Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 84
Entry Year 2016
Acreage: 1,926
County Schoolcraft
Management Area: Garden Thompson Plains

Revision Date: 04/25/2014

Stand Examiner: Tori Irving

Legal Description:

T41N, R17W, Sections 23, 26 & 35

Identified Planning Goals:

This compartment is in the Garden Thompson Plains Management Areas. The main objectives for this area are timber management, wildlife habitat, protection of unique areas, species of special concern, and opportunities for forest recreation. This compartment is lies within the Thompson Plains, which is a large opening complex that is managed for wildlife.

Soil and topography:

In general, the soils are very well drained sandy soils. The terrain in the area is flat to slightly rolling. The main soil types are Rubicon Sand and Mancelona Sand.

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

The entire compartment is State land without any private fragmentation. The compartment is surrounded by State land on the north, east, and west boundaries. There is private land on the southern boundary. There are 2 major gas pipelines, a high energy transmission line a railroad and US-2 Highway bisecting the compartment.

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:

This compartment lies within what is called the Thompson plains and there are several compartments that make up this area. There are several large grass openings that are maintained through prescribed burning which provide critical habitat for a wide range of game and non-game species.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

Wildlife featured species: Woodcock, ruffed grouse, deer and turkey.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 0 and 50 feet. The Silurian Manistique Group subcrops below the glacial drift. The Manistique could be used for stone. A gravel pit is located in Section 26 and potential appears to be good. A dimension stone quarry is located two miles to the northwest. There is no commercial oil and gas production in the UP.

Vehicle Access:

The vehicle access to the compartment is excellent. Highway US-2 runs through the southern part of the compartment. There are numerous trails and roads throughout the compartment the provide access to the interior stands. There is not a railroad crossing within the compartment. The crossing is east of the compartment boundary.

Survey Needs:

None needed.

Recreational Facilities and Opportunities:

Fire Protection:

Fire potential is high in the compartment given the grass and pine fuel types and the amount of recreational use of the area. Tha compartment is mainly uipland and a fair network of roads and trails exist but there are 2 underground pipelines and one railroad that cross through the compartment that limit the access points to only a few approved crossings.

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**

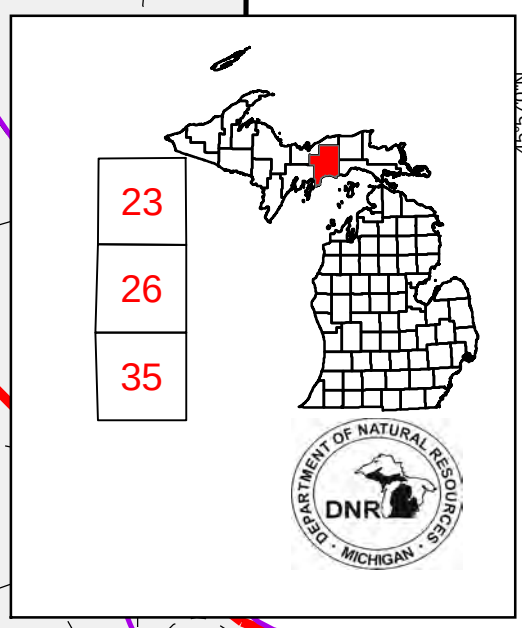
The following information is displayed, where pertinent, on the attached compartment maps:

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

Cover Type & Treatment Map

Compartment: 084
T41N R17W
14 15 22 23 26 27 34 35
County: Schoolcraft
Unit: Shingleton
Management Area: Garden Thompson Plains
YOE: 2016
Acres: 1,926 GIS Calculated
Examiner: Tori Irving
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
- Snowmobile Trails
- Snowmobile Trail
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Pipeline
- Powerline
- Stream
- Intermittent Stream
- Lakes and Rivers
- State Forest Land

Non-Forest Regeneration

Planned Regeneration

- Natural
- Planted

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Seed Tree (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Planting (tree species)
- Prescribed Burn
- Treatments w/ Site Condition

Forest Stands

Level 3

- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 431 - Upland Mixed Forest

Non-Forest Stands

Level 3

- 110 - Low Intensity Urban
- 123 - Other High Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 500 - Water

Stand Boundary Map

Compartment: 084
T41N R17W
14 15 22 23 26 27 34 35
County: Schoolcraft
Unit: Shingleton
Management Area: Garden Thompson Plains
YOE: 2016
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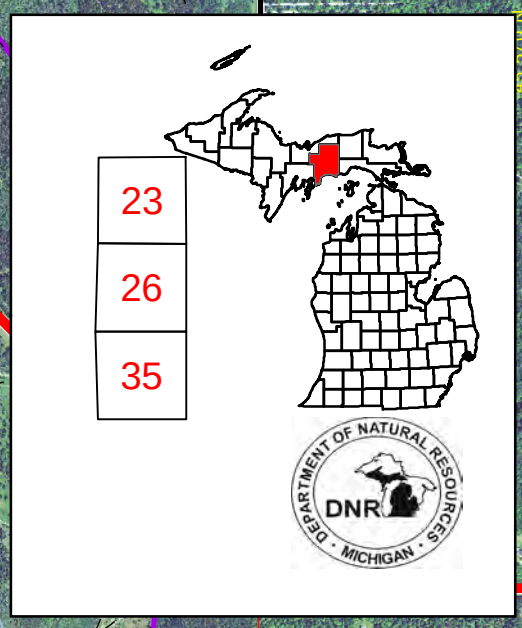

23
1 4130-A6
2 310-G0
3 4130-A6
4 4122-O9
5 4122-O9
6 4130-A6
7 110-X0
8 4130-A3
9 310-G0
10 310-G0
11 110-X0
12 4123-O9
13 4130-A6
14 310-G0
15 4123-O7
16 330-U0
17 4130-A6
18 310-G0
19 4130-A3
20 4130-A6
21 4199-MD9
22 110-X0
23 4130-A6
24 4130-A6
25 4119-M9
26 4130-A3
27 4123-O9
28 4130-A3
29 4222-J6
30 310-G0
31 110-X0
32 4130-A3
33 4130-A6
34 310-G0
35 4133-A3
36 4130-A3
37 310-G0
38 310-G0
40 310-G0
41 4130-A3
42 4131-A3
43 4131-A6
44 4123-O9
45 4130-A3
46 4130-A6
47 4211-R9
48 4212-J6
49 4130-A3
50 4131-A3
51 4211-R9
53 4214-MC3
54 4225-MC7
56 4211-R9
57 4211-R9
58 4211-R3
60 4211-R9
61 330-U0
62 4211-R3
63 4211-R9
64 4130-A3
65 4221-R9
66 4211-R3
67 4311-UM2
68 4132-A6
70 123-X0
71 4222-J6
72 4211-R3
73 330-U0
74 4226-MC6
75 500-Z0
76 310-G0
77 4221-R9
79 4221-R3
80 4211-R9
81 4136-A3
82 4130-A6
83 4211-R9
84 4123-O9
85 4199-MD6
86 4220-W6

26
4220-W9

35

Ninemile Lake
Dufour Creek
Carlson Rd
Carlson Rd
Carlson Rd
Flodin Rd
149
2
2

Legend

- Miris Corners
- Snowmobile Trail
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Pipeline
- Powerline
- Stream
- Intermittent Stream
- Lakes and Rivers
- Stand Boundaries

Forest Stands

Level 3

411 - Northern Hardwood
412 - Oak Types
413 - Aspen Types
419 - Mixed Upland Deciduous
421 - Planted Pines
422 - Natural Pines
431 - Upland Mixed Forest

Non-Forest Stands

Level 3

110 - Low Intensity Urban
310 - Herbaceous Openland
330 - Low-Density Trees
500 - Water

1 0.5 0 1 Miles

86°24'0"W 86°23'0"W 86°22'0"W
45°57'0"N 45°56'0"N 45°55'0"N 45°54'0"N

Special Conservation Areas & Site Conditions Map

Compartment: 084
T41N R17W
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County: Schoolcraft
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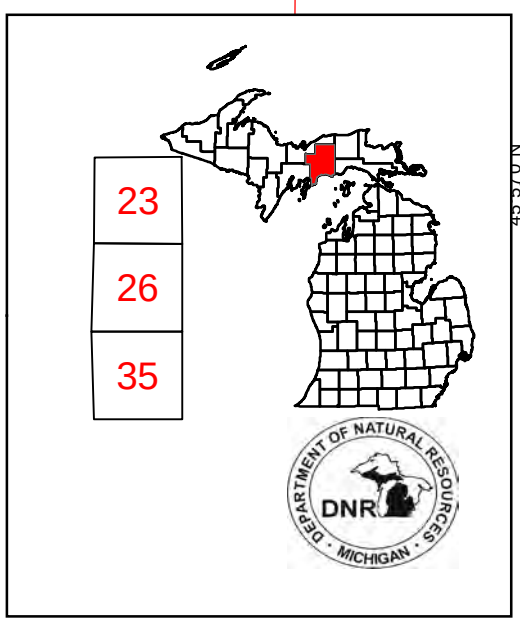

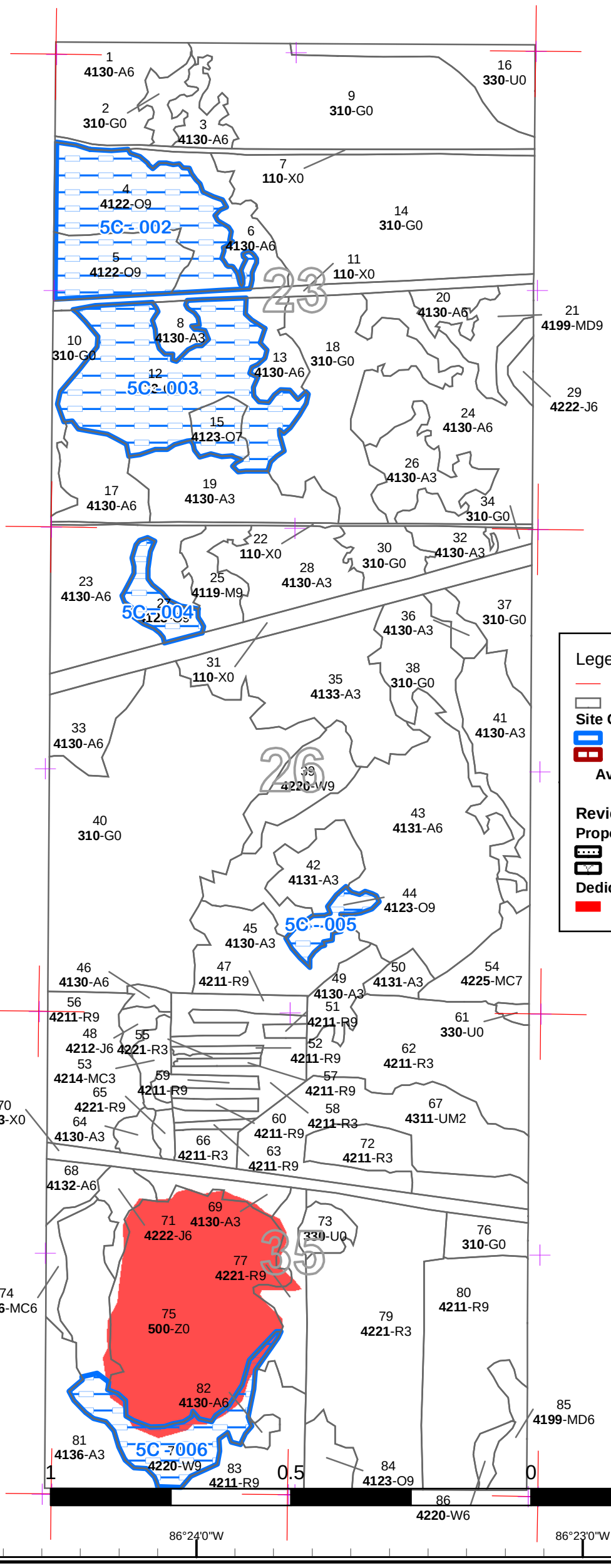

Legend
- Miris Corners
- Stand Boundaries

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

Available Factors W/ Constraints
5C: Delay treatment for age/size class diversity or exceptional site quality

Reviewable SCAs

Proposed SCA's
- Proposed SCA
- SCA Removal

Dedicated Special Conservation Areas
- Ecological Reference Areas

1 0.5 0 1 Miles

86°24'0"W 86°23'0"W 86°22'0"W
45°57'0"N 45°56'0"N 45°55'0"N 45°54'0"N

Report 1 – Total Acres by Cover Type and Age Class

Shingleton Mgt. Unit **Compartment 084 Year of Entry 2016**

Tori Irving : 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
Aspen	58	98	55	270	106	0	0	0	0	0	0	0	0	0	**587**
Herbaceous Openland	455	0	0	0	0	0	0	0	0	0	0	0	0	0	**455**
Jack Pine	0	0	0	6	8	0	0	0	0	0	0	0	0	0	**14**
Low-Density Trees	28	0	0	0	0	0	0	0	0	0	0	0	0	0	**28**
Mixed Upland Deciduous	0	0	0	0	0	0	0	21	0	0	0	0	0	0	**21**
Natural Mixed Pines	0	0	6	0	0	0	17	0	0	0	0	0	0	0	**23**
Northern Hardwood	0	0	0	0	0	0	0	0	13	0	0	0	0	0	**13**
Oak	0	0	0	0	0	0	0	74	89	0	0	0	0	0	**163**
Planted Mixed Pines	0	6	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Red Pine	0	164	21	0	0	21	133	0	0	0	0	0	0	0	**338**
Upland Mixed Forest	54	0	0	0	0	0	0	0	0	0	0	0	0	0	**54**
Urban	68	0	0	0	0	0	0	0	0	0	0	0	0	0	**68**
Water	90	0	0	0	0	0	0	0	0	0	0	0	0	0	**90**
White Pine	0	0	0	0	0	20	0	0	0	0	0	46	0	0	**66**
Total	**752**	**268**	**82**	**277**	**114**	**41**	**149**	**95**	**102**	**0**	**0**	**46**	**0**	**0**	**1926**

Report 2 – Proposed Treatment Summaries

Shingleton Mgt. Unit
Year of Entry 2016

Compartment 084
Total Compartment Acres: 1,926

Acres by Treatment Type

Commercial Harvest - 161	Tree Planting - 248	Other - 286
Habitat Cut - 0	Opening Maintenance - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Natural Pines	0	0	0	21	0	0	**21**
Oak Types	0	0	8	0	0	0	**8**
Planted Pines	24	0	0	0	108	0	**132**
Total	**24**	**0**	**8**	**21**	**108**	**0**	**161**

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
47	41084047-Cut	10.1	42110 - Planted Red Pine	High Density Log	68	111-140	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Final harvest the stand. No retention due to small strip sizes and for ease of maneuverability.

Other Comments:

Next Steps: Trench and plant the stand to red pine. Continue to monitor for regeneration success.

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
51	41084051-Cut	1.6	42110 - Planted Red Pine	High Density Log	68	111-140	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Final harvest the stand. No retention due to small size and ease of maneuverability.

Other Comments:

Next Steps: Trench and plant the stand to red pine. Continue to monitor for regeneration success.

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
52	41084052-Cut	1.9	42110 - Planted Red Pine	High Density Log	69	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Final harvest the stand. No retention due to small size and ease of maneuverability.

Other Comments:

Next Steps: Trench and plant to red pine. Continue to monitor for regeneration success.

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
56	41084056-Cut	32.5	42110 - Planted Red Pine	High Density Log	68	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Thin red pine to 120.

Other Comments: Will be a light thinning.

Next Steps: Thin again next inventory cycle.

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	41084057-Cut	1.8	42110 - Planted Red Pine	High Density Log	69	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Final harvest the stand. No retention due to small size and ease of maneuverability.

Other Comments:

Next Steps: Trench and plant to red pine. Continue to monitor for regeneration success.

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
59	41084059-Cut	4.5	42110 - Planted Red Pine	High Density Log	68	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Final harvest the stand. No retention due to small size and ease of maneuverability.

Other Comments:

Next Steps: Trench and plant to red pine. Continue to monitor for regeneration success.

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
60	41084060-Cut	2.8	42110 - Planted Red Pine	High Density Log	68	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Final harvest the stand. No retention due to small size and ease of maneuverability.

Other Comments:

Next Steps: Trench and plant red pine. Continue to monitor for regenration success.

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
63	41084063-Cut	1.8	42110 - Planted Red Pine	High Density Log	68	111-140	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Final harvest the stand. No retention due to small size and ease of maneuverability.

Other Comments:

Next Steps: Trench and plant red pine. Continue to monitor for regeneration success.

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
78	41084078_small-Cut	20.9	42200 - Natural White Pine	High Density Log	114	51-80	Harvest	Shelter Wood with Reserves	4220 - Natural White Pine	Fld. Tr. Bdy. - Incomplete

Prescription Specs: Remove overstory, a few residual trees can be left if wind firm, especially by the lake. Cut stand only when soils are frozen to reduce rutting, erosion, sedimentation and compaction.

Other Comments: Stand is currently on contract. 9 Mile Lake Pine II. Sale #41-010-11-01

Next Steps: Continue to monitor for regeneration success. Acceptable regeneration is a mix of current canopy species.

Proposed Start Date: 10/01/2010

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
80	41084080-Cut	54.8	42110 - Planted Red Pine	High Density Log	60	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: This stand to 120.

Other Comments:

Next Steps: Thin again during the next inventory cycle.

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
83	41084083-Cut	20.5	42110 - Planted Red Pine	High Density Log	59	81-110	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Thin stand to 120.

Other Comments: Residual BA will be below 120 due to a lot of open pockets through the stand. Focus marking efforts on thicker pockets.

Next Steps: Thin again during the next inventory cycle.

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
84	41084084-Cut	8.2	4123 - Red Oak	High Density Log	77	51-80	Harvest	Seed Tree with Reserves	4123 - Red Oak	Cmpt. Review Proposal

Prescription Specs: Cut all red pine pine and white pine, and a few oak. Protect the advanced oak regeneration.

Other Comments:

Next Steps: Continue to monitor for oak regeneration. Acceptable species mix include current canopy and sub-canopy species.

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
67	41084067-Plant	53.7	4311 - Pine, Aspen Mix	Medium Density Sapling	8		Tree Planting	Hand Plant	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Regenerate red pine utlizing the following methods: herbicide, Rx burn, trenching, and planting.

Other Comments: This stand was planted in 2007. Regeneration was checked in the spring of 2008 and then again in 2010. The stand failed the regen check.

Next Steps: Contintue to monitor for success of regeneration of jack pine. Acceptable species mix is red pine.

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	NF_41084016-Plant	7.7	3302 - Low Density Conifer Trees				Tree Planting	Hand Plant	4212 - Planted Jack Pine	Cmpt. Review Proposal

Prescription Specs: Trench and plant to jack pine.

Other Comments:

Next Steps: Continue to monitor for jack pine regeneration. Acceptable species is jack pine.

Proposed Start Date: 10/01/2014

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
40	NF_41084040-Plant	146.6	310 - Herbaceous Openland				Tree Planting	Hand Plant	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Regenerate red pine utlizing the following methods: herbicide, Rx burn, trenching, and planting.

Other Comments:

Next Steps: Monitor for success of red pine regeneration. Acceptable species is red pine.

Proposed Start Date: 10/01/2014

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
73	NF_41084073-Plant	6.4	3302 - Low Density Conifer Trees				Tree Planting	Hand Plant	4212 - Planted Jack Pine	Cmpt. Review Proposal

Prescription Specs: Regenerate jack pine utilizing any of the following methods: herbicide, Rx burn, treching, and planting.

Other Comments: Stand was planted in 2005, replanted in 2007 and then again in 2013. The stand failed the 2013 regen counts.

Next Steps: Monitor for regeneration success. Acceptable species is jack pine.

Proposed Start Date: 10/01/2014

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
76	NF_41084076-Plant	9.0	310 - Herbaceous Openland				Tree Planting	Hand Plant	4222 - Natural Jack Pine	Cmpt. Review Proposal

Prescription Specs: Regenerate jack pine utilizing any of the following methods: herbicide, Rx burn, trenching, and planting.

Other Comments: Stand was planted in 2005. Release work was done in 2008. Stand failed 2010 regen checks.

Next Steps: Monitor for jack pine regeneration. Acceptable species mix is jack pine.

Proposed Start Date: 10/01/2014

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	NF_41084002-Burn	6.9	310 - Herbaceous Openland				Prescribed Burn	Unspecified	310 - Herbaceous Openland	Cmpt. Review Proposal

Prescription Specs: Burn stand to maintain stand as an opening.

Other Comments:

Next Steps: Burn again in 10 years to reduce herbaceous competition.

Proposed Start Date: 10/01/2014

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
9	NF_41084009-Burn	73.4	310 - Herbaceous Openland				Prescribed Burn	Unspecified	310 - Herbaceous Openland	Cmpt. Review Proposal

Prescription Specs: Burn stand to maintain stand as an opening.

Other Comments:

Next Steps: Burn again in 10 years to reduce herbaceous competition.

Proposed Start Date: 10/01/2014

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
14	NF_41084014-Burn	97.5	310 - Herbaceous Openland				Prescribed Burn	Unspecified	310 - Herbaceous Openland	Cmpt. Review Proposal

Prescription Specs: Burn stand to maintain stand as an opening.

Other Comments:

Next Steps: Burn again in 10 years to reduce herbaceous competition.

Proposed Start Date: 10/01/2014

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
18	NF_41084018-Burn	52.2	310 - Herbaceous Openland				Prescribed Burn	Unspecified	310 - Herbaceous Openland	Cmpt. Review Proposal

Prescription Specs: Burn stand to maintain stand as an opening.

Other Comments:

Next Steps: Burn again in 10 years to reduce herbaceous competition.

Proposed Start Date: 10/01/2014

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
30	NF_41084030-Burn	11.2	310 - Herbaceous Openland				Prescribed Burn	Unspecified	310 - Herbaceous Openland	Cmpt. Review Proposal

Prescription Specs: Burn stand to maintain stand as an opening.

Other Comments:

Next Steps: Burn again in 10 years to reduce herbaceous competition.

Proposed Start Date: 10/01/2014

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
37	NF_41084037-Burn	16.4	310 - Herbaceous Openland				Prescribed Burn	Unspecified	310 - Herbaceous Openland	Cmpt. Review Proposal

Prescription Specs: Burn stand to maintain stand as an opening.

Other Comments:

Next Steps: Burn again in 10 years to reduce herbaceous competition.

Proposed Start Date: 10/01/2014

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
38	NF_41084038-Burn	28.5	310 - Herbaceous Openland				Prescribed Burn	Unspecified	310 - Herbaceous Openland	Cmpt. Review Proposal

Prescription Specs: Burn stand to maintain stand as an opening.

Other Comments:

Next Steps: Burn again in 10 years to reduce herbaceous competition.

Proposed Start Date: 10/01/2014

Total Treatment Acreage Proposed: 670.7

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 | **Compartment 084**

Tori Irving : Examiner | **Year of Entry 2016**

Availability for Management

Total Acres	Acres Available	Acres Not Available	Dominant Site Conditions	No	5C
587	587		**Aspen**	587	
14	14		**Jack Pine**	14	
21	21		**Mixed Upland Deciduous**	21	
23	23		**Natural Mixed Pines**	23	
13	13		**Northern Hardwood**	13	
163	163		**Oak**	9	154
6	6		**Planted Mixed Pines**	6	
338	338		**Red Pine**	338	
54	54		**Upland Mixed Forest**	54	
66	66		**White Pine**	41	25
1,285	1,285		Total Forested Acres	1,106	179
	100%		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	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	64				
Comments:							
003	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	74				
Comments:							

004	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	9
Comments:			
005	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	7
Comments:			
006	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	25
Comments:			

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

Comments

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	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	High Density Pole	29.2	33		
3	4130 - Aspen	High Density Pole	8.5	33		Good stocking.
4	4122 - Oak, Pine	High Density Log	42.4	82	51-80	Stand was thinned in 1997. Harvest next decade to open canopy to release oak regeneration.
5	4122 - Oak, Pine	High Density Log	22.7	82	51-80	Stand was cut as part of the Thompson Plains R-O-Ws Sale #41-027-06-01. The sale was cut in the summer of 2010. TCR date 12/13/2010.
6	4130 - Aspen	High Density Pole	15.3	33		Some oak and white birch along the edges of the stand.
8	4130 - Aspen	High Density Sapling	6.0	3		Stand was cut as part of sale # 41-027-06-01 Thompson Plains R-O-Ws. The sale was cut in the summer of 2010. TCR date is 12/6/2010. The stand is fully stocked with sapling-sized aspen and red maple.
12	4123 - Red Oak	High Density Log	65.7	78	81-110	Stand was thinned in 1980. There is oak and aspen are regenerating under the canopy. The BA is still a little light. Hold off on thinning/canopy gap creation until next inventory cycle.
13	4130 - Aspen	High Density Pole	10.8	33		
15	4123 - Red Oak	Low Density Log	7.7	80	1-50	Stand was cut as part of the sale 41-027-06-01 Thompson Plains R-O-W's. Sale was cut in the summer of 2010. TCR date is 12/6/2010. Sale is closed and on the regen timeclock to count during the inventory cycle (2014). FTP 1300 (aspen TSI) was closed on 8/30/2011. Overstory is pretty much solid oak. The understory is full of aspen. The canopy is open and will provide plenty of room for the aspen to regenerate and reach the canopy.
17	4130 - Aspen	High Density Pole	18.8	32		
19	4130 - Aspen	High Density Sapling	29.9	16		
20	4130 - Aspen	High Density Pole	7.1	32		
21	4199 - Other Mixed Upland Deciduous	High Density Log	12.4	70	81-110	
23	4130 - Aspen	High Density Pole	41.5	34		
24	4130 - Aspen	High Density Pole	58.4	36		

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	4119 - Mixed Northern Hardwoods	High Density Log	12.5	80	1-50	Stand had heavy blow down damage from 1997 windstorm. The stand was cut as part of the Thompson Plains R-O-Ws. Sale was cut in the summer of 2010. TCR date is 12/6/2010. WLD: In general, wildlife objectives for Northern Hardwood Management include retaining all hemlock, oak, mountain ash and dead snags. It is desired to maintain component of large diameter trees, den trees, and trees with large crotches that would support raptor nests. Yellow birch, American beech, black cherry, and conifers are considered favorable and management activities should encourage retention and expansion of these species. Additionally, large course woody debris is a vital component in the forest and should be retained after the completion of any timber sales.
26	4130 - Aspen	High Density Sapling	19.2	16		
27	4123 - Red Oak	High Density Log	9.4	83	51-80	
28	4130 - Aspen	High Density Sapling	26.3	16		
29	42220 - Natural Jack Pine	High Density Pole	2.9	34		
32	4130 - Aspen	High Density Sapling	7.7	16		
33	4130 - Aspen	High Density Pole	16.2	39		Some good sized aspen in the stand. There is some porcupine damage through the stand.
35	4133 - Aspen, Mixed Pine	High Density Sapling	51.6	4	1-50	Stand was cut as part of the Thompson Plains R-O-W Sale # 41-027-06-01. Sale was cut in the summer of 2010. TCR Date 12/6/2010. FTP 1300, aspen TSI was completed as of 8/30/2011. There are scattered overstory pine and oak. Some of which were cut out in the Thompson Pains sale. Understory aspen and red maple are coming in pretty thick. There is some scattered red oak regenerating as well.
36	4130 - Aspen	High Density Sapling	5.2	31		There is some red maple along the edges of the stand but not enough to include in the canopy. Some pole sized stems and good stocking.
39	42200 - Natural White Pine	High Density Log	16.8	58	1-50	
41	4130 - Aspen	High Density Sapling	27.9	31		This stand is really thick with aspen regeneration. There are scattered jack pine and oak in the stand, most of it is along the edges.
42	4131 - Aspen, Oak	High Density Sapling	15.3	25		

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
43	4131 - Aspen, Oak	High Density Pole	99.2	40	51-80	There are some mature, overstory oak and aspen. There are small sapling sized aspen and oak in the understory, which are almost as tall as the overstory. Leave the stand for another decade or two to mature and gain more volume. Some areas of the understory are substantially thicker than others.
44	4123 - Red Oak	High Density Log	6.9	80	1-50	Stand is regenerating well. There is not a lot of oak present. It is mostly aspen, red maple, and beech. Stand was harvested as part of Sale # 41-027-06-01 Thompson Plains R-O-Ws. The sale was cut in the summer of 2010. TCR date 12/6/2010.
45	4130 - Aspen	High Density Sapling	28.7	33		
46	4130 - Aspen	High Density Pole	2.6	31		There are a few scattered red pine in the understory.
47	42110 - Planted Red Pine	High Density Log	10.1	68	111-140	Stand was part of the 9 Mile Pine Sale # 009-06. TCR is 6/22/2010. The stand was thinned in the Spring of 2008. Some damage due to poor operator.
48	42120 - Planted Jack Pine	High Density Pole	3.5	37		Old furrows in the stand.
49	4130 - Aspen	High Density Sapling	10.4	16		
50	4131 - Aspen, Oak	High Density Sapling	5.6	25		
51	42110 - Planted Red Pine	High Density Log	1.6	68	111-140	Stand was once a mix of jack pine and red pine. The stand was part of Sale # 09-06 9 Mile Pine. TCR date is 6/22/2013. The stand was actually cut in the Spring of 2008. Some damaged occurred due to poor operation.
52	42110 - Planted Red Pine	High Density Log	1.9	69	81-110	Stand was cut as part of the 9 Mile Red Pne Sale #41-009-06-01. The stand was cut in the Spring of 2008. There was some damage due to poor operation.
53	42140 - Planted Mixed Pine	High Density Sapling	6.2	15		Stand was thinned in 1998. The Jack Pine strips were removed as part of a salvage sale in 1997 then replanted in 1998. The stand consists of only young red pine, residual red pine and separate stands. Regeneration survey (3/14/02) results show 833 red pine trees/acre and 450 volunteers per acre. Release work scheduled to be done under FTP #41-892. Completion report (1/6/2004) showed a total of 5 acres of release work done in 8/03.
54	42250 - Pine, Oak	Low Density Log	16.9	69	1-50	Stand was cut as part of Thompson Plains ROWs Sale # 41-027-06-01. Sale was cut in the summer of 2010 and is closed.
55	42210 - Natural Red Pine	High Density Sapling	1.3	23		There is some scattered jack pine.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
56	42110 - Planted Red Pine	High Density Log	35.0	68	111-140	The stand was alternate rows of red pine and jack pine. In the spring of 1997, 2 rows of jack pine and one row of red pine were cut leaving only red pine. The stand received heavy damage from a 1997 windstorm and it was subsequently salvaged. The stand was cut as part of the 9-Mile Pine Sale #41-009-06. The stand was cut in the Spring of 2008. TCR date 6/22/2010.
57	42110 - Planted Red Pine	High Density Log	1.8	69	81-110	This stand was cut as aprt of the 9 Mile Red Pine Sale # 41-009-06-01. Stnad was cut in the Spring of 2008. Some damage occured due to poor operation.
58	42110 - Planted Red Pine	High Density Sapling	21.9	18		Thinned in 1988. Jack Pine strips removed as salvage sale in 1997 and was replanted in 1998. The stand now consists of only young red pine. Residual red pine are in separate strips. Regeneration survey results from 3/14/2002 show 833 red pine trees/acre and 450 volunteers per acre. Five acres of release work (FTP 41-892) was completed in 8/03. FTP is now closed.
59	42110 - Planted Red Pine	High Density Log	4.5	68	81-110	Stand is one of a series of strips. Stocking and diameter are deceiving in the strips. The narrower the strip, the larger the diameter. The stand was one a J6/R6. The Jack Pine was cut out and replanted to R3 resulting in a storied mosaic, which may not be the best from a sphaeropsis stand point. The stand was cut as part of the 9-Mile Pine Sale #41-009-06. The stand was cut in the Spring of 2008. TCR date 6/22/2010. Some damage occurred in the sale area due to a poor equipment operator.
60	42110 - Planted Red Pine	High Density Log	2.8	68	81-110	Stand is one of a series of strips. Stocking and diameter are deceiving in the strips. The narrower the strip, the larger the diameter. The stand was one a J6/R6. The Jack Pine was cut out and replanted to R3 resulting in a storied mosaic, which may not be the best from a sphaeropsis stand point. The stand was cut as part of the 9-Mile Pine Sale #41-009-06. The stand was cut in the Spring of 2008. TCR date 6/22/2010. Some damage occurred in the sale area due to a poor equipment operator.
62	42110 - Planted Red Pine	High Density Sapling	52.3	15		3/14/2002 Regeneration survey results: 771 red pine trees/acre and 470 volunteers per acre. Release work to be done under FTP #41-805 1/6/2004 Received completion for 10 total acres of release work was completed in 8/2003. FTP is closed. There are some scattered aspen pockets in the stand.
63	42110 - Planted Red Pine	High Density Log	1.8	68	111-140	Stand is one of a series of strips. Stocking and diameter are deceiving in the strips. The narrower the strip, the larger the diameter. The stand was one a J6/R6. The Jack Pine was cut out and replanted to R3 resulting in a storied mosaic, which may not be the best from a sphaeropsis stand point. The stand was cut as part of the 9-Mile Pine Sale #41-009-06. The stand was cut in the Spring of 2008. TCR date 6/22/2010. Some damage occurred in the sale area due to a poor equipment operator.
64	4130 - Aspen	High Density Sapling	4.4	15		

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
65	42210 - Natural Red Pine	High Density Log	2.5	68	51-80	The stand was one a J6/R6. The Jack Pine was cut out and replanted to R3 resulting in a storied mosaic, which may not be the best from a sphaeropsis stand point. The stand was cut as part of the 9-Mile Pine Sale #41-009-06. The stand was cut in the Spring of 2008. TCR date 6/22/2010. Some damage occurred in the sale area due to a poor equipment operator.
66	42110 - Planted Red Pine	High Density Sapling	6.1	15		Stand was thinned in 1988. The jack pine strips were removed as part of a salvage sale in 1997 and was replanted in 1998. The stand now consists of only young red pine. Residual red pine are in separate stands. 3/14/2002: Regeneration survey results showed 833 red pine trees/acre and 450 volunteers per acres. Release work to be done as part of FTP #41892 1/6/2004: Completion report for 5 acres of release work on 8/2003. FTP is now closed.
67	4311 - Pine, Aspen Mix	Medium Density	53.7	8		Stand was cut in the spring of 2004 as the Salvage Jack Pine Sale. The stand is being converted to red pine under FTP C41-1119. The stand was trenched in the summer of 2004 with Wyman Nursery Staff. 6/1/2006: Stand was planted in 2005. The 2006 regeneration counts were 247 red pine. Site may need herbicides. It will be replanted in the spring of 2007. 5/12/2007: Stand was replanted. Needs a regeneration check in 2008. 4/22/2008: Spring 2008 regeneration check results: 470 red pine, 156 jack pine, 4 white pine. Regeneration check in 2010. 8/25/2008: Inmates cut hardwood competition to release the red pine. Keep monitoring for future release work. 3/22/2010: The 2010 regeneration check (3rd year check) 350 red pine, 254 jack pine, 6 white pine. The site was referred to the TMS for additional regeneration work.
68	4132 - Aspen, Jack Pine	High Density Pole	6.8	45		
69	4130 - Aspen	High Density Sapling	8.0	24		
71	42220 - Natural Jack Pine	High Density Pole	7.7	46		
72	42110 - Planted Red Pine	High Density Sapling	20.2	22		The stand was planted with red pine under FTP C41-517. The completion report was dated July 1991.
74	42260 - Natural Pine, Mixed Deciduous	High Density Pole	5.9	24	51-80	Stand is pretty thick in the understory, which is mostly white pine.
77	42210 - Natural Red Pine	High Density Log	15.7	69	51-80	

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
78	42200 - Natural White Pine	High Density Log	45.9	114	51-80	Stand has been cut and salvaged many times due to shallow soils. There is a lot of pine regeneration, mostly white, but a lot of red as well. The stand was cut as part of the 9-Mile Pine Sale #41-0090-06. 10/31/2011: The stand was re-prepped an put on proposal #41-010-11 9-Mile Pine II (16 Acres) Residual white pine 55' and red pine 10'.
79	42210 - Natural Red Pine	High Density Sapling	83.5	14	141-170	The stand was cut in 1997/98 and 77 acres were planted in 1999. 3/14/2002: Regeneration survey results: 896 red pine tree/acre and 93 volunteers per acre. Release work still needs to be done under FTP#41-766 5/22/2006: A small portion of the stand was planted with inmates. 1 acre – 1000 red pine. 11/8/2006: 2007 regeneration check on a small planted piece: 466 red pine, 33 jack pine, 33 white pine. 4/24/2009: Release work done and not needed anymore. CLOSE FTP C41-766 There is some scattered black cherry and red oak in the canopy but there is not enough to include these species in the canopy data.
80	42110 - Planted Red Pine	High Density Log	54.8	60	141-170	This stand was part of the 9 Mile Pine Sale #41-009-06-01. The sale was cut in the Spring of 2008. TCR 6/22/10.
81	4136 - Aspen, Mixed Conifer	High Density Sapling	23.8	24		There is white pine along the edges. The southern end of the stand has some lower pockets with tag alder and black spruce. There is some scattered red pine in the canopy but not enough to be included with the canopy species.
82	4130 - Aspen	High Density Pole	2.3	24		
83	42110 - Planted Red Pine	High Density Log	20.5	59	81-110	Thinned in 1989. 3/8/2006: Stand was part of 9-Mile Pine Sale #41-009-06. Units 4 and 5. Stand was thinned in 2008. TCR date 6/22/2010.
84	4123 - Red Oak	High Density Log	8.2	77	51-80	Stand was planted through with red pine about 50 years ago but the red pine was stunted due to shade.
85	4199 - Other Mixed Upland Deciduous	High Density Pole	9.0	77	81-110	The stand had blow down damage from 1997, which was salvaged. In general, Wildlife objective for Northern Hardwood Management include retaining all hemlock, oak, mountain ash, and dead snags. It is desired to maintain components of large diameter trees, den trees, and trees with large crotches that would support raptor nests. Yellow birch, American beech, black cherry, and conifers are considered favorable and management activities should encourage retention and expansion of these species. Additionally, large course woody debris is a vital component in the forest and should be retained after the completion of any timber sale.
86	42200 - Natural White Pine	High Density Pole	3.5	59	81-110	

Report 9 – Nonforested Stands

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	310 - Herbaceous Openland	6.9	Yes	High	Stand is full of shrubs and is filling in. It has juneberry, cherry, and hazel present. Aspen is starting to encroach on all sides. Some maintenance will need to be done in order to maintain stand as an opening.
7	11 - Low Intensity Urban	6.8	No	Unspecified	Enbridge Pipeline
9	310 - Herbaceous Openland	73.4	Yes	High	
10	310 - Herbaceous Openland	10.7	No	Unspecified	
11	11 - Low Intensity Urban	12.8	No	Unspecified	Great Lakes Gas Pipeline
14	310 - Herbaceous Openland	97.5	Yes	High	
16	3302 - Low Density Conifer Trees	20.4	Plantation	Jack Pine	The stand was cut as part of the Danko South Sale #41-025-06-01. TCR date was 7/20/2009. The sale had some trespass issues in the spring of 2008 when the producer thought they were cutting their actual adjacent sale, Dufour Headwaters. Approximately 1.5 acres were cut. The sale had previously been on hold due to green-up; however, due to the trespass issue, it was determined the best thing was to go ahead and sell the sale prior to meeting the green-up requirement. The stand was scarified in the summer of 2010.
18	310 - Herbaceous Openland	52.2	No	Unspecified	
22	11 - Low Intensity Urban	3.7	No	Unspecified	Cloverland Powerline
30	310 - Herbaceous Openland	11.2	Yes	High	
31	11 - Low Intensity Urban	27.6	No	Unspecified	Railroad and Cloverland Transmission Line
34	310 - Herbaceous Openland	2.4	Yes	High	
37	310 - Herbaceous Openland	16.4	No	Unspecified	
38	310 - Herbaceous Openland	28.5	Yes	High	The stand was burned in 1997 with other grass stands.
40	310 - Herbaceous Openland	146.6	Yes	High	About half of the stand is full of aspen. The edges are filling in rapidly.

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
61	3302 - Low Density Conifer Trees	1.5	Plantation	Red Pine	Stand was cut as part of the Thompson Plains ROWs Sale #41-027-06-01. The stand was cut in the summer of 2010. The sale is closed with a TCR date of 12/6/2010. The stand is covered under FTP 41-1302 and is on the list to plant. The stand is on the regeneration timeclock.
70	123 - Other High Intensity Urban	17.5	No	Unspecified	Highway US-2
73	3302 - Low Density Conifer Trees	6.4	Plantation	Red Pine	
75	50 - Water	89.5	No	Unspecified	9 Mile Lake
76	310 - Herbaceous Openland	9.0	Plantation	Red Pine	