

Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41099 Entry Year 2020 Acreage: 1,171 County Delta

Management Area: Lake Michigan Shoreline

Revision Date: 2018-07-16

Stand Examiner: Adam Petrelius

Legal Description:

T38N R19W Sections 23, 24, 26, 27, 34, 35

Identified Planning Goals:

Multiple resource management for current and future generations.

Soil and topography:

The topography within the compartment is mostly flat. Slight elevation changes occur with values ranging from 581-650 feet. The majority of the compartment is dominated by mixed stands of aspen, birch, and balsam fir. Stands bordering the Lake Michigan shoreline are mostly cedar. The major soil types found, in order of abundance, are Limestone Rock Land, Summerville, and Eastport. Additional soils found are Alpena, Ensign, Duel, Rubicon, and Ruse. Habitat types within the compartment, in order of abundance, are Unclassified (Limestone Rock Land), PArVAa, AFOA, PVE, Unclassified Lowland, and ATFD. It lies within the Garden Outcrop Land Type Association, and the Lake Michigan Shoreline Management Area.

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

State land within this compartment was acquired between 1907 and 1986. Only the northern boundary is bordered by state land. The rest is surrounded by private land and Lake Michigan. The northern portion is accessed from 10th road through a public easement acquired by the DNR. The southern portion has no legal access. Private ownership surrounding the compartment is mostly large blocks of ownership with 6 different owners. Even though access is limited in the southern portion, both areas receive heavy use during deer season. Problems associated with this include littering and ORV damage

Unique Natural Features:

This compartment contains unique ecosystems and species which contribute towards the biodiversity of landscape. It is home to a variety of rare plants associated with alvar and shoreline habitats. All three types of special management areas are found here, Special Conservation Areas (SCA), High Conservation Value Areas (HCVA), and Ecological Reference Areas (ERA). The entire compartment is categorized as a SCA for deer wintering complex. It also contains a designated Coastal Environmental Area (HCVA). Alvar ecosystems (ERA) are also found within the northern and southern portions of the compartment. Areas of cedar along the Lake Michigan shoreline are also classified as potential old growth.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

Forest management activities are planned and implemented to prevent damage and strengthen the quality of the unique ecosystems and species located within the compartment.

Watershed and Fisheries Considerations:

The northern sub-section of this compartment contains Sucker Lake. 100' plus 5' per 1% increase in slope; buffers are recommended to protect shoreland areas adjacent to these waterbodies in accordance with Best Management Practices. Note: Buffers may not apply when conducting treatments for the control of invasive species (i.e., phragmites). The eastern regions of this compartment border Lake Michigan.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

An active sand/gravel pit is located less than two miles to the northwest, in Section 15. There may be some sand & gravel potential and there is good limestone/dolostone potential within the compartment. There is no known metallic mineral potential in this area, and there is no history of mineral leasing. There is no commercial oil and gas production in the UP.

Vehicle Access:

The compartment is split into 2 portions. The northern portion can be accessed from 10th Road. At the end of 10th road access is east along a forest road which the DNR holds a public easement. Access to the southern portion is from JJ Road. Once JJ road ends, travel south along a forest road ½ mile to the compartment boundary. The southern portion can also be accessed from the west and south through a system of privately owned forest roads. There is no legal access for the DNR to manage the southern portion of the compartment.

Survey Needs:

Survey work may be needed within the compartment prior to timbersale preparation.

Recreational Facilities and Opportunities:

There are no recreational facilities located within the compartment. Opportunities for hunting, fishing, and other forms of recreational activity exist within or adjacent to this compartment.

Fire Protection:

Response time to fires within this compartment from the Thompson field office will be slow. Fayette State Park, located within 5 miles, has a small engine with qualified firefighters and can be dispatched if needed. The compartment receives little use throughout fire season and a lightening caused fire is more likely that a human caused fire. Weather conditions here are typically cooler with higher humidity values than other areas of the management unit. Lake Michigan can be used as a water source if needed.

Additional Compartment Information:

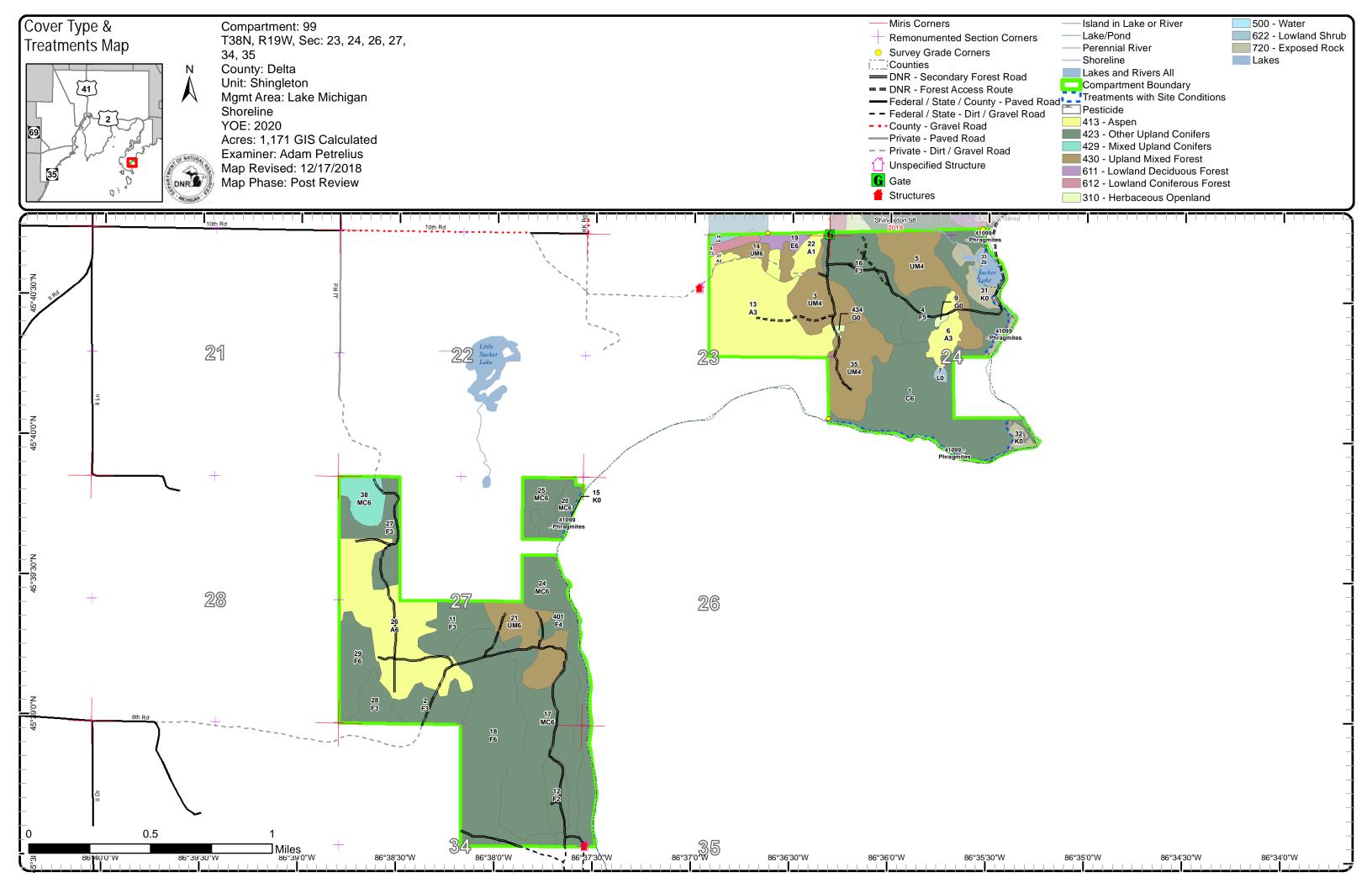
The following reports from the Inventory are attached:

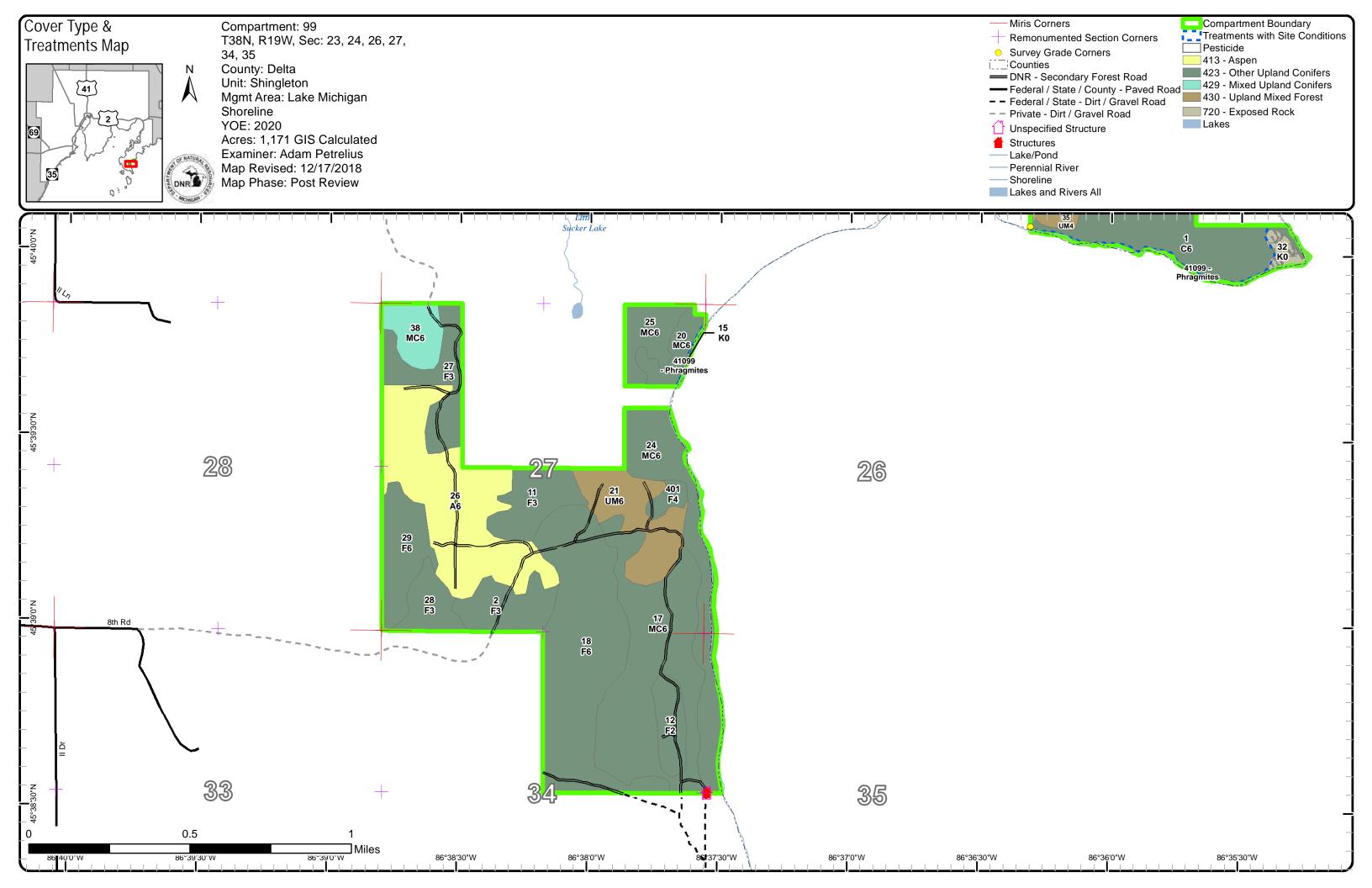
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

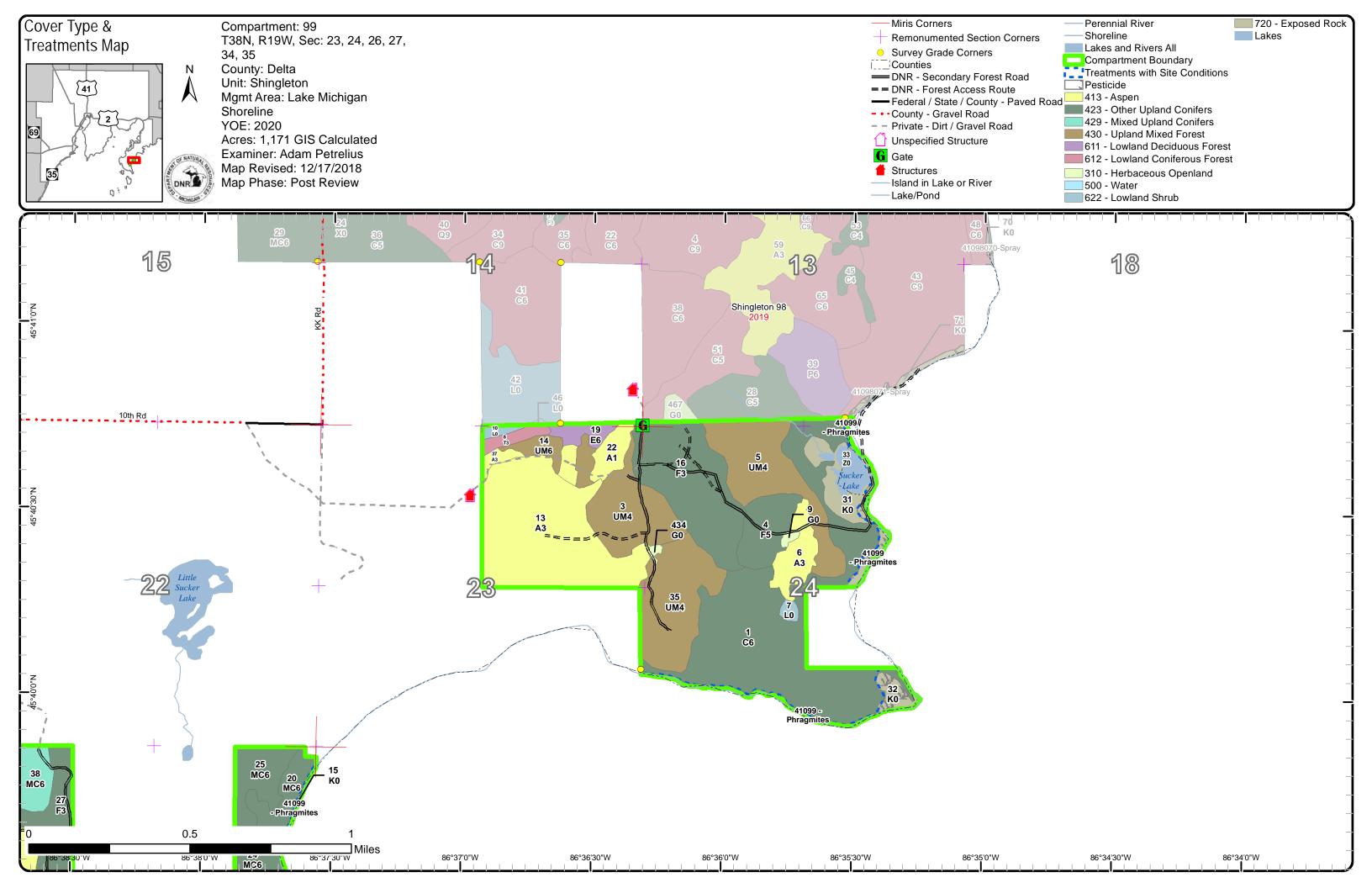
The following information is displayed, where pertinent, on the attached compartment maps:

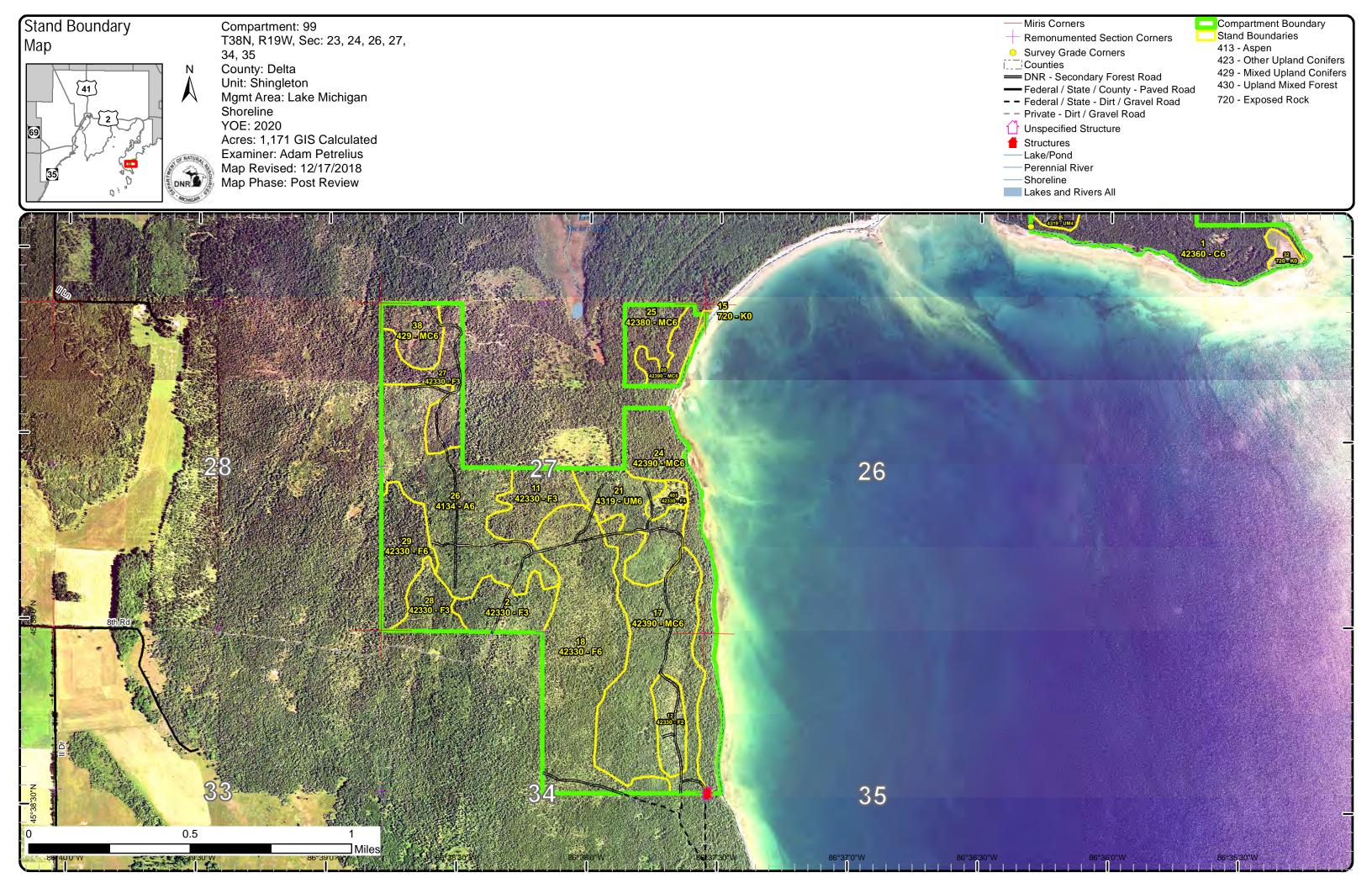
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries

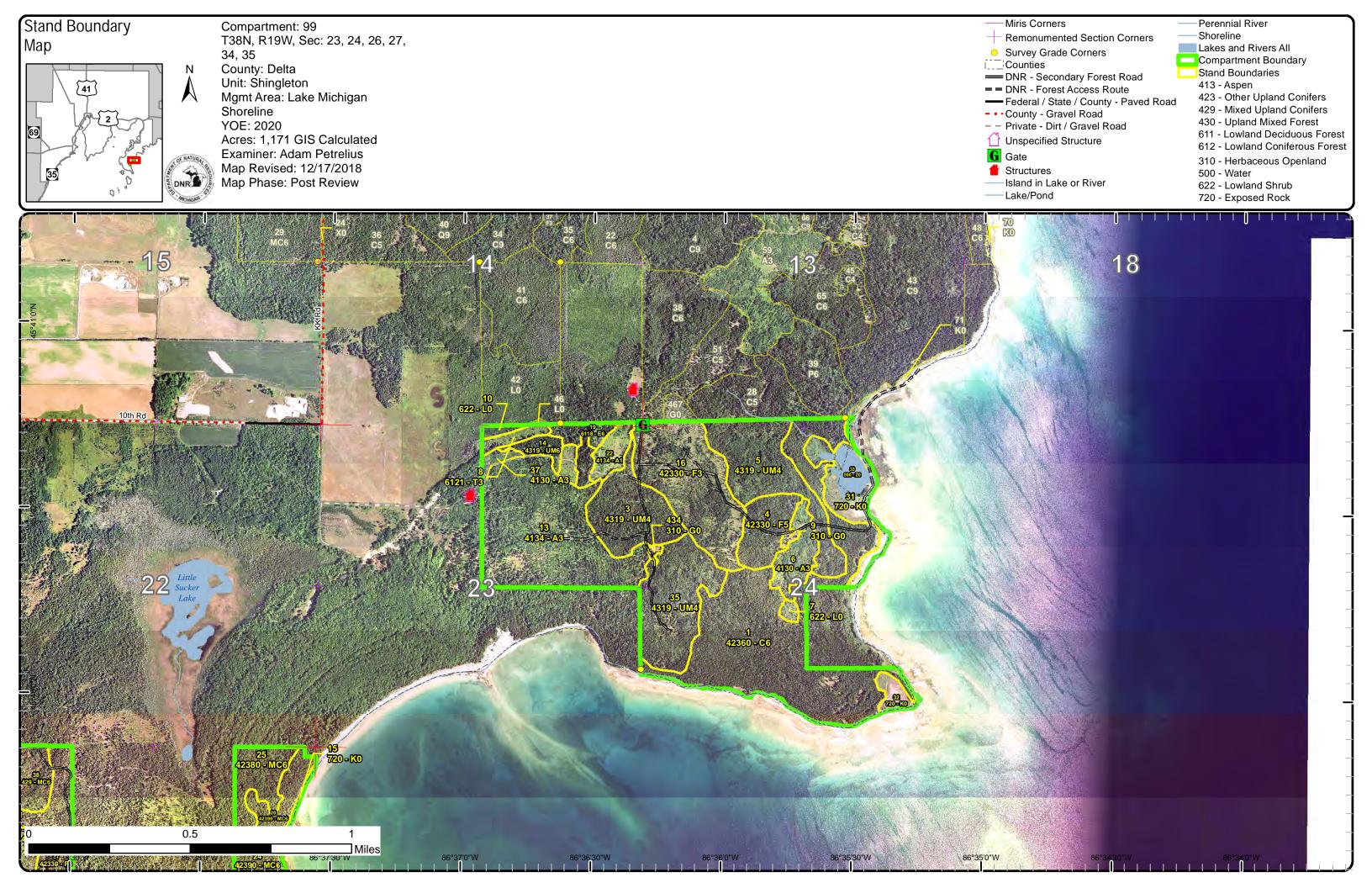
Details on the road access system

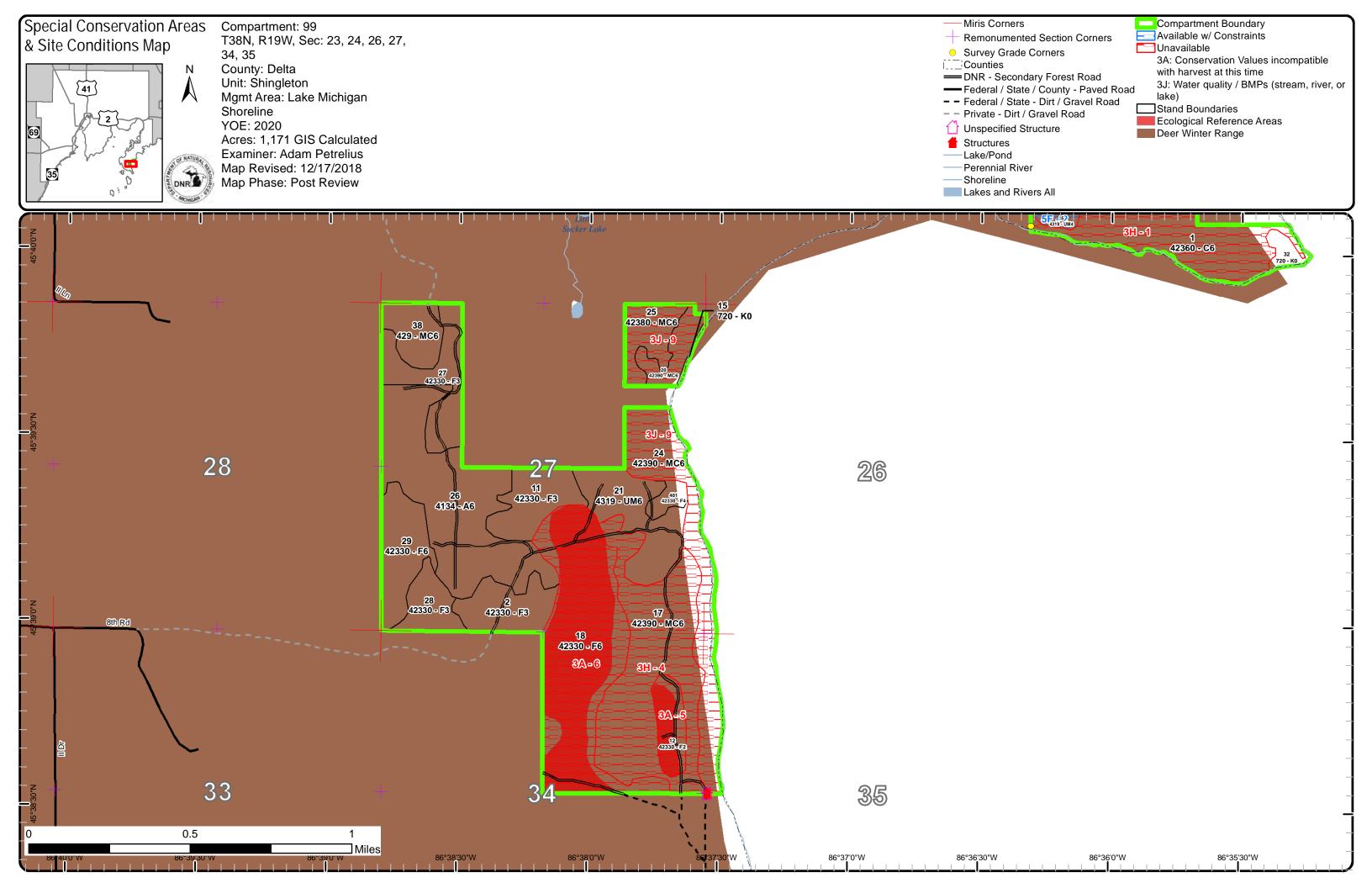


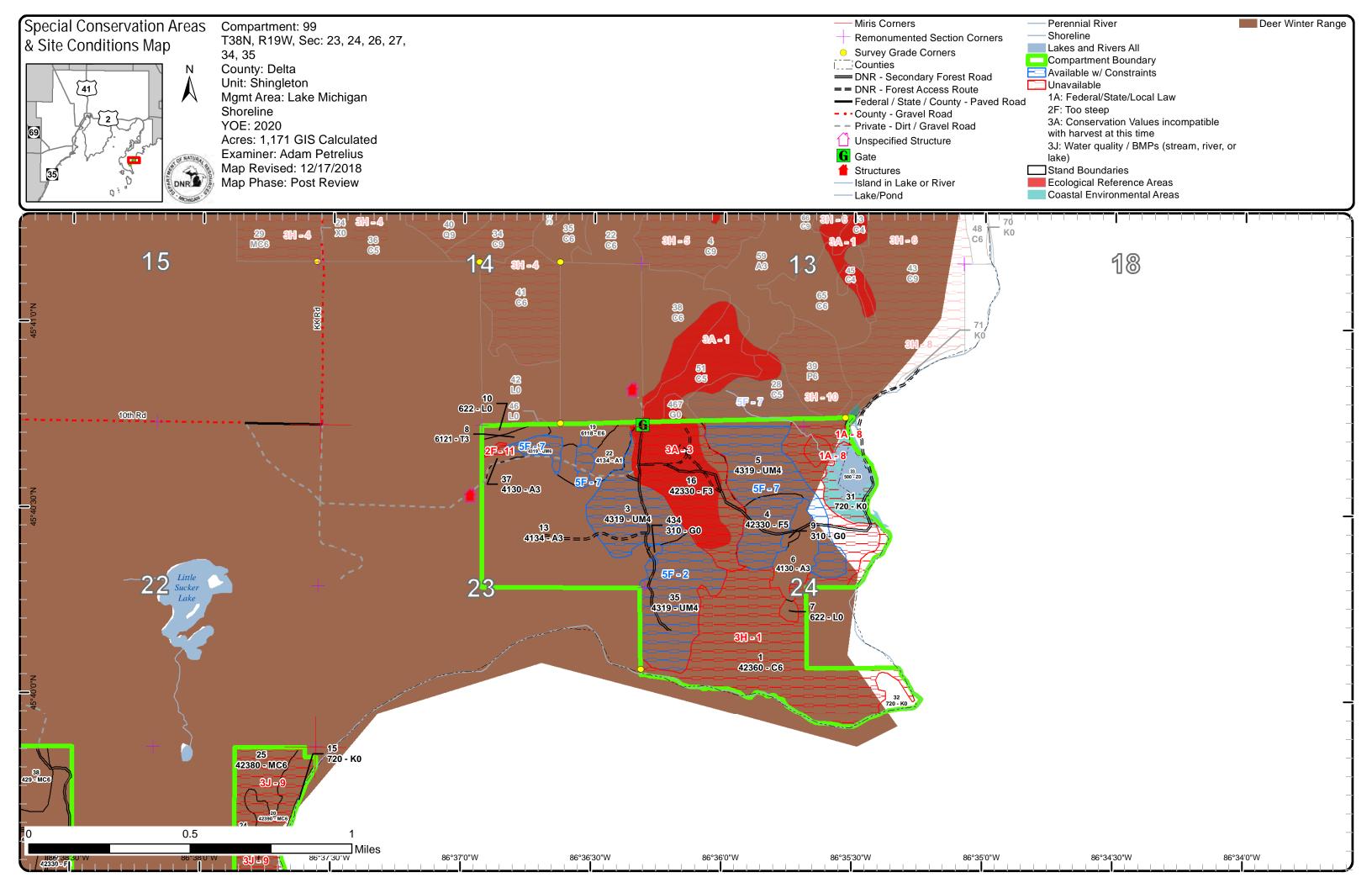












Shingleton Mgt. Unit

Adam Petrelius : Examiner

Compartment 99 Year of Entry 2020



Age Class

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Aspen	0	16	109	0	102	0	0	0	0	0	0	0	0	0	0	0	0	0	227
Cedar	0	0	0	0	0	0	0	0	0	136	0	0	0	0	0	0	0	0	136
Exposed Rock	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lowland Deciduous	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7
Lowland Shrub	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Tamarack	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Upland Conifers	0	0	0	0	19	0	0	0	104	0	95	0	0	0	0	0	0	0	217
Upland Mixed Forest	0	0	0	0	41	140	0	0	0	0	0	0	0	0	0	0	0	0	181
Upland Spruce/Fir	0	0	0	44	264	51	0	0	0	0	0	0	0	0	0	0	0	0	358
Water	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	41	21	109	44	426	191	0	0	111	136	95	0	0	0	0	0	0	0	1172
																	1		



Report 2 – Treatment Summary

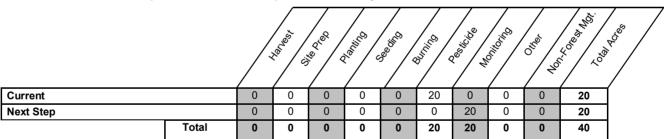
Shingleton Mgt. Unit Year of Entry: 2020

Acres of Harvest

Compartment 99
Total Compartment Acres: 1,171

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

Proposed and Next Step Treatments by Method



Shingleton Mgt. Unit Report 3 -- Treatments Compartment: 99 s Year of Entry: 2020 t а **Treatment** Stand Stand BA **Treatment Treatment Cover Type** n Acres Size Age **Approval** Name CoverType Density Range Method Objective Structure Status Age Type d 31 41099 -19.8 720 - Exposed Rock Nonstocked Unspec Pesticide Other - Specify 720 - Exposed Draft Field **Phragmites** ified Rock Boundary **Habitat Cut: No** Site Condition: Federal/State/Local Law Prescription Spray are for phragmites following appropriate guidelines. Specs: Next Step Monitoring, Invasive Species

Treatments:
Acceptable

Regen:
Other
Comment:

Proposed Start Date: 8 /10/2017

Total Treatment Acreage Proposed:

19.8

Shingleton Mgt. Unit

Compartment: 99 Year of Entry: 2020 **Adam Petrelius : Examiner**

Availa	ability for	Managemer	nt							
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Con	ditions	3	
Acres	Available	With Condition	Not Available		5F	1A	2F	3A	3H	3J
226	225	0	1	Aspen	0		1	0		
136	0	0	136	Cedar	0				136	
29	6	0	23	Exposed Rock		22			0	1
2	2	0	0	Herbaceous Openland						
7	7	0	0	Lowland Deciduous						
4	4	0	0	Lowland Shrub						
5	0	0	5	Tamarack			5			
217	19	0	198	Upland Conifers					104	94
180	41	139	0	Upland Mixed Forest	139			0		
358	141	20	197	Upland Spruce/Fir	20			197		
6	0	0	6	Water		6				
1,171	446	159	566	Total Forested Acres	159	27	6	197	240	96
	38%	14%	48%	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.

ecified Unspecified Unspecifie	Unspecified				
		Unspecified	137	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	Unavailable
					Comments:
ecified Unspecified Unspecifie	Unspecified	Unspecified	82	5F: Evaluated for Forest Health Considerations	Available
	<u> </u>	<u> </u>			Comments:

Report 4 – Site Conditions

Shingleton Mgt. Unit
Adam Petrelius : Examiner

Compartment: 99 Year of Entry: 2020

3	Unavailable	3A: Conservation Values incompatible with harvest at this time	60 Unspecified		Unspecified	Unspecified	Unspecified		
	Comments:								
4	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	104	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments:								
5	Unavailable	3A: Conservation Values incompatible with harvest at this time	17	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments:								
6	Unavailable	3A: Conservation Values incompatible with harvest at this time	121	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments: ERA								
7	Available	5F: Evaluated for Forest Health Considerations	73	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments: Fir is 1 to 2 sticks on average. Too many small diameter trees for salvage harvest.								
8	Unavailable	1A: Federal/State/Local Law	27	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments: Coastal Environme	ental Area							

Report 4 - Site Conditions

Shingleton Mgt. Unit
Adam Petrelius : Examiner

Compartment: 99 Year of Entry: 2020

9 Unavailable	3J: Water quality / BMPs (stream, river, or lake)	96	3D: Recreational / Scenic values	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	Unspecified	Unspecified		
Comments:								
11 Unavailable	e 2F: Too steep	1	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified		
Comments: Trees on top of ridge were left during previous harvest because it was too steep and WLD wanted some mature conifers on top of ridge for deer bedding areas.								

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: 99
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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	Habitat Area	An area that provide some specific need for the life cycle of wildle and Waterfowl Production Areas, deer wintering complexes in low openings and savannas. Habitat areas are distinct from critical hendangered or threatened species (such as Kirtland's warbler or general in nature, are not primarily associated with threatened or covered by species recovery plans that are developed in cooperations.	wland conifer communities, grassland abitat designated for recovery of piping plover areas) in that they are more endangered species, and are not
HCVA	Coastal Environmental Areas	The public designation process is defined by Part 323, Shoreland Natural Resources and Environmental Protection Act, 1994 PA 4 Michigan Department of Environmental Quality (DEQ). This is an currently under consideration by the DEQ.	51. The program is administered by the
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of identified as Element Occurrences (EOs) by the Michigan Natura context of their natural community classification system. Element (Excellent) or B (Good) and a Global (G) or State (S) element (rathreatened (2), or rare (3) serve as an initial base of ERAs. They the State. The system is comprised of individual or associations managed for restoration and maintenance of natural ecological p submit recommendations for lands as ERAs using the DNR Constitution.	Il Features Inventory (MNFI) within the toccurrences with viability ranks of A rity) ranking of endangered (1), may be located upon any ownership in of natural community types that are rocesses and values. The public may

s t	Shingleton	Shingleton Mgt. Unit			– Forested	Stands Compartment: 99 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42360 - Upland Cedar	Poletimber Well	136.3	89	111-140	
2	42330 - Upland Fir	Sapling Well	26.3	28	1-50	
3	4319 - Mixed Upland Forest	Poletimber Poor	35.2	48	51-80	
4	42330 - Upland Fir	Poletimber Medium	19.9	44	1-50	
5	4319 - Mixed Upland Forest	Poletimber Poor	46.5	44	81-110	possible harvest next YOE
6	4130 - Aspen	Sapling Well	15.0	15	1-50	[1/23/04 BB] Sale is now closed, cedar was saved within the paint line, Aspen was TSI'd as part of the cut, most was cut. Stand is to far away for inmates to do any additional work.
8	6121 - Tamarack	Sapling Well	5.1	6	1-50	[4/27/10 BB] Stand is now on proposal, 11-10-01 Scared Cayote. Actual prepared acreage is 6. Residual Basal Area = White Pine 10sq ft, hemlock 12 sq ft Unit 1[8/31/2012 TI] Sale is closed. TCR date 2/20/2012.
11	42330 - Upland Fir	Sapling Well	26.9	35	1-50	
12	42330 - Upland Fir	Sapling Medium	16.5	35	1-50	
13	4134 - Aspen, Spruce/Fir	Sapling Well	93.7	15	1-50	
14	4319 - Mixed Upland Forest	Poletimber Well	10.8	43	51-80	adjacent stands showed poor regeneration following harvest
16	42330 - Upland Fir	Sapling Well	60.0	33	Immature	Temporary camping site and illegal 4 wheeler trails located within stand. Campers also left an outhouse. Referred to LED. Found again this YOE and referred. FTP 1452, Glossy Buckthorn removal is cancelled. 10 years ago there was a report of 1 plant onsite somewhere in this compartment. That plant was never located and FTP is cancelled.
17	42390 - Mixed Non-Pine Upland Conifers	Poletimber Well	103.5	77	51-80	
18	42330 - Upland Fir	Poletimber Well	120.6	37	1-50	
19	6118 - Lowland Deciduous with Cedar	Poletimber Well	6.9	73	81-110	
20	42390 - Mixed Non-Pine Upland Conifers	Poletimber Well	13.8	97	111-140	

S t	Shingleton	Mgt. Unit		Report 7	– Forested	Stands Compartment: 99 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	4319 - Mixed Upland Forest	Poletimber Well	40.9	31	1-50	
22	4134 - Aspen, Spruce/Fir	Sapling Poor	12.6	6	1-50	[4/27/10 BB] Stand is now on proposal, 11-10-01 Scared Cayote. Actual prepared acreage is 8. Residual Basal Area = scattered white birch leave trees. Unit 3
						[8/31/2012 TI] Sale is closed. TCR date 2/20/2012.
						Regeneration success is spotty. Aspen and fir are present in most areas however open pockets do exist within the stand. It was decided at the 2020 YOE review that these open areas hold important wildlife attributes in a compartment lacking open land areas. Existence and maintenance of these open areas is acceptable and desired into the future.
24	42390 - Mixed Non-Pine Upland Conifers	Poletimber Well	60.9	97	81-110	
25	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimber Well	19.8	97	81-110	
26	4134 - Aspen, Spruce/Fir	Poletimber Well	101.8	34	51-80	
27	42330 - Upland Fir	Sapling Well	33.5	38	1-50	
28	42330 - Upland Fir	Sapling Well	17.2	29	1-50	
29	42330 - Upland Fir	Poletimber Well	31.4	40	1-50	
35	4319 - Mixed Upland Forest	Poletimber Poor	46.9	42	1-50	
37	4130 - Aspen	Sapling Well	3.3	6	1-50	[4/27/10 BB] Stand is now on proposal, 11-10-01 Scared Cayote. Actual prepared acreage is 3. Unit 2
						[8/31/2012 TI] Sale is closed. TCR date 2/20/2012.
38	429 - Mixed Upland Conifers	Poletimber Well	19.2	35	1-50	
401	42330 - Upland Fir	Poletimber Poor	5.9	35	1-50	

Compartment: 99 Year of Entry: 2020



Stand	Cover Type	Acres	Managed Site	General Comments:
7	622 - Lowland Shrub	2.0	No	
9	310 - Herbaceous Openland	1.2	No	OPIC - FMD: SCA-Deeryard. Illegal blind located within stand referred to LED.
10	622 - Lowland Shrub	2.4	No	OPIC - FMD: SCA-Deeryard.
15	720 - Exposed Rock	1.0	No	
31	720 - Exposed Rock	21.8	No	
32	720 - Exposed Rock	5.9	No	
33	500 - Water	5.6	No	OPIC - FMD: HCVA - Coastal Environmental Area, SCA - Deeryard. Potential Old Growth. Lake Michigan shoreline.
434	310 - Herbaceous Openland	1.0	No	OPIC - FMD: SCA-Deeryard. Bald knob of grass. Stand is being used as a temporary camp location. Shooting lanes have been cut. Referred to LED.