

Revision Date: 7/16/2012

Stand Examiner: Adam Petrelius

Legal Description: T42N R15W, Sections 17, 18, 19, 20, 30

RMU (if applicable): Compartment 76 lies within Seney Manistique Swamp Management Area.

Management Goals: The main goal of this compartment is to conduct multiple resource management for current and future generations.

Soil and Topography: The topography within the compartment is very consistent and the majority of the land is flat. A steep ridge exists in the northeast. Elevation values peak at 663 feet and drop to 604 at the Manistique River edge. Most of the land is forested and most common cover types are cedar and mixed swamp conifer. The two most abundant soils are Pelkie and Dawson/Greenwood/Loxley.

Ownership Patterns, Development, and Land Use in and Around the Compartment: State land within this compartment was acquired between 1927 and 1946. The compartment boundary borders private and state land. Most of the land receives very minimal use because of difficult access. The northeast end of the compartment receives the most use for hunting and fishing.

Special Management Designations or Considerations: Most of the land is located within a deer wintering area.

Watershed and Fisheries Considerations: Streams are classified from First Quality Cold Water (FQCW) down to Second Quality Warm Water (SQWW). In this area, the FQCW means an excellent trout fishery, one that is supplemented by a Fisheries Division annual stocking program. These waters are generally the famous ones, but also include somewhat smaller waters that are capable of supporting the fish population density necessary to provide a superior angling experience. SQCW implies a cold stream that supports a natural trout population, but is limited by either physical size or lack of spawning/foraging habitat. Its limitations mean that it will never support a heavy angling pressure and harvest, so Fisheries Division does not publicize the water. Local anglers, however, know what the streams support, and do fish them quite a bit. In-stream habitat is usually in the form of large woody debris, or downed trees. Fish need them because they provide protection from overhead predators and because they force water currents to scour holes under and around them. The holes provide more water volume in the stream, keeping it cooler, as well as giving the fish more volume to "hide" in. The woody structure also forces more eddy currents, breaking the "solid" water flow so that fish can get out of the current to rest. First Quality Warm Waters, (FQWW) are large, productive waters capable of supporting a good fishery for either warm-water species or cool-water species. In the Upper Peninsula, the designation generally applies to walleye, pike, musky or smallmouth bass waters. SQWW means small, possibly stagnant, warm streams that produce little to no actual fishery. Although small, their warm temperatures and generally high nutrient levels imply generally a higher productivity than the more "fishable" streams. Their value is attained from the production of forage that migrates downstream into areas of either cold-water or warm-water sports fish populations. For that reason, they are NOT useless waters, and they should be protected somewhat for the aquatic invertebrate and fish forage that they produce.

Beaver populations in these streams could be a benefit, as their dams will increase productivity as well as inhibit sand bedload migration. Fisheries Values Good. The Manistique River is classified as FQWW through this area. The Sturgeon Hole Creek, however, is warm enough in this area to be classified SQWW. It probably supports colder season migration of trout from the upper reaches downstream to their winter holding areas.

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° F. Annual snowfall in this area averages approximately 120 inches. The compartment falls within the Seney Manistique Swamp Management Area which highlights the following Featured Species: Moose, sharp-tailed grouse, snowshoe hare and white-tailed deer. The Manistique River forms the east and south borders of this compartment. The landscape is characterized by meandering river, oxbows and predominantly lowland forests. General Land Office (GLO) Surveyor notes show the circa 1850 lowland conifer swamps were comprised primarily cedar, spruce, and tamarack. Lowland hardwoods contained hemlock, elm, aspen, ash, balsam poplar, balsam fir, and red maple. Upland hardwoods along the river contained sugar maple, hemlock, yellow birch, pine (presumably white), and balsam fir. Windthrow and flooding likely played major roles in the natural disturbance regime. Current forests appear to be very similar in species composition to pre-settlement conditions. A significant portion of this compartment (all stands bordering the Manistique River) will be managed to include retention of some old growth characteristics. Wildlife habitat objectives in this compartment are associated with providing structural and species compositions similar to pre-settlement conditions. This includes maintaining closed canopy coniferous lowlands, protecting wetland boundaries, and promoting old growth characteristics along the Manistique River. The river corridor also serves as a wintering complex for deer. Bald eagles (State and Federally threatened) fish along the course of the Manistique River. There are also at least two rare plant species that are found along the river course. Other wildlife species of interest that may utilize this compartment include spring peepers, leopard frogs, pileated woodpecker, eastern kingbird, muskrat, and beaver.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel, peat and muck and minor coarse-textured glacial till. The glacial drift thickness varies between 10 and 50 feet. The Silurian Burnt Bluff group and Cabothead Shale subcrop below the glacial drift. The Burnt Bluff is quarried for stone. The nearest gravel pit is located two miles to the southeast and potential appears to be limited. There is no commercial oil and gas production in the UP.

Vehicle Access: Vehicle access is poor. The main access road through the compartment travels through private land.

Survey Needs: Survey work may be needed for a timbersale.

Recreational Facilities and Opportunities: There are no designated recreational facilities located within the compartment. Opportunities for fishing, hunting, and other forms of outdoor recreation exist.

Fire Protection: Access is poor. Some areas of the compartment are a mile away from the nearest road with many rivers and sloughs present. Fuels are mostly low ground. Numerous water sources are present.

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 Adam Petrelius : Examiner

Compartment 076 Year of Entry 2014



Age Class

		6.0	10 ^{.7} 0	6 ² ,0	67. ja	10-1-1-1 10-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	65. 05	60 ^{.00}	10 ¹	89.00	66.0	00 ⁻⁰⁰ -01	817.91'	*02, 190	Con An	, de lo
Aspen	0	8	0	33	0	0	0	0	0	0	0	0	0	0	41	
Cedar	0	0	0	0	0	0	0	32	0	0	96	0	0	0	129	
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Lowland Conifers	0	0	48	0	72	120	0	0	32	0	0	89	0	0	362	
Lowland Deciduous	0	0	0	0	0	0	0	0	197	12	0	0	0	0	209	
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	32	0	0	0	0	32	
Lowland Shrub	247	0	0	0	0	0	0	0	0	0	0	0	0	0	247	
Lowland Spruce/Fir	0	0	0	0	0	8	0	0	0	23	9	0	0	0	39	
Marsh	58	0	0	0	0	0	0	0	0	0	0	0	0	0	58	1
Mixed Upland Deciduous	0	0	0	0	0	52	0	56	0	78	3	0	0	0	190	
Northern Hardwood	0	0	0	0	0	0	0	27	0	21	0	0	0	0	48	
Upland Spruce/Fir	0	0	19	0	0	0	0	0	0	0	0	0	0	0	19	
Water	127	0	0	0	0	0	0	0	0	0	0	0	0	0	127	
Total	435	8	67	33	72	181	0	115	229	166	108	89	5	0	1509	1



Table 2 – Proposed Treatment Summaries

- MICHIGAN	Shingleton Mgt. Unit Year of Entry 2014								Compartment Total Compartment Acres:	076 1509
			A	Acres by 1	reatmer	nt Type)			
	Commercial Harvest - 80	Site Prep - 0		Tree P	lanting -	0	Pre	scribed Burn - 0	Other - 0	
	Habitat Cut - 0	Opening Mainten	ance - 0	Tree S	eeding -	0	Pes	sticide - 0		
				Cover Ty	pe by Ha	rvest	Method			
			Contraction of the second	Selection of the select	Stell	Concerning and Aline	Solution of the second	049/ 4C/ 60		
	Lowlan	d Deciduous	12	0 0	0	0	0 12			
	Lowlan	d Mixed Forest	0	45 0	0	0	0 45			
	Lowlan	d Spruce/Fir	23	0 0	0	0	0 23			
		Total	35	45 0	0	0	0 80			

S t			Shing	leton Mgt. Unit	Tab	le 3 with	Treatn No Lim	nents Prescrib iting Factor	bed	Compartment: 076 Year of Entry 2014	DNR DNR
a n d	Treatn Nan	nent ne	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	4107600)1-Cut	22.5	6122 - Black Spruce	Medium Density Pole	90		Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal
<u>Pres</u> Spec	<u>cription</u> (<u>cs:</u>	Cut all sp	oecies ex	cept hemlock and oak.							
<u>Othe</u> <u>Com</u>	e <u>r</u> N <u>ments:</u> ti	/lay nee mber.	d survey	work. Retention patches	s can be ex	cluded a	long the v	western boundary	of the stand where	it fades into bog/less p	roductive
<u>Next</u> Step	<u>s:</u>	Check re	egeneratio	on next year of entry.							
Propo Start	<u>osed</u> Date: 10	0/01/201	3								
11	4107601	1-Cut	29.3	6132 - Mixed Lowland Forest with Cedar	High Density Pole	90		Harvest	Group Selection	6132 - Mixed Lowland Forest with Cedar	Cmpt. Review Proposal
<u>Pres</u> Spec	<u>cription</u> C <u>cs:</u> E	Cut stan Do not c	d heavily ut cedar,	with an overall residual hemlock, and oak.	goal of 30 t	to 60 bas	al area. (Create large canor	py gaps to promote	regeneration of mid tol	erant species.
<u>Othe</u> Com	<u>r</u> FF <u>ments:</u> c li h	Retention avity tre is acce arvest t	n will be a es, espe ptable to o winter f	a mixture of species, but cially where overtopping selectively cut within the or deeryard management	: focus leav hemlock. I e seasonal nt.	ing large Buffer old creek bu	e poor qua d sloughs uffer. Excl	ality mixed hardwo 50 feet and Manis lude any inoperabl	ods that exhibit old stique River 100 fe le areas where hen	growth characteristics et. Buffer seasonal cree llock/cedar is too thick.	for future ks by 50 feet. Restrict
<u>Next</u> Step	<u>s:</u>	Check re	egeneratio	on next year of entry.							
Propo Start	<u>osed</u> Date: 10)/01/201	3								
16	4107601	l6-Cut	12.3	6118 - Lowland Deciduous with Cedar	High Density Loo	90 g		Harvest	Clearcut with Reserves	6118 - Lowland Deciduous with Cedar	Cmpt. Review Proposal
Pres Spec	<u>cription</u> C <u>cs:</u>	Cut all sp	oecies ex	cept cedar, hemlock, an	id oak.						
<u>Othe</u> Com	e <u>r</u> F <u>ments:</u> s	Retentio loughs	n will be o by 50 fee	edar, hemlock, and oak t. It is acceptable to sele	. Slough bu ectively cut	uffer will within th	also be re e season	etention patch. Re al creek buffer. Ex	strict harvest to wir clude any inoperat	nter for deeryard manag ble areas	ement. Buffer
<u>Next</u> Step	<u>s:</u> '	Check re	generatio	on next year of entry.							
Propo Start	<u>bsed</u> Date: 10	0/01/201	3								
11	4107602	21-Cut	15.9	6132 - Mixed Lowland Forest with Cedar	High Density Pole	90		Harvest	Group Selection	6132 - Mixed Lowland Forest with Cedar	Cmpt. Review Proposal
Pres Spec	<u>cription</u> C <u>cs:</u> E	Cut stan Do not c	d heavily ut cedar,	with an overall residual hemlock, and oak.	goal of 30 t	to 60 bas	al area. (Create large canop	py gaps to promote	regeneration of mid tol	erant species.
<u>Othe</u> Com	e <u>r</u> F <u>ments:</u> c v	Retention avity tre /here he	n will be a es, espe emlock/ce	a mixture of species, but cially where overtopping edar is too thick. Restrict	focus leav hemlock. I harvest to	ing large Buffer old winter fo	e poor qua d sloughs or deeryar	ality mixed hardwo 50 feet and Manis rd management.	ods that exhibit old stique River 100 fe	growth characteristics et. Exclude any inopera	for future ble areas
<u>Next</u> Step	c <u>s:</u>	Check re	egeneratio	on next year of entry.							
Propo Start	<u>osed</u> Date: 10)/01/201	3								
A	Total Tr creage P	eatmen ropose	it d: 8	0.0							

S t		Shingleton	Mgt. Unit	Table 4	Tre a L	atments imiting	Compartment: 076 Year of Entry 2014	ATTINATION AND AND AND AND AND AND AND AND AND AN		
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
			#Error							
Presci Specs	ription ::									
<u>Other</u> Comm	<u>nent:</u>									
<u>Next</u> <u>Steps:</u>	<u>.</u>									
<u>Propos</u> Start D	<u>ed</u> <u>ate:</u> #Error									
<u>Limitir</u> Treatn	ng Factor and No nent Reason	<u>)</u>								
Ac	Total Treatmen	nt d: O								

				Ou Prescr	t of YC ibed w)E Tr ith No Li	eatments imiting Facto	or	Year of Entry: 2014	AND NATURE AND NATURE	
Tre N	atment lame	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status	
410 0	009014- Cut1	5.2	6120 - Lowland Cedar	High Density Pole	141		Harvest	Patch or Strip Clearcut	6120 - Lowland Cedar	Cmpt. Review Proposal - Incomplete	
Prescription Specs:	<u>ı</u> patch cut	t app. 5 ac	res, determined at time	e of prep							
<u>Other</u> Comments:											
<u>Next</u> <u>Steps:</u>	Monitor a	according t	o work instructions.								
Proposed Start Date:	10/01/20	11									
41044 O	4_OutOfY E-Cut	0.9					Harvest	Crown Thinning	42210 - Natural Red Pine	Cmpt. Review Proposal - Incomplete	
Prescription Specs:	n_ Mark red	pine and	white pine to 80 sq.ft. v	vhere dens	ities are	high enoug	gh. Cut all other s	species except hem	nlock, oak, and cedar.	·	
<u>Other</u> Comments:	Retentior	n will be a	portion of the red pine	and white p	oine trees	s remaining	g .				
<u>Next</u> <u>Steps:</u>	Possible	regenerat	ion harvest next year o	f entry.							
Proposed Start Date:	10/01/20	13									
4117	2002-Cut	4.4	4112 - Maple, Beech, Cherry Association	High Density Pole	49		Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal	
Prescription Specs:	n_ Treatmen adjacent MO=Un-e Retentior	nt=Thin sta hardwood even aged n=Residua	and down to 80 BA on in comp 169 in 2014. hardwoods with qualit I BA	average wh y Sugar Ma	ile puttin ple stem	g in regen s	gaps to promote	e species diversity a	and Sugar Maple. Put s	tand up with	
<u>Other</u> Comments:											
<u>Next</u> <u>Steps:</u>	Natural r	egen surve	ey to follow harvest dur	ing the nex	t invento	ry cycle.					
Proposed Start Date:	10/01/20	14									
Total	Treatmen	t	_								

Acreage Proposed: 10.5

S	Shingletor	n Mgt. Unit		5 – Fo	prested Stands	Compartment: 076 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6122 - Black Spruce	Medium Density Pole	22.5	90		previously factor limited
2	6120 - Lowland Cedar	High Density Pole	81.7	108		
3	6122 - Black Spruce	High Density Pole	8.7	106		
4	6124 - Lowland Spruce- Fir	High Density Sapling	48.5	28		scattered mature black spruce and fir
5	42320 - Upland Spruce	High Density Sapling	18.5	28		
7	6120 - Lowland Cedar	Medium Density	32.4	70		
8	6122 - Black Spruce	High Density Pole	8.2	50		
9	6128 - Lowland Coniferous, Mixed Deciduous	Low Density Pole	21.5	80		Stand swapped from Non-Forested to Forested.
10	6129 - Mixed Coniferous Lowland Forest	Low Density Sapling	72.4	40		
11	6132 - Mixed Lowland Forest with Cedar	High Density Pole	31.9	90		
12	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	120.1	58		
13	6120 - Lowland Cedar	High Density Log	14.6	100		New stand added.
15	42350 - Upland Hemlock	High Density Log	5.2	120		New stand added.
16	6118 - Lowland Deciduous with Cedar	High Density Log	12.3	90		
17	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	10.7	70		
19	4117 - Mixed N. Hardwood - Pine	High Density Pole	3.1	70		
20	4119 - Mixed Northern Hardwoods	High Density Pole	24.2	70	111-140	
21	4112 - Maple, Beech, Cherry Association	High Density Pole	21.2	90		

S t	Shingleton Mgt. Unit			5 – Fo	prested Stands	Compartment: 076 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	19.3	89		
24	4190 - Mixed Upland Deciduous with Cedar	High Density Pole	7.6	70		cut in past. aspen was salvaged
27	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	2.9	100		
29	4191 - Mixed Upland Deciduous with Conifer	High Density Log	7.0	70		
30	4130 - Aspen	High Density Sapling	7.6	16		
31	4199 - Other Mixed Upland Deciduous	High Density Pole	30.4	70		bur oak in stand
34	4199 - Other Mixed Upland Deciduous	High Density Pole	52.4	50		
35	4130 - Aspen	High Density Pole	33.3	31		
36	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	38.3	90		
39	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	40.2	90		
40	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	89.0	119	p	ortions of stand were cut in past for deeryard management.
42	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	10.5	80		
45	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	75.0	80		
46	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	98.2	80		stand cut in past for deer yard management
52	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	4.4	80		

Shingleton Mgt. Unit

6 – Nonforested Stands

Compartment: 076



Year of Entry: 2014

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:	(Mid)
6	622 - Lowland Shrub	5.3	N\A	Unspecified		
14	50 - Water	6.2	N\A	Unspecified		
18	50 - Water	3.0	N\A	Unspecified		
23	622 - Lowland Shrub	6.1	N\A	Unspecified		
25	50 - Water	2.6	N\A	Unspecified		
26	622 - Lowland Shrub	236.1	N\A	Unspecified		
28	50 - Water	18.2	N\A	Unspecified		
32	50 - Water	12.5	N\A	Unspecified		
33	623 - Emergent Wetland	27.0	N\A	Unspecified		
37	310 - Herbaceous Openland	1.9	N\A	Unspecified		
38	50 - Water	66.5	N\A	Unspecified		
41	50 - Water	12.1	N\A	Unspecified		
43	623 - Emergent Wetland	15.0	N\A	Unspecified		
44	50 - Water	2.1	N\A	Unspecified		
47	623 - Emergent Wetland	10.0	N\A	Unspecified		
48	50 - Water	2.3	N\A	Unspecified		
49	623 - Emergent Wetland	2.0	N\A	Unspecified		
50	623 - Emergent Wetland	3.1	N\A	Unspecified		

6 – Nonforested Stands

Compartment: 076 Year of Entry: 2014



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
51	50 - Water	1.7	N\A	Unspecified	
53	623 - Emergent Wetland	1.3	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
multiple - see	SCA Removal	41076_SCARemoval	529.8	Stands were previously coded as potential old growth. These stands do not meet our current old growth definition and are being removed from potential old growth SCA status. They should continue to remain an SCA for deer wintering complex.



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	и Туре	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 wildl and Waterfowl Production Areas, deer wintering complexes in lo openings and savannas. Habitat areas are distinct from critical h endangered or threatened species (such as Kirtland's warbler or general in nature, are not primarily associated with threatened of covered by species recovery plans that are developed in cooper-	ife species, including State Wildlife Areas wland conifer communities, grassland labitat designated for recovery of piping plover areas) in that they are more r endangered species, and are not ation with Federal agencies.





Compartment: 076 T42N R15W Sec. 17, 18, 19, 20, 30 County: Schoolcraft Unit: Shingleton YOE: 2014 Acres: 1,509 GIS Calculated Examiner: Adam Petrelius Map Revised: 09/12/2012 Map Phase: Pre-Review

0.5

86°14'0"W

De La			
	Stand #	Stocking	
	23	Density	
	(412)0)	- A7	
),	Level 3 Level 4	OI Code	
	Cover Typ	e Code	

86°13'0"W

Stand Boundaries Forest Stands Level 3 411 - Northern Hardwood 413 - Aspen Types 419 - Mixed Upland Deciduous 423 - Other Upland Conifers 611 - Lowland Deciduous Forest 612 - Lowland Coniferous Forest 613 - Lowland Mixed Forest Non-Forest Stands Level 3 310 - Herbaceous Openland 500 - Water 622 - Lowland Shrub 623 - Emergent Wetland





Compartment: 076 T42N R15W Sec. 17, 18, 19, 20, 30 County: Schoolcraft Unit: Shingleton YOE: 2014 Acres: 1,509 GIS Calculated Examiner: Adam Petrelius Map Revised: 09/12/2012 Map Phase: Pre-Review



413 - Aspen Types
419 - Mixed Upland Deciduous
423 - Other Upland Conifers
611 - Lowland Deciduous Forest
612 - Lowland Coniferous Forest
613 - Lowland Mixed Forest
Non-Forest Stands
Level 3
310 - Herbaceous Openland
500 - Water
622 - Lowland Shrub
623 - Emergent Wetland
Dedicated Special Conservation Areas
Deer Wintering Areas

