

Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41169 Entry Year 2024 Acreage: 1,377 County Alger

Management Area: Pictured Rocks Buffer

Stand Examiner: Scott Kentner

Legal Description:

T48N R17W Sections 26,33-35

Identified Planning Goals:

Provide for the protection, integrated management, and responsible use of a healthy, productive, forest and mineral resource base for the social, recreational, environmental, and economic benefit of the people of the State of Michigan

Soil and topography:

The hardwoods timber types in this compartment are growing on Saugatuck sand, Ogemaw sandy loam or Munising loam. The conifer timber types are growing on Carbondale peat. The terrain ranges greatly from very steep hills to rolling areas to the flats in the conifer types.

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

This compartment has broken ownership of private and commercial private lands. The entire compartment is within the Pictured Rocks National Lake Shore Boundary.

Unique Natural Features:

Archeological, Historical, and Cultural Features:

This area was logged at the turn of the century like many of the areas in the Shingleton Management Unit. There are traces of old grades and winter roads.

Special Management Designations or Considerations:

The compartment is located within the dedicated Pictured Rocks National Lakeshore Buffer Zone.

Watershed and Fisheries Considerations:

Fisheries Concerns: This compartment borders Spray Creek in the Northeastern portion. Spray Creek is a designated trout stream containing native brook trout. Angling pressure is minimal with poor access through the Pictured Rocks National Lakeshore. Spray Creek looks to have a site-condition placed on it until it leaves the compartment boundary. Section Thirty-four Creek is also a designated trout stream with the presence of native brook trout. This is a coldwater stream that feeds into Chapel Lake and then into Chapel Creek. The riparian management zone (RMZ) for both Spray Creek and Section Thirty-four Creek should be set at 100 feet in stands proposed for harvest treatments. For these stands, Fisheries Division requests no cutting within the RMZ for these streams. In any stands proposed for clear-cuts where aspen is a major component or a management objective for regeneration should buffer the streams 300 feet, plus 5 feet per 1% of slope.

Wildlife Habitat Considerations:

This compartment is located in the Grand Marias Sandy End Moraine Outwash sub-subsection. The average growing season is approximately 120 days. The extreme winter temperature generally reaches approximately -35o F. Snowfall in this compartment averages 200 inches or more annually. The compartment falls within the Pictured Rocks Buffer Management Area which highlights the following Featured Species: American Marten, blackburnian warbler, northern goshawk and pileated woodpecker. General Land Office (GLO) Surveyor notes show a fairly even distribution of sugar maple, beech, hemlock, yellow birch and balsam fir in the uplands. Spotted maple (presumed to be striped maple), red maple, cedar, and spruce were also present in lesser amounts. Lowlands were dominated by cedar, but also contained hemlock, black ash, beech, tamarack, and balsam fir. Beaver ponding and wind throw were likely the major forms of natural disturbance. Current upland forests appear to be much less diverse than those recorded during the first survey. Sugar maple dominates, while beech, hemlock, yellow birch, and balsam fir probably occur at lower densities. Lowland conifer forests appear to be similar in species composition to those found in the 1850s. Wildlife habitat objectives include maintaining closed canopy conifer forests, protecting the Spray Creek stream corridor, and promoting species and structural diversity within and between hardwood stands. Common loon (Michigan threatened) is the only rare species

recorded within this compartment. Moose (Michigan special concern) utilize this compartment at various times. Other wildlife species of interest may include spotted salamander, American toad, scarlet tanager, red-backed vole and northern flying squirrel.

Mineral Resource and Development Concerns and/or Restrictions

169 Sections 26 & 33-35, T48N-R17W, Alger County

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. The nearest known active sand/gravel pit is just over two miles south. There is some potential for sand within the compartment, but development potential may be limited. The compartment appears to be entirely within the boundaries of Pictured Rocks National Lakeshore, and surface mining may be restricted. 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:

Access into the south part of the compartment is on good dirt roads. There are a fair number of skid trails and old logging roads that are in and around the compartment. Access to the north is on good dirt roads until the location of a portable bridge at Spray Creek, which will be removed after sale completion. Access can be poor due to heavy soils.

Survey Needs:

Recreational Facilities and Opportunities:

There are no recreational facilities within the compartment however opportunities include hunting, fishing and hiking.

Fire Protection:

The timber types are mainly hardwood and lowland conifers reducing the chances of any large wildland fire occurrences.

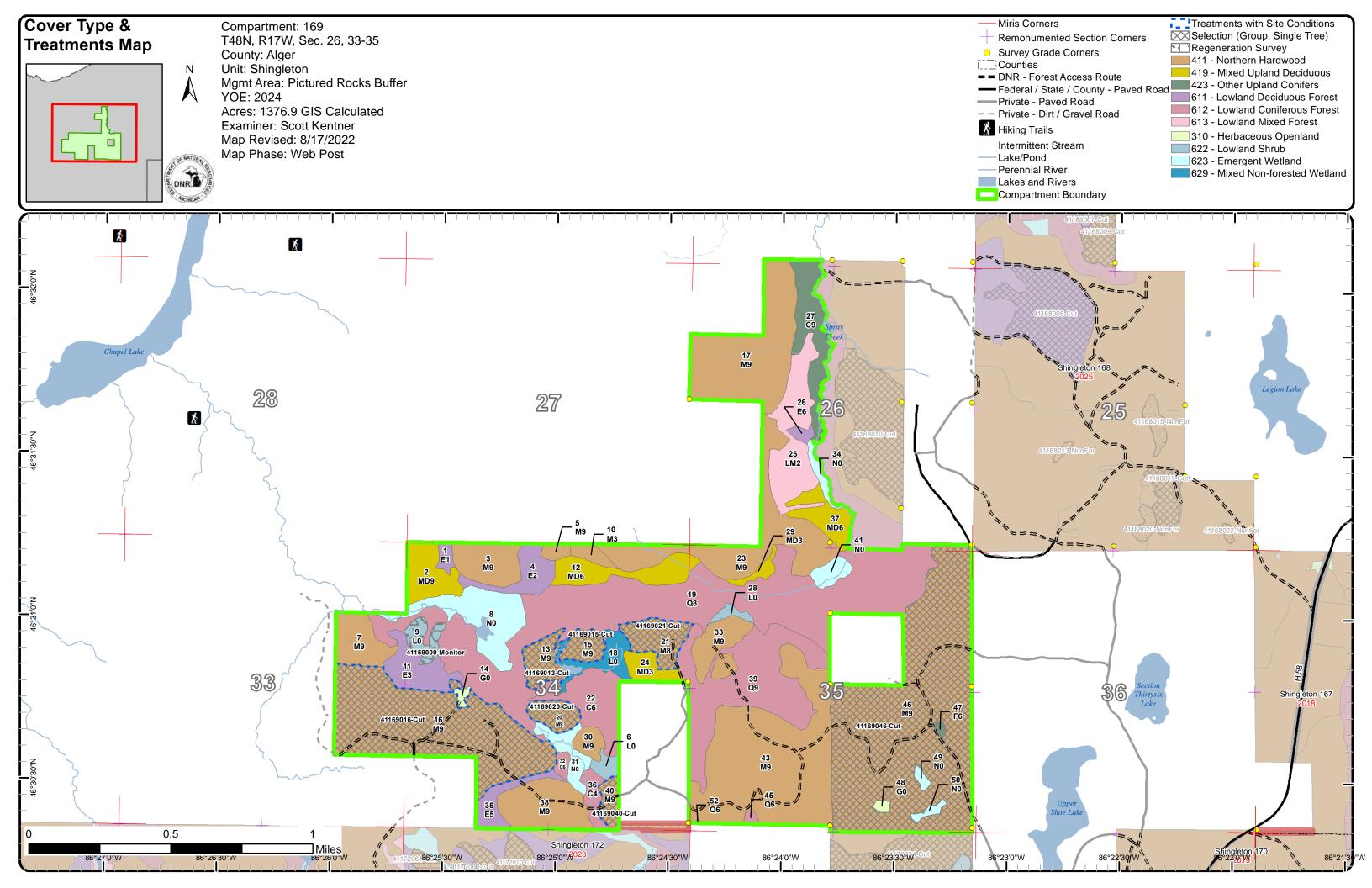
Additional Compartment Information:

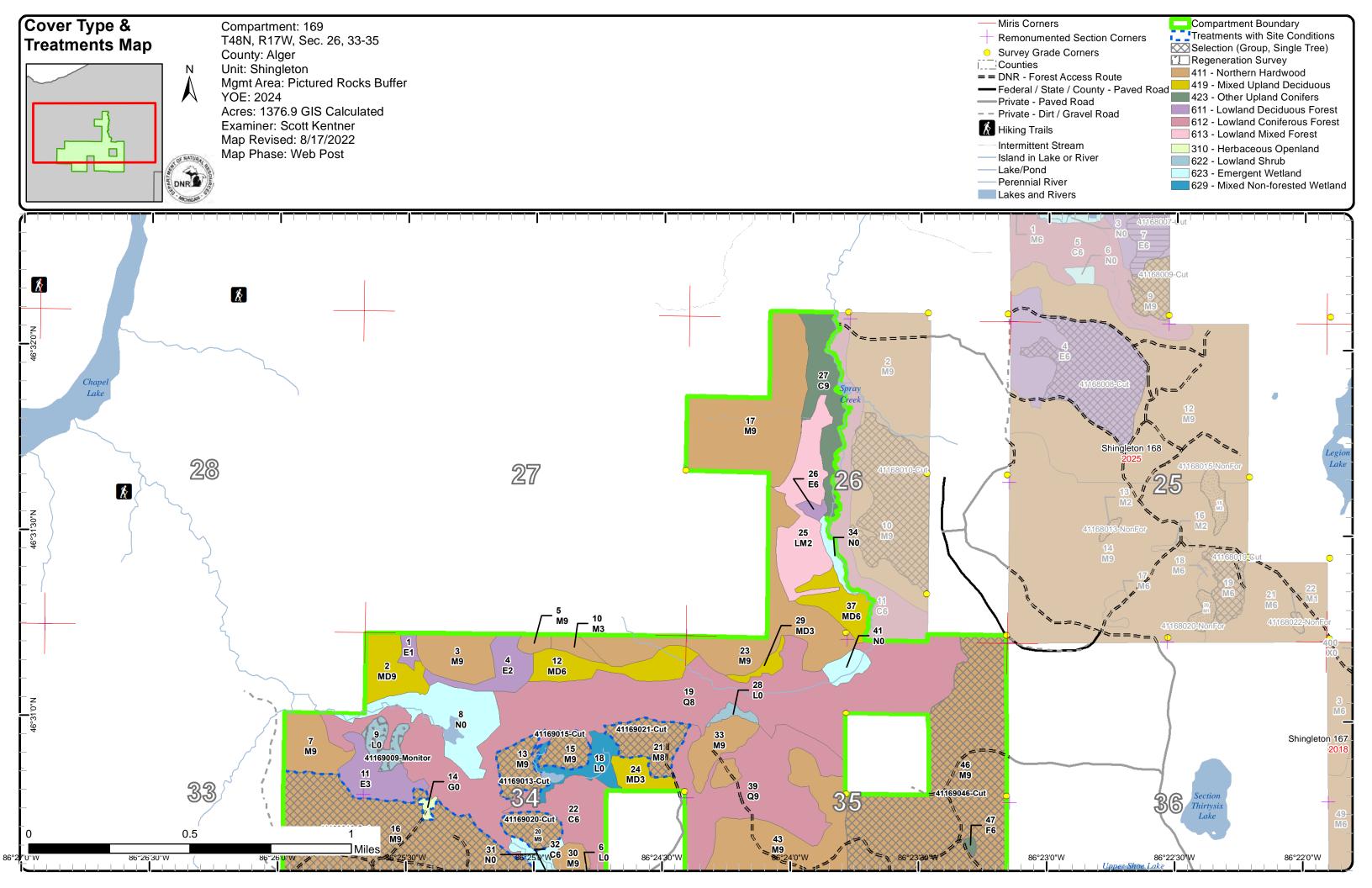
The following reports from the Inventory are attached:

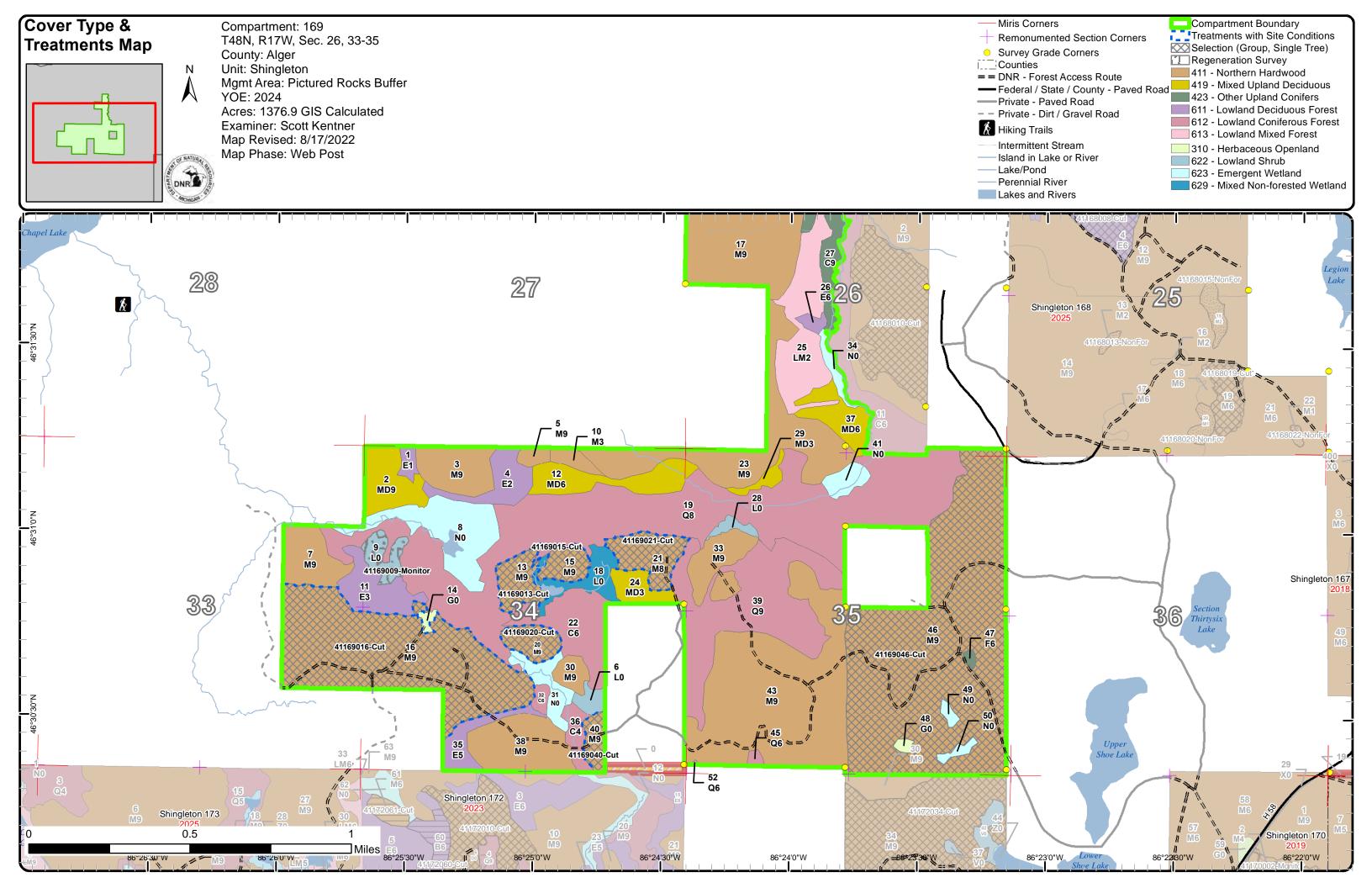
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

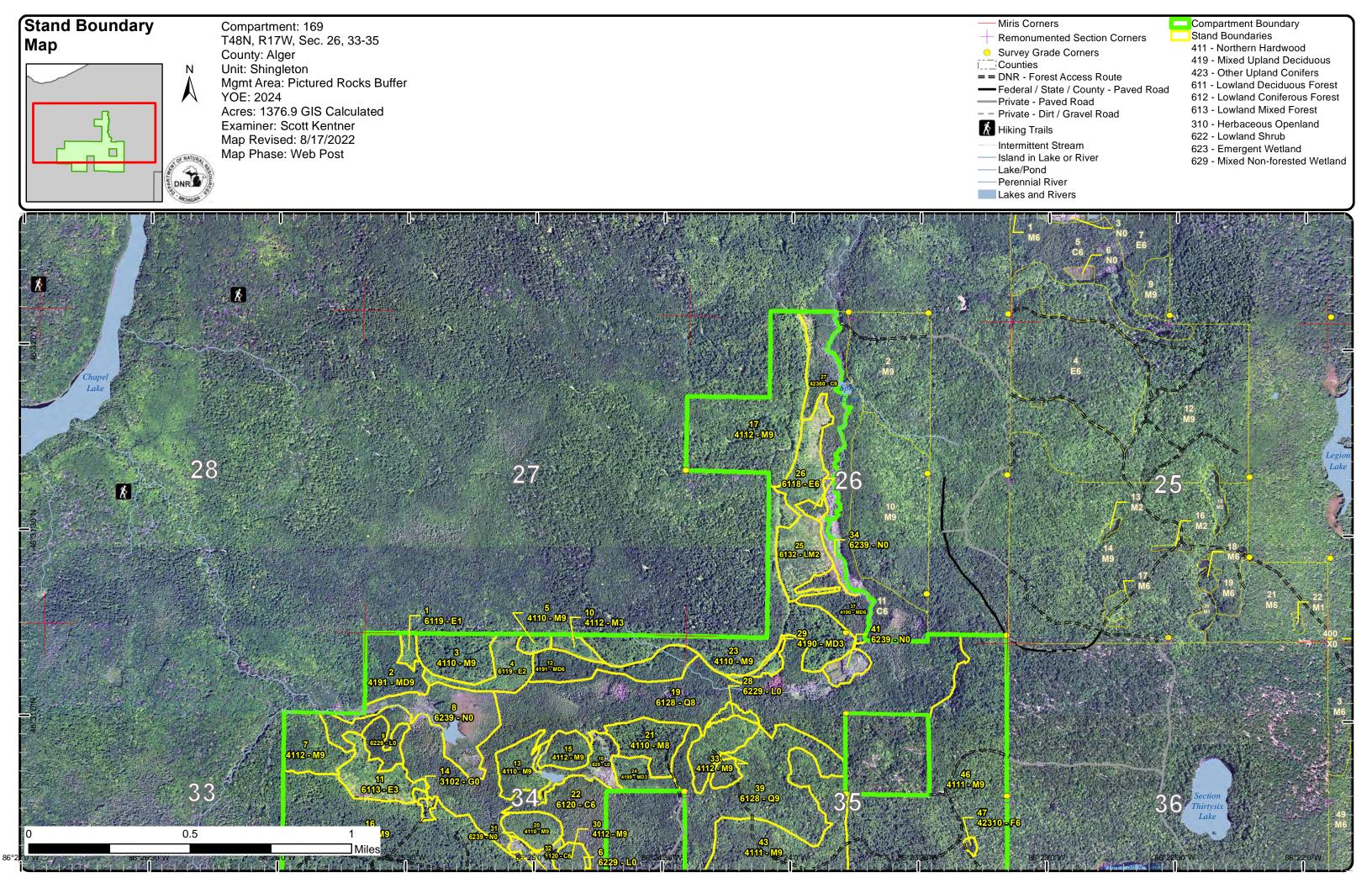
The following information is displayed, where pertinent, on the attached compartment maps:

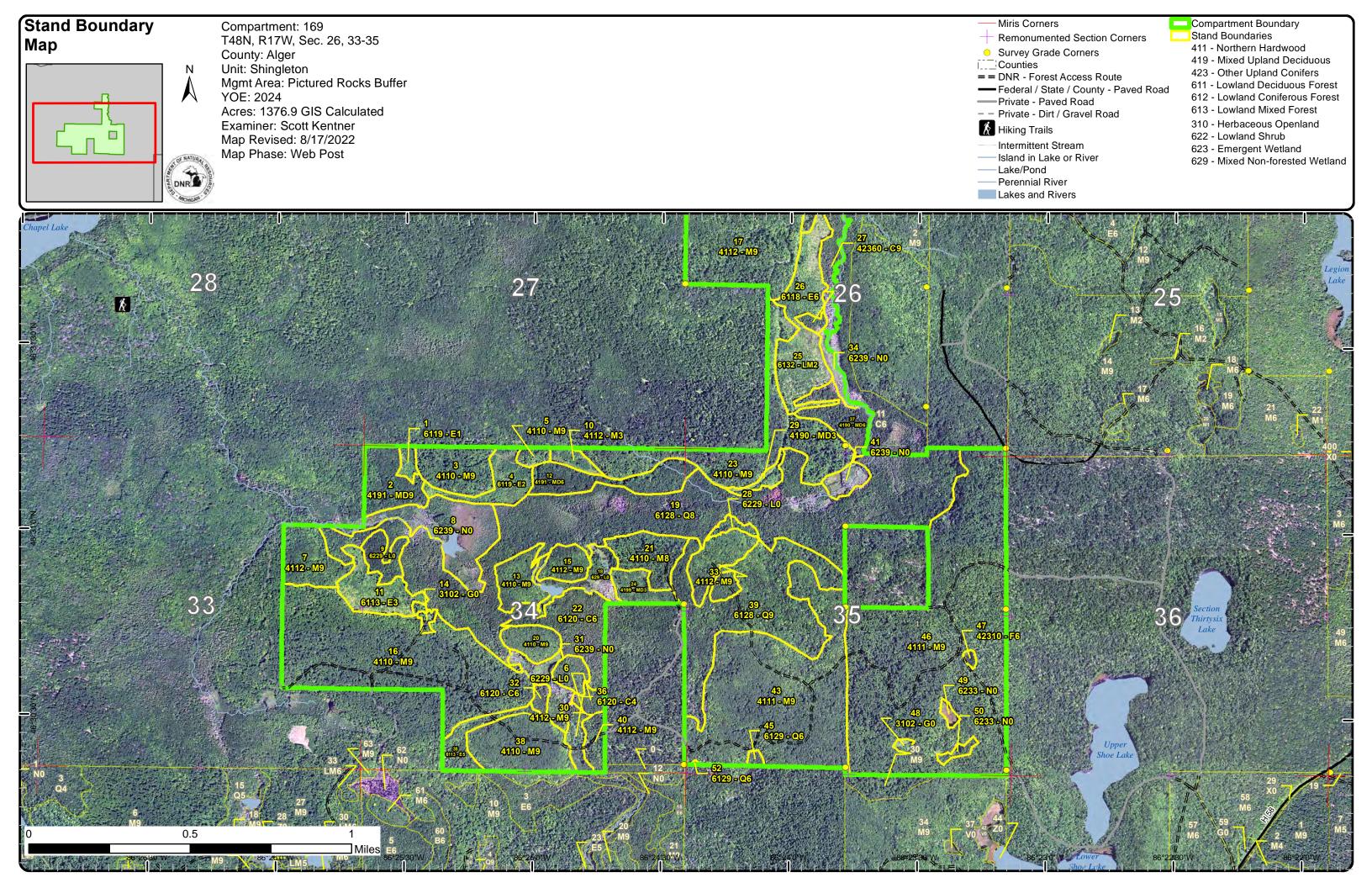
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

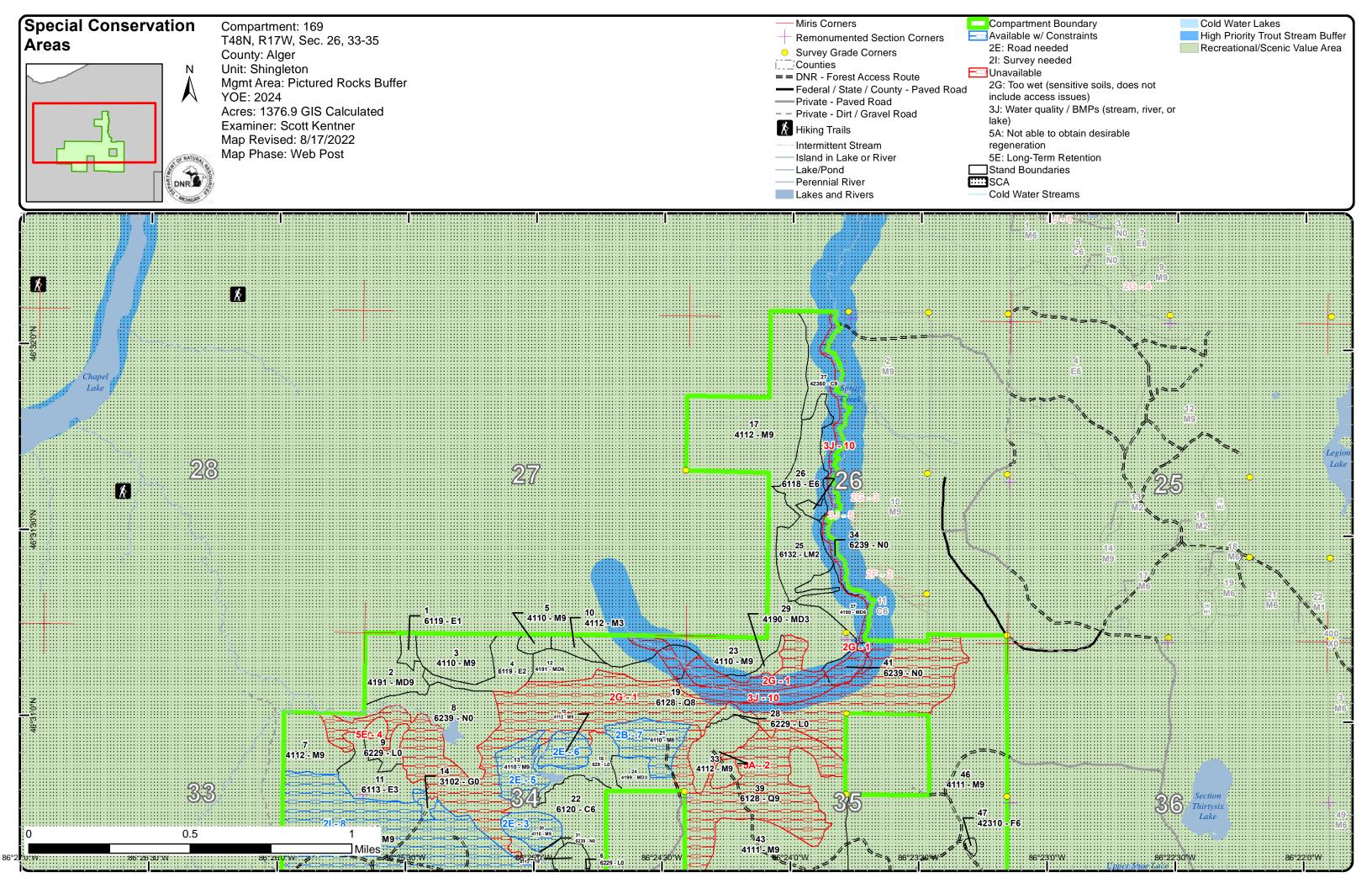


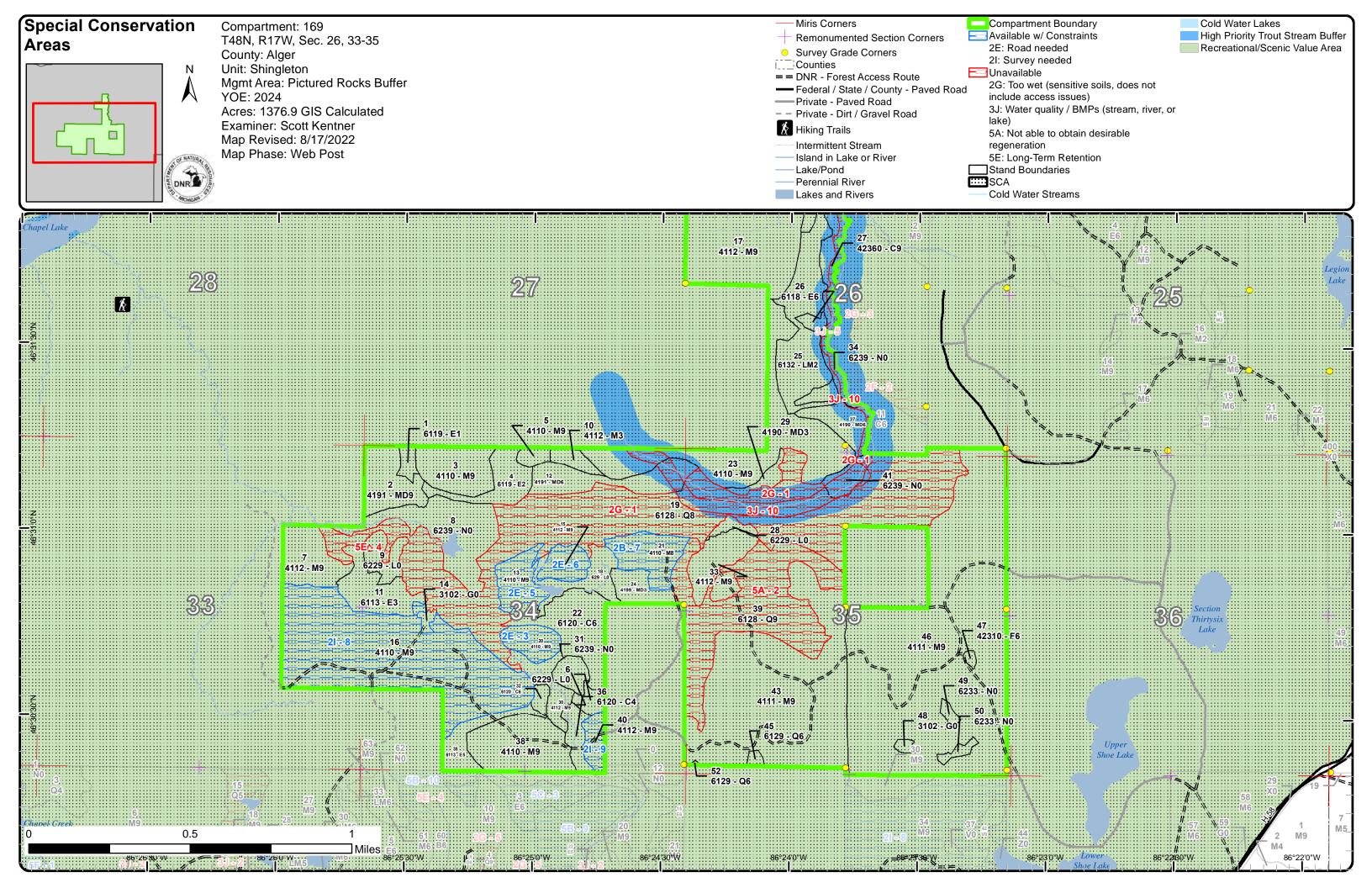












Compartment 169 Year of Entry 2024

Shingleton Mgt. Unit Scott Kentner: Examiner



Age Class

Cedar 0 <th></th>																				
Herbaceous Openland 3 0		**************************************	A STATE OF THE PROPERTY OF THE	3 / 2	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			» /\&		R. S.		& Ja	70,			\$ 4.50 M	Real of the second	St Jree	No. No.
Lowland Conifers 0	Cedar	0	0	0	0	0	0	0	0	32	36	0	0	0	0	0	0	0	0	67
Lowland Deciduous 0 0 36 0 0 0 11 2 0	Herbaceous Openland	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lowland Mixed Forest 0 0 39 0	Lowland Conifers	0	0	0	0	0	0	0	0	216	0	77	0	0	0	0	0	0	0	293
Lowland Shrub 29 0	Lowland Deciduous	0	0	36	0	0	0	11	2	0	0	0	0	0	0	0	0	0	0	49
Marsh 61 0 <td>Lowland Mixed Forest</td> <td>0</td> <td>0</td> <td>39</td> <td>0</td> <td>39</td>	Lowland Mixed Forest	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Mixed Upland Deciduous 0 0 13 0	Lowland Shrub	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Northern Hardwood 0 0 5 0 0 0 0 578 183 0	Marsh	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61
Upland Spruce/Fir 0 0 0 1 0	Mixed Upland Deciduous	0	0	13	0	0	0	0	37	19	0	0	0	0	0	0	0	0	0	69
	Northern Hardwood	0	0	5	0	0	0	0	0	578	183	0	0	0	0	0	0	0	0	766
Total 93 0 93 1 0 0 11 39 845 219 77 0 0 0 0 0 0 0 1377	Upland Spruce/Fir	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Total	93	0	93	1	0	0	11	39	845	219	77	0	0	0	0	0	0	0	1377



Report 2 – Treatment Summary

Shingleton Mgt. Unit Year of Entry: 2024

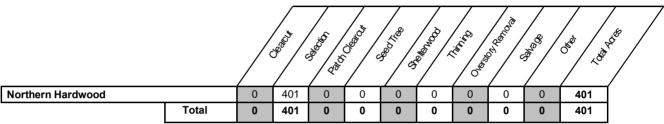
Acres of Harvest

Compartment 169

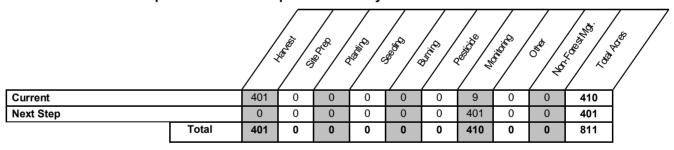
Total Compartment Acres: 1,377

Commercial Harvest - 222 Harvests with Site Condition - 179 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Shinaleton Mat. Unit Report 3 -- Treatments Compartment: 169 s Year of Entry: 2024 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat n Density CoverType Method Objective Name Structure Age Range Type Cut **Proposed Treatments:** 41169009-9 8.9 6229 - Mixed Nonstocked 0 Unspec Monitoring Natural Regen 613 - Lowland Even-Aged No Monitor lowland shrub ified (Re-Inventory) Mixed Forest Prescription Check For regeneration next inventory cycle Specs: Next Step **Treatments:** Acceptable Any species Regen: Other Comment: Site Condition: Proposed Start Date: 10/1 /2031 41169013-Cut 13.0 4110 - Sugar Maple Sawtimber Harvest 411 - Northern 78 111-Single Tree Uneven-No Association Well 140 Selection Hardwood Aged Single-Tree selection: Mark stand down to an average of 80BA, following the Complete Marker guidelines, creating regen pockets to promote Prescription species diversity and Sugar Maple regen. Sugar Maple advanced regeneration should try to be avoided as not to damage. Winter harvest only Specs: due to access. Monitoring, Natural Regen (Re-Inventory) Next Step Treatments: Acceptable Northern Hardwood species Regen: Other Mark cut trees in any other except Orange as past marking is still present. Comment:

<u>Site Condition:</u> Road Needed <u>Proposed Start Date:</u> 10/1 /2023

41169015-Cut 4112 - Maple, Sawtimber 78 111-Harvest Single Tree 411 - Northern Uneven-No 9.1 Beech, Cherry Well 140 Selection Hardwood Aged Association

Association

Single-Tree selection: Mark stand down to an average of 80BA, following the Complete Marker guidelines, creating regen pockets to promote species diversity and Sugar Maple regen. Sugar Maple advanced regeneration should try to be avoided as not to damage. Winter harvest only

due to access.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

<u>Prescription</u>

Specs:

Acceptable Northern Hardwood species

Regen:

Other Mark cut trees in any color except Orange as past marking is still present.

Comment:

<u>Site Condition:</u> Road Needed <u>Proposed Start Date:</u> 10/1 /2023

Compartment: 169

Year of Entry: 2024

S t a

a n d	Treatn Nan		Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habita Cut
16	411690	16-Cut	121.7 4 ⁻	110 - Sugar Maple Association	Sawtimbe Well	r 80	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	No
Pres Spec	cription cs:	species	diversity a		gen. Sugar	Maple a			mplete Marker guide hould try to be avoid			
	Step tments:	Monitor	ing, Natura	l Regen (Re-Invent	ory)							
Acce Rege	eptable en:	Norther	n Hardwoo	d species								
Othe Com	e <u>r</u> nment:											
Site	Condition	<u>n:</u> Surv	ey Needed	d								
Prop	osed Sta	art Date:	10/1 /202	23								
20	411690	20-Cut	10.3 4	110 - Sugar Maple Association	Sawtimbe Well	r 78	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	No
Pres Spec	cription cs:		diversity a						mplete Marker guide hould try to be avoid			
	Step_ tments:	Monitor	ing, Natura	l Regen (Re-Invent	ory)							
Acce Rege	eptable en:	Norther	n Hardwoo	d species								
Othe Com	e <u>r</u> nment:	Mark cu	ıt trees in a	ny color except Ora	ange as pas	st marki	ng is still p	oresent.				
Site	Condition	<u>n:</u> Roa	d Needed									
Prop	osed Sta	art Date:	10/1 /202	23								
21	411690	21-Cut	17.8 4 ⁻	110 - Sugar Maple Association	Sawtimbe Medium	r 78	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	No
Pres Spec	cription cs:		diversity a						mplete Marker guide hould try to be avoid			
	Step tments:	Monitor	ing, Natura	l Regen (Re-Invent	ory)							
Acce Rege		Norther	n Hardwoo	d species								
Othe Com	e <u>r</u> nment:											
Site	Condition	<u>n:</u> Unk	nown Acce	ess								
Prop	osed Sta	art Date:	10/1 /202	23								

Shingleton Mgt. Unit	Report 3 Treatments



S t a									Year of Entry	y: 2024	DNR DNR
	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
40 4	11169040-Cut	7.0	4112 - Maple, Beech, Cherry Association	Sawtimbe Well	r 78	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	No
Prescr Specs:	species							nplete Marker guide ould try to be avoid			promote
Next S Treatm		ring, Natura	al Regen (Re-Inver	ntory)							
Accept Regen		rn Hardwoo	od species								
Other Comm	ient:										
Site Co	ondition: Sur	vey Neede	d								
Propos	sed Start Date:	10/1 /202	23								
46 4	11169046-Cut	222.3	4111 - S.Maple, Hard Mast Association	Sawtimbe Well	r 78	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	No
Prescr Specs								nplete Marker guide ould try to be avoid			promote
Next S Treatm		ring, Natura	al Regen (Re-Inver	ntory)							
Accept Regen		rn Hardwoo	od species								
Other Comm	ent:										
Site Co	ondition:										
Propos	sed Start Date:	10/1 /202	23								

Total Treatment Acreage Proposed: 410.1

Shingleton Mgt. Unit

Compartment: 169 Year of Entry: 2024 **Scott Kentner: Examiner**

Availa	ability for	Managemei	nt								
Total	Acres	Acres Avail	Acres	D	omina	nt Site	Cond	ditions	3		
Acres	Available	With Condition	Not Available		2B	2E	21	2G	3J	5A	5E
67	58	0	10	Cedar					10		
3	3	0	0	Herbaceous Openland							
292	2	0	291	Lowland Conifers				200	14	77	
50	50	0	0	Lowland Deciduous							
39	39	0	0	Lowland Mixed Forest							
29	29	0	0	Lowland Shrub							0
61	53	0	8	Marsh					8		
69	65	0	5	Mixed Upland Deciduous					5		
765	584	179	2	Northern Hardwood	18	32	129		2		
1	1	0	0	Upland Spruce/Fir							
1,377	883	179	316	Total Forested Acres	18	32	129	200	38	77	0
	64%	13%	23%	Relative Percent							

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

Site No.	Dominant Site Cond Availability Dominant Site Condition		Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Conditio	
1	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	200	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified	
	Comments:							
2	Unavailable	5A: Not able to obtain desirable regeneration	77	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: At this time we are u	unable to regenerate the star	nd natura	lly with out losing the Ceda	r component of the stand.			
3	Available	2E: Road needed	10	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							

Report 4 – Site Conditions

Shingleton Mgt. Unit
Scott Kentner: Examiner

4	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Available	2E: Road needed	13	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Available	2E: Road needed	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Available	2B: Unknown if access through adjacent landowner(s) is possible	18	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Available	2l: Survey needed	122	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
9	Available	2l: Survey needed	7	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
	Comments:						
10	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	39	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

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: 169
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.

Conservation Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen condition stocked trout populations and those of other coldwater fish specific conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	ies to persist from year to year. Suitable ey are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish specing year 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 se conditions due to substantial
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their effect as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, diversity of plants and wildlife. Riparian cts on water quality and quantity, as well



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments
1	6119 - Mixed Lowl	and Decidud	ous Forest	Sapling	Poor	3.2	15	Immature	N/A		Stand was cut 15-16 yrs ago. Stand is fully stocked with deciduous
	Canopy Species	% Cover	Size Class	DBH	Age						saplings.
	Red Maple	40	Sapling	3	15						
	Paper Birch	30	Sapling	3	15						
	Balsam Fir	10	Sapling	1							
	Black Cherry	10	Sapling	3							
	Sugar Maple	10	Sapling	3							
2	4191 - Mixed Upl Co	and Decidu	ous with	Sawtimb	er Well	18.7	70	81-110	N/A		Stand was sold and they partially harvested 15-16yrs ago but pulled out due to weather conditions, only about 1/6 of the stand cut.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	30	Log	14		Northern	White Cedar	Low	< 5 feet	Tall Shrub	
	Paper Birch	40	Log	12	70	Ва	Isam Fir	Medium	< 5 feet	Tall Shrub	
	Balsam Fir	10	Log	10					ı		
	White Spruce	10	XLog	18							
No	rthern White Cedar	5	Log	12							
	Hemlock	5	Log	12							
3	4110 - Sugar I			Sawtimb		20.5	80	81-110	N/A	0:	Thinned 15-16 yrs ago, good Sugar Maple regen growing back. Basal area is on the lower end of the range, was cut pretty aggressively last harvest.
	Canopy Species		Size Class		Age		nopy Species		Avg. Height	Size	
	Red Maple Sugar Maple	20 80	Log	12 12	80		lsam Fir	Low	< 5 feet	Tall Shrub	
	Sugai Maple	00	Log	12	00		ar Maple	Medium	10 - 20 feet	Tall Shrub	
							d Maple	Medium	< 5 feet	Tall Shrub	
						Ne	u iviapie	Medium	< 3 leet	Tall Stillub	
4	6119 - Mixed Lowl			Sapling N		15.1	15	Immature	N/A		Stand gets wetter as you go south. Red Maple on ridges and Paper Birch/Cedar in wet areas.
	Canopy Species		Size Class		Age						2.0.7.0000
No	rthern White Cedar	5	Sapling	1							
	Black Cherry	10	Sapling	3							
	Sugar Maple	25	Sapling	3							
	Paper Birch	20	Sapling	3							
	Red Maple	30	Sapling	3	15						
	Balsam Fir	10	Sapling	1							
5	4110 - Sugar I	•		Sawtimb		3.4	82	51-80	N/A		Thinned 15-16 yrs ago. Basal area is on the lower end of the BA range. Good RM regen present.
	Canopy Species		Size Class		Age		nopy Species		Avg. Height	Size	
	Sugar Maple	80	Log	16	82		Beech	Low	< 5 feet	Tall Shrub	
	White Spruce	5	Log	14			Isam Fir	Low	< 5 feet	Tall Shrub	
	Red Maple	15	Log	12			te Spruce	Low	< 5 feet	Tall Shrub	
						Re	d Maple	Full	10 - 20 feet	Tall Shrub	

Shingleton Mgt. Unit



Stand	Level 4 Co	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
6	6229 - Mixed	l lowland sh	nrub	Nonsto	cked	4.3	0	Unspecified	613 - Lowland M	lixed Forest	cut within the Entry of 2012.
7	4112 - Maple, Beed	ch, Cherry A	ssociation	Sawtimb	er Well	18.9	82	51-80	N/A		41-026-14-01 unit 1. Large "pocket" was cut to create regen gap within the
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Speci	es Density	Avg. Height	Size	stand. Regeneration is just starting to return, look for regen status during next inventory cycle.
	Yellow Birch	5	Pole	5		Suç	gar Maple	Medium	10 - 20 feet	Sapling	
	White Pine	5	XLog	24		Yel	low Birch	Low	10 - 20 feet	Sapling	
	Black Cherry	30	Log	14		Ba	alsam Fir	Low	5 - 10 feet	Sapling	
	Beech	5	XLog	18		Whi	ite Spruce	Low	10 - 20 feet	Sapling	
	Sugar Maple	25	Log/Pole	14		Re	ed Maple	Medium	10 - 20 feet	Sapling	
	Red Maple	30	Log	14	82			,		1	•
8	6239 - Mixed E	mergent W	etland	Nonsto	cked	34.9		Unspecified	No		Small patches of trees present scattered throughout area.
9	6229 - Mixed	l lowland sh	nrub	Nonsto	cked	8.9	0	Unspecified	613 - Lowland M	lixed Forest	41-026-14-01 unit 2. Small amount of regen present, check on regeneratio status next inventory cycle (2032). Retention patch located NW part of stand.
10	4112 - Maple, Beed	ch, Cherry A	ssociation	Sapling	Well	4.7	15	Immature	N/A		Cut 15-16 years ago, Full of RM regen.
	Canopy Species	% Cover	Size Class	DBH	Age						
	Red Maple	50	Sapling	3	15						
	Bigtooth Aspen	10	Sapling	3							
	Balsam Fir	5	Sapling	1							
	Black Cherry	35	Sapling	3							
11	6113 - Lo	wland Maple	е	Sapling	Well	18.4	15	Immature	N/A		Cut 15-16 years ago, some nice cedar regen in pockets, otherwise red
	Canopy Species	% Cover	Size Class	DBH	Age						maple is very dense
	Balsam Fir	20	Sapling	2	15						
	Black Spruce	10	Sapling	1							
No	thern White Cedar	10	Sapling	1							
	Red Maple	60	Sapling	2	15						
12	4191 - Mixed Upla Co	and Deciduo onifer	ous with	Poletimb	er Well	22.0	68	81-110	N/A		Mix of deciduous and conifers.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Speci	es Density	Avg. Height	Size	
	Paper Birch	45	Pole	8	68	Suç	gar Maple	Low	< 5 feet	Tall Shrub	
	Balsam Fir	5	Log	10		Re	ed Maple	Low	< 5 feet	Tall Shrub	
	White Spruce	15	Log	12		Ва	alsam Fir	Medium	< 5 feet	Tall Shrub	
No	thern White Cedar	5	Log	12			<u></u>				
	Red Maple	30	Pole	8							



Stand	Level 4 Co	over Type		Size De	nsity	Acres :	Stand Age E	A Range	Managed S	Site	General Comments
13	4110 - Sugar M	laple Assoc	ciation	Sawtimb	er Well	13.0	78	111-140	N/A		Pockets of Sugar Maple regen present.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	
	Sugar Maple	80	Log/Pole	10	78	Bals	am Fir	Low	< 5 feet	Tall Shrub	
	Red Maple	20	Log	10		Suga	r Maple	Medium	< 5 feet	Tall Shrub	
14	3102	- Grass		Nonsto	cked	1.7	U	Inspecified	No		Small grass opening, with apple and Cherry trees.
15	4112 - Maple, Beed	ch, Cherry A	ssociation	Sawtimb	er Well	9.1	78	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	
No	rthern White Cedar	5	Log	14		Suga	r Maple	Low	< 5 feet	Tall Shrub	
	Black Cherry	25	Log	14		Bals	am Fir	Medium	< 5 feet	Tall Shrub	
	Sugar Maple	25	Pole	8							
	Paper Birch	5	Pole	8							
	Red Maple	30	Log	12	78						
	Yellow Birch	5	XLog	18							
	Balsam Fir	5	Pole	9							
16	4110 - Sugar N	laple Assoc	ciation	Sawtimb	er Well	121.7	80	111-140	N/A		Thinned 15-16 yrs ago, good HM regen. Basal area is on the lower end of the BA range. However canopy gaps are starting to close in around full
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	regeneration growth.
	Red Maple	10	Log	14		Red	Maple	Low	< 5 feet	Tall Shrub	
	Sugar Maple	90	Log	14	80	Suga	r Maple	Low	< 5 feet	Tall Shrub	
17	4112 - Maple, Beed	ch, Cherry A	ssociation	Sawtimb	er Well	72.2	78	81-110	N/A		Stand was thinned 15- 16 years ago. Thinned pretty hard last harvest, bas
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	area is on the lower end of range, good regen crop of maple filling in canopy gaps. West "40" is very hilly and contains many areas of seeps.
	Red Maple	30	Log	14		Red	Maple	Medium	< 5 feet	Tall Shrub	samply gapo. Trock to to voly thing and contains than a doctor coops.
	Hemlock	5	Pole	8		Suga	r Maple	Medium	< 5 feet	Tall Shrub	
	Sugar Maple	65	Log	12	78	В	eech	Medium	< 5 feet	Tall Shrub	
						Bals	am Fir	Low	5 - 10 feet	Tall Shrub	
18	629 - Mixed nor	n-forested w	retland	Nonsto	cked	13.2		Immature	No		
19	6128 - Lowland Dec	iduous		Sawtimber			79	51-80	N/A		Wet, many seeps empty into the stand with pockets of straight Birch and Cedar. Stands contains Spray Creek headwaters.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	
	White Spruce	10	Log	10			am Fir	Medium	< 5 feet	Tall Shrub	
No	rthern White Cedar	35	Log	12	79	White	Spruce	Low	< 5 feet	Tall Shrub	
	White Pine	5	XLog	24		He	mlock	Low	< 5 feet	Tall Shrub	
	Paper Birch	15	Log	10	67	Northern \	White Cedar	Low	< 5 feet	Tall Shrub	
	Red Maple	10	Log	10							
	Balsam Fir	25	Log	10							



Stand	Level 4 Cover Type			Size Density	Acres	Stand Age	BA Range	Managed S	Site	General Comments
20	4110 - Sugar N	ciation	Sawtimber Well	10.3	78	111-140	N/A		Pockets of HM regen already present.	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	
	Sugar Maple	80	Log	12 78	Su	gar Maple	Medium	< 5 feet	Tall Shrub	
	Red Maple	20	Log	10	В	alsam Fir	Low	< 5 feet	Tall Shrub	
21	4110 - Sugar Maple Association		ciation S	Sawtimber Mediu		17.8 78 111-140		N/A		Nice HM regen, thinned 15-16 years ago. Basal area is on the lower end of the BA range. However canopy gaps are starting to close in around full
	Canopy Species		Size Class			anopy Species		Avg. Height	Size	regeneration growth.
	Red Maple	10	Log	12		ed Maple	Medium	< 5 feet	Tall Shrub	
	Black Cherry	10	Log	12	Su	gar Maple	High	< 5 feet	Tall Shrub	
	Sugar Maple	80	Log	12 78						
22	6120 - Lo	wland Ceda	ır	Poletimber Well	28.5	80	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	
	Red Maple	5	Pole	8	Norther	n White Cedar	High	5 - 10 feet	Tall Shrub	
	Hemlock	5	Log	10						
No	rthern White Cedar	90	Pole	5 80						
23	4110 - Sugar Maple Association		ciation	Sawtimber Well	61.7	78	81-110	N/A		Awesome HM regen. Thinned 15-16 years ago. basal area is on the lower end of range. Stand was harvested pretty aggressively last time. Stand is
	Canopy Species		Size Class			anopy Species		Avg. Height	Size	on slope with the road at the bottom being a winter only use road.
	Sugar Maple	85	Log	11 78		gar Maple	High	10 - 20 feet	Tall Shrub	
	Red Maple	10	Log	10	В	alsam Fir	Low	5 - 10 feet	Tall Shrub	
	Yellow Birch	5	Log	14	R	ed Maple	Low	5 - 10 feet	Tall Shrub	
24	4199 - Other Mixe	ed Upland D	eciduous	Sapling Well	9.5	15	Immature	N/A		Clear-cut 15-16 yrs ago, Wet inclusions of cedar cut along with the rest but not regenerating back to Cedar.
	Canopy Species	% Cover	Size Class	DBH Age						not regenerating back to occur.
	Paper Birch	10	Sapling	1						
	Balsam Fir	10	Sapling	1						
	Balsam Poplar	30	Sapling	2 15						
	Red Maple	30	Sapling	2 15						
	Sugar Maple	20	Sapling	2						
25	6132 - Mixed Lowla	and Forest v	vith Cedar	Sapling Medium	38.7	15	Immature	N/A		Stand was clear cut 15-16 yrs ago, very nice Cedar regen with over 300 trees/ ac on the eastside. Other deciduous species are filling in stand with
	Canopy Species	% Cover	Size Class	DBH Age						largely saplings filling in stand.
No	rthern White Cedar	20	Sapling	1 15						
	Red Maple	10	Sapling	3 15						
	Bigtooth Aspen	40	Sapling	3 15						
	White Spruce	10	Sapling	3						
			- 1 3							



Stand	Level 4 Cover Type			Size Density	Acres	Stand Age E	BA Range	Managed S	ite	General Comments
26	6118 - Lowland De	eciduous wi	th Cedar	Poletimber Well	2.4	60	51-80	N/A		Pockets of pure Birch and Cedar within stand.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Can	opy Species	Density	Avg. Height	Size	
	Balsam Fir	5	Log	10	Bals	sam Fir	High	< 5 feet	Tall Shrub	
	Paper Birch	30	Pole	8	Northern '	White Cedar	Medium	< 5 feet	Tall Shrub	
	White Spruce	5	Log	10	Red	Maple	Medium	< 5 feet	Tall Shrub	
Nor	rthern White Cedar	30	Pole	8						
	Red Maple	30	Pole	8 60						
27	42360 - Սբ	oland Ceda	r	Sawtimber Well	28.9	75	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Can	opy Species	Density	Avg. Height	Size	
	Black Spruce	5	Log	10	Northern '	White Cedar	High	< 5 feet	Tall Shrub	
Nor	rthern White Cedar	60	Log	10 75	He	mlock	Low	< 5 feet	Tall Shrub	
	Hemlock	5	Log	10						
	Paper Birch	30	Log	10						
28	6229 - Mixed	lowland sh	rub	Nonstocked	3.0	0 ι	Jnspecified	613 - Lowland M	ixed Forest	Cut last entry 41-026-14-01 unit 9. Only regen present is red maple stump sprouts.
29	4190 - Mixed Upla Ce	and Decidud edar	ous with	Sapling Well	3.9	15	Immature	N/A		Clear-cut 15-16 yrs ago full of regen.
	Canopy Species	% Cover	Size Class	DBH Age						
	Red Maple	25	Sapling	3 15						
	Bigtooth Aspen	25	Sapling	3						
Nor	rthern White Cedar	25								
	Sugar Maple	20	Sapling	1						
	Sugai Maple	25	Sapling Sapling	3 15						
30	4112 - Maple, Beec	25	Sapling		6.1	78	51-80	N/A		41-026-14-01 unit 6, Sale Closed.
		25 h, Cherry A	Sapling	3 15		78 opy Species		N/A Avg. Height	Size	41-026-14-01 unit 6, Sale Closed.
	4112 - Maple, Beec	25 h, Cherry A	Sapling	3 15 Sawtimber Well	Sub-Can				Size Tall Shrub	41-026-14-01 unit 6, Sale Closed.
	4112 - Maple, Beec	25 h, Cherry A % Cover	Sapling ssociation Size Class	3 15 Sawtimber Well DBH Age	Sub-Can	opy Species	Density	Avg. Height		41-026-14-01 unit 6, Sale Closed.
	4112 - Maple, Beeck Canopy Species Sugar Maple	h, Cherry A Cover 25	Sapling ssociation Size Class Pole/Log Log	3 15 Sawtimber Well DBH Age	Sub-Can	opy Species	Density	Avg. Height		41-026-14-01 unit 6, Sale Closed.
	4112 - Maple, Beeck Canopy Species Sugar Maple Red Maple	25 h, Cherry A % Cover 25 60	Sapling ssociation Size Class Pole/Log	Sawtimber Well DBH Age 9 12 78	Sub-Can	opy Species	Density	Avg. Height		41-026-14-01 unit 6, Sale Closed.
	4112 - Maple, Beeck Canopy Species Sugar Maple Red Maple Beech	25 h, Cherry A % Cover 25 60 5 10	Sapling ssociation Size Class Pole/Log Log Log Log Log	3 15 Sawtimber Well DBH Age 9 12 78 14	Sub-Can	opy Species sam Fir	Density	Avg. Height		41-026-14-01 unit 6, Sale Closed.
	4112 - Maple, Beech Canopy Species Sugar Maple Red Maple Beech Black Cherry 6239 - Mixed Er	25 h, Cherry A % Cover 25 60 5 10	Sapling ssociation Size Class Pole/Log Log Log Log Log etland	3 15 Sawtimber Well DBH Age 9 12 78 14 14 14	Sub-Can Bals	opy Species sam Fir	Medium	Avg. Height 5 - 10 feet		Nice pole stand of Cedar, with creek that runs the length through the middle
31 32	4112 - Maple, Beech Canopy Species Sugar Maple Red Maple Beech Black Cherry 6239 - Mixed Er	h, Cherry A Cover 25 60 5 10 mergent We wland Ceda	Sapling ssociation Size Class Pole/Log Log Log Log Log etland	Sawtimber Well DBH Age 9 12 78 14 14 14 Nonstocked Poletimber Well	Sub-Can Bals	opy Species sam Fir	Medium Unspecified	Avg. Height 5 - 10 feet No		
31	4112 - Maple, Beech Canopy Species Sugar Maple Red Maple Beech Black Cherry 6239 - Mixed Er	h, Cherry A Cover 25 60 5 10 mergent We wland Ceda	Sapling ssociation Size Class Pole/Log Log Log Log etland	Sawtimber Well DBH Age 9 12 78 14 14 Nonstocked Poletimber Well	Sub-Can Bals	opy Species sam Fir	Medium Unspecified	Avg. Height 5 - 10 feet No		Nice pole stand of Cedar, with creek that runs the length through the middle
31 32	4112 - Maple, Beech Canopy Species Sugar Maple Red Maple Beech Black Cherry 6239 - Mixed En	h, Cherry A Cover 25 60 5 10 mergent We wland Ceda Cover	Sapling ssociation Size Class Pole/Log Log Log Log etland r Size Class	Sawtimber Well DBH Age 9 12 78 14 14 14 Nonstocked Poletimber Well DBH Age	Sub-Can Bals	opy Species sam Fir	Medium Unspecified	Avg. Height 5 - 10 feet No		Nice pole stand of Cedar, with creek that runs the length through the middle



Stand	Level 4 C	over Type		Size Dens	ity	Acres	Stand Age I	BA Range	Managed 9	Site	General Comments
33	4112 - Maple, Beed	ch, Cherry A	ssociation	Sawtimber	Well	18.6	80	51-80	N/A		Cut last entry, 41-026-14-01 unit 10. Some RM stump sprouts are popping
	Canopy Species	% Cover	Size Class	DBH A	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	lup.
	Sugar Maple	30	Log	10		Re	d Maple	High	< 5 feet	Sapling	
	Red Maple	60	Log	10	80	E	Beech	Low	< 5 feet	Tall Shrub	
	Beech	5	Pole	8		Whit	e Spruce	Medium	< 5 feet	Tall Shrub	
	Hemlock	5	Log	10		Ba	sam Fir	Medium	< 5 feet	Tall Shrub	
						He	emlock	Medium	< 5 feet	Tall Shrub	
34	6239 - Mixed E	mergent W	etland	Nonstock	ed	4.5	l	Jnspecified	No		
35	6113 - Lo	wland Maple	e F	Poletimber M	lediun	n 11.0	55	51-80	N/A		Seep running through stand, this stand acts as its buffer .
	Canopy Species	% Cover	Size Class	DBH A	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	10	Pole	8		Ba	sam Fir	Medium	< 5 feet	Tall Shrub	
	American Elm	5	Pole	6							
	Yellow Birch	10	Pole/Log	8							
	Balsam Fir	10	Pole	8							
No	rthern White Cedar	10	Log	12							
	Red Maple	50	Pole	6	55						
	Black Ash	5	Pole	6							
36	6120 - Lo	wland Ceda		Poletimber		7.3	80	1-50	N/A		
	Canopy Species		Size Class		Age						
No	orthern White Cedar	100	Pole	5	80						
37	4190 - Mixed Upl C	and Decidud edar	ous with	Poletimber	Well	15.4	60	51-80	N/A		Pockets of pure P Birch and Cedar along edges.
	Canopy Species	% Cover	Size Class	DBH A	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Red Maple	35	Pole	8	60	Ba	sam Fir	High	< 5 feet	Tall Shrub	
	Paper Birch	30	Pole	8		Northern	White Cedar	Medium	< 5 feet	Tall Shrub	
	White Spruce	5	Log	10		Re	d Maple	Medium	< 5 feet	Tall Shrub	
	Balsam Fir	5	Log	10							•
No	rthern White Cedar	25	Log	10							
38	4110 - Sugar N	/laple Assoc	ciation	Sawtimber	Well	30.6	78	81-110	N/A		Cut last entry 41-026-14-01 unit 8. SM regen covering ground as seedlings
	Canopy Species	% Cover	Size Class	DBH A	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	80	Log	14	78	Sug	ar Maple	Full	< 5 feet	Seeding	
	Red Pine	15	Log	14				-			
	Ironwood	5	Pole	6							



Stand	Level 4 Co	over Type		Size Density	Acres	Stand Age B	A Range	Managed S	Site	General Comments	
39	6128 - Lowland (Deci	Coniferous, duous	Mixed	Sawtimber Well	77.2	90	81-110	N/A		Seeps run through stand towards the North on the east and west sides.	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Car	nopy Species	Density	Avg. Height	Size		
	Red Maple	10	Log	10	He	emlock	Medium	< 5 feet	Tall Shrub		
	Yellow Birch	10	Log	14	Bal	lsam Fir	Medium	< 5 feet	Sapling		
No	orthern White Cedar	30	Log	10							
	White Spruce	10	Log	12							
	Hemlock	40	Log	12 90							
40	4112 - Maple, Beec	h, Cherry A	Association	Sawtimber Well	7.0	78	111-140	N/A		Thinned 20 years ago. Basal area is on the lower end of the BA range.	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Car	nopy Species	Density	Avg. Height	Size	However canopy gaps are starting to close in around full regeneration growth.	
	Sugar Maple	60	Log	14 78	Re	d Maple	Low	5 - 10 feet	Tall Shrub		
	Beech	5	Log	14	E	Beech	Low	5 - 10 feet	Tall Shrub		
	Red Maple	30	Log	14	Bal	lsam Fir	Low	5 - 10 feet	Tall Shrub		
	Yellow Birch	5	Log	10							
41	6239 - Mixed E	mergent W	etland	Nonstocked	6.4	U	nspecified	No			
43	4111 - S.Maple, Hard Mast Association			Sawtimber Well	127.2 78		51-80	N/A		Cut last entry, 41-026-14-01 units 11-13. Regen is starting to come in nicely.	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Tilicery.	
	Sugar Maple	60	Log	12 78		ar Maple	High	< 5 feet	Tall Shrub		
	Red Maple	15	Log	14	Re	d Maple	Medium	< 5 feet	Tall Shrub		
	Yellow Birch	5	Log	14							
	Basswood	5	Log	10							
	Beech	15	Log	10							
45	6129 - Mixed Conife	erous Lowla	and Forest	Poletimber Well	1.3	70	81-110	N/A			
	Canopy Species		Size Class								
	Hemlock	45	Pole	8 70							
	White Pine	10	Log	14							
	Black Spruce	45	Pole	8							
46	4111 - S.Maple, Hard Mast Association			Sawtimber Well	222.3 78		111-140	N/A		Thinned 15-16 years ago. Basal area is on the lower end of the BA range. However canopy gaps are starting to close in around full regeneration	
	Canopy Species		Size Class			nopy Species	Density	Avg. Height	Size	growth.	
	Beech	10	Log	10		d Maple	High	< 5 feet	Tall Shrub		
	Hemlock	2	XLog	18	E	Beech	Medium	< 5 feet	Tall Shrub		
	Sugar Maple	70	Log	12 78							
	Basswood	8	Log	14							
	Red Maple	10		12							



Stand	Level 4 Co	over Type		Size Density	Acres	Stand Age	BA Range	Managed S	ite	General Comments
47	42310 - Pla	anted Sprud	e	Poletimber Well	1.0	29	51-80	N/A		Planted White Spruce, was an opening.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
	White Spruce	100	Pole	7 29	Whi	ite Spruce	Low	< 5 feet	Tall Shrub	
48	3102	- Grass		Nonstocked	1.4		Unspecified	No		Starting to fill in with SM regen.
49	6233 - W	et Meadow		Nonstocked	1.8		Unspecified	No		
50	6233 - W	et Meadow		Nonstocked	2.2		Immature	No		Depressions with grass growing in low areas that seasonally fill with water, surrounded by steep slopes with older hemlock.
52	6129 - Mixed Conife	erous Lowla	and Forest	Poletimber Well	0.2	70	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH Age						
	Hemlock	45	Pole	8 70						
	White Pine	10	Log	14						
	Black Spruce	45	Pole	8						