

Revision Date: 10/26/2010

Stand Examiner: Rick Hill

Legal Description: 45N 16W Sections: 26 34 35

Identified Planning Goals ('Management Area' or 'RMU', if applicable): Seney Manistique swamp

Management Goals: Multiple use management with emphases on timber, wildlife, fisheries and biodiversity.

Soil and Topography: Two LTA's are found in the compartment. The Channel Fen South makes up the majority of the compartment while the Shingleton Fen is found in only a small part of the compartment.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Land within the compartment boundaries is all State land except for 160 acres of private ownership in section 34. to the east of the compartment lies the Seney wildlife refuge, in all other directions are state land with scattered private in holdings.

Unique, Natural Features: The following rare rushes and grass are known from section 33: Vasey's rush (Juncus vasevi, state threatened), slender spike-rush (Eleocharis nitida, state endangered) and Canada rice-grass (Oryzopsis canadensis, state threatened). In addition, in section 35 there is a population of the state threatened plant sweet coltsfoot (Petasites sagittatus). These plants are often associated with openings within seasonally wet sand/jack pine areas (e.g. on Saugatuck sands). As long as operators avoid marsh areas throughout the compartment, it is unlikely that prescribed management will adversely impact these species. If operating vehicles must pass through marshy areas, harvesting during the winter would also help mitigate any harm to these populations of rare plants. There is a 1995 record of Northern blue butterfly (Lycaeides idas nabokovi, state threatened) in section 26. Any openings in dry (or- less commonly- seasonally wet) jack pine areas, and shallow seasonally-inundated grasslands could support this butterfly and its host plant the state threatened **dwarf bilberry** (Vaccinium cespitosum). Instructing operators to avoid traveling over large openings in jack pine stands and limiting harvest operations to winter would help avoid potential impacts on the Northern Blue and dwarf bilberry. There is potential for nesting red-shouldered hawk (Buteo lineatus, state threatened) and Northern goshawks (Accipiter gentilis, state special concern) to occur throughout this compartment in stands of northern hardwoods, mixed swamp conifer, mature aspen and swamp hardwood. Please also see the Species Abstract section of this document in which we have provided the web access for more detailed information on these rare raptors. Wood turtle (Clemmys insculpta, state special concern) could occur in and along Hickey Creek, West Branch Manistique River, Marsh Creek, and Ducey Creek. The prescribed treatments in this compartment are unlikely to adversely impact this species if best management practices are followed along these riparian corridors.

Archeological, Historical, and Cultural Features: There is an old logging camp in located in the compartment.

Special Management Designations or Considerations: 640 acres were acquired after the 1992 review from the Seney Wildlife Refuge. This is the second time it has been inventoried.

Watershed and Fisheries Considerations: Fisheries Values are good in this compartment. Both the

Creighton and the West Branch Manistique Rivers are classed Second Quality Warm Water, but the whole Hickey Creek system to the west is Second Quality Cold Water, supporting native brook trout. Fisheries does no active management in any of these waters. Even so, protection from sand bedload is still a high priority.

Wildlife Habitat Considerations: This compartment is located in the Seney Sand Lake Plain ecological sub-subsection. 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 120 inches. General Land Office surveyor notes show the historic upland forest cover to be a hardwood/conifer mix including hemlock, white pine, red pine, maple and beech. The lowlands also contained a mixture of conifer and deciduous species including cedar, alder, black ash, tamarack, and black spruce. Natural disturbances in this area probably included fire, windthrow, and beaver ponding. Current vegetative cover within the compartment includes mature white pine, upland and lowland hardwoods, red pine, and spruce. Immature (regenerating) stands include balsam poplar, jack pine, red pine and aspen. The eastern portion of the compartment has recently become part of the State forest system. Prior to that it belonged to the Seney National Wildlife Refuge. Apparently the refuge had an openland management objective for those lands. As a result the timber was harvested in a manner that resulted in some semi-open aspen stands. This objective will not be carried through under State ownership. Rather the entire compartment will be managed for forest cover. The mature hardwood and pine stands will be managed to encourage structural and species diversity. Large diameter pulp quality trees will be left. Development of a super-canopy will also result from the management of these stands. There are a number of plant species of concern in the vicinity of this compartment. Wildlife species of interest known to utilize this compartment include moose, gray wolf, fisher, marten, sandhill crane, and saw-whet owl.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel. There is minor local relief in the compartment. There is insufficient data to determine the glacial drift thickness. The Ordovician Trenton Limestone subcrops below the glacial drift. The Trenton is used for stone/dolomite. The nearest gravel pit is 5 miles to the north. There is limited gravel potential on State lands. Approximately 20% of the State land is surface only.

Vehicle Access: Access to this compartment varies depending on location all areas east of the west branch of the Manistique River are easily accessible with a series of two tracks off of the Creighton truck trail. Areas west of the west branch of Manistique river are harder to get to with a long trek up the section 19 creek road needed to access most of the compartment. Due to a lack of easments the area to the west of section 19 creek can only be reached on foot

Survey Needs: none at this time

Recreational Facilities and Opportunities: Hunting, fishing and trapping are the most common recreation in this area.

Fire Protection: This compartment has a mix of upland and lowland fuels with potential for large fire growth. The Seney fire burned it this general area in the 1070's. Much of this compartment has high risk fuels in areas hard to access.

Additional Compartment Information: None



Compartment 19 T45N, R16W, Sec. 25,26,34-36 County: Cheboygan Unit: Shingleton YOE: 2012 Acres: 1,831 GIS Calculated Stand Examiner: Rick James Hill Map Revised: 9/28/2010 Map Phase: Pre-Review

1

Stand

Stocking Density 23

(412)0) - A7 Level 3 OI Level 4 Code

Cover Type Code

Legend

- Miris Corners Remonumented Section Corners Paved Roads Poor Dirt Roads
- Intermittent Stream/Drain Stream
- Lakes and Rivers **Stand Boundaries**

Forest Stands

Level 3

- 411 Northern Hardwood413 Aspen Types421 Planted Pines

- 421 Planted Pines
 422 Natural Pines
 429 Mixed Upland Conifers
 431 Upland Mixed Forest
 611 Lowland Deciduous Forest
 612 Lowland Coniferous Forest
 613 Lowland Mixed Forest

Non-Forest Stands

- Level 3
- 310 Herbaceous Openland 320 Upland Shrub 330 Low-Density Trees 500 Water

- 622 Lowland Shrub

Stand Boundary Map





Table 1 – Total Acres by Cover Type and Age Class

Shingleton Mgt. Unit

Data updated before 2:00 PM

Compartment 019 Year of Entry 2012



							Age	Class									
	Hor	des des	6. 1	0 ² 0	10 ²		10 ¹⁰	S. S.	69-100	101	89 69 60	68. 19.	601.001	6 ¹⁷⁰	100 × 1000		, do to
Aspen	0	15	100	99	8	0	0	0	0	0	0	0	0	0	13	235	ſ
Bog	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Herbaceous Openland	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
Jack Pine	0	0	197	37	16	127	0	0	0	0	0	0	0	0	0	377	
Low-Density Trees	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	
Lowland Conifers	0	0	0	5	52	0	0	22	11	0	0	0	0	0	53	144	
Lowland Deciduous	0	0	151	0	0	12	32	0	0	0	0	0	0	0	0	194	
Lowland Mixed Forest	0	0	9	0	0	0	0	15	66	0	0	0	0	0	0	90	
Lowland Shrub	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	41	0	0	0	0	0	41	
Natural Mixed Pines	0	0	0	0	0	20	0	12	0	5	0	0	0	0	6	43	
Northern Hardwood	0	4	0	0	0	0	238	0	17	48	0	0	0	0	0	308	
Red Pine	0	0	0	0	0	132	0	0	35	0	6	0	0	0	0	173	
Treed Bog	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	
Upland Conifers	0	0	0	22	57	43	65	0	0	89	0	0	0	0	38	314	
Upland Mixed Forest	0	19	0	58	0	0	0	5	53	0	0	0	0	0	40	175	
Upland Shrub	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Water	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	
White Pine	0	58	0	0	0	0	0	0	121	0	0	0	0	0	0	179	l
Total	93	96	456	220	134	333	335	54	302	182	6	0	0	0	151	2363	

Table 2 – Proposed Treatment Summaries

Shingleton Mgt. Unit

Data updated before 2:00 PM

Compartment 019 tal Compartment Acres: 2363

Year of Entry 2012					Total Compartment Acres:
	Α	cres by Treatmer	nt Type		
Commercial Harvest - 239	Site Prep - 0	Tree Planting -	0 Pre	scribed Burn - 0	Other - 0
Habitat Cut - 44	Opening Maintenance - 0	Tree Seeding -	0 Pes	ticide - 0	
	(Cover Type by Ha	arvest Method		
	5 ^{et}	See CH an	And the second second	Well Action	
Jack Pin	e 123	0 0 0	0 0 123	Ĭ	
Lowland	Deciduous 32	0 0 0	0 0 32		
Lowland	Spruce/Fir 41	0 0 0	0 0 41		
Natural	Mixed Pines 21	0 0 0	0 0 21		
Red Pine	e 0	0 0 0	35 0 35	Ī	
Upland C	Conifers 27	0 0 0	0 0 27	1	
Upland M	Mixed Forest 5	0 0 0	0 0 5		

35

0

0

0

283

249

0

Total

S t		Shingleton Mgt. Unit Data updated before 2:00 PM			Table 3 wi	Tre th No L	atments Pres _imiting Fact	Compartment: 019 Year of Entry 2012		
a n d	Treat Na	tment ime	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
11	41019	011-Cut	40.6	6122 - Black Spruce H	ligh Density Pole	81	Harvest	Clearcut with Reserves	Lowland Spruce-Fir	Cmpt. Review Proposal
<u>Presci</u> Specs	ription_ .:	Clearcut use the 4	This sta inch cle	nd, leave all red and wh earcut spec to accomplis	ite pine as well a sh this.	s hemloc	k, and cedar. Ad	vanced black spruce re	egeneration should also	be protected
<u>Other</u> Comm	n <u>ents:</u>	This sale is fairly di road.	should ifficult so	be held and harvested w b bigger sales would mo	vith spruce in cor st likely be a bet	npartmer ter option	nt 16. This will pro i in this area. Acc	ovide more volume for ess to this area is off t	a sale in the area. Acce he smith lake road to se	ess to this area ction 19 creek
<u>Next</u> Steps:	<u>.</u>	Acceptab higher ar	le reger eas of th	neration is a mix Black S ne stand.	pruce, Jack Pine	e, Aspen,	Balsam Fir, Tam	narack and Red Maple.	If regeneration fails plan	nt jack pine in
23	41019	023-Cut	32.0	6117 - Lowland H Deciduous, Mixed Coniferous	ligh Density Pole	54	Harvest	Clearcut with Reserves	Lowland Deciduous, Mixed Coniferous	Cmpt. Review Proposal
Presci Specs	ription_ ::	Clearcut	this star	nd, Leave all hemlock ar	d white pine also	o leave al	ll cedar.			
<u>Other</u> Comm	nents:	This sale is fairly d road.	should ifficult so	be held and harvested v bigger sales would mo	<i>v</i> ith spruce in cor st likely be a bet	npartmer ter option	nt 16. This will pro i in this area. Acc	ovide more volume for cess to this area is off t	a sale in the area. Acce he smith lake road to se	ess to this area ction 19 creek
<u>Next</u> Steps:	<u>.</u>	Acceptab	le reger	neration is a mix Black S	pruce, Jack Pine	e, Aspen,	Balsam Fir, Tam	narack and Red Maple.		
41	41019	041-Cut	5.4	4319 - Mixed H Upland Forest	ligh Density Pole	63	Harvest	Clearcut with Reserves	Aspen, Mixed Pine	Cmpt. Review Proposal
<u>Presci</u> Specs	ription_ ::	Clearcut	this star	nd, do not cut red pine a	so leave white p	ine and h	emlock and any	oak if present.		
<u>Other</u> Comm	nents:	Group wi	th stand	36, 41, 43,						
<u>Next</u> Steps:	<u>.</u>	Acceptab	le reger	neration is a mix Black S	pruce, Jack Pine	e, Aspen,	Balsam Firand F	Red Maple. If regeneral	tion fails plant jack pine.	
43	41019	043-Cut	4.0	42260 - Natural Pine, Mixed Deciduous	High Density Sapling	45	Harvest	Clearcut with Reserves	Aspen, Jack Pine	Cmpt. Review Proposal
Presci Specs	ription_ ;:	Clearcut Hemlock	this star	nd mark some of the red	pine for remova	l. Reserv	e the rest of the v	white pine, also leave V	Vhite Pine. Also do not	cut any Oak or
<u>Other</u> Comm	<u>nents:</u>	Group wi	th other	stands east of river to m	ake sale viable t	for harves	st.			
<u>Next</u> Steps:	<u>.</u>	Acceptab	le reger	neration includes Jack P	ine, Aspen, Red	Pine, Wł	nite Pine and Rec	d Maple. If regeneratior	n fails plant Jack Pine.	
76	41019	076-Cut	34.7	42210 - Natural F Red Pine	ligh Density Log	70	Harvest	Crown Thinning	Natural Red Pine	Cmpt. Review Proposal
Presci Specs	ription_ ::	Thin red where jac	pine to 1 k pine i	100 Square Feet cut all j s dominant.	ack pine and har	dwood, L	eave all Oak and	l Hemlock. Create gap	s to allow jack pine rege	n in areas
Other Comm	nents:	Group wi	th stand	15 and 76 to improve v	olumes and impr	ove sale	viability			
<u>Next</u> Steps:										

S t		Data	Shing a upda	gleton Mgt. Unit ted before 2:00 F	Table 3 PM with	Tre th No L	atments Pre _imiting Fact	scribed tor	Compartment: 019 Year of Entry 2012	
a n d	Trea Na	tment ame	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
77	41019	077-Cut	11.8	42290 - Natural Mixed Pine	High Density Pole	60	Harvest	Clearcut with Reserves	Aspen, Mixed Conifer	Cmpt. Review Proposal
Preso Spec:	<u>cription</u> s:	Clearcut trees. Th	this star is will al	nd, Scarify post harve so satisfy retention g	est Reserve tree mar uidelines.	rk 2 to 3 I	large spruce and	d white pine an acre als	o mark a few jack pine a	n acre as seed
<u>Other</u> Comr	<u>nents:</u>	Group th	is stand	with other stands ea	st of the river to mak	ke a large	er sale.			
<u>Next</u> Steps	<u>3:</u>	Scarify p spruce, b	ost harv alsam fi	est to encourage jacl ir, aspen and jack pir	k pine regen. If regen ne	n fails the	en plant jack pin	e. Acceptable regenera	ation consists of white pir	ie, red pine,
83	41019	083-Cut	26.9	429 - Mixed Upland Conifers	High Density Pole	48	Harvest	Clearcut with Reserves	Aspen, Jack Pine	Cmpt. Review Proposal
Preso Spec	<u>cription</u> s:	Clearcut	this star	nd mark some of the	red pine and white p	ine for re	emoval. Reserve	the rest of the white p	ine, also leave White Pin	e.
<u>Other</u> Comr	<u>r</u> ments:	Group wi place cut	th other s	stands east of river t	o make sale viable f	or harves	st. This stand ha	as a mix of ages only cu	ut a portion look for areas	of oldest trees
<u>Next</u> Steps	<u>8:</u>	Acceptat	ole reger	neration includes Jac	k Pine, Aspen, Red	Pine, Wł	nite Pine and Re	d Maple. If regeneratio	n fails plant Jack Pine.	
15	4101 C	l9083- ut1	122.8	42220 - Natural Jack Pine	High Density Log	49	Harvest	Clearcut with Reserves	Natural Jack Pine	Cmpt. Review Proposal
Preso Spec	<u>cription</u> s:	Clearcut provide a	this star seed so	nd, do not cut red pin ource and to meet re	e also leave white pi tention guidelines.	ne and h	emlock and any	oak if present. Mark a	jack pine every acre as I	eave trees to
<u>Other</u> Comr	<u>nents:</u>	Access is	s from th	ne Smith Lake Rd to	the sec. 19 creek roa	ad. Cut w	ith stand 57 as	well as 76.		
<u>Next</u> Steps	<u>3:</u>	Acceptat the stanc	ole reger I.	neration is a mix Blac	k Spruce, Jack Pine	, Aspen,	Balsam Fir, Tar	marack, and Red Mapl	e. If regeneration fails pla	ant jack pine in
A	Total creage	Treatmen Proposed	t 1: 27	78.2						

S t	Data	Shingle updated	eton Mgt. Unit d before 2:00 PM	Table 4	Treatme a Limiti	ents Prescrib ing Factor	ed with	Compartment: 019 Year of Entry 2012	
a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
			#Error						
Presc Specs	ription ::								
<u>Other</u> Comm	<u>nent:</u>								
<u>Next</u> Steps	<u>:</u>								
<u>Limitir</u> <u>Treatr</u>	ng Factor and No ment Reason	<u>)</u>							
Ac	Total Treatmen reage Proposed	t d:	0						

Out of VOE Troatmonte

Year of Entry: 2012



					Outor		eatments		4
	Data	update	d before 2:00 PM	Pr	escribed	d with No Li	miting Factor		Michigan
Treatme Name	nt	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
41039_Ou OE-Cu	tOfY t	14.6				Harvest	Clearcut with Reserves	Natural Pine, Mixed Deciduous	Cmpt. Review Proposal
Prescription Specs:	Cuta	all trees e	xcept hemlock and oa	ak. Leave a few	red pine ar	nd white pine fo	r seed.		
<u>Other</u> <u>Comments:</u>	Acce have feet. shou	ess to this st may be Buffer Sr Id exclude	stand will involve the e needed. Survey wor nith creek 100 feet. T e the very dense pate	installation of a k may be neede hese will be the hes.	temporary d. There is retention a	bridge. This co a creek / drain reas. East edge	uld be built and placed b age located in southern p e of stand has some ceda	y the logger west of thi part of stand, it runs ea ar. Cedar can be cut, b	s stand. Winter st/west. Buffer 50 ut sale boundary
<u>Next</u> <u>Steps:</u>	Plant any s	t red pine species m	on ridges to maintair ixture currently found	omponent. Lo onsite.	w ground s	hould regenera	te to mixed species. Acc	eptable management o	bjectives includes
41049_Ou OE-Cu	tOfY t	15.3				Harvest	Single Tree Selection	Natural Red Pine	Cmpt. Review Proposal
Prescription Specs:	Cut a avail	all species able and	except red pine ,oak thin thicker areas of p	x, white pine, and oles.	d hemlock.	Red pine and	white pine should be mar	ked. Create regenerat	on holes where
<u>Other</u> Comments:	See botto	MNFI cor	nments. Winter harve ls. Protect existing re	est will be neede d pine and white	ed due to ro pine rege	oad conditions i neration.	nto treatment area. Buffe	r on Walsh Ditch shou	d be placed at the
<u>Next</u> <u>Steps:</u>	Natu	ural regen	eration of red pine, ja	ck pine, and wh	ite pine is a	acceptable. Pla	nt red pine if regeneratior	n fails.	
41088_Ou OE-Cu	tOfY t	2.3				Harvest	Shelterwood	Natural Red Pine	Cmpt. Review Proposal
Prescription Specs:	Mark spec	red pine ies excep	and white pine to 50 t hemlock and oak.	sq. ft. basal area	a to thicken	rcrowns and pr	epare for regeneration ha	arvest next year of entr	y. Cut all other
<u>Other</u> Comments:	Set u addit	ip treatme ional rete	ent as soon as it is ap ntion, small stand.	proved at comp	artment rev	view in order to	combine it into one timbe	ersale with Comparmer	nt 88, stand 43. No
<u>Next</u> Steps:	Evalu	uate stan	d next year of entry fo	r possible regen	eration hav	vest. Try to mai	ntain management objec	tive of natural red pine	
41118_Ou OE_1-C	tOfY ut	8.6				Harvest	Crown Thinning	Natural Red Pine	Cmpt. Review Proposal
Prescription Specs:	Cuta	all Jack P	ne and mark Red and	d White Pine to S	90 BA				
<u>Other</u> Comments:	Cut v	vith stand	34 comp 117						
<u>Next</u> <u>Steps:</u>									
41179_Ou OE-Cu	tOfY t	4.2				Harvest	Single Tree Selection	Sugar Maple Association	Cmpt. Review Proposal
Prescription Specs:	Cut t spec gaps snag	o 80 SF u ies variat in areas s.	ising selection system on across it, thin to ir of less shade toleran	n. Release crop nprove diversity t species. Cut as	trees using favor reten spen clones	the complete tion of mesic c s for aspen reg	marker as a guide, mark to onfers. In areas of beech eneration. Leave some s	for best tree in place. T use beach bark marki ingle aspen trees whe	This stand has some ng guidelines. Place re possible for soft
<u>Other</u> Comments:	Acce Birch	ptable re , Hemloc	generation is a mix of k and White Pine	hardwood spec	ies includir	ng Sugar maple	, Red maple, Basswood,	Black Cherry, Yellow E	Birch, Aspen, White
<u>Next</u> <u>Steps:</u>									
Total	Treat	ment							

45.1 Acreage Proposed:

S t	Shingleton Mgt. Unit			5 – For Data update	ested Sta	andsCompartment: 0192:00 PMYear of Entry: 2012
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42290 - Natural Mixed Pine	Medium Density	6.5	Uneven Age		This stand is a mix of species filling in an open area.
2	42260 - Natural Pine, Mixed Deciduous	High Density Sapling	10.4	48		
3	42220 - Natural Jack Pine	High Density Sapling	14.4	11		
4	4119 - Mixed Northern Hardwoods	High Density Log	49.8	57	51-80	This stand cut in the winter of 2010 by Spencer FP In sale # 410330201. This stand was cut using a selection system. All spruce and balsam fir where cut and all hemlock was left in the sale.
5	6132 - Mixed Lowland Forest with Cedar	High Density Pole	14.8	67		Lowland drains separating the hardwood stands in this area.
7	42120 - Planted Jack Pine	High Density Sapling	48.5	11		
8	4319 - Mixed Upland Forest	Medium Density	18.5	5		
9	6124 - Lowland Spruce- Fir	Low Density Pole	52.3	30		This area is a mix of lowland shrub and trees surrounding the river.
11	6122 - Black Spruce	High Density Pole	40.6	81		
12	4119 - Mixed Northern Hardwoods	High Density Log	188.4	57	51-80	This stand cut in the winter of 2010 by Spencer FP In sale # 410330201. This stand was cut using a selection system. All spruce and balsam fir where cut and all hemlock was left in the sale.
13	42220 - Natural Jack Pine	High Density Sapling	12.6	11		
14	42200 - Natural White Pine	High Density Log	120.5	75	1-50	
15	42220 - Natural Jack Pine	High Density Log	122.8	49		
16	6124 - Lowland Spruce- Fir	Medium Density Pole	44.2	Uneven Age		Riparian area along the river. A lot of tag alder with a mix of tree species present in varying amounts.
17	42290 - Natural Mixed Pine	High Density Pole	4.5	80		
18	4117 - Mixed N. Hardwood - Pine	High Density Log	39.8	80		
19	6123 - Lowland Fir	Medium Density Pole	10.5	70		

e	Shingletor		5 – For	ested Star	nds	Compartment: 019		
t				Data update	ed before 2	:00 PM	Year of Entry: 2012	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	
20	4119 - Mixed Northern Hardwoods	Medium Density Pole	8.4	82		This stand c 410330201. spruce and b	ut in the winter of 2010 by Spencer FP In sale # This stand was cut using a selection system. All balsam fir was cut and all hemlock was left in the sale.	
21	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	9.0	Uneven Age				
22	429 - Mixed Upland Conifers	High Density Log	88.6	82	51-80	This stand c 410330201. spruce and b	ut in the winter of 2010 by Spencer FP In sale # This stand was cut using a selection system. All palsam fir was cut and all hemlock was left in the sale.	
23	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	32.0	54				
26	42290 - Natural Mixed Pine	Medium Density Pole	5.3	47	1-50			
27	4133 - Aspen, Mixed Pine	High Density Sapling	100.0	12			Cut in 1998, this stand looks good.	
28	42110 - Planted Red Pine	High Density Pole	28.0	47				
29	4112 - Maple, Beech, Cherry Association	High Density Sapling	3.8	6				
30	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	17.9	70				
31	6118 - Lowland Deciduous with Cedar	Medium Density Pole	11.6	45				
33	4130 - Aspen	High Density Sapling	19.7	25				
34	6132 - Mixed Lowland Forest with Cedar	High Density Pole	18.6	70		Lowland dra	ins separating the hardwood stands in this area.	
35	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	150.7	11			Cut in 1999 looks good.	
36	42110 - Planted Red Pine	High Density Pole	78.1	45	141-170			
38	4311 - Pine, Aspen Mix	High Density Pole	19.0	25				
39	4130 - Aspen	Medium Density	2.8	3				

S t	Shingleton Mgt. Unit			5 – For Data update	ested Star	nds 2:00 PM	Compartment: 019 Year of Entry: 2012		
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:		
40	6132 - Mixed Lowland Forest with Cedar	Medium Density	8.9	11					
41	4319 - Mixed Upland Forest	High Density Pole	5.4	63					
42	42210 - Natural Red Pine	High Density Log	6.3	93	171-200				
43	42260 - Natural Pine, Mixed Deciduous	High Density Pole	4.0	45					
44	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	5.3	25					
45	429 - Mixed Upland Conifers	High Density Pole	21.6	26		Ν	lix of pine, spruce, aspen.		
47	4134 - Aspen, Spruce/Fir	High Density Pole	12.8	Uneven Age		Uneven age aspen	stand majorty 32 years old cut in 2	20 years.	
48	42120 - Planted Jack Pine	High Density Pole	16.1	39					
49	6128 - Lowland Coniferous, Mixed Deciduous	Low Density Pole	22.3	65		This is	the riparian area for the river.		
50	4311 - Pine, Aspen Mix	High Density Sapling	13.7	Uneven Age					
51	4130 - Aspen	High Density Pole	7.9	34					
52	4130 - Aspen	High Density Sapling	7.2	27					
54	6131 - Hemlock, White Pine, Maple, Birch	High Density Log	29.8	76	141-170				
55	4130 - Aspen	High Density Sapling	8.0	5					
57	42110 - Planted Red Pine	High Density Pole	26.1	47	141-170				
58	4112 - Maple, Beech, Cherry Association	High Density Pole	17.4	72	81-110	This	s stand was thined last YOE.		
59	42120 - Planted Jack Pine	High Density Sapling	1.6	11					
60	42120 - Planted Jack Pine	High Density Sapling	115.7	11					

s	Shingletor		5 – For	ested Sta	nds	Compartment: 019		
t				Data update	ed before 2	2:00 PM	Year of Entry: 2012	-
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	
62	429 - Mixed Upland Conifers	High Density Pole	53.2	50		This is a mixed age be harvested it c	e stand. If desired a portion of this stand co ould also be held for ten years to allow the aspen to fully mature.	uld ;
63	4132 - Aspen, Jack Pine	High Density Pole	21.9	22				
64	42220 - Natural Jack Pine	High Density Pole	36.6	29				
65	429 - Mixed Upland Conifers	High Density Pole	57.4	36				
67	4136 - Aspen, Mixed Conifer	High Density Pole	29.9	24				
69	42120 - Planted Jack Pine	High Density Sapling	4.0	11				
72	4319 - Mixed Upland Forest	High Density Pole	52.8	76	81-110			
74	429 - Mixed Upland Conifers	High Density Pole	38.2	Uneven Age		This stand is a mi has a large variat should be cut ne	x of species common to dry sites. This sta on in size and ages and density. This are ext cycle to create a better even age stand	nd ea
75	429 - Mixed Upland Conifers	High Density Pole	12.2	50				
76	42210 - Natural Red Pine	High Density Log	34.7	70	141-170			
77	42290 - Natural Mixed Pine	High Density Pole	11.8	60				
78	42200 - Natural White Pine	Low Density Sapling	58.2	4				
80	4311 - Pine, Aspen Mix	High Density Pole	39.1	26				
81	42120 - Planted Jack Pine	High Density Pole	4.2	48				
82	4130 - Aspen	High Density Sapling	4.5	5				
83	429 - Mixed Upland Conifers	High Density Pole	42.7	48				
84	4134 - Aspen, Spruce/Fir	High Density Sapling	19.8	26				
85	4311 - Pine, Aspen Mix	High Density Sapling	26.0	Uneven Age		Aspen cu	t last year of entry coming back well.	

Shingleton Mgt. Unit

6 – Nonforested Stands Data updated before 2:00 PM

Compartment: 019 Year of Entry: 2012



Stand	Cover Type	Acres	Gen Cmts:
6	622 - Lowland Shrub	1.2	
10	320 - Upland Shrub	1.3	
24	3301 - Low Density Deciduous Tree	10.6	Clearcut in 2010
25	50 - Water	8.5	
32	6225 - Bog	2.6	
37	50 - Water	3.8	
46	622 - Lowland Shrub	4.2	
53	6224 - Treed Bog	13.6	
56	3303 - Mixed Low Density Trees	5.6	
61	3303 - Mixed Low Density Trees	5.5	
66	50 - Water	11.3	
68	330 - Low-Density Trees	4.9	
70	622 - Lowland Shrub	5.0	
71	3301 - Low Density Deciduous Tree	4.0	
73	310 - Herbaceous Openland	2.0	
79	310 - Herbaceous Openland	9.5	This area was planted in the 3 years.



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.

Data updated before 2:00 PM

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.

Conservation Area	Туре	Description	Data updated before 2:00 PM	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream stocked trout popul year to year. Coldw contributions of gro designated as trout	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.	