

# **Compartment Review Presentation**

**Shingleton Forest Management Unit** 

Compartment 41115 Entry Year 2019 Acreage: 1,584

County Schoolcraft

Management Area: Bullock Ranch

Revision Date: 2017-02-08

Stand Examiner: Scott Kentner

**Legal Description:** 

T46N, R13W, Sec. 31, 32; T45N, R13W, Sec. 5, 6

## **Identified Planning Goals:**

To maintain the large opening complexes for a suite of wildlife species dependant upon this type of habitat; and to provide sustainable forest eco-system management.

## Soil and topography:

The majority of the compartment is low, marshy ground with ridges of pine. The soil types for the ridges are mainly Deford-Rubicon mixes; while the soil types for the low ground are mainly drained Marky-Deford Mucks or Carbondale, Lupton and Tawas soils.

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

The Seney National Wildlife Refuge borders the south side of the compartment; the town of Seney is in the Northeast of the compartment, and the remainder of the compartment is bordered by state owned land.

### **Unique Natural Features:**

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

## Archeological, Historical, and Cultural Features:

Man-made ditches exist where swamp drainage was attempted for farming.

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

HCVA - Fox River

### Watershed and Fisheries Considerations:

The Fox River is found on the eastern border of this compartment. The Fox River supports good natural reproduction of brook trout and provides excellent nursery habitat for young fish. 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 immediately south and west of the village of Seney. Important features include M-28 on the north the Fox River and M-77 on the east. Clark Ditch empties into Townline Ditch within this compartment. Pre-settlement data show tamarack and spruce as the dominant timber types within this area. A small amount of cedar was also present. Landforms higher above the water table appear to have contained red pine and red maple. Likely due to lowering of the water table associated with Clark and Townline ditches, the current dominant forest species are red pine and jack pine.

The wildlife habitat management objectives for this compartment include protecting the lowland systems and providing age class and structural diversity between upland conifer stands.

## Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel. There is insufficient data to determine the glacial drift thickness. The Ordovician Utica Shale subcrops below the glacial drift. The Utica doe not have a current economic use. Gravel pits at not found in the area and potential appears to be limited. There is no commercial oil and gas production in the UP.

#### **Vehicle Access:**

The majority of the compartment is low, wet ground with large islands of pine trees, and is without roads.

#### **Survey Needs:**

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None needed at this time.

# **Recreational Facilities and Opportunities:**

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

## **Fire Protection:**

This compartment lies almost entirely within the Fox River Zone Dispatch Area. Lack of roads in most of the compartment makes access to fires difficult.

## **Additional Compartment Information:**

The following reports from the Inventory are attached:

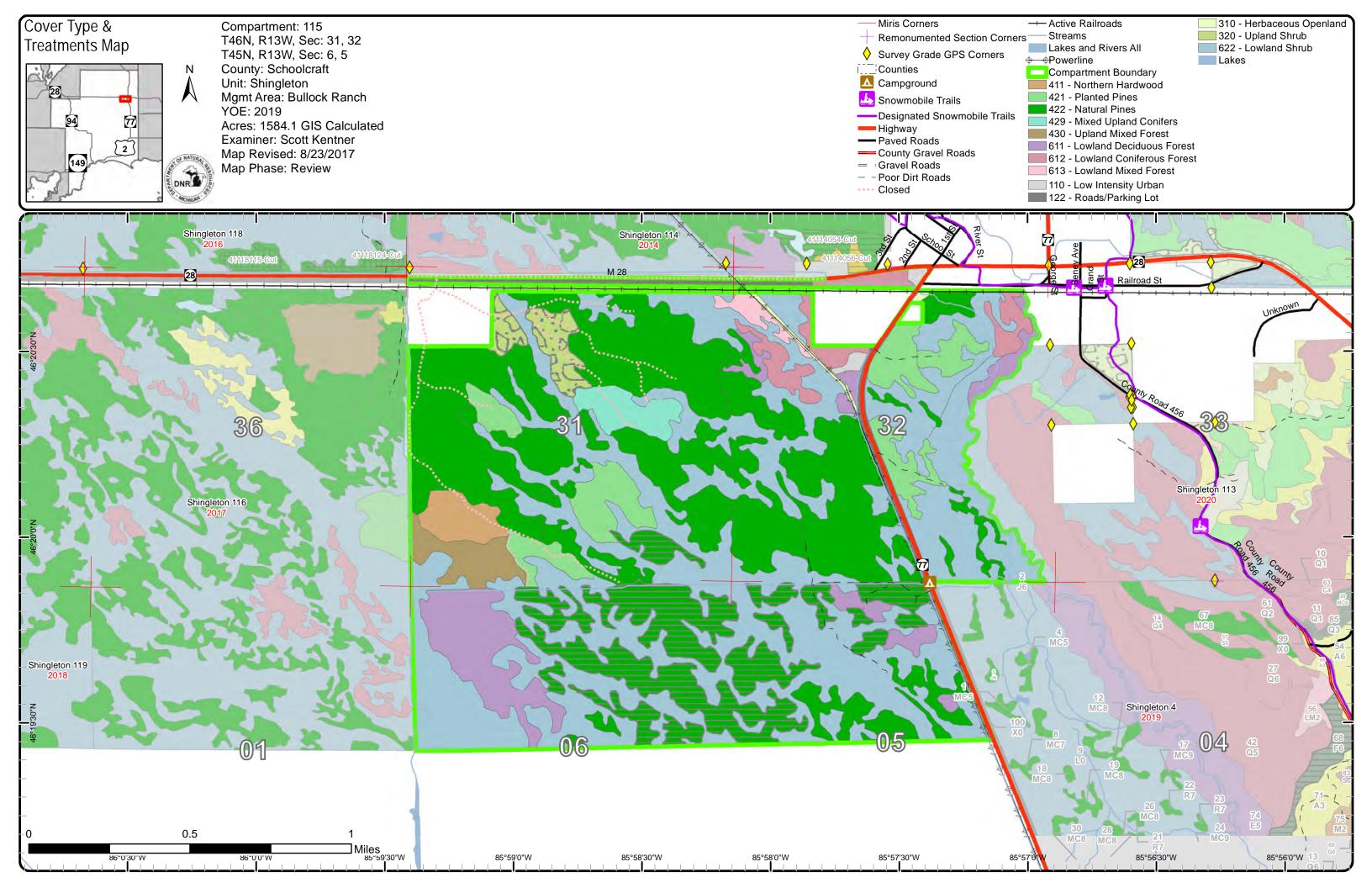
Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

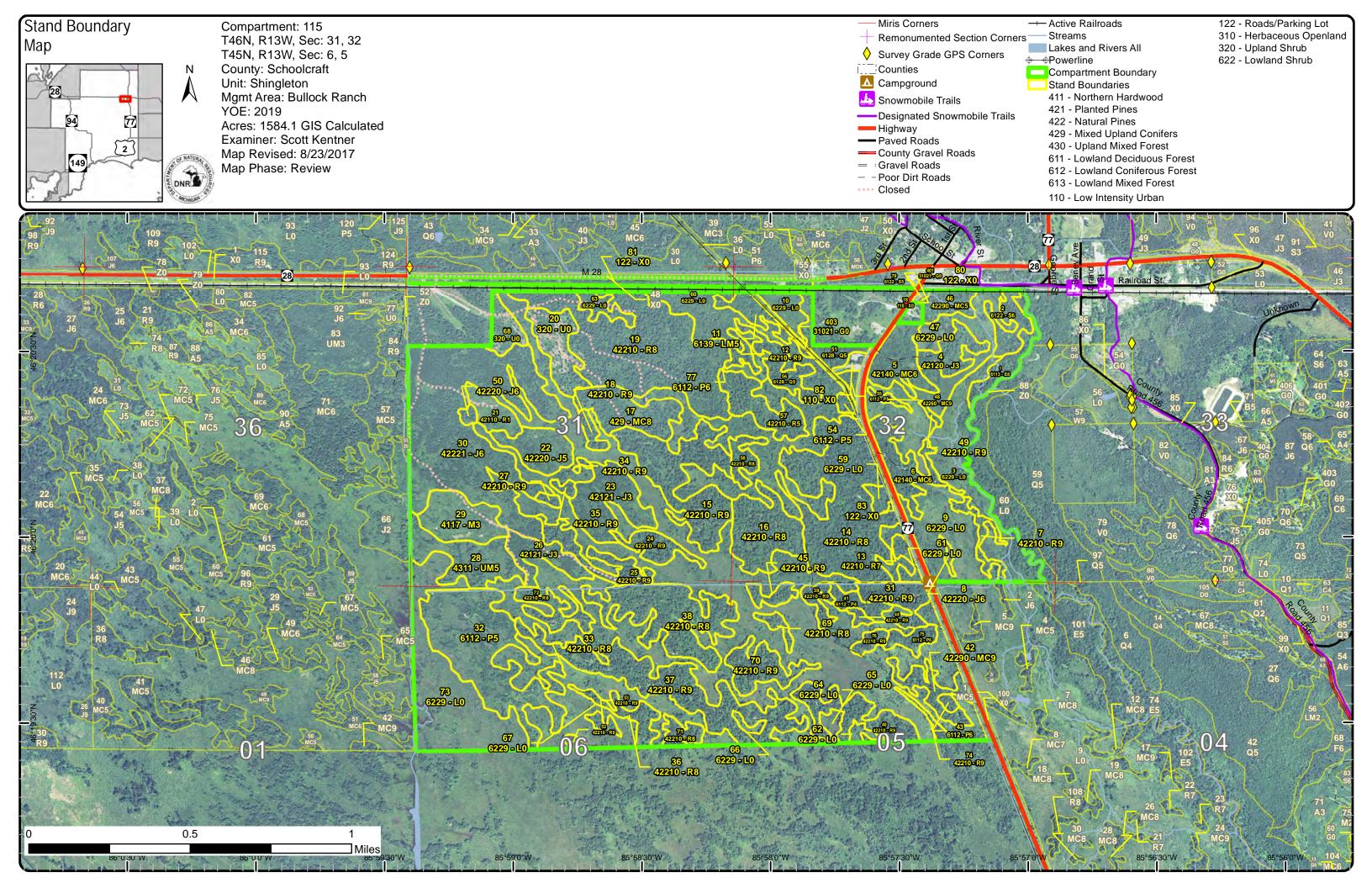
The following information is displayed, where pertinent, on the attached compartment maps:

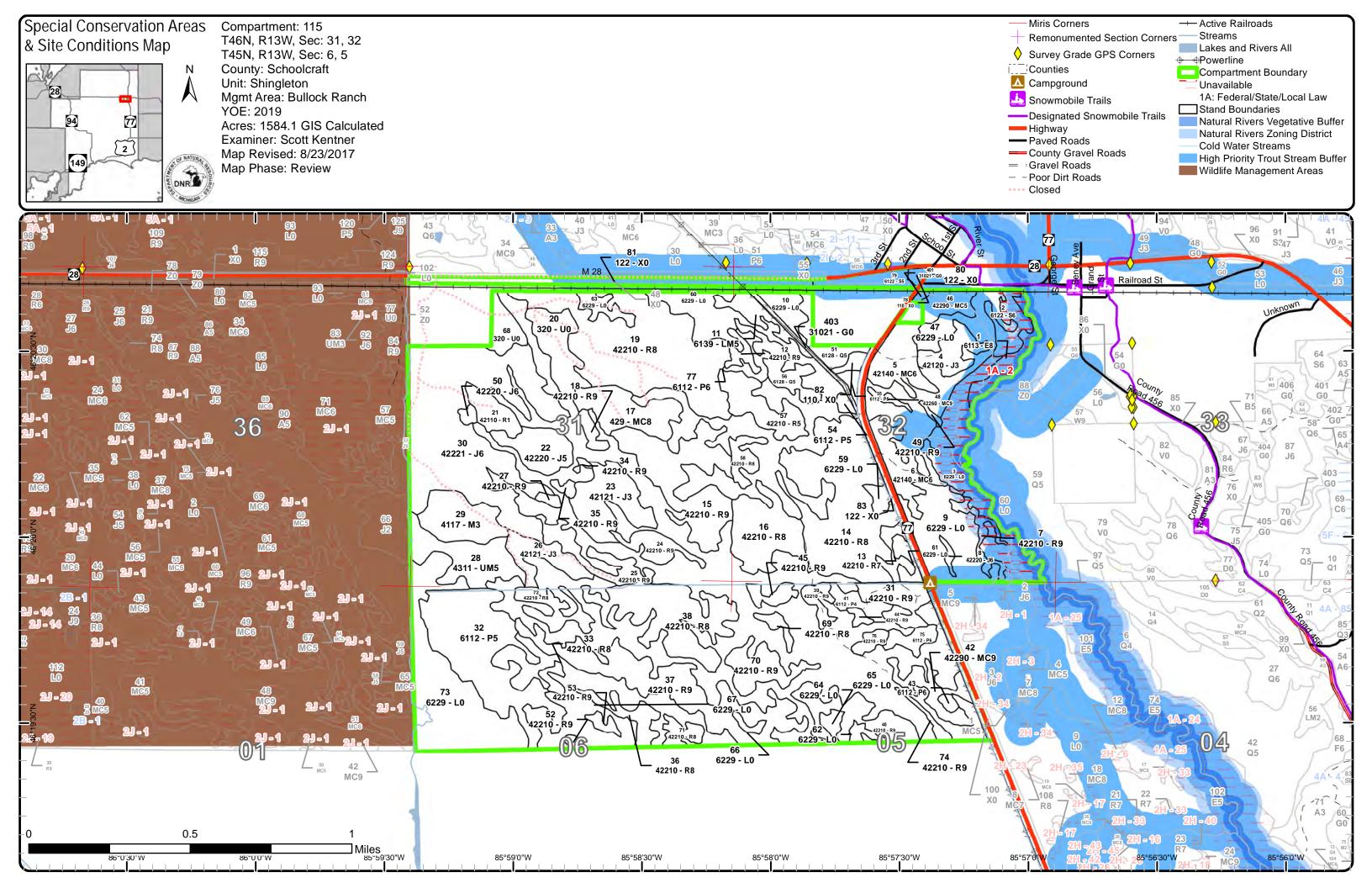
Base feature information, stand boundaries, cover types, and numbers Proposed treatments

Site condition boundaries

Details on the road access system







Shingleton Mgt. Unit Scott Kentner: Examiner



Age Class

	No.	A STAN		\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	§ /\$	No. 10	, % /%		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		\$ /6/	70.7	81, K	\$2.55 \ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	O L	g* Jue	N. S.
Herbaceous Openland	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Jack Pine	0	0	0	167	2	0	1	0	0	0	0	0	0	0	0	0	0	0	170
Lowland Aspen/Balsam Poplar	0	0	0	58	13	5	4	0	0	0	0	0	0	0	0	0	0	0	80
Lowland Conifers	0	0	0	0	0	12	8	0	0	0	0	0	0	0	0	0	0	0	20
Lowland Deciduous	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	10
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8
Lowland Shrub	599	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	599
Lowland Spruce/Fir	0	0	0	0	8	0	10	0	0	0	0	0	0	0	0	0	0	0	18
Natural Mixed Pines	0	0	0	0	0	0	8	13	0	0	0	0	0	0	0	0	0	0	21
Northern Hardwood	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Planted Mixed Pines	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Red Pine	0	0	9	0	0	0	0	351	107	0	0	0	0	0	0	0	0	21	487
Upland Conifers	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	22
Upland Mixed Forest	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Upland Shrub	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Urban	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Total	673	0	29	282	23	17	41	386	107	0	0	0	0	0	0	0	0	29	1586



# **Report 2 – Treatment Summary**

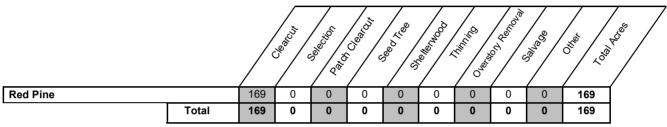
# Shingleton Mgt. Unit Year of Entry: 2019

#### **Acres of Harvest**

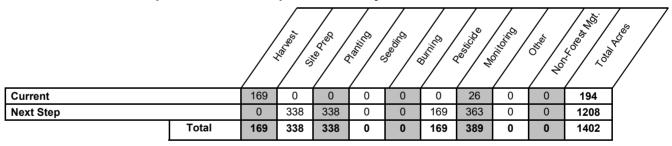
Compartment 115
Total Compartment Acres: 1,584

Commercial Harvest - 169 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

# **Cover Type by Harvest Method**



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



Proposed Start Date: 31 41115031-Cut

**Habitat Cut: No** Site Condition:

Prescription Clearcut with Retention: Remove all trees down to 2". Follow retention guidelines.

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, Skidder/Mechanical; Planting, Initial Plant; Planting, Replant; Monitoring,

Treatments: Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable red pine

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

33 41115033-Cut 2.8 42210 - Natural Sawtimber 72 1-50 Harvest Clearcut with 4211 - Planted Even-Aged Proposal Red Pine Medium Retention Red Pine

**Habitat Cut: No Site Condition:** 

Prescription Clearcut with Retention: Remove all trees down to 2". Follow retention guidelines.

Specs:

SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, Skidder/Mechanical; Planting, Initial Plant; Planting, Replant; Monitoring,

<u>Treatments:</u> Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Red pine

Regen:

Other

Comment:

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

Retention

Red Pine

**Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type Approval** Age n Density Method Objective Status Name CoverType Age Range Type Structure d 42210 - Natural 4211 - Planted 36 41115036-Cut 8.5 Sawtimber 69 51-80 Clearcut with Even-Aged Proposal Harvest Red Pine Red Pine Medium Retention

**Habitat Cut: No** Site Condition:

Prescription Clearcut with Retention: Remove all trees down to 2". Follow retention guidelines.

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Pesticide, Skidder/Mechanical; Monitoring,

Treatments: Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Red pine

Regen:

Other Comment:

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

37 41115037-Cut 42210 - Natural Sawtimber 69 51-80 Harvest Clearcut with 4211 - Planted Even-Aged Proposal

Site Condition: **Habitat Cut: No** 

Prescription Clearcut with Retention: Remove all trees down to 2". Follow retention guidelines.

Well

Red Pine

Specs:

SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Pesticide, Skidder/Mechanical; Monitoring, Next Step

Treatments: Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Red pine

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

41115038-Cut 40.5 42210 - Natural Sawtimber 51-80 Harvest Clearcut with 4211 - Planted Even-Aged Proposal Red Pine Retention

Red Pine Medium

Prescription Clearcut with Retention: Remove all trees down to 2". Follow retention guidelines.

Site Condition:

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Pesticide, Skidder/Mechanical; Monitoring,

Treatments: Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Red pine

**Habitat Cut:** No

Regen:

Other Comment:

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

41115039-Cut 46 42210 - Natural Sawtimber 75 111-Harvest Clearcut with 4211 - Planted Even-Aged Proposal

Red Pine Red Pine Well 140 Retention

**Habitat Cut: No Site Condition:** 

Prescription Clearcut with Retention: Remove all trees down to 2". Follow retention guidelines.

Specs:

SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Pesticide, Skidder/Mechanical; Monitoring,

Treatments: Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Red pine

Regen:

**Other** Comment:

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

DNR DNR

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
44	41115044-Cut	1.6	42210 - Natural Red Pine	Sawtimber Well	75	81-110	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Proposal

Habitat Cut: No Site Condition:

<u>Prescription</u> Clearcut with Retention: Remove all trees down to 2". Follow retention guidelines.

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Pesticide, Skidder/Mechanical; Monitoring,

<u>Treatments:</u> Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Red Pine

Regen: Other

Comment:

Proposed Start Date: 10/01/2018

45 41115045-Cut 4.4 42210 - Natural Sawtimber 65 1-50 Harvest Clearcut with 4211 - Planted Even-Aged Proposal Red Pine Well Retention Red Pine

Habitat Cut: No Site Condition:

<u>Prescription</u> Clearcut with Retention: Remove all trees down to 2". Follow retention guidelines.

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Pesticide, Skidder/Mechanical; Monitoring,

Treatments: Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Red pine

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

68 41115068- 8.2 320 - Upland Shrub Nonstocked 0 Unspec Monitoring Artificial 4211 - Planted Even-Aged Draft Field Monitor ifjed Regen(1yr) Red Pine Boundary

Habitat Cut: No Site Condition:

Prescription Specs:

Novt Stop · Mor

<u>Next Step</u>; Monitoring, Artificial Regen(3yr) <u>Treatments:</u>

Acceptable Red pine

Regen:

Regen:

Other Percent to Treat = 100%

Comment:

Proposed Start Date: 06/15/2017

69 41115069-Cut 3.1 42210 - Natural Sawtimber 73 1-50 Harvest Clearcut with 4211 - Planted Even-Aged Proposal Red Pine Medium Red Pine Red Pine

Habitat Cut: No Site Condition:

<u>Prescription</u> Clearcut with Retention: Remove all trees down to 2". Follow retention guidelines.

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Pesticide, Skidder/Mechanical; Monitoring,

<u>Treatments:</u> Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Red pine

Regen:

<u>Other</u>

Comment:

Proposed Start Date: 10/01/2018

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
70	41115070-Cut	14.5	42210 - Natural Red Pine	Sawtimber Well	71	51-80	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Proposal

Site Condition: **Habitat Cut: No** 

Prescription Clearcut with Retention: Remove all trees down to 2". Follow retention guidelines.

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Pesticide, Skidder/Mechanical; Monitoring,

<u>Treatments:</u> Artificial Regen(1yr), Monitoring, Artificial Regen(3yr)

Acceptable Red pine

Regen:

Other Comment:

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

71 41115071-Cut 42210 - Natural Sawtimber 51-80 Harvest Clearcut with 4211 - Planted Even-Aged Proposal Red Pine Red Pine Medium Retention

**Habitat Cut: No** Site Condition:

Prescription Clear-cut with Retention: Remove all a trees down to 2". Follow retention guidelines.

Specs:

SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Pesticide, Skidder/Mechanical; Monitoring, Next Step

Treatments: Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Red pine

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

72 41115072-Cut 42210 - Natural Sawtimber 51-80 Harvest Clearcut with 4211 - Planted Even-Aged Proposal Red Pine Red Pine Medium Retention

**Habitat Cut:** No Site Condition:

Prescription Clearcut with Retention: Remove all trees down to 2". Follow retention guidelines.

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Pesticide, Skidder/Mechanical; Monitoring,

Treatments: Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Red pine

Regen:

Other Comment:

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

76 41115076-Cut 3.3 42210 - Natural Sawtimber 75 81-110 Harvest Clearcut with 4211 - Planted Even-Aged Proposal Red Pine Well Retention Red Pine

**Habitat Cut: No Site Condition:** 

Prescription Clearcut with Retention: Remove all trees down to 2". Follow retention guidelines.

Specs:

SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Pesticide, Skidder/Mechanical; Monitoring,

Treatments: Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Red pine

Regen:

Other

Comment:

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

**Total Treatment** 194.4 **Acreage Proposed:** 

Compartment: 115

Shingleton Mgt. Unit

Year of Entry: 2019 **Scott Kentner: Examiner** 

# **Availability for Management**

96%

Total	Acres	Acres Avail	Acres		<b>Dominant Site Conditions</b>
Acres	Available	With Condition	Not Available		1A
5	5	0	0	Herbaceous Openland	
170	170	0	0	Jack Pine	
80	80	0	0	Lowland Aspen/Balsam Poplar	
20	20	0	0	Lowland Conifers	
10	0	0	10	Lowland Deciduous	10
8	8	0	0	Lowland Mixed Forest	
599	562	0	37	Lowland Shrub	37
17	10	0	7	Lowland Spruce/Fir	7
21	21	0	0	Natural Mixed Pines	
20	20	0	0	Northern Hardwood	
33	33	0	0	Planted Mixed Pines	0
487	483	0	4	Red Pine	4
21	21	0	0	Upland Conifers	
24	24	0	0	Upland Mixed Forest	
26	26	0	0	Upland Shrub	
43	43	0	0	Urban	
1,584	1,527		58	Total Forested Acres	58

4%

Relative Percent

<sup>\*</sup>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.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
2	Unavailable	1A: Federal/State/Local Law	58	Unspecified	Unspecified	Unspecified	Unspecified
	<b>Comments:</b> Fox River Natural R	iver					

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: 115
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.

Conservatio Area	п Туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish speci year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
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 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	Shingleton Mgt. Unit			– Forested	Stands Compartment: 115 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6113 - Lowland Maple	Sawtimber Medium	9.8	51	51-80	HCVA - Natural River, Fox River. Low, wet area next to the Fox River, flood plains.
2	6122 - Black Spruce	Poletimber Well	9.5	56	81-110	HCVA - Natural River, Fox River.
4	42120 - Planted Jack Pine	Sapling Well	11.0	20	Immature	Planted to Jack Pine, with other natural regeneration (r.pine, w.pine, b.spruce, aspen). Scattered large Red and White Pine.
5	42140 - Planted Mixed Pine	Poletimber Well	16.9	20	Immature	Planted to red pine. Low, flat areas have regenerated to aspen. Scattered large red & white pine. M-77 is west boundary of stand.
6	42140 - Planted Mixed Pine	Poletimber Well	16.1	20	Immature	Planted to red pine; some areas with natural regeneration - j.pine and b.spruce. Lower, flat areas have regenerated to aspen. Scattered red and white pine. M-77 is west boundary of stand.
7	42210 - Natural Red Pine	Sawtimber Well	6.5	67	81-110	HCVA - Natural River, Fox River. Small island chain in a large marsh near the Fox River.
8	42220 - Natural Jack Pine	Poletimber Well	1.4	53	51-80	Small flat area with trees in a large marsh. Visible from M-77.
11	6139 - Mixed Lowland Forest	Poletimber Medium	7.8	40	81-110	Adjacent to the railroad and the powerline; near M-28. Low, wet area with red pine and aspen.
12	42210 - Natural Red Pine	Sawtimber Well	3.7	63	51-80	Thinned last entry. Regeneration is aspen, maple and spruce on the flatter terrain; and red, white, and jack pine on the ridges.
13	42210 - Natural Red Pine	Sawtimber Poor	4.2	64	1-50	Thinned last entry - BA varies, but is generally sparse. Regeneration is mainly aspen and maple. Next to M-77.
14	42210 - Natural Red Pine	Sawtimber Medium	71.8	64	51-80	Thinned in past- variable BA 20-90. Flat areas with tall brush and aspen & maple regeneration; ridges with blueberry and pine regeneration.
15	42210 - Natural Red Pine	Sawtimber Well	42.0	65	51-80	Cut apx. 1997. Old roads have pine regeneration. Flat ground vegetated by tall brush and aspen regeneration.
16	42210 - Natural Red Pine	Sawtimber Medium	26.8	65	51-80	Thinned last entry - BA varrries from 20 to 90.
17	429 - Mixed Upland Conifers	Sawtimber Medium	21.5	67	1-50	Cut apx. 1996. Mainly flat ground with tall brush and dense grass/sedge. Red and White Pine are widely spaced. Old roads have JP regeneration.
18	42210 - Natural Red Pine	Sawtimber Well	3.5	67	51-80	Cut apx. 1997. Flat ground with tall brush and aspen regeneration; higher ground with blueberry and pine regeneration.

s t	Shingletor	n Mgt. Unit		Report 7	- Forested	Stands Compartment: 115 Year of Entry: 2019
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
19	42210 - Natural Red Pine	Sawtimber Medium	82.2	65	81-110	Thinned apx 1997; BA is variable from 30-90. Low ground with aspen regeneration and tall brush; higher ground with blueberry and some pine regeneration in the old roads. Low, wet areas throughout.
21	42110 - Planted Red Pine	Sapling Poor	9.1	13	Immature	[8-25-06] 1116 red pine/acre were handplanted by Dept. of Corrections under FTP C41-922 - partial FTP completion dtd 6-16-06. Schedule survival check for 2007.  [5/11/07 km] Survival check with D.Kuhr: zero planted trees were found (none either dead or alive). Don is planning to plant this stand in fall 07 or spring 08.  Higher ground has blueberry/sedge; lower ground has thick sedge and tall brush.  [6/1/09] Area was planted with summer students. 1st year regen check needed in 2010  [10-18-10] 2010 regen check 286 rp T/A. May need additional work. The ridges of stand 21 are at 900T/A the numbers are high because the trees were planted quite close. The low areas are a mix of lowland brush with some scattered trees these areas are below 600 t/a. Judging by the photo from 1998 these areas are regenerating to a similar condition. Close the FTP at this point, as regeneration is successful. (9/13RH)
22	42220 - Natural Jack Pine	Poletimber Medium	15.1	22	Immature	Ridges with more jack pine; lower ground with more brush.
23	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	24.3	24	Immature	Planted to jack pine; natural regeneration includes red pine, white pine and aspen.
24	42210 - Natural Red Pine	Sawtimber Well	8.6	65	81-110	Ridges of red pine in a marsh. Regeneration is red pine, white pine and b.spruce.
25	42210 - Natural Red Pine	Sawtimber Well	13.1	65	81-110	Narrow ridges of red pine. Regeneration consists of red pine, white pine, jack pine and b.spruce.
26	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	12.3	28	Immature	Regenerating to a mix of jack pine and aspen, with a few red and white pine. Higher ground has blueberry, lower ground has thick sedge and tall brush.
27	42210 - Natural Red Pine	Sawtimber Well	1.5	65	81-110	Small, high knob of red pine.
28	4311 - Pine, Aspen Mix	Poletimber Medium	23.8	29	Immature	Regenerating to a mix of trees: mainly aspen with some jack pine and a few red and white pine. Higher ground has blueberry; lower ground has thick sedge and tall brush.

s t	Shingletor	Mgt. Unit		Report 7	- Forested	Stands	Compartment: 115 Year of Entry: 2019	OF NATURAL PROPERTY OF NAT
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	MICHIGAN
29	4117 - Mixed N. Hardwood - Pine	Sapling Well	20.2	17	Immature	[5/11/07 km] Walk throu regen is sparse (aspen, plant this stand in fall	FTP C41-922: no regene was done. Igh regen check with D.Kul red pine, jackpine); Don is 07 or spring 08. Higher gro und has thick sedge and ta	hr. Natural planning to ound has
						regen of [10-18-10] 2010 regen of work. The ridges in state because the trees were pulse of lowland brush with below 600 t/a. Judging by regenerating to a similar	atted with summer students, wheck needed in 2010 neck 460 rp T/A. May need nd 29 are lower but are still lanted quite close. The low a some scattered trees these the photo from 1998 these condition. Close the FTP and is successful. (RH9/13)	d additional I at 700 t/a areas are a se areas are se areas are at this point,
30	42221 - Natural Jack Pine, Mixed Deciduous	Poletimber Well	104.7	22	Immature	south 1/2 has some low	gher ground and has more ver areas and more aspen . Overall a JP stand.	
31	42210 - Natural Red Pine	Sawtimber Well	11.6	67	81-110		Near M-77.	
32	6112 - Lowland Aspen	Poletimber Medium	58.2	21	Immature	prescri [1-29-04 RFT] FTP car [5/11/07 km] Walk throu the higher ground has n aspen, red pine and v blueberry; the lower grou	26 as sale #047-91, with an ibed burn (C41-604). Incelled. Areas that can realready have. If you have already have attrally regenerated to jack white pine. The higher ground (majority) has thick secess; surrounded by low, we ditches.	generate nr. Some of k pine with und has dge and tall
33	42210 - Natural Red Pine	Sawtimber Medium	2.8	72	1-50	Ridges of pine, thinn	ned last entry. Variable BA	20-90.
34	42210 - Natural Red Pine	Sawtimber Well	0.8	65	81-110	Small, h	igh knob of red pine.	
35	42210 - Natural Red Pine	Sawtimber Well	1.7	65	81-110	Small, h	igh knob of red pine.	
36	42210 - Natural Red Pine	Sawtimber Medium	8.5	69	51-80	Ridges of pine, thinned	last entry. BA varriable fro	om 20-90.
37	42210 - Natural Red Pine	Sawtimber Well	50.3	69	51-80	Ridges of pine, thinn	ed last entry. Variable BA	20-90.
38	42210 - Natural Red Pine	Sawtimber Medium	40.5	73	51-80	Ridges of pine, thinr	ned last entry. Variable BA	20-90.
39	42210 - Natural Red Pine	Sawtimber Well	4.6	75	111-140	Blueberry on ridge	s; med/tall brush in lower a	areas.
40	42210 - Natural Red Pine	Sawtimber Well	20.7	76	81-110		variable - from 20-90. Gred roads from thinning.	eat Regen

s t	Shingleton	Mgt. Unit		Report 7	– Forested	Stands Compartment: 115 Year of Entry: 2019			
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:			
41	6112 - Lowland Aspen	Poletimber Poor	6.2	37	51-80	Low, wet ground with scattered trees.			
42	42290 - Natural Mixed Pine	Sawtimber Well	11.5	67	51-80	Near M-77. Ridges of pine in a marsh. Flat areas have aspen regeneration; higher ground has pine regeneration in the old roads.			
43	6112 - Lowland Aspen	Poletimber Well	1.5	37	1-50	Aspen with a few scattered pine trees. Many trees are still 2-4" DBH.			
44	42210 - Natural Red Pine	Sawtimber Well	1.6	75	81-110	Ridges of red pine. Regeneration is a mix of aspen and r.maple with some red pine, white pine and b.spruce.			
45	42210 - Natural Red Pine	Sawtimber Well	4.4	65	1-50	Thinned apx. 2000.			
46	42290 - Natural Mixed Pine	Poletimber Medium	8.2	52	51-80	Railroad ROW is north boundary, and it is near M-77. Low, we ground with a few small ridges. There is an intermittant drain through the stand. Species composition and BA varies throughout.			
48	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	1.6	67	51-80	Small, narrow ridge in a large marsh; visible from M-77.			
49	42210 - Natural Red Pine	Sawtimber Well	1.0	67	51-80	Small, narrow ridge in a large marsh.			
50	42220 - Natural Jack Pine	Poletimber Well	1.7	37	81-110	JP are about 2-3 sticks tall			
51	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	8.4	54	111-140	Between the powerline and the railroad, near M-28 and M-77. Low, wet ground with scattered trees and tall brush.			
52	42210 - Natural Red Pine	Sawtimber Well	1.2	69	51-80	Small knoll of pine, adjacent to SNWR.			
53	42210 - Natural Red Pine	Sawtimber Well	2.4	69	51-80	Ridges of pine, thinned last entry. BA varriable from 20-90.			
54	6112 - Lowland Aspen	Poletimber Medium	1.7	52	81-110	Low, wet area with scattered trees. Near the powerline and M-77.			
55	6112 - Lowland Aspen	Poletimber Medium	2.3	56	81-110	Near the powerline and M-77. Low, wet ground with scattered trees.			
56	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	11.8	40	51-80	Chain of ridges in a large marsh. Higher ground with blueberry, lower ground with med-tall brush.			
57	42210 - Natural Red Pine	Poletimber Medium	16.9	65	51-80	Thinned last entry - BA is variable 30-80. Regeneration on the lower ground consists of aspen and spruce; regeneration on the higher ground consists of j.pine, r.pine, and w.pine.			

S t	Shingleton	Mgt. Unit		Report 7	– Forested	Stands Compartmer Year of Entr	15/ 64 \ 10
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	MICHIGAN. 9
58	42210 - Natural Red Pine	Sawtimber Medium	6.5	64	51-80	Thinned last entry - BA varries from 30 consists of r.pine and w.pine on the high spruce and r.maple on the low	er ground and aspen,
69	42210 - Natural Red Pine	Sawtimber Medium	3.1	73	1-50	Ridges of pine, thinned last entry. V	ariable BA 20-90.
70	42210 - Natural Red Pine	Sawtimber Well	14.5	71	51-80	Ridges of pine, thinned last entry. V	ariable BA 20-90.
71	42210 - Natural Red Pine	Sawtimber Medium	5.2	71	51-80	Ridges of pine, thinned last entry. V	ariable BA 20-90.
72	42210 - Natural Red Pine	Sawtimber Medium	9.9	71	51-80	Ridges of pine, thinned last entry. \	/ariable BA 20-90.
74	42210 - Natural Red Pine	Sawtimber Well	2.6	67	51-80	Narrow ridge of pine in a large marsh. Regeneration is mainly as	
75	6112 - Lowland Aspen	Poletimber Well	5.5	37	51-80	Low, wet ground with scattered tre	es. Near M-77.
76	42210 - Natural Red Pine	Sawtimber Well	3.3	75	81-110	Ridges of red pine. Regeneration is a mix with some red pine, white pine	
77	6112 - Lowland Aspen	Poletimber Well	4.7	45	81-110	Low, wet area with a large clone of aspen M-28.	. Near the railroad and

6122 - Black Spruce

79

Poletimber

Medium

7.5

30

51-80

West of Seney Office.



Stand	Cover Type	Acres	Managed Site	General Comments:
3	6229 - Mixed lowland shrub	38.0	No	HCVA - Natural River, Fox River. Large low, wet area with scattered trees.
9	6229 - Mixed lowland shrub	32.5	No	Low, wet area adjacent to M-77. Tall brush with scattered trees.
10	6229 - Mixed lowland shrub	7.2	No	At intersection of powerline and railroad, near M-28. Low, wet, and brushy; with a few scattered trees.
20	320 - Upland Shrub	17.3		Thinned apx. 1997.  [11-04-10] Stand is now under contract TS# 41-031-09-01 Bear Bait. Residual BAred pine = 24 sq.ft./acre. See FTP's C41-1442 (red pine regeneration) and W41-1459 (oak underplanting.)  [05-01-12] Sale is completed TCR dtd 04/30/12.  Trenched 6/1/16.  Planted spring 2017
47	6229 - Mixed lowland shrub	43.5	No	Low, wet ground with tall brush and scattered clumps of trees. A portion of the stand is adjacent to M-77.
59	6229 - Mixed lowland shrub	3.2	No	Low, wet area near M-77. A few scattered trees.
60	6229 - Mixed lowland shrub	83.5	No	Low, wet area with tall brush and a few scattered trees. Near the railroad and M-28.
61	6229 - Mixed lowland shrub	5.1	No	Low, wet area near M-77. A few scattered trees.
62	6229 - Mixed lowland shrub	2.4	No	Low, wet area next to SNWR.
63	6229 - Mixed lowland shrub	5.5	No	Low, wet area near the railroad and M-28. A few scattered trees.
64	6229 - Mixed lowland shrub	2.8	No	Low, wet area next to SNWR.
65	6229 - Mixed lowland shrub	260.5	No	Large marsh extending from M-28 to the Seney National Wildlife Refuge. Med/tall brush with scattered trees. Contains islands of pine.
66	6229 - Mixed lowland shrub	1.7	No	
67	6229 - Mixed lowland shrub	54.4	No	Low, wet area with tall brush, in between islands of red pine. Adjacent to SNWR.

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Compartment: 115

Year of Entry: 2019

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Stand	Cover Type	Acres	Managed Site	General Comments:
68	320 - Upland Shrub	8.2		Thinned apx. 1994. Aspen regeneration in the flat areas.  [11-04-10] Stand is now under contract TS# 41-031-09-01 Bear Bait. Residual BA - red pine = 21 sq.ft./acre. See FTP's C41-1442 (red pine regeneration) and W41-1459 (oak underplanting.)  [05-01-12] Sale is completed TCR dtd 04/30/12.  Site Trenched 6/1/16.  Planted spring 2017
73	6229 - Mixed lowland shrub	58.7	No	Low, wet area with tall bursh, adjacent to Clark Ditch, with Townline Ditch going through the stand. Borders SNWR.
78	110 - Low Intensity Urban	1.5	No	Seney Field Office and Parking lot.
80	122 - Road/Parking Lot	1.4	No	M-28 and M-77
81	122 - Road/Parking Lot	19.0	No	Southern part of M-28 and strip of land between M-28 and the railroad.
82	110 - Low Intensity Urban	2.4	No	Electric substation site.
83	122 - Road/Parking Lot	18.6	No	M-77 ROW
401	31021 - Cool Season Grass	0.9	No	Small grassy area at intersection of M-77 and railroad.
403	31021 - Cool Season Grass	3.8	No	Powerline ROW.