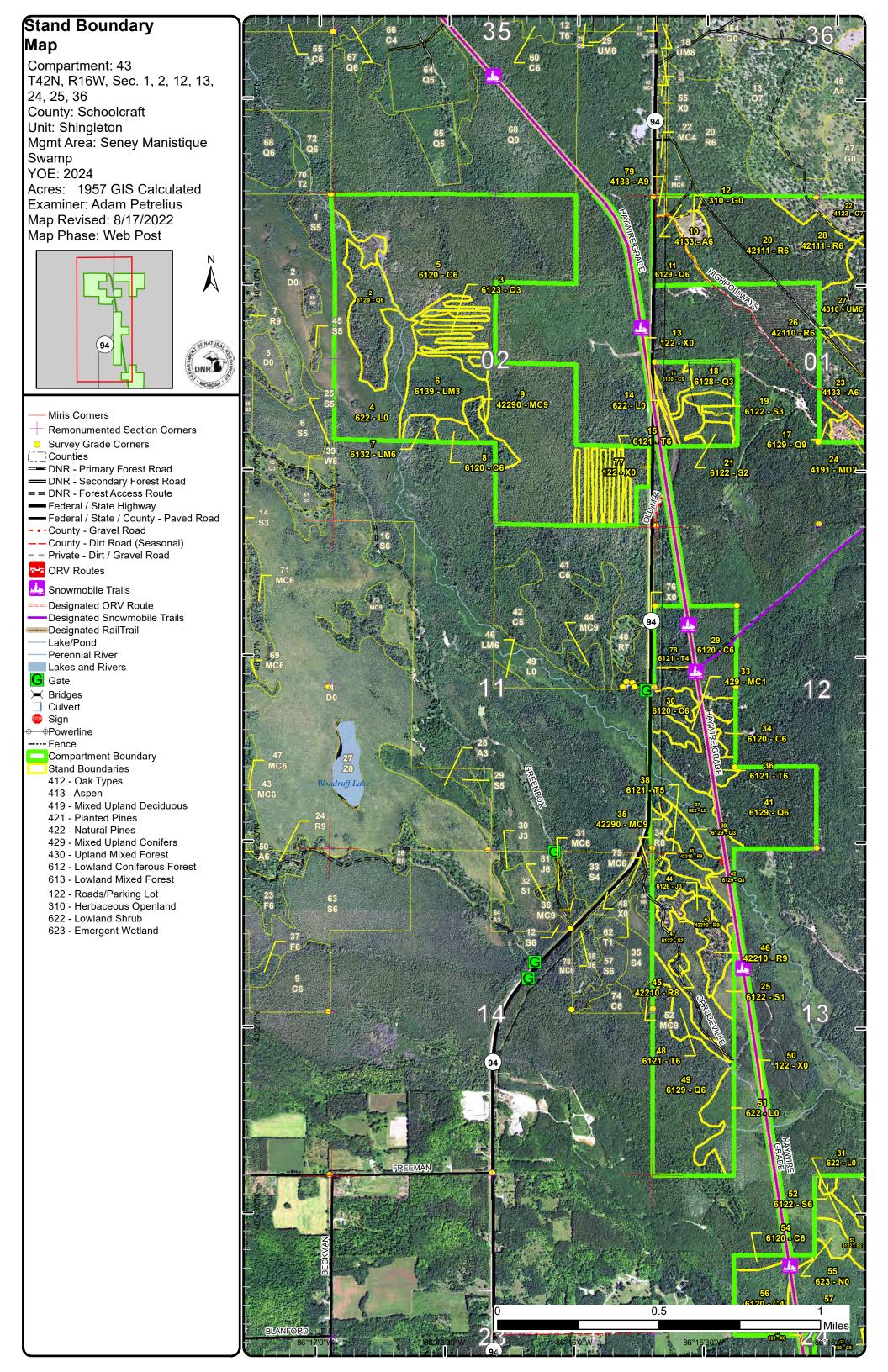
Details on the road access system

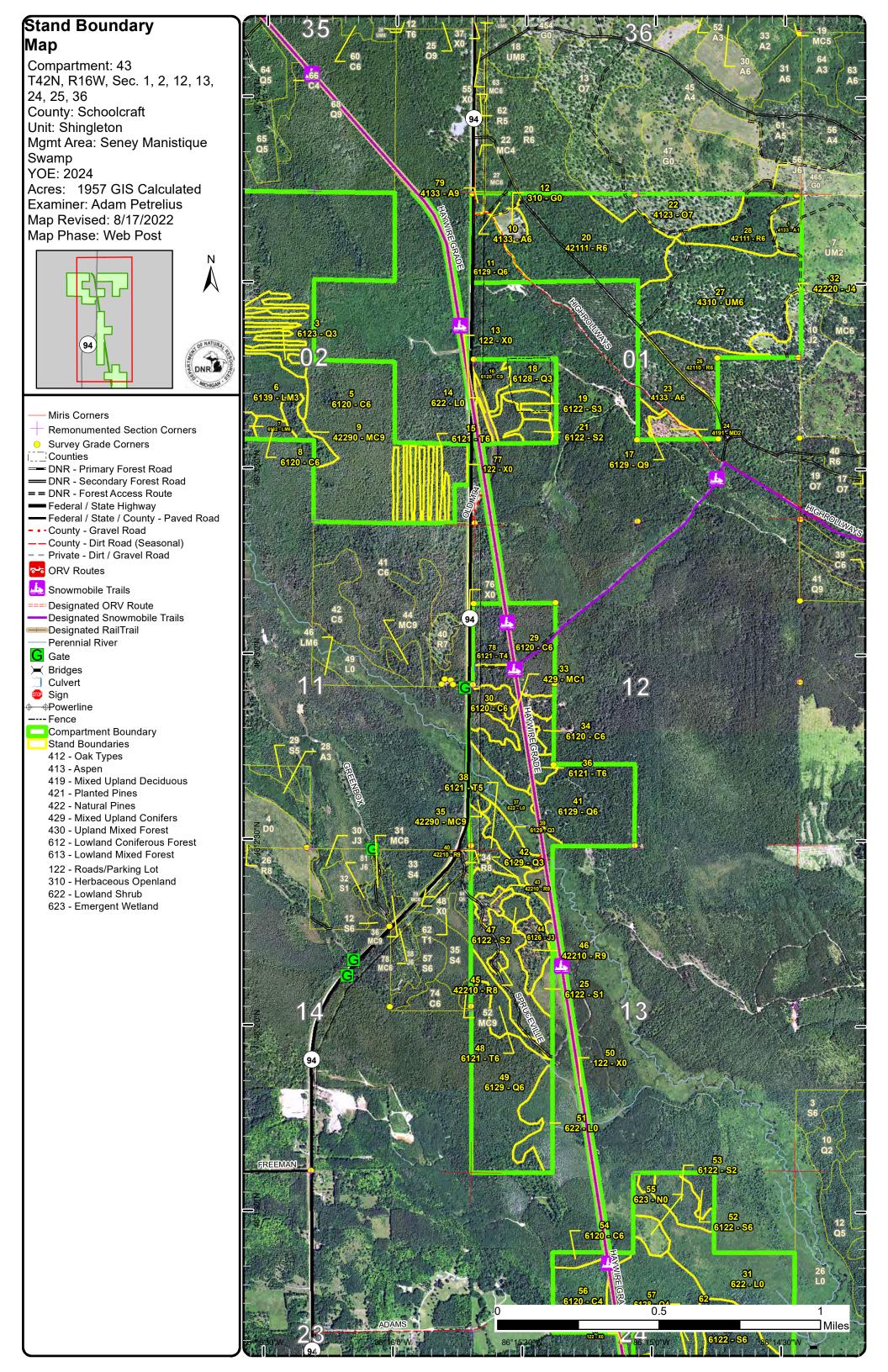


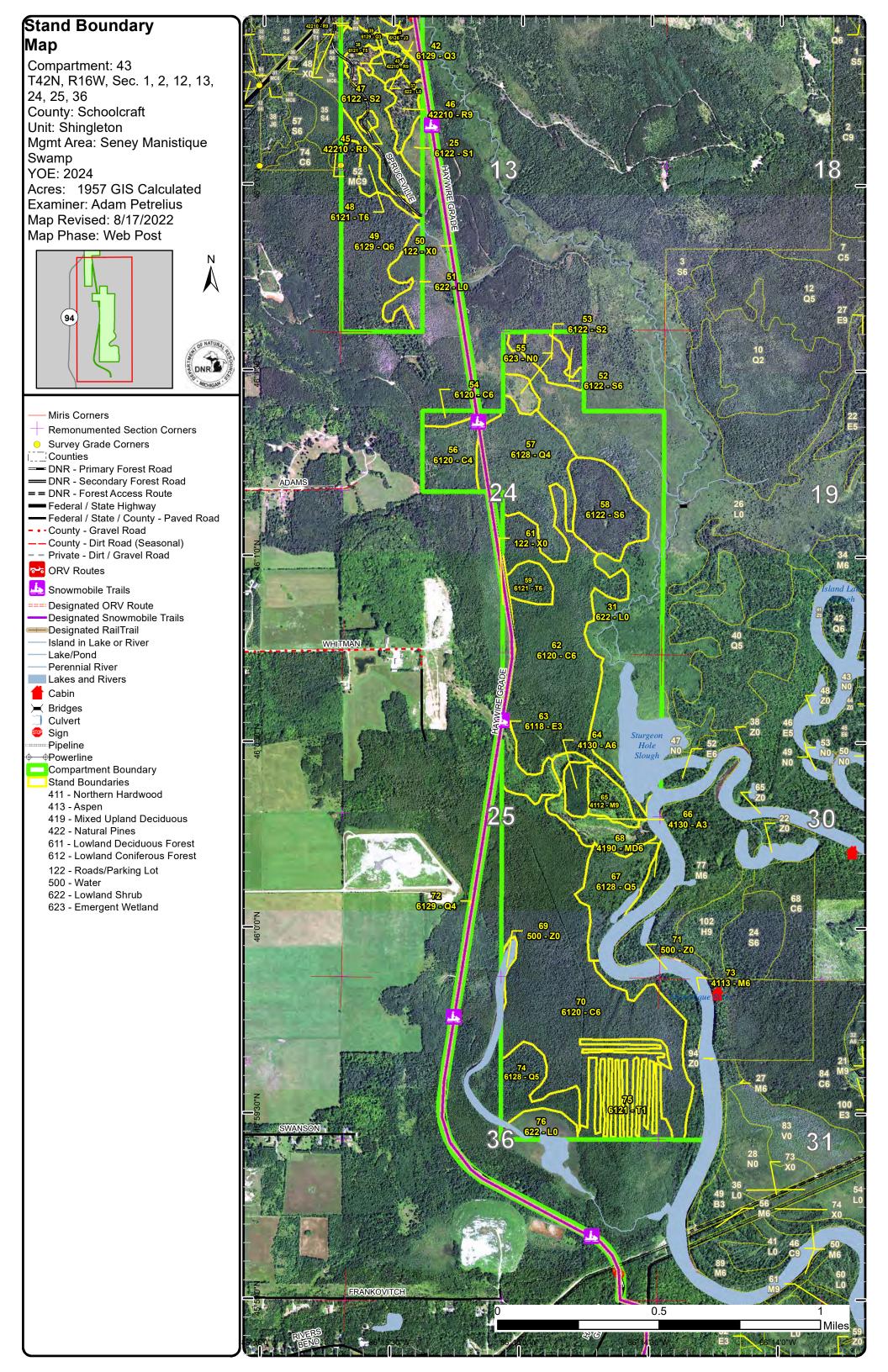


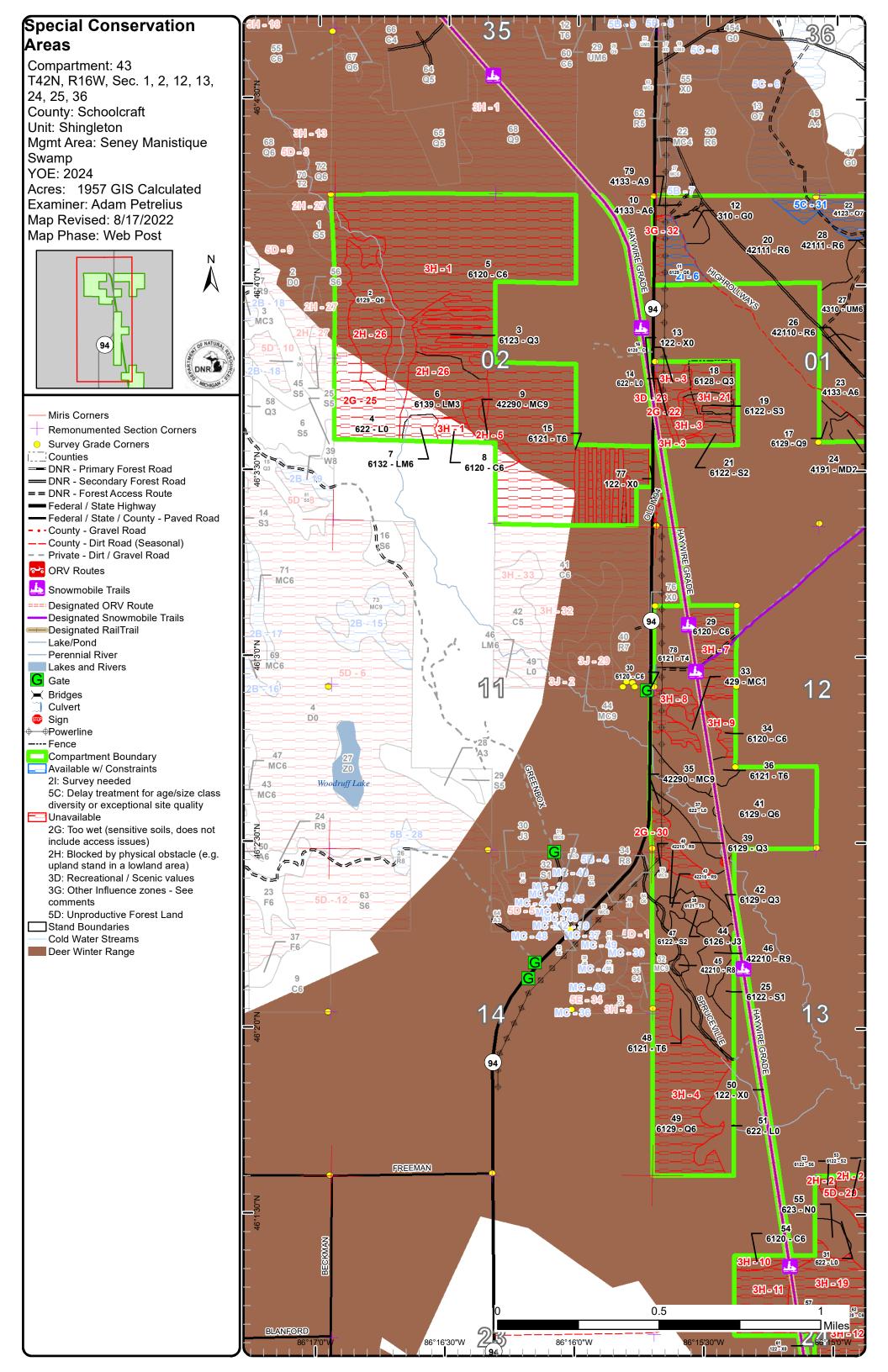


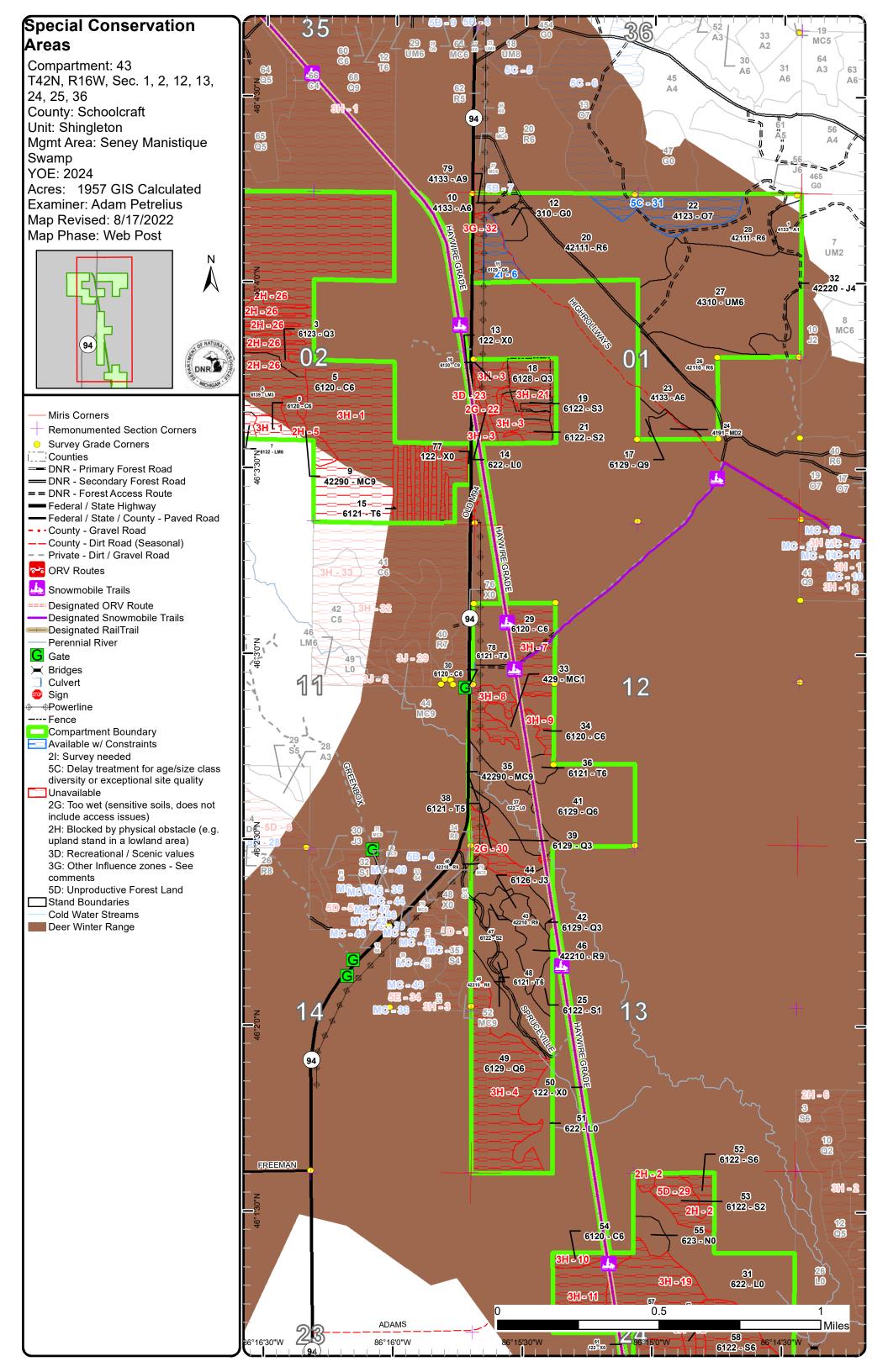


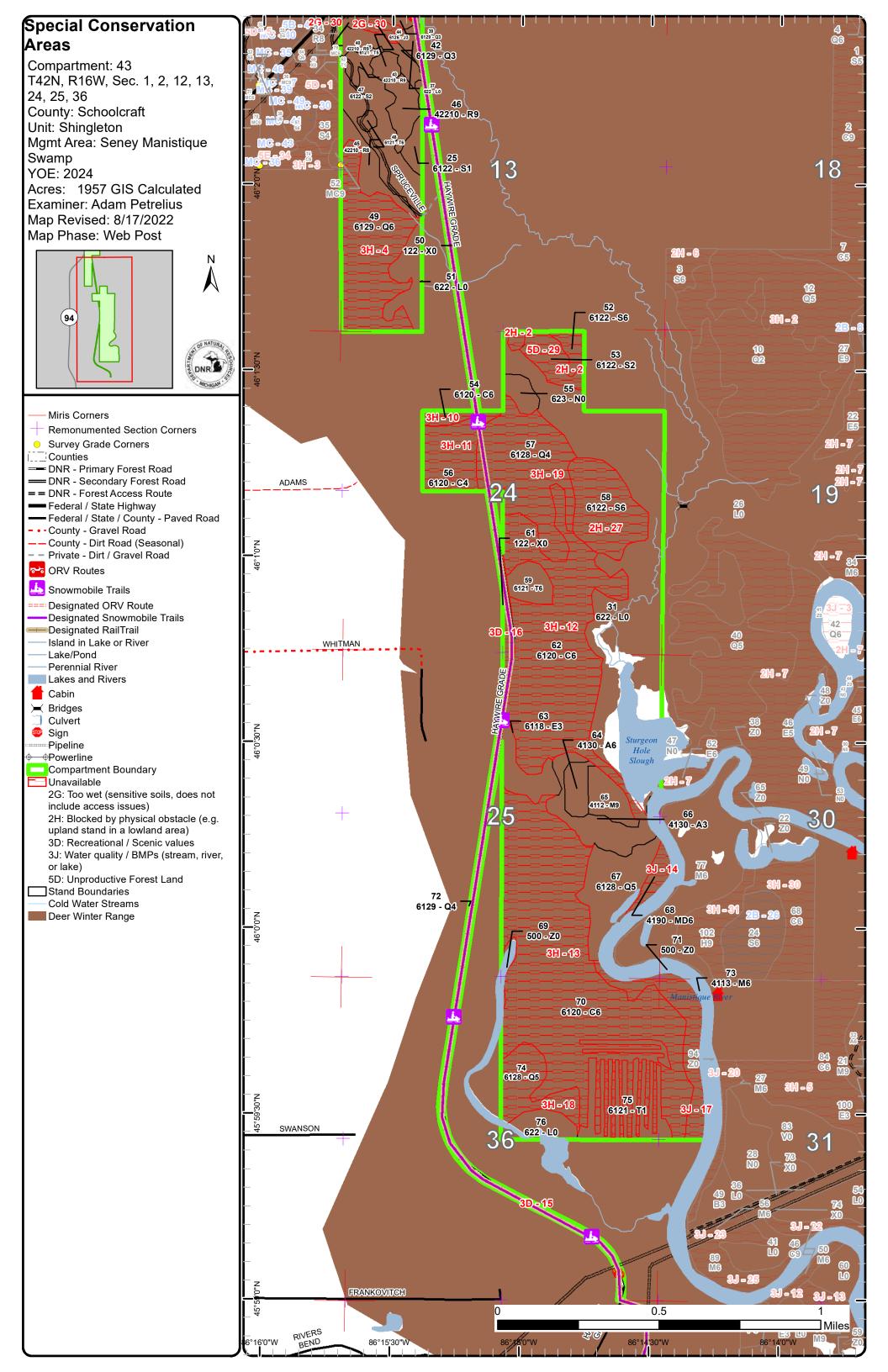












Compartment 43 Year of Entry 2024

Shingleton Mgt. Unit **Adam Petrelius : Examiner**



Age Class

	zer.	KO ST	3/2		g g	§ /§		3/8	8/8	R &	* / &		\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Q / L	N. S.	25 / B		gt Jres	Lag Lag
Aspen	0	20	0	8	38	0	2	0	0	0	0	0	0	0	0	0	0	0	68
Cedar	0	0	0	0	0	0	0	0	119	0	4	265	267	0	0	0	0	0	654
Herbaceous Openland	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Jack Pine	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Lowland Conifers	0	0	0	14	35	0	159	22	3	43	0	0	57	0	0	0	0	0	333
Lowland Deciduous	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Lowland Mixed Forest	0	0	0	0	0	27	0	0	0	0	0	5	0	0	0	0	0	0	32
Lowland Shrub	263	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	263
Lowland Spruce/Fir	0	0	0	0	34	10	12	0	0	7	34	0	0	0	0	0	0	0	97
Marsh	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Mixed Upland Deciduous	0	6	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	13
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	2	0	0	8	0	0	0	0	0	10
Northern Hardwood	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	38
Oak	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	26
Red Pine	0	0	0	0	0	0	91	16	0	18	0	0	0	0	0	0	0	0	125
Tamarack	0	0	0	0	3	66	10	0	10	0	0	0	0	0	0	0	0	0	89
Upland Conifers	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Upland Mixed Forest	0	0	0	0	83	0	0	0	0	0	0	0	0	0	0	0	0	0	83
Urban	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Water	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Total	335	57	14	35	193	103	274	38	132	141	38	270	332	0	0	0	0	0	1961



Report 2 – Treatment Summary

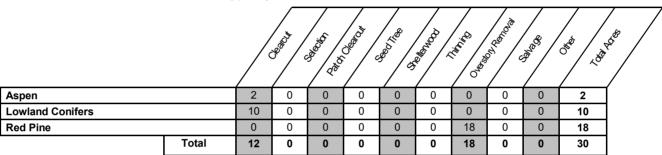
Shingleton Mgt. Unit Year of Entry: 2024

Acres of Harvest

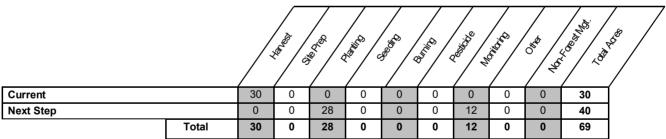
Compartment 43
Total Compartment Acres: 1,957

Commercial Harvest - 19 Harvests with Site Condition - 10 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Shingleton Mgt. Unit

Report 3 -- Treatments

Compartment: 43 Year of Entry: 2024

s t а n

d

Treatment Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat CoverType Method Name Age Objective Structure Density Range Type Cut

Proposed Treatments:

41043011-Cut 10.3 6129 - Mixed Poletimber 82 81-110 Harvest Clearcut with 612 - Lowland Even-Aged No Coniferous Lowland Well Retention Coniferous Forest Forest

Prescription Cut all trees except oak, hemlock, and cedar. Leave some wind firm white pine for seed and aesthetics. Retention will be located between M94

Specs: and the powerline.

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

Treatments:

<u>Acceptable</u> Mixed coniferous and deciduous species.

Regen:

Stand could be supplemented with oak or other WLD preferred species if desired.

Other Possible land use issues which will require a survey.

Comment:

Site Condition: Survey Needed Proposed Start Date: 10/1 /2023

41043040-cut 1.3 42210 - Natural Red Sawtimber 84 81-110 429 - Mixed No Harvest Overstory Even-Aged Removal **Upland Conifers**

<u>Prescription</u> Cut all trees except hemlock and oak. Protect understory. These are small mature pine islands which eventually may convert to other species

Specs: following harvest.

Next Step Planting, Replant

Treatments:

<u>Acceptable</u> Mixed pine will be the goal, however any species will be acceptable.

Regen:

Stands were planted in the past with oak and should be protected. Other

Comment:

Site Condition:

Proposed Start Date: 10/1 /2023

4.8 42210 - Natural Red Sawtimber 51-80 429 - Mixed No 41043043-cut Harvest Overstory Even-Aged Removal **Upland Conifers**

Cut all trees except hemlock and oak. Protect understory. These are small mature pine islands which eventually may convert to other species

following harvest. Incorporate some red pine and white pine seed trees into the red line. Specs:

Next Step Planting, Replant

Treatments:

Acceptable Mixed pine will be the goal, however any species will be acceptable.

Regen:

Other Stands were planted in the past with oak and should be protected.

Comment:

Site Condition:

Proposed Start Date: 10/1 /2023

Shingleton Mgt. Unit Report 3 -- Treatments Compartment: 43 s Year of Entry: 2024 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat n CoverType Method Name Density Age Objective Structure Range Type Cut d 45 41043045-cut 1.8 42210 - Natural Red Sawtimber 51-80 Harvest Overstory 429 - Mixed Even-Aged No Pine Medium Removal **Upland Conifers** Cut all trees except hemlock and oak. Protect understory. These are small mature pine islands which eventually may convert to other species following harvest. Incorporate some red pine and white pine seed trees into the red line. Specs: Next Step Planting, Replant Treatments: Mixed pine will be the goal, however any species will be acceptable. <u>Acceptable</u> Regen: Other (Stands were planted in the past with oak and should be protected. Comment: Site Condition: Proposed Start Date: 10/1 /2023 41043046-Cut 9.8 42210 - Natural Red Sawtimber 85 51-80 Harvest Overstory 429 - Mixed Even-Aged No Pine Well Removal **Upland Conifers** Cut all trees except hemlock and oak. Protect understory. These are small mature pine islands which eventually may convert to other species **Prescription** Specs: following harvest. Incorporate some red pine and white pine seed trees into the red line. Next Step Planting, Replant Treatments: Mixed pine will be the goal, however any species will be acceptable. <u>Acceptable</u> Regen: Other 1 4 1 Stands were planted in the past with oak and should be protected. Comment: Site Condition: Proposed Start Date: 10/1 /2023 41043079-Cut 1.5 4133 - Aspen, Mixed Sawtimber 111-Harvest Clearcut Nο 413 - Aspen Even-Aged Pine Well 140 Prescription Cut all trees hardwood trees greater than 2 inches except oak. Cut all conifer trees greater than 4 inches except hemlock. No retention due to Specs: small stand size and close proximately to the highway.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Stand will likely regenerate to aspen, however any combination of mixed coniferous and deciduous is acceptable.

Regen:

Other Comment:

Site Condition:

Proposed Start Date: 10/1 /2023

Total Treatment Acreage Proposed: 29.5

Shingleton Mgt. Unit

Compartment: 43 Year of Entry: 2024 **Adam Petrelius : Examiner**

Availa	ability for	Managemer	nt										
Total	Acres	Acres Avail	Acres		Domina	nt Site	Con	dition	S				
Acres	Available	With Condition	Not Available		21	5C	2G	2H	3D	3G	3Н	3J	5D
67	67	0	0	Aspen									
654	0	0	654	Cedar							654		
5	5	0	0	Herbaceous Openland									
13	13	0	0	Jack Pine									
332	99	10	223	Lowland Conifers	10			43	25	5	151		
14	14	0	0	Lowland Deciduous									
32	0	0	32	Lowland Mixed Forest				32					
263	205	0	59	Lowland Shrub			59	0					
96	34	0	62	Lowland Spruce/Fir				41			10		12
6	6	0	0	Marsh									
12	6	0	7	Mixed Upland Deciduous								7	
10	2	0	7	Natural Mixed Pines				7					
38	11	0	27	Northern Hardwood								27	
26	0	26	0	Oak		26							
125	125	0	0	Red Pine									
89	79	0	10	Tamarack			10				0		
31	31	0	0	Upland Conifers									
83	83	0	0	Upland Mixed Forest									
40	15	0	24	Urban					24				
21	21	0	0	Water									
1,957	815	36	1,106	Total Forested Acres	10	26	69	123	49	5	815	33	12
	42%	2%	57%	Relative Percent		<u> </u>					<u> </u>		

^{*}Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

1 Unavailable 3H: Deer Wintering Area - 251 Unspecified Unspecifie	
Commonte:	Jnspecified
Comments.	

Shingleton Mgt. Unit
Adam Petrelius : Examiner

2	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
3	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	16	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	57	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
5	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	8	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
6	Available	2I: Survey needed	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	24	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Shingleton Mgt. Unit
Adam Petrelius : Examiner

Unspecified	nspecified	d U	Unspecified	Unspecified	12	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	Unavailable	8
							Comments:	C
Unspecified	nspecified	d U	Unspecified	Unspecified	4	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	Unavailable	9
							Comments:	C
Unspecified	nspecified	d U	Unspecified	Unspecified	4	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	Unavailable	10
							Comments:	C
Unspecified	nspecified	d U	Unspecified	2G: Too wet (sensitive soils, does not include access issues)	25	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	Unavailable	11
	oted in future.	ould not be attem	ve seen and shoul	g resulted in worst rutting I ha	vesting	l and only cedar was left. Har	Comments: Stand was harveste	
Unspecified	nspecified	d U	Unspecified	Unspecified	119	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	Unavailable	12
							Comments:	C
							Comments:	

Shingleton Mgt. Unit
Adam Petrelius : Examiner

13	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	200	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
14	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
15	Unavailable	3D: Recreational / Scenic values	25	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: laywire Grade						
16	Unavailable	3D: Recreational / Scenic values	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Haywire Grade						
17	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	27	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified	Unspecified	Unspecified
C	Comments:						
18	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	22	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

Shingleton Mgt. Unit
Adam Petrelius : Examiner

19	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	58	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
21	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	24	1D: Interest Group / Neighbor	Unspecified	Unspecified	Unspecified
	comments: enced area for ce	dar regeneration					
22	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
23	Unavailable	3D: Recreational / Scenic values	16	Unspecified	Unspecified	Unspecified	Unspecified
	comments: laywire Grade						
25	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	56	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
26	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	74	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

Shingleton Mgt. Unit
Adam Petrelius : Examiner

27	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	34	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
29	Unavailable	5D: Unproductive Forest Land	12	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
30	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	10	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
31	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	26	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Overstory is mostly	oak. Understory is young and	immature	e. It is undersireable to h	arvest oak in this area at th	ne present time.	
32	Unavailable	3G: Other Influence zones - See comments	5	Unspecified	Unspecified	Unspecified	Unspecified
	comments: vet along road. wil	l serve as visual buffer for adjac	ent stan	d			

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: 43
Year of Entry 2024



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.

Conservatio Area	n Type	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 conducted 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 stream designated as trout resources by Fisheries Order 210.	cies (e.g., slimy sculpin) to persist from ese conditions due to substantial
SCA	Habitat Area	An area that provide some specific need for the life cycle of wild and Waterfowl Production Areas, deer wintering complexes in loopenings and savannas. Habitat areas are distinct from critical lendangered or threatened species (such as Kirtland's warbler of general in nature, are not primarily associated with threatened covered by species recovery plans that are developed in cooper	owland conifer communities, grassland nabitat designated for recovery of r piping plover areas) in that they are more or endangered species, and are not



Stan	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age B	BA Range	Managed S	Site	General Comments	MICHIGAN
1	4133 - Aspe	en, Mixed Pi	ine	Sapling	Poor	8.3	22	1-50	N/A		Stand would make a good wildlife opening.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	70	Sapling	1	22	Quak	ing Aspen	Medium	5 - 10 feet	Sapling		
	Red Oak	10	Pole/Log	9		R	ed Oak	Medium	5 - 10 feet	Sapling		
	Red Pine	10	Log	10		Ja	ck Pine	Low	5 - 10 feet	Sapling		
	Jack Pine	10	Sapling	3							-	
2	6129 - Mixed Conif	erous Lowla	and Forest	Poletimb	er Well	27.5	85	81-110	N/A			
3	6123 - L	owland Fir		Sapling	y Well	15.1	37	1-50	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Tamarack	10	Sapling/Pole	3			Alder	Medium	5 - 10 feet	Tall Shrub		
	Balsam Fir	70	Sapling/Pole	4	37	Ва	lsam Fir	High	5 - 10 feet	Sapling		
	Black Spruce	10	Sapling/Pole	4								
N	orthern White Cedar	10	Pole	8								
4	622 - Lov	wland Shrub)	Nonsto	cked	56.2			No			
5	6120 - Lo	wland Ceda	ır f	Poletimb	er Well	246.6	111	111-140	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
N	orthern White Cedar	75	Pole/Log	9	111	Ва	lsam Fir	Low	5 - 10 feet	Sapling		
	Black Spruce	15	Pole	8			Alder	Low	5 - 10 feet	Tall Shrub		
	Tamarack	10	Pole	8		Blac	k Spruce	Low	5 - 10 feet	Sapling		
6	6139 - Mixed	Lowland Fo	orest	Sapling	ı Well	26.6	49	51-80	N/A			
7	6132 - Mixed Lowla	and Forest v	with Cedar F	Poletimb	er Well	5.1	100	81-110	N/A			
8	6120 - Lo	wland Ceda	ır F	Poletimb	er Well	4.7	111	111-140	N/A			
9	42290 - Nato	ural Mixed F	Pine \$	Sawtimb	er Well	7.5	110	111-140	N/A			



Stand	d Level 4 Co	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed S	ite	General Comments	MICHIGAN
10	4133 - Aspe	en, Mixed P	ine	Poletimb	er Well	4.0	35	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Red Oak	10	Log/Pole	12		W	hite Pine	Medium	5 - 10 feet	Sapling		
	Bigtooth Aspen	70	Pole	6	35	Bigto	ooth Aspen	Medium	10 - 20 feet	Sapling		
	Red Pine	10	Pole	9							-	
	White Pine	10	Log/Pole	10								
11	6129 - Mixed Conife	erous Lowla	and Forest	Poletimb	er Well	15.5	82	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	White Pine	10	Log/XLog	14		W	hite Pine	Low	< 5 feet	Sapling		
	Red Maple	5	Pole	7		Blad	ck Spruce	Medium	5 - 10 feet	Sapling		
	Black Spruce	40	Pole	7	82						-	
	Red Pine	5	Log/XLog	14								
	Bigtooth Aspen	10	Pole	8								
	Jack Pine	5	Pole	9								
No	orthern White Cedar	25	Pole	9								
12	310 - Herbac	eous Open	land	Nonsto	ocked	5.1		Immature	No		RDR has been written to deal with the ORV issue, but no good solubeen found.	ution has
13	122 - Road	d/Parking L	ot	Nonsto	cked	16.4		Immature	No			
14	622 - Low	vland Shrub)	Nonsto	ocked	2.3			No			
15	6121 - 7	Tamarack		Poletimb	er Well	12.6	45	1-50	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Black Spruce	10	Pole/Sapling	g 5		Ba	alsam Fir	Medium	5 - 10 feet	Sapling		
	Tamarack	60	Pole/Sapling	g 5	45		Alder	Medium	5 - 10 feet	Tall Shrub		
	Paper Birch	10	Pole/Sapling	g 5								
	Balsam Fir	10	Pole/Sapling	g 5								
No	orthern White Cedar	10	Pole/Saplino	g 5								
16	6120 - Lov	wland Ceda	ır	Sawtimb	er Well	15.8	111	141-170	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
No	orthern White Cedar	80	Log/Pole	10		Ba	alsam Fir	Low	< 5 feet	Sapling		
	Tamarack	10	Pole	8				'		•	-	
	Black Spruce	10	Pole	9								



Stand	Level 4 Co	over Type		Size De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
17	6129 - Mixed Conif	erous Lowla	and Forest	Sawtimb	er Well	3.3	76	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
No	orthern White Cedar	35	Pole	8	76	WI	hite Pine	Low	< 5 feet	Sapling	
	Black Spruce	20	Pole	8		Blad	ck Spruce	Medium	5 - 10 feet	Sapling	
	White Pine	20	Log/Pole	12							
	Red Pine	25	Log/Pole	12							
18	6128 - Lowland Dec	Coniferous, iduous	Mixed	Sapling	Well	14.0	21	1-50	N/A		A trespass was discovered in a portion of the stand in 1999 and 2000. An 8 foot fence was constructed around the area harvested and cedar seedlings
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	were planted. 2003 regen count on cedar showed 483 cedar trees.
	Red Maple	10	Sapling	2			Alder	High	5 - 10 feet	Tall Shrub	
	Quaking Aspen	5	Sapling	2							•
	Balsam Fir	20	Sapling	2							
No	orthern White Cedar	20	Sapling/Pole	3	21						
	Tamarack	15	Sapling	2							
	Paper Birch	10	Sapling	2							
	Black Spruce	20	Sapling	2							
19	6122 - BI	ack Spruce		Sapling	Well	4.9	47	1-50	N/A		inside fence
	Canopy Species	% Cover	Size Class		Age		nopy Species	Density	Avg. Height	Size	
	Black Spruce	50	Sapling	3	47		ck Spruce	Medium	5 - 10 feet	Sapling	
No	orthern White Cedar	10	Sapling	2			n White Cedar	Low	< 5 feet	Sapling	
	Paper Birch	10	Sapling	3			Alder	Medium	5 - 10 feet	Tall Shrub	
	Balsam Fir	20	Sapling	3							
	Tamarack	10	Sapling	3							
20	42111 - Planted Dec	l Red Pine, iduous	Mixed F	Poletimb	er Well	69.4	50	1-50	N/A		Cut in spring 2005, X-Mass Buck Sale, 41-007-04-01. Residual basal areas were 25 ft red pine, 8 ft white pine.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Pine	70	Pole/Log	9	50	R	ed Oak	Medium	5 - 10 feet	Sapling	
	Paper Birch	10	Pole	7		WI	hite Pine	Medium	5 - 10 feet	Sapling	
	White Pine	10	Pole	8		Bigto	ooth Aspen	High	10 - 20 feet	Sapling	
	Red Oak	10	Log	12							
	rted Oak										
21		ack Spruce		Sapling N	/ledium	4.7	47	1-50	N/A		
21		ack Spruce			/ledium		47	1-50 Density	N/A Avg. Height	Size	
21	6122 - BI			DBH		Sub-Ca				Size Tall Shrub	



Stand	d Level 4 C	over Type		Size Density	Acres	Stand Age B	A Range	Managed S	Site	General Comments
22	4123 -	Red Oak	S	Sawtimber Poo	or 25.6	85	1-50	N/A		burned in spring 2000
	Canopy Species	% Cover	Size Class	DBH Age	Sub-C	anopy Species	Density	Avg. Height	Size	
	Bigtooth Aspen	10	Pole/Sapling	5 22		Red Oak	Medium	10 - 20 feet	Sapling	
	Jack Pine	5	Pole/Sapling	5	\	Vhite Pine	Medium	5 - 10 feet	Sapling	
	Red Pine	5	Pole/Sapling	5		Red Pine	Medium	5 - 10 feet	Sapling	
	Red Oak	80	Log/Pole	11 85	Big	tooth Aspen	Medium	10 - 20 feet	Sapling	
23	4133 - Aspe	en, Mixed Pi	ine F	Poletimber We	ell 25.9	35	1-50	N/A		west end is more sparse. appears to have had some habitat work in past
	Canopy Species	% Cover	Size Class	DBH Age	Sub-C	anopy Species	Density	Avg. Height	Size	
	Bigtooth Aspen	63	Pole/Sapling	5 35	\	Vhite Pine	Medium	5 - 10 feet	Sapling	
	White Pine	10	Pole/Sapling	5	,					
	Jack Pine	10	Sapling	3						
	Red Pine	5	Sapling	4						
	Red Oak	7	Sapling/Pole	4						
	Paper Birch	5	Sapling	3						
24	4191 - Mixed Upla Co	and Deciduo onifer	ous with S	Sapling Mediur	m 5.6	5	1-50	N/A		harvested in 1986 and spring 2016.Scarified in summer 2018. Red pine regeneration is absent management objective Is being changed to reflect
	Canopy Species	% Cover	Size Class	DBH Age						current species on site.
	Red Pine									
		10	Log	16						
	Red Oak	10 40	Log Sapling	16 1 5						
	Red Oak Bigtooth Aspen									
		40	Sapling	1 5						
	Bigtooth Aspen	40 10	Sapling Sapling	1 5						
	Bigtooth Aspen Black Spruce	40 10 10	Sapling Sapling Sapling	1 5 1 1						
25	Bigtooth Aspen Black Spruce Red Maple White Pine	40 10 10 10	Sapling Sapling Sapling Sapling Sapling Sapling	1 5 1 1 1 1 1 1 1 Sapling Poor		35	1-50	N/A		Red osier dogwood shrubs were planted in canopy gaps in stand. Will
25	Bigtooth Aspen Black Spruce Red Maple White Pine 6122 - Bl	40 10 10 10 20 lack Spruce	Sapling Sapling Sapling Sapling Sapling Sapling Sapling	1 5 1 1 1 1 1 Sapling Poor	Sub-C	anopy Species	Density	Avg. Height	Size	Red osier dogwood shrubs were planted in canopy gaps in stand. Will serve as a valuable food source that is high crude protein for deer wintering in the Sturgeon Hole Wintering complex.
25	Bigtooth Aspen Black Spruce Red Maple White Pine	40 10 10 10 20 lack Spruce % Cover	Sapling Sapling Sapling Sapling Sapling Sapling	1 5 1 1 1 1 1 Sapling Poor DBH Age	Sub-C				Size Sapling	serve as a valuable food source that is high crude protein for deer wintering
25	Bigtooth Aspen Black Spruce Red Maple White Pine 6122 - Bl	40 10 10 10 20 lack Spruce	Sapling Sapling Sapling Sapling Sapling Sapling Sapling	1 5 1 1 1 1 1 Sapling Poor	Sub-C	anopy Species	Density	Avg. Height		serve as a valuable food source that is high crude protein for deer wintering in the Sturgeon Hole Wintering complex.
25	Bigtooth Aspen Black Spruce Red Maple White Pine 6122 - Bi Canopy Species Tamarack	40 10 10 10 20 lack Spruce % Cover	Sapling Sapling Sapling Sapling Sapling Sapling Sapling	1 5 1 1 1 1 1 Sapling Poor DBH Age	Sub-C	canopy Species ack Spruce	Density High	Avg. Height < 5 feet	Sapling	serve as a valuable food source that is high crude protein for deer wintering in the Sturgeon Hole Wintering complex.
25	Bigtooth Aspen Black Spruce Red Maple White Pine 6122 - Bi Canopy Species Tamarack	40 10 10 10 20 lack Spruce % Cover 15 85	Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling	1 5 1 1 1 1 1 Sapling Poor DBH Age	Sub-C	eanopy Species ack Spruce Alder Famarack	Density High Medium	Avg. Height < 5 feet 5 - 10 feet	Sapling Tall Shrub	serve as a valuable food source that is high crude protein for deer wintering in the Sturgeon Hole Wintering complex. [12/19/2018 TI] This stand was cut as part of the Spruceville Pine Sale #41-
	Bigtooth Aspen Black Spruce Red Maple White Pine 6122 - Bl Canopy Species Tamarack Black Spruce	40 10 10 10 20 lack Spruce % Cover 15 85	Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling	1 5 1 1 1 1 1 1 Sapling Poor DBH Age 4 4 35	Sub-C Bl	eanopy Species ack Spruce Alder Famarack	Density High Medium Medium	Avg. Height	Sapling Tall Shrub	serve as a valuable food source that is high crude protein for deer wintering in the Sturgeon Hole Wintering complex.
	Bigtooth Aspen Black Spruce Red Maple White Pine 6122 - Bl Canopy Species Tamarack Black Spruce	40 10 10 10 20 lack Spruce % Cover 15 85	Sapling Sapling Sapling Sapling Sapling Sapling Sapling Size Class Sapling Sapling	1 5 1 1 1 1 1 Sapling Poor DBH Age 4 4 35	Sub-C	Fanopy Species ack Spruce Alder Famarack 67	Density High Medium Medium	Avg. Height < 5 feet 5 - 10 feet 5 - 10 feet N/A	Sapling Tall Shrub Sapling	serve as a valuable food source that is high crude protein for deer wintering in the Sturgeon Hole Wintering complex. [12/19/2018 TI] This stand was cut as part of the Spruceville Pine Sale #41-
	Bigtooth Aspen Black Spruce Red Maple White Pine 6122 - Bi Canopy Species Tamarack Black Spruce 42110 - Pla Canopy Species	40 10 10 10 20 lack Spruce % Cover 15 85	Sapling Sapling Sapling Sapling Sapling Sapling Size Class Sapling Sapling Sapling	1 5 1 1 1 1 1 Sapling Poor DBH Age 4 35 Poletimber We	Sub-C	Eanopy Species ack Spruce Alder Famarack 67 Eanopy Species	Density High Medium Medium 111-140 Density	Avg. Height < 5 feet 5 - 10 feet 5 - 10 feet N/A Avg. Height	Sapling Tall Shrub Sapling Size	serve as a valuable food source that is high crude protein for deer wintering in the Sturgeon Hole Wintering complex. [12/19/2018 TI] This stand was cut as part of the Spruceville Pine Sale #41-

Shingleton Mgt. Unit Report 7 – Stands



Stand	Level 4 Co	Cover Type		Size Density		Acres Stand Age BA Range			Managed S	ite	General Comments
27	4310 - Piı	ne, Oak Mix	. Po	oletimb	er Well	83.0	35	1-50	N/A		oak is mature, rest of species are younger.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Oak	25	Log/Pole	11		Re	ed Pine	Low	5 - 10 feet	Sapling	
	Paper Birch	5	Pole/Sapling	5		R	ed Oak	Medium	5 - 10 feet	Sapling	
	White Pine	15	Pole	8		Ja	ck Pine	Low	5 - 10 feet	Sapling	
	Jack Pine	10	Pole/Sapling	6		Wh	nite Pine	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	20	Sapling/Pole	3							
	Red Pine	25	Pole	8	35						
28	42111 - Planted Dec	l Red Pine, iduous	Mixed Po	oletimb	er Well	21.8	50	51-80	N/A		Cut in spring 2005, X-Mass Buck Sale, 41-007-04-01. Residual basal areas were 31 ft red pine, 3 ft white pine. TSI complete in spring 2006.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Pine	70	Pole	8	50	Bigto	oth Aspen	High	5 - 10 feet	Sapling	
	Paper Birch	10	Pole	8		R	ed Oak	Medium	5 - 10 feet	Sapling	
	Bigtooth Aspen	10	Sapling	3		Wh	nite Pine	Medium	5 - 10 feet	Sapling	
	Red Oak	10	Log/Pole	12							-
29	6120 - Lov	wland Ceda	· D	- - 4:	\\/ -!!	04.0	105	444.470			
23	0.20 20.	Maria Ocaa	I PO	oletimb	er Well	24.3	105	141-170	N/A		
23	Canopy Species	% Cover	Size Class		l Age		nopy Species		Avg. Height	Size	
23						Sub-Ca			•	Size Sapling	
	Canopy Species	% Cover	Size Class	DBH		Sub-Ca	nopy Species	Density	Avg. Height		
	Canopy Species Black Spruce	% Cover	Size Class Pole/Sapling	DB F	I Age	Sub-Ca	nopy Species	Density	Avg. Height		
	Canopy Species Black Spruce orthern White Cedar Tamarack	% Cover 10 75	Size Class Pole/Sapling Pole Pole/Sapling	7 9 7	I Age	Sub-Ca	nopy Species	Density	Avg. Height		Red osier dogwood shrubs were planted in canopy gaps in stand. Will
No	Canopy Species Black Spruce orthern White Cedar Tamarack	% Cover	Size Class Pole/Sapling Pole Pole/Sapling	DBH 7 9 7 Dletimb	1 Age	Sub-Cal Black	nopy Species	Medium 111-140	Avg. Height 10 - 20 feet	Sapling	Red osier dogwood shrubs were planted in canopy gaps in stand. Will serve as a valuable food source that is high crude protein for deer wintering in the Sturgeon Hole Wintering complex.
No	Canopy Species Black Spruce rthern White Cedar Tamarack 6120 - Lov Canopy Species Tamarack	% Cover	Size Class Pole/Sapling Pole Pole/Sapling r Po Size Class Pole	DBH 7 9 7 Deletimb	105 eer Well	Sub-Car Blace 11.5 Sub-Car	nopy Species sk Spruce	Medium 111-140	Avg. Height 10 - 20 feet N/A	Sapling	serve as a valuable food source that is high crude protein for deer wintering
30	Canopy Species Black Spruce orthern White Cedar Tamarack 6120 - Low Canopy Species Tamarack Black Spruce	% Cover 10 75 15 wland Ceda % Cover 5 5	Size Class Pole/Sapling Pole Pole/Sapling r Po Size Class Pole Pole	7 9 7	105 per Well	Sub-Car Blace 11.5 Sub-Car	nopy Species kk Spruce 107 nopy Species	Medium 111-140 Density	Avg. Height 10 - 20 feet N/A Avg. Height	Sapling	serve as a valuable food source that is high crude protein for deer wintering
30	Canopy Species Black Spruce rthern White Cedar Tamarack 6120 - Lov Canopy Species Tamarack	% Cover	Size Class Pole/Sapling Pole Pole/Sapling r Po Size Class Pole	DBH 7 9 7 Deletimb	105 eer Well	Sub-Car Blace 11.5 Sub-Car	nopy Species kk Spruce 107 nopy Species	Medium 111-140 Density	Avg. Height 10 - 20 feet N/A Avg. Height	Sapling	serve as a valuable food source that is high crude protein for deer wintering
30	Canopy Species Black Spruce orthern White Cedar Tamarack 6120 - Low Canopy Species Tamarack Black Spruce orthern White Cedar	% Cover 10 75 15 wland Ceda % Cover 5 5	Size Class Pole/Sapling Pole Pole/Sapling r Po Size Class Pole Pole Pole	7 9 7	105 eer Well 1 Age	Sub-Car Blace 11.5 Sub-Car	nopy Species k Spruce 107 nopy Species k Spruce	Medium 111-140 Density	Avg. Height 10 - 20 feet N/A Avg. Height	Sapling	serve as a valuable food source that is high crude protein for deer wintering
30 No	Canopy Species Black Spruce orthern White Cedar Tamarack 6120 - Low Canopy Species Tamarack Black Spruce orthern White Cedar	% Cover	Size Class Pole/Sapling Pole Pole/Sapling T Pole Size Class Pole Pole Pole	DBH 7 9 7 poletimb BBH 8 8 9	105 eer Well 1 Age	Sub-Car Blace 11.5 Sub-Car Blace	nopy Species k Spruce 107 nopy Species k Spruce	Medium 111-140 Density Low	Avg. Height 10 - 20 feet N/A Avg. Height 5 - 10 feet	Sapling	serve as a valuable food source that is high crude protein for deer wintering
30 No	Canopy Species Black Spruce rthern White Cedar Tamarack 6120 - Lov Canopy Species Tamarack Black Spruce rthern White Cedar	% Cover	Size Class Pole/Sapling Pole Pole/Sapling r Po Size Class Pole Pole Pole Pole	DBH 7 9 7 Deletimb BBH 8 8 9 Nonsto	105 eer Well 1 Age 107	Sub-Can Blace 11.5 Sub-Can Blace 152.4	nopy Species k Spruce 107 nopy Species k Spruce	Medium 111-140 Density Low Unspecified	Avg. Height 10 - 20 feet N/A Avg. Height 5 - 10 feet No	Sapling	serve as a valuable food source that is high crude protein for deer wintering in the Sturgeon Hole Wintering complex.
30 No	Canopy Species Black Spruce orthern White Cedar Tamarack 6120 - Low Canopy Species Tamarack Black Spruce orthern White Cedar 622 - Low 42220 - Nat	% Cover	Size Class Pole/Sapling Pole Pole/Sapling r Po Size Class Pole Pole Pole Pole	DBH 7 9 7 Deletimb BBH 8 8 9 Nonsto	er Well 105 107 107 107	Sub-Can Blace 11.5 Sub-Can Blace 152.4	nopy Species k Spruce 107 nopy Species k Spruce	Medium 111-140 Density Low Unspecified	Avg. Height 10 - 20 feet N/A Avg. Height 5 - 10 feet No	Sapling	serve as a valuable food source that is high crude protein for deer wintering in the Sturgeon Hole Wintering complex.



Stand	Level 4 C	over Type	•	Size Density		Acres	Stand Age	BA Range	Managed S	Site	General Comments	
33	429 - Mixed I	Upland Con	ifers	Saplino	g Poor	31.0	5	1-50	N/A		upland ridges with black spruce in the low areas surrounding rid	lge.
	Canopy Species	% Cover	Size Class	DBH	H Age						[12/19/2018 TI] Stand was cut as part Sale #41-005-14-01 Spru	uceville
	Bigtooth Aspen	5	Sapling	1							Pine. TCR Date 10/1/2018	
	Jack Pine	50	Sapling	1	5							
	Black Spruce	10	Sapling	1								
	Balsam Fir	5	Sapling	1								
No	orthern White Cedar	5	Pole	8								
	Tamarack	10	Sapling	1								
	Red Pine	5	Log	14								
	Quaking Aspen	5	Sapling	1								
	Red Maple	5	Sapling	1								
34	6120 - Lo	wland Ceda	ar P	oletimb	er Well	3.9	90	141-170	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
No	orthern White Cedar	75	Pole	9	90	Blad	ck Spruce	Medium	10 - 20 feet	Sapling		
	Black Spruce	15	Pole	8						_	1	
	Tamarack	10	Pole/Sapling	7								
35	42290 - Nati				er Well	2.1	84	81-110	N/A			
	Canopy Species	% Cover	Size Class		H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Red Pine	50	Log/XLog	14	84		ılsam Fir	Medium	5 - 10 feet	Sapling		
	Black Spruce	20	Pole	6			ck Spruce	Low	5 - 10 feet	Sapling		
	White Pine	30	Log/XLog	14		R	ed Pine	Low	5 - 10 feet	Sapling		
36	6121 -	Tamarack	Р	oletimb	er Well	3.4	30	1-50	N/A			
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Tamarack	85	Pole/Sapling	5	30		Alder	High	5 - 10 feet	Tall Shrub		
	Black Spruce	15	Pole	5							•	
37	622 - Lov	wland Shrub)	Nonst	ocked	26.4			No			
38		Tamarack			r Mediun		76	1-50	N/A		FTP 1488 for red osier dogwood planting was written in spring 2	2011.
	Canopy Species		Size Class		H Age		nopy Species		Avg. Height	Size		
Ú.	Black Spruce	40	Pole	7			ılsam Fir	Medium	5 - 10 feet	Sapling		
	Tamarack	50 10	Pole	8	76		ck Spruce Alder	Medium	5 - 10 feet	Sapling		

Shingleton Mgt. Unit Report 7 - Stands



Stand	l Level 4 C	over Type	;	Size De	nsity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments
39	6129 - Mixed Conif	erous Lowl	and Forest	Sapling	Well	9.6	34	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age						
	Jack Pine	5	Sapling/Pole	4							
	Black Spruce	30	Sapling	4							
	Tamarack	40	Sapling	4	34						
	White Pine	10	Sapling/Pole	4							
	Red Pine	10	Log	14							
	Balsam Fir	5	Sapling	4							
40	42210 - Na	tural Red P	ine S	Sawtimb	er Well	1.3	84	81-110	N/A		large oak planted by wildlife in 2011
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Pine	70	Log	14	84	W	hite Pine	Medium	5 - 10 feet	Sapling	
	White Pine	30	Log	14		R	led Pine	Low	< 5 feet	Sapling	
						Bla	ck Spruce	Medium	5 - 10 feet	Sapling	
41	6129 - Mixed Conif			Poletimb		46.6	56	51-80	N/A		cut in past. ridges and low areas. Red osier dogwood planted within the gaps of this stand. Notice a Creek in the stand if harvested in the future this
	Canopy Species		Size Class		Age		nopy Species	Density	Avg. Height	Size	will need to be delineated
No	orthern White Cedar	20	Pole	8			ck Spruce	Medium	10 - 20 feet	Sapling	
	Tamarack	45	Pole/Sapling		56	Ta	amarack	Medium	10 - 20 feet	Sapling	
	White Pine	5	XLog/Log	22			Alder	Medium	5 - 10 feet	Tall Shrub	
	Black Spruce	25	Pole/Sapling		56						
	Red Pine	5	Log/XLog	16							
42	6129 - Mixed Conif	erous Lowl	and Forest	Sapling	Well	9.9	35	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Pine	10	Sapling	3			Alder	Medium	< 5 feet	Tall Shrub	
	Tamarack	20	Sapling	3							
	Black Spruce	30	Sapling	3	35						
	White Pine	20	Sapling	3							
	Balsam Fir	10	Sapling	3							
	Paper Birch	10	Sapling	3							
43	42210 - Na	tural Red P	ine S	Sawtimb	er Well	4.8	84	51-80	N/A		Large oak planted by wildlife in 2011
	Canopy Species		Size Class		Age		nopy Species		Avg. Height	Size	
	White Pine	10	Log/Pole	12			ck Spruce	Medium	5 - 10 feet	Sapling	
	Red Pine	90	Log/Pole	12	84		hite Pine	Medium	5 - 10 feet	Sapling	
							led Pine	Full	5 - 10 feet	Sapling	
						Ba	alsam Fir	Low	5 - 10 feet	Sapling	



Stand	Level 4 Cover Type			Size Density		Acres	Stand Age E	BA Range	Managed Site		General Comments	
44	6126 - Lowl	and Jack P	ine	Sapling	g Well	4.2	28	1-50	N/A			
	Canopy Species	% Cover	Size Class	DBH	I Age							
	White Pine	10	Sapling	4								
	Black Spruce	10	Sapling	3								
	Jack Pine	80	Sapling/Pole	4	28							
45	42210 - Nat	tural Red P	ine Sa	awtimbe	r Mediun	n 1.8	84	51-80	N/A		large oak planted by wildlife in 2011	
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	anopy Species	Density	Avg. Height	Size		
	Red Pine	90	Log	13	84	Bla	ck Spruce	Medium	5 - 10 feet	Sapling		
	White Pine	10	Log	12		F	Red Pine	Medium	5 - 10 feet	Sapling		
		'		'		W	hite Pine	Medium	5 - 10 feet	Sapling		
46	42210 - Nat	tural Red P	ine S	Sawtimb	er Well	9.8	85	51-80	N/A		[12/18/2018 TI] This stand was cut as part of Spruceville Pine Sale #41-0	
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	14-01. TCR Date 10/1/2018.	
	White Pine	10	Log	16		F	Red Pine	Medium	< 5 feet	Sapling		
	Red Pine	90	Log	16	85	W	hite Pine	Medium	5 - 10 feet	Sapling		
						Bla	ck Spruce	Medium	5 - 10 feet	Sapling		
47	6122 - BI	ack Spruce	: 5	Sapling N	Medium	28.8	35	1-50	N/A		Red osier dogwood shrubs were planted in canopy gaps in stand. Will serve as a valuable food source that is high crude protein for deer wintering	
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	in the Sturgeon Hole Wintering complex.	
	Black Spruce	85	Sapling	4	35	Bla	ck Spruce	High	< 5 feet	Sapling	3 1	
	Tamarack	15	Sapling	4			Alder	Medium	5 - 10 feet	Tall Shrub		
						T	amarack	Medium	5 - 10 feet	Sapling		
48	6121 - ⁻	Tamarack	F	Poletimb	er Well	10.9	40	1-50	N/A			
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	anopy Species	Density	Avg. Height	Size		
No	orthern White Cedar	10	Pole	8		Bla	ck Spruce	Medium	10 - 20 feet	Sapling		
	Tamarack	50	Pole/Sapling	5	40	T	amarack	Medium	10 - 20 feet	Sapling		
	Black Spruce	40	Pole/Sapling	5			Alder	Medium	5 - 10 feet	Tall Shrub		
49	6129 - Mixed Conife	erous Lowl	and Forest F	Poletimb	er Well	56.9	111 L	Inspecified	N/A		Red osier dogwood shrubs were planted in canopy gaps in stand. Will serve as a valuable food source that is high crude protein for deer wintering	
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	serve as a valuable rood source that is high crude protein for deer wintering in the Sturgeon Hole Wintering complex.	
No	orthern White Cedar	40	Pole	6	111	Bla	ck Spruce	Medium	10 - 20 feet	Sapling		
	Tamarack	30	Pole	5			Alder	High	10 - 20 feet	Tall Shrub	Island of pine in adjacent compartment should be managed with this stand	
	White Pine	5	Log/XLog	16							-	
	Black Spruce	20	Pole	6								
	Red Pine	5	Log/XLog	14								
50	122 - Road	d/Dorking L	-4	Nonsto	-11	12.5			No			



Stand	d Level 4 Co	ver Type	S	•	Acres	Stand Age E	BA Range	Managed S	ite	General Comments	
51	622 - Low	land Shrub		Nonsto	cked	14.3			No		
52	6122 - Bla	ick Spruce	Po	oletimb	er Well	7.1	86	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Black Spruce	100	Pole/Sapling	7	86	Blac	k Spruce	Medium	10 - 20 feet	Sapling	
53	6122 - Bla	ick Spruce	Sa	apling N	/ledium	12.0	51	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Black Spruce	100	Sapling	3	51	Blac	k Spruce	Medium	< 5 feet	Sapling	
54	6120 - Low	land Ceda	r Po	oletimb	er Well	4.1	100	111-140	N/A		cedar pocket excluded from previous sale
	Canopy Species		Size Class		Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
No	orthern White Cedar	90	Pole	8	100	Northern	White Cedar	Medium	10 - 20 feet	Sapling	
	Balsam Poplar	10	Pole	7							
55	623 - Emerç	gent Wetlar	nd	Nonsto	cked	6.0			No		
56	6120 - Low				er Poor	24.5	100	1-50	N/A		Stand was cut in winter 2006, Whitmans Landing Sale. Residual volumes were 20 feet of cedar. Stand was very wet and there was little slash to
	Canopy Species		Size Class		Age		nopy Species	Density	Avg. Height	Size	operate on. Major rutting occured during sale operations which was fixed
No	orthern White Cedar	100	Pole	8	100		Alder am Poplar	Low	5 - 10 feet 5 - 10 feet	Tall Shrub	with a bulldozer. regen is acceptable on higher areas . cattails in low areas
57	6128 - Lowland C	Coniferous, duous	Mixed Po	oletimb	er Poor	57.7	50	1-50	N/A	Sapling	very wet.
	Canopy Species										
	canopy openion	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Balsam Poplar	% Cover	Size Class Pole	DB F	Age		nopy Species Alder	Density High	Avg. Height 5 - 10 feet	Size Tall Shrub	
					Age						
	Balsam Poplar Paper Birch Black Spruce	15 5 35	Pole	8 5 5			Alder	High	5 - 10 feet	Tall Shrub	
	Balsam Poplar Paper Birch	15 5	Pole Pole/Sapling	8 5	Age 50		Alder	High	5 - 10 feet	Tall Shrub	
58	Balsam Poplar Paper Birch Black Spruce Tamarack	15 5 35 45 ack Spruce	Pole Pole/Sapling Pole/Sapling Pole/Sapling	8 5 5 6 oletimb	50 er Well		Alder	High	5 - 10 feet	Tall Shrub Sapling	
58	Balsam Poplar Paper Birch Black Spruce Tamarack 6122 - Bla	15 5 35 45 ack Spruce	Pole Pole/Sapling Pole/Sapling Pole/Sapling Pole/Sapling	8 5 5 6 Oletimb	50	Blace 33.8 Sub-Car	Alder ck Spruce 92 nopy Species	High Low 81-110 Density	5 - 10 feet 5 - 10 feet N/A Avg. Height	Tall Shrub Sapling Size	
58	Balsam Poplar Paper Birch Black Spruce Tamarack 6122 - Black Canopy Species Paper Birch	15 5 35 45 ack Spruce % Cover 5	Pole Pole/Sapling Pole/Sapling Pole/Sapling Pole/Sapling Pole Size Class Pole	8 5 5 6 6 Deletimb	50 er Well	Blace 33.8 Sub-Car	Alder ck Spruce	High Low	5 - 10 feet 5 - 10 feet N/A	Tall Shrub Sapling	
	Balsam Poplar Paper Birch Black Spruce Tamarack 6122 - Bla Canopy Species Paper Birch Black Spruce	15 5 35 45 ack Spruce % Cover 5 90	Pole Pole/Sapling Pole/Sapling Pole/Sapling Pole/Sapling Pole Size Class Pole Pole	8 5 5 6 6 Deletimb	50 er Well	Blace 33.8 Sub-Car	Alder ck Spruce 92 nopy Species	High Low 81-110 Density	5 - 10 feet 5 - 10 feet N/A Avg. Height	Tall Shrub Sapling Size	
	Balsam Poplar Paper Birch Black Spruce Tamarack 6122 - Black Canopy Species Paper Birch	15 5 35 45 ack Spruce % Cover 5	Pole Pole/Sapling Pole/Sapling Pole/Sapling Pole/Sapling Pole Size Class Pole	8 5 5 6 6 Deletimb	50 er Well	Blace 33.8 Sub-Car	Alder ck Spruce 92 nopy Species	High Low 81-110 Density	5 - 10 feet 5 - 10 feet N/A Avg. Height	Tall Shrub Sapling Size	
	Balsam Poplar Paper Birch Black Spruce Tamarack 6122 - Bla Canopy Species Paper Birch Black Spruce orthern White Cedar	15 5 35 45 ack Spruce % Cover 5 90	Pole Pole/Sapling Pole/Sapling Pole/Sapling Pole/Sapling Pole Size Class Pole Pole Pole	8 5 5 6 6 Deletimb	50 er Well	Blace 33.8 Sub-Car	Alder ck Spruce 92 nopy Species	High Low 81-110 Density	5 - 10 feet 5 - 10 feet N/A Avg. Height	Tall Shrub Sapling Size	
No	Balsam Poplar Paper Birch Black Spruce Tamarack 6122 - Bla Canopy Species Paper Birch Black Spruce orthern White Cedar	15 5 35 45 45 45 45 45 45	Pole Pole/Sapling Pole/Sapling Pole/Sapling Pole/Sapling Pole Size Class Pole Pole Pole Size Class	8 5 5 6	50 er Well Age 92 er Well Age	33.8 Sub-Car Blace 9.5 Sub-Car	92 nopy Species ck Spruce 51 nopy Species	81-110 Density Low 51-80	5 - 10 feet 5 - 10 feet N/A Avg. Height 10 - 20 feet	Tall Shrub Sapling Size	
No	Balsam Poplar Paper Birch Black Spruce Tamarack 6122 - Black Canopy Species Paper Birch Black Spruce Orthern White Cedar 6121 - T	15 5 35 45 45	Pole Pole/Sapling Pole/Sapling Pole/Sapling Pole/Sapling Pole Size Class Pole Pole Pole Pole	8 5 5 6	50 er Well Age 92 er Well	33.8 Sub-Car Blace 9.5 Sub-Car	92 nopy Species sk Spruce 51	81-110 Density Low 51-80	5 - 10 feet 5 - 10 feet N/A Avg. Height 10 - 20 feet	Sapling Size Sapling	



Stand	Level 4 Co	ver Type	!	Size De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
61	122 - Road	/Parking Lo	ot	Nonsto	cked	10.3			No		
62	6120 - Low	land Ceda	r F	Poletimb	er Well	119.0	75	141-170	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Paper Birch	2	Pole/Sapling	5		Ва	alsam Fir	Low	5 - 10 feet	Sapling	
	Black Spruce	10	Pole/Sapling	6		Blad	ck Spruce	Low	10 - 20 feet	Sapling	
No	rthern White Cedar	80	Pole	8	75	Ta	amarack	Low	5 - 10 feet	Sapling	
	Tamarack	5	Pole/Sapling	5			Alder	Low	5 - 10 feet	Tall Shrub	
	Black Ash	3	Pole/Sapling	6							
63	6118 - Lowland De	ciduous wi	th Cedar	Sapling	Well	13.8	15	1-50	N/A		Stand was cut in 2006, Whitmans Landing. Residual basal area was 40 feet of cedar.
	Canopy Species	% Cover	Size Class	DBH	Age						leet of cedar.
	Bigtooth Aspen	50	Sapling	2	15						
	Balsam Poplar	15	Sapling	1							
No	rthern White Cedar	20	Pole	8							
	Red Maple	15	Sapling	1							
64	4130 -	Aspen	F	Poletimb	er Well	7.7	34	81-110	N/A		very good site
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Paper Birch	10	Pole/Sapling	5		Sug	gar Maple	Medium	5 - 10 feet	Sapling	
	Bigtooth Aspen	90	Pole	7	34						
65	4112 - Maple, Beecl	n, Cherry A	ssociation S	Sawtimb	er Well	11.1	85	81-110	N/A		This stand will be nearly impossible to manage for Maple due to high deer numbers.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Trumpers.
	Red Maple	33	Log/Pole	10			gar Maple	Low	< 5 feet	Sapling	
	White Spruce	1	Pole	8		Whi	ite Spruce	Low	< 5 feet	Sapling	
	Bigtooth Aspen	2	Pole/Sapling	7			Beech	High	5 - 10 feet	Sapling	
	Sugar Maple	55	Log/Pole	11	85						
	Paper Birch	9	Pole	9							
66	4130 -	Aspen		Sapling	Well	19.6	8	1-50	N/A		Stand was cut as part of Limestone Ridge (Sale #41-006-14-01). Sale has been cut and is complete. TCR date: 4/23/15.
	Canopy Species	% Cover	Size Class	DBH	Age						been cut and is complete. TON date: 4/25/15.
	Quaking Aspen	100	Sapling	1	8						
67	6128 - Lowland C Decid	Coniferous, duous	Mixed Po	letimbe	Medium	n 29.6	55		N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Balsam Poplar	20	Pole	7			Alder	Medium	5 - 10 feet	Tall Shrub	
No	rthern White Cedar	20	Pole/Sapling	6		Ta	amarack	Low	10 - 20 feet	Sapling	
No	rthern White Cedar Black Spruce Tamarack	20 35 25	Pole/Sapling Pole/Sapling Pole/Sapling	5	55		amarack ck Spruce	Low	10 - 20 feet 10 - 20 feet	Sapling Sapling	



Stand	Level 4 Co	ver Type		Size Density	Acres	Stand Age E	BA Range	Managed S	ite	General Comments	MICHIGAN .
68	4190 - Mixed Upla Ce	ınd Decidud edar	ous with	Poletimber Well	6.8	86	51-80	N/A			
69	500 -	Water		Nonstocked	3.1			No			
70	6120 - Low	/land Ceda	r	Poletimber Well	199.8	107	111-140	N/A			
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
No	orthern White Cedar	90	Pole	8 107		Alder	Low	5 - 10 feet	Tall Shrub		
	Tamarack	5	Pole	8	Bla	ck Spruce	Low	< 5 feet	Sapling		
	Black Spruce	5	Pole	8		·					
71	500 -	Water		Nonstocked	18.1			No			
72	6129 - Mixed Conife			Poletimber Poor	24.5	55	51-80	N/A		Haywire grade ROW	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Black Spruce	30	Pole	7		Alder	Medium	5 - 10 feet	Tall Shrub		
No	orthern White Cedar	30	Pole	7	Bla	ck Spruce	Medium	5 - 10 feet	Sapling		
	Tamarack	40	Pole	7 55							
73	4113 - R.Ma	aple, Conif	er	Poletimber Well	26.7	81	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Balsam Fir	20	Pole	7	Ва	alsam Fir	Medium	5 - 10 feet	Sapling		
	Red Maple	50	Pole/Log	9 81		Alder	Medium	5 - 10 feet	Tall Shrub		
	Paper Birch	10	Pole	9							
	Sugar Maple	20	Log/Pole	10							
74	6128 - Lowland C Decid	Coniferous, duous	Mixed P	oletimber Mediu	m 22.0	66		N/A		Portions were cut in 1955.	
75	6121 - T	amarack		Sapling Poor	28.3	44	1-50	N/A	_	Cedar strip cuts. alot of tag alder	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Tamarack	70	Sapling	4 44		Alder	High	5 - 10 feet	Tall Shrub		
	Black Spruce	30	Sapling	4							
76	622 - Low	land Shrub		Nonstocked	11.4			No			
77	122 - Road	/Parking Lo	ot	Nonstocked	0.8			No			



Stand	Level 4 C	over Type	S	Size De	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
78	6121 -	Tamarack	Po	Poletimber Poor		14.0	41	1-50	N/A		1[12/19/2018 Ti] Stand was cut as part of Spruceville Pine Sale #41-005-
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	14-01. TCR Date 10/1/2018.
	Black Spruce	25	Pole/Sapling	6		Bla	ck Spruce	Medium	< 5 feet	Sapling	
No	rthern White Cedar	25	Pole	8		Ta	amarack	Medium	< 5 feet	Sapling	
	Tamarack	50	Pole	6	41		Alder	High	5 - 10 feet	Tall Shrub	
79	4133 - Aspe	en, Mixed P	ine S	awtimb	er Well	1.5	51	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Bigtooth Aspen	60	Pole	9	51	R	Red Oak	Low	5 - 10 feet	Sapling	
	Red Pine	40	Log/Pole	13	71	Ва	alsam Fir	Medium	5 - 10 feet	Sapling	
						Re	ed Maple	Medium	5 - 10 feet	Sapling	