Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41177
Entry Year 2019
Acreage: 1,209
County Alger
Management Area: Cusino Complex

Revision Date: 2017-07-11

Stand Examiner: Jason Lindquist

Legal Description:

T47N, R17W, sec. 19, 30-32

Identified Planning Goals:

To provide sustainable forest eco-system management.

Soil and topography:

Soils in the upland hardwood areas of the compartment are mainly either Munising Calcareous Substratum-Cookson Complex 1-6% slopes, or Munising-Yalmer-Frohling, Calcareous substratum 1-6% slopes. The lowland areas near Noble lake and Stoney Creek have Carbondale, Lupton and Tawas soils.

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

There are a few private parcels to the south, commercial forestland on the west, and state owned land to the north and east.

Unique Natural Features:

Archeological, Historical, and Cultural Features:

None known at present

Special Management Designations or Considerations:

An ERA management plan is written for the rich conifer swamp near Noble Lake.

Watershed and Fisheries Considerations:

Moderate. Stoney Creek is classified as Type 1 trout water. Although it can support native brook trout, we do not actively manage it. There is no fishery associated with the Eastern Lake Superior Fisheries Management area.

Wildlife Habitat Considerations:

Located due north of Van Meer, this compartment contains Noble Lake and the headwaters of Stoney Creek. Pre-settlement data show that sugar maple was the dominant upland forest type at that time. Beech, yellow birch and hemlock were also well represented. In the lowland areas, cedar and tamarack were recorded most often with mixtures of black spruce, ash and elm.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of an end moraine of medium-textured till. There is insufficient data to determine the glacial drift thickness. The Ordovician Prairie du Chien (PdC) Formation subcrops below the glacial drift. The PdC could be used for stone. The nearest gravel pit is two miles to the southwest, but there should be potential on the uplands. There is no commercial oil and gas production in the UP.

Vehicle Access:

Most of the compartment is accessible by vehicle on poor two-track roads.

Survey Needs:

none needed at present

Recreational Facilities and Opportunities:

Although there are no developed DNR recreational facilities within the compartment, the compartment is used for hunting and mushroom picking

Fire Protection:

The majority of the compartment is easily accessed by fire protection vehicles. There are no specific Fire Protection

concerns within this compartment.

Additional Compartment Information:

The following reports from the Inventory are attached:

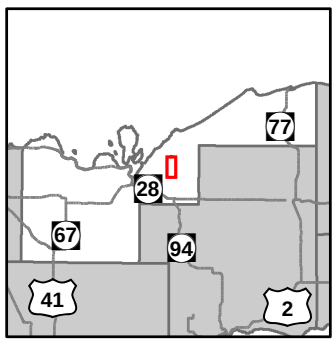
- **Total Acres by Cover Type and Age Class**
- **Cover Type by Harvest Method**
- **Proposed Treatments – No Limiting Factors**
- **Proposed Treatments – With Limiting Factors**
- **Stand Details (Forested and Nonforested)**
- **Dedicated and Proposed Special Conservation Areas**
- **Site Condition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

Compartment: 177
T47N,R17W, Sec: 19, 30, 31
County: Alger
Unit: Shingleton
Mgmt Area: Cusino Complex
YOE: 2019
Acres: 1209 GIS Calculated
Examiner: Jason Lindquist
Map Revised: 8/23/2017
Map Phase: Review



N

- Miris Corners
- Remonumented Section Corners
- Field Grade GPS Corners
- Counties
- Paved Roads
- County Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- Streams
- Lakes and Rivers All
- Compartment Boundary
- Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- Lakes

Stand Boundary Map

Compartment: 177
T47N,R17W, Sec: 19, 30, 31
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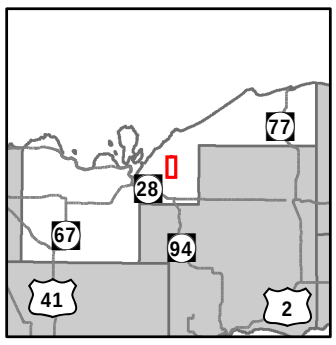

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- Miris Corners
- Remonumented Section Corners
- Field Grade GPS Corners
- Counties
- Paved Roads
- County Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- Streams
- Lakes and Rivers All
- Compartment Boundary
- Stand Boundaries
  - 411 - Northern Hardwood
  - 413 - Aspen
  - 419 - Mixed Upland Deciduous
  - 612 - Lowland Coniferous Forest
  - 613 - Lowland Mixed Forest
  - 310 - Herbaceous Openland
  - 330 - Low Density Trees
  - 500 - Water
  - 622 - Lowland Shrub

Special Conservation Areas & Site Conditions Map

Compartment: 177
T47N,R17W, Sec: 19, 30, 31
County: Alger
Unit: Shingleton
Mgmt Area: Cusino Complex
YOE: 2019
Acres: 1209 GIS Calculated
Examiner: Jason Lindquist
Map Revised: 8/23/2017
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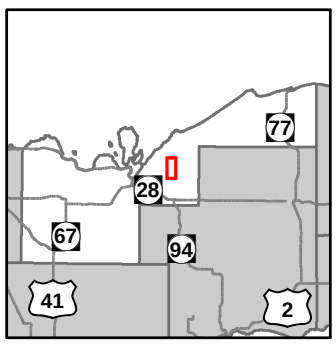

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- Miris Corners
- Remonumented Section Corners
- Field Grade GPS Corners
- Counties
- Paved Roads
- County Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- Streams
- Lakes and Rivers All
- Compartment Boundary
- SCA Proposed
- Unavailable
- 3A: Conservation Values incompatible with harvest at this time
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Ecological Reference Areas
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Verified Type 2 Old Growth
- Deer Winter Range
- Contiguous Resource Area
- Possible Type 2 Old Growth

Report 1 – Total Acres by Cover Type and Age Class

Shingleton Mgt. Unit **Compartment 177 Year of Entry 2019**

Jason Lindquist : Examiner

Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	0	12	43	19	0	2	0	0	0	0	0	0	0	0	0	0	0	**76**
Cedar	0	0	0	0	0	0	0	0	39	0	0	91	0	0	0	0	0	36	**166**
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Low-Density Trees	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**46**
Lowland Conifers	0	0	0	0	5	5	0	0	2	0	0	0	0	0	0	0	0	3	**15**
Lowland Mixed Forest	0	0	0	0	0	0	0	4	9	56	0	0	0	0	0	0	0	18	**87**
Lowland Shrub	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**40**
Mixed Upland Deciduous	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	**7**
Northern Hardwood	0	0	0	0	6	0	0	0	0	158	0	0	0	0	0	0	0	554	**718**
Water	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**49**
Total	**138**	**0**	**15**	**43**	**30**	**5**	**2**	**4**	**50**	**214**	**0**	**91**	**0**	**0**	**0**	**0**	**0**	**616**	**1206**

Report 2 – Treatment Summary

Shingleton Mgt. Unit

Year of Entry: 2019

Acres of Harvest

Compartment 177

Total Compartment Acres: 1,209

Commercial Harvest - 537

Harvests with Site Condition - 0

Next Step Harvest - 0

Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	2	0	0	0	0	0	0	0	0	**2**
Low-Density Trees	25	0	0	0	0	0	0	0	0	**25**
Lowland Conifers	5	0	0	0	0	0	0	0	0	**5**
Lowland Mixed Forest	11	0	0	0	0	0	0	0	0	**11**
Mixed Upland Deciduous	2	0	0	0	0	0	0	0	0	**2**
Northern Hardwood	0	492	0	0	0	0	0	0	0	**492**
Total	**45**	**492**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**537**

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	537	0	0	0	0	0	0	0	0	**537**
Next Step	0	0	0	0	0	0	537	0	0	**537**
Total	**537**	**0**	**0**	**0**	**0**	**0**	**537**	**0**	**0**	**1073**

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
3	41177003-Cut	41.3	4110 - Sugar Maple Association	Sawtimber Well	80	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Thin hardwood to 70-90 BA. Target basswood, beech, and aspen in stand.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Northern hardwood species currently on site.

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
6	41177006-Cut	23.4	4110 - Sugar Maple Association	Sawtimber Well	80	141-170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Thin hardwoods to 70-90 BA. Target basswood and cherry first then Hard maple. Cut all aspen in stand.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Hardwood species on site.

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
8	41177008-Cut	32.1	4110 - Sugar Maple Association	Sawtimber Well	80	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Thin to 70-90 BA. thin basswood, cherry,and any aspen then maple.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Hardwood species on site

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
11	41177011-Cut	10.9	6139 - Mixed Lowland Forest	Sawtimber Well	71	81-110	Harvest	Clearcut with Retention	613 - Lowland Mixed Forest	Even-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all trees except hemlock. Retention will be in the North part of the stand near wet area.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: mixed of conifers and hardwoods.

Other Comment: Should be winter cut due to wet heavy soils.

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
12	41177012-Cut	13.9	4110 - Sugar Maple Association	Sawtimber Well	80	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: thin to 70-90 BA. do not cut elm

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
17	41177017-Cut	5.1	4110 - Sugar Maple Association	Sawtimber Well	80	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Thin stand down to 70-90 BA. Cut Basswood and cherry out.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
18	41177018-Cut	5.4	4110 - Sugar Maple Association	Sawtimber Well	80	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen. Thin to 70-90 BA

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
19	41177019-Cut	3.9	4110 - Sugar Maple Association	Sawtimber Well	80	51-80	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Thin to 70-90 BA. Cut all aspen.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
20	41177020-Cut	40.2	4110 - Sugar Maple Association	Sawtimber Well	80	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Thin to 70-90 BA. Thin out basswood, aspen and beech and Hard maple. Do not cut Hemlock

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: hardwoods species

Other Comment: stand has some low wet ground on the south west side that should be cut in the winter.

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
23	41177023-Cut	13.3	4110 - Sugar Maple Association	Sawtimber Well	80	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Thin to 70-90 BA. do nut cut Hemlock. do not cut any aspen with in 300 feet of Stoney creek.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
25	41177025-Cut	26.6	4110 - Sugar Maple Association	Sawtimber Well	80	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: cut all aspen. Thin rest of stand to 70-90 BA

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
29	41177029-Cut	46.8	4110 - Sugar Maple Association	Sawtimber Well	80	141-170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: thin down to 70-90 BA

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
31	41177031-Cut	70.9	4110 - Sugar Maple Association	Sawtimber Well	80	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: thin to 70-90 BA

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
32	41177032-Cut	3.2	4110 - Sugar Maple Association	Sawtimber Well	80	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Thin down to 70-90 BA. Cut out Basswood and aspen

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
35	41177035-Cut	18.2	4119 - Mixed Northern Hardwoods	Poletimber Well	80	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all spruce and beech. Do not cut Hemlock Thin stand to 70 -90 BA. Do not cut any Aspen with in 300 feet of Stoney creek.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
37	41177037-Cut	15.7	4119 - Mixed Northern Hardwoods	Sawtimber Medium	80	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all spruce. Thin to 70-90 BA. Do not cut Hemlock. Do not cut any aspen with in 300 feet of Stoney creek.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
38	41177038-Cut	13.0	4112 - Maple, Beech, Cherry Association	Sawtimber Well	80	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all beech and spruce. Thin stand to 70-90 BA. Do not cut Hemlock

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
40	41177040-Cut	26.3	4110 - Sugar Maple Association	Sawtimber Well	80	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: thin to 70-90 BA. Cut all spruce, beech, and balsam. do nut cut hemlock.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
41	41177041-Cut	16.8	4112 - Maple, Beech, Cherry Association	Sawtimber Well	80	51-80	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: thin to 70-90 cut all spruce and balsam. do not cut hemlock

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
49	41177049-Cut	14.0	4112 - Maple, Beech, Cherry Association	Sawtimber Well	80	141-170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all beech and balsam. Thin to 70-90 BA

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
51	41177051-Cut	9.4	330 - Low-Density Trees	Nonstocked		Unspecified	Harvest	Clearcut	3102 - Grass		Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all trees. except elm

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Grass

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
53	41177053-Cut	4.8	4110 - Sugar Maple Association	Sawtimber Medium	80	141-170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: thin to 70-90 BA. Cut all aspen and thin rest of species

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
54	41177054-Cut	2.3	4130 - Aspen	Poletimber Medium	52	81-110	Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Retention not needed due to small acreage. Cut all trees.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Aspen and Hard maple mix

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
58	41177058-Cut	9.1	4110 - Sugar Maple Association	Sawtimber Well	80	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all aspen. Thin rest of stand to 70-90 BA

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
63	41177063-Cut	1.6	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	71	81-110	Harvest	Clearcut	4191 - Mixed Upland Deciduous with Conifer	Even-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut all trees except hemlock. No retention small acres.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: mix of conifers and hardwoods.

Other Comment:

Proposed Start Date: 06/26/2017

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
66	41177066-Cut	47.8	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	80	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Thin out spruce. Cut all aspen and pole size ironwood. Thin rest down to 70-90 BA

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
71	41177071-Cut	5.1	6124 - Lowland Spruce-Fir	Sawtimber Well	49	111-140	Harvest	Clearcut	613 - Lowland Mixed Forest	Uneven-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Clear cut. Do not cut Cedar, Hemlock, and birch. No retention is necessary because of stands small acreage, and the adjacent stand is a similar cover type, which is not being harvested. No retention needed to small size.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Hardwood species

Other Comment:

Proposed Start Date: 10/01/2018

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
407	41177407-Cut	15.5	3303 - Mixed Low Density Trees	Nonstocked		Unspecified	Harvest	Clearcut	3102 - Grass		Proposal

Habitat Cut: No **Site Condition:**

Prescription Specs: Cut stand for wildlife opening. Cut all trees except Apple, juneberry, and elm.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: none

Other Comment:

Proposed Start Date: 10/01/2018

Total Treatment Acreage Proposed: 536.6

Report 4 – Site Conditions

Shingleton Mgt. Unit

Jason Lindquist : Examiner

Compartment: 177

Year of Entry: 2019

Availability for Management

Total Acres	Acres Available	*Acres Avail With Condition*	Acres Not Available		Dominant Site Conditions 3A	3J
76	76	*0*	0	**Aspen**		
170	17	*0*	154	**Cedar**	95	58
2	2	*0*	0	**Herbaceous Openland**		
47	47	*0*	0	**Low-Density Trees**		
15	15	*0*	0	**Lowland Conifers**		
87	31	*0*	56	**Lowland Mixed Forest**	56	
40	33	*0*	7	**Lowland Shrub**	7	
8	8	*0*	0	**Mixed Upland Deciduous**		
714	693	*0*	21	**Northern Hardwood**	21	
49	49	*0*	0	**Water**		
1,209	970		239	Total Forested Acres	180	58
	80%		20%	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
1	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	16	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
2	**Unavailable**	**3A: Conservation Values incompatible with harvest at this time**	180	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

4	**Unavailable**	**3J: Water quality / BMPs (stream, river, or lake)**	23	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified

Comments:

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

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
	Type 1 or Type 2 Old Growth	Possible Type 2 Old Growth Area	**Proposed SCA**	
Comments				
	Type 1 or Type 2 Old Growth	Verified Type 2 Old Growth Area	**Proposed SCA**	
Comments				

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.

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

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
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.
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	6120 - Lowland Cedar	Sawtimber Well	91.0	107	81-110	SCA-Potential Old Growth, Rich conifer swamp (MNFI). An ERA management plan is currently under development for the rich conifer swamp near Noble Lake. Large cedar swamp surrounding Noble Lake. 99=yellow birch, red maple soil=Carbondale, Lupton and Tawas soils
2	4112 - Maple, Beech, Cherry Association	Poletimber Well	4.2	180	81-110	SCA-Potential Old Growth, surrounded by rich conifer swamp (no access to stand). An ERA management plan is currently under development for the rich conifer swamp near Noble Lake. Hardwood ridge within conifer swamp. Near Noble Lake. 99=beech, paper birch, yellow birch, cherry soil=Carbondale, Lupton and Tawas soils
3	4110 - Sugar Maple Association	Sawtimber Well	41.3	80	111-140	Thinned last entry. Habitat type=AFOAs 99/1=basswood, y.birch soil=Munising Calcareous Substratum-Cookson Complex 1-6% slopes
4	4110 - Sugar Maple Association	Sawtimber Well	72.7	80	81-110	Some areas of the stand were cut last entry. The majority of the stand is M6, with some areas of M9. To address MNFI concerns, the red line on the east side adjacent to stand 1 will be on dry ground. See stand 412 - no logging equipment allowed. Rolling terrain. 99/2=cherry & ironwood Habitat type=AFOAs soil=Munising-Yalmer-Frohling complex, calcareous substratum, 1-6% slopes and Munising Calcareous substratum-Cookson complex 1-6% slopes. [11-23-10] Stand is now under contract 41-029-09-01 Noble Lake Hardwood. Residual BA: Sugar maple = 67; basswood = 9; beech = 2; elm = 1; yellow birch = 1; red maple & cherry = 1; total = 81 sq.ft./acre. Sale is now completed TCR dtd 8-19-13.
5	4130 - Aspen	Poletimber Well	26.1	22	111-140	Aspen with some hardwood mixed in. A few residual merchantable hardwood and aspen (<10 BA). Soil=Munising-Yalmer-Frohling complex, calcareous substratum 1-6% slopes
6	4110 - Sugar Maple Association	Sawtimber Well	23.4	80	141-170	Lower BA at the south end. 99/2= cherry & beech Habitat type=AFOAs soil=Munising Calcareous substratum-Cookson Complex 1-6% slopes
7	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	6.4	32	81-110	Dense hardwood regeneration: s.maple, r.maple, cherry, etc. This stand is on slightly lower ground than the surrounding hardwood stands. There are a few merchantable hardwoods (<10BA). Soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-6% slopes
8	4110 - Sugar Maple Association	Sawtimber Well	32.1	80	81-110	Thinned last entry. Dense hardwood regeneration 5-10 ft. tall. Rolling terrain. 99/1=s.maple, basswood, cherry Soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-6% slopes
9	4139 - Aspen, Mixed Deciduous	Poletimber Well	4.1	22	81-110	Aspen with some hardwood mixed in. Soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-6% slopes

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
11	6139 - Mixed Lowland Forest	Sawtimber Well	11.4	71	81-110	There is a lot of diversity within the stand, with conifers and hardwoods mixed together, and separate areas of each. There are also low, wet areas within the stand. Mixed regeneration reflects the canopy, with hardwood and balsam fir throughout, and other species in groups. 98=white pine and hemlock soil=Charlevoix-Ensley Complex 0-3% slopes
12	4110 - Sugar Maple Association	Sawtimber Well	13.9	80	81-110	99=y.birch, cherry, aspen Soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-6% slopes
13	4112 - Maple, Beech, Cherry Association	Sawtimber Well	7.6	80	81-110	Thinned last entry. Ridge of hardwood surrounded by low, wet ground. Winter road to stand is full of water and tall brush. road on stand is full of regen. 99/1=yellow birch, sugar maple, beech, cherry Soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-6% slopes
14	4112 - Maple, Beech, Cherry Association	Sawtimber Well	13.5	80	81-110	Thinned last entry. Ridge of hardwood surrounded by low, wet ground. Winter road to stand is full of water and tall brush. rd full of regen 99/1=yellow birch, sugar maple, beech, cherry Soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-6% slopes
15	6132 - Mixed Lowland Forest with Cedar	Poletimber Medium	56.3	82	81-110	Variable BA - trees in groups. Low, wet ground. Soil=Carbondale, Lupton and Tawas soils
16	4130 - Aspen	Sapling Well	4.1	37	51-80	Mix of aspen and hardwood regeneration. Soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-6% slopes
17	4110 - Sugar Maple Association	Sawtimber Well	5.1	80	111-140	Hardwood rigde within a grass stand. Soil=Munising Calcareous substratum-Cookson Complex 1-6% slopes
18	4110 - Sugar Maple Association	Sawtimber Well	5.4	80	81-110	Hardwood ridges with small pockets of M3 & A3. Soil=Munising-Yalmer-Frohling Complex, calcareous
19	4110 - Sugar Maple Association	Sawtimber Well	3.9	80	51-80	Small openings within the stand. 99=cherry, basswood, ironwood soil=Munising Calcareous substratum-Cookson Complex 1-6% slopes
20	4110 - Sugar Maple Association	Sawtimber Well	40.2	80	111-140	Thinned about 1995. Dense regeneration; mainly hardwood with balsam fir. Some areas of the stand are M9, but the average is M6. Ancillary data is available. 99/2=basswood, ironwood, apsen Soil=Munising-Yalmer-Frohling Complex, Calcareous Substratum 1-6% slopes. wet areas along the west side of stand.
21	4130 - Aspen	Sapling Well	13.0	37	81-110	Aspen with some other trees mixed in: b.fir, spruce, cherry and maple. Soil=Munising Calcareuos Substratum - Cookson Complex 1-6% slopes
22	6120 - Lowland Cedar	Sawtimber Well	19.4	107	201+	Streams through stand - Stoney Creek and tributaries. Mainly cedar, with mixed conifers closer to the edges. 99=r.maple, y.birch soil=Chippeny-Nahma Mucks

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	4110 - Sugar Maple Association	Sawtimber Well	13.3	80	81-110	Thinned in 1997. Rolling terrain. Habitat type=AFOAs 99/2=r.maple, ironwood soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-12% slopes, dissected
24	4110 - Sugar Maple Association	Sawtimber Well	31.8	80	81-110	Mainly sugar maple with a few yellow birch, basswood, aspen and beech. Rolling terrain. Some areas with American Yew (ground hemlock). Protect vernal ponds by maintaining shade around them. 99/2=beech, aspen, ironwood Habitat type=AFOAs soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-6% slopes = 1; total = 77 sq.ft./acre. Was cut in 2010
25	4110 - Sugar Maple Association	Sawtimber Well	26.6	80	81-110	Thinned 1997. 99/2=aspen, ironwood, r.maple, p.birch, cherry soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-12% slopes, dissected Aspen patch along the rd
26	4112 - Maple, Beech, Cherry Association	Poletimber Medium	6.8	80	81-110	Cut last entry: all trees except maple. Dense regeneration - maple, cherry, y.birch, b.fir, etc. Ground cover includes raspberry and American Yew (ground hemlock). Soil=Carbondale, Lupton, and Tawas soils
27	6120 - Lowland Cedar	Sawtimber Well	23.0	72	171-200	Stand contains drainages to Stoney Creek. Mix of conifers and hardwoods, with some cedar patches. soil=Carbondale, Lupton, and Tawas soils
28	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	2.3	75	141-170	Small stand that continues onto private to west. Low, wet ground at the bottom of a hill in stand 30. Soil=Carbondale, Lupton and Tawas soils
29	4110 - Sugar Maple Association	Sawtimber Well	46.8	80	141-170	Thinned in 2000. Rolling terrain. American Yew throughout most of the stand, especially in the north. Habitat type=AFOAs 99/2=y.birch, beech, aspen
30	4110 - Sugar Maple Association	Sawtimber Well	55.6	80	81-110	Rolling terrain. Mainly sugar maple with a few beech, basswood, yellow birch and ironwood. . 99/2=y.birch, beech, ironwood, aspen Habitat type=AFOAs [9-7-10] Stand is now under contract TS 41-004-09-01 Rosemund Maple. Residual BA: sugar maple = 72; yellow birch = 4; basswood = 7; beech = 2; total = 85 sq.ft./acre. [8-10-12] Sale is now closed/completed TCR dtd 7-30-12.
31	4110 - Sugar Maple Association	Sawtimber Well	70.9	80	111-140	Thinned in 2000. The north part of the stand has dense American Yew (ground hemlock). Habitat type is AFOAs. 99/2=basswood, r.maple, cherry, y.birch
32	4110 - Sugar Maple Association	Sawtimber Well	3.2	80	81-110	Small hardwood stand that continues onto private land. Corner post was found in stand, and an old paint line. Soil=Munising-Yalmer-Frohling Complex, calcareous substratum, 1-6% slopes
34	6120 - Lowland Cedar	Sawtimber Well	16.1	77	201+	Low, wet area containing small creeks. Mix of trees; some areas are mainly cedar. 99=y.birch, r.maple, aspen soil=Carbondale, Lupton and Tawas soils

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	4119 - Mixed Northern Hardwoods	Poletimber Well	18.2	80	111-140	Thinned in 2000. Regeneration is a mix of hardwoods with balsam fir. the stand (near stand 37) Soil=Munising-Yalmer-Frohling Complex, calcareous substratum, 1-6% slopes
37	4119 - Mixed Northern Hardwoods	Sawtimber Medium	15.7	80	81-110	Cut in 2000; residual BA is low. There are some areas of M3 & A3. Habitat type=ATFD Soil=Ingalls sand, 0-3% slopes. .
38	4112 - Maple, Beech, Cherry Association	Sawtimber Well	13.0	80	111-140	Cut in 2000. Soil=Munising-Calcareous Substratum-Ensley Complex 0-6% slopes
39	6120 - Lowland Cedar	Sawtimber Well	16.6	107	201+	Small creek through stand. 99=r.maple, y.birch soil=Carbondale, Lupton and Tawas soils
40	4110 - Sugar Maple Association	Sawtimber Well	26.3	80	81-110	Rolling terrain. Southwest corner of stand drops into Q type as it goes to private land. Old skid roads still visible. A few areas with American Yew. BA varries 70-100. 99/2=beech, aspen, ironwood Soil=Munising-Calcareous Substratum-Ensley Complex 0-6% slopes
41	4112 - Maple, Beech, Cherry Association	Sawtimber Well	16.8	80	51-80	Cut in 2000; residual BA is low. There are patches of M3 and A3 within the stand. Habitat type=ATFD Soil=Munising Calcareous Substratum-Ensley Complex 0-6% slopes
42	4112 - Maple, Beech, Cherry Association	Sawtimber Well	5.9	80	81-110	Cut in 2000. Soil=Munising-Yalmer-Frohling Complex. Calcareous Substratum, 1-6% slopes
43	4119 - Mixed Northern Hardwoods	Sawtimber Well	2.1	80	81-110	Regeneration is a mix of hardwoods and b.fir. Soil=Munising-Yalmer-Frohling Complex. Calcareous Substratum, 1-6% slopes
44	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	3.8	62	51-80	Low, wet ground.
45	4130 - Aspen	Sapling Well	12.2	17	81-110	Mix of species including: b.fir, spruce, aspen, maple and white birch. low and wet on south end.
46	4112 - Maple, Beech, Cherry Association	Sawtimber Well	4.0	80	81-110	Thinned in 2000. . Soil=Munising-Yalmer-Frohling Complex, Calcareous Substratum, 1-6% slopes. Needs to let grow.
48	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	3.1	73	111-140	Drainage between hardwood ridges. Soil=Carbondale, Lupton and Tawas soils
49	4112 - Maple, Beech, Cherry Association	Sawtimber Well	14.0	80	141-170	Thinned in 2000. 99/1=r.maple, s.maple, cherry soil=Munising-Yalmer-Frohling Complex, Calcareous Substratum, 1-6% slopes
50	6139 - Mixed Lowland Forest	Sawtimber Well	9.0	75	81-110	Low, wet ground Soil=Carbondale, Lupton and Tawas soils

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
52	4112 - Maple, Beech, Cherry Association	Sawtimber Well	1.7	80	111-140	Regeneration consists of mixed hardwoods and b.fir. Some ground hemlock is present. Soil=Munising-Yalmer-Frohling Complex, Calcareous Substratum, 1-6% slopes
53	4110 - Sugar Maple Association	Sawtimber Medium	4.8	80	141-170	Many trees are 1-4" DBH. Soil=Munising Calcareous Substratum-Cookson Complex 1-6% slopes
54	4130 - Aspen	Poletimber Medium	2.3	52	81-110	Many trees are 2-4"DBH. Soil=Munising Calcareous Substratum-Cookson Complex 1-6% slopes
55	4110 - Sugar Maple Association	Poletimber Well	3.2	80	141-170	Small hardwood ridge surrounded by grass stands. Soil=Munising Calcareous Substratum-Cookson Complex 1-6% slopes
56	4110 - Sugar Maple Association	Poletimber Well	1.8	80	111-140	Small hardwood ridge within grass stand. Soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-6% slopes
57	4139 - Aspen, Mixed Deciduous	Poletimber Well	4.4	22	111-140	Aspen with some hardwood mixed in. Some small openings within the stand. soil=Munising Calcareous substratum-Cookson Complex 1-6% slopes
58	4110 - Sugar Maple Association	Sawtimber Well	9.1	80	111-140	mi of aspen and maple Soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-6% slopes
59	4130 - Aspen	Poletimber Well	4.4	22	81-110	Aspen with some hardwood mixed in. . Soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-6% slopes
60	6132 - Mixed Lowland Forest with Cedar	Poletimber Medium	6.9	67	51-80	Stoney Creek is adjacent to this stand, and a tributary flows through the stand. Low, wet ground with tall brush and scattered trees. 99=b.ash, r.maple, y.birch Soil=57 Carbondale, Lupton and Tawas soils.
61	4139 - Aspen, Mixed Deciduous	Poletimber Well	3.7	22	81-110	Aspen with some hardwood mixed in. Soil=Munising Calcareous substratum-Cookson complex 1-6% slopes
63	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	4.5	71	81-110	Upland mix of trees. Soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-6% slopes
65	4112 - Maple, Beech, Cherry Association	Sawtimber Well	8.4	80	81-110	Thinned in 2000. Regenerations is mixed hardwoods and b.fir. Soil=Munising-Yalmer-Frohling Complex. Calcareous Substratum, 1-6% slopes
66	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	47.8	80	111-140	99=r.maple, cherry, p.birch, y.birch, beech, ironwood Soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-6% slopes
67	4130 - Aspen	Poletimber Well	1.5	37	81-110	Aspen with some maple, basswood and b.fir. Small stand surrounded by grass. Soil=Munising Calcareous Substratum-Cookson Complex 1-6% slopes

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
69	6124 - Lowland Spruce-Fir	Poletimber Medium	4.8	37	81-110	Wet in areas 98=w.spruce, b.fir soil=57 Carbondale, Lupton, Tawas soils
70	4119 - Mixed Northern Hardwoods	Sawtimber Well	1.3	80	171-200	Narrow, high ridge of hardwoods within a cedar stand. Soil=Carbondale, Lupton and Tawas soils
71	6124 - Lowland Spruce-Fir	Sawtimber Well	5.1	49	111-140	Mix of hardwood and conifer trees, with some openings in the canopy. Lower ground than surrounding hardwoods. Seasonal drainage in stand flowing toward the creek in s.39. Soil=Munising-Yalmer-Frohling Complex, calcareous substratum 1-6% slopes
410	4191 - Mixed Upland Deciduous with Conifer	Sapling Poor	3.4	15	Immature	Grass stand that is filling in with trees: aspen, maple, b.fir, cherry, spruce. Soil=Munising-Yalmer-Frohling Complex, Calcareous Substratum, 1-6% slopes

Stand	Cover Type	Acres	Managed Site	General Comments:
10	622 - Lowland Shrub	15.2	No	OPIC - FMD: Low, wet ground near Stoney Creek. Some ponding along creek. Soil=Carbondale, Lupton and Tawas soils
33	622 - Lowland Shrub	2.7	No	OPIC - FMD: Low, wet area near Stoney Creek. Some ponding along the creek. Tall brush and scattered trees. Soil=Carbondale, Lupton and Tawas soils
36	622 - Lowland Shrub	3.0	No	OPIC - FMD: Low, wet area along Stoney Creek. Tall brush and scattered trees. Soil=Histosols & Aquents, ponded
47	622 - Lowland Shrub	7.1	No	Stoney Creek is adjacent to this stand, and a tributary flows through the stand. Low, wet ground with tall brush and scattered trees. 99=b.ash, r.maple, y.birch Soil=57 Carbondale, Lupton and Tawas soils.
51	330 - Low-Density Trees	14.5	No	Slightly lower ground than surround hardwood stands. Filling in with trees: cherry, b.fir, maple, aspen. Soil=Munising-Yalmer-Frohling Complex, Calcareous substratum 1-6% slopes
62	500 - Water	2.9	No	OPIC - FMD: Ponds along Stoney Creek. Soil=Histosols and Aquents, ponded
68	500 - Water	1.1	No	Low, wet ground near Stoney Creek. Some ponding along creek. Soil=Carbondale, Lupton and Tawas soils
72	622 - Lowland Shrub	4.1	No	OPIC - FMD: Low, wet ground with tall brush along the edge of Noble Lake. Soil=Dawson, Greenwood and Loxley soils
73	500 - Water	44.9	No	OPIC - FMD: Noble Lake
74	622 - Lowland Shrub	3.4	No	OPIC - FMD: Low, wet ground with tall brush along the edge of Noble Lake. Soil=Dawson, Greenwood and Loxley soils
75	622 - Lowland Shrub	4.7	No	Low, wet ground with tall brush and scattered trees (tamarack, spruce, cedar), next to H-58. There is a half acre mixed aspen stand on the southeast side of stand along the Rosemund rd. Soil=Dawson, Greenwood & Loxley soils
401	3102 - Grass	0.9	No	Slightly lower ground than surround hardwood stands. Filling in with trees: cherry, b.fir, maple, aspen. Soil=Munising Calcareous substratum-Cookson Complex 1-6% slopes
403	3102 - Grass	1.2	No	Slightly lower ground than surround hardwood stands. Filling in with trees: cherry, b.fir, maple, aspen. Old RR grade through stand. Soil=Munising Calcareous substratum-Cookson Complex 1-6% slopes
406	3303 - Mixed Low Density Trees	2.1	No	Small grass stand that if filling in with trees Balsam ,cherry and aspen. Soil=Munising-Yalmer-Frohling Complex, Calcareous substratum 1-6% slopes

Stand	Cover Type	Acres	Managed Site	General Comments:
407	3303 - Mixed Low Density Trees	15.5	No	Large grass stand that is filling in with trees, especially near edges: aspen, maple, b.fir, spruce, juneberry, cherry. Soil=Munising Calcareous substratum-Cookson complex, 1-6% slopes
408	330 - Low-Density Trees	1.1	No	Small grass stand that is filling in with trees: aspen, maple, b.fir, cherry, spruce. Soil=Munising-Yalmer-Frohling Complex, Calcareous substratum 1-6% slopes
409	330 - Low-Density Trees	2.5	No	Grass stand that is filling in with trees: aspen, maple, b.fir, cherry, spruce. Soil=Munising-Yalmer-Frohling Complex, Calcareous substratum 1-6% slopes
411	330 - Low-Density Trees	4.5	No	Grass stand that is filling in with trees: aspen, maple, b.fir, cherry, spruce. Slightly lower ground than surrounding hardwood stands. Soil=Munising-Yalmer-Frohling Complex, Calcareous Substratum, 1-6% slopes
412	330 - Low-Density Trees	2.7	No	Grass stand that is filling in with trees: aspen, maple, b.fir, cherry, spruce. Old homestead site; apple trees, fences, foundations. Soil=Munising-Yalmer-Frohling Complex, Calcareous Substratum, 1-6% slopes
413	330 - Low-Density Trees	3.6	No	Small grass stand that is filling in with trees: aspen, maple, b.fir, cherry, spruce. Soil=Munising-Yalmer-Frohling Complex, Calcareous substratum 1-6% slopes