

## **Compartment Review Presentation**

**Shingleton Forest Management Unit** 

Compartment 41006 Entry Year 2019 Acreage: 1,171

**County Schoolcraft** 

**Management Area: Fox River Complex** 

**Revision Date: 2017-06-12** 

Stand Examiner: Peter Holodnick

**Legal Description:** 

T45N, R13W, Sec. 25-28, 35

**Identified Planning Goals:** 

### Soil and topography:

There is a wide variety of soil types within the compartment. The soil type for the majority of the upland is Neconish-Wainola-Kinross Complex 0-6% slopes, and the soil type for the majority of the lowlands is Dawson, Greenwood and Loxley soils.

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

The Seney National Wildlife Refuge borders the west side of the compartment; the south and east sides are bordered by privately owned land, and the north side of the compartment is mainly bordered by state owned land.

### **Unique Natural Features:**

Currently under review by Michigan Natural Features Inventory (MNFI).

### Archeological, Historical, and Cultural Features:

### **Special Management Designations or Considerations:**

**HCVA - Fox River** 

#### **Watershed and Fisheries Considerations:**

This compartment has the Manistique River, Holland Ditch, and Holland Creek flowing through it. The Manistique River is classified as a non-trout water. The fisheries community consists of walleye, smallmouth bass, northern pike, sunfish, yellow perch, sucker spp., and minnow spp. Standard BMP's should be implemented to control sediment sources from adjacent uplands. Fine sediments such as silt and sand negatively affect natural reproduction of fish, decrease the diversity of aquatic invertebrate and fish taxa, and result in lower overall fish populations.

#### Wildlife Habitat Considerations:

This compartment lies east of M-77 and north of Ten Curves Road. The Manistique River is the dominant feature coursing through the southeast portion of the compartment. Pre-settlement data indicates that the upland forest contained a mix of hemlock, white pine, and jack pine with lesser amounts of sugar maple, beech, basswood, and aspen. Lowland forests contained primarily black spruce and tamarack with smaller amounts of cedar and elm.

The current lowland forest contains basically the same species composition as the circa 1850 forest. The uplands show a significant increase in red pine and aspen.

The wildlife habitat management regime consists of facilitating the expansion of hemlock within the compartment, providing age and structural diversity within the aspen community, promoting naturally structured upland conifer stands and increasing hard mast availability.

#### Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel, coarse-textured till and peat and muck. The glacial drift thickness varies between 10 and 100 feet. The Silurian Manitoulin Dolomite and Ordovician Queenston Shale and Big Hill Dolomite subcrop below the glacial drift. The Manitoulin and Big Hill could be used for stone. Gravel pits at not found in the general area and potential appears to be limited. There is no commercial oil and gas production in the UP.

#### **Vehicle Access:**

A portion of the compartment is not accessible by vehicle, due to lack of bridges.

#### **Survey Needs:**

Much of the proposed cutting cannot be completed without survey.

### **Recreational Facilities and Opportunities:**

There are no DNR recreational facilities within the compartment; but the area is heavily used for hunting.

#### **Fire Protection:**

Portions of Sections 26 and 27 of this compartment lie within the Fox River Zone Dispatch Area. Lack of bridges makes access to fires in the east part of the compartment difficult.

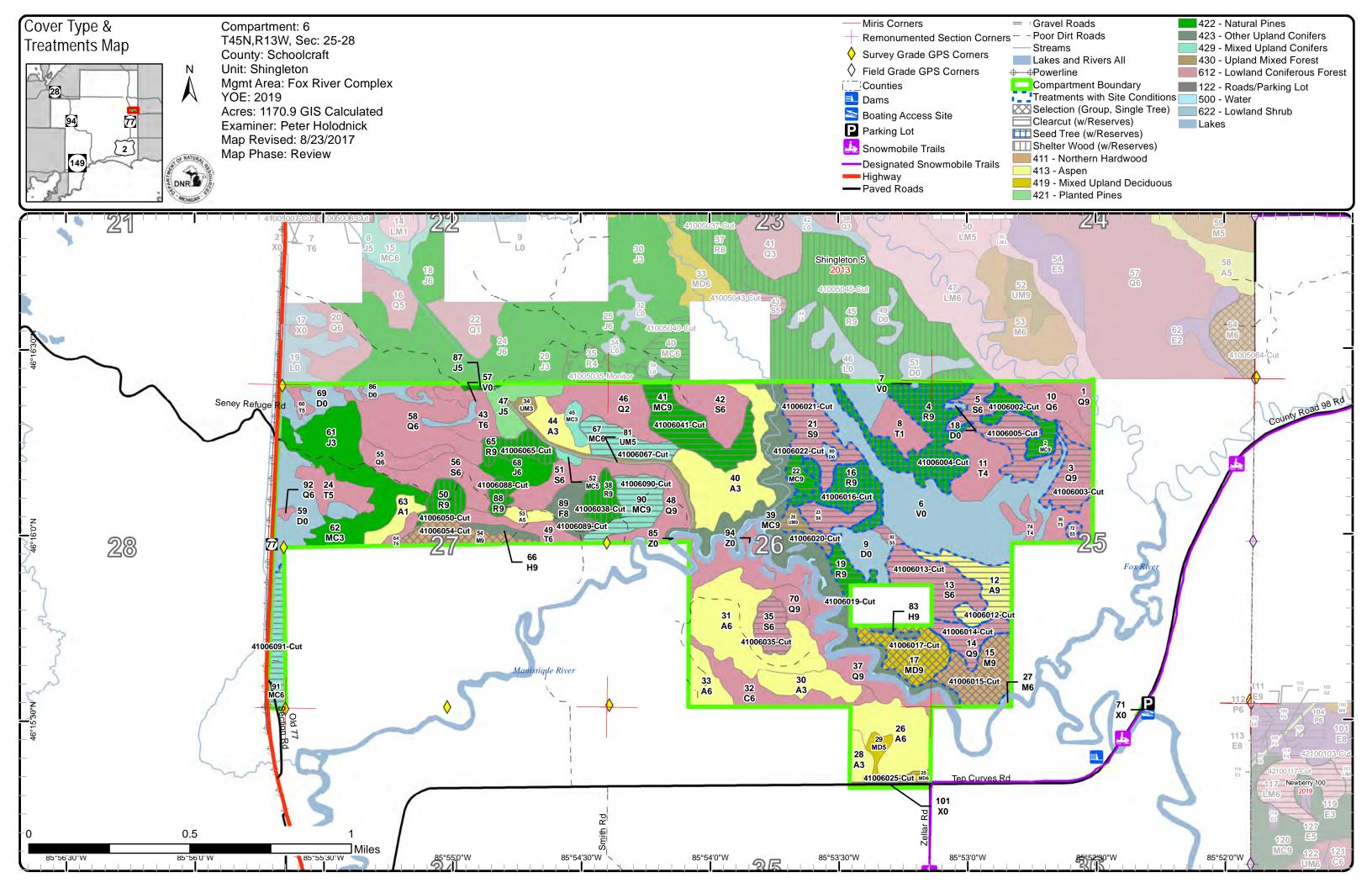
### **Additional Compartment Information:**

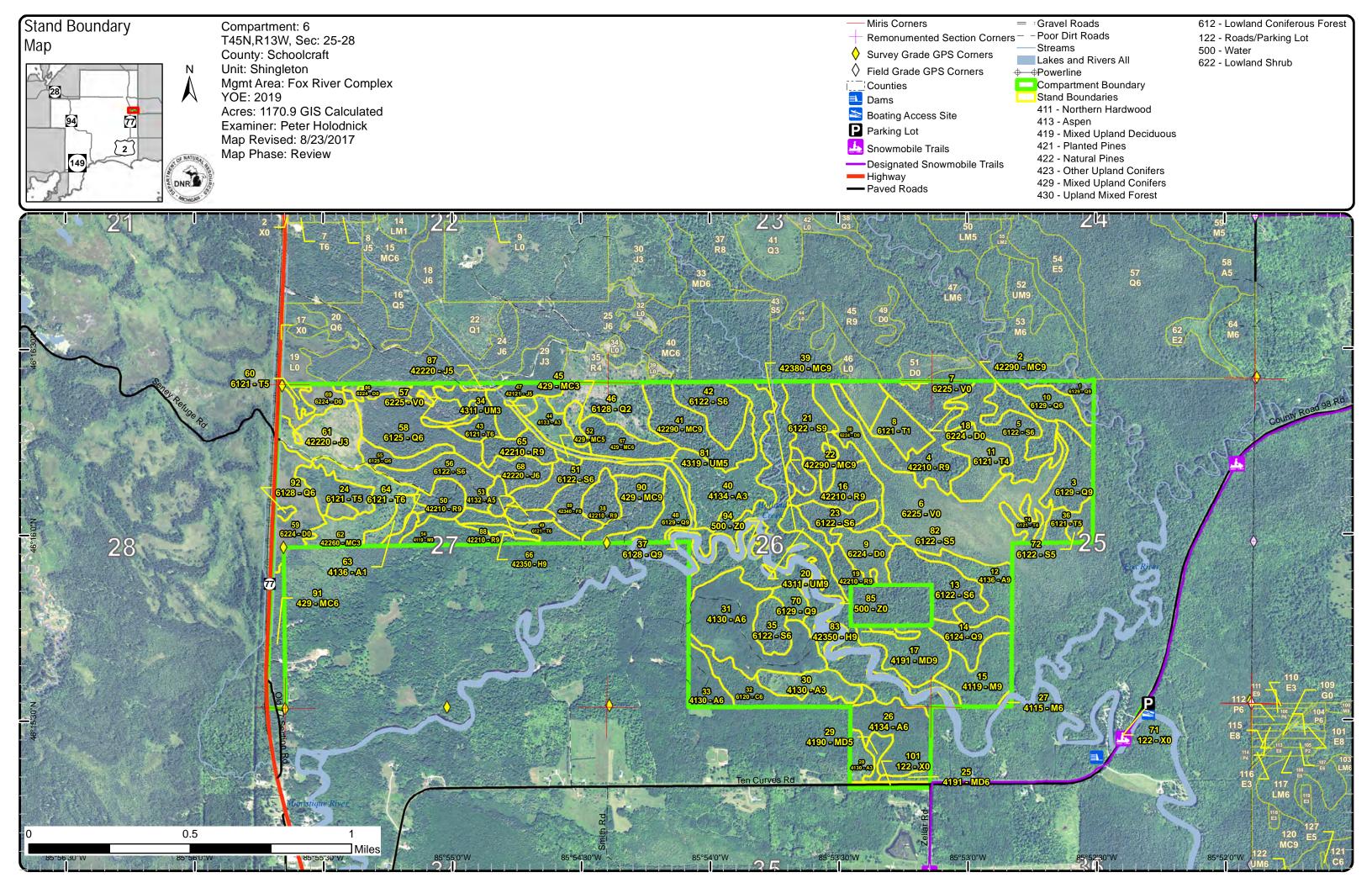
The following reports from the Inventory are attached:

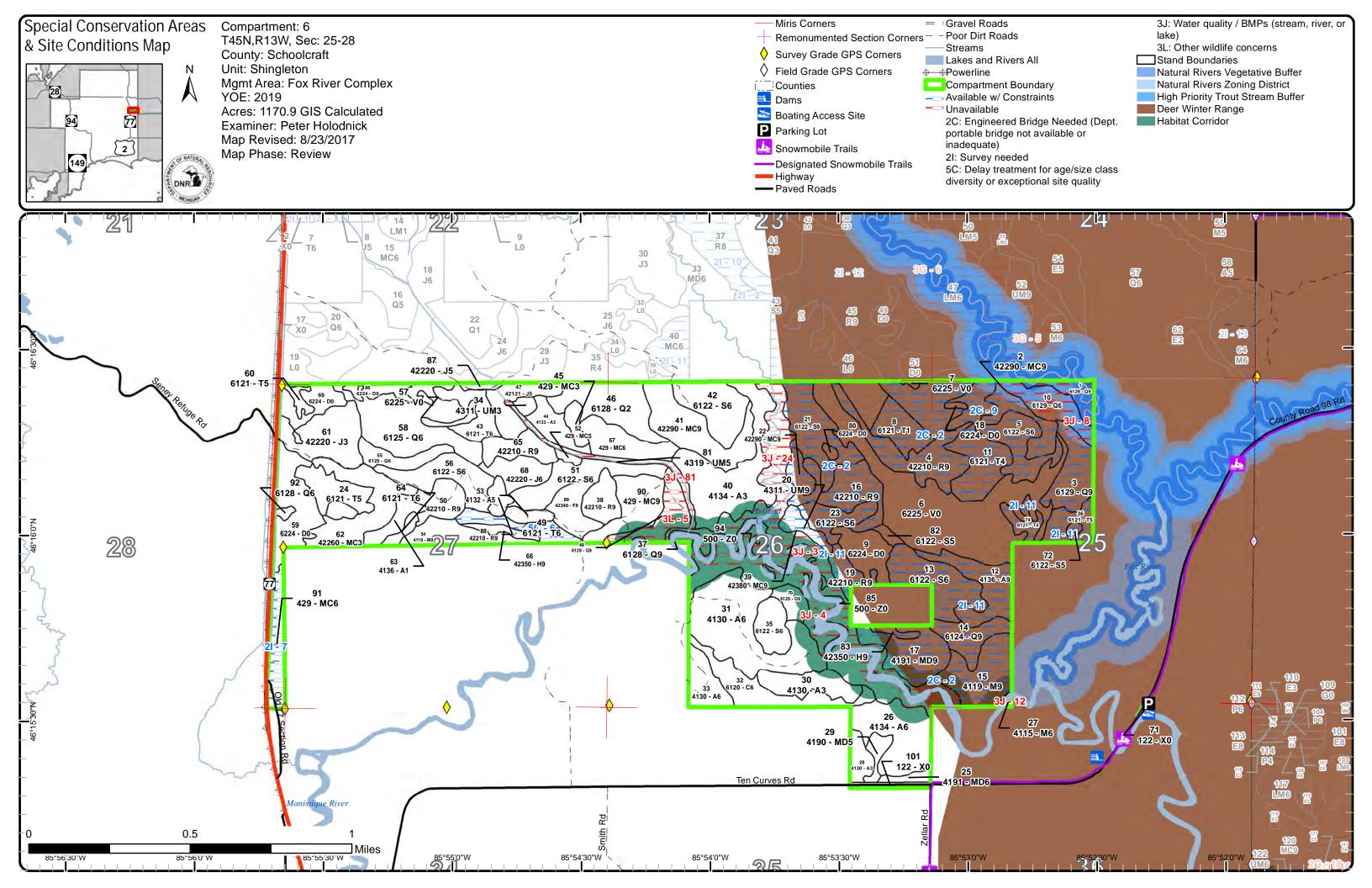
Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

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







Shingleton Mgt. Unit

Compartment 6

Year of Entry 2019

DNR DNR

Peter Holodnick : Examiner

## Age Class

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Aspen	0	35	0	47	46	4	0	0	18	0	0	0	0	0	0	0	0	26	176
Bog	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88
Cedar	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	19
Hemlock	0	0	0	0	0	0	0	0	3	0	0	2	0	0	0	0	0	0	5
Jack Pine	0	22	0	12	0	12	0	0	0	0	0	0	0	0	0	0	0	0	46
Lowland Conifers	0	23	0	0	0	9	0	37	75	7	12	0	0	0	0	0	0	14	176
Lowland Spruce/Fir	0	0	0	0	0	54	0	0	69	24	0	0	0	0	0	0	0	0	147
Mixed Upland Deciduous	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	23	27
Natural Mixed Pines	0	24	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	26	66
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	35
Red Pine	0	0	0	0	0	0	0	0	15	20	0	0	0	0	0	0	0	63	98
Tamarack	0	0	0	0	0	3	32	3	44	0	0	0	0	0	0	0	0	0	81
Treed Bog	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56
Upland Conifers	0	4	0	0	0	0	15	62	17	0	0	0	0	0	0	0	0	1	98
Upland Mixed Forest	0	2	0	0	0	0	0	8	5	0	0	0	0	0	0	0	0	0	15
Upland Spruce/Fir	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	11
Urban	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Water	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Total	172	110	0	59	46	82	47	114	262	81	12	2	0	0	0	0	0	188	1172



# **Report 2 – Treatment Summary**

# Shingleton Mgt. Unit Year of Entry: 2019

## **Acres of Harvest**

Compartment 6
Total Compartment Acres: 1,171

Commercial Harvest - 128
Harvests with Site Condition - 268
Next Step Harvest - 0
Habitat Cut - 0

## **Cover Type by Harvest Method**

		/		Topology De A		1, 8 / 5 / 5	O NO	On The Control of the	R. TOUGH TO	86,465		
Aspen		18	0	0	0	0	0	0	0	0	18	
Lowland Conifers		27	0	0	0	0	0	0	0	0	27	
Lowland Spruce/Fir		93	0	0	0	0	0	0	0	0	93	
Mixed Upland Deciduous		3	20	0	0	0	0	0	0	0	23	
Natural Mixed Pines		42	0	0	0	0	0	0	0	0	42	
Northern Hardwood		0	35	0	0	0	0	0	0	0	35	
Red Pine		7	0	0	59	32	0	0	0	0	97	
Upland Conifers		44	0	0	0	0	0	0	0	0	44	
Upland Mixed Forest		5	0	0	0	0	0	0	0	0	5	
Upland Spruce/Fir		11	0	0	0	0	0	0	0	0	11	
	Total	250	56	0	59	32	0	0	0	0	396	

## **Proposed and Next Step Treatments by Method**

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		/.			Cino Co			Signal M			4° / 3	, se la companya di santa di s
Current		396	0	0	0	0	0	0	0	0	396	ĺ
Next Step		0	15	15	0	0	7	380	0	0	417	
	Total	396	15	15	0	0	7	380	0	0	813	

Treatments:

Acceptable Any tree species Regen:

Other Comment:

10/01/2018 **Proposed Start Date:** 

41006005-Cut 24.3 6122 - Black Spruce Poletimber 111-Harvest Clearcut with 612 - Lowland Even-Aged Proposal Well 140 Retention Coniferous

Forest

Site Condition: Engineered Bridge Needed **Habitat Cut: No** 

Prescription Clear cut with retention. No cut Hemlock, Cedar, and Oak if present. Retention is in the fox river buffer.

Specs:

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable Mix of trees currently found in this area

Regen: Other Comment:

Other Comment:

Proposed Start Date: 10/01/2018

41006015-Cut 22.0 4119 - Mixed Sawtimber 171-Harvest **Group Selection** 411 - Northern Proposal Uneven-Northern Hardwoods Well 200 Hardwood Aged

**Habitat Cut: No** Site Condition: Survey Needed

Prescription Mark down to 80 BA. Mark trees with poor form and deformities. Cut all Spruce, Balsam Fir, and Aspen. No cut Hemlock and Oak. Cut cedar only for access.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Northern Hardwoods Regen:

Other Comment:

**Habitat Cut: No** Site Condition: Engineered Bridge Needed

Prescription Clear cut no retention due to size. No cut Hemlock and Oak.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree species

Regen: Other Comment:

Shingleton Mgt. Unit Report 3 -- Treatments Compartment: 6 s Year of Entry: 2019 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age **Approval** n Method Objective Structure Status Name CoverType Density Age Range Type d 41006021-Cut 22.7 6122 - Black Spruce Sawtimber Clearcut with 6122 - Black 21 81-110 Harvest Even-Aged Proposal Well Retention Spruce **Habitat Cut: No** Site Condition: Engineered Bridge Needed Prescription Cut all trees except Hemlock and Oak. leave 3-10% retention. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) **Treatments:** Acceptable Any tree species Regen: Other Comment: **Proposed Start Date:** 10/01/2018 22 41006022-Cut 49 42290 - Natural Sawtimber 141-Harvest Clearcut 4319 - Mixed Even-Aged Proposal Mixed Pine Well 170 **Upland Forest Habitat Cut:** No Site Condition: Engineered Bridge Needed Prescription Clear cut no retention due to size. No cut Hemlock and Oak. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Any tree species Regen: **Other** Comment: **Proposed Start Date:** 10/01/2018 23 41006023-Cut 10.2 6122 - Black Spruce Poletimber 79 81-110 Harvest Clearcut 6122 - Black Even-Aged Proposal Spruce **Habitat Cut: No** Site Condition: Engineered Bridge Needed Prescription Cut all trees except Hemlock and Oak. Leave no retention due to small size. Specs: Monitoring, Natural Regen (Re-Inventory) Next Step Treatments: Acceptable Any tree species Regen: Other Comment: Proposed Start Date: 10/01/2018 41006025-Cut 2.6 4191 - Mixed Poletimber 80 111-Harvest Clearcut 4319 - Mixed Even-Aged Proposal **Upland Deciduous** Well 140 **Upland Forest** with Conifer **Habitat Cut: No Site Condition:** Prescription Clear cut no retention because of its small size. No cut Hemlock, Oak, and Cedar if present. Specs: Monitoring, Natural Regen (Re-Inventory) Next Step Treatments: Acceptable Any Tree Species

10/01/2018

Regen:
Other
Comment:

Proposed Start Date:

10/01/2018 **Proposed Start Date:** 

50 41006050-Cut 8.6 42210 - Natural Sawtimber 84 111-Harvest Shelterwood 42110 - Planted Even-Aged Proposal Red Pine Well Red Pine 140

**Habitat Cut: No Site Condition:** 

Prescription Mark to between 40-60 BA of trees. No cut Hemlock and Oak. No other retention needed due to small size

Specs:

SitePrep, Trenching, Planting, Initial Plant Next Step

Treatments:

Acceptable Any Tree Species currently in the overstory would be acceptable.

Regen:

**Other** 

Comment:

Regen:

Other

Comment:

10/01/2018 **Proposed Start Date:** 

41006072-Cut

Medium

70

81-110

Harvest

Clearcut

612 - Lowland Even-Aged Coniferous

Proposal

Forest

Site Condition: Survey Needed **Habitat Cut: No** 

1.6 6122 - Black Spruce Poletimber

Prescription Clear cut no retention because of small size. No cut Hemlock, Oak and Cedar if present.

Specs:

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable Any tree species

Regen:

This needs a survey.

<u>Other</u> Comment:

10/01/2018 **Proposed Start Date:** 

Shingleton Mgt. Unit Report 3 -- Treatments Compartment: 6 s Year of Entry: 2019 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age **Approval** n Method Objective Structure Status Name CoverType Density Age Range Type d 41006082-Cut 1.8 6122 - Black Spruce Poletimber 612 - Lowland 82 51-80 Harvest Clearcut Even-Aged Proposal Coniferous Medium Forest **Habitat Cut: No Site Condition:** Prescription Clear cut no retention due to size. No cut Hemlock and Oak. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Any tree species Regen: **Other** Comment: 10/01/2018 **Proposed Start Date:** 41006088-Cut 3.9 42210 - Natural Sawtimber 84 111-Harvest Shelterwood 4319 - Mixed Uneven-Proposal Red Pine Well 140 **Upland Forest** Aged **Habitat Cut:** No **Site Condition:** Prescription Mark trees down to between 30 to 60 BA. Focus your marking on the large 16-18 inch red and white pine. No other retention needed due to Specs: small size Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Any species in the overstory Regen: **Other** Comment: **Proposed Start Date:** 10/01/2018 41006089-Cut 10.6 42340 - Upland Sawtimber 84 111-Harvest Clearcut with 4319 - Mixed Even-Aged Proposal Spruce/Fir Medium 140 Retention **Upland Forest Habitat Cut: No Site Condition:** Prescription Cut all tree species except Hemlock and Oak. Also leave tree mark a few large White and Red Pine. Leave 3-10% retention. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Any tree species Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

41006090-Cut 17.1 429 - Mixed Upland Sawtimber 72 141-Harvest Clearcut with 4319 - Mixed Even-Aged Proposal Conifers Well 170 Retention **Upland Forest** 

**Habitat Cut: No Site Condition:** 

Prescription Cut all trees except Hemlock and Oak. Also Leave tree mark a few White and Red Pine. Leave 3-10% retention.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any tree species

Regen: Other Comment:

Shingleton Mgt. Unit Report 3 -- Treatments Compartment: 6 s Year of Entry: 2019 t а **Treatment** Stand BA **Treatment Treatment Cover Type** Acres Stand Size Age **Approval** n Density Age Method Objective Structure Status Name CoverType Range Type d 91 41006091-Cut 12.8 429 - Mixed Upland Poletimber 111-Harvest Clearcut with 4319 - Mixed Even-Aged Proposal Upland Forest Conifers Well 140 Retention **Habitat Cut:** No Site Condition: Survey Needed Prescription Cut all trees except Hemlock and Oak. Leave 3-10% retention. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Any tree species Regen:

Proposed Start Date:

<u>Other</u>

Comment:

10/01/2018

survey needed

**Total Treatment** Acreage Proposed: Shingleton Mgt. Unit

Peter Holodnick: Examiner

Compartment: 6
Year of Entry: 2019

Availa	ability for	Managemer	nt						
Total	Acres	Acres Avail	Acres		Domina	nt Site	Cond	ditions	S
Acres	Available	With Condition	Not Available		2C	21	5C	3J	3L
175	157	18	0	Aspen		18			
88	88	0	0	Bog					
19	19	0	0	Cedar					
5	3	2	0	Hemlock		2			
45	45	0	0	Jack Pine					
176	70	27	79	Lowland Conifers		27		67	12
147	66	81	0	Lowland Spruce/Fir	57	24			
27	7	20	0	Mixed Upland Deciduous		20			
66	50	16	0	Natural Mixed Pines	16				
36	13	22	0	Northern Hardwood	5	17		0	
98	32	65	0	Red Pine	59	7			
81	28	53	0	Tamarack	29	14	9		
56	54	0	2	Treed Bog				2	
99	37	13	49	Upland Conifers		13		49	
15	2	5	8	Upland Mixed Forest	5			8	
11	11	0	0	Upland Spruce/Fir					
3	3	0	0	Urban					
25	25	0	0	Water					
1,171	710	323	138	Total Forested Acres	172	142	9	126	12
	61%	28%	12%	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.

1 Available 2C: Engineered Bridge 0 Unspecified Unspec	Unspecified
Comments:	

# Report 4 – Site Conditions

Shingleton Mgt. Unit

Peter Holodnick: Examiner

Compartment: 6
Year of Entry: 2019

2	Available	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)	136	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	28	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Manistique River						
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	24	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3L: Other wildlife concerns	12	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Trees are small						
7	Available	2I: Survey needed	13	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

# **Report 4 – Site Conditions**

Shingleton Mgt. Unit
Peter Holodnick: Examiner

Compartment: 6
Year of Entry: 2019

8	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	22	2I: Survey needed	2D: Portable Bridge Needed (Dept. bridge will be adequate)	Unspecified	Unspecified
	Comments: Fox river buffer						
9	Available	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)	35	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
11	Available	2l: Survey needed	129	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)	Unspecified	Unspecified	Unspecified
	Comments:						
12	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	0	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)	2I: Survey needed	Unspecified	Unspecified
	Comments: Fox river buffer						
24	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	20	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

# **Report 4 – Site Conditions**

Shingleton Mgt. Unit

Compartment: 6 Year of Entry: 2019 Peter Holodnick: Examiner

81 Unspecified Unavailable 3J: Water quality / BMPs 8 Unspecified Unspecified Unspecified (stream, river, or lake) **Comments:** 

08/24/2017 9:29:12 AM - Page 4 of 4 REEDH5 Mgt. Unit

Compartment: #Type! Year of Entry:



## 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
Comments				

Shingleton Mgt. Unit Compartment: 6
Year of Entry 2019



# 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.

Conservation Area	n Type	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 wildle and Waterfowl Production Areas, deer wintering complexes in low openings and savannas. Habitat areas are distinct from critical hendangered or threatened species (such as Kirtland's warbler or general in nature, are not primarily associated with threatened or covered by species recovery plans that are developed in cooperations.	wland conifer communities, grassland abitat designated for recovery of piping plover areas) in that they are more endangered species, and are not
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high d communities are ecologically and socially significant in their effect as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from sp approved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 10 and Vegetative Buffers for each Natural River see the table locat folder.	Zoning District is a 400 foot buffer for 00 feet. To view specific Zoning Districts

s t	Shingletor	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 6 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	7.3	77	1-50	OPIC - FMD: HCVA-Natural River, Fox River. Fox River flood plain with scattered trees, tall brush and grass/sedge.  98=cedar, hemlock and spruce soil=65 AuSable, Deford & Tawas Mucks, Frequently flooded; also 27A Hendrie-Anninias Complex 0-3% slopes
2	42290 - Natural Mixed Pine	Sawtimber Well	10.9	77	111-140	Conifer/hardwood mix on slightly higher ground. Difficult access: need a bridge over Holland Creek, or a road through private. Regeneration of the same species mix is acceptable. Soil=525B Neconish-Wainola-Kinross Complex 0-6% slopes
3	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	16.7	77	111-140	Mix of conifers on lower ground. East property line was put in by private surveyor; accuracy is unknown. Soil=525B Neconish- Wainola-Kinross Complex 0-6% slopes
4	42210 - Natural Red Pine	Sawtimber Well	39.4	87	171-200	Scattered spruce Soil=37 Dawson, Greenwood and Loxley soils
5	6122 - Black Spruce	Poletimber Well	24.3	87	111-140	OPIC - FMD: Difficult access: needs bridge across Holland Creek, or road through private. soil=525B Neconish-Wainola-Kinross Complex 0-6% slopes; and 37 Dawson, Greenwood and Loxley soils
8	6121 - Tamarack	Sapling Poor	11.6	72	1-50	Bog with leatherleaf and other brush species. Scattered spruce and tamarack. Soil=37 Dawson, Greenwood and Loxley soils
10	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	13.5	117	141-170	Natural River, Fox River. Large diameter Hemlock, White Pine and Birch are within the stand. East private line was put in by private surveyor and its accuracy is unknown. Soil=525B Neconish-Wainola-Kinross Complex 0-6% slopes
11	6121 - Tamarack	Poletimber Poor	17.9	72	1-50	Bog with leatherleaf and other brush species. Scattered spruce and tamarack. Soil=37 Dawson, Greenwood and Loxley soils
12	4136 - Aspen, Mixed Conifer	Sawtimber Well	18.0	77	81-110	East blue line was put in by private surveyor and accuracy is unknown. Difficult access: need bridge over Holland Creek or road through private. Regeneration of the same species mix is acceptable. 98=white pine, b.spruce. soil=525B Neconish-Wainola-Kinross complex 0-6% slopes
13	6122 - Black Spruce	Poletimber Well	22.6	77	141-170	Difficult access: need bridge across Holland creek, or road through private. Adjacent to private property; survey needed. 98=white pine, cedar soil=525B Neconish-Wainola-Kinross Comples 0-6% slopes and 36 Carbondale, Lupton & Tawas soils
14	6124 - Lowland Spruce- Fir	Sawtimber Well	11.8	77	111-140	Difficult access: bridge needed across Holland creek, or road through private. Adjacent to private property; survey needed. Regeneration of the same species mix is acceptable. Soil=36 Carbondale, Lupton and Tawas soils

S t	Shingleton	Mgt. Unit		Report 7	– Forested	Stands Compartment: 6 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
15	4119 - Mixed Northern Hardwoods	Sawtimber Well	22.0	99	171-200	Difficult access: bridge across Holland Creek needed, or a road through private land far to the north. There is an old road through the stand. The east property line was put in by private surveyor; accuracy unknown. 98=b.fir, hemlock, white pine soil=34B Liminga Fine Sand 0-6% slopes and 34E 15-35% slopes
16	42210 - Natural Red Pine	Sawtimber Well	19.4	77	141-170	Difficult access: bridge over Holland Creek needed, or road through private land to the north. 35/2=jack pine and white pine soil=525B Neconish-Wainola-Kinross Complex 0-6% slopes
17	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	20.3	77	111-140	Difficult access: bridge across Holland Creek needed, or a road through private land far to the north. There is an old road through the stand. Adjacent to private property; survey needed. 98= Hemlock, Spruce, Cedar and White Pine soil=525B Neconish-Wainola-Kinross Complex 0-6% slopes and 13D Kalkaska sand 6-15% slopes
19	42210 - Natural Red Pine	Sawtimber Well	6.6	77	81-110	Follow BMP guidelines along the Manistique River. Difficult access: bridge needed across Holland Creek, or a road across private from the north. Stand is adjacent to private property; survey needed. Soil=525B Neconish-Wainola-Kinross Complex 0-6% slopes
20	4311 - Pine, Aspen Mix	Sawtimber Well	5.3	77	141-170	Follow BMP guidelines near Holland Creek and the Manistique River. Difficult access; bridge needed over Holland Creek, or a road from the north. Soil=525B Neconish-Wainola-Kinross Complex 0-6% slopes
21	6122 - Black Spruce	Sawtimber Well	22.7	79	81-110	Difficult access: bridge needed across Holland Creek, or a road through private to the north. Treat with C005 s 20 to the north. Soil=525B Neconish-Wainola-Kinross Complex 0-6% slopes
22	42290 - Natural Mixed Pine	Sawtimber Well	4.9	77	141-170	OPIC - FMD: Cut all trees except Hemlock. Leave some Red and White Pine for retention. Jack Pine is the preferred regeneration species, but a mix with other species similar to what is currently on site will be acceptable. Scarify or handplant to regenerate jack pine. Difficult access: bridge needed across Holland Creek, or a road through private to the north. Soil=525B Neconish-Wainola-Kinross Complex 0-6% slopes
23	6122 - Black Spruce	Poletimber Well	10.2	79	81-110	Difficult access: bridge over Holland Creek is needed, or road through private to the north. 35/2=red and white pine soil=525B Neconish-Wainola-Kinross Comples 0-6% slopes
24	6121 - Tamarack	Poletimber Medium	12.3	53	Unspecified	OPIC - FMD: Large bog next to M-77. Contains some small pockets of trees (b.spruce, tamarack). Soil=Markey Mucky Peat
25	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	2.6	80	111-140	Narrow stand adjacent to 10 Curves Rd. Dense b.fir regeneration. Soil=Wallace Sand 15-35% slopes
26	4134 - Aspen, Spruce/Fir	Poletimber Well	26.0	33	81-110	Aspen with b.fir, r.maple & spruce. Soil=Finch-Spot Complex 0-3% slopes and Wallace Sand 6- 15% slopes

s t	Shingleton	ı Mgt. Unit		Report 7	– Forested	Stands Compartment: 6 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	4115 - Y.Birch, Hemlock NH	Poletimber Well	0.4	67	111-140	Very small stand, on the opposite side of the Manistique River than the rest of the state land. 98=hemlock, w.pine, b.fir 99=r.maple, cherry soil=67B Pelkie, occasionally flooded-Deford, frequently flooded complex, 0-6% slopes
28	4130 - Aspen	Sapling Well	5.8	5	Immature	OPIC - FMD: Adjacent to 10 Curves Rd. There is an old trail road into the stand. Soil=Finch-Spot Complex 0-3% slopes. [4-7-10] Stand is now under contract TS 41-014-09-01 Beaver View. [4-28-12] Sale is now complete TCR dtd 4-16-12.
29	4190 - Mixed Upland Deciduous with Cedar	Poletimber Medium	3.9	67	51-80	OPIC - FMD: Low, wet area with tall brush and a scattered trees. Adjacent to 10 Curves Rd. 91=b.ash, tamarack Soil=Carbondale-Lupton-Tawas Mucks
30	4130 - Aspen	Sapling Well	13.4	5	Immature	OPIC - FMD: A mix of large Aspen and smaller conifers. Soil=Finch-Spot complex 0-3% slopes[4-7-10] Stand is now under contract TS 41-014-09-01 Beaver View. Sale is now complete TCR dtd 4-16-12.
31	4130 - Aspen	Poletimber Well	46.1	30	Immature	OPIC - FMD: Rolling terrain. Aspen with some cherry, r.maple, b.fir, p.birch and beech. Soil=Paquin-Finch Sands 0-6% slopes and Wallace sand 6-15% & 15-35% slopes
32	6120 - Lowland Cedar	Poletimber Well	18.6	87	81-110	OPIC - FMD: 98=hemlock, b.fir, w.pine 99=aspen, r.maple, birch soil= 36 Carbondale-Lupton-Tawas Mucks
33	4130 - Aspen	Poletimber Well	10.8	24	Immature	OPIC - FMD: Aspen with other species including: cherry, b.fir, r.maple and p.birch. Soil=Paquin-Finch Sand 0-6% slopes and Wallace sand 15-35% slopes
34	4311 - Pine, Aspen Mix	Sapling Well	2.0	5	Immature	Soil=Neconish-Kinross-Wainola Complex 0-6% slopes [4-28-12] Sale is now complete TCR dtd 4-16-12. (RH10/29/12) scarifed summer of 2012 by holli .
35	6122 - Black Spruce	Poletimber Well	10.0	72	111-140	OPIC - FMD: Scattered large white pine with other conifers (spruce, tamarack, hemlock). Soil=Finch-Spot Complex 0-3% slopes
36	6121 - Tamarack	Poletimber Medium	8.5	77	1-50	OPIC - FMD: Mix of conifers on lower ground. East property line was put in by private surveyor; accuracy is unknown. Soil=525B Neconish-Wainola-Kinross Complex 0-6% slopes
37	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	39.3	75	81-110	OPIC - FMD: Manistique River riparian zone; includes a steep bank and floodplain with old oxbows. Mix of conifers and hardwoods - species composition and BA varries.  Soil=Pelkie, occasionally flooded-Deford frequently flooded Complex 0-6% slopes
38	42210 - Natural Red Pine	Sawtimber Well	8.8	79	81-110	Soil=Neconish-Kinross-Wainola Complex 0-6% slopes

S t	Shingleton Mgt. Unit			Report 7	- Forested	Stands Compartment: 6 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
39	42380 - Non Pine Upland Conifer, Mixed Deciduous	Sawtimber Well	48.8	65	111-140	Riparian zone along the Manistique River and Holland creek - steep banks and floodplain. soil=Pelkie occasionally flooded-Deford frequently flooded Complex 0-6% slopes
40	4134 - Aspen, Spruce/Fir	Sapling Well	36.1	25	Immature	OPIC - FMD: Aspen with b.spruce, j.pine, r.maple, etc. Between Holland Ditch and Holland Creek. Soil=Neconish-Kinross-Wainola Complex 0-6% slopes
41	42290 - Natural Mixed Pine	Sawtimber Well	26.3	86	51-80	There is aspen regeneration in the south portion of the stand. soil=Neconish-Kinross-Wainola Complex 0-6% slopes
42	6122 - Black Spruce	Poletimber Well	18.5	45	1-50	soil=Neconish-Kinross-Wainola Complex 0-6% slopes
43	6121 - Tamarack	Poletimber Well	10.7	55	51-80	soil=Neconish-Kinross-Wainola Complex 0-6% slopes. This should be ready to be put up next entry.
44	4133 - Aspen, Mixed Pine	Sapling Well	8.7	5	Immature	OPIC - FMD: This stand contains a large variety of tree species. Cut all trees except w.pine, r.pine, hemlock, oak and cedar. Follow BMP guidelines for Holland Ditch buffer (stand 39). The Holland Ditch buffer, in combination with the leave trees, will be used to satisfy the retention guidelines. Aspen with a combination of species currently on site is acceptable for regeneration. 91=cherry, r.pine, w.pine, b.fir, r.maple soil=Neconish-Kinross-Wainola Complex 0-6% slopes [4-7-10] Stand is now under contract TS 41-014-09-01 Beaver View. Residual BA: White pine = 4; red pine = 3; total = 7 sq.ft./acre. [4-28-12] Sale is now complete TCR dtd 4-16-12.
45	429 - Mixed Upland Conifers	Sapling Well	3.7	5	Immature	soil=Neconish-Kinross-Wainola Complex 0-6% slopes [4-7-10] Stand is now under contract TS 41-014-09-01 Beaver View. See also FTP C41-1414 (jack pine regeneration.) Residual BA: red pine = 2 sq.ft./acre. [4-28-12] Sale is now complete TCR dtd 4-16-12. RH10/29/12 scarifed summer of 2012 by holli Fp regen check in 3 years per work instructions.
46	6128 - Lowland Coniferous, Mixed Deciduous	Sapling Medium	23.0	5	Immature	soil=Neconish-Kinross-Wainola Complex 0-6% slopes [4-28-12] Sale is now complete TCR dtd 4-16-12.
47	42121 - Planted Jack Pine, Mixed Deciduous	Poletimber Medium	11.8	20	Immature	Trenched and seeded in Oct 1997. A narrow buffer of trees was left along Holland Ditch. soil=Neconish-Kinross-Wainola Complex 0-6% slopes
48	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	12.1	97	111-140	Along Holland Ditch and the Manistique River. soil=Neconish- Kinross-Wainola Complex 0-6% slopes and Pelkie occasionally flooded-Deford frequently flooded Complex 0-6% slopes (near river)
49	6121 - Tamarack	Poletimber Well	9.4	59	51-80	Low ground along the bottom of a hardwood ridge. soil=Neconish-Kinross-Wainola Complex 0-6% slopes
50	42210 - Natural Red Pine	Sawtimber Well	9.6	84	111-140	Ridges with red and white pine. soil=Neconish-Kinross- Wainola Complex 0-6% slopes

s t	Shingleton	Shingleton Mgt. Unit			- Forested	Stands Compartment: 6 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
51	6122 - Black Spruce	Poletimber Well	17.5	40	1-50	Near Holland Ditch. soil=Neconish-Kinross-Wainola Complex 0-6% slopes
52	429 - Mixed Upland Conifers	Poletimber Medium	1.4	40	81-110	Near Holland Ditch. soil=Neconish-Kinross-Wainola Complex 0-6% slopes
53	4132 - Aspen, Jack Pine	Poletimber Medium	3.6	40	1-50	soil=Neconish-Kinross-Wainola Complex 0-6% slopes
54	4119 - Mixed Northern Hardwoods	Sawtimber Well	13.2	87	111-140	Adjacent to private land. Hilly terrain. Soil=Liminga Fine Sand 0-6% & 15-35% slopes
55	6125 - Lowland Black Spruce, Jack Pine	Poletimber Well	8.6	40	1-50	soil=Finch-Spot Complex and Rosseau Fine Sand 15-35% slopes
56	6122 - Black Spruce	Poletimber Well	17.7	40	1-50	Soil=Markey Mucky Peat and Finch-Spot Complex 0-3% slopes
58	6125 - Lowland Black Spruce, Jack Pine	Poletimber Well	37.1	60	51-80	Cut next entry. soil=Finch-Spot Complex 0-3% slopes
60	6121 - Tamarack	Poletimber Medium	2.6	67	1-50	Cut next entry. Near M-77, surrounded by bog. Soil=Markey Mucky Peat
61	42220 - Natural Jack Pine	Sapling Well	22.1	5	Immature	OPIC - FMD: Partially visible from M-77. soil=Neconish-Kinross-Wainola Complex 0-6% slopes and Finch-Spot Complex 0-3% slopes  [4-7-10] Stand is now under contract TS 41-014-09-01 Beaver View. See also FTP C41-1414 (jack pine regeneration.)  Residual BA: red & white pine = 1 sq.ft./acre.  [4-28-12] Sale is now complete TCR dtd 4-16-12. ( RH10/29/12) scarifed summer of 2012 by holli Fp regen check in 3 years per work instructions.
62	42260 - Natural Pine, Mixed Deciduous	Sapling Well	24.1	5	Immature	Adjacent to private property (to south), a survey request has been filed. Spruce with a mix of species similar to that currently on site will be acceptable for regeneration. 35=r.pine, w.pine soil=Neconish-Kinross-Wainola Complex 0-6% slopes and Markey Mucky Peat[4-7-10] Stand is now under contract TS 41-014-09-01 Beaver View. Residual BA: White pine = 1; red pine = 3; total = 4 sq.ft./acre.[4-28-12] Sale is now complete TCR dtd 4-16-12.
63	4136 - Aspen, Mixed Conifer	Sapling Poor	6.8	5	Immature	soil=Neconish-Kinross-Wainola Complex 0-6% slopes & Markey Mucky Peat [4-7-10] Stand is now under contract TS 41-014-09-01 Beaver View. See also FTP C41-1414 (jack pine regeneration.) Residual BA: White pine = 8; red pine = 8; total = 16 sq.ft./acre. [4-28-12] Sale is now complete TCR dtd 4-16-12. ( RH10/29/12) scarifed summer of 2012 by holli Fp regen check in 3 years per work instructions.
64	6121 - Tamarack	Poletimber Well	2.7	40	Unspecified	Low, wet ground. Soil=Markey Mucky Peat

s t	Shingleton Mgt. Unit			Report 7	<ul><li>Forested</li></ul>	Stands Compartment: 6 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
65	42210 - Natural Red Pine	Sawtimber Well	10.2	84	111-140	soil=Neconish-Kinross-Wainola Complex 0-6% slopes
66	42350 - Upland Hemlock	Sawtimber Well	3.2	79	111-140	Narrow stand of hemlock at bottom of hardwood hill. soil=Neconish-Kinross-Wainola Complex 0-6% slopes
67	429 - Mixed Upland Conifers	Poletimber Well	14.5	55	111-140	lots of small openings through out. soil=Neconish-Kinross- Wainola Complex 0-6% slopes
68	42220 - Natural Jack Pine	Poletimber Well	10.0	48	51-80	soil=Neconish-Kinross-Wainola Complex 0-6% slopes and Rosseau Fine Sand 15-35% slopes
70	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	5.4	80	111-140	OPIC - FMD: Manistique River riparian zone; includes a steep bank and floodplain with old oxbows. Mix of conifers and hardwoods - species composition and BA varries.  Soil=Pelkie, occasionally flooded-Deford frequently flooded Complex 0-6% slopes
72	6122 - Black Spruce	Poletimber Medium	1.6	70	81-110	OPIC - FMD: Slightly higher ground with med-tall brush species including leatherleaf and alder. Soil=37 Dawson, Greenwood and Loxley soils
74	6121 - Tamarack	Poletimber Poor	5.2	77	1-50	Low, wet ground with med-tall brush species including leatherleaf and alder. Old bog area filling in with trees. Soil=37 Dawson, Greenwood and Loxley soils
81	4319 - Mixed Upland Forest	Poletimber Medium	7.7	67	51-80	Riparian zone along Holland Ditch - steep bank and area at top of bank. soil=525B Neconish-Wainola-Kinross Complex 0-6% slopes
82	6122 - Black Spruce	Poletimber Medium	1.8	77	51-80	Narrow stand that is slightly higher than the surrounding bog stands.
83	42350 - Upland Hemlock	Sawtimber Well	2.1	107	171-200	OPIC - FMD: Adjacent to private property (lines are not in). Old road is near the property line. Soil=525B Neconish-Wainola-Kinross Complex 0-6% slopes
87	42220 - Natural Jack Pine	Poletimber Medium	1.6	40	1-50	Grassy hill along a trail road with a few trees. Next to Holland Ditch. soil=Rosseau Fine Sand 15-35% slopes
88	42210 - Natural Red Pine	Sawtimber Well	3.9	84	111-140	soil=Neconish-Kinross-Wainola Complex 0-6% slopes
89	42340 - Upland Spruce/Fir	Sawtimber Medium	10.6	84	111-140	soil=Neconish-Kinross-Wainola Complex 0-6% slopes
90	429 - Mixed Upland Conifers	Sawtimber Well	17.1	72	141-170	Scattered large red and white pine. soil=Neconish-Kinross- Wainola Complex 0-6% slopes
91	429 - Mixed Upland Conifers	Poletimber Well	13.0	69	111-140	Cut next entry. Narrow stand between M-77 and private land. Soil=Markey Mucky Peat. Consider selling this property to consolidate state land better.

S t a n d	Shingleto		Report 7	<ul><li>Forested</li></ul>	Stands Compartment: 6 Year of Entry: 2019	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
92	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	1.1	84	51-80	Cut next entry year. Small group of trees within a bog, near M-77. Soil=Markey Mucky Peat

Compartment: 6 Year of Entry: 2019



Stand	Cover Type	Acres	Managed Site	General Comments:
6	6225 - Bog	84.9	No	Bog with leatherleaf and other brush species. Scattered spruce and tamarack. Soil=37 Dawson, Greenwood and Loxley soils
7	6225 - Bog	0.6	No	Bog with leatherleaf and other brush species. Scattered spruce and tamarack. Soil=37 Dawson, Greenwood and Loxley soils
9	6224 - Treed Bog	12.5	No	Bog with leatherleaf and other brush species. Scattered spruce and tamarack. Soil=37 Dawson, Greenwood and Loxley soils
18	6224 - Treed Bog	2.3	No	
57	6225 - Bog	2.4	No	Low, wet ground. soil=Neconish-Kinross-Wainola Complex 0-6% slopes
59	6224 - Treed Bog	24.0	No	OPIC - FMD: Large bog next to M-77. Contains some small pockets of trees (b.spruce, tamarack). Soil=Markey Mucky Peat
69	6224 - Treed Bog	10.3	No	Bog adjacent to M-77. Soil=Markey Mucky Peat
71	122 - Road/Parking Lot	0.5	No	parking lot
80	6224 - Treed Bog	1.0	No	Small bog, with scattered trees, within a spruce stand. Place retention area around this stand when cutting surrounding stand 21. Sol=37 Dawson, Greenwood and Loxley soils
85	500 - Water	23.7	No	OPIC - FMD: Manistique River
86	6224 - Treed Bog	5.7	No	OPIC - FMD: Bog with a few scattered trees (j.pine, b.spruce, tamarack). Soil=Markey Mucky Peat
94	500 - Water	1.0	No	OPIC - FMD: Old oxbows of the Manistique River.
101	122 - Road/Parking Lot	2.8	No	OPIC - FMD: Co P 498 R-O-W (10 curves Rd).