Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 97
Entry Year 2015
Acreage: 436
County Delta
Management Area: Lake Michigan Shoreline

Revision Date: 05/20/2013

Stand Examiner: Adam Petrelius

Legal Description:

T38N R18W Sections 4-6

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 very fragmented and the Lake Michigan Shoreline is continually being developed with summer homes. There are an increasing number of year round residents in the area as well. Fragmentation is leading to more Land Use problems since new gates, illegal ORV trails, and illegal blinds are emerging all the time.

Unique Natural Features:

This area of the Garden Peninsula is home to various rare plants that grown on the Limestone Bedrock Glade that exists down here.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

The entire compartment is designated as obligate winter range for deer. A Limestone Bedrock Lakeshore ERA exists along the southeastern shoreline.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of thin to discontinuous lacustrine (lake) sand and gravel over bedrock. The glacial drift thickness varies between 0 and 10 feet. The Silurian Engadine and Manistique Groups subcrop below the glacial drift. These rocks are used for stone and were used for flux in iron making at Fayette. The nearest gravel pit is two miles to the north, but potential appears to be limited. There is no commercial oil and gas production in the UP.

Vehicle Access:

Access to the compartment is good, the Portage Bay Road which is a Department Road runs through the entire compartment. Most of the two-track roads are gated once they enter private land.

Survey Needs:

Treatments exist that border private land and survey work will be needed.

Recreational Facilities and Opportunities:

There are no developed recreation facilities within this compartment. However, the Portage Bay Rustic Camground lies

just north of the northeast corner of the compartment. This ADA accessible campground has 23 campsites, a sand/gravel boat launch and the Ninja Aki interpretive pathway. The campground is managed by staff from Fayette Historic State Park, which is located a few miles southwest of the compartment.

Fire Protection:

Additional Compartment Information:

The following reports from the Inventory are attached:

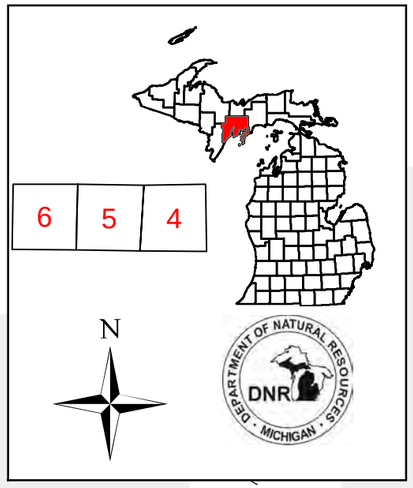
- **Total Acres by Cover Type and Age Class**
- **Cover Type by Harvest Method**
- **Proposed Treatments – No Limiting Factors**
- **Proposed Treatments – With Limiting Factors**
- **Stand Details (Forested and Nonforested)**
- **Dedicated and Proposed Special Conservation Areas**
- **Site Condition 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: 097
T38N R18W
04 05 06
County: Delta
Unit: Shingleton
YOE: 2015
Acres: 436 GIS Calculated
Examiner: Adam Petrelius
Map Revised: 09/12/2013
Map Phase: Pre-Review



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

86°35'0"W 86°34'0"W 86°33'0"W 86°32'0"W 86°31'0"W
45°44'0"N 45°43'0"N

Fishery Lake
Bog Lake
Charboneau Lake
Portage Bay Rd
12.75 Ln

3 6129-Q6 | 8 6120-C6 | 2 6120-C6 | 7 6115-E6 | 10 6120-C6 | 4 6117-E6 | 1 622-L0 | 9 4319-UM6 | 11 4236-C6 | 12 720-K0 | 5 429-MC8 | 6 720-K0 | 13 4319-UM6 | 14 4233-F6 | 15 4238-MC3 | 17 4239-MC4 | 16 4238-MC6 | 20 720-K0 | 19 720-K0 | 18 4236-C6

6 5 4

1 0.5 0 1 Miles

Legend

- Miris Corners
- Remonumented Section Corners
- Gate
- 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

- Clearcut (w/Reserves, Patch/Strip)
- Other Treatment - See Comments

Forest Stands

Level 3

- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

- 622 - Lowland Shrub
- 720 - Exposed Rock

Stand Boundary Map

Compartment: 097
T38N R18W
04 05 06
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Map Revised: 09/12/2013
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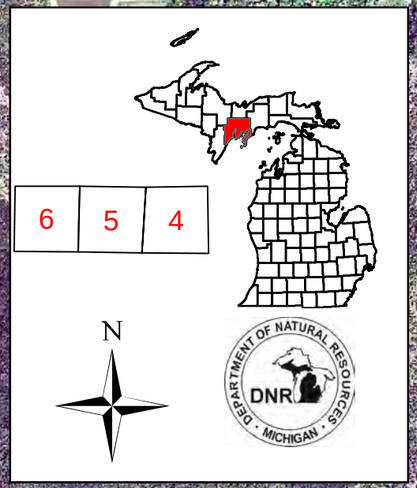

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Forest Stands

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Non-Forest Stands

Level 3

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- 720 - Exposed Rock

1 0.5 0 1 Miles

Special Conservation Areas & Site Conditions Map

Compartment: 097
T38N R18W
04 05 06
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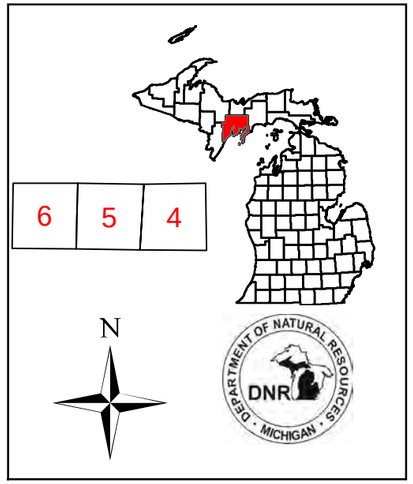

Stand # 23
Stocking Density
(412)0) - A7
Level 3 Level 4 OI Code
Cover Type Code

Legend
- Miris Corners
- Stand Boundaries

Site Condition Available
- Unavailable (Factor - Number)

Site Condition Type
- Unavailable Factors
  - 3J: Water quality / BMPs (stream, river, or lake)

Reviewable SCAs

Proposed SCA's
- Proposed SCA
- SCA Removal

Dedicated Special Conservation Areas
- Ecological Reference Areas

86°35'0"W 86°34'0"W 86°33'0"W 86°32'0"W 86°31'0"W 86°30'0"W
45°44'0"N
45°43'0"N

3 **6129**-Q6
8 **6120**-C6
2 **6120**-C6
10 **6120**-C6
4 **6117**-E6
1 **622**-L0
7 **4115**-E6
3J - 005
3J - 012
9 **4319**-UM6
11 **4236**-C6
3J - 006
C97
12 **720**-K0
6
5 **429** -MC
3J - 010
C97
6 **720**-K0

16 **4238**-MC6
20 **720**-K0
3J - 009
13 **4319**-UM6
14 **4233**-F6
15 **4238**-MC3
17 **4239**-MC4
3J - 008
5
4
19 **720**-K0
18
C97
3J - 007

1 0.5 0 1 Miles

Report 1 – Total Acres by Cover Type and Age Class

Shingleton Mgt. Unit **Compartment 097 Year of Entry 2015**

Adam Petrelius : Examiner

Age Class

	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	Total
Cedar	0	0	0	0	0	0	9	0	28	5	8	7	0	0	**58**
Exposed Rock	38	0	0	0	0	0	0	0	0	0	0	0	0	0	**38**
Lowland Conifers	0	0	0	0	0	0	0	0	0	9	0	0	0	0	**9**
Lowland Deciduous	0	0	32	0	0	0	0	0	12	0	0	0	0	0	**44**
Lowland Shrub	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Upland Conifers	0	0	0	31	0	0	0	100	0	36	0	0	0	0	**167**
Upland Mixed Forest	0	0	0	72	0	0	0	0	0	0	0	0	0	0	**72**
Upland Spruce/Fir	0	0	0	46	0	0	0	0	0	0	0	0	0	0	**46**
Total	**40**	**0**	**32**	**149**	**0**	**0**	**9**	**100**	**40**	**50**	**8**	**7**	**0**	**0**	**436**

Report 2 – Proposed Treatment Summaries

Shingleton Mgt. Unit
Year of Entry 2015

Compartment 097
Total Compartment Acres: 436

Acres by Treatment Type

Commercial Harvest - 42	Tree Planting - 0	Other - 38
Habitat Cut - 0	Opening Maintenance - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Lowland Coniferous Forest	9	0	0	0	0	0	**9**
Mixed Upland Conifers	33	0	0	0	0	0	**33**
Total	**42**	**0**	**0**	**0**	**0**	**0**	**42**

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
3	41097003-Cut	9.1	6129 - Mixed Coniferous Lowland Forest	High Density Pole	95		Harvest	Clearcut with Reserves	6129 - Mixed Coniferous Lowland Forest	Fld. Tr. Bdy.

Prescription Specs: Clearcut with reserves. Cut all trees except red pine, white pine, and hemlock.

Other Comments: Stand is on contract already, Portage Bay Sale, 11-09. Stand is restricted to winter harvest to provide browse for deer wintering in the area.

Next Steps: Regen check will occur during next inventory cycle. Accpetable species includes any mixture currently found onsite.

Proposed Start Date: 06/10/2010

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
5	41097005-Cut	32.8	429 - Mixed Upland Conifers	Medium Density Log	92	51-80	Harvest	Clearcut with Reserves	429 - Mixed Upland Conifers	Cmpt. Review Proposal

Prescription Specs: Clearcut with reserves. Leave all hemlock and cedar. Buffer Lake Michigan 100 feet from tree line minimum. This will be the retention. Cut in winter to feed deer. Survey work may be needed.

Other Comments: Stand has a very dense fir understory and will convert to fir regardless of silvicultural prescription. Although there is not a large number of hardwood trees within the stand, deer will benefit from tops that do exist when harvested in the winter months.

Next Steps: check regeneration next year of entry.

Proposed Start Date: 10/01/2014

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
20	C97 phragmites-Other	38.1	720 - Exposed Rock				Other	Unspecified	720 - Exposed Rock	Cmpt. Review Proposal

Prescription Specs: Remove phragmites according to common accepted practices

Other Comments:

Next Steps:

Proposed Start Date: 10/31/2013

Total Treatment Acreage Proposed: 80.0

Report 4 -- Treatments Prescribed with a Limiting Factor

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

Prescription Specs:

Other Comment:

Next Steps:

Proposed Start Date: #Type!

Limiting Factor

Total Treatment Acreage Proposed: 0.0

Report 5 – Site Conditions

Shingleton Mgt. Unit

Adam Petrelius : Examiner

Compartment 097

Year of Entry 2015

Availability for Management

Total Acres	Acres Available	Acres Not Available	Dominant Site Conditions	No	3J
58	14	44	**Cedar**	14	44
9	9		**Lowland Conifers**	9	
44	32	12	**Lowland Deciduous**	32	12
167	157	9	**Upland Conifers**	157	9
72	72		**Upland Mixed Forest**	72	
46	46		**Upland Spruce/Fir**	46	
396	330	65	Total Forested Acres	330	65
	83%	17%	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
005	**Not Available**	**3J: Water quality / BMPs (stream, river, or lake)**	7				
	Comments:						
006	**Not Available**	**3J: Water quality / BMPs (stream, river, or lake)**	8	3H: Deer Wintering Areas			
	Comments:						
007	**Not Available**	**3J: Water quality / BMPs (stream, river, or lake)**	28	3H: Deer Wintering Areas			
	Comments:						
008	**Not Available**	**3J: Water quality / BMPs (stream, river, or lake)**	5	3H: Deer Wintering Areas			
	Comments:						

009	**Not Available**	**3J: Water quality / BMPs (stream, river, or lake)**	3	3H: Deer Wintering Areas
	Comments:			
010	**Not Available**	**3J: Water quality / BMPs (stream, river, or lake)**	3	
	Comments:			
012	**Not Available**	**3J: Water quality / BMPs (stream, river, or lake)**	13	
	Comments:			

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
C97	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	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.
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:
2	6120 - Lowland Cedar	High Density Pole	4.9	92		Originally part of stand 3, but was excluded from Portage Bay Sale because it was mostly cedar.
3	6129 - Mixed Coniferous Lowland Forest	High Density Pole	9.1	95		On contract. Portage Bay Sale, 11-09.
4	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	32.0	22		
5	429 - Mixed Upland Conifers	Medium Density Log	35.7	92	51-80	Thinned in 1986. stand will convert to fir regardless of prescription. remove overstory before it dies. leave hem,cedar, buffer lake 100 ft from tree line
7	6115 - Lowland Ash	High Density Pole	12.4	84		Prepwork was started last yoe, but a stream was found and cut off alot of acreage. Ground was also very wet and stand was factor limited.
8	6120 - Lowland Cedar	High Density Pole	7.4	114		Prepwork started on stand last yoe, but stopped when a creek was found.
9	4319 - Mixed Upland Forest	High Density Pole	36.0	32		
10	6120 - Lowland Cedar	High Density Pole	9.5	68		
11	42360 - Upland Cedar	High Density Pole	8.2	103		
13	4319 - Mixed Upland Forest	High Density Pole	36.1	37		
14	42330 - Upland Fir	High Density Pole	45.7	37		some scattered mature fir
15	42380 - Non Pine Upland Conifer, Mixed Deciduous	High Density Sapling	25.3	32		
16	42380 - Non Pine Upland Conifer, Mixed Deciduous	High Density Pole	5.6	32		
17	42390 - Mixed Non-Pine Upland Conifers	Low Density Pole	100.3	75		
18	42360 - Upland Cedar	High Density Pole	28.0	80		

Report 9 – Nonforested Stands

Compartment: 097
Year of Entry: 2015

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	622 - Lowland Shrub	1.6	Unspecified	Unspecified	
6	720 - Exposed Rock	2.3	Unspecified	Unspecified	
12	720 - Exposed Rock	9.2	Unspecified	Unspecified	
19	720 - Exposed Rock	24.6	Unspecified	Unspecified	
20	720 - Exposed Rock	2.0	Unspecified	Unspecified	