

Shingleton Forest Management Unit<br/>Compartment Review PresentationCompartment # 46Entry Year: 2013Compartment Acreage: 2781County: Schoolcraft

Revision Date: 8/22/11

Stand Examiner: Bob Burnham

Legal Description: T42N R16W Sec 6,7,17,18,19&20

## RMU (if applicable):

**Management Goals:** The main goal in this compartment is to conduct multiple resource management for the good of the citizens of the State of Michigan.

**Soil and Topography:** The soils in this compartment are mainly comprised of Wallace Sands and Carbondale. The lands east of the Big Ditch are comprised of large marshes with sand ridge islands of pine. The lands west of the Big Ditch are low organic soils supporting mainly cedar.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** The Hiawatha National Forest borders on the west and other state land on the east. Within the compartment there are a few isolated hunting forties. One of the forties was acquired by the State recently through the Forest Legacy Fund. The stands along the north shore of Indian Lake are moderately used by duck hunters. Land Use is limited due to poor access to the compartment.

**Unique, Natural Features:** This compartment is a mix of marsh and upland ridges as well as a large block of quality cedar. Bald eagles are frequent on the north end of Indian Lake.

Archeological, Historical, and Cultural Features: None known.

**Special Management Designations or Considerations:** The entire compartment is within the Seney Manistique Swamp Management Area. The land west of the Big Ditch is part of the Big Springs Deeryard.

**Watershed and Fisheries Considerations:** The Big Ditch upstream from Barnhart Creek is classified as Second Quality Cold Water (SQCW). Smith Creek is classified Second Quality Warm Water (SQWW). Indian Lake on the south boundary is excellent for smallmouth bass, perch, pike, walleyes, and some occasional ciscoe and brown trout.

**Wildlife Habitat Considerations:** This compartment lies within the Seney Sand Lake Plain ecological subsubsection. The growing season in this area is less than 100 days with extreme minimum winter temperatures of  $-46^{0}$  F. Annual snowfall in this area averages between 120 and 140 inches. General Land Office (GLO) Surveyor notes for the compartment did not contain the volume of information as was found in other areas. However, the notes that are available show jack pine, aspen, white birch and red pine occurred on the uplands. Ash, alder, cedar, black spruce, and tamarack occurred in lowland forest. The notes also discuss the presence of open grassy knolls that would make good grazing meadows. Windthrow and wildfire and beaver ponding likely played major roles in the ecology of the area. Given the scant GLO notes, it is difficult to assess the amount of change between the original survey and present conditions. However, the building of Big Ditch undoubtedly altered water tables thereby impacting the vegetation. Potentially, areas

that were once open are now forested as a result of the water table changes. The southern portion of this compartment is part of the Big Springs deeryard. The wildlife habitat objectives in that area are to maintain the closed canopy coniferous forest. Other habitat objectives include protecting the marsh complex ecosystem, promoting species, age and structural diversity within and between conifer stands, and protecting the Indian Lake watershed. Bald eagle (Michigan threatened), sharp-tailed grouse (Michigan special concern) and Gray wolf (Federal and Michigan endangered) activity has been recorded within this compartment. Other wildlife species of interest include spring peeper, great blue heron, deer mouse, and porcupine.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 10 and 50 feet. The Ordovician Queenston Shale and Silurian Manitoulin Dolomite subcrop below the glacial drift. The Manitoulin could be used for stone. The nearest gravel pit is 4 miles to the northeast and potential appears to be limited. There is no commercial oil and gas production in the UP.

**Vehicle Access:** Vehicle access is extremely limited, none of the private land has vehicle access and one is strictly accessed by boat. The few two tracks there are on the east side of the compartment are accessed from the north off of M-94 on the Smith Creek Road.

**Survey Needs:** Survey corners around the private 40 in Section 18 will be needed to prepare the adjacent stands.

**Recreational Facilities and Opportunities:** The West Shore Campground of the Indian Lake State Park is south west of the compartment as well as Palms Book State Park home of Kitch-iti-ki-pi (The Big Spring), a popular tourist attraction. Indian Lake offers recreational opportunities and the Big Ditch is used frequently by canoers. Due to poor vehicle access inland the compartment offers good secluded hunting opportunities.

**Fire Protection:** Fire response to this compartment will be slow due to the distance from the office, the equipment needed will likely be marsh type units due to the nature of the terrain.

## Additional Compartment Information:

- > 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

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

# Shingleton Mgt. Unit

### Robert Burnham : Examiner

### Compartment 046 Year of Entry 2013



							Age	Class									
	Hor	A series	6.z	61.01 2	67. ()	67.10 101	AD AD	<sup>65.</sup>	60 <sup>.00</sup>	101	69.00	66:a	001.001 -7	611.01.	200× 1500	AND A	,00,
Cedar	0	0	0	0	0	0	0	0	0	0	0	372	229	0	0	601	
Jack Pine	0	0	19	97	0	0	0	0	1	2	0	0	0	0	0	120	
Lowland Conifers	0	0	0	0	0	0	0	0	104	14	0	24	0	0	0	143	
Lowland Shrub	196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	196	
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	29	243	2	0	0	0	0	274	
Marsh	1055	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1055	
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	20	
Natural Mixed Pines	0	0	0	26	0	0	0	15	1	10	23	50	0	0	0	124	
Red Pine	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	
Tamarack	0	0	0	0	0	0	0	0	0	20	0	6	0	0	0	25	
Treed Bog	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Upland Conifers	0	0	178	12	0	0	0	0	0	6	7	0	0	0	0	202	
Water	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	]
Total	1264	0	197	135	0	0	0	15	135	315	39	451	229	0	0	2781	



AllCHIGAN .	Shingleton Mgt. Unit Year of Entry 2013									Compartment Total Compartment Acres:	
				Acres by	Treatm	ent Ty	ре				
	Commercial Harvest - 407	Site Prep - 0		Tree	Planting	- 0		Preso	ribed Burn - 0	Other - 0	
	Habitat Cut - 13	Opening Mair	ntenance - 0	Tree	Seeding	- 0		Pesti	cide - 0		
				Cover T	ype by I	Harves	st Meth	nod			
				<u> </u>	/ "	and the second second	ininino os		Se of the second		
	Lowland	Conifers	109	0 10	0	0	0	118			
	Lowland	Spruce/Fir	212	0 0	0	0	0	212			
	Natural M	lixed Pines	50	0 28	0	0	0	78			
	Upland C	Conifers	0	0 0	12	0	0	12			
		Tota	I 370	0 38	12	0	0	420			

Shingleton Mgt. Unit S t a n Treatment Acres Stage1				-	atments Pres Limiting Fact		Compartment: 046 Year of Entry 2013	ANATURE ANATURE	
a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	41046001-Cut	7.6	42290 - Natural Mixed Pine	High Density Log	65	Harvest	Seed Tree with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal
Presc Specs	•			ig red and white pir	ie as we	Il as some other t	trees along edges excl	uded by the red line. Try	y and scarify
<u>Other</u> Comn	nents:								
<u>Next</u> Steps		possibl	e, acceptable regen is	a mix of pine speci	es. Exa	mine regen at the	e next oi cycle.		
2	41046002-Cut	9.6	6127 - Lowland Pine	High Density Log	79	Harvest	Seed Tree with Reserves	6127 - Lowland Pine	Cmpt. Review Proposal
Presc Specs	•	a mix of	f upland and lowland, c	cut as seed tree cut	leaving	red and white pir	ne for seed, also leave	retention along creek cc	n west side.
<u>Other</u> Comn	nents:								
<u>Next</u> Steps		ole rege	n is a mix of teh currer	nt species. Examin	e regen	at the next oi cyc	le.		
4	41046004-Cut	7.1	42290 - Natural Mixed Pine	High Density Log	65	Harvest	Seed Tree with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal
Presc Specs		as a see	ed tree cut leaving red	and white pine. If p	ossible	scarify.			
<u>Other</u> Comn	nents:								
<u>Next</u> Steps		possibl	e, acceptable regen is	a mix of the curren	t specie	s. Examine rege	n at the next oi cycle.		
7	41046007-Cut	13.3	42290 - Natural Mixed Pine	High Density Log	94	Harvest	Seed Tree with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal
Presc Specs		stand as	s a seed tree with rese	rves leaving red an	d white p	pine for seed, in a	addition leave some rel	tention along edges.	
<u>Other</u> Comn	 <u>ments:</u>								
<u>Next</u> Steps		ole rege	neration is a mix of teh	current pine speci	es. Exa	mine regen at the	e next oi cycle.		
12	41046012-Cut	29.0	6125 - Lowland Black Spruce, Jack Pine	High Density Pole	77	Harvest	Clearcut with Reserves	6125 - Lowland Black Spruce, Jack Pine	Cmpt. Review Proposal
Presc Specs								er-mature and needs to the really stunted port	
	nents:								
<u>Next</u> Steps		tion, acc	ceptable regen is a mix	of jack pine and b	lack spru	uce. Examine reç	gen at the next oi cycle	). 	

Shingleton Mgt. Unit

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

Compartment: 046 Year of Entry 2013

a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
17	41046017-Cut	49.7	42290 - Natural Mixed Pine	High Density Log	101	Harvest	Clearcut with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal

Prescription Stand is a large hodge podge stand, upland ridge near lake and sprawling throughout. The jack pine is over-mature and spruce is small in some areas. Stand needs to be harvested leave adequete pine seed and leave retention areas on the northwest and southeast which is where the cedar is. There is also a trace amount of hemlock within stand which will be left.

#### Other

S t

Comments:

<u>Next</u> Scarify the upland portions if possible. Acceptable regen is a mix of the current species. Examine regen at the next oi cycle. <u>Steps:</u>

22	41046	022-Cut	18.3	6122	- Black S	pruce	Medium Densi Pole	ity 79	Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal
Pres Spec										nas some decent mercha as retention if needed.	ntable spruce that could	be cut, there is
<u>Othe</u> Com	<u>r</u> ments:											
<u>Next</u> Step		None, ac	ceptab	le rege	en is a mix	of cur	rrent species ma	iinly spruc	e. Examine rege	eneration at the next oi cy	/cle.	
28	41046	028-Cut	155.5	6122	- Black S	pruce	High Density P	ole 84	Harvest	Clearcut	6122 - Black Spruce	Cmpt. Review Proposal
<u>Pres</u> Spec		Stand is	on con	tract, lı	ndian Lake	e Spru	ce which is a mi	x of black	spruce and jack	pine. The jack pine sho	uld get scarified under a	current ftp.
<u>Othe</u> <u>Com</u>	<u>r</u> ments:											
<u>Next</u> Step		Jack pine	e regen	eratior	n on the hi	igh gro	und, acceptable	regen is a	a mix of the curre	ent species, jack pine on	uplands and black spruc	æ on lowlands.
33	41046	033-Cut	5.9	429 -	Mixed Up Conifers	bland	High Density L	.og 85	Harvest	Shelter Wood with Reserves	429 - Mixed Upland Conifers	Cmpt. Review Proposal
<u>Pres</u> Spec		Stand is pine dow				avy bal	lsam understory.	. Stand is	2-3 aged with m	nature pine. Cut all specie	es except hemlock and n	nark the white
<u>Othe</u> <u>Com</u>	<u>r</u> ments:											
<u>Next</u> Step		Acceptat	le rege	en is a	mix of the	currer	nt species. Exar	mine rege	n during the next	t oi cycle.		
35	41046	035-Cut	11.6	6122	- Black S	pruce	High Density P	ole 82	Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal
<u>Pres</u> Spec		Stand is	mature	and sl	hould be c	cut. Re	etenton should b	e patches	excluded with re	ed line.		
<u>Othe</u> <u>Com</u>	<u>r</u> ments:											
<u>Next</u> Step		None, ac	ceptab	le rege	en is any c	of the c	current mix, mair	nly black s	pruce. Examine	regen at the next oi cycl	e.	

		Shin	gleton Mgt. Unit	Table 3	Tre	atments Pre	escribed	Compartment: 046	TOF NATURAL PA
S t				wi	th No L	imiting Fac	tor	Year of Entry 2013	DNR
a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
38	41046038-Cut	65.2	6125 - Lowland Black Spruce, Jack Pine	High Density Pole	73	Harvest	Clearcut with Reserves	6125 - Lowland Black Spruce, Jack Pine	Cmpt. Review Proposal
Presc Specs								The jack pine is over-m See management consi	
<u>Other</u> Comn	- nents:								
<u>Vext</u> Steps		he uplar	nds. Acceptable regen i	is a mix of the curr	rent spec	ies. Examin reç	gen on the next oi cycle		
44	41046044-Cut	6.5	429 - Mixed Upland Conifers	High Density Log	92	Harvest	Shelter Wood with Reserves	429 - Mixed Upland Conifers	Cmpt. Review Proposal - Incomplete
Presc Specs		pecies e	except hemlock and ced	lar, cut red and wh	nite pine a	as a shelterwood	d cut. See managemer	nt considrations.	
<u>Dther</u>	-								
<u>Jext</u> Steps		cceptabl	e regen is a mix of teh o	current species. e	examine r	egen at teh nex	t oi cycle.		
47	41046047-Cut	26.2	6122 - Black Spruce	High Density Pole	82	Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal
Presc Specs			clearcut and put a wide . See management cor		long sout	h end for visual	management for Indiar	n lake. Make it wide eno	ugh not to
<u>Other</u> Comm	- <u>nents:</u>								
<u>Vext</u> Steps		cceptabl	e regen is a mix of curr	ent species and co	ount rege	n at the next oi	cycle.		
49	41046049-Cut	14.5	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	82	Harvest	Clearcut with Reserves	6129 - Mixed Coniferous Lowland Forest	Cmpt. Review Proposal
resc pecs			oor quality, harvest with	n adjacent leave re	etention a	long south end	for visuals. Retain ced	ar as well. See manage	ment
Other Comm	- nents:								
<u>Vext</u> Steps		cceptabl	e regen is a mix of teh o	current species an	ıd examir	e regen at next	oi cycle.		
	Total Treatmer	nt							

Total Treatment Acreage Proposed: 420.0

S t a		Shingle	eton Mgt. Unit	Table 4		ents Prescrib ng Factor	ed with	Compartment: 046 Year of Entry 2013	DINATURAL DINATURAL
n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
			#Error						
Presc Specs	ription S:								
<u>Other</u> Comn									
<u>Next</u> <u>Steps</u>	<u>:</u>								
	ng Factor and No ment Reason	0_							
Ac	Total Treatmer reage Propose		0						

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

Year of Entry: 2013



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
41022_OutO OE-Cut	<b>fY</b> 35.6				Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
Prescription 3 Specs:	rd row thinni	ng. Cut all trees in de	esignated rows. R	lows can be	e spaced wider	apart in areas with lower	basal area. Do not cut	hemlock and oak.
<u>Dther</u> D Comments:	o not cut an	y trees within 50 feet	of the West Bran	ich Manistio	que River.			
<u>Next</u> T Steps:	hin next yea	r of entry.						
41049_OutO OE_1-Cut					Harvest	Single Tree Selection	42290 - Natural Mixed Pine	Cmpt. Review Proposal
Prescription N	lark red pine	and white pine to 30	sg. ft. Create ga	os in canor	v for regenera	tion where nine exists. An	eas that have thicker v	oung poles can be
<u>Specs:</u> n	narked to 80.	Cut all other species						
<u>Other</u> A		. Cut all other species nd is too difficult for c	s except hemlock	and oak if				
<u>Other</u> A <u>Comments:</u>	ccess to sta	nd is too difficult for c	s except hemlock	and oak if	present.	on includes any species r		
<u>Dther</u> A <u>Domments:</u> <u>Next</u> F	access to sta	nd is too difficult for c	s except hemlock	and oak if	present.	·		
Dther A Comments: <u>Vext</u> F Steps: 41053_OutO OE-Cut Prescription N	Access to sta Regeneration <b>fY</b> 10.2 fark red pine	nd is too difficult for c walkthrough during r	s except hemlock continuous thinnir next inventory cyc	and oak if ng. de. Accepta	present. able regeneration Harvest by for regenera	on includes any species r	nixture currently found 42290 - Natural Mixed Pine	onsite. Cmpt. Review Proposal
Other A   Other A   Comments: F   Next F   Steps: A   41053_OutO OE-Cut   OE-Cut Prescription   Specs: n	fY 10.2 fr in the test of	nd is too difficult for c walkthrough during r	s except hemlock continuous thinnir next inventory cyc sq. ft. Create ga s except hemlock	and oak if ng. cle. Accepta ps in canop and oak if	present. able regeneration Harvest by for regenera	on includes any species r Single Tree Selection	nixture currently found 42290 - Natural Mixed Pine	onsite. Cmpt. Review Proposal

S t	Shingleton Mgt. Unit			5 – Fo	prested Stands	Compartment: 046 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42290 - Natural Mixed Pine	High Density Log	7.6	65	111-140	
2	6127 - Lowland Pine	High Density Log	9.6	79	111-140	
3	42210 - Natural Red Pine	High Density Log	7.4	90		
4	42290 - Natural Mixed Pine	High Density Log	7.1	65	141-170	
6	42290 - Natural Mixed Pine	High Density Log	9.8	90	81-110	
7	42290 - Natural Mixed Pine	High Density Log	13.3	94	141-170	
8	42220 - Natural Jack Pine	High Density Log	1.3	81		
9	429 - Mixed Upland Conifers	High Density Sapling	12.4	24		
10	42220 - Natural Jack Pine	High Density Log	1.1	81		
12	6125 - Lowland Black Spruce, Jack Pine	High Density Pole	29.0	77		
14	42290 - Natural Mixed Pine	High Density Pole	1.0	79		
15	42220 - Natural Jack Pine	High Density Sapling	3.7	22		
16	42220 - Natural Jack Pine	Medium Density Log	1.5	77		
17	42290 - Natural Mixed Pine	High Density Log	49.7	101		
20	42290 - Natural Mixed Pine	High Density Sapling	12.8	22		
21	42220 - Natural Jack Pine	High Density Sapling	92.8	22		
22	6122 - Black Spruce	Medium Density Pole	18.3	79		
23	42290 - Natural Mixed Pine	High Density Sapling	13.2	22		

S t	Shingleton Mgt. Unit			5 – Fo	prested Stands	Compartment: 046 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
24	6122 - Black Spruce	Medium Density Pole	10.7	72		
25	4191 - Mixed Upland Deciduous with Conifer	High Density Log	20.1	82		
27	42290 - Natural Mixed Pine	High Density Log	6.7	82	81-110	
28	6122 - Black Spruce	High Density Pole	155.5	84		
29	42290 - Natural Mixed Pine	High Density Log	3.3	82		
30	6121 - Tamarack	High Density Pole	4.0	102		
31	6121 - Tamarack	Medium Density Pole	1.8	102		
33	429 - Mixed Upland Conifers	High Density Log	5.9	85		
34	6129 - Mixed Coniferous Lowland Forest	Low Density Pole	4.6	102		
35	6122 - Black Spruce	High Density Pole	11.6	82		
36	6120 - Lowland Cedar	High Density Log	174.7	114		
37	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	7.9	104		
38	6125 - Lowland Black Spruce, Jack Pine	High Density Pole	65.2	73		
39	6126 - Lowland Jack Pine	Medium Density	15.3	14		
42	42220 - Natural Jack Pine	High Density Sapling	4.2	14		
43	6122 - Black Spruce	High Density Pole	3.1	82		
44	429 - Mixed Upland Conifers	High Density Log	6.5	92	111-140	
45	429 - Mixed Upland Conifers	Medium Density	88.9	14		

S t	Shingleton Mgt. Unit Level 4 Size			5 – Fo	prested Stands	Compartment: 046 Year of Entry: 2013	THE DURCH AND
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	MICHIGAN
46	6120 - Lowland Cedar	High Density Log	13.1	114			
47	6122 - Black Spruce	High Density Pole	26.2	82			
48	429 - Mixed Upland Conifers	High Density Sapling	23.3	14			
49	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	14.5	82			
51	6122 - Black Spruce	High Density Pole	1.9	92			
52	429 - Mixed Upland Conifers	Medium Density	11.9	14			
53	6120 - Lowland Cedar	High Density Pole	41.5	113			
54	429 - Mixed Upland Conifers	Medium Density	53.4	14			
55	6121 - Tamarack	Medium Density Pole	19.6	84			
56	6120 - Lowland Cedar	High Density Pole	371.7	109			
57	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	11.8	109			
60	6122 - Black Spruce	High Density Pole	46.4	84			

Shingleton Mgt. Unit

#### 6 – Nonforested Stands

Compartment: 046

Year of Entry: 2013

NATURA

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
5	622 - Lowland Shrub	35.5	N\A	Unspecified	
11	623 - Emergent Wetland	538.2	N\A	Unspecified	
13	623 - Emergent Wetland	3.1	N\A	Unspecified	
18	50 - Water	12.4	N\A	Unspecified	
19	622 - Lowland Shrub	8.7	N\A	Unspecified	
26	622 - Lowland Shrub	73.6	N\A	Unspecified	
32	622 - Lowland Shrub	1.3	N\A	Unspecified	
40	6224 - Treed Bog	1.4	N\A	Unspecified	
41	623 - Emergent Wetland	20.0	N\A	Unspecified	
50	623 - Emergent Wetland	492.3	N\A	Unspecified	
58	623 - Emergent Wetland	0.5	N\A	Unspecified	
59	623 - Emergent Wetland	0.5	N\A	Unspecified	
61	622 - Lowland Shrub	5.0	N\A	Unspecified	
62	622 - Lowland Shrub	71.8	N\A	Unspecified	



#### 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



#### **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.

Conservatio Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.	
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	Wild and Scenic Rivers	enic Wild and Scenic Rivers are established under authority of the National Wild and Scenic Rivers Act, Public Law 90-542, as amended. Each Wild and Scenic River has a river specific Federal management plan, and State agencies may enter into written cooperative agreements with the administering Federal agency for the management of Wild and Scenic Rivers that are upon State-owned lands. There are 18 miles of Federal designated Wild and Scenic Rivers that are located within the State Forest.	







