



Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 100

Entry Year 2015

Acreage: 850

County Delta

Management Area: Lake Michigan Shoreline

Revision Date: 05/21/2013

Stand Examiner: Adam Petrelius

Legal Description:

T37N R19W Sections 2, 3, 10, 11, and 14

Identified Planning Goals:

The main goal in this compartment is to conduct multiple resource management for current and future generations. It lies within the Lake Michigan Shoreline Management Area. Vegetative management in the Lake Michigan Shoreline Management Area will emphasize protection of the unique character of the area and all of the threatened, endangered, and special concern species while providing recreational opportunities, timber products and wildlife habitat.

Soil and topography:

The topography in this compartment is mostly flat; the soils are mainly shallow layers directly over limestone bedrock. The soil types are mainly poorly drained organics with some loams mixed throughout.

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

Ownership in and around the compartments is somewhat fragmented and the Lake Michigan Shoreline is continually being developed with summer homes. Fragmentation is leading to more Land Use problems since new gates are emerging all the time. There is an abandoned cabin in Section 10, the Department is moving forward on removing it and rehabilitating the site.

Unique Natural Features:

Various rare plant are found growing on the Limestone Bedrock Glade that exists here at the tip of the Garden Peninsula.

Archeological, Historical, and Cultural Features:

Sites are present and documented at the Office of the State Archaeologist.

Special Management Designations or Considerations:

The entire compartment is classified as obligate winter range for deer. An ERA also exists for Limestone Bedrock Lakeshore. A large portion of the compartment is also classified as a non-dedicated natural area. Most of it was previously designated as potential old growth, but this classification is being removed since these areas do not meet our current definition of old growth.

Whitetail deer concentrate very heavily in this compartment during winter months. The large presence of deer each winter here at the tip of the Garden Peninsula causes regeneration issues. Harvests in the past 10 to 20 years down here are barren stump fields and the entire compartment is factor limited because we are unable to achieve desirable regeneration here.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of thin to discontinuous glacial till over bedrock. The glacial drift thickness varies between 0 and 10 feet. The Silurian Manistique Group subcrops below the glacial drift. The Manistique could be used for stone. The nearest gravel pit is one mile to the west, but potential appears to be limited. There is no commercial oil and gas production in the UP.

Vehicle Access:

Vehicle access is decent through the compartment; the Department currently holds easements through the private land in Sections 2 and 11. Due to the low topography and organic soils the roads often become filled with standing water after

large rain events and during spring break-up. However, due to the exposed bedrock roads are usually passable even in high water.

Survey Needs:

None.

Recreational Facilities and Opportunities:

There are no developed recreation facilities within this compartment.

Fire Protection:

Additional Compartment Information:

The following reports from the Inventory are attached:

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

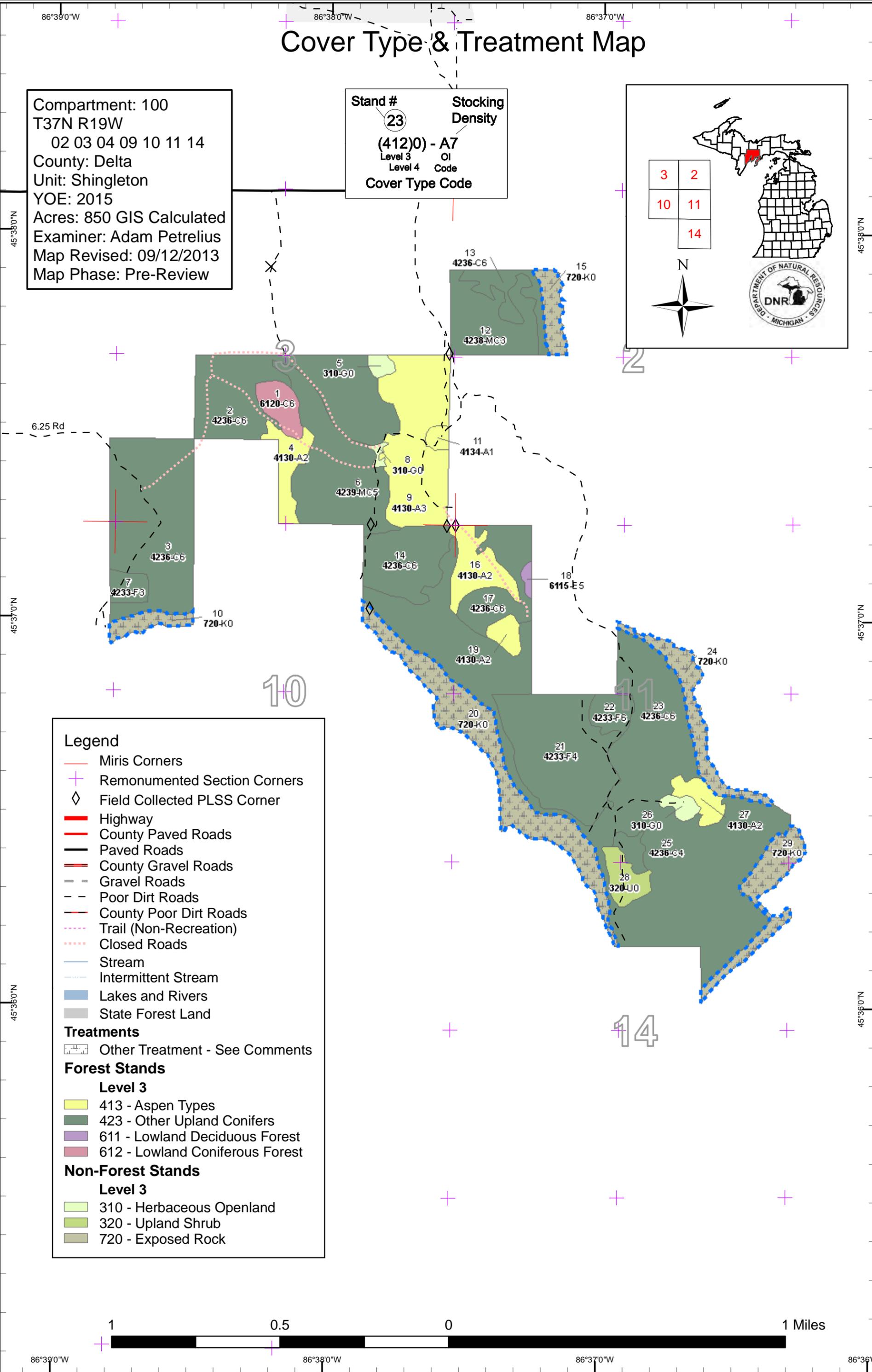
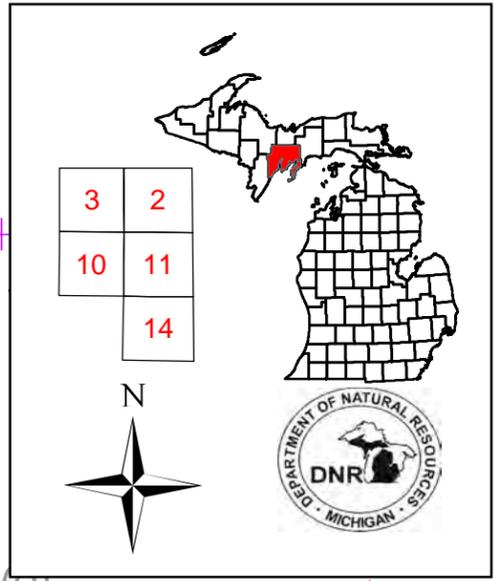
The following information is displayed, where pertinent, on the attached compartment maps:

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

Cover Type & Treatment Map

Compartment: 100
 T37N R19W
 02 03 04 09 10 11 14
 County: Delta
 Unit: Shingleton
 YOE: 2015
 Acres: 850 GIS Calculated
 Examiner: Adam Petrelus
 Map Revised: 09/12/2013
 Map Phase: Pre-Review

Stand #
 23
(4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- Miris Corners
- + Remonumented Section Corners
- ◇ Field Collected PLSS Corner
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Stream
- Intermittent Stream
- Lakes and Rivers
- State Forest Land

Treatments

- Other Treatment - See Comments

Forest Stands

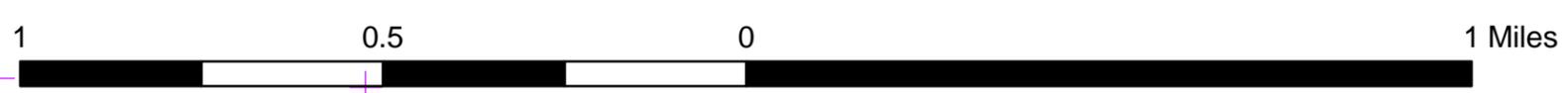
Level 3

- 413 - Aspen Types
- 423 - Other Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 720 - Exposed Rock



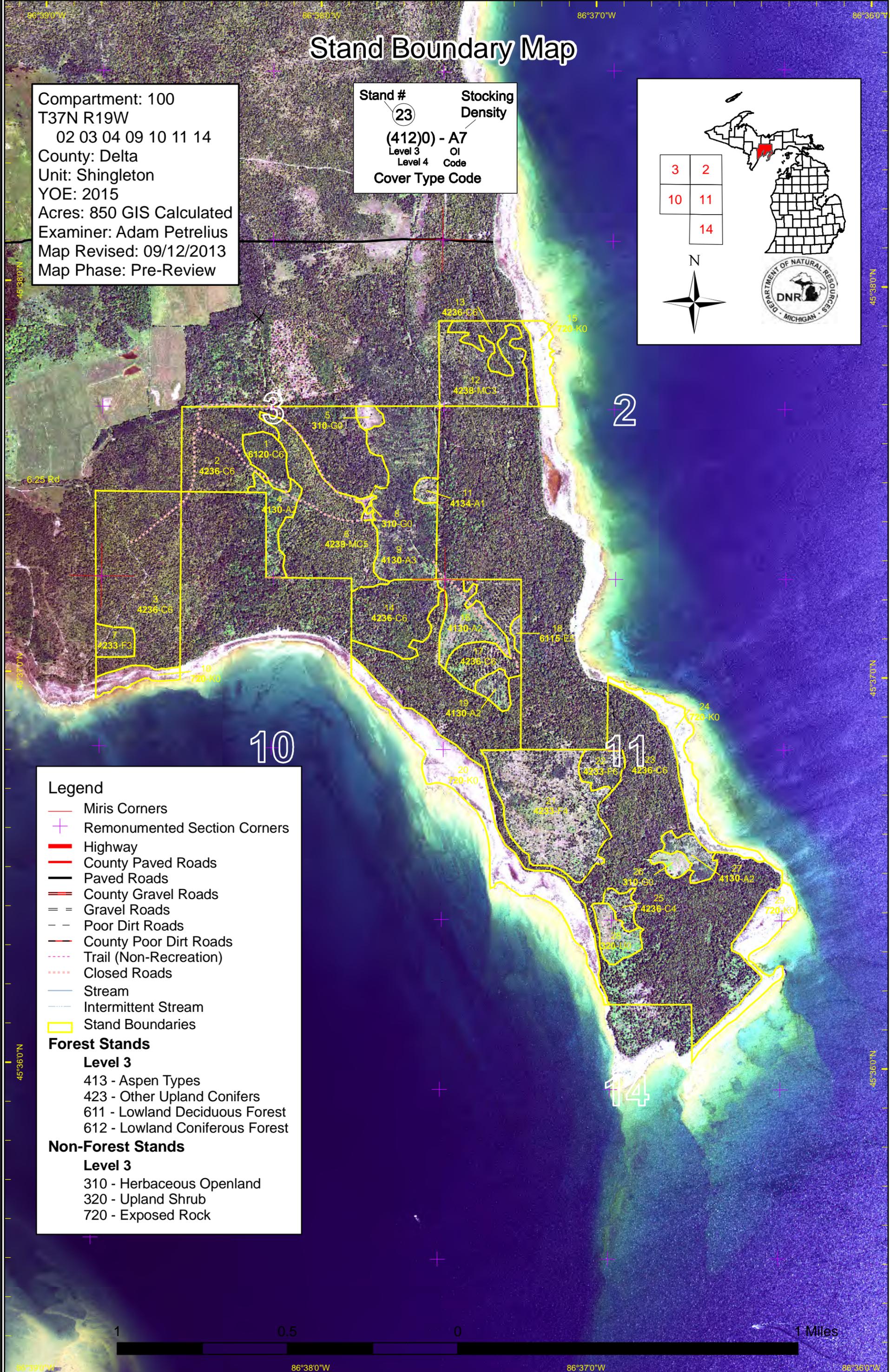
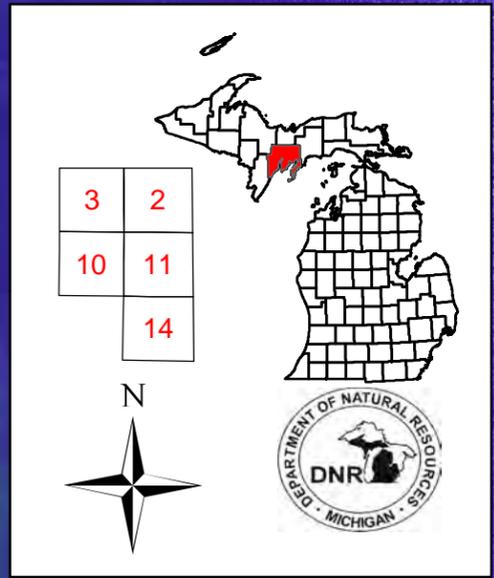
86°39'0"W 86°38'0"W 86°37'0"W 86°36'0"W

45°38'0"N 45°37'0"N 45°36'0"N

Stand Boundary Map

Compartment: 100
 T37N R19W
 02 03 04 09 10 11 14
 County: Delta
 Unit: Shingleton
 YOE: 2015
 Acres: 850 GIS Calculated
 Examiner: Adam Petrelus
 Map Revised: 09/12/2013
 Map Phase: Pre-Review

Stand #
 23
(412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- Miris Corners
- + Remonumented Section Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Stream
- Intermittent Stream
- Stand Boundaries

Forest Stands

Level 3

- 413 - Aspen Types
- 423 - Other Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 720 - Exposed Rock

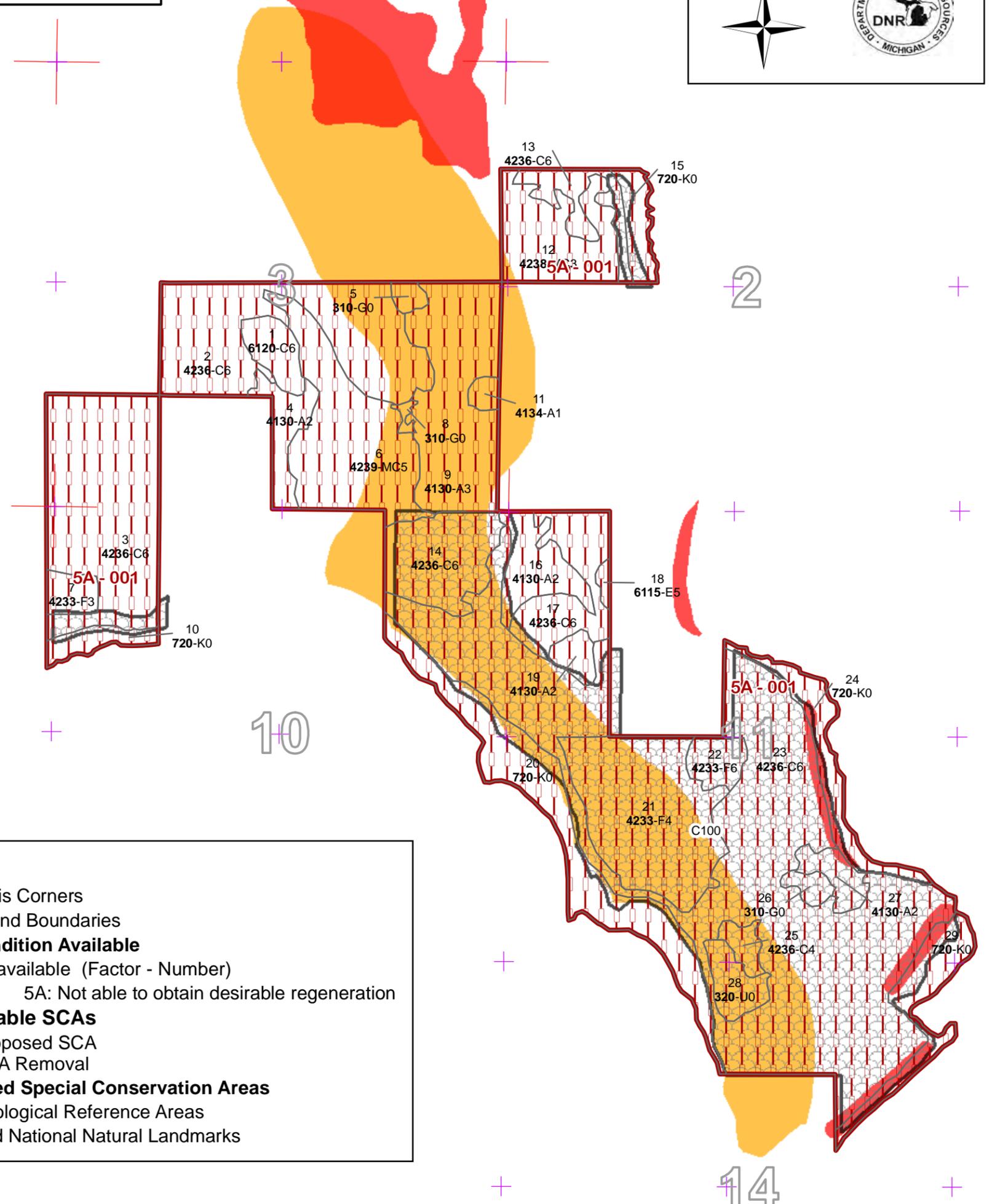
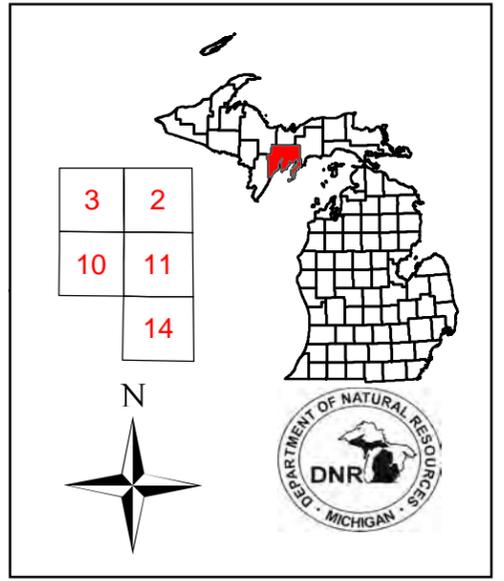


86°39'0"W 86°38'0"W 86°37'0"W 86°36'0"W
 45°36'0"N 45°37'0"N 45°38'0"N

Special Conservation Areas & Site Conditions Map

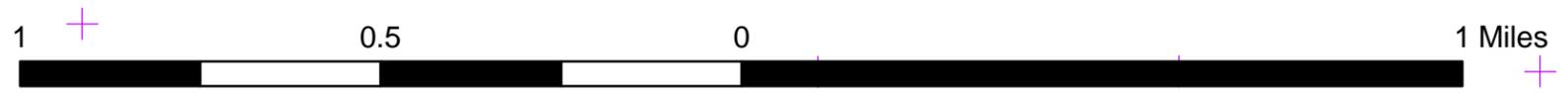
Compartment: 100
 T37N R19W
 02 03 04 09 10 11 14
 County: Delta
 Unit: Shingleton
 YOE: 2015
 Acres: 850 GIS Calculated
 Examiner: Adam Petrelus
 Map Revised: 09/12/2013
 Map Phase: Pre-Review

Stand #
 23
 (412)0 - A7
 Level 3 OI
 Level 4 Code
 Cover Type Code



Legend

- Miris Corners
- Stand Boundaries
- Site Condition Available**
- Unavailable (Factor - Number)
 5A: Not able to obtain desirable regeneration
- Reviewable SCAs**
- Proposed SCA
- SCA Removal
- Dedicated Special Conservation Areas**
- Ecological Reference Areas
- and National Natural Landmarks



86°39'0"W 86°38'0"W 86°37'0"W

45°38'0"N
45°37'0"N
45°36'0"N

45°38'0"N
45°37'0"N
45°36'0"N

Report 1 – Total Acres by Cover Type and Age Class



	Age Class														Total
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +	Uneven Age	
Aspen	0	34	67	0	0	0	0	0	0	0	0	0	0	0	101
Cedar	0	0	0	0	0	0	10	77	0	73	13	25	266	0	463
Exposed Rock	107	0	0	0	0	0	0	0	0	0	0	0	0	0	107
Herbaceous Openland	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Lowland Deciduous	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
Upland Conifers	0	0	0	31	0	0	0	53	0	0	0	0	0	0	84
Upland Shrub	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Upland Spruce/Fir	0	0	68	8	0	0	0	0	0	0	0	0	0	0	77
Total	125	34	135	39	0	0	11	130	0	73	13	25	266	0	850



Report 2 – Proposed Treatment Summaries

Shingleton Mgt. Unit
Year of Entry 2015

Compartment 100
Total Compartment Acres: 850

Acres by Treatment Type

Commercial Harvest - 0	Tree Planting - 0	Other - 107
Habitat Cut - 0	Opening Maintenance - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
	#Error	#####	#Error	#####	#Error	#####	
Total	0	0	0	0	0	0	0



S
t
a
n
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
----------------	-------	-----------	--------------	-----------	----------	----------------	------------------	----------------------	-----------------

#Type! #Type!

Prescription
Specs:

Other
Comments:

Next
Steps:

Proposed
Start Date: #Type!

**Total Treatment
Acreage Proposed: 0.0**



S
t
a
n
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
10 C100 phragmites-Other	107.2	720 - Exposed Rock				Other	Unspecified	720 - Exposed Rock	Cmpt. Review Proposal

Prescription Phragmites removal - use common and accepted practices
Specs:

Other
Comment:

Next
Steps:

Proposed
Start Date: Unspecified

Limiting Factor 5A: Not able to obtain desirable regeneration

Total Treatment
Acreage Proposed: 107.2

Report 5 – Site Conditions

Shingleton Mgt. Unit
Adam Petrelius : Examiner

Compartment 100
Year of Entry 2015

Availability for Management

Total Acres	Acres Available	Acres Not Available	Dominant Site Conditions	5A
101		101	Aspen	101
463		463	Cedar	463
2		2	Lowland Deciduous	2
84		84	Upland Conifers	84
77		77	Upland Spruce/Fir	77
725		725	Total Forested Acres	725
		100%	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 Condition
001	Not Available	5A: Not able to obtain desirable regeneration	850	3H: Deer Wintering Areas	3B: Threatened, endangered, and special concern species/communities		
Comments: Heavy deer concentrations during winter months.							



Report 6 – 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
C100	Potential Old Growth		SCA Removal	
Comments does not meet criteria				



Report 7 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.
SCA	Non-Dedicated Natural Areas and National Natural Landmarks	This category is comprised of those Natural, Wilderness and Wild Areas that have been nominated or proposed for legal dedication, but for which legal dedication by legislature has not occurred. The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action.
HCVA	Legally dedicated Natural Areas, Wilderness or Wild Areas	The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	High Density Pole	9.7	60		
2	42360 - Upland Cedar	High Density Pole	68.0	90		
3	42360 - Upland Cedar	High Density Pole	77.0	74		
4	4130 - Aspen	Medium Density	11.8	13		
6	42390 - Mixed Non-Pine Upland Conifers	Medium Density Pole	52.7	70		hard to distinguish between canopy and subcanopy. Most of the mature fir are dying and being replaced with more fir.
7	42330 - Upland Fir	High Density Sapling	6.5	22		
9	4130 - Aspen	High Density Sapling	55.8	23		
11	4134 - Aspen, Spruce/Fir	Low Density Sapling	2.9	23		When harvested, this area had mostly cedar and is now mostly stumps and grass.
12	42380 - Non Pine Upland Conifer, Mixed Deciduous	High Density Sapling	31.1	31		Stand is aspen and fir regen with grass pockets filled with cedar stumps. Zero cedar regeneration.
13	42360 - Upland Cedar	High Density Pole	13.0	102		
14	42360 - Upland Cedar	High Density Pole	29.7	120		
16	4130 - Aspen	Medium Density	17.0	12		stand cut in winter 2000
17	42360 - Upland Cedar	High Density Pole	24.5	110		All other species were cut out of this stand last year of entry.
18	6115 - Lowland Ash	Medium Density Pole	1.5	60		alot of trees are dying due to water stress.
19	4130 - Aspen	Medium Density	5.2	12		stand was cut through in 2000, and all cedar was left.
21	42330 - Upland Fir	Low Density Pole	61.7	29		Stand was cut in 1983 and at the time it was a very nice cedar/fir stand. deer destroyed all regen. Areas that previously had cedar are now grass and stumps. Did not get a very good look at whole stand since road getting there was filled with water during the start of spring breakup. Only saw a small portion of it during the fall.
22	42330 - Upland Fir	High Density Pole	8.4	30		

S
t
a
n
d

Shingleton Mgt. Unit

Report 8 – Forested Stands

Compartment: 100
Year of Entry: 2015



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	42360 - Upland Cedar	High Density Pole	236.4	124		an old building located in the NW corner of stand is on a list to be removed when funding is available.
25	42360 - Upland Cedar	Low Density Pole	4.8	90		cedar
27	4130 - Aspen	Medium Density	7.8	22		



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
5	310 - Herbaceous Openland	2.8	Unspecified	Unspecified	
8	310 - Herbaceous Openland	1.2	Unspecified	Unspecified	
10	720 - Exposed Rock	7.3	Unspecified	Unspecified	
15	720 - Exposed Rock	9.3	Unspecified	Unspecified	
20	720 - Exposed Rock	52.4	Unspecified	Unspecified	
24	720 - Exposed Rock	18.5	Unspecified	Unspecified	
26	310 - Herbaceous Openland	3.7	Unspecified	Unspecified	Stand is a grass field with cedar stumps. Zero cedar regeneration, and no regeneration of other species either.
28	320 - Upland Shrub	9.6	Unspecified	Unspecified	
29	720 - Exposed Rock	19.7	Unspecified	Unspecified	