

# **Shingleton Forest Management Unit Compartment Review Presentation**

Compartment #174 Entry Year: 2014 Compartment Acreage: 1418 County: Alger

Revision Date: 08/17/12

Stand Examiner: Jesse Bramer

**Legal Description:** T48N R17W Section 31, T47N R17W Section 4-8

**RMU** (if applicable): This compartment is located within the Pictured Rocks Buffer Management Area.

**Management 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:** Rolling except for the steep ridges in section 31. The area contains high quality hardwood soils.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Pictured Rocks National Lake Shore is to the north. There is Forest Land Group to the east along with some other private property.

**Unique, Natural Features:** The compartment contains the West Branch and the main branch of the Mosquito River.

Archeological, Historical, and Cultural Features: There is a known site in Section 8.

**Special Management Designations or Considerations:** This Compartment is within the dedicated Pictured Rocks National Lakeshore Buffer.

**Watershed and Fisheries Considerations:** Fisheries Values Good. This compartment contains the Mosquito River which is a coldwater stream and supports an excellent native brook trout fishery. A 200 feet no-clearcut buffer should be maintained adjacent to the Mosquito River. A 50 feet no-cut buffer should be maintained as well (okay to selection cut to within 50 feet of river).

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 -35° 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 sugar maple and beech were the dominant tree species on the uplands in this compartment. Hemlock, yellow birch and balsam fir were mentioned in about half the locations while white birch, ironwood, and elm were less abundant. Tamarack, spruce and white pine were lightly scattered with the area. Lowlands were dominated by cedar but also contained tamarack, spruce, fir, alder and black ash. Windthrow and beaver ponding were likely the major forms of natural disturbance within the compartment. Current forests appear to be similar in species composition to pre-settlement conditions. Sugar maple dominates the upland and cedar, spruce and fir occupy the lowlands.

Wildlife habitat objectives are primarily associated with maintaining within and between stand structural and species diversity associated with northern hardwood forests. Gray wolves and moose (Michigan special concern) utilize the compartment, but no rare species have actually been recorded. Other wildlife species of interest that may utilize this compartment include eastern newt, blue-spotted salamander, great-crested flycatcher, broad-winged hawk, masked shrew and eastern chipmunk

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of end moraine of medium-textured glacial till. There is insufficient data to determine the glacial drift thickness. The Ordovician Prairie du Chien (PdC) and the Cambrian Trempealeau Formation subcrop below the glacial drift. The PdC and Trempealeau could be used for stone. The nearest gravel pit is several miles to the south, but there should be potential in the compartment. There is no commercial oil and gas production in the UP.

**Vehicle Access:** Poor at times due to heavy soils. Access to T48N R17W Section 31 and T47N R17W Section 6 can be difficult due to wet soils, streams, and blockades.

**Survey Needs:** Survey corners and boundary lines should be established, especially adjacent to Forest Land Group property. Confirm boundaries adjacent to Pictured Rocks National Lakeshore.

Recreational Facilities and Opportunities: Deer hunting, trapping, fishing, hiking, and bird watching.

**Fire Protection:** Wildfire is not a major concern here due to the forest cover type and soils.

**Additional Compartment Information:** Most of the hardwood stands are of high quality.

- > The following reports from the Inventory are attached:
  - **♦** Total Acres by Cover Type and Age Class
  - **♦** Proposed Treatment Summary
  - **♦** Proposed Treatments No Limiting Factors
  - **♦** Proposed Treatments With Limiting Factors
  - **♦ Stand Details (Forested and Nonforested)**
  - **♦ Dedicated and Proposed Special Conservation Areas**
- > The following information is displayed, where pertinent, on the attached compartment maps:
  - ♦ Base feature information, stand boundaries, cover types, and numbers
  - **♦** Proposed treatments
  - **♦** Details on the road access system

### Table 1 – Total Acres by Cover Type and Age Class

Compartment 174 Year of Entry 2014

Shingleton Mgt. Unit Jesse Bramer : Examiner

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#### Age Class

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		80	82.00	, p. 2	, S. /	do de	\$ /	8 /	R. O.	\$ 6	188° /	00,700	0,70	No Sur	Re /	,
Cedar	0	0	0	0	0	0	0	0	0	0	89	0	0	0	89	ĺ
Low-Density Trees	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17	
Lowland Conifers	0	0	32	17	3	0	0	10	35	0	3	0	0	0	100	
Lowland Deciduous	0	0	8	16	35	16	0	17	0	0	13	0	0	21	126	
Lowland Mixed Forest	0	0	0	9	6	14	0	0	0	0	0	0	0	0	29	
Lowland Shrub	45	0	0	0	0	0	0	0	0	0	0	0	0	0	45	
Mixed Upland Deciduous	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	
Northern Hardwood	0	0	0	0	0	103	871	0	0	0	0	0	0	0	974	
Treed Bog	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26	
Water	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
Total	95	0	40	41	45	133	877	27	35	0	105	0	0	21	1418	1



### **Table 2 – Proposed Treatment Summaries**

Shingleton Mgt. Unit

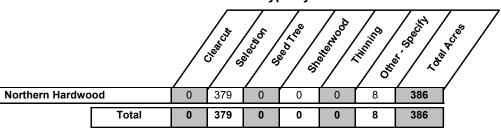
Compartment 174 Year of Entry 2014 **Total Compartment Acres: 1418** 

**Acres by Treatment Type** 

Commercial Harvest - 386 Site Prep - 0 Tree Planting - 0 Prescribed Burn - 0 Other - 0

Habitat Cut - 0 Tree Seeding - 0 Pesticide - 0 Opening Maintenance - 0

### **Cover Type by Harvest Method**



### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 174 Year of Entry 2014

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
9	41174009-Cut	60.0	4119 - Mixed Northern Hardwoods	High Density Pole	54	81-110	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Cmpt. Review Proposal

Prescription Treatment= Single tree harvest this stand retaining approximately 80 BA. Maintain the species diversity. Create regeneration openings

Specs: throughout.

Long term MO= Create opportunities for and enhance existing stand regeneration.

Retention= Retain wildlife trees, seed trees, and species diversity. Reserve hemlock, cedar, and oak.

Other The southern part of this stand was under contract TS # 027-04 Mosquito East around 2006 but was never completed. There is old orange and Comments: red marking paint still visible. Access roads leading to the stand from Chapel Road are in place, but blocked off and are in poor condition.

Next Steps:

s

<u>Proposed</u>

Start Date: 10/01/2014

10 41174010-Cut 39.1 4111 - S.Maple, High 60 111-140 Harvest Single Tree 4111 - S.Maple, Cmpt. Review Hard Mast Hard Mast Density Selection Proposal Association Pole Association

Prescription Treatment= Single tree harvest this stand retaining approximately 80 BA. Maintain the species diversity. Create regeneration openings

throughout. Specs:

Long term MO= Create opportunities for and enhance existing stand regeneration.

Retention= Retain wildlife trees, seed trees, and species diversity. Reserve hemlock, cedar, and oak.

Access roads leading to the stand from Chapel Road are in place, but blocked off and are in poor condition. Other

Comments:

Next Steps:

Proposed

10/01/2014 Start Date:

41174018-Cut Cmpt. Review 18 512 4112 - Maple, High 60 111-140 Harvest Single Tree 4112 - Maple, Beech, Cherry Density Selection Beech, Cherry Proposal Association Pole Association

Prescription Treatment= Single tree harvest this stand retaining approximately 80 BA. Maintain the species diversity. Create regeneration openings

Specs: throughout.

Long term MO= Create opportunities for and enhance existing stand regeneration.

Retention= Retain wildlife trees, seed trees, and species diversity. Reserve hemlock, cedar, and oak.

Other There is old orange and red marking paint in the western portion of this stand. Parts of this stand was under contract TS # 027-04 Mosquito East

Comments: around 2006, but was never completed.

<u>Next</u> Steps:

**Proposed** 

Specs:

10/01/2014 Start Date:

20 41174020-Cut 4112 - Maple, High 60 81-110 Harvest Other - Specify 4112 - Maple, Cmpt. Review 7.7 Beech, Cherry Density in Comments Beech, Cherry Proposal Association Pole Association

Prescription Treatment=> Remove any beech trees present that are infected by BBD (Beech Bark Disease] and any other merchantable tree species needed

for access. Do not harvest any cedar, hemlock, or oak that may be present.

Long term MO=> Create opportunities for and enhance existing stand regeneration. Retention= Retain wildlife trees, seed trees, and species diversity. Reserve hemlock, cedar, and oak.

Other\_ In the event that beech volumes are low, additional tree species may be marked.

Comments: <u>Next</u>

Steps: **Proposed** 

Start Date: 10/01/2014

## Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 174
Year of Entry 2014

DNR DNR

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
37	41174037-Cut	62.2	4110 - Sugar Maple Association	High Density Pole	65	81-110	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal

Prescription Treatment= Single tree harvest this stand retaining approximately 80 BA. Maintain the species diversity. Create regeneration openings

Specs: throughout.

Long term MO= Create opportunities for and enhance existing stand regeneration.

Retention= Retain wildlife trees, seed trees, and species diversity. Reserve hemlock, cedar, and oak.

Other Comments:

s

Next Steps:

**Proposed** 

Start Date: 10/01/2014

39 41174039-Cut 166.0 4110 - Sugar Maple High 60 111-140 Harvest Single Tree 4110 - Sugar Maple Cmpt. Review Association Density Log Selection Association Proposal

<u>Prescription</u> Treatment= Single tree harvest this stand retaining approximately 80 BA. Maintain the species diversity. Create regeneration openings

Specs: throughout.

Long term MO= Create opportunities for and enhance existing stand regeneration.

Retention= Retain wildlife trees, seed trees, and species diversity. Reserve hemlock, cedar, and oak.

Other Aesthetics are part of the management area objectives, and this stand occurs along the Chapel Road which receives a lot of recreational traffic

Comments: during the warmer seasons. Mark for aesthetics near the Chapel Road with other silvicultural objectives in mind.

Next Steps:

<u>Proposed</u>

Start Date: 10/01/2014

Total Treatment

Acreage Proposed: 386.3

Shingleton Mgt. Unit Table 4 -- Treatments Prescribed with Compartment: 174 a Limiting Factor s Year of Entry 2014 Treatment CoverType Treatment Treatment **Cover Type** n Acres Size Stand BA **Approval** Name Method Objective Status Density Age Range Type d #Error Prescription Specs: <u>Other</u> Comment: <u>Next</u> Steps: <u>Proposed</u> Start Date: #Error

Total Treatment Acreage Proposed:

<u>Limiting Factor and No</u> <u>Treatment Reason</u>

0

### Out of YOE -- Treatments **Prescribed with No Limiting Factor**

Year of Entry: 2014

DNR DNR	
nproval	

 Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
41009014- Cut1	5.2	6120 - Lowland Cedar	High Density Pole	141		Harvest	Patch or Strip Clearcut	6120 - Lowland Cedar	Cmpt. Review Proposal - Incomplete

Prescription patch cut app. 5 acres, determined at time of prep

Specs:

<u>Other</u> Comments:

<u>Next</u>

Monitor according to work instructions.

Steps:

**Proposed** 

10/01/2011 Start Date:

> 41044\_OutOfY 0.9 **OE-Cut**

Harvest

Crown Thinning

42210 - Natural Red Pine

Cmpt. Review Proposal -Incomplete

Prescription Mark red pine and white pine to 80 sq.ft. where densities are high enough. Cut all other species except hemlock, oak, and cedar.

Specs:

Other Retention will be a portion of the red pine and white pine trees remaining.

Comments:

<u>Next</u>

Possible regeneration harvest next year of entry.

Steps:

**Proposed** 

10/01/2013 Start Date:

> 41172002-Cut 4.4

4112 - Maple, Beech, Cherry Association

High Density Pole

49

Harvest

Single Tree Selection

4110 - Sugar Maple Cmpt. Review Association

Proposal

Prescription Treatment=Thin stand down to 80 BA on average while putting in regen gaps to promote species diversity and Sugar Maple. Put stand up with

Specs:

adjacent hardwood in comp 169 in 2014. MO=Un-even aged hardwoods with quality Sugar Maple stems

Retention=Residual BA

<u>Other</u>

Comments:

Natural regen survey to follow harvest during the next inventory cycle. <u>Next</u>

Steps:

**Proposed** 

10/01/2014 Start Date:

**Total Treatment** 

10.5 Acreage Proposed:

S t	Shingletor	Mgt. Unit		5 – Fo	orested Sta	nds Compartment: 174 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
3	4191 - Mixed Upland Deciduous with Conifer	High Density Log	5.1	62	1-50	This is a hardwood dominated stand along a tributary of the Mosquito River. This stand acts as a buffer and contains a variety of tree species and slight changes of topography.
4	4112 - Maple, Beech, Cherry Association	High Density Log	45.0	65	51-80	This stand was single tree harvested under the contract TS# 41-026-04-01, Mosquito West from 2005-2009. The basal area within this stand is variable.
5	6139 - Mixed Lowland Forest	High Density Pole	6.3	45	1-50	This is a lowland stand of cedar, fir, ash, and spruce with some birch and maple trees present.
6	4115 - Y.Birch, Hemlock NH	High Density Log	88.0	65	51-80	This stand was single tree harvested under the contract TS # 41-026-04-01, Mosquito West from 2005-2009. The basal area is variable within this stand.
7	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density	16.8	35		This is part of the riparian zone of the Mosquito River. It contains a mixture of lowland conifers and deciduous trees with a high concentration of sapling to pole sized balsam fir.
9	4119 - Mixed Northern Hardwoods	High Density Pole	60.0	54	81-110	This stand contains lower quality trees in the pole class. There is a high density of balsam fir in the understory. The southern part of this stand was under contract TS # 027-04 Mosquito East around 2006 but was never completed. There is old orange and red marking paint still visible.
10	4111 - S.Maple, Hard Mast Association	High Density Pole	39.1	60	111-140	This stand contains mostly pole to sawlog sized trees. Approximately around 1987 this stand was selectively thinned.
11	6124 - Lowland Spruce- Fir	Medium Density	31.7	25		This is a lowland area with high concentrations of balsam fir, cedar, and spruce. There are small drainages that flow from this stand and eventually into the Mosquito River. This stand was harvested in the late 1980's where they cut cedar along with everything else, but they did leave patches of mature cedar.  Natural regeneration is coming back very well.
13	6113 - Lowland Maple	High Density Pole	26.6	45	51-80	There are several drainages that flow from this stand to the Mosquito River. Lowland tree species dominate here with low quality timber. A hemlock patch occurs in the northeastern part of this stand, and it appears that the northwest portion of the stand was thinned more heavily around 1987 than the rest of the stand.
14	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	16.2	50	1-50	Low wet area with a mix of low quality hardwoods with lowland conifer. Portions of this stand were included in the contract TS # 027-04 Mosquito East around 2006.
15	6139 - Mixed Lowland Forest	Medium Density Pole	14.3	51	51-80	A beaver activity has affected the northern portion of this stand resulting in tree mortality and younger regeneration. There are many springs throughout this area with large aspen declining as well.
16	6124 - Lowland Spruce- Fir	High Density Pole	2.9	46	51-80	Fir and spruce stand with other lowland tree species. There is cedar present which contains much cedar regeneration. Also, there is a small aspen clone in the southwest part of the stand.

S t	Shingleton Mgt. Unit			5 – Foi	rested Sta	Compartment: 174 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	4112 - Maple, Beech, Cherry Association	High Density Log	21.7	65	51-80	The stand was single tree harvested under the contract TS # 41- 026-04-01, Mosquito West between 2005-2009. The northern portion of this stand contains more pole sized tree and a greater presence of red maple. The basal area within this stand fluctuates as well.
18	4112 - Maple, Beech, Cherry Association	High Density Pole	51.2	60	111-140	Stand is mostly sugar maple and red maple, but contains a well component of beech and yellow birch. Balsam fir is thick in the understory in some places and there is old orange and red marking paint in the western portion of this stand. Parts of this stand was under contract TS # 027-04 Mosquito East around 2006, but was never completed.
19	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Sapling	20.7	Uneven Age		This stand resides by the mosquito river and occurs on low ground that may have been the river's floodplain at one time.  Now it is mostly tag alder with scattered mature trees.
20	4112 - Maple, Beech, Cherry Association	High Density Pole	7.7	60	81-110	This stand was thinned in the past and contains a lot of advanced regeneration. There is a large component of mature beech with BBD in this stand.
21	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	17.1	73	51-80	Low wet area that contains low quality trees with a few merchantable ones. This is a transition zone between higher ground in the west to low ground in the east.
22	4111 - S.Maple, Hard Mast Association	High Density Pole	147.0	60	81-110	This stand was thinned around 2006 under contract TS # 027-04 Mosquito East. In the very NW corner of the stand there is a Beech Bard Disease plot, which was protected from being harvested during the sale.
23	6120 - Lowland Cedar	High Density Pole	26.2	100	111-140	This is a lowland stand composed mainly of large diameter cedar trees.
24	4112 - Maple, Beech, Cherry Association	High Density Pole	35.6	58	81-110	Stand was thinned under contract TS # 027-04 Mosquito East around 2006. The basal area near Chapel Road was kept higher.
26	6130 - Fir, Aspen, Maple	Medium Density	8.5	30		A creek and drainage make up this stand holding lowland tree species within it.
27	6128 - Lowland Coniferous, Mixed Deciduous	High Density Sapling	35.4	82		This stand is on low, wet ground which contains stunted, poor quality trees. There is larger diameter cedar in patches scattered throughout the stand along with patches of tag alder, sapling sized hardwood species, and spruce/fir.
29	6118 - Lowland Deciduous with Cedar	High Density Pole	12.5	107	1-50	This is a transition zone between low and slightly higher ground with hardwoods and lowland species present.
30	6120 - Lowland Cedar	High Density Log	24.8	107	111-140	
31	4115 - Y.Birch, Hemlock NH	High Density Log	49.0	65	81-110	This stand contains a variety of tree species along its edges.  The basal area varies throughout the stand too.
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s t	Shingleto	n Mgt. Unit		5 – Fo	orested Sta	rinds Compartment: 174 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
32	4112 - Maple, Beech, Cherry Association	High Density Log	75.5	65	51-80	This stand was single tree harvested under the contract TS# 041-04, 639 Hardwood around 2007.
33	4112 - Maple, Beech, Cherry Association	High Density Log	48.4	64	81-110	This stand was single tree harvested under the contract TS# 041-04, 639 Hardwood around 2007.
36	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	15.7	35	1-50	This stand is within the riparian zone of the Mosquito River and acts as a buffer.
37	4110 - Sugar Maple Association	High Density Pole	62.2	65	81-110	The southern portion of this stand contains mostly sugar maple and then black cherry increases in abundance further north.  Tree size and quality is lower in the northern portion also.  Overall tree density is variable too.
38	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	3.3	100	81-110	
39	4110 - Sugar Maple Association	High Density Log	206.3	60	111-140	This stand was single tree harvested around the late 1980'S. It consists of variable basal area and tree form. Larger diameter trees were left along the Chapel Road and tree spacing is wider. Tree densities become higher further from the road.
41	6120 - Lowland Cedar	High Density Pole	20.0	102	81-110	This stand contains several wet drainages and various tree sizes and densities. The northern portion of this stand experiences some tree mortality.
43	6120 - Lowland Cedar	High Density Pole	18.0	102	111-140	This stand is mostly high density cedar in the pole-log size class. There is a greater presence of fir, spruce, and aspen on the outside of this stand. This area appears to be a transitional area between this cedar stand and the adjacent hardwood stands.
44	4119 - Mixed Northern Hardwoods	High Density Pole	7.2	57	81-110	Access may be a problem with this stand. This stand contains a mix of poor quality black cherry trees and maple. There are scattered large aspen trees present as well. The stand is surrounded by lowland cedar.
45	4110 - Sugar Maple Association	High Density Pole	20.4	65	81-110	This stand was single tree harvested under the contract TS# 041-04, 639 Hardwood.
46	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	8.8	40		This stand may have treatment limiting factors such as water quality/bmps due to wet ground. There are many water seeps that are inhabited by many lowland tree species. Tree size is sapling-pole and form is poor.
47	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	8.2	24		This is a sapling sized aspen clone.
48	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	9.9	72	51-80	White spruce, cedar, and paper birch make up the majority for tree species.

s t	Shingleto	n Mgt. Unit		5 – F	orested Sta	nds Compartment: 174 Year of Entry: 2014	DNR DNR
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	MICHIGAN 6
50	4112 - Maple, Beech, Cherry Association	High Density Pole	9.9	60	51-80	This stand was single tree harvested under the co 04104, 639 Hardwood around 2005. This stand small hills.	

### 6 - Nonforested Stands

Compartment: 174 Year of Entry: 2014



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	3303 - Mixed Low Density Trees	0.4	N\A	Unspecified	
2	6229 - Mixed lowland shrub	0.5	N\A	Unspecified	
8	50 - Water	0.8	N\A	Unspecified	
12	6220 - Alder/willow	22.3	N\A	Unspecified	
25	622 - Lowland Shrub	3.2	N\A	Unspecified	
28	6224 - Treed Bog	26.0	N\A	Unspecified	
34	50 - Water	5.8	N\A	Unspecified	
35	6229 - Mixed lowland shrub	18.6	N\A	Unspecified	
40	330 - Low-Density Trees	2.5	N\A	Unspecified	
42	330 - Low-Density Trees	10.5	N\A	Unspecified	
49	330 - Low-Density Trees	4.1	N\A	Unspecified	

Compartment: 174
Year of Entry: 2014



### 7 - 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.

Stand	SCA Type	SCA Name	Acres	Comments

Compartment: 174
Year of Entry 2014



### **8 – 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.

Conservation Area	on Type	Description	HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or cked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from ar to year. Coldwater streams in Michigan typically provide these conditions due to substantial attributions of groundwater to their stream flows. Such streams are established by Director's action and signated as trout resources by Fisheries Order 210.	
SCA	Contiguous Resource Area	These are DNR-owned lands that are directly contiguous to adjacent ownerships, where there is potential or coordination of landscape-level management for similar purposes. Such lands include distinct but ontiguous DNR-owned lands, such as State Parks, State Forest and Wildlife Areas. Such lands also include DNR-owned lands that are adjacent to other ownerships such as Federal Parks, National Forest wilderness areas, National Wildlife Refuges, conservancy lands, and private lands such as the Huron flountain Club.	
SCA	Visual Management Area	An area of general social appreciation that is managed to recogn Examples of these areas include scenic vistas, scenic or natural	

