Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 159
Entry Year 2016
Acreage: 2,132
County Schoolcraft
Management Area: Seney Manistique Swamp

Revision Date: 04/09/2014

Stand Examiner: Shiela Clark

Legal Description:

T46N R16W Sections 19, 20, 29, 30

Identified Planning Goals:

The main goal in this compartment is to conduct multiple resource management for current and future generations.

Soil and topography:

The majority of the compartment is flat and low, wet ground. The terrain changes are slight but enough to establish low quality hardwoods and pine. The low areas contain muck and peat soils, some of the ridges contain sands that are naturally low in fertility. The water table is high everywhere.

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

There is no private land within the compartment boundaries. The majority of the surrounding land is still State of Michigan owned.

Unique Natural Features:

No Unique Natural Features known.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

No special management considerations.

Watershed and Fisheries Considerations:

Good. Commencement Creek is managed as Type II trout water, this is the west side of the compartment.

Wildlife Habitat Considerations:

This compartment consists of forested islands within a large marsh complex. Commencement Creek forms the western boundary. General Land Office notes show that subtle changes in elevation provided for different vegetative land cover. The lowest areas were dominated by open marsh, transition sites held tamarack, cedar, and black spruce. Slightly higher areas held yellow birch, white pine, and red maple.

Current species composition appears similar to pre-settlement times with a possible shift to a heavier concentration of black spruce in some areas.

The wildlife habitat objectives in this compartment include protection of the marsh complex and providing age and structural diversity within aspen and lowland hardwood systems.

The featured species in this management area are beaver, moose, ruffed grouse, sharp-tailed grouse, snowshoe hare and deer.

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 Prairie du Chien Group and Cambrian Trempealeau Formation subcrop below the glacial drift. These rocks could be used for stone. Gravel pits are located one mile to the west, but potential appears to be limited. There is no commercial oil and gas production in the UP.

Vehicle Access:

Access is extremely poor. The only drivable two-track is in section 30. There are a couple old winter roads that spur off M-

28 but are overgrown and mainly underwater.

Survey Needs:

None.

Recreational Facilities and Opportunities:

Limited hunting opprtunities exist.

Fire Protection:

Access to much of the compartment is limited by low ground/wetlands. Given the lowland nature of the compartment, large fire potential is generally limited to later in the summer and in years of exceptional drought but any fire start in the compartment could create challenges with the lack of access and increased fuel loads due the large amount of tree mortality from the Larch Caseborer and water stress.

Additional Compartment Information:

The tamarack in the area is starting be attacked by Larch Caseborer. For that reason harvest will focus on Tamarack during this entry.

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

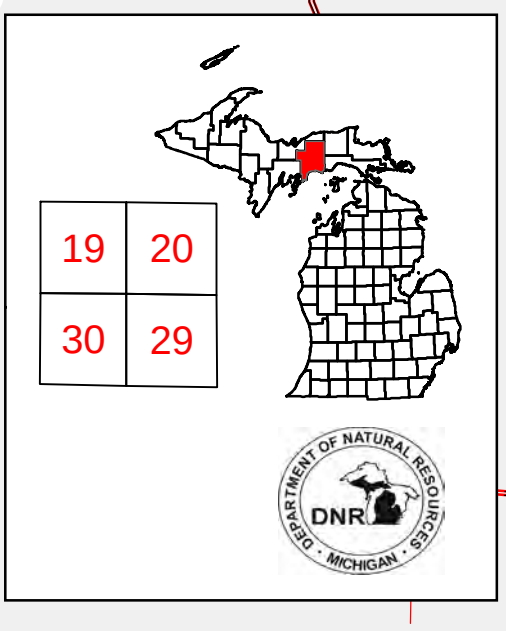
The following information is displayed, where pertinent, on the attached compartment maps:

Base feature information, stand boundaries, cover types, and numbers
Proposed treatments
Site condition boundaries
Details on the road access system

Cover Type & Treatment Map

Compartment: 159
T46N R16W
16 17 18 19 20 21 28 29 30
County: Schoolcraft
Unit: Shingleton
Management Area: Seney Manistique Swamp
YOE: 2016
Acres: 2,131 GIS Calculated
Examiner: Shiela Clark
Map Revised: 07/30/2014
Map Phase: Pre-Review

Stand # 23
Stocking Density
(412)0) - A7
Level 3 Level 4 OI Code
Cover Type Code



Legend

- Miris Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Railroads
- Stream
- Intermittent Stream
- Lakes and Rivers
- State Forest Land

Non-Forest Regeneration

Planned Regeneration

- Natural
- Planted

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Planting (tree species)
- Regeneration Survey
- Treatments w/ Site Condition

Forest Stands

Level 3

- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

- 110 - Low Intensity Urban
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub

1 6128-Q2
2 6121-T5
3 6121-T4
4 6120-C6
5 6121-T4
6 6121-T5
7 6121-T6
8 6128-Q5
9 6128-Q4
10 6121-T5
11 6128-Q5
12 500-Z0
13 6128-Q5
14 622-D0
15 6121-T5
16 6129-Q5
17 6117-E5
18 4319-UM3
19 6128-Q5
20 4233-F2
21 6128-Q5
22 6129-Q4
23 6122-S6
24 4319-UM3
25 500-Z0
26 4319-UM5
27 6122-S5
28 500-Z0
29 622-L0
30 6121-T4
31 500-Z0
32 6117-E4
33 6122-S2
34 6122-S5
35 6122-S5
36 500-Z0
37 330-U0
38 429-MC2
39 110-X0
40 6122-S6
41 6122-S6
42 6128-Q5
43 622-D0
44 6119-E4
45 429-MC2
46 6121-T5
47 6121-T4
48 6122-S2
49 6122-S6
50 6124-Q5
51 6122-S5
52 500-Z0
53 110-X0
54 6124-Q5
55 6128-Q5
56 622-D0
57 6122-S5
58 6128-Q5
59 6128-Q5
60 500-Z0

19 20 30 29 28

1 0.5 0 1 Miles

86°22'0"W 86°21'0"W 86°20'0"W
46°23'0"N 46°22'0"N 46°21'0"N

Stand Boundary Map

Compartment: 159
T46N R16W
16 17 18 19 20 21 28 29 30
County: Schoolcraft
Unit: Shingleton
Management Area: Seney Manistique Swamp
YOE: 2016
Acres: 2,131 GIS Calculated
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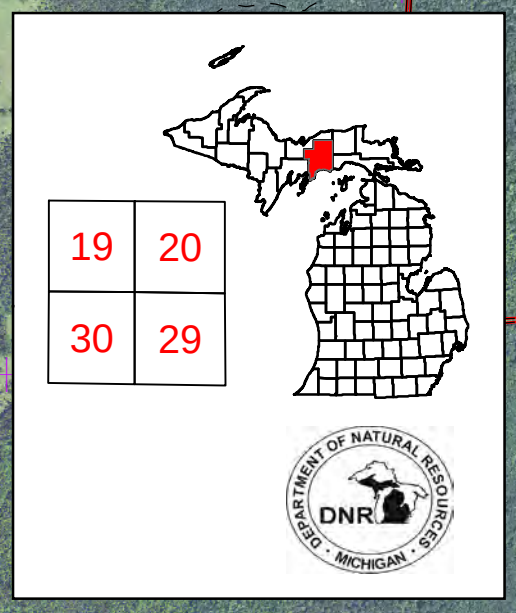
Map Revised: 07/30/2014
Map Phase: Pre-Review

Stand # 23
Stocking Density
(412)0) - A7
Level 3 Level 4 OI Code
Cover Type Code



Legend

- Miris Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Stream
- Intermittent Stream
- Lakes and Rivers
- Stand Boundaries

Forest Stands

Level 3

423 - Other Upland Conifers
429 - Mixed Upland Conifers
431 - Upland Mixed Forest
611 - Lowland Deciduous Forest
612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

110 - Low Intensity Urban
330 - Low-Density Trees
500 - Water
622 - Lowland Shrub

1 6128-Q1
2 6121-T5
3 6121-T4
4 6120-C6
5 6121-T4
6 6121-T5
7 6121-T6
8 6128-Q5
9 6128-Q4
10 6121-T5
11 6128-Q5
12 500-Z0
13 6128-Q5
14 622-D0
15 6121-T5
16 6129-Q5
17 6117-E5
18 4319-UM3
19 6128-Q5
20 4233-F2
21 6128-Q5
22 6129-Q4
23 6122-S6
24 4319-UM3
25 500-Z0
26 4319-UM5
27 6122-S5
28 500-Z0
29 622-L0
30 6121-T4
31 500-Z0
32 6117-E4
33 6122-S2
34 6122-S5
35 6122-S5
36 500-Z0
37 330-U0
38 429-MC2
39 110-X0
40 6122-S6
41 6122-S6
42 6128-Q5
43 622-D0
44 6119-E4
45 429-MC2
46 6121-T4
47 6121-T4
48 6122-S2
49 6122-S6
50 6124-Q5
51 6122-S5
52 500-Z0
53 110-X0
54 6124-Q5
55 6128-Q5
56 622-D0
57 6122-S5
58 6128-Q5
59 6128-Q5
60 500-Z0

19
20
30
29
28

1 0.5 0 1 Miles

86°22'0"W
86°21'0"W
86°20'0"W
46°24'0"N
46°23'0"N
46°22'0"N
46°21'0"N

Special Conservation Areas & Site Conditions Map

Compartment: 159
T46N R16W
16 17 18 19 20 21 28 29 30
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Management Area: Seney Manistique Swamp
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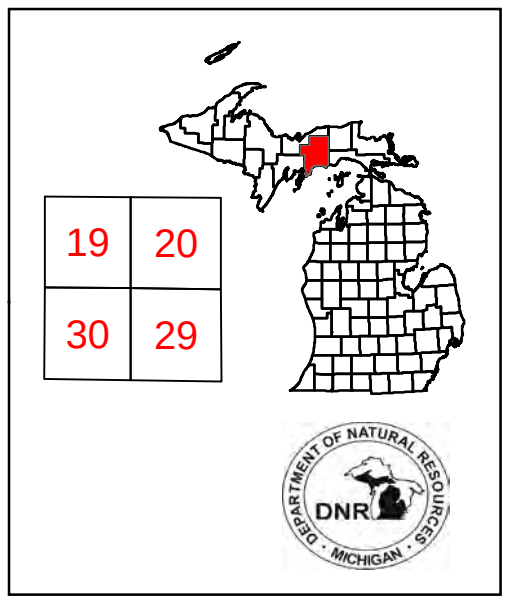


Legend
- Miris Corners
- Stand Boundaries

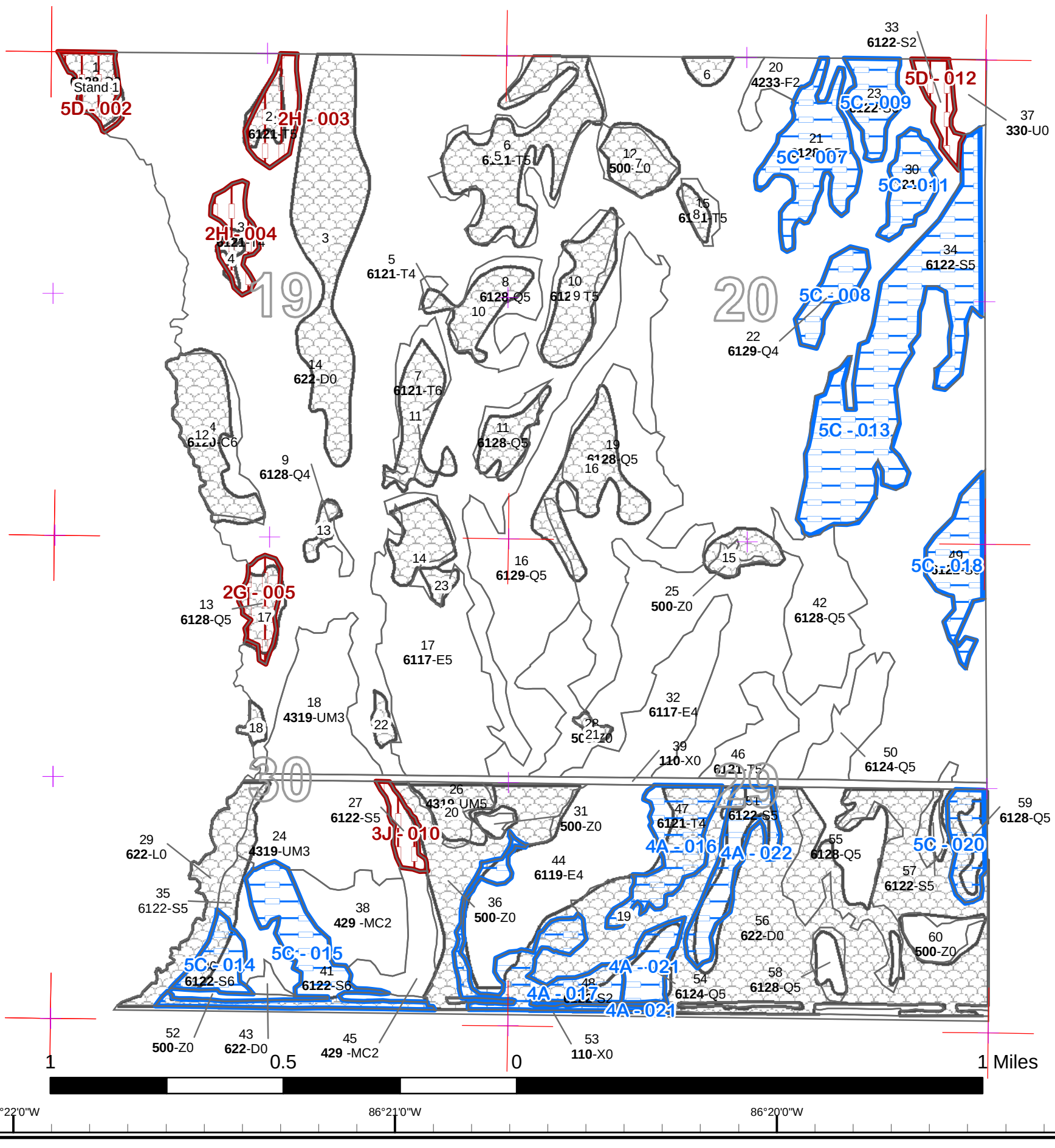
Site Condition Available
- Available w/ Constraints (Factor - Number)
- Unavailable (Factor - Number)

Site Condition Type

Available Factors W/ Constraints
- 4A: No merchantable products (see product standards)
- 5C: Delay treatment for age/size class diversity or exceptional site quality

Unavailable Factors
- 2G: Too wet (sensitive soils, does not include access issues)
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3J: Water quality / BMPs (stream, river, or lake)
- 5D: Unproductive Forest Land

Reviewable SCAs
- Proposed SCA
- SCA Removal



Report 1 – Total Acres by Cover Type and Age Class

Shingleton Mgt. Unit **Compartment 159 Year of Entry 2016**

Shiela Clark : Examiner

Age Class

	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +	Uneven Age	Total
Cedar	0	0	0	0	0	0	0	0	0	25	0	0	0	0	**25**
Low-Density Trees	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
Lowland Conifers	0	0	0	0	0	0	0	0	30	144	71	79	0	0	**324**
Lowland Deciduous	0	0	28	52	0	0	0	0	65	0	0	0	0	0	**145**
Lowland Shrub	16	0	0	0	0	0	0	0	0	0	0	0	0	0	**16**
Lowland Spruce/Fir	0	0	0	12	0	0	0	0	117	77	0	0	0	0	**205**
Tamarack	0	0	0	0	0	0	11	59	16	40	0	18	0	0	**145**
Treed Bog	1053	0	0	0	0	0	0	0	0	0	0	0	0	0	**1053**
Upland Conifers	0	13	0	23	0	0	0	0	0	0	0	0	0	0	**36**
Upland Mixed Forest	0	0	69	0	0	0	0	0	9	0	0	0	0	0	**78**
Upland Spruce/Fir	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
Urban	25	0	0	0	0	0	0	0	0	0	0	0	0	0	**25**
Water	65	0	0	0	0	0	0	0	0	0	0	0	0	0	**65**
Total	**1173**	**13**	**97**	**87**	**0**	**0**	**11**	**59**	**237**	**287**	**71**	**97**	**0**	**0**	**2131**

Report 2 – Proposed Treatment Summaries

Shingleton Mgt. Unit
Year of Entry 2016

Compartment 159
Total Compartment Acres: 2,132

Acres by Treatment Type

Commercial Harvest - 409	Tree Planting - 7	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Lowland Coniferous Forest	344	0	0	0	0	0	**344**
Lowland Deciduous Forest	65	0	0	0	0	0	**65**
Total	**409**	**0**	**0**	**0**	**0**	**0**	**409**

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
6	41159006-Cut	44.0	6121 - Tamarack	Medium Density Pole	77	81-110	Harvest	Clearcut with Reserves	6128 - Lowland Coniferous, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: This stand will be a difficult area to get to and has variable stocking. Harvest all merchantable trees, leaving large white pine, no more than 20 ba.

Other Comments: Plan on a 5 year contract. Access will be from M-28 on the west side. Crane mats and a 35 to 40 foot portable bridge will be needed to cross Pine Creek on the power line. Harvest in the winter and current species is acceptable regeneration.

Next Steps: Monitor regneration at the next entry.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
7	41159007-Cut	14.8	6121 - Tamarack	High Density Pole	84	81-110	Harvest	Clearcut with Reserves	6119 - Mixed Lowland Deciduous Forest	Cmpt. Review Proposal

Prescription Specs: This stand will be a difficult area to get to and has variable stocking. Harvest all merchantable trees, leaving large white pine totaling no more than 20 ba.

Other Comments: Plan on a 5 year contract. Access will be from M-28 on the west side. Crane mats and a 35 to 40 foot portable bridge will be needed to cross Pine Creek on the power line. Harvest in the winter and current species is acceptable regeneration.

Next Steps: Monitor regeneration at next entry.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
8	41159008-Cut	18.9	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	80		Harvest	Clearcut with Reserves	6128 - Lowland Coniferous, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: This stand will be a difficult area to get to and has variable stocking. Harvest all merchantable trees, leaving large white pine no more than 20 ba.

Other Comments: Plan on a 5 year contract. Access will be from M-28 on the west side. Crane mats and a 35 to 40 foot portable bridge will be needed to cross Pine Creek on the powerline. Harvest in the winter and current species is acceptable regeneration.

Next Steps: Monitor regeneration at next entry.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
10	41159010-Cut	18.0	6121 - Tamarack	Medium Density Pole	113		Harvest	Clearcut with Reserves	6128 - Lowland Coniferous, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: This stand will be a difficult area to get to and has variable stocking. Harvest all merchantable trees, leaving large white pine totally no more than 20 ba.

Other Comments: Plan on a 5 year contract. Access will be from M-28 on the west side. Crane mats and a 35 to 40 foot portable bridge will be needed to cross Pine Creek on the power line. Harvest in the winter and current species is acceptable regeneration.

Next Steps: Monitor regeneration at next entry.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
11	41159011-Cut	10.3	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	94		Harvest	Clearcut with Reserves	6128 - Lowland Coniferous, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: This stand will be a difficult area to get to and has variable stocking. Harvest all merchantable trees, leaving large white pine totalling no more than 20 ba.

Other Comments: Plan on a 5 year contract. Access will be from M-28 on the west side. Crane mats and a 35 to 40 foot portable bridge will be needed to cross Pine Creek on the power line. Harvest in the winter and current species is acceptable regeneration.

Next Steps: Monitor regeneration at next entry.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
16	41159016-Cut	79.0	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	113	111-140	Harvest	Clearcut with Reserves	6128 - Lowland Coniferous, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: This stand will be a difficult area to get to and has variable stocking. Harvest all merchantable trees, leaving larger white pine not to exceed 20 ba.

Other Comments: Plan on a 5 year contract. Access will be from M-28 on the west side. Crane mats and a 35 to 40 foot portable bridge will be needed to cross Pine Creek on the power line. Harvest in the winter and current species is acceptable regeneration.

Next Steps: Monitor regeneration at next entry.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
17	41159017-Cut	65.0	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	86		Harvest	Clearcut with Reserves	6128 - Lowland Coniferous, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: This stand will be a difficult area to get to and has variable stocking. Harvest all merchantable trees, leaving large white pine no more than 20 ba.

Other Comments: Plan on a 5 year contract. Access will be from M-28 on the west side. Crane mats and a portable bridge will be needed to cross Pine Creek on the power line. Harvest in the winter and current species is acceptable regeneration.

Next Steps: Monitor regeneration at next entry.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
19	41159019-Cut	61.7	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	104	81-110	Harvest	Clearcut with Reserves	6128 - Lowland Coniferous, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: This stand will be a difficult area to get to and has variable stocking. Harvest all merchantable trees, leaving large red and white pine not to exceeed 20 ba.

Other Comments: Plan on a 5 year contract. Access will be from M-28 on the west side. Crane mats and a portable bridge will be needed to cross Pine Creek on the power line. Harvest in the winter and current species is acceptable regeneration.

Next Steps: Monitor regeneration at next entry.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
42	41159042-Cut	28.3	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	93	111-140	Harvest	Clearcut with Reserves	6128 - Lowland Coniferous, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: This stand will be a difficult area to get to and has variable stocking. Harvest all merchantable trees, leaving large white pine not to exceed 20 ba.

Other Comments: Plan on a 5 year contract. Access will be from M-28 on the east side. A portable bridge will be needed to cross the ditch on M-28. Harvest in the winter and current species is acceptable regeneration.

Next Steps: Monitor regeneration at next entry.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
46	41159046-Cut	13.0	6121 - Tamarack	Medium Density Pole	93	51-80	Harvest	Clearcut with Reserves	6128 - Lowland Coniferous, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: This stand will be a difficult area to get to and has variable stocking. Harvest all merchantable trees, leaving large white pine leaving no more than 20 ba.

Other Comments: Plan on a 5 year contract. Access will be from M-28 on the east side. A portable bridge will be needed to cross the ditch on M-28. Harvest in the winter and current species is acceptable regeneration.

Next Steps: Monitor regeneration at next entry.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
50	41159050-Cut	14.0	6124 - Lowland Spruce-Fir	Medium Density Pole	93	51-80	Harvest	Clearcut with Reserves	6124 - Lowland Spruce-Fir	Cmpt. Review Proposal

Prescription Specs: This stand will be a difficult area to get to and has variable stocking. Harvest all merchantable trees, leaving large red and white pine. Some pine will be harvested, leaving 20 ba.

Other Comments: Plan on a 5 year contract. Access will be from M-28 on the east side. A portable bridge will be needed to cross the ditch on M-28. Harvest in the winter and current species is acceptable regeneration.

Next Steps: Monitor regeneration at next entry.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
55	41159055-Cut	32.5	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	93	141-170	Harvest	Clearcut with Reserves	6128 - Lowland Coniferous, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: This stand will be a difficult area to get to and has variable stocking. Harvest all merchantable trees, leaving large white pine no more than 20 ba.

Other Comments: Plan on a 5 year contract. Access will be from M-28 on the east side. A portable bridge will be needed to cross the ditch on M-28. Harvest in the winter and current species is acceptable regeneration.

Next Steps: Monitor regeneration at next entry.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
57	41159057-Cut	4.4	6122 - Black Spruce	Medium Density Pole	92	81-110	Harvest	Clearcut with Reserves	6128 - Lowland Coniferous, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: This stand will be a difficult area to get to and has variable stocking. Harvest all merchantable trees, leaving large white pine not to exceed 20 ba.

Other Comments: Plan on a 5 year contract. Access will be from M-28 on the east side. A portable bridge will be needed to cross the ditch on M-28. Harvest in the winter and current species is acceptable regeneration.

Next Steps: Monitor regeneration at next entry.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
58	41159058-Cut	5.7	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	93	81-110	Harvest	Clearcut with Reserves	6128 - Lowland Coniferous, Mixed Deciduous	Cmpt. Review Proposal

Prescription Specs: This stand will be a difficult area to get to and has variable stocking. Harvest all merchantable trees, leaving large white pine not to exceed 20 ba.

Other Comments: Plan on a 5 year contract. Access will be from M-28 on the east side. A portable bridge will be needed to cross the ditch on M-28. Harvest in the winter and current species is acceptable regeneration.

Next Steps: Monitor regeneration at next entry.

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
37	NF_41159037-Plant	6.7	3302 - Low Density Conifer Trees				Tree Planting	Hand Plant	42120 - Planted Jack Pine	Cmpt. Review Proposal

Prescription Specs: Trench and plant with Jack pine

Other Comments:

Next Steps: Monitor according to work instructions

Proposed Start Date: 10/01/2015

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
32	41159032-Survey	27.8	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Pole	20		Regeneration Survey	Intermediate Survey (natural regen)	6117 - Lowland Deciduous, Mixed Coniferous	Cmpt. Review Proposal

Prescription Specs: Regeneration is starting to come in, but is still small. Species representative of what was there before harvest.

Other Comments:

Next Steps:

Proposed Start Date: 03/01/2018

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
44	41159044-Survey	52.4	6119 - Mixed Lowland Deciduous Forest	Low Density Pole	30		Regeneration Survey	Intermediate Survey (natural regen)	6119 - Mixed Lowland Deciduous Forest	Cmpt. Review Proposal

Prescription Specs: Regeneration is starting to come in, but is still small. Species representative of what was there before harvest.

Other Comments:

Next Steps:

Proposed Start Date: 03/01/2018

Total Treatment Acreage Proposed: 496.3

Report 4 -- Treatments Prescribed with a Site Condition

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
		#Type!	#Type!							

Prescription Specs:

Other Comment:

Next Steps:

Proposed Start Date: #Type!

Limiting Factor

Total Treatment Acreage Proposed: **0.0**

Report 5 – Site Conditions

Shingleton Mgt. Unit

Shiela Clark : Examiner

Compartment 159

Year of Entry 2016

Availability for Management

Total Acres	Acres Available	Acres Not Available		Dominant Site Conditions No	5D	5C	4A	3J	2H	2G
25	25		**Cedar**	25						
269	252	17	**Lowland Conifers**	124	9	119	9			8
65	65		**Lowland Deciduous**	65						
232	227	5	**Lowland Spruce/Fir**	50		130	46	5		
145	125	19	**Tamarack**	96		11	19		19	
143	143		**Upland Conifers**	143						
78	78		**Upland Mixed Forest**	78						
7	7		**Upland Spruce/Fir**	7						
965	923	42	Total Forested Acres	589	9	260	74	5	19	8
	96%	4%	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.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
002	**Not Available**	**5D: Unproductive Forest Land**	9				
	Comments:						
003	**Not Available**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	11	4A: No merchantable products (see product standards)			
	Comments:						
004	**Not Available**	**2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)**	9	4A: No merchantable products (see product standards)			
	Comments:						

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005	**Not Available**	**2G: Too wet (sensitive soils, does not include access issues)**	8	

Comments:

007	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	25	

Comments:
Stand has harvestable timber, will wait ten years and treat with stands in the area. Trees are healthy.

008	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	9	

Comments:
Plan to harvest with adjacent spruce stand during next rotation.

009	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	11	

Comments:
Stand is healthy and plan to harvest during next rotation with other stands in the area.

010	**Not Available**	**3J: Water quality / BMPs (stream, river, or lake)**	5	

Comments:
Stand is a buffer left from previous cut.

011	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	11	

Comments:
Will look at harvesting next rotation when harvest stand 34.

012	**Not Available**	**5D: Unproductive Forest Land**	7

Comments:
This stand was left from a recent timbersale. Ground is low and trees submerchantable and probably will never be merchantable due to water stress.

013	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	71

Comments:
Harvest with other stands in the area during the next rotation. Also consider with adjacent compartment.

014	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	9

Comments:
Black Spruce is healthy and will hold. Harvest stand in the next rotation along with spruce stand in the northeast.

015	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	24

Comments:
Spruce is healthy and will hold. Harvest stand during the next rotation along with Stand 40

016	**Available**	**4A: No merchantable products (see product standards)**	19

Comments:
Part of buffer left from previous harvest also some of treed bog that has filled in since previous inventory.

017	**Available**	**4A: No merchantable products (see product standards)**	23

Comments:
Stand is part of buffer left from previous harvest.

018	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	16

Comments:

Spruce is healthy and will hold. Harvest next rotation include surrounding stands and stands from compartment 157.

020	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	10

Comments:

Harvest with stands to the north.

021	**Available**	**4A: No merchantable products (see product standards)**	10

Comments:

Small acreage.

022	**Available**	**4A: No merchantable products (see product standards)**	16

Comments:

Small acreage with low volume and difficult access.

Report 6 – 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
	Other SCA		**SCA Removal**	

Comments

Young pockets of tamarack are starting to become merchantable. Scattered spruce and fir with a handful of white pine pulp and logs present. This stand is a slight elevation change in the surrounding marsh. Water stress is keeping the trees from becoming

10	Other SCA		**SCA Removal**	

Comments

Open grown trees with 1 foot elevation difference from surrounding marsh. The high water table is making for poor quality wood that is dying out. Cutting is not feasable. 20 BA snags. Potential Old Growth

11	Other SCA		**SCA Removal**	

Comments

Access is very poor. Scattered jack pine, red pine and white pine logs - look good. Very young white birch in understory, probably fire oriented. 5 BA snags. Potential Old Growth

12	Other SCA		**SCA Removal**	

Comments

Cedar looks healthy. Some scattered white birch. Closer to the river the more open and shorter the cedar trees are. Very wet ground. South part of the stand same age but extremely water stressed typing out only as a C2 20-30 feet tall. 10 BA snags. Poten

13	Other SCA		**SCA Removal**	

Comments

Open grown trees with 1 foot elevation difference from surrounding marsh. The high water table is making for poor quality wood that is dying out. Cutting is not feasable. 20 BA snags. Potential Old Growth

14	Other SCA		**SCA Removal**	

Comments

Young pockets of tamarack are starting to become merchantable. Scattered spruce and fir with a handful of white pine pulp and logs present. This stand is a slight elevation change in the surrounding marsh. Water stress is keeping the trees from becoming

15	Other SCA		**SCA Removal**	

Comments

Ponds within compartment 159. Potential Old Growth

16	Other SCA		**SCA Removal**	

Comments

Because of quality and location will only be able to cut with adjacent stand. Jack pine component has mainly died out. Scattered merchantable aspen and red maple. 10 BA snags. Potential Old Growth

17	Other SCA		**SCA Removal**	

Comments

Closer to the creek the stand becomes more of a C2 about 20 feet tall. Open areas mixed in. Spruce and other species are in good condition. 6 BA snags. 98=tamarack/wp pulp. Potential Old Growth

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SCA Name	SCA Category	Detail Type	Recommendation	Acres
18	Other SCA		**SCA Removal**	

Comments

Ponds within compartment 159. Potential Old Growth

19	Other SCA		**SCA Removal**	

Comments

Open area with marsh grasses. Some scattered tamarack or white pine trying to grow 2-4 feet tall. Areas along the creek can have a soil type of 70. Potential Old Growth

2	Other SCA		**SCA Removal**	

Comments

Scattered spruce and fir of all age classes. Aspen is in poor health. Tamarack is still in good condition. 10 BA snags. Potential Old Growth

20	Other SCA		**SCA Removal**	

Comments

Aspen is in poor condition. Jack pine is old and with large limbs to ground. Scattered tamarack and spruce are present with a conifer fringe on the west and north part of the stand. Scattered white and red pine logs, most are not wind firm. Prescribed l

21	Other SCA		**SCA Removal**	

Comments

Ponds within compartment 159. Potential Old Growth

22	Other SCA		**SCA Removal**	

Comments

Ponds within compartment 159. Potential Old Growth

23	Other SCA		**SCA Removal**	

Comments

Ponds within compartment 159. Potential Old Growth

3	Other SCA		**SCA Removal**	

Comments

brush 5-15 feet tall. Potential Old Growth

4	Other SCA		**SCA Removal**	

Comments

Very poor quality stand. Tamarack is dying out fast. Low volume of spruce and other species in understory. Water stress/age is a problem. May convert to marsh or low area. Extremely poor access. 70 BA snags. Potential Old Growth

5	Other SCA		**SCA Removal**	

Comments

Stand has a slight elevation difference so trees are not as water stressed. Some red maple, fir and beech present in understory. SI from 20 years ago. Scattered white and red pine - some tops still look good. Access is extremely poor. Potential Old Grow

Report 6 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

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SCA Name	SCA Category	Detail Type	Recommendation	Acres
6	Other SCA		**SCA Removal**	

Comments

Ponds within compartment 159. Potential Old Growth

7	Other SCA		**SCA Removal**	

Comments

Ponds within compartment 159. Potential Old Growth

8	Other SCA		**SCA Removal**	

Comments

Timber is larger diameter with in the stand. Outer edges are water stressed. Scattered white birch, fir and spruce. 5BA snags. Potential Old Growth

9	Other SCA		**SCA Removal**	

Comments

Over story is very sparse. Stand is starting to become more merchantable. Good pockets of S4 then T4 - Aspen that was present has died out. 20 BA snags. Potential Old Growth

Stand 1	Other SCA		**SCA Removal**	

Comments

brush 5-15 feet tall. Potential Old Growth

Report 7 – 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.

ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density	8.6	92		There are no merchantable trees in this stand. It is low ground and is a buffer along Commencement Creek.
2	6121 - Tamarack	Medium Density Pole	10.9	67		Scattered spruce and fir of all age classes. tamamarack in good condition.
3	6121 - Tamarack	Low Density Pole	8.6	92		Very poor quality stand. Tamarack is dying fast. Low volume of spruce and other species in undertory. Water stress/age is a problem.
4	6120 - Lowland Cedar	High Density Pole	25.4	92		A little cedar regen. Not a lot of regen except along edge of stand.
5	6121 - Tamarack	Low Density Pole	1.6	80		Open grown trees with 1 foot elevatin difference from surroundign marsh. The high water table is making for poor quality wood that is dying out. Not merchantable.
6	6121 - Tamarack	Medium Density Pole	44.0	77	81-110	Stand has a slight elevation difference so trees are not as water stressed. Tamarack is starting to die. The trees are small diameter, but are 4 to 6 sticks tall. Lots of hardwood in the understory.
7	6121 - Tamarack	High Density Pole	14.8	84	81-110	
8	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	18.9	80		Open grown trees with 1 foot elevation difference from surrounding marsh. the high water table is making for poor quality wood that is dying out.
9	6128 - Lowland Coniferous, Mixed Deciduous	Low Density Pole	3.0	80		Open grown trees with 1 foot elevation difference from surrounding marsh. the high water table is making for poor quality wood that is dying out.
10	6121 - Tamarack	Medium Density Pole	18.0	113		Stand is starting to fill in, the stands acreage has increased since last entry.
11	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	10.3	94		
13	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	8.2	80	81-110	
15	6121 - Tamarack	Medium Density Pole	4.4	75		
16	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	79.0	113	111-140	Northeast edge is higher with mostly white pine, red pine and hardwood. Spruce is good size and stocking in the north.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	65.0	86		
18	4319 - Mixed Upland Forest	High Density Sapling	31.6	28		Good regeneration.
19	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	61.7	104	81-110	This stand has some merchantable trees, but there are lots of submerchantable trees.
20	42330 - Upland Fir	Medium Density	7.4	4		This stand was cut in 2010. White Pine logs left on west side.
21	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	24.9	92		Stand is a mix of low land hardwoods that are younger than the overstory spruce and other conifers. There are scattered cedar, aspen and red pine. Stocking is sparce with lots of tag alder and not a lot of regeneration.
22	6129 - Mixed Coniferous Lowland Forest	Low Density Pole	8.8	104		Fairly healthy stand. Timber is more sparse to the south.
23	6122 - Black Spruce	High Density Pole	11.1	85	111-140	This stand is very dense with small diameter black spruc. The diameters range from 4 to 8 inches and average 5 sticks tall. Small ridge of white pine in cender of stand also includes red maple, white birch.
24	4319 - Mixed Upland Forest	High Density Sapling	37.7	28		Good stocking, stand looks good.
26	4319 - Mixed Upland Forest	Medium Density Pole	8.8	86		Stand is overmature most of the aspen has died out and has been replaced by red maple, while this stand is higher than other stands, it is not a true upland stand.
27	6122 - Black Spruce	Medium Density Pole	5.3	86		Stand is a buffer along the creek.
30	6121 - Tamarack	Low Density Pole	10.6	75		Timber is very sparse and lots of tag alder.
32	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Pole	27.8	20		Timber sale 41-013-06-01 Pine Creek havest was closed in June 2014. FTP W41-1281 (aspen TSI) was closed. Residual trees left behind are black spruce and cedar. Currently this stand is dominated by red maple and aspen. 2 inch seedlings of jack pine, white pine and black spruce are starting to show up and will need more time to become established, but should regeneration fully.
33	6122 - Black Spruce	Medium Density	6.9	85		This stand was left from previous harvest. Predominately sapling size.
34	6122 - Black Spruce	Medium Density Pole	75.7	85	111-140	

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	6122 - Black Spruce	Medium Density Pole	12.2	36	51-80	Stand was cut in the 70's. There is some water stress but trees look good.
38	429 - Mixed Upland Conifers	Medium Density	22.7	35		This is a variable stand with a variety of ages, diameters and stocking. It is mostly upland, but there is lowland included in the stand.
40	6122 - Black Spruce	High Density Pole	9.1	92		
41	6122 - Black Spruce	High Density Pole	23.8	92	200+	
42	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	28.3	93	111-140	
44	6119 - Mixed Lowland Deciduous Forest	Low Density Pole	52.4	30		The harvest was closed on June 2014. Currently the stand is dominated by red maple and aspen, with a few conifer left from harvest. Jack pine, white pine, and black spruce seedlings (2 -3 inches) are starting to show, will just need more time. Stand should regenerate nicely.
45	429 - Mixed Upland Conifers	Medium Density	13.0	16		Stand was finished cutting in 2001 TS#36-97-01. FTP# C41-829. In 2003 stand was never scarified and parts of it were aspen regen. 5000 jack pine were planted by inmates in remaining open areas during spring 2003. Jack pine was again planted in 2007. Jack Pine is okay were it is more open. There is a lot of competition in other areas of the stand. FTP was cl;osed.
46	6121 - Tamarack	Medium Density Pole	13.0	93	51-80	Stand is variable - species are slow growng due to water stress, but doing okay. Diameter and heights are small. Scattered red and white pine are dying out.
47	6121 - Tamarack	Low Density Pole	18.7	92		The last inventory this tand was labeled a treed bog, now however, it has enough timber to be considered a forested stand. It is still sparsely stocked.
48	6122 - Black Spruce	Medium Density	23.1	90		This stand is the buffer left along Pine Creek after adjacent stand was harvested. Most of the trees are submerchantable.
49	6122 - Black Spruce	High Density Pole	17.5	85	111-140	There are some large white pine near the north end of that stand. The tamarack in the stand is starting to die, not sure if it is water stress or sawfly.
50	6124 - Lowland Spruce-Fir	Medium Density Pole	14.0	93	51-80	Stand has lots of submerchantble trees and areas of poor stocking. There are some scattered large spruce and white pine on the edges. Access and water stress make this stand undesirable for harvest.
51	6122 - Black Spruce	Medium Density Pole	16.1	93	51-80	Lots of small diameter trees only 2 sticks in height. There are scattered red and white pine, but they are dieing out. Stand is overmature and water stressed. Not enough volume for harvest.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
54	6124 - Lowland Spruce-Fir	Medium Density Pole	9.5	92	51-80	Stand is variable. Jack pine is in a small pocket by the road. Trees are health. Scattered red maple, aspen white birch of poor quality.
55	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	32.5	93	141-170	This stand is variable with lots of little open pockets of smaller diameter trees. Access and water table are a problem for harvesting stand.
57	6122 - Black Spruce	Medium Density Pole	4.4	92	81-110	Trees are starting to die back due to water stress.
58	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	5.7	93	81-110	Large spruce and white pine on the edges of the stand, more tamarack in the middle. Lots of little open pockets of smaller diameter trees.
59	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	10.8	93	51-80	This stand is lightly stocked. There are lots of small spruce, tamarack and white birch. Due to water table this stand will never amount to much timber.

Report 9 – Nonforested Stands

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
12	50 - Water	10.6	No	Unspecified	
14	6224 - Treed Bog	921.7	No	Unspecified	
25	50 - Water	2.2	No	Unspecified	
28	50 - Water	1.4	No	Unspecified	
29	6220 - Alder/willow	16.0	No	Unspecified	Marsh ground along Commencement Creek.
31	50 - Water	1.7	No	Unspecified	
36	50 - Water	32.0	No	Unspecified	Pine Creek and surrounding marshland.
37	3302 - Low Density Conifer Trees	6.7	Natural Regen	Lowland Conifers	
39	11 - Low Intensity Urban	14.3	No	Unspecified	
43	6224 - Treed Bog	2.1	No	Unspecified	
52	50 - Water	10.3	No	Unspecified	Drainage ditches along M-28.
53	11 - Low Intensity Urban	11.0	No	Unspecified	M-28.
56	6224 - Treed Bog	129.0	No	Unspecified	
60	50 - Water	6.7	No	Unspecified	