



Compartment Review Presentation

Gladwin Forest Management Unit

Compartment 31

Entry Year 2016

Acreage: 4,247

County Gladwin

Management Area: Gladwin Lake Plain

Revision Date: 05/07/2014

Stand Examiner: Rick Myrick

Legal Description:

T20N R01E; Section 13-14, 22-24, 26, 27, 34

Identified Planning Goals:

The compartment is heavy to early successional species. The species composition is 43% aspen, 12% swamp hardwoods, 6% pines, 4% oak, 3% upland mixed deciduous, 3% lowland aspen, and 6% other forested cover types. The rest of the compartment is made up of 20% non-forested wetlands, and 3% non-forested uplands.

Most of the drainages run to the southwest and into the Tittabawassee River. The drainages divide the compartment in numerous places making access difficult.

When managing the forest cover types maintain the current mixture and look for opportunities to increase the species diversity. This can be done by favoring the retention of some conifers and oaks in timber sales.

Soil and topography:

The soils are predominantly wet with 61% of them being somewhat poorly drained and 15% being poorly drained. In contrast 24% of the soils are well to excessively drained. Therefore, the soils are often very wet in the spring. However, they should dry out significantly during the summer and into the fall.

The terrain is generally flat with significant micro-relief except along the drainages and creeks that flow into the Tittabawassee River. These drainages are often bordered by steep banks along wet draws.

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

The state land is in one contiguous block with no inholdings.

The private lands are in small parcels along the Tittabawassee River to the east. These are mainly permanent or seasonal residences. On the west side of the compartment the private land holdings are in larger blocks and are used as permanent residences or recreational properties.

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:

None

Watershed and Fisheries Considerations:

The Tittabawassee River makes up much of the eastern boundary of the compartment. This area is heavily fished and used for water recreation. In addition, many drainages and intermittent creeks flow through the compartment and into the Tittabawassee River. Any harvesting activity in this compartment needs to consider them when the timber sales are being set up.

Wildlife Habitat Considerations:

Wildlife Habitat Considerations: Compartment #31. Both upland and lowland systems are present, making it suitable for a number of wildlife species. The majority of stands are lowland cover types. Furbearers including beaver, mink, muskrat, black bear, bobcat, and coyote use the lowlands as corridors as well as year-round habitat. Game species likely to be present in this compartment include black bear, bobcat, raccoon, coyote, wood duck, wild turkey, ruffed grouse and white-tailed deer. Many bird species stand to benefit from the juxtaposition of lowland and upland habitats present in the compartment. These species include gray catbird, redbellied vireo, white-breasted nuthatch, tufted titmouse, black-capped

chickadees, eastern kingbirds and northern flicker. The compartment is easily accessible to hunters via Cedar Lake Road, Mohawk Trail and Drummond Road.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 100 and 200 feet. Beneath the glacial drift are the Pennsylvanian Grand River and Saginaw Formations. The Saginaw Formation is used for clay/shale in other areas of the State. A gravel pit is located in Section 15, but potential appears limited. This compartment has had sparse exploration for oil and gas. The two well Secord Field, located two miles to the south, produced 12,000 BO from the Dundee between 1937 and 1941. There are currently no oil and gas leases in the compartment.

Vehicle Access:

Because of the drainages in the compartment, access is limited. Many of the trails were put in for logging activities and most were closed after the harvests were completed. Currently there are several trails that come off of Drummond Road that go to wildlife openings. There are also several trails that come off of Mohawk Trail. Most of the trails and two tracks go only a short way into the compartment before there is a gate or berm. These access points provide camping, parking, and hunting opportunities on the north, west, and south sides.

Survey Needs:

None needed at this time

Recreational Facilities and Opportunities:

MCCT Trail runs along the northern boundary on County Roads. All recreational trail sign posts should be protected. The Midland to Mackinac Boy Scout Hiking Trail runs through the western third of the compartment. All recreational trail sign posts and blue marked trees along the trail should be protected. Part of headwaters to Middle Branch of Tittabawassee, Secord Lake and Indian Lake Creek provides water sport and hunting opportunities. Consider protecting the current road bed conditions and maintaining access for users.

Fire Protection:

There have been some problems in the past with wildfires. This is mainly because the compartment is accessible by boat from spring through fall; however access for fire equipment is limited. This combined with the forest cover types being mainly aspen and the presence of natural fuel breaks make the fire danger only moderate in this compartment.

Additional Compartment Information:

The compartment has a large complex of lowlands that beavers are using. This activity has influenced the aspen regeneration along the drainages. In addition, the beaver activity greatly affects the number of ponds present. These fluctuate frequently in number and in size. Currently there are a number of beaver ponds that appear to be abandoned and the dams have failed while several newer ones are now present.

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**

Report 1 – Total Acres by Cover Type and Age Class



	Age Class														Total
	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	
Aspen	272	147	676	408	207	11	5	9	27	30	0	0	0	11	1803
Bog	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Cedar	0	0	0	0	0	0	0	0	0	0	10	0	11	0	21
Herbaceous Openland	73	0	0	0	0	0	0	0	0	0	0	0	0	0	73
Jack Pine	0	0	0	24	15	0	67	0	0	0	0	0	0	0	106
Low-Density Trees	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Lowland Aspen/Balsam Poplar	0	0	49	14	43	0	5	0	0	0	0	0	0	0	111
Lowland Conifers	0	0	0	5	0	0	0	0	0	0	0	0	0	13	18
Lowland Deciduous	61	0	0	17	7	0	22	84	155	36	0	0	0	132	514
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11
Lowland Shrub	544	0	0	0	0	0	0	0	0	0	0	0	0	0	544
Marsh	120	0	0	0	0	0	0	0	0	0	0	0	0	0	120
Mixed Upland Deciduous	0	0	7	95	15	0	37	0	4	0	0	0	0	39	196
Natural Mixed Pines	0	0	27	0	31	0	0	32	0	0	0	0	0	28	118
Oak	0	0	19	0	0	74	5	2	51	7	0	0	0	0	157
Red Pine	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
Sand, Soil	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Treed Bog	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Upland Conifers	0	0	0	17	0	0	22	0	0	0	0	0	0	0	39
Upland Mixed Forest	0	0	17	0	24	12	0	16	0	0	0	0	0	25	95
Upland Shrub	32	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Water	187	0	0	0	0	0	0	0	0	0	0	0	0	0	187
White Pine	0	0	0	0	18	0	0	6	5	0	0	0	0	0	30
Total	1358	147	795	579	361	98	163	149	245	73	10	0	11	260	4247



Report 2 – Proposed Treatment Summaries

Gladwin Mgt. Unit
Year of Entry 2016

Compartment 031
Total Compartment Acres: 4,247

Acres by Treatment Type

Commercial Harvest - 505 Tree Planting - 0 Other - 18
 Habitat Cut - 17 Opening Maintenance - 28

Cover Type by Harvest Method

		<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
(Habitat Cut)Lowland Deciduous Forest	2	0	0	0	0	0	0	2
(Habitat Cut)Upland Mixed Forest	0	15	0	0	0	0	0	15
Aspen Types	205	0	0	0	0	0	0	205
Lowland Coniferous Forest	69	13	0	0	0	0	0	82
Lowland Deciduous Forest	36	60	0	0	0	0	0	96
Mixed Upland Conifers	22	0	0	0	0	0	0	22
Mixed Upland Deciduous	6	0	0	0	0	0	0	6
Natural Pines	0	10	0	28	0	0	0	38
Oak Types	6	0	42	0	0	0	0	48
Upland Mixed Forest	0	9	0	0	0	0	0	9
Total	345	107	42	28	0	0	0	522

S
t
a
n
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
12 73031012-Cut	35.1	4125 - Black, N. Pin Oak	High Density Pole	54	51-80	Harvest	Seed Tree	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription The stand can be harvested as a clearcut with reserves. The retention should be individually marked trees favoring the oak that will last 10 years. These should not exceed 2 per acre.

Other There are portions of the stand that are wet so rutting could be a problem. Some of the wet areas may need to be painted out of the sale. This may reduce the acres significantly.

Next Steps: After harvest interplant the site with red pine. The regeneration is expected to be patchy.

Proposed Start Date: 10/01/2015

18 73031018-Cut	44.3	6119 - Mixed Lowland Deciduous Forest	High Density Log	84	51-80	Harvest	Single Tree Selection	6119 - Mixed Lowland Deciduous Forest	Cmpt. Review Proposal
-----------------	------	---------------------------------------	------------------	----	-------	---------	-----------------------	---------------------------------------	-----------------------

Prescription Harvest the stand as a selection retaining 70 BA. This could be done as a group selection or as a single tree marking. The stand gets quite wet toward the southern edge which may need to be painted out.

Other Because of the percentage of ground that may be too wet to harvest the harvested acres may be significantly less than the inventory acres.

Next Steps: The stand is expected to regenerate naturally to lowland hardwoods.

Proposed Start Date: 10/01/2015

36 73031036-Cut	15.9	6113 - Lowland Maple	High Density Pole	84	51-80	Harvest	Single Tree Selection	6119 - Mixed Lowland Deciduous Forest	Cmpt. Review Proposal
-----------------	------	----------------------	-------------------	----	-------	---------	-----------------------	---------------------------------------	-----------------------

Prescription Shelterwood harvest the stand down to 60 BA. This stand is along the base of a ridge and portions of the stand are wet. Harvest favoring the retention of maple and oak.

Other The stand is wet and as such there are parts of the stand that may need to be painted out. Therefore the harvest acres may be significantly less than the inventory acres.

Next Steps: The stand is expected to regenerate naturally to lowland hardwoods.

Proposed Start Date: 10/01/2015

44 73031044-Cut	22.0	429 - Mixed Upland Conifers	High Density Log	65	81-110	Harvest	Clearcut with Reserves	429 - Mixed Upland Conifers	Cmpt. Review Proposal
-----------------	------	-----------------------------	------------------	----	--------	---------	------------------------	-----------------------------	-----------------------

Prescription The stand could be harvested as a clearcut with reserves. When harvesting the branches need to be left on site to provide seed. This harvest should be done in summer or fall so some scarification occurs.

Other There are some areas in the stand that are very wet and may need to be painted out. This may reduce the harvest acres from the inventory acres significantly.

Next Steps: The stand is expected to regenerate naturally from seed. If not the stand may need to be scarify and seeded with red or jack 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
105	73031105-Cut	10.8	4130 - Aspen	High Density Pole	52		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Harvest the stand as a clearcut with reserves. The retention should favor oak but do not eliminate any one species. The retention should not exceed 5% of the BA or area. The Boy Scout trail runs through the stand and it will need to be protected. The trail is in the northern portion of the stand. Visual concerns along Clear Lake Road and the Log Church should be addressed when the stand is set up.</p> <p><u>Specs:</u></p> <p><u>Other</u> The stand will need a culvert to access it from Cedar Lake Road. This may be placed between stands 113 and 114 then access it from the south. Also it could be near the county road and stand 114 can be accessed from the north.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> The stand is expected to regenerate naturally to aspen with some oak and maple.</p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
113	73031113-Cut	2.2	4123 - Red Oak	High Density Log	76	111-140	Harvest	Seed Tree	4199 - Other Mixed Upland Deciduous	Cmpt. Review Proposal
<p><u>Prescription</u> The stand could be seed tree harvested retaining 20 BA. The retention should focus on the large wolfy oak and some of the pines. There is an area that is used for parking, hunting and dispersed camping that should be considered when setting up the sale.</p> <p><u>Specs:</u></p> <p><u>Other</u></p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> The stand is expected to regenerate to a mixture of upland hardwood species with a component of oak.</p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
143	73031143-Cut	1.6	6112 - Lowland Aspen	High Density Pole	29		Harvest	Clearcut with Reserves	613 - Lowland Mixed Forest	Cmpt. Review Proposal
<p><u>Prescription</u> Harvest the stand as a clearcut with reserves. The terrain is a matrix of uplands and lowlands so some portions of the stand may not be operable.</p> <p><u>Specs:</u></p> <p><u>Other</u> The stand is low and wet in many areas so rutting could be a problem. In addition because of the low wet ground the harvested acres may be significantly less than the inventory acres.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> The stand is expected to regenerate as a lowland aspen stand mixed ty swamp conifers and hardwoods.</p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
146	73031146-Cut	35.8	6112 - Lowland Aspen	High Density Pole	42		Harvest	Clearcut with Reserves	6119 - Mixed Lowland Deciduous Forest	Cmpt. Review Proposal
<p><u>Prescription</u> Harvest the stand as a clearcut with reserves. The terrain is a matrix of uplands and lowlands so some portions of the stand may not be operable.</p> <p><u>Specs:</u></p> <p><u>Other</u> The stand is low and wet in many areas so rutting could be a problem. In addition because of the low wet ground the harvested acres may be significantly less than the inventory acres.</p> <p><u>Comments:</u></p> <p><u>Next Steps:</u> The stand is expected to regenerate as a lowland aspen stand mixed ty swamp conifers and hardwoods.</p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
235	73031235-Cut	13.0	6127 - Lowland Pine	High Density Log	80	141-170	Harvest	Single Tree Selection	6127 - Lowland Pine	Cmpt. Review Proposal
<p><u>Prescription</u> The stand is wet and could be thinned down to 90 sq. ft. Rutting in the stand could be a problem. It needs to have individual trees marked for <u>Specs:</u> both the thinning and for the skid trails. Keep the skid trails on the driest ground and refrain from marking trees in the wettest areas. When harvesting the stand the branches are to be left for seed. The harvest will also need to be delayed to 2021 because of green up issues with stand 231 which is currently under contract 73-010-12-01 Cove View Aspen</p> <p><u>Other</u> The stand needs to be looked at in late summer to see if the stand is harvestable. There are definite wet areas in the stand that may be too wet <u>Comments:</u> to harvest.</p> <p><u>Next</u> The stand is expected to regenerate to a mixture of pines. <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2020</p>										
240	73031240-Cut	9.0	4319 - Mixed Upland Forest	High Density Log	77	111-140	Harvest	Single Tree Selection	4220 - Natural White Pine	Cmpt. Review Proposal
<p><u>Prescription</u> The stand is to be harvested as a selection retaining 70 BA. When marking favor the removal of aspen and hardwoods but do not eliminate any <u>Specs:</u> one species. The harvest will also need to be delayed to 2021 because of green up issues with stand 246 which is currently under contract 73- 010-12-01 Cove View Aspen</p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> The stand is expected to remain mainly a pine stand with some hardwoods. <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2020</p>										
263	73031263-Cut	68.6	6126 - Lowland Jack Pine	High Density Pole	63	111-140	Harvest	Clearcut with Reserves	6126 - Lowland Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> The stand could be harvested as a clearcut with reserves. When it is harvested the tops and branches will need to be left on site to promote <u>Specs:</u> natural regeneration. This has worked in other stands with a similar terrain and water issues. Lastly because of the wetness rutting could be a significant problem if it is not watched. The harvest will also need to be delayed to 2021 because of green up issues with stand 279 and 278 which is currently under contract 73-010-12-01 Cove View Aspen</p> <p><u>Other</u> The stand will need to be looked at in late summer to see if it is manageable. There are areas that are very wet that may not dry out. Because <u>Comments:</u> of this the harvest acres may be significantly less than the inventory acres.</p> <p><u>Next</u> The stand is expected to regenerate naturally by seed to jack pine and other pine species. If not the stand may need to be seeded. <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2020</p>										
231	73032031- Sel	9.8	42290 - Natural Mixed Pine	High Density Log	77	141-170	Harvest	Single Tree Selection	42290 - Natural Mixed Pine	Fld. Tr. Bdy.
<p><u>Prescription</u> Remove all red maple, THEN individual tree mark with orange paint to remove white pine less than 14" D, plus additional red pine to reach <u>Specs:</u> target BA of 90. Do not harvest oak or aspen.</p> <p><u>Other</u> Purpose of retaining aspen is to decrease its presence in stand over long term. Residual mixed stand will be retention. <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2011</p>										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
46	73032046-FH	5.5	4199 - Other Mixed Upland Deciduous	High Density Log	65		Harvest	Clearcut with Reserves	4319 - Mixed Upland Forest	Fld. Tr. Bdy.
<u>Prescription</u> Final harvest: Use sale specification to reserve all oak and white pine for retention by BA.										
<u>Specs:</u>										
<u>Other</u> Regeneration expected, but if regen fails, plant red pine.										
<u>Comments:</u>										
<u>Next</u> Check regeneration at TCR date plus four years.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2011										
74	73032074- FH_exp-0	46.3	4130 - Aspen	High Density Pole	40	51-80	Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Fld. Tr. Bdy.
<u>Prescription</u> Clearcut. Leave all non-aspen/maple for retention by BA. Use 2 drains for retention, as well as heavy conifer patches at NW and NE edges.										
<u>Specs:</u>										
<u>Other</u> Will need to armor drains and only cross in a few defined spots. Early harvest to even age class distribution. Some aspen approaching log size.										
<u>Comments:</u> Expect regeneration, but if regeneration fails, plant red pine.										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2011										
74	73032074- FH_exp-1	3.6	4130 - Aspen	High Density Pole	40	51-80	Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Fld. Tr. Bdy.
<u>Prescription</u> Clearcut. Leave all non-aspen/maple for retention by BA. Use 2 drains for retention, as well as heavy conifer patches at NW and NE edges.										
<u>Specs:</u>										
<u>Other</u> Will need to armor drains and only cross in a few defined spots. Early harvest to even age class distribution. Some aspen approaching log size.										
<u>Comments:</u> Expect regeneration, but if regeneration fails, plant red pine.										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2011										
78	73032078-FH	6.0	4125 - Black, N. Pin Oak	Medium Density Log	91	1-50	Harvest	Clearcut with Reserves	4125 - Black, N. Pin Oak	Fld. Tr. Bdy.
<u>Prescription</u> FINAL HARVEST NOW. 4" spec on the little regen that is there. Small stand but can harvest with other stands. Expect oak stand to regenerate, but plant red pine if regen fails.										
<u>Specs:</u>										
<u>Other</u> Broken out of old ('02) stand 21. Very little understory, mostly old log sized oak with little regen. Valuable for mast now, but will lose mast when oak dies soon. Can get oak back from stump sprouts if clearcut. Interplant jack pine if regeneration fails.										
<u>Comments:</u>										
<u>Next</u> Check regeneration at TCR date plus four years. Plant red pine if regen. is not adequate when surveyed.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2011										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
79	73032079-FH	23.8	4130 - Aspen	High Density Pole	40		Harvest	Clearcut with Reserves	4130 - Aspen	Fld. Tr. Bdy.

Prescription Clearcut winter (frozen and dormant, NON-NEGOTIABLE, or do not cut). Reserve red pine, white and jack pine for retention using spec.

Specs:

Other Will have to armor 4 to 5 narrow drains. Expect natural regeneration. If regen inadequate, plant jack pine.

Comments:

Next Check regeneration at TCR date plus four years.

Steps:

Proposed

Start Date: 10/01/2011

95	73032095-FH	93.7	4130 - Aspen	High Density Pole	38		Harvest	Clearcut with Reserves	4130 - Aspen	Fld. Tr. Bdy.
----	-------------	------	--------------	-------------------------	----	--	---------	---------------------------	--------------	---------------

Prescription Final harvest. Use dry/frozen spec non-negotiable: 15-20% very wet depressions. Don't cut non-aspen species except red maple and ash

Specs: (reserve using sale specification for retention by BA). Also mark retention islands in wet areas with red paint.

Other Midland to Mackinac trail runs through stand; use pathway protection spec to protect trail tread. Trace of white pine, black oak and elm in overstory, and balsam fir, hazel and white pine in understory. Expect natural regeneration.

Comments:

Next Alternate prescription if regeneration were to fail: plant red pine.

Steps:

Proposed

Start Date: 10/01/2011

23	NF_73031023- Seed	11.3	3105 - Mixed Upland Herbaceous				Tree Seeding	Machine Seed	4212 - Planted Jack Pine	Cmpt. Review Proposal
----	----------------------	------	-----------------------------------	--	--	--	--------------	--------------	-----------------------------	--------------------------

Prescription The stand did not regenerate. The site may need to be scarified and then seeded either in late fall or off a snowmobile in winter.

Specs:

Other

Comments:

Next The stand will need to have a regeneration survey done after seeding or planting.

Steps:

Proposed

Start Date: Unspecified

29	NF_73031029- Seed	6.9	3105 - Mixed Upland Herbaceous				Tree Seeding	Machine Seed	4212 - Planted Jack Pine	Cmpt. Review Proposal
----	----------------------	-----	-----------------------------------	--	--	--	--------------	--------------	-----------------------------	--------------------------

Prescription The stand did not regenerate. The site may need to be scarified and then seeded either in late fall or off a snowmobile in winter.

Specs:

Other

Comments:

Next The stand will need to have a regeneration survey done after seeding or planting.

Steps:

Proposed

Start Date: Unspecified

47	NF_73031047- NonFor	5.0	3102 - Grass				Non-Forest Management	Mowing	310 - Herbaceous Openland	Cmpt. Review Proposal
----	------------------------	-----	--------------	--	--	--	--------------------------	--------	------------------------------	--------------------------

Prescription Manage with mowing, cultivating, planting and chemical treatment to maintain the wildlife opening.

Specs:

Other

Comments:

Next

Steps:

Proposed

Start Date: Unspecified



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
104	NF_73031104- NonFor	3.7	3102 - Grass				Non-Forest Management	Mowing	310 - Herbaceous Openland	Cmpt. Review Proposal

Prescription Manage with mowing, cultivating, planting and chemical treatment to maintain the wildlife opening.

Specs:

Other

Comments:

Next

Steps:

Proposed

Start Date: Unspecified

132	NF_73031132- NonFor	3.8	3102 - Grass				Non-Forest Management	Mowing	310 - Herbaceous Openland	Cmpt. Review Proposal
-----	------------------------	-----	--------------	--	--	--	-----------------------	--------	---------------------------	-----------------------

Prescription Manage with mowing, cultivating, planting and chemical treatment to maintain the wildlife opening.

Specs:

Other

Comments:

Next

Steps:

Proposed

Start Date: Unspecified

147	NF_73031147- NonFor	1.6	3102 - Grass				Non-Forest Management	Mowing	310 - Herbaceous Openland	Cmpt. Review Proposal
-----	------------------------	-----	--------------	--	--	--	-----------------------	--------	---------------------------	-----------------------

Prescription Manage with mowing, cultivating, planting and chemical treatment to maintain the wildlife opening.

Specs:

Other

Comments:

Next

Steps:

Proposed

Start Date: Unspecified

158	NF_73031158- NonFor	3.4	3102 - Grass				Non-Forest Management	Mowing	310 - Herbaceous Openland	Cmpt. Review Proposal
-----	------------------------	-----	--------------	--	--	--	-----------------------	--------	---------------------------	-----------------------

Prescription Manage with mowing, cultivating, planting and chemical treatment to maintain the wildlife opening.

Specs:

Other

Comments:

Next

Steps:

Proposed

Start Date: Unspecified

**Total Treatment
Acreage Proposed: 482.7**

S
t
a
n
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
64 73031064-Cut	15.1	4311 - Pine, Aspen Mix	High Density Log	94	81-110	Harvest	Group Selection	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal

Prescription Specs: The stand is to be harvested as a group selection favoring the removal of aspen. However do not eliminate any one species. Also mark the stand with the visual impact in mind because of the Tittibawassee River.

Other Comment: The terrain is undulating and there are inclusions of low wet ground that will need to be watched for rutting. Also a road will need to be put in to access the stand.

Next Steps: The stand is expected to regenerate naturally to a mixture of hardwoods and pines.

Proposed Start Date: 10/01/2015

Limiting Factor 2E: Road needed

68 73031068-Cut	27.9	42290 - Natural Mixed Pine	High Density Log	107	111-140	Harvest	Shelterwood	4220 - Natural White Pine	Cmpt. Review Proposal
-----------------	------	----------------------------	------------------	-----	---------	---------	-------------	---------------------------	-----------------------

Prescription Specs: The northern portion of the stand is mainly white and jack pine. The jack pine gets heavier the further north in the stand. Harvest this portion of the stand as a seed tree shelter wood retaining 10-60 BA. In the areas that are heavy to jack pine should be 10-20 BA than in the areas of heavy white pine which should be 60 BA. The southern portion of the stand is mainly red pine. Harvest the southern portion down to 10-20 BA. When marking of the stand favor the retention of a variety of pines. In the northern portion favor the retention of white pine and in the southern portion favor the retention of red pine. The branches of the pines need to be left for seed. Therefore harvest the stand in late summer through winter.

Other Comment: There will be a need to have a road put in to access the stand. The transition between stands 68 and 70 is not sharp on the ground because of bleed over from stand 70 when it was harvested.

Next Steps: The stand is expected to regenerate naturally to mixed pine.

Proposed Start Date: 10/01/2015

Limiting Factor 2E: Road needed

70 73031070-Cut	26.8	4130 - Aspen	High Density Pole	43		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
-----------------	------	--------------	-------------------	----	--	---------	------------------------	-------------	-----------------------

Prescription Specs: The stand is to be harvested as a clearcut with reserves. The retention should be in small pockets not to exceed 5% of the area. Look to have the pockets retain representative mix of trees.

Other Comment: There will be a need to have a road put in to access the stand.

Next Steps: The stand is expected to regenerate naturally to aspen with some pines from stand 68.

Proposed Start Date: 10/01/2015

Limiting Factor 2E: Road needed

114 73031114-Cut	4.9	4123 - Red Oak	High Density Log	61	81-110	Harvest	Seed Tree	4199 - Other Mixed Upland Deciduous	Cmpt. Review Proposal
------------------	-----	----------------	------------------	----	--------	---------	-----------	-------------------------------------	-----------------------

Prescription Specs: The stand should be seed tree harvested retaining 20 BA. The retention should focus on the oak but some pine should be retained also.

Other Comment: The stand will need a culvert to access it from Cedar Lake Road. This may be placed between stands 113 and 114. Also it could be near the county road in stand 105 and stand 114 can be accessed from the north.

Next Steps: The stand is expected to regenerate naturally to a mix of oak and other hardwood. If not it may need to be seeded to jack pine.

Proposed Start Date: 10/01/2015

Limiting Factor 2E: Road needed

S
t
a
n
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
76 73031076-NonFor	10.8	42260 - Natural Pine, Mixed Deciduous	Low Density Sapling	29		Non-Forest Management	Other - Specify	3105 - Mixed Upland Herbaceous	Cmpt. Review Proposal

Prescription The stand is to be cultivated for annual crop to establish a wildlife opening.

Specs:

Other

Comment:

Next

Steps:

Proposed

Start Date: Unspecified

Limiting Factor 2E: Road needed

**Total Treatment
Acreage Proposed: 85.6**

Report 5 – Site Conditions

Gladwin Mgt. Unit
Rick Myrick : Examiner

Compartment 031
Year of Entry 2016

Availability for Management

Total Acres	Acres Available	Acres Not Available	Dominant Site Conditions	Dominant Site Conditions									
				No	5C	5B	3J	3G	3D	2H	2G	2F	2E
1802	1664	138	Aspen	1,499			30		23	56		30	165
21		21	Cedar								21		
106	82	24	Jack Pine	82						24			
111	99	12	Lowland Aspen/Balsam Poplar	99							12		
18	18		Lowland Conifers	18									
513	240	273	Lowland Deciduous	188	24	28	47	46			180		
11		11	Lowland Mixed Forest								11		
196	196	0	Mixed Upland Deciduous	196							0		
117	74	43	Natural Mixed Pines	47						28		16	27
157	139	19	Oak	83		51	19						5
4		4	Red Pine							4			
39	22	17	Upland Conifers	22							17		
95	65	30	Upland Mixed Forest	57			5		9	15			8
30	30		White Pine	25									5
3,219	2,627	592	Total Forested Acres	2,315	24	79	101	46	32	127	241	45	209
	82%	18%	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 Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
002	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	15				
Comments:							
003	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	27				
Comments:							

Report 5 – Site Conditions

Gladwin Mgt. Unit
Rick Myrick : Examiner

Compartment 031
Year of Entry 2016

004	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	28		
Comments:					
005	Not Available	3J: Water quality / BMPs (stream, river, or lake)	13	2E: Road needed	3D: Recreational / Scenic values
Comments:					
006	Not Available	3D: Recreational / Scenic values	18	3J: Water quality / BMPs (stream, river, or lake)	
Comments:					
007	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	24		
Comments:					
008	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	29		
Comments:					
009	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	11		
Comments:					

Report 5 – Site Conditions

Gladwin Mgt. Unit
Rick Myrick : Examiner

Compartment 031
Year of Entry 2016

010	Available	2E: Road needed	5
Comments:			
011	Not Available	2G: Too wet (sensitive soils, does not include access issues)	7
Comments:			
012	Available	2E: Road needed	7
Comments:			
013	Available	2E: Road needed	14
Comments:			
014	Available	2E: Road needed	44
Comments:			
015	Available	2E: Road needed	71
Comments:			
016	Available	2E: Road needed	16
Comments:			

Report 5 – Site Conditions

Gladwin Mgt. Unit
Rick Myrick : Examiner

Compartment 031
Year of Entry 2016

017	Available	2E: Road needed	29
Comments:			
018	Available	2E: Road needed	5
Comments:			
019	Available	2E: Road needed	8
Comments:			
020	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	4
Comments:			
022	Not Available	3G: Other Influence zones - See comments	18
Comments: The stand needs to be evaluated in summer to see if the stand is too wet to harvest.			
023	Available	2E: Road needed	8
Comments:			
024	Available	2E: Road needed	11
Comments:			

Report 5 – Site Conditions

Gladwin Mgt. Unit
Rick Myrick : Examiner

Compartment 031
Year of Entry 2016

025	Available	2E: Road needed	20
Comments:			
026	Not Available	2G: Too wet (sensitive soils, does not include access issues)	0
Comments:			
027	Not Available	2G: Too wet (sensitive soils, does not include access issues)	3
Comments:			
028	Available	5B: Maintain for regeneration purposes	51
Comments:			
029	Not Available	2G: Too wet (sensitive soils, does not include access issues)	11
Comments:			
030	Not Available	2G: Too wet (sensitive soils, does not include access issues)	12
Comments:			

Report 5 – Site Conditions

Gladwin Mgt. Unit
Rick Myrick : Examiner

Compartment 031
Year of Entry 2016

031	Not Available	2G: Too wet (sensitive soils, does not include access issues)	11	
Comments:				
032	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	24	
Comments:				
033	Not Available	2G: Too wet (sensitive soils, does not include access issues)	7	
Comments:				
034	Not Available	2G: Too wet (sensitive soils, does not include access issues)	14	
Comments:				
102	Not Available	2G: Too wet (sensitive soils, does not include access issues)	5	
Comments:				
103	Not Available	2G: Too wet (sensitive soils, does not include access issues)	10	
Comments:				

Report 5 – Site Conditions

Gladwin Mgt. Unit
Rick Myrick : Examiner

Compartment 031
Year of Entry 2016

104	Not Available	2G: Too wet (sensitive soils, does not include access issues)	3
Comments:			
105	Not Available	2G: Too wet (sensitive soils, does not include access issues)	7
Comments:			
106	Not Available	2G: Too wet (sensitive soils, does not include access issues)	4
Comments:			
107	Not Available	2G: Too wet (sensitive soils, does not include access issues)	4
Comments:			
108	Not Available	2G: Too wet (sensitive soils, does not include access issues)	12
Comments:			
109	Not Available	2G: Too wet (sensitive soils, does not include access issues)	26
Comments:			

Report 5 – Site Conditions

Gladwin Mgt. Unit
Rick Myrick : Examiner

Compartment 031
Year of Entry 2016

110	Not Available	2G: Too wet (sensitive soils, does not include access issues)	11	
Comments:				
111	Not Available	3D: Recreational / Scenic values	9	3J: Water quality / BMPs (stream, river, or lake) 2F: Too steep
Comments:				
112	Not Available	2G: Too wet (sensitive soils, does not include access issues)	10	
Comments:				
113	Not Available	2G: Too wet (sensitive soils, does not include access issues)	6	
Comments:				
114	Not Available	2G: Too wet (sensitive soils, does not include access issues)	11	
Comments:				
115	Not Available	3J: Water quality / BMPs (stream, river, or lake)	40	
Comments: portions of the stand are too wet other areas are managable, especially on the east side of creek.				

Report 5 – Site Conditions

Gladwin Mgt. Unit
Rick Myrick : Examiner

Compartment 031
Year of Entry 2016

116	Not Available	2G: Too wet (sensitive soils, does not include access issues)	24
Comments:			
202	Not Available	3J: Water quality / BMPs (stream, river, or lake)	7
Comments:			
203	Not Available	3J: Water quality / BMPs (stream, river, or lake)	11
Comments:			
204	Not Available	3J: Water quality / BMPs (stream, river, or lake)	5
Comments:			
205	Not Available	2G: Too wet (sensitive soils, does not include access issues)	5
Comments:			
206	Not Available	2G: Too wet (sensitive soils, does not include access issues)	7
Comments:			

Report 5 – Site Conditions

Gladwin Mgt. Unit
Rick Myrick : Examiner

Compartment 031
Year of Entry 2016

208	Not Available	2G: Too wet (sensitive soils, does not include access issues)	5	
Comments:				
209	Not Available	3J: Water quality / BMPs (stream, river, or lake)	19	
Comments:				
210	Not Available	3J: Water quality / BMPs (stream, river, or lake)	6	
Comments:				
211	Not Available	2G: Too wet (sensitive soils, does not include access issues)	5	
Comments:				
212	Not Available	2G: Too wet (sensitive soils, does not include access issues)	5	3J: Water quality / BMPs (stream, river, or lake)
Comments:				
213	Not Available	2F: Too steep	21	3J: Water quality / BMPs (stream, river, or lake)
Comments:				

Report 5 – Site Conditions

Gladwin Mgt. Unit
Rick Myrick : Examiner

Compartment 031
Year of Entry 2016

214	Not Available	2F: Too steep	7	3J: Water quality / BMPs (stream, river, or lake)
Comments:				
215	Not Available	2G: Too wet (sensitive soils, does not include access issues)	17	
Comments:				
217	Not Available	2F: Too steep	9	3D: Recreational / Scenic values
Comments:				
218	Not Available	2F: Too steep	9	3D: Recreational / Scenic values
Comments:				
220	Not Available	3D: Recreational / Scenic values	5	2F: Too steep 2G: Too wet (sensitive soils, does not include access issues)
Comments:				
221	Not Available	3G: Other Influence zones - See comments	29	2E: Road needed
Comments:				

Report 5 – Site Conditions

Gladwin Mgt. Unit
Rick Myrick : Examiner

Compartment 031
Year of Entry 2016

222	Available	5B: Maintain for regeneration purposes	28
------------	------------------	---	-----------

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
Director's Order	Other SCA		SCA	
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
--------------------------	-------------	--------------------



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4	4125 - Black, N. Pin Oak	Medium Density Log	50.6	84	1-50	The stand was harvested in 2010 as a seed tree harvest. Regeneration is mainly red maple stump sprouts and some oak seedlings. There is heavy deer browse on the maple and oak.
5	6119 - Mixed Lowland Deciduous Forest	High Density Log	14.0	97	51-80	The stand contains a drainage. The maple is heavy to the north and ash to the south. EAB is heavy throughout the stand.
6	6119 - Mixed Lowland Deciduous Forest	High Density Log	24.0	87	51-80	The stand is a matrix of uplands and lowlands with the lowlands being the majority. The terrain is undulating. It is made up of a series of knob, swales and ridges. The elevation difference in the terrain is significant. The understory at the north end is heavy to balsam fir and red maple to the south. Some of the lowlands are too wet to harvest especially along the east and north sides. The Boy Scout trail runs through the stand.
7	4199 - Other Mixed Upland Deciduous	High Density Pole	38.7	Uneven Age	81-110	The stand is a matrix of uplands and lowlands with the uplands being the majority. There seems to be several different stands present. However, they could not be distinguish clearly on the ground or in the imagery.
8	6119 - Mixed Lowland Deciduous Forest	High Density Pole	11.3	83	81-110	The stand contains a drainage. The maple is heavy to the north end and ash is heavy to the south end. EAB damage is heavy. The aspen is overmature and it is declining.
9	4125 - Black, N. Pin Oak	Medium Density Pole	39.4	54	1-50	The stand is a matrix of uplands and lowlands with the uplands being the majority. The terrain is hummocky. The oak in the stand has poor form with branches all the way to the ground. There is a lot of white pine stumps.
10	6119 - Mixed Lowland Deciduous Forest	High Density Pole	11.9	83	1-50	The stand is a matrix of uplands and lowlands with the lowlands being the majority. There is a drainage in the stand that goes to the south. There are inclusions of lowland shrubs. The terrain is hummocky.
11	4130 - Aspen	Medium Density	29.0	4		The terrain is undulating. The tree species mix is variable. It goes from tag alder to poverty grass. Blueberry is common throughout the stand.
12	4125 - Black, N. Pin Oak	High Density Pole	35.1	54	51-80	The terrain is hummocky. The stand is a matrix of uplands and lowlands with the uplands being the majority. The density and size of the overstory trees is variable.
16	4199 - Other Mixed Upland Deciduous	Medium Density Pole	45.9	36	1-50	The density of the stand is variable. The oak has poor form. The stand is a matrix of uplands and lowlands with the uplands being the majority.
18	6119 - Mixed Lowland Deciduous Forest	High Density Log	44.3	Uneven Age	51-80	The stand is a matrix of uplands and lowlands with the lowlands being the majority. The stand seems to have some bands of different age classes but they were not easily defined on the ground or in imagery. The terrain is hummocky.
19	4131 - Aspen, Oak	Medium Density	52.9	29		The stand was harvested retaining oak. The terrain is undulating and goes from dry ridges to lowland shrubs. The density is quite variable going from well to poorly stocked.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	4130 - Aspen	Low Density Sapling	13.2	4		The stand was harvested in 2010. The regeneration is patchy. The stand is a matrix of uplands and lowlands with the uplands being the majority.
24	6115 - Lowland Ash	Low Density Pole	4.3	85	1-50	The ground cover is tag alder, willow, and marsh grass. The soils are too wet to harvest. EAB is very heavy in the stand.
32	42210 - Natural Red Pine	High Density Log	3.5	84	81-110	This stand is a peninsula that goes into a lowland shrub type.
34	6112 - Lowland Aspen	Low Density Pole	7.4	43	1-50	The stand is a drainage that flows to the south. The north end has flooded areas and it is heavy to ash. The south end is very hummocky and is heavy to quaking aspen with marsh grass ground cover.
35	42260 - Natural Pine, Mixed Deciduous	High Density Pole	12.5	43	51-80	This stand is a knob surrounded on three sides by lowland shrubs. The only access would be from the north along a ridge.
36	6113 - Lowland Maple	High Density Pole	15.9	Uneven Age	51-80	The stand lies on a level area that starts from a base of a ridge and goes to a lowland shrub type. The terrain is hummocky and in areas very wet.
41	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	34.9	36	1-50	The terrain is undulating. It goes from tag alder to poverty grass. Blueberry is common throughout the stand. The tree species mix is variable.
43	4310 - Pine, Oak Mix	Medium Density Pole	7.5	43	1-50	This stand is a matrix of uplands and lowlands with the uplands being the majority. The terrain is variable. The low areas go from cattails to tag alder. The uplands are mainly bracken fern and poverty grass.
44	429 - Mixed Upland Conifers	High Density Log	22.0	65	81-110	The stand is a matrix of uplands and lowlands with the uplands being about 55%. Black spruce is present in the wet drainages. Some of the wettest areas have leather leaf.
46	42200 - Natural White Pine	High Density Pole	4.8	89	111-140	This stand is a peninsula that is surrounded on three sides by lowlands. A portion of the stand is accessible from the west. There is a drainage that bisects the stand. It appears to have generated from a few large white pines that have seeded the area over the years. The diameter of the trees goes from seedling to extra-large sawlogs. The sawlogs have been open grown having heavy branches all the way to the ground.
49	4130 - Aspen	Medium Density	24.9	4		The stand was harvested in 2010. Regeneration is being browse by deer and beaver. The terrain is generally flat. There are inclusions of marsh grass which is associated with drainages.
52	42290 - Natural Mixed Pine	Low Density Pole	13.9	43	1-50	The stand is a matrix of uplands and lowlands with the uplands being the majority. The southern tip of the stand is mature red pine. The rest is a mixture of sapling and poles. The terrain is hummocky.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
53	4133 - Aspen, Mixed Pine	High Density Sapling	28.9	29		The edges of the stand are being hit heavily by beavers. Where this is happening the red pine understory is being released. The released red pine has about 2' of growth pre year. Where it is still in the understory the growth is only 6". The aspen is almost pure on the west side. There is a heavy mixture of aspen and red pine on the east side. The north east corner is almost pure red pine because the aspen has been removed by beaver.
55	4133 - Aspen, Mixed Pine	Medium Density Pole	17.5	29	1-50	The stand is a matrix of uplands and lowlands with the uplands being the majority. Some of the lowlands are alder and willow. The pines are seeding in.
59	42290 - Natural Mixed Pine	Low Density Pole	16.3	29	1-50	The jack pine in the stand is short, being only 2 sticks tall. It has poor form. Many have light to moderate galling. Most of the galls are on side branches. However, some of them are on the main stem. The terrain is hummocky but fairly dry. There are a few inclusions of low wet ground. The tamarack is mainly along the edges. The aspen is being hit by beavers, especially near the lowlands. The crown closure is closer to 75%.
63	42220 - Natural Jack Pine	High Density Sapling	24.1	33	1-50	The jack pine in the stand is short, being only 2 sticks tall. It has poor form. Many have light to moderate galling. Most of the galls are on side branches. However, some of them are on the main stem. The terrain is hummocky but fairly dry. There are a few inclusions of low wet ground. The tamarack is mainly along the edges. The aspen is being hit by beavers, especially near the lowlands. The crown closure is closer to 75%.
64	4311 - Pine, Aspen Mix	High Density Log	15.1	Uneven Age	81-110	The aspen along the Tittabawassee River and drainages are being impacted by beaver. So between beavers and natural decline the aspen is falling out of the stand. In the open areas the stand is filling in with white pine and balsam fir with some scattered red pines. The terrain is undulating and the depressions are wet.
65	4130 - Aspen	High Density Sapling	29.0	29		The stand is about 90% uplands. The lowlands are mainly in the draws. These drain into the Tittabawassee River. The terrain is mainly flat and it becomes undulating near the draws. The aspen is moving nicely into poles and there are already some 6" diameter poles present.
68	42290 - Natural Mixed Pine	High Density Log	27.9	Uneven Age	111-140	This stand is a slight upland ridge. The species are variable, being heavy to red pine at the south end; more jack pine toward the north end; and white pine is present throughout. The aspen in the stand is a mixture of poles and logs. Most of the logs are overmature and declining. The poles present are the spill over from the harvest of pre-inventory stand 76. FACTOR LIMIT THE STAND: NEEDS ROAD
70	4130 - Aspen	High Density Pole	26.8	43		The terrain is hummocky. The uplands makes up about 80-85% of the stand. There are several wet drainages present. This stand could be harvested, as it is a pole stand. However, it would be better to wait 10 years. FACTOR LIMIT THE STAND: NEEDS ROAD



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
71	4132 - Aspen, Jack Pine	Medium Density	13.8	29		The terrain is hummocky. There are numerous small inclusions of low wet ground. There is an upland knob in the center of the stand that is poverty grass and bracken fern. This area is very sparse. The edges of the stand are being heavily impacted by beaver activity. Most of the activity is 2+ years old. The rest of the stand is well stock. It is mainly aspen with pockets of jack pine.
73	4130 - Aspen	High Density Sapling	7.1	29		There are pockets of aspen that are being heavily hit by porcupines, especially near the large white pines. The stand is mainly uplands with a few low wet areas. The edges of the stand near the lowlands are being heavily impacted by beavers.
75	4133 - Aspen, Mixed Pine	High Density Log	12.7	97	81-110	This stand was left when the aspen to the west and north was harvested. It was left to address visual concerns along the Tittabawassee River. This stand is right across from permanent residences along the east side. The terrain is hummocky.
76	42260 - Natural Pine, Mixed Deciduous	Low Density Sapling	10.8	29		The ground cover is mainly poverty grass with areas of blueberry. There are pockets of aspen and some conifers. The south end of the stand was burned in a wildfire (2002) and has regenerated to jack pine. The beaver have been impacting the aspen that is present. At the current time the crown closure is around 25%.
78	4130 - Aspen	High Density Sapling	43.6	29		The stand is well stocked overall. However, it is being heavily impacted by beavers. The heaviest hit areas are in the northwest corner near the lowland shrub types. The beaver chews are fairly old.
80	4133 - Aspen, Mixed Pine	High Density Log	17.6	94	51-80	FACTOR LIMIT THE STAND FOR SCENIC VALUE ALONG THE TITTABAWASSEE RIVER. The aspen in the stand is declining and is being replaced by white pine, red pine, and balsam fir. Along the river the stand has a steep drop off. In addition to the decline in the aspen it is also being hit by beavers.
101	4130 - Aspen	Low Density Sapling	14.7	1		The stand is a little patchy. The south end is being heavily browsed by deer. About 80% of the regeneration shows signs of browse. The crown closure is 25 to 35%. At the current time it is questionable if the stand will make it past the deer.
102	6118 - Lowland Deciduous with Cedar	High Density Log	25.7	Uneven Age	81-110	The terrain is hummocky. Overall the stand is low and wet. However, there is a portion of the stand that is upland. This portion is along the maintained wildlife opening. The south end is very wet. However the north end is not too bad. There is a drainage running through the stand.
103	4130 - Aspen	Medium Density	37.9	1		Some areas in the stand are open but overall it has about a 60% crown closure. The balsam fir in the stand was kept in pockets while the retained oaks and white pines are scattered. There is heavy deer browse in much of the stand. However, there appears to be enough regeneration to get past the deer.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
105	4130 - Aspen	High Density Pole	10.8	52		This is a mature aspen/oak stand. The aspen is mainly larger poles that are 7 to 8 sticks tall. Much of the oaks are sawlogs.
106	6132 - Mixed Lowland Forest with Cedar	High Density Pole	11.3	Uneven Age	141-170	There is heavy wind throw in the northern end of the stand. However, there is some level of wind throw throughout the stand. The cedar is more common at the north and south ends. Ash and maple are more common in the central portion of the stand. In areas of lower density the regeneration of white pine and balsam fir is thick. Overall it is a very wet site. There is also a trace of beech and basswood.
107	6118 - Lowland Deciduous with Cedar	High Density Pole	40.4	86	81-110	The stand has a creek running through it that has a well-defined bed and bank. There are numerous springs in the stand that feed into the creek. The percentage of hardwoods increases going south. Overall the stand is a matrix of uplands and lowlands with the lowlands being the majority. In the areas of thick balsam fir there is evidence of high winter deer activity. The area southwest of the creek is very wet and heavy to green and black ash. This area is too wet to harvest.
108	6120 - Lowland Cedar	High Density Pole	10.3	102		
109	4131 - Aspen, Oak	High Density Sapling	37.1	11		The regeneration in the stand has been heavily browsed by deer. Currently a significant amount of the oak regeneration is just getting above the deer. When it was harvested some of the overstory trees were retained, most of them were oaks. However, there is also some white pine, red pine, tamarack, red maple and aspen. The Boy Scout trail runs through the stand.
110	6118 - Lowland Deciduous with Cedar	High Density Log	4.1	76	81-110	
111	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	24.2	76	51-80	This stand has a trace of yellow birch, basswood, and river birch. EAB is present in the stand and it is at a moderate level. The ash is concentrated along the central drainage and aspen along the edges. The stand has a lot of old cedar stumps present. The stand looks like it was harvested one time. However, there is no cedar regeneration present. The terrain is hummocky.
112	4130 - Aspen	High Density Sapling	18.5	11		
113	4123 - Red Oak	High Density Log	2.2	76	111-140	This stand is an upland ridge along a low swale. The swale has a creek running through it. The terrain is undulating.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
114	4123 - Red Oak	High Density Log	4.9	61	81-110	The red oak in the stand is grade. It looks like the stand had a species removal of all species besides oak to 4" DBH. The regeneration is mainly maple stump sprouts. The regeneration is about the same age as the stand to the north. The harvest has left the stand with a nice overstory of oak with a medium stocked red maple understory. The density of the stand is lower in the west end than in the east end.
115	4130 - Aspen	High Density Sapling	49.0	23		
117	4130 - Aspen	High Density Pole	38.2	34		
118	6119 - Mixed Lowland Deciduous Forest	High Density Pole	10.0	96		
119	6119 - Mixed Lowland Deciduous Forest	High Density Pole	6.6	40		
120	4130 - Aspen	High Density Sapling	28.3	11		
122	6118 - Lowland Deciduous with Cedar	High Density Pole	6.3	82	81-110	The stand has heavy wind throw of cedar at the north end. It also has a thick understory of balsam fir. The ash is heavier to the south. The stand looks to be wetter at the north and south ends. The terrain is hummocky. There are signs of heavy winter deer activity judging from the copious amount of deer droppings. The stand is about 80% lowlands and much of that is too wet to manage.
123	4130 - Aspen	High Density Sapling	36.4	31		
125	6120 - Lowland Cedar	High Density Log	11.1	124	51-80	
126	4130 - Aspen	High Density Sapling	38.0	11		
128	6119 - Mixed Lowland Deciduous Forest	High Density Pole	11.8	99		
131	4130 - Aspen	High Density Sapling	34.0	22		
133	4130 - Aspen	High Density Sapling	35.7	22		
135	6119 - Mixed Lowland Deciduous Forest	High Density Log	5.0	73		
136	4130 - Aspen	High Density Pole	48.0	31		



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
137	4310 - Pine, Oak Mix	Medium Density Log	6.8	79	51-80	The stand's understory of maple is mainly multi stemmed. The white pine size varies from extra-large sawlogs at the north end to a mixture of poles and logs at the south end. This stand lies next to a beaver flooding. Therefore, much of the aspen has been removed and what is left is declining. In the past the stand looks like it had the hardwoods removed.
141	4311 - Pine, Aspen Mix	Medium Density Log	12.4	52	51-80	
142	4133 - Aspen, Mixed Pine	Medium Density	10.4	12		This stand is a matrix of uplands and lowlands with the uplands being the majority. The cedars that were retained were left in a single pocket. White pine poles and logs as well as balsam fir were left along Drummond road to lessen the visual impact of the harvest. Some of the low wet areas in the stand are lowland shrubs.
143	6112 - Lowland Aspen	High Density Pole	1.6	29		
144	4132 - Aspen, Jack Pine	Medium Density	55.9	8		The stand is a matrix of uplands and lowlands with the uplands being the majority. The regeneration is a patchy mix that goes from pines, to oaks, to aspens to cattails and lowland shrubs. Much of the regeneration shows signs of deer browse. The white pines show signs of some weeviling but it is not too bad. The jack pines show signs of galls but it is not extensive.
145	42200 - Natural White Pine	High Density Log	6.4	79	111-140	This is a ridge. The regeneration is heavy to red maple in the south end.
146	6112 - Lowland Aspen	High Density Pole	35.8	42		
148	6115 - Lowland Ash	Medium Density Pole	3.7	73		
150	4130 - Aspen	High Density Sapling	75.7	22		
151	6115 - Lowland Ash	Medium Density Pole	3.0	72		
152	4130 - Aspen	Low Density Sapling	14.5	12		
156	4130 - Aspen	High Density Sapling	71.1	22		
159	4311 - Pine, Aspen Mix	High Density Log	9.2	72	111-140	
161	4130 - Aspen	Low Density Sapling	19.6	1		The stand is regenerating fairly well. There are still some large openings. The deer browse is lower here than in the cut to the east. The crown closure is around 50%.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
162	4130 - Aspen	Low Density Sapling	21.4	1		The stand is being heavily browsed. The regeneration is patchy. The overall crown closure is 25%.
163	6119 - Mixed Lowland Deciduous Forest	High Density Pole	11.4	78	81-110	The stand is a matrix of uplands and lowland with the lowland being the majority. The terrain is hummocky. EAB is heavy in the ash
165	6119 - Mixed Lowland Deciduous Forest	High Density Pole	10.4	Uneven Age	81-110	The stand is a matrix of uplands and lowlands with the lowlands being the majority. The terrain is hummocky and there are some very wet areas in the stand. The ash has EAB and it is heavy.
201	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	28.7	80	81-110	The access to the stand would have to be off Clear Lake Road using a large culvert. The ash in the stand is heavily EAB and is declining as well as the overmature aspen. The stand is a matrix of uplands and lowlands with the lowlands being around 75%. There are areas in the stand that are too wet to harvest. The lowlands have a variety of deciduous shrubs including tag alder and red osier dogwood. The upland areas have a thick balsam fir understory. There is a brush line and survey corners along the south edge of the stand. There is also a survey corner at the northwest corner that ties into a wire fence.
203	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	14.1	38		75% of overstory aspen/maple; younger fir forms rest of overstory. NE and S ends (about 10% too wet). Most of stand is dry enough to harvest and there's adequate volume but access is very poor. Access from west is not possible.
204	429 - Mixed Upland Conifers	Medium Density	16.7	38		70% upland. Not a lot of aspen to warrant early harvest. Lot of wet ground. Trace of birch, cedar and tamarack.
208	6115 - Lowland Ash	Low Density Sapling	4.7	38		barely forested. 10% emergent wetland.
212	6115 - Lowland Ash	Medium Density Pole	5.1	38		
213	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Sapling	60.6	5		This stand is a matrix of uplands and lowlands with the lowlands being around 60%. There are areas in the stand that are cattails and reed grass; areas of lowland shrubs; and there are ridges that are uplands. The stand was harvested as a 4" DBH clearcut with all the white pine, marked oak and marked hardwoods being left. The regeneration is patchy with some areas being very dense and other areas being non-forested. The ash in the stand has heavy EAB and some of the white pines appear to have blister rust. The crown closure is around 50%. Deer browse is heavy in some areas.
214	42200 - Natural White Pine	Medium Density Pole	7.5	41	1-50	Meet mapping rules? if not combine with stand 21. Combine with stand 21 and/or 31 if too small. Trace of red pine and tamarack.
215	4130 - Aspen	Medium Density	11.4	21		Trace O' Balsam fir, jack pine, white pine and tamarack



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
218	4311 - Pine, Aspen Mix	Medium Density	11.6	22		L type drain through west end. Some good dense bigtooth aspen clones, rest conifers. Some oak. Trace of tamarack.
221	4133 - Aspen, Mixed Pine	Medium Density	12.0	22		Trace of birch, red maple, red pine in overstory, pin cherry in understorey.
222	42220 - Natural Jack Pine	Medium Density Pole	4.6	41		Trace of red pine and paper birch
223	4130 - Aspen	Medium Density	7.8	21		Scout trail runs through stand. Trace of jack pine, birch, black oak, white pine in canopy; willow and white pine in understorey.
225	42220 - Natural Jack Pine	Medium Density	10.5	41		Few shallow small drains run E-W through stand. Ground cover mainly bracken, wintergreen; some vaccinnium/leatherleaf. Trace of black oak, pin cherry, red maple, paper birch.
227	4133 - Aspen, Mixed Pine	High Density Sapling	6.2	6		The stand was harvested retaining a good portion of the oak and pine overstorey. The regeneration is coming up fairly well. The aspen is heaviest along the road. There is a lot of diversity in the stand. The terrain is hummocky. The ground cover is heavy to blackberry and blueberry.
228	6112 - Lowland Aspen	High Density Log	4.6	60		Floodplain and side slopes and narrow upland RMZ along tributary of Elk Lake Creek. 65% lowland. Trace of juneberry, balsam fir, elm, swamp white oak and cedar in understorey.
229	4136 - Aspen, Mixed Conifer	Medium Density	7.5	8		This stand was harvested retaining marked pine and oak. The regeneration is dense along Mohawk Trail but get sparse going south.
230	4130 - Aspen	High Density Sapling	2.3	21		
231	42290 - Natural Mixed Pine	High Density Log	10.3	77	141-170	Access at far NE corner of stand off paved road.
232	4311 - Pine, Aspen Mix	Medium Density Pole	16.7	41	1-50	The terrain is hummocky. The aspen looks to be declining. The species change from white pine and aspen in the south to jack pine, white pine, aspen and oak north. There is a trace of black cherry, tamarack, red pine, and paper birch. The white pine has poor form. They have branches all the way to the ground. In addition they appear to be weeviled. The jack pine has significant galls; most are on the lateral branches.
233	4199 - Other Mixed Upland Deciduous	Low Density Pole	15.2	41		ASH/ALDER DRAINS CROSSING IN SEVERAL PLACES. 60% UPLAND, REST ASH/MAPLE OVER ALDER. IN 10 YEARS ACCESS WOULD BE DIFFICULT AND WOULD HAVE TO CUT DRY/FROZEN/DORMANT. TRACE OF JACK PINE, RED PINE AND BLACK OAK.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
234	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	17.5	65	111-140	The terrain is hummocky and wet. The ash has moderate to heavy EAB and it is declining. The aspen is also not doing too well and looks to be declining. The stand is a matrix of uplands and lowlands with the lowlands being the majority. There is also a trace of cedar and white pine present.
235	6127 - Lowland Pine	High Density Log	13.0	Uneven Age	141-170	The terrain is hummocky and seasonably wet. There are scattered pockets of leather leaf. Though the stand is wet it is at a higher elevation than the lowland type to the east. There is a ridge along the east side that hinders overland flow. Therefore, most of the water has to drain through the soil. This makes the stand have standing water in the spring and after heavy rain. The stand has scattered logs and oversized logs with a thick layer of co-dominate red pine poles. The red pines are not of the highest quality. They have about 12" between branch whorls. So they do not make utility poles though the tapper is not bad and some cabin logs may be present.
236	4199 - Other Mixed Upland Deciduous	High Density Sapling	6.7	21		
237	6119 - Mixed Lowland Deciduous Forest	High Density Pole	20.9	Uneven Age	51-80	The stand is a matrix of uplands and lowlands with the lowlands being the majority. The ash in the stand is heavily EAB and showing signs of significant mortality. The terrain is hummocky.
238	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	18.8	77		25% upland along road
239	4130 - Aspen	High Density Sapling	6.5	40		Trace of Black oak, white pine in understory. Accessible from far SE edge off curve of road. NOT AN ASPEN SITE. Almost no merchantable vol. now at age 37. In 10 years do commercial or non-com cut and plant pine, probably red pine (few in stand with decent site index). Deep drain runs E-W but can get to back of stand from SE corner.
240	4319 - Mixed Upland Forest	High Density Log	9.9	Uneven Age	111-140	The stand is a matrix of uplands and lowlands with the uplands being the majority. There is a lot of down trees, most of which are balsam fir. Some of the white and red pines are extra-large sawlogs having a DBH of 22" or greater. The aspen in the stand is declining. The ash has moderate to heavy EAB and it is also declining. The terrain is hummocky.
242	4130 - Aspen	High Density Pole	6.6	39		
244	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	5.7	Uneven Age		10-15% of canopy is balsam fir saplings, separate story from maple/ash.
245	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	29.8	65	51-80	trace of hemlock and white oak in canopy, hemlock in understory.
246	4199 - Other Mixed Upland Deciduous	High Density Log	7.1	65		



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
248	4191 - Mixed Upland Deciduous with Conifer	High Density Log	3.6	87	51-80	Access issue. Pulled from Mohawk Harvest Sale ('06) due to new deep ditch from improvement of road. Trace red maple in understory.
249	6115 - Lowland Ash	Medium Density	5.0	65		NE 30% is L type.
251	42290 - Natural Mixed Pine	Medium Density Pole	4.2	41	1-50	
252	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	28.4	87	51-80	The ash in the stand does have some EAB. The EAB is not as heavy as they are in other areas of the compartment. The terrain is hummocky. The stand is a matrix of uplands and lowlands with the mix being close to 50/50. The stand was thinned last YO. The regeneration is starting but it is not heavy.
253	42260 - Natural Pine, Mixed Deciduous	High Density Pole	6.7	77	51-80	Steep bank of Secord Lake. Trace of Red oak and rock elm in canopy and pin cherry in understory.
254	6113 - Lowland Maple	High Density Pole	6.9	Uneven Age	51-80	The aspen in the stand is declining and falling out of the overstory. The area is a matrix of uplands and lowlands with the lowlands being a slight majority. The terrain is hummocky and much of the drainage in the stand is along the edges. There is heavy white pine regeneration at the north end. There is more maple at the south end and oak is scattered throughout the stand. The soils also seem to get wetter going south.
256	6113 - Lowland Maple	High Density Pole	2.7	Uneven Age	81-110	The terrain is hummocky. The stand is quite small and a culvert will be needed to access the stand. It may not be worth the cost to gain access for the wood that is present.
257	4133 - Aspen, Mixed Pine	Medium Density Log	21.0	84		Visual buffer for Secord Lake: Steep slope down to lake. Trace of black cherry, birch in canopy.
258	6112 - Lowland Aspen	Medium Density	32.0	22		60% lowland. Small patch mature WP in north central portion of stand. SE edge of portion north of drainage is a lower percentage canopy closure and a little wetter.
259	6127 - Lowland Pine	High Density Pole	4.7	34	51-80	Blueberry in portions of south end. 65-70% lowland. Trace of birch, aspen, jack pine in overstory, dogwood in understory.
262	42200 - Natural White Pine	High Density Pole	10.9	41	51-80	Most pine is infested with white pine weevil. Few patches of aspen along road. Trace of tamarack, red pine, birch, jack pine in overstory, tamarack and red maple in understory.
263	6126 - Lowland Jack Pine	High Density Pole	66.6	63	111-140	The terrain is hummocky. The soils are seasonably wet. However, the stand is higher in elevation than the stands to the east. Along the east side of the stand is a ridge and road that hinders overland water flow to the east. Therefore, the water must drain through the soil to the east. This type of stand often dries up in late summer and could be managed. There are also areas in the stand that are open leather leaf as well as slight upland ridges.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
264	6114 - Lowland Oak	Medium Density	7.0	30		Barely lowland. Hummocky, with areas of moss and blueberry (25%). Similar to stand 134 but far less white pine and slightly drier.
265	6113 - Lowland Maple	Medium Density Pole	6.9	77		Drainage
268	4130 - Aspen	Medium Density	7.4	5		The stand was harvested. There is regeneration that is coming in fairly well but there are portion that did not regenerate. The areas that did not come back are mainly wet and are now reed grass.
270	4131 - Aspen, Oak	High Density Sapling	4.7	21		Former ('02) stand 21 divided. This southern portion is mostly regen with low % log sized oak. MANAGE NEW STAND.
271	4136 - Aspen, Mixed Conifer	High Density Sapling	13.3	38		Midland to Mackinaw Trail runs through stand at N end. Several steep drains to Secord lake dissect stand.
273	4130 - Aspen	High Density Pole	129.0	22		Split along Thendary Drive: Different ages. Midland to Mackinaw Trail runs through stand. 30% lowland. Trace of red pine, black ash, pin oak and jack pine.
274	4130 - Aspen	High Density Pole	61.3	40	51-80	Early harvest to even age class distribution. Some aspen approaching log size.
275	6115 - Lowland Ash	Low Density Pole	6.9	79		Creek floodplain.
277	6112 - Lowland Aspen	Low Density Sapling	5.3	22		
278	4125 - Black, N. Pin Oak	Medium Density Log	6.6	91	1-50	Broken out of old ('02) stand 21. Very little understory, mostly old log sized oak with little regen. Valuable for mast now, but will lose mast when oak dies soon. Can get oak back from stump sprouts if FINAL HARVEST NOW. 4" spec on the little regen that is there. Small stand but can harvest with other stands. Plant red pine if regen fails. Trace of white pine, jack pine, red maple in canopy.
279	4130 - Aspen	High Density Pole	38.6	40		Barely upland. No understory coming in. Best to harvest this YOY if want aspen. Good volume. No sensitive fern; 5-10% bracken. Ground cover blueberry, goldenrod, raspberry, 5% swamp grass, 5% winterberry.
281	42260 - Natural Pine, Mixed Deciduous	High Density Pole	15.0	77	51-80	Access off Mohawk Trail at stand 36 (same access as stand 30)
282	4131 - Aspen, Oak	Medium Density	21.7	30		5-10% very shallow lowland (hummocky and bog areas). Grades to higher % lowland at south end (15-20%). Southern 5-10 ac has about 10% tamarack, 2% birch, trace of black spruce. Northern 15 ac has about 5% jack pine. Also trace of red pine in canopy.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
286	4131 - Aspen, Oak	High Density Sapling	7.3	31		Grades to wetter with far less aspen and more oak and maple at north end. Hummocky at south end. Trace of paper birch in canopy, red pine and alder in subcanopy.
291	4131 - Aspen, Oak	High Density Sapling	14.6	21		Trace of tamarack in overstory, alder, white and red pine, paper birch and black oak in understory. Some supercanopy oak.
292	4130 - Aspen	Medium Density	16.8	22		portions reverted to lowland shrubs with birch coming in. Will eventually succeed back to forest. Patchwork of good aspen clones, south half closer to solid aspen. 15-20% lowland. Trace of winterberry.
293	4133 - Aspen, Mixed Pine	High Density Log	8.7	77		Slope of Secord Lake: Narrow visual buffer for dense homes along lake. West end more xeric with more oak and less white pine.
294	4130 - Aspen	High Density Pole	55.2	40		5-10% lowland with ash and grass/forbs. Access Issue. Between stands 91 and 94 very wet: would probably want to have 2 landings- North and South. Another almost 40% is low but operable WITH DRY/FROZEN SPEC. Candidate for early harvest but would prefer to not cut this stand because of wet ground and access issue. Trace of white pine, birch, elm, black cherry.
295	4130 - Aspen	High Density Pole	128.6	38		Candidate for early harvest. Would have to use dry/frozen spec non-negotiable: 15-20% very wet depressions. Don't cut non-aspen species except red maple and ash. Midland to Mackinac trail runs through stand. Trace of white pine, black oak and elm in overstory, and balsam fir, hazel and white pine in understory.
296	4130 - Aspen	High Density Sapling	44.4	31		Northeast 1/3 is 85% aspen clumps, rest combination of bracken openings and small L pockets. Mostly solid aspen with good site index. Aspen smaller and mixed with more jack, red and white pine, oak and birch at north end. Trace of black oak, red maple, birch, red pine and jack pine in overstory, trace of serviceberry, white pine, hazel and jack pine in understory.
297	4133 - Aspen, Mixed Pine	High Density Log	11.2	Uneven Age		Slope of secord lake: leave as visual and bmp buffer.
299	4131 - Aspen, Oak	Medium Density Pole	6.6	40		ORV trail through East end. 15-20% lowland. Trace of birch, red pine, tamarack and red oak in overstory. Trace of white pine and tag alder in understory.
301	6112 - Lowland Aspen	Medium Density	10.4	22		Trace of swamp white oak, white pine, hawthorn and pin oak in canopy.
302	4130 - Aspen	High Density Sapling	34.2	4		Harvested 2010. Should have done dormant season harvest. Aspen dense in many places, or reverted to emergent wetland (15-20%). No deer browse.
303	4125 - Black, N. Pin Oak	Low Density Sapling	18.6	22		Buffer (visual and steep slope) along Secord Lake. Trace of red maple and tamarack (canopy), tag alder, serviceberry, hazel in understory.

S
t
a
n
d

Gladwin Mgt. Unit

Report 8 – Forested Stands

Compartment: 031
Year of Entry: 2016

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
307	4319 - Mixed Upland Forest	Medium Density	5.4	22		Visual and RMZ buffer for Secord Lake. Very diverse species and size mix.
308	4130 - Aspen	Medium Density Log	5.7	84		Buffer (BMP's, visual) adjacent to Secord Lake. Trace of red and jack pine (canopy), juneberry, red and white pine, red maple and balsam fir (understory).
309	4130 - Aspen	High Density Sapling	63.3	38		Different than stand 79; therefore split stand. Less than pole size. Scout trail runs through stand.
310	4130 - Aspen	High Density Sapling	19.1	22		Harvested with stand 81: came back more dense. Scattered L type pockets. Trace of pin oak and red maple in overstory and following in understory: serviceberry, hawthorn, alder, red ozier dogwood, hazel.
312	4130 - Aspen	High Density Pole	12.3	41		Trace O' white pine, pin cherry in subcanopy.
314	4131 - Aspen, Oak	Medium Density Log	5.4	61		Scattered drainages and low areas, including some deep drainages draining into Secord Lake. Leave as visual buffer for lake and adjacent homes and heavily traveled road. Trace of birch, elm, white pine and red maple in overstory, dogwood, white pine and blue beech in understory.
315	6112 - Lowland Aspen	High Density Pole	13.9	38		Scout trail through stand. Broken out of stand 79/131: far wetter, with swamp grass. Trace white pine and COTTONWOOD in canopy, balsam fir in subcanopy.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	3104 - Degraded	2.1	No	Low	This is an open grass type. It is often used for parking or dispersed camping.
2	6229 - Mixed lowland shrub	3.3	No	Unspecified	The stand is in a depression that is quite wet and heavy to tag alder and willow.
3	6225 - Bog	4.7	No	Unspecified	The stand is a heavy to leather leaf. There are some scattered white pines
13	6229 - Mixed lowland shrub	8.1	No	Low	The stand is a depression that is mainly tag alder with pockets of cattails.
14	50 - Water	19.1	No	Unspecified	The stand is a beaver pond.
15	50 - Water	11.4	No	Low	This stand is a beaver pond
17	3105 - Mixed Upland Herbaceous	2.7	No	Unspecified	The terrain is undulating and is mainly bracken fern, sweet fern and grass.
20	3202 - Autumn Olive/Honeysuckle	3.7	No	Unspecified	This is an old autumn olive planting on poor soils. The ground cover is poverty grass and sweet fern.
22	50 - Water	3.2	No	Unspecified	This is a beaver pond. The edges have heavy tag alder and marsh grass.
23	3105 - Mixed Upland Herbaceous	11.3	Natural Regen	Jack Pine	This stand was harvested in 2010 and has not regenerated. The terrain is hummocky to undulating. The low ground is very wet.
25	6229 - Mixed lowland shrub	6.0	No	Unspecified	The stand is mainly tag alder and lowland shrubs over water.
26	3303 - Mixed Low Density Trees	3.2	No	Unspecified	This stand has some older trees that have been seeding into the stand.
27	629 - Mixed non-forested wetland	23.9	No	Unspecified	The stand is mainly cattail with areas of open water.
28	6229 - Mixed lowland shrub	43.5	No	Unspecified	This stand is mainly tag alder, willow and dogwood with small islands of low density trees and grass.
29	3105 - Mixed Upland Herbaceous	6.9	Natural Regen	Jack Pine	The stand was harvested in 2010 and has not regenerated. The terrain is hummocky to undulating. The low areas are very wet. The only trees in the stand are the residual pine.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
30	6229 - Mixed lowland shrub	16.0	No	Unspecified	The stand is mainly tag alder, willow and marsh grass with some scattered trees. The soils are very wet at the current time but may dry out in late summer.
31	3202 - Autumn Olive/Honeysuckle	2.7	No	Unspecified	This is an old autumn olive planting on poor soils. The ground cover is poverty grass and sweet fern.
33	629 - Mixed non-forested wetland	33.3	No	Unspecified	The stand is mainly an emergent marsh type with areas of open water and areas of lowland shrubs.
37	50 - Water	1.5	No	Unspecified	This is a beaver pond surrounded by tag alder and willow.
38	6239 - Mixed Emergent Wetland	30.6	No	Low	The stand is a mixture of tag alder and willow; marsh grass and cattails; and open water.
39	3201 - Sweet Fern	19.5	No	Unspecified	The aspen in the stand has been chewed off by beaver. There are now only a few small clones. The ground cover is mainly sweet fern and poverty grass.
40	6229 - Mixed lowland shrub	24.0	No	Unspecified	This area is a mixture of upland knobs surrounded by lowland shrubs. It is about a 50 50 mix of uplands and lowlands. The upland areas are mainly low density conifer trees and are a mixture of native pines. What regeneration that is present is 43 years old.
42	6233 - Wet Meadow	7.4	No	Unspecified	This area was a beaver pond but has since drained. It is now more of a beaver meadow. There are now some upland areas visible. The central portion of the stand still has open water.
45	6220 - Alder/willow	3.1	No	Low	This is a lowland type of tag alder.
47	3102 - Grass	5.0	Yes	High	This area is a maintained wildlife opening.
48	50 - Water	16.9	No	Unspecified	Beaver pond
50	6229 - Mixed lowland shrub	11.6	No	Low	The stand is just short of a 20% crown closure at the north end. The crown closure becomes less going south. Also the stand becomes mainly tag alder.
51	6239 - Mixed Emergent Wetland	11.3	No	Unspecified	This is mainly an emergent wetland with open water caused by beavers.
54	629 - Mixed non-forested wetland	3.1	No	Unspecified	This stand is a mixture of tag alder and cattails with some areas of open water. It looks like it may have been an old beaver flooding.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
56	629 - Mixed non-forested wetland	59.7	No	Unspecified	This is mainly a lowland shrub type with upland islands and low ridges. The uplands are only slightly higher than the surrounding lowlands.
57	6220 - Alder/willow	1.8	No	Low	This is an area of tag alder over standing water.
58	50 - Water	65.0	No	Unspecified	This is Tittibawassee River and its tributaries. Many of the tributaries have multiple beaver dams and ponds.
60	629 - Mixed non-forested wetland	25.0	No	Unspecified	This stand is an extensive mixture non forested wetlands types. It goes from tag alder to marsh grass to open water.
61	629 - Mixed non-forested wetland	5.4	No	Unspecified	The stand is mainly tag alder and marsh grass that has a drainage running through it. At the south end there is an old beaver dam that is still restricting water flow.
62	6229 - Mixed lowland shrub	7.4	No	Unspecified	This is mainly a tag alder and willow stand that drains to the south. There is some beaver activity at the south end. However, the dam has a breach and it is draining at the current time.
66	6229 - Mixed lowland shrub	2.1	No	Unspecified	The stand is in a depression and it is very wet. The tag alder and willow are on hummocks. There are some scattered ashes present.
67	3105 - Mixed Upland Herbaceous	7.5	No	Unspecified	The stand was an aspen stand but it has been decimated by beavers. There are chewed stumps all over. Most of the chews appear to be 2-3 years old. There are some newer chews toward the south end.
69	6229 - Mixed lowland shrub	1.5	No	Unspecified	The stand is in a depression of mainly tag alder and willow. There is some aspen. The overall crown closure is around 20%.
72	3105 - Mixed Upland Herbaceous	11.4	No	Unspecified	The stand has been heavily hit by beavers. It has been converted to a low density pine stand.
74	6229 - Mixed lowland shrub	5.3	No	Unspecified	This is a long drainage that is mainly tag alder that is around 4' tall over marsh grass.
77	629 - Mixed non-forested wetland	3.3	No	Unspecified	This stand is a series of old beaver floodings. The aspen that has been chewed around the edges is around 2-3 years old. The stand itself is mainly tag alder and willow. Toward the southern end of the stand there is an area of open water and a dam. However, right now the water is running under the dam so it may soon be out.
79	6229 - Mixed lowland shrub	2.6	No	Unspecified	This is a depression that drains to the south. It is mainly tag alder with some quaking aspen and ash. The crown closure is around 20%.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
104	3102 - Grass	3.7	Yes	High	This is a maintained wildlife opening
116	629 - Mixed non-forested wetland	8.8			
121	622 - Lowland Shrub	2.7			
124	6220 - Alder/willow	12.3			
127	623 - Emergent Wetland	3.5			
129	623 - Emergent Wetland	2.0			
130	622 - Lowland Shrub	11.6			
132	3102 - Grass	3.8	Yes	High	This is a maintained wildlife opening.
134	623 - Emergent Wetland	4.6			
138	3302 - Low Density Conifer Trees	3.9	No	Low	This stand is an area that was harvested and has come back as a low density conifer stand.
139	50 - Water	7.6			
140	629 - Mixed non-forested wetland	20.9			
147	3102 - Grass	1.6	Yes	High	This is a maintained wildlife opening
149	310 - Herbaceous Openland	1.8			
153	50 - Water	12.6			
154	622 - Lowland Shrub	26.2			
155	623 - Emergent Wetland	11.8			
157	622 - Lowland Shrub	4.9			



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
158	3102 - Grass	3.4	No	Medium	
160	50 - Water	6.0			
164	629 - Mixed non-forested wetland	17.2	No	Unspecified	The stand is mainly made up of two old beaver flooding. They have drained down but are still very wet,
202	6220 - Alder/willow	1.3	Unspecified	Unspecified	willow, alder, 5-10% aspen, ash, fir near road.
205	3103 - Rubus-Fern	8.7	Unspecified	Unspecified	20-25% L.
206	6230 - Cattail	8.4	Unspecified	Unspecified	Grass w/ little bit of alder, WP, RM
207	6230 - Cattail	9.9	Unspecified	Unspecified	Floating aquatic, but no code for.
209	6220 - Alder/willow	3.2	Unspecified	Unspecified	mostly willow
210	6230 - Cattail	8.0	Unspecified	Unspecified	Diverse: areas of willow/alder, 10% bracken, scattered WP, birch, areas of bog
211	629 - Mixed non-forested wetland	15.2	Unspecified	Unspecified	Very diverse: Ash canopy dying (EAB?). 11% cover, open water 10%, willow/ald 20%, swamp grass 60%
216	3102 - Grass	3.0	Unspecified	Unspecified	
217	3301 - Low Density Deciduous Tree	9.6	Natural Regen	Aspen	This stand was harvested but has not regenerated well. Most of the trees are in the western half of the stand. The white pines are weeviled. The terrain is hummocky. The crown closure is between 5 and 25%. However, on the average it is greater than 15%. Cut in the summer of 2008.
219	6230 - Cattail	3.5	Unspecified	Unspecified	Crk bed w/ lush grass and lot of dead ash.
220	6220 - Alder/willow	6.8	Unspecified	Unspecified	Willow, alder, swamp grass
224	6220 - Alder/willow	13.8	Unspecified	Unspecified	Scattered tam, birch, maple, especially to NE
226	6225 - Bog	1.5	Unspecified	Unspecified	Scattered jack and red pine, black spruce, aspen
241	6220 - Alder/willow	48.2	Unspecified	Unspecified	Alder/will w/ 10% N and 10% sparsely treed upland



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
243	3205 - Mixed Upland Shrub	6.1	Unspecified	Unspecified	20% lowland with willow. 15% sweet fern. 15% N. Very late seral wetland tht's now upland.
247	6225 - Bog	4.0	Unspecified	Unspecified	
250	6239 - Mixed Emergent Wetland	1.0	Unspecified	Unspecified	Old curve of Mohawk Trail: curve re-routed and paved a few years ago.
255	710 - Sand, Soil	18.8	Unspecified	Unspecified	Actually paved road (cover type 122) but cover type dropdown did not permit me to enter 122 and it was not in drop down.
260	6224 - Treed Bog	4.8	Unspecified	Unspecified	WP, JP, QA
261	6220 - Alder/willow	24.5	Unspecified	Unspecified	
266	6220 - Alder/willow	1.6	Unspecified	Unspecified	Lot of ash around edges.
267	6233 - Wet Meadow	8.2	Unspecified	Unspecified	mostly grass, sedge, rush. Some open water and cattails and floating aquatic.
269	3303 - Mixed Low Density Trees	8.7	Unspecified	Unspecified	diverse: aspen, black oak, tamarack, jack pine and paper birch. 60% upland (bracken), rest L type
272	50 - Water	26.3	Unspecified	Unspecified	
276	6220 - Alder/willow	3.7	Unspecified	Unspecified	Will/ald w/ 10% birch, rm, wp
280	6220 - Alder/willow	12.9	Unspecified	Unspecified	
283	6225 - Bog	1.2	Unspecified	Unspecified	leatherleaf w scattered white pine
284	6220 - Alder/willow	5.5	Unspecified	Unspecified	mostly will, some trees @ N and E edges
285	6220 - Alder/willow	1.1	Unspecified	Unspecified	mostly willow with dogwood, rushes (5%). Scattdr birch, tamarack, maple.
287	6239 - Mixed Emergent Wetland	1.1	Unspecified	Unspecified	cattails, open water and rushes/swamp grass. Broad watercourse.
288	6224 - Treed Bog	1.1	Unspecified	Unspecified	WP, RM, PB, TAM, QA w/ blueberry. 15-20% treed.

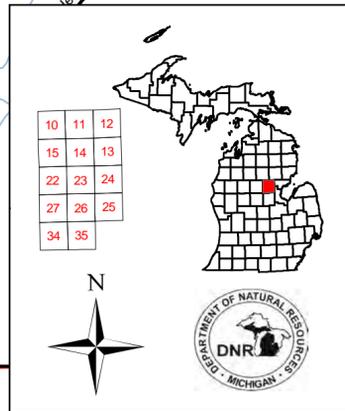


Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
289	6233 - Wet Meadow	8.7	Unspecified	Unspecified	5% cattails, 8% willow around edge. few ash
290	710 - Sand, Soil	2.5	Yes	Unspecified	Actually cover type 122: road/parking lot but menu does not give me this choice.
298	6225 - Bog	1.2	Unspecified	Unspecified	some alder, maple, w and r pine, oak, aspen
300	6220 - Alder/willow	11.3	Unspecified	Unspecified	Mostly will, some cattails
304	50 - Water	7.4	Unspecified	Unspecified	
305	50 - Water	4.5	Unspecified	Unspecified	
306	6220 - Alder/willow	1.0	Unspecified	Unspecified	alder
311	6225 - Bog	3.7	Unspecified	Unspecified	5% white pine, birch, fir
313	50 - Water	4.1	Unspecified	Unspecified	
316	50 - Water	1.0	Unspecified	Unspecified	

Cover Type & Treatment Map

Compartment: 031
 T20N R01E
 10 11 12 13 14 15 22 23 24 25 26 27 33 34 35
 County: Gladwin
 Unit: Gladwin
 YOE: 2016
 Acres: 4,247 GIS Calculated
 Examiner: Rick Myrick
 Map Revised: 05/29/2014
 Map Phase: Pre-Review

Stand #
23
 Stacking
 Density
(4120) - A7
 Level 3
 OI
 Level 4
 Code
 Cover Type Code



Legend

- Miris Corners
- Hiking Trails
- Hiking Trail
- Hunter Walking Trail
- Hunter Walking Trail
- Gate
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Stream
- Intermittent Stream
- Lakes and Rivers
- Treatments w/ Site Condition

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Seed Tree (w/Reserves)
- Shelter Wood (w/Reserves)
- Selection (Group, Single Tree)
- Other Harvest - See Comments
- Seeding (tree species)
- Moving

Forest Stands

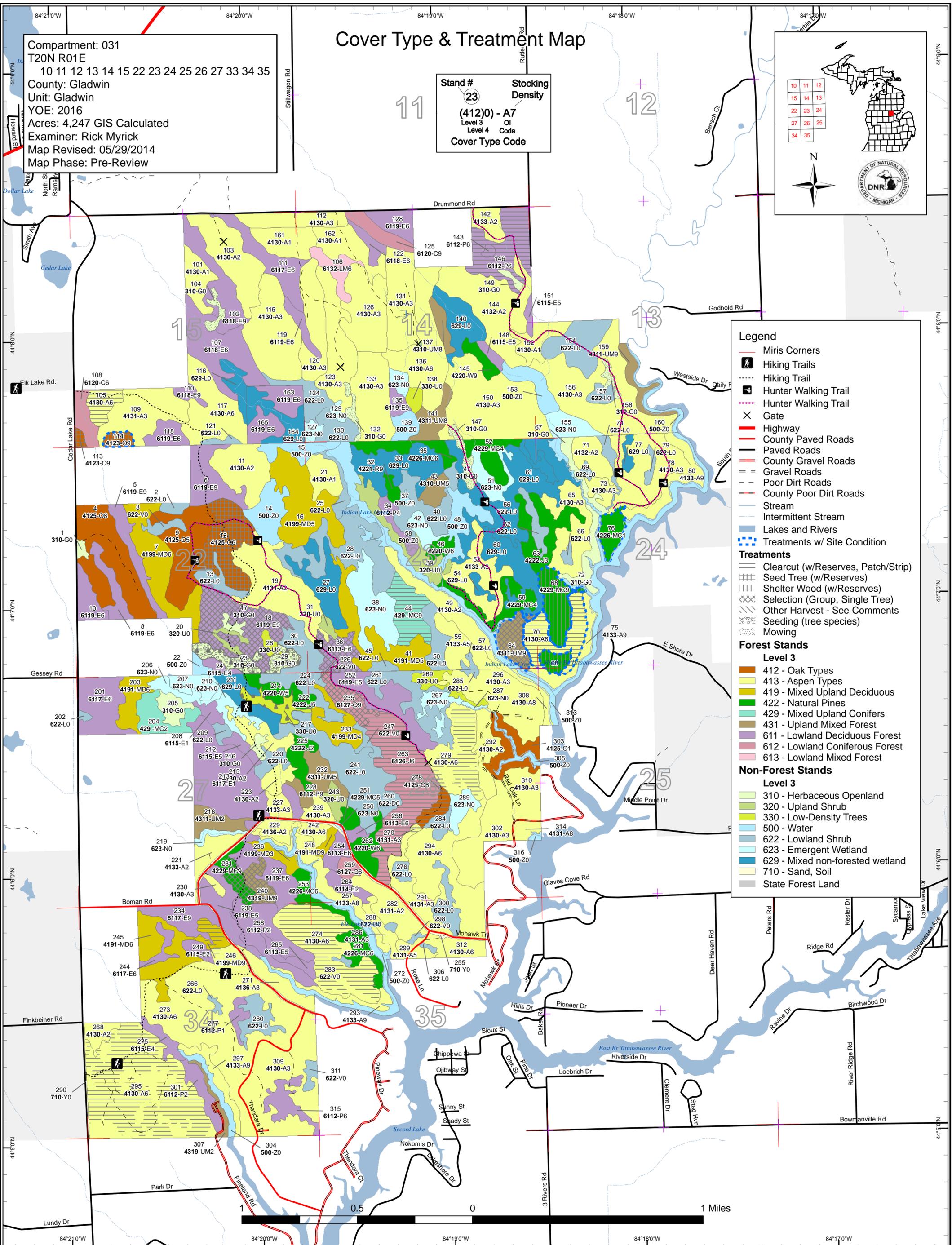
Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

Level 3

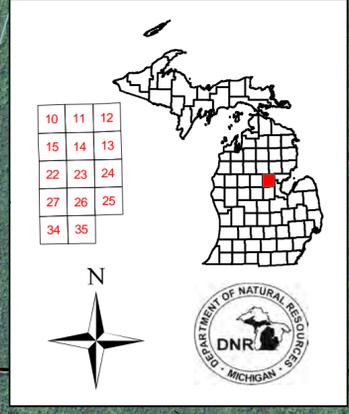
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland
- 710 - Sand, Soil
- State Forest Land



Stand Boundary Map

Compartment: 031
 T20N R01E
 10 11 12 13 14 15 22 23 24 25 26 27 33 34 35
 County: Gladwin
 Unit: Gladwin
 YOE: 2016
 Acres: 4,247 GIS Calculated
 Examiner: Rick Myrick
 Map Revised: 05/29/2014
 Map Phase: Pre-Review

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



- Legend**
- Miris Corners
 - Hiking Trail
 - Hiking Trail
 - Hunter Walking Trail
 - Hunter Walking Trail
 - Gate
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trail (Non-Recreation)
 - Stream
 - Intermittent Stream
 - Stand Boundaries
- Forest Stands**
- Level 3**
- 412 - Oak Types
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 422 - Natural Pines
 - 429 - Mixed Upland Conifers
 - 431 - Upland Mixed Forest
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
 - 613 - Lowland Mixed Forest
- Non-Forest Stands**
- Level 3**
- 310 - Herbaceous Openland
 - 320 - Upland Shrub
 - 330 - Low-Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland
 - 629 - Mixed non-forested wetland
 - 710 - Sand, Soil

