

Compartment Review Presentation

Shingleton Forest Management Unit Compartment 41002 Entry Year 2018 Acreage: 1,287 County Schoolcraft Management Area: Fox River Complex

Revision Date: 2016-08-31

Stand Examiner: Jennifer Burnham

Legal Description:

T45N, R13W, Sections 2, 11, and 14

Identified Planning Goals:

Management activities that coordinate multiple uses and benefits for the people of Michigan including recreation, timber production and protection/enhancement of wildlife habitat are desirable. The Fox River Plan provides guidance for protection of the Fox River and its tributaries by defining parameters for forest management treatments.

Soil and topography:

The uplands generally feature rolling (sometimes steep) terrain and sandy soils such as Kalkaska and Wallace sands, while the lowlands feature a variety of flat, poorly-drained muck and peat soils such as the Carbondale-Lupton-Tawas soils group. Lowland terrain accounts for most of the area in this compartment.

Ownership Patterns, Development, and Land Use in and Around the Compartment:

The Fox River Club owns a significant block of land within the Compartment. the area is heavily used for recreational purposes such as hunting and snowmobiling.

Unique Natural Features:

None known.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

The Old Seney Road is both a county road and a designated snowmobile trail. The Fox River is a designated Natural River with an approved management plan.

Watershed and Fisheries Considerations:

This compartment contains the Dead Creek and the Fox River. The Fox River is designated a Natural River. The Dead Creek is a tributary to the Fox River, and the Fox River a tributary to the Manistique River. The Fox River is designated a "Natural River" which is one of two systems (Two Hearted #2) in the Upper Peninsula with "Natural River" status. Special regulation may apply to rivers that their tributaries designated as Natural Rivers.

Wildlife Habitat Considerations:

During pre-settlement times, the upland areas in this compartment supported a mixed deciduous/coniferous forest. The deciduous species of this forest consisted primarily of sugar maple, basswood, elm and beech, while hemlock was the dominant upland conifer. Lowland areas primarily supported coniferous swamps containing tamarack, cedar, and spruce. The Fox River passes through the southern portion of this compartment. Lowland areas within this compartment appear to be similar to pre-settlement species composition. Upland areas show an increase in the aspen component and a corresponding decrease in sugar maple, basswood, elm, beech, hemlock, and white pine. The wildlife habitat management regime consists of protecting the hydrology along the Fox River, providing age and structural diversity between lowland conifer stands, and retaining light seeded species as well as den trees and soft mast (yellow birch catkins). Variable retention guidelines are being adhered to in stands scheduled for final harvest. This compartment lies within the Fox River Complex Management Area and featured species within this MA are American black bear, northern goshawk, snowshoe hare, spruce grouse, and white-tailed deer.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of peat and muck and lacustrine (lake) sand and gravel. There is insufficient data to determine the glacial drift thickness. The Ordovician Stonington and Big Hill Formations subcrop below the glacial drift. The Stonington and Big Hill could be used for stone/dolomite. Gravel pits at not found in the general area, but there may be some potential on the uplands. There is no commercial oil and gas production in the UP.

Vehicle Access:

The Old Seney Road is a well-maintained county road.

Survey Needs:

Not at this time.

Recreational Facilities and Opportunities:

The Old Seney Road is a designated snowmobile trail. No other improved facilities exist within this compartment.

Fire Protection:

Due to the wet lowland terrain and soils, access to most of the compartment is difficult.

Additional Compartment Information:

The following reports from the Inventory are attached: Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

The following information is displayed, where pertinent, on the attached compartment maps: Base feature information, stand boundaries, cover types, and numbers Proposed treatments Site condition boundaries Details on the road access system





Stand Boundary Map

Compartment: 2 T45N,R13W, Sec: 02, 11, 14 County: Schoolcraft Unit: Shingleton Mgmt Area: Fox River Complex YOE: 2018 Acres: 1,287 GIS Calculated Examiner: Jennifer Burnham Map Revised: 12/6/2016 Map Phase: Post Review









Report 1 – Total Acres by Cover Type and Age Class

Shingleton Mgt. Unit

Year of Entry 2018



Age Class

	Hor	AN CONTRACTOR	05	54 54	55 55 56'	83 (¥	63- 50°	° 5	69 7.	\$1. \$	89. 89. 80. 80. 80. 80. 80. 80. 80. 80. 80. 80	69 49. 19	70°.	01. 1. 1.	87. 57 57 57 57 57	21 00 11 12 10 10 10 10 10 10 10 10 10 10 10 10 10	09-12-12-12-12-12-12-12-12-12-12-12-12-12-	DX Jrew	1.000 L.020
Aspen	0	7	78	21	46	0	0	0	0	0	0	0	0	0	0	0	0	11	162
Cedar	0	0	0	0	0	0	0	0	0	0	0	204	0	0	0	0	0	0	204
Herbaceous Openland	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lowland Aspen/Balsam Poplar	0	0	26	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Lowland Conifers	0	41	0	0	0	0	0	0	0	0	6	170	0	0	0	0	0	0	217
Lowland Deciduous	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	194	211
Lowland Mixed Forest	0	0	3	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	35
Lowland Shrub	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62
Lowland Spruce/Fir	0	0	0	0	0	0	6	13	3	0	0	32	0	0	0	0	0	0	53
Mixed Upland Deciduous	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9	17
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	114	0	0	0	0	0	27	141
Tamarack	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Treed Bog	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Upland Conifers	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	13
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	11
Urban	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Water	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Total	188	65	107	30	53	0	6	13	3	11	19	553	0	0	0	0	0	241	1285

Acres of Harvest



Compartment 2 Total Compartment Acres: 1,287

Commercial Harvest - 163 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method

			Concut	Defection	Clearcur	Cond Tree	relienuood	Over Minning	Con Concernation	og Had	Cure,	S. S
Aspen		11	0	0	0	0	0	0	0	0	11	
Lowland Conifers		130	0	0	0	0	0	0	0	0	130	
Lowland Mixed Forest		22	0	0	0	0	0	0	0	0	22	
	Total	163	0	0	0	0	0	0	0	0	163	

Proposed and Next Step Treatments by Method

			IS IS	de d	O. I.C.	oso di la constante de la constant	onin o	Costicido	in the second second	No. No.	10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000	Action of the second
Current		163	0	0	0	0	0	0	0	0	163	
Next Step		0	0	0	0	0	0	163	0	0	163	
	Total	163	0	0	0	0	0	163	0	0	326	

Shingleton Mgt. Unit			Re	port 3	Treatme	nts	Compar Year of	tment: 2 Entry: 2018	OF NATURAL RUN		
t a n Trea d Na	tment ame	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
11 41002	011-Cut	19.3	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	105	111- 140	Harvest	Clearcut with Retention	612 - Lowland Coniferous Forest	Even-Aged	Draft Field Boundary
Habitat Cu Prescription Specs:	<u>ut:</u> No Final ha on air p Q2 und	arvest. Do bhoto) and lerstory.	Site Condition: o not cut hemlock and d left for seed source	d sub mercha of hemlock	antable and cec	cedar. Re Iar. Avoi	ed line areas of d pockets of pu	higher elevations to ire cedar with red lin	not cut. There is o e. Protect advanc	one within each ed regeneration	stand (seen found in the
<u>Next Step</u> <u>Treatments:</u>	Monito	ring, Natu	iral Regen (Re-Invent	ory)							
<u>Acceptable</u> <u>Regen:</u>	Regen	eration wi	Il be the species that	are currently	/ preser	nt.					
<u>Other</u> Comment:	Areas Sale sp harves	of transitio becs must ting opera	on along the East side t include a provision r tions along the snow	e of the stane equiring the mobile trail.	ds are te purchas	o be left o ser to notif	ut of the sale b y the Seney Sr	ut could be thinned t nowmobile Associati	hrough later on w on when the sale	ith adjacent hai is purchased to	dwood stands coordinate
Proposed St	<u>tart Date</u>	10/0	1/2017								
15 41002	015-Cut	42.2	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	105	81-110	Harvest	Clearcut with Retention	612 - Lowland Coniferous Forest	Even-Aged	Draft Field Boundary
Habitat Cu Prescription Specs:	<u>ut:</u> No Final ha on air p Q2 und	arvest. Do bhoto) and lerstory.	Site Condition: o not cut hemlock and d left for seed source	l sub mercha of hemlock	antable and cec	cedar. Re lar. Avoid	ed line areas of I pockets of pu	higher elevations to re cedar with red line	not cut. There is o e. Protect advance	one within each ed regeneration	stand (seen found in the
<u>Next Step</u> <u>Treatments:</u>	Monito	ring, Natu	ral Regen (Re-Inven	ory)							
<u>Acceptable</u> <u>Regen:</u>	Regen	eration wi	ll be the species that	are currently	/ preser	nt.					
<u>Other</u> Comment:	Areas Sale sp harves	of transitio becs must ting opera	on along the East side t include a provision r ations along the snow	e of the stane equiring the mobile trail.	ds are to purchas	o be left o ser to notif	ut of the sale b y the Seney Sr	ut could be thinned t nowmobile Association	hrough later on w on when the sale	ith adjacent hai is purchased to	dwood stands coordinate
Proposed St	tart Date	10/0	1/2017								
18 41002	018-Cut	56.9	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	105	81-110	Harvest	Clearcut with Retention	612 - Lowland Coniferous Forest	Even-Aged	Draft Field Boundary
Habitat Cu Prescription Specs:	<u>ut:</u> No Final ha on air p Q2 und	arvest. Do bhoto) and lerstory.	Site Condition: o not cut hemlock and d left for seed source	l sub mercha of hemlock	antable and cec	cedar. Re lar. Avoic	ed line areas of I pockets of pu	higher elevations to re cedar with red line	not cut. There is o e. Protect advance	one within each ed regeneration	stand (seen found in the
<u>Next Step</u> <u>Treatments:</u>	Monito	ring, Natu	ral Regen (Re-Invent	ory)							
<u>Acceptable</u> <u>Regen:</u>	Regen	eration wi	ll be the species that	are currently	/ preser	nt.					
<u>Other</u> Comment	Areas o	of transitio	on along the East side	e of the stan	ds are to	o be left o ser to notif	ut of the sale b	ut could be thinned t	hrough later on w	ith adjacent ha	dwood stands

harvesting operations along the snowmobile trail.

Proposed Start Date: 10/01/2017

S t		Shin	gleton Mgt. Unit		Re	eport 3	Treatme	nts	Compart Year of	ment: 2 Entry: 2018	DR NATURAL A
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
37 4	1002037-Cut	11.0	4130 - Aspen	Poletimber	55	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	Draft Field
Habit Prescr Specs:	<u>at Cut:</u> No i <u>ption</u> Final H	arvest. Le	Site Condition: eave Cherry and any	cedar that m	nay be	present.					Doundary
<u>Next S</u> Treatm	<u>tep</u> Monitor <u>nents:</u>	ring, Natu	ral Regen (Re-Inven	tory)							
Accept Regen	<u>table</u> Regen <u>:</u>	will be the	e same spp that are	present. Stei	ms/ac s	should incr	ease in the asp	en.			
<u>Other</u> Comm	Stand i ent: hardwo	s small in oods.	acreage, Retention	is not neede	d becau	use of the	amount of matu	ire aspen that will b	be on the edges nea	ar the transitior	to the
42 4	sed Start Date	22.3	1/2017 6139 - Mixed Lowland Forest	Poletimber Well	106	81-110	Harvest	Clearcut with Retention	6131 - Hemlock, White Pine,	Even-Aged	Draft Field Boundary
Habit Prescr Specs:	<u>at Cut:</u> No i <u>ption</u> Cut all	species e	Site Condition: xcept for cedar and l	hemlock. Ha	rvest in	frozen co	nditions to prote	ect wet soils.	маре, ыгсп		
<u>Next S</u> Treatm	i <u>tep</u> Monitor nents:	ring, Natu	ral Regen (Re-Inven	tory)							
Accept Regen	<u>table</u> Regeno	eration wil	l be species that are	present now	Ι.						
<u>Other</u> Comm	Protect	drainage	if it ends up going th	nrough the st	and. No	ot found at	t this time.				
Propos	sed Start Date	10/0	1/2016								
43 4	1002043-Cut	10.1	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	102	51-80	Harvest	Clearcut with Retention	612 - Lowland Coniferous Forest	Even-Aged	Draft Field Boundary
labit	<u>at Cut:</u> No		Site Condition:	<u>.</u>							
Prescr Specs:	i <u>ption</u> Cut all :	species e	xcept for cedar. Did	not see hem	lock; if	present de	o not cut. Harve	st in winter to prote	ect wet soils.		
<u>Vext S</u> Freatm	<u>tep</u> Monitor nents:	ring, Natu	ral Regen (Re-Inven	tory)							
Accept Regen	<u>table</u> Regeno <u>:</u>	eration wil	l be the same specie	es that is pre	sent no	W.					
<u> Other</u> Comm	ent:										
Propos	sed Start Date	10/0	1/2016								
43 4	1002143-Cut	1.4	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	102	51-80	Harvest	Clearcut	612 - Lowland Coniferous Forest	Even-Aged	Draft Field Boundary
-labit Prescr Specs:	at Cut: No iption Cut all	species e	Site Condition: xcept for cedar. Did	not see hem	lock; if	present de	o not cut. Harve	st in winter to prote	ect wet soils.		
<u>Next S</u> Freatm	<u>tep</u> Monitor <u>nents:</u>	ring, Natu	ral Regen (Re-Inven	tory)							
<u>Accept</u> Regen	<u>table</u> Regeno <u>:</u>	eration wil	l be the same specie	es that is pre	sent no	W.					
<u>Other</u> Comm	No rete <u>ent:</u> stand.	ention due Not found	to the small acreage at this time.	e. Surroundir	ng trees	s with be tl	ne seed source	for regeneration. P	Protect drainage if it	ends up going	through the
Propos	sed Start Date	10/0	1/2016								
Ac	Total Treatme	ent 1 ed:	63.2								

Shingleton Mgt. Unit

Jennifer Burnham : Examiner

Compartment: 2 Year of Entry: 2018

Availability for Management

Total	Acres	Acres Avail	Acres	D	omina	nt Site	e Cone	ditions
Acres	Available	With Condition	Not Available		5B	5C	3J	5D
162	162	0	0	Aspen			0	
204	204	0	0	Cedar				
1	1	0	0	Herbaceous Openland				
32	32	0	0	Lowland Aspen/Balsam Poplar				
217	177	22	18	Lowland Conifers		22	18	
211	104	0	108	Lowland Deciduous			108	
35	29	2	5	Lowland Mixed Forest		2	5	
62	45	0	17	Lowland Shrub			17	
55	22	0	32	Lowland Spruce/Fir				32
18	18	0	0	Mixed Upland Deciduous				
141	141	0	0	Northern Hardwood			0	
1	1	0	0	Tamarack				
100	100	0	0	Treed Bog				
13	9	0	4	Upland Conifers			4	
11	0	11	0	Upland Mixed Forest	11			
7	7	0	0	Urban				
17	1	0	16	Water			16	
1,287	1,052	35	199	Total Forested Acres	11	24	167	32
	82%	3%	16%	Relative Percent				-

*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

Site No.	e Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	149	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Fox River buffer						
2	Unavailable	5D: Unproductive Forest Land	32	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

				Report 4 - Site Con	ditions		
	Shin	gleton Mgt. Unit				Compartment: 2	0
	Jennifer Bu	rnham : Examiner				rear of Entry. 201	0
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	16	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: wait to treat when	the conifers to the south have b	een harv	ested and starting to reg	enerate.		
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	18	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Buffer for Fox Rive	er HCVA Plan					
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Acreage too small	, wait to harvest with stand to co	ompartme	ent to the south.			
7	Available	5B: Maintain for regeneration purposes	11	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						



Report 5 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
	Potential Old Growth		SCA Removal	84
Comments				
Already a HCVA - Natura	al Rivers.			
	Potential Old Growth		SCA Removal	101
Comments				
Already a HCVA - Natura	al Rivers.			

Compartment: 2 Year of Entry 2018



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

Conservatior Area	п 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 wild and Waterfowl Production Areas, deer wintering complexes in lo openings and savannas. Habitat areas are distinct from critical l endangered or threatened species (such as Kirtland's warbler o general in nature, are not primarily associated with threatened o covered by species recovery plans that are developed in cooper	life species, including State Wildlife Areas owland conifer communities, grassland nabitat designated for recovery of r piping plover areas) in that they are more or endangered species, and are not ration with Federal agencies.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems i influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their effer as aesthetics, habitat, bank stability, timber production, and the	n which the terrestrial ecosystem le unique conditions adjacent to lakes, diversity of plants and wildlife. Riparian lots on water quality and quantity, as well ir contribution to overall biodiversity.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from s approved distance from the river centerlines. The Natural River most Natural Rivers. The Vegetative Buffer ranges from 25 to 1 and Vegetative Buffers for each Natural River see the table loca folder.	patial buffers set from an established and s Zoning District is a 400 foot buffer for 00 feet. To view specific Zoning Districts ted on the I:\Documentation\GDSE data

S t	Shingleton	Shingleton Mgt. Unit				I Stands Compartment: 2 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6122 - Black Spruce	Poletimber Medium	32.4	103	1-50	Poor quality stand due to high water table. Cedar is found along the edges, the white pine is found on the small knobs of higher ground. FMD: Slow-growing, semi-open spruce on wet, boggy ground - operability is questionable.Soils - Carbondale, Lupton and Tawas - mucks and peat
2	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	5.8	95	81-110	Nice stand, old stumps, should have been harvested with the adjacent stand. Area is wet but freezable. There is a small creek 2' wide on the south side of the stand. Not sure of all it's location, not on the topo maps. A small amount of acreage in HCVA - Fox River (due to possible drainages into the Fox River.) Soils - Carbondale, Lupton and Tawas - mucks and peat
3	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	16.3	105	81-110	Soils - Carbondale, Lupton and Tawas - mucks and peatNatural disturbance is creating a mosaic of age classes in this stand, but cedar will probably dominate over time. Harvest now and regenerate naturally - a mix of any commercial timber species will be considered acceptable regeneration. This harvest is a clearcut with reserves. Retention guidelines - Do not cut any hemlock, and retain enough cedar and submerchantable conifers to provide approximately 8-10% cover for the stand area. This includes advanced regeneration found in the the Q3 understory, which should be protected whenever possible.Note: Sale specs must include a provision requiring the purchaser to notify the Seney Snowmobile Association when the sale is purchased to coordinate harvesting operations along the snowmobile trail. Rh (8/22/14) Sale sold to zellar ex under contract number 41-023-08- 01 osr conifers Unit returned uncut land owner denied access.
4	6120 - Lowland Cedar	Poletimber Well	192.1	103	81-110	Some areas thick with cedar of fair quality. Other areas are more open with tag alder and some pockets of just marsh grass. High water table is not allowing a good SI. White pine, red maple and birch are mainly found on the 1' elevation difference knobs scattered around the stand. There is a small amount of acreage in HCVA - Fox River PlanSoils - Carbondale, Lupton and Tawas - mucks and peat
5	4110 - Sugar Maple Association	Poletimber Well	12.4	105	81-110	Stand harvested in the early 90's. Slopes off into the Q type. BA needs a little more time and then harvest again. Beech that was in the over story is now dead.
6	42390 - Mixed Non-Pine Upland Conifers	Poletimber Well	12.8	95	51-80	South of the small 2' creek in the stand. Mushy ground but would be able to freeze. Stand has old stumps but ground a little lower than stand 2 and is still filling in. DBH smaller and less BA. Acreage in HCVA - Fox River (due to possible drainages into the Fox River.) Soils - Carbondale, Lupton and Tawas - mucks and peat

S t	Shingletor	Shingleton Mgt. Unit				Stands Compartment: 2 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
7	6121 - Tamarack	Poletimber Well	1.4	102	51-80	Tamarack has insect damage. All species except for cedar are over mature and need to be harvested. The North chunk is a knob of high ground with bracken fern.
						OPIC - FMD: Soils - Carbondale, Lupton and Tawas - mucks and
						peat Mixed stand but cedar is beginning to express dominance. The understory varies considerably from hardwoods to pure cedar.
11	6128 - Lowland Coniferous, Mixed	Poletimber Well	32.8	105	111-140	Only a small portion of acres are found in the HCVA - Fox River Plan
	Deciduous					Soils - Carbondale, Lupton and Tawas - mucks and peat Natural disturbance is creating a mosaic of age classes in this stand, but cedar will probably dominate over time. Harvest now and regenerate naturally - a mix of any commercial timber species will be considered acceptable regeneration. Buffer the river in accordance with the Fox River Plan, and watch out for unmapped tributaries to Dead Creek that may also need to be buffered.
						This harvest is a clearcut with reserves. Retention guidelines - Do not cut any hemlock, and retain enough cedar and submerchantable conifers to provide approximately 8- 10% cover for the stand area. This includes advanced regeneration found in the the Q3 understory, which should be protected whenever possible.
						Note: Sale specs must include a provision requiring the purchaser to notify the Seney Snowmobile Association when the sale is purchased to coordinate harvesting operations along the snowmobile trail. RH(8/22/14) Sale sold to zellar ex under contract number 41-023-08-01 osr conifers Unit returned uncut land owner denied access.
12	6122 - Black Spruce	Poletimber Poor	2.5	70	1-50	I little better BA than a bog. High water table keeps stand from being fully stocked.
						OPIC - FMD: Treed bog with a few merchantable sized trees. SI too low for management. Soils - Carbondale, Lupton and Tawas - mucks and peat
13	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	9.0	23	1-50	Hemlock and some cedar are mainly on the edges. The bottom of the ridges hold some water. OPIC - FMD: UPDATED TCR 1/12/99 - 031-90-01Soils - Wallace sand, 15-35% slopesYOE 2008: Cut to regenerate paper birch, but this is progressing slowly. More upland brush (pin cherry) than birch regen at this time.
14	4119 - Mixed Northern Hardwoods	Poletimber Well	6.4	106	81-110	Beech falling out dead, short steep slope.
						OPIC - FMD: Soils - Wallace sand, 15-35% slopes Steep, rolling terrain - close to inoperable for most logging equipment due to the steep slopes.
15	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	49.7	105	81-110	All but the cedar is at it's max age and will only start to fall out of the stand. Harvest now with adjacent stands. Even in areas high BA to cedar harvesting through should be good. There are areas where BA is low.
						A small amount of acreage is found in the HCVA - Fox River Plan. Soils - Carbondale, Lupton and Tawas - mucks and peat Natural disturbance is creating a mosaic of age classes in this stand, but cedar will probably dominate over time. Hold this until the adjacent stands (#11 and #18) are cut and regenerated.

S t	S Shingleton Mg			Report 7	– Forested	Stands Compartment: 2 Year of Entry: 2018	R
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	CHIGAN .
16	4134 - Aspen, Spruce/Fir	Sapling Well	20.8	18	Immature	Good regeneration OPIC - FMD: UPDATED TCR 1/12/99 - 031-90-01Soils - Kalkaska sand, 6-15% slopes and Wallace sand, 15-35% slopes on the ridges; the swales are probably ei Paquin/Finch sands or Deford muck. YOE 2008: This is a ridg swale complex that has been cut to regenerate aspen. Pocke residual red maple & large hemlock are scattered throughout, highly variable stocking. Much of the area has regenerated aspen and/or lowland conifer regeneration, but some openings exist on both the uplands and the lowlands.	e ither ge- ts of with to s still
17	4112 - Maple, Beech, Cherry Association	Poletimber Well	20.2	105	81-110	BA plots 110 (hemlock clumps) to 60. Many broken trees (w damage?). OPIC - FMD: UPDATED TCR 1/12/99 - 031-90-01 Soils - Kalkaska sand 0-15% slopes	ind
18	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	61.0	105	81-110	Soils - Carbondale, Lupton and Tawas - mucks and peatNatur disturbance is creating a mosaic of age classes in this stand, cedar will probably dominate over time.Harvest now and regenerate naturally - a mix of any commercial timber species be considered acceptable regeneration. This harvest is a clearcut with reserves.Retention guidelines - Do not cut any hemlock, and retain enough cedar and submerchantable coni to provide approximately 8-10% cover for the stand area. Th includes advanced regeneration found in the the Q3 understo which should be protected whenever possible.Note: Sale specs must include a provision requiring the purchaser to no the Seney Snowmobile Association when the sale is purchase coordinate harvesting operations along the snowmobile trail. (8/22/14) Sale sold to zellar ex under contract number 41-023 01 osr conifers Unit returned uncut land owner denied acces	ral but fers nis ory, tify d to Rh 3-08- ss.
19	4134 - Aspen, Spruce/Fir	Poletimber Well	30.5	33	1-50	A4/A5 some areas are becoming merchantable. Cut in '83. The is a good pocket of conifer in the northern part of the stand OPIC - FMD: Soils - McMillan-Greylock fine sandy loams at 15% slopesYoung aspen stand with balsam fir plus scattered spruce, ash, red maple, elm etc. The understory varies from 2 DBH. This stand will probably become a fully-stocked A6 by r entry. Ground cover species include ferns and a variety of herbaceous plants.	nere I. 1- 1- 2-4" next
20	4115 - Y.Birch, Hemlock NH	Poletimber Well	9.2	106	81-110	Stand was left out of the surrounding cuts because of hill side buffering the D type.	e or
21	6122 - Black Spruce	Poletimber Medium	13.4	66	51-80	Harvest stand at the same time as the adjacent aspen stan OPIC - FMD: Soils - Transition zone from the poorly-draine Dawson-Greenwood-Loxley mucks/peats to the upland McMi Greylock fine sandy loam at 6-15% slopeFringe of slow-growi black spruce on the edge of a bog. The age given is based several sample trees, but this stand actually displays unevena characteristics.	d. d llan- ng on ged
23	4112 - Maple, Beech, Cherry Association	Poletimber Well	17.3	105	51-80	Harvest with adjacent stand.OPIC - FMD: Soils - upland McMillan-Greylock or McMillan fine sandy loams at 0-15% slopesHardwood mix on variable terrain. A few white ash are also present. The mixed softwood includes black spruce, wh pine and hemlock.	ite

S t	Shingleton Mgt. Unit			Report 7	– Forested	Stands	Compartment: 2 Year of Entry: 2018	DNR DNR	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	BE MICHIGAN .	
24	4130 - Aspen	Sapling Well	20.5	20	Immature	Rolling terrain, con	ifer in pockets. Should be re	d pine.	
						OPIC - FMD: UPI Soils - McMillan-Greyl YOE 2008: Young aspe the last stand, and occas few small patches of pin valuab	DATED TCR 1/12/99 - 031 lock fine sandy loams at 6-1 en with scattered residual co sional pockets of conifer reg cherry etc. are also present le soft mast for wildlife.	-90-01 5% slopes nifers from eneration. A , but provide	
25	4112 - Maple, Beech, Cherry Association	Poletimber Well	20.6	105	81-110	Ash has some old brow and YB are dead. Thinn	se. Remove all aspen when ed in '98 and 2001.Prescribe	cut. Beech e cut in 2028	
28	4130 - Aspen	Poletimber	7.7	33	1-50	Harvest wit	h hardwoods when treating.		
		vven				OPIC - FMD: Soils - M	cMillan-Greylock fine sandy 15% slopes	loams at 1-	
29	4110 - Sugar Maple Association	Poletimber Well	17.4	106	81-110	There is more browse a road that divides it. Mos and ash. OPIC - FMD: So at 1-15% slopesSelect o Mixed hardwood	browse and less BA on the south side of the trail es it. Most of the old regen gaps are full of cherry - FMD: Soils - McMillan-Greylock fine sandy loams esSelect cut under TS #23-00 TCR dtd 12-8-02. hardwood includes red maple & basswood.		
30	4130 - Aspen	Sapling Well	1.7	33	1-50	OPIC - FMD: Soils - Trar to McMillan-Greyloc	nsition from Kalkaska sand a ck fine sandy loams at 6-15%	t 0-6% slope 6 slopes	
31	4130 - Aspen	Sapling Well	5.6	13	Immature	Think stand of regenera the south and is wl	ation. The low portion of the shere the conifers are mainly	stand is too found.	
						OPIC - FMD: Soils - Trar loams at 6-15% slopes t Ta	nsition from McMillan-Greylo o the poorly-drained Carbon awas mucks/peats	ck fine sandy dale-Lupton-	
32	6128 - Lowland Coniferous, Mixed Deciduous	Sapling Poor	41.2	3	1-50	Stand is very wet and ho coming along well. So under but health	lding water in pockets but re me of the regen is up at 3', s y. Stand should fully regener	generation is ome is still rate.	
						OPIC - FMD: HCVA - F Soils - Carbondale, Ready to harvest and re species are acceptable watch out for unmapper require buffering in	ox River (due to possible dra the Fox River.) Lupton and Tawas - mucks : generate naturally - all com regeneration. During timber d drainages through this star accordance with the Fox Riv	ainages into and peat mercial tree sale prep, nd that may rer Plan.	
						This harves Retention guidelines: F some defective or low wildlife; also emphasize the Q3 und	t is a clearcut with reserves. Retain all hemlock and leave quality yellow birch (14" plus protecting the advanced reg erstory whenever possible.	-tree mark s DBH) for jeneration in	
						Include the adjacent S approved for harvest wi	6 stand in Cmp 003 (#047) th this timber stand at YOE 2 on 12-18-06.	which was 2008 review	
						Note: Sale specs must in to notify the Seney Sn purchased to coordii snowmobile trail. Sa inve	Iclude a provision requiring to owmobile Association when nate harvesting operations a le cut by Zeller Ex in 2012 ch ntory cycle for regen.	ne purchaser the sale is long the neck next	

S t	Shingleton Mgt. Unit			Report 7	– Forested	I Stands Compartment: 2 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
34	6112 - Lowland Aspen	Sapling Well	25.6	14	Immature	Good regeneration and diversity in the stand. There are some open areas with marsh grasses, raspberry. Along stand 19 there are some small seeps that drain into the stand. OPIC - FMD: Soils - Carbondale, Lupton and Tawas - mucks and
						peat Harvest was completed in 2003. Much of the area is fully stocked with mixed aspen and/or hardwood regen, but enough areas have only lowland brush to drop the overall stocking down to P2. In these unstocked areas, it appears that conifer regeneration is slowly progressing, and over the next ten years or so the entire stand will be fully stocked with acceptable regeneration.
35	4134 - Aspen, Spruce/Fir	Sapling Well	51.2	14	1-50	A4/A5 some areas are becoming merchantable. OPIC - FMD: Soils - McMillan-Greylock fine sandy loams at 1-15% slopesYoung aspen stand with balsam fir plus scattered spruce, ash, red maple, elm etc. The understory varies from 2-4" DBH. This stand will probably become a fully-stocked A6 by next entry. Ground cover species include ferns and a variety of herbaceous plants.
36	4130 - Aspen	Sapling Poor	7.1	4	Immature	Good regeneration.
						 OPIC - FMD: Soils - McMillan-Greylock fine sandy loams at 1-6% slopes Originally included as part of the surrounding hardwood stand, this aspen is now ready to harvest - evidence of breakup is present. The stand's year of origin as shown is an approximation based on several trees, but there is some age variation present. Mixed pulpwood includes a variety of hardwoods plus spruce and balsam fir.
						 This harvest is a clearcut with reserves. To meet stand retention guidelines: 1) Do not cut any conifers less than 6" DBH, and protect any pine, balsam fir or spruce regeneration. 2) Retain some mature aspen by leaving them outside the cutting boundary line or using them as boundary trees. Follow the harvest with TSI of residual poor quality hardwoods & aspen to assure proper aspen regeneration, but DO NOT cut serviceberry or residual conifers. A mix of aspen, hardwoods and conifers will be considered acceptable regeneration.
						Note: Sale specs must include a provision requiring the purchaser to notify the Seney Snowmobile Association when the sale is purchased to coordinate harvesting operations along the snowmobile trail.
						[8/13/08] Now under contract TS 41-003-07-01 Octo-Pine. See also FTP W41-1365 (aspen TSI.)
37	4130 - Aspen	Poletimber Well	11.0	55	81-110	Picked through in '83, starting to fall apart. Final harvest.
38	4199 - Other Mixed	Poletimber	8.5	106	51-80	Final harvest - poor quality.
	Upland Deciduous	Well				OPIC - FMD: Soils - McMillan-Greylock fine sandy loams at 1-6% slopes
40	6120 - Lowland Cedar	Poletimber Well	11.7	106	81-110	Old skid road running between the cut and cedar type. Same stand as adjacent compartment. They should be treated at the same time. Black spruce looks healthy, if harvested would need to cut some of the cedar. Small creek comes out at the road through the stand.OPIC - FMD: Soils - Carbondale, Lupton and Tawas - mucks and peat

S t	Shingleton Mgt. Unit			Report 7	 Forested 	Stands Compartm Year of Er	Compartment: 2 Year of Entry: 2018	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	General Comments:	
42	6139 - Mixed Lowland Forest	Poletimber Well	22.3	106	81-110	Would need a solid winter to harvest. W and did not find any creeks, but a lot of creek on the other side of the county re stand at some point. All species but ce falling out of the stand. Would need to good regeneration of these species ba lower BA mixed through the stand. In s cedar regen,	/andered on wet areas ar bad that may dar are over harvest this ack. There ar ome of the g	bear ground nd there is a go into the mature and entry to get e areas of aps there is
						OPIC - FMD: Soils - Carbondale, Luptor	n and Tawas	- mucks and
						peat Very wet site - Unevenaged characteris the paper birch and balsam fir are rap softwood pulp includes cedar a	tics are now idly dropping ind black spr	prevalent as out. Mixed uce.
43	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	10.1	102	51-80	Tamarack has insect damage. All spec over mature and need to be harvested. ⁻ of high ground with bracken fern. Of Carbondale, Lupton and Tawas - muck but cedar is beginning to express dom varies considerably from hardwo	ties except for The North ch PIC - FMD: S s and peatMi inance. The ods to pure o	or cedar are unk is a knob Soils - xed stand understory cedar.
44	6122 - Black Spruce	Poletimber Well	6.3	55	81-110	Fir and cedar in understory are dead fro needs 10-20 more years to get som harvesting. A good winter would allow fo picked through in the 60's. There is an stand.	om being sha e dbh on the or harvesting fairly new rec	ded out. BS m before . Cedar was I line for this
						OPIC - FMD: Soils - Carbondale, Luptor	n and Tawas	- mucks and
						pear Cedar over a dense understory of balsa Mixed pulpwood includes spruce	m fir-cedar-b e and paper l	black spruce. birch.
46	6139 - Mixed Lowland Forest	Sapling Well	3.1	14	Immature	Good regeneration	on	
						OPIC - FMD: Soils - poorly drained/fre Deford-Tawas mu Mix of conifer regeneration with a few	quently flood icks patches of A	ed Ausable- \3 includes.
48	6112 - Lowland Aspen	Sapling Well	6.5	33	Immature	SCA - deer yard in very southern corne cedar posts and other conifer in 69 and water table and low	er. Stand was 83. Small db v SI.	harvest for h due to high
						OPIC - FMD: Soils - Transiton from po flooded Ausable-Deford-Tawas mucks fine sandy loams at 1-15 Understory includes A3, lowlar	oorly drained up to McMilla 5% slopes nd brush and	/frequently an-Greylock Q3.
49	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	89.7	110	81-110	Not old growth timber. Red maple and are either very old or in the understory w Majority of the stand is in HC Soils - poorly drained/frequently flooded mucks Soft, wet ground along the Fox Riv inoperable, or would present tremendo The site indices vary predictably with elevation. Some areas within the stand a	other decidu /here there is VA - Fox Riv J Ausable-De rer - many ar us BMP issue changes in te are dominate	ous species blow down. er eford-Tawas eas are es to reach. errain and d by conifers.

S t	Shingleton Mgt. Unit			Report 7	– Forested	Stands Compartment: 2 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
50	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	104.2	106	81-110	Lower BA than stand 49 across the Fox River. Low ground, wet with poor SI Much of the stand falls within the HCVA - Fox River Plan Soils - poorly drained/frequently flooded Ausable-Deford-Tawas mucks, Markey mucky peat, and also Spot-Finch sands as it transitions toward the uplands Soft, wet ground along the Fox River - many areas are inoperable, or would present tremendous BMP issues to reach. The site indices vary predictably with changes in terrain and elevation. Some areas within the stand are dominated by conifers.
53	6131 - Hemlock, White Pine, Maple, Birch	Sawtimber Well	10.1	106	81-110	Some acreage of the stand falls within the SCA - deer yard.and the Fox River HCVA
						Soils - poorly drained/frequently flooded Ausable-Deford-Tawas mucks Inaccessible stand along the Fox River featuring a mix of species, but cedar will probably become even more dominant over time. Mixed sawlogs include very large (20" + DBH) white pine & scattered yellow birch; mixed softwood pulp represents balsam fir, black spruce and hemlock.
54	6117 - Lowland Deciduous, Mixed Coniferous	Sapling Well	16.9	9	Immature	Stand is regenerating well, still filling in especially with conifer being smaller than the hardwood spp. A little bit of blow down from the residual trees left from cut.
						Cut under TS 41-033-08-01
						OPIC - FMD: Soils - Carbondale, Lupton and Tawas - mucks and
						peat Mixed sawlogs include very large (20" + DBH) white pine & scattered yellow birch; mixed softwood pulp represents balsam fir, black spruce and hemlock. Ready to harvest and regenerate naturally - all commercial tree species are acceptable regeneration.
						This harvest is a clearcut with reserves. To meet retention guidelines, do not cut hemlock or white pine and leave-tree mark some defective or low quality yellow birch (14" plus DBH) for wildlife. Protect the advanced regeneration in the Q3 understory whenever possible. [8-26-09] sale completed TCR dtd 8-26-09. Regen will be checked during next inventory cycle for YOE 2018.
56	6113 - Lowland Maple	Sapling Well	0.5	22	1-50	cut with Stand to the south in C005.
57	4311 - Pine, Aspen Mix	Poletimber Well	10.9	86	51-80	 OPIC - FMD: Soils - Wallace sand 15-35% slopes and Spot-Finch sands on the transition to the adjacent lowlands Last cut in 1994, 58-94-02; resulting in a mixed understory heavy to aspen but also including patches of hardwoods and mixed upland conifers. The red pine is found primarily in clumps, while the more open areas feature the young aspen. Mixed softwood volume includes white and jack pine, balsam fir and spruce.
59	4130 - Aspen	Sapling Well	5.6	32	Immature	Looks good. N side of stand falls into low ground.
						OPIC - FMD: Soils - Wallace sand 15-35% slopes and Spot-Finch sands on the transition to the adjacent lowlands Young aspen with numerous clumps of residuals.

S t a n d	Shingleton Mgt. Unit			Report 7	– Forested	I Stands Compartment: 2 Year of Entry: 2018
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
61	4119 - Mixed Northern Hardwoods	Poletimber Well	37.3	103	81-110	 Higher topography than surrounding area., small ridges. Grass openings that were typed out in the past are now incorporated into the hardwood stand. Access is difficult due to the wet ground and drains in the adjacent stands. Also, some of the stand acres fall within the Fox River cooridor. OPIC - FMD: Soils - Kalkaska sands at 6-35% slopes plus Spot-Finch sands on the transitional edges to the adjacent lowlands

Shingleton Mgt. Unit

Compartment: 2 Year of Entry: 2018



Stand	Cover Type	Acres	Managed Site	General Comments:
8	6224 - Treed Bog	26.2	No	Treed bog with a few merchantable sized trees. SI too low for management. Soils - Carbondale, Lupton and Tawas - mucks and peat
10	6229 - Mixed lowland shrub	34.7	No	Low type around Dead Creek. HCVA - Fox River Plan
				Lowland brush and marsh surrounding Dead Creek Soils - Carbondale, Lupton and Tawas - mucks and peat
26	6224 - Treed Bog	73.9	No	OPIC - FMD: Soils - poorly-drained Dawson-Greenwood-Loxley mucks/peats Submerchantable black spruce & tamarack bog up to 20' tall and 2" DBH. Inoperable ground.
27	500 - Water	1.4	No	OPIC - FMD: HARCOURT LAKE
41	122 - Road/Parking Lot	6.7	No	OPIC - FMD: Old Seney Road R.O.W also a snowmobile trail.
52	500 - Water	16.1	No	OPIC - FMD: HCVA - Fox River
58	622 - Lowland Shrub	6.5	No	HCVA - Fox River Soils - poorly drained/frequently flooded Ausable-Deford-Tawas mucks and Markey muckey peat
60	6223 - Inundated Shrub Swamp	20.8	No	HCVA - Fox River Plan, stand contains a tributary to the Fox River Soils - Markey mucky peat Marsh with scattered trees
401	3102 - Grass	1.2	No	OPIC - FMD: Soils - Kalkaska sand at 0-6% slopes