



**Gladwin Forest Management Unit
Compartment Review Presentation
Compartment #105 Entry Year: 2012
Compartment Acreage: 1541 County: Midland**

Revision Date: Feb 2010, Sept 2010

Stand Examiner: Steven Nyhoff

Legal Description: T15N, R1W, Sections 2, 3, 10 and 11

Identified Planning Goals ('Management Area' or 'RMU', if applicable): None

Management Goals: In the past 30 years, the compartment has been heavily managed for aspen and other early successional ecosystems. Currently the stands are heavy to oak and aspen on the dry ground and red maple and ash in the wetter areas. It was noticed that there were areas of significant wind throw of the mature trees.

Continue to manage the compartment for the current cover types.

Soil and Topography: The terrain in the compartment is flat with minimal topographical relief, except along Black Creek. This creek has a flood plain bordered by steep banks. It also joins the Tittabawassee River just to the east of the compartment.

The soils in the compartment are Pipestone sand, Wixom sand, and Kingsville fine sand on the level areas which are broken up with low ridges of Covert sand, and the wet depressions of Kinross mucky sand and Adrian muck.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The state ownership is mostly contiguous within the compartment boundary. This ownership is part of a larger block of state land that goes from US-10 to the north county line of Midland. The land is used for hunting; mushroom and berry picking; hiking and dispersed camping. It is also popular with mountain bikers. This group has built a large trail system within this compartment and adjacent compartments. The trail systems were built without permission of the DNR. They have been improving the trail with wooded structures to cross environmentally sensitive soil and along creek corridors without proper measures taken to avoid erosion and sedimentation into the creeks.

Along the east side of the compartment is a subdivision.

Unique, Natural Features: There are records of wood turtles in the compartment and to the NW and SW of the area. There are also records of Three-awned grass to the south.

Archeological, Historical, and Cultural Features: No known occurrences. No new ones were located during the inventory process.

Special Management Designations or Considerations: None

Watershed and Fisheries Considerations: The compartment has Black Creek flowing through it. This creek has a sand bottom, warm water drainages. However, there are concerns about sediment load flowing into the Tittabawassee Rivers.

The forest treatments planned along Black creek are confined to the bluff above the creeks. This boundary will follow BMP consideration to minimize erosion or sedimentation into the creek from logging

activity. In addition, the treatments that are scheduled near these creeks are not clearcuts but some form of partial removals.

Wildlife Habitat Considerations: This compartment is dominated by areas of lowland deciduous forest with open water inclusions; some are man-made borrow pits while others are natural. Blueberry is common and found throughout the area and provides food source. Several beaver ponds are also found. Waterfowl are frequently seen using these ponds. This compartment is used extensively by deer hunters, although turkey and grouse hunting is also popular. The aspen component should be maintained and increased when possible for wildlife species. The area should continue to benefit from the species diversity within stands. Oak species should be encouraged and not be entirely removed from any one stand.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of Lacustrine (lake) sand and gravel. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift is the Pennsylvanian Saginaw Formation. The Saginaw Formation is used for clay/shale in other areas of the State. This area is predominantly sand, and gravel potential in the compartment is considered limited. Four dry holes have been drilled in the compartment, and several small fields are in the area. The closest is Sanford Field discovered in 1951. It has produced 228,272 BO from the Dundee. This area is leased for oil and gas and potash development.

Vehicle Access: The access is off Burns Road, Meir Road, and Blakley Road. There is a main dirt road giving access to the western portion of the compartment. In addition, many closed roads traverse the compartment.

Survey Needs: Text

Recreational Facilities and Opportunities: Within the compartment boundary is the Black Creek State Forest Campground.

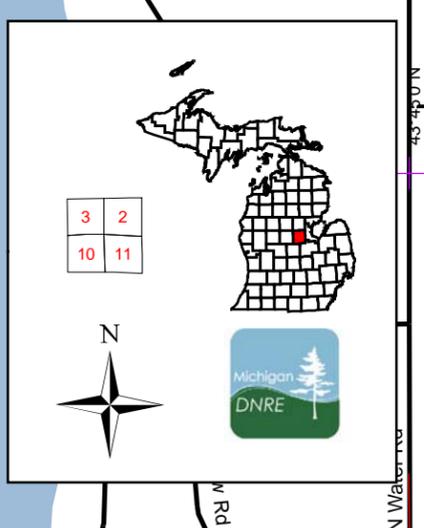
Fire Protection: Text

Additional Compartment Information: There has been a growing problem in the compartment with illegal mountain bike use. This group has been establishing and improving bike trails without the consent of the DNR. The trail improvements include making of bridges and boardwalks with treated lumber to cross wet areas. They continue to expand the trail system not only in compartment 105 but also in compartments 100, 104, 99, 98, and 97.

Cover Type & Treatment Map

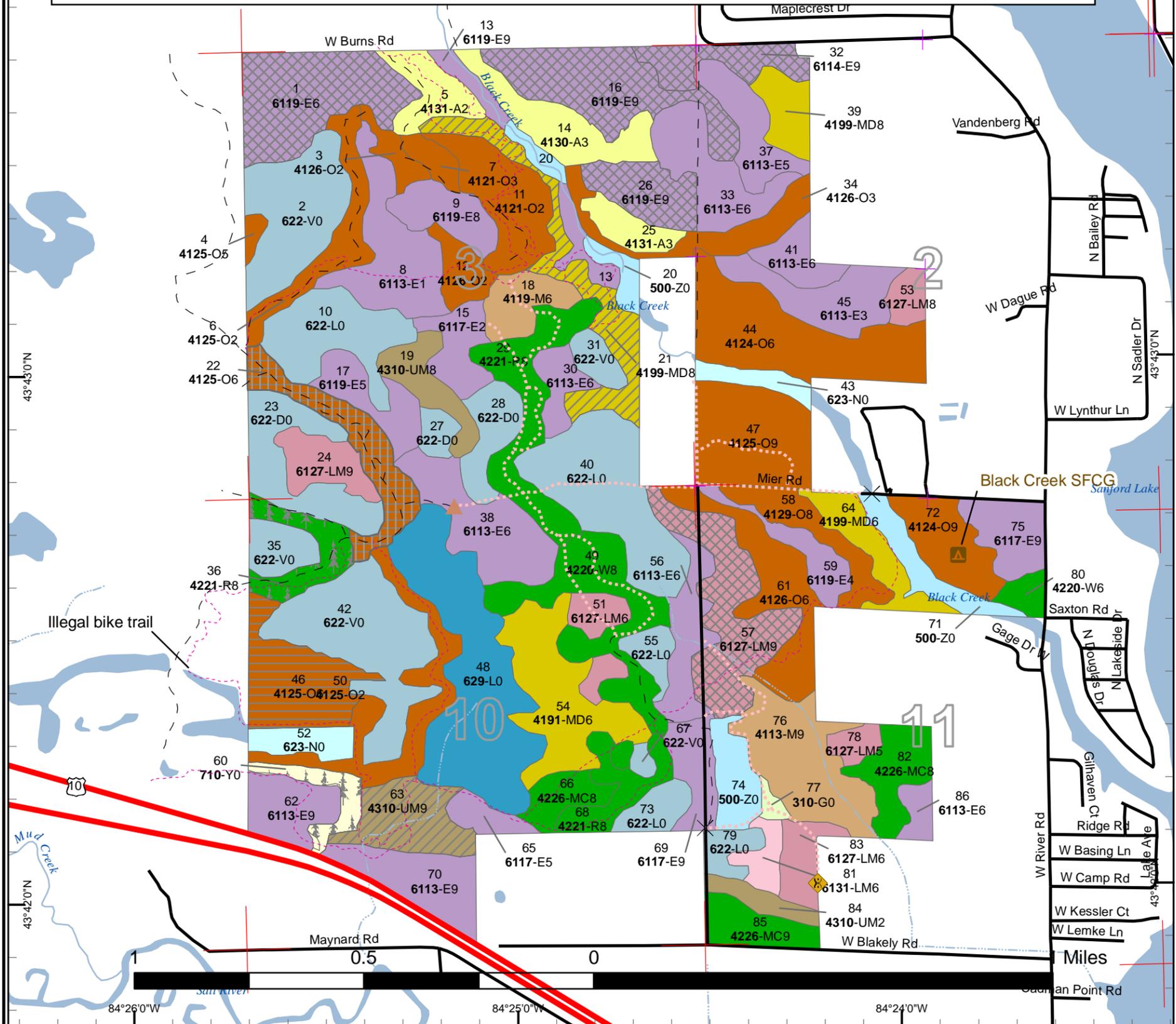
Compartment 105
 T15N, R01W, Sec. 2, 3, 10, 11
 County: Midland
 Unit: Gladwin
 YOE: 2012
 Acres: 1,539 acres GIS Calculated
 Stand Examiner: Steve Nyhoff
 Map Revised: 9/22/2010
 Map Phase: Pre-Review

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



Legend

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> — Miris Corners + Remonumented Section Corners — Highway — Paved Roads — Poor Dirt Roads - - - Trail (Non-Recreation) ⋯ Closed Roads ⬡ US Highway ⬢ State Forest Campgrounds ⬠ Guard Rail ▲ Berm × Gate — Intermittent Stream/Drain — Stream — Lakes and Rivers | <h3>Treatments</h3> <ul style="list-style-type: none"> ▭ Clearcut (w/Reserves, Patch/Strip) ▨ Seed Tree (w/Reserves) ▧ Thinning (Crown, Low, Systematic) ▩ Selection (Group, Single Tree) ▫ Planting (tree species) <h3>Forest Stands</h3> <p>Level 3</p> <ul style="list-style-type: none"> 411 - Northern Hardwood 412 - Oak Types 413 - Aspen Types 419 - Mixed Upland Deciduous 422 - Natural Pines 431 - Upland Mixed Forest 611 - Lowland Deciduous Forest 612 - Lowland Coniferous Forest 613 - Lowland Mixed Forest | <h3>Non-Forest Stands</h3> <p>Level 3</p> <ul style="list-style-type: none"> 310 - Herbaceous Openland 500 - Water 622 - Lowland Shrub 623 - Emergent Wetland 629 - Mixed non-forested wetland 710 - Sand, Soil |
|---|---|---|



84:26:0"W

84:25:0"W

84:24:0"W

43:45:0"N

43:45:0"N

Compartment 105
 T15N, R01W, Sec. 2, 3, 10, 11
 County: Midland
 Unit: Gladwin
 YOE: 2012
 Acres: 1,539 acres GIS Calculated
 Stand Examiner: Steve Nyhoff
 Map Revised: 9/22/2010
 Map Phase: Pre-Review

Dedicated & Proposed Special Conservation Area Map



3	2
10	11



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

Legend

- | | | |
|---|---|--|
| <ul style="list-style-type: none"> — Miris Corners — Remonumented Section Corners Proposed Special Conservation Areas SCA - Special Conservation Area SCA Removal Dedicated Special Conservation Areas ▲ Campgrounds □ Stand Boundaries | <p>Non-Forest Stands</p> <p>Level 3</p> <ul style="list-style-type: none"> 310 - Herbaceous Openland 500 - Water 622 - Lowland Shrub 623 - Emergent Wetland 629 - Mixed non-forested wetland 710 - Sand, Soil | <p>Forest Stands</p> <p>Level 3</p> <ul style="list-style-type: none"> 411 - Northern Hardwood 412 - Oak Types 413 - Aspen Types 419 - Mixed Upland Deciduous 422 - Natural Pines 431 - Upland Mixed Forest 611 - Lowland Deciduous Forest 612 - Lowland Coniferous Forest 613 - Lowland Mixed Forest |
|---|---|--|

43:44:0"N

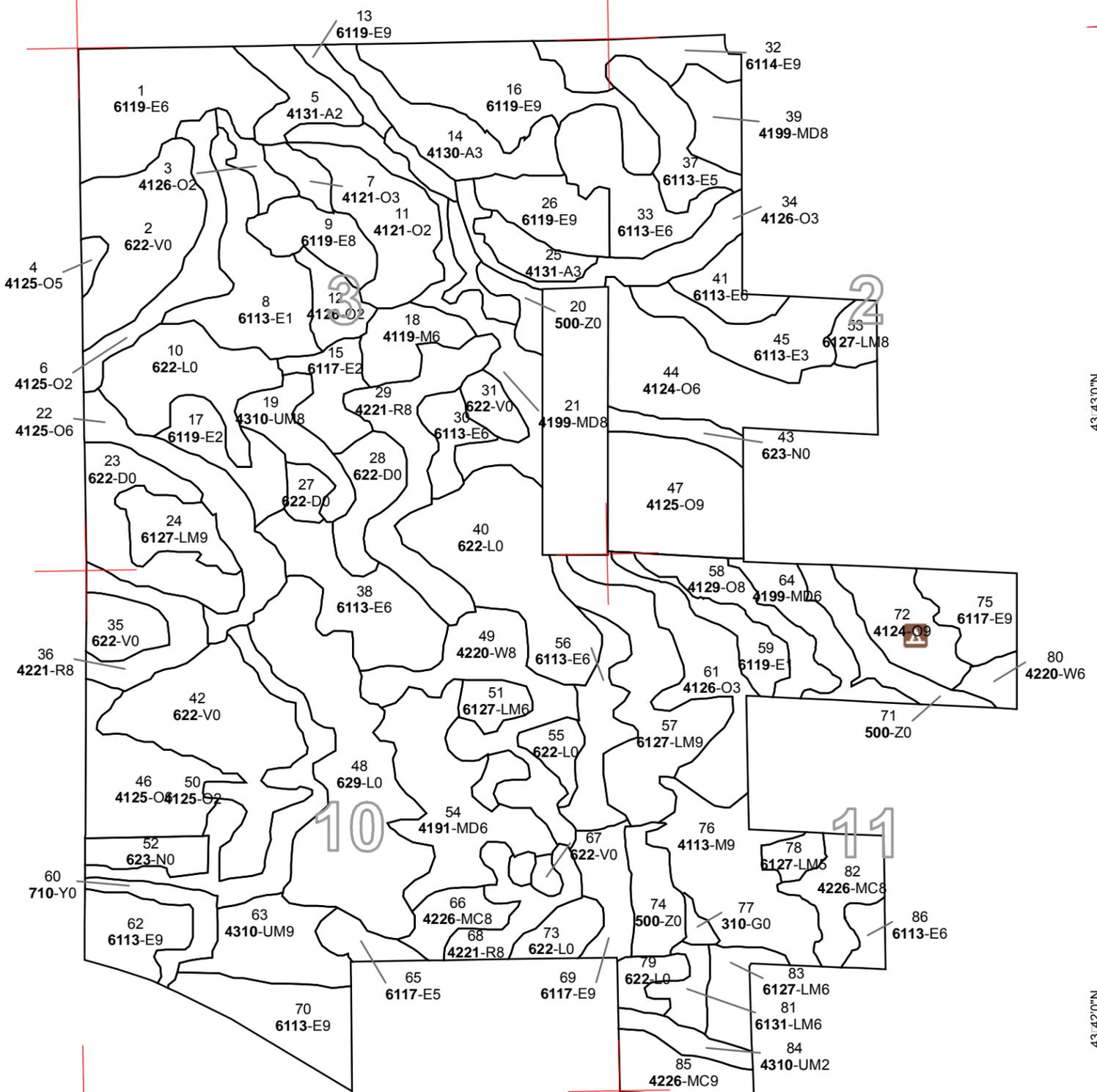
43:44:0"N

43:43:0"N

43:43:0"N

43:42:0"N

43:42:0"N



84:26:0"W

84:25:0"W

84:24:0"W

Table 1 – Total Acres by Cover Type and Age Class

Data updated before 10:00 AM



	Age Class														Total	
	Non-Forested	1-9	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	0	0	22	22	0	0	0	0	0	0	0	0	0	0	0	45
Bog	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	101
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lowland Conifers	0	0	0	0	0	21	0	5	13	0	6	0	0	0	38	83
Lowland Deciduous	0	43	0	0	9	0	62	0	25	7	0	0	0	0	264	411
Lowland Mixed Forest	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7
Lowland Shrub	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161
Marsh	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	38	0	0	0	0	53	91
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	11	16	0	0	0	13	41
Northern Hardwood	0	0	0	13	0	0	0	0	0	0	0	0	0	0	36	49
Oak	0	91	17	0	0	0	0	0	0	28	16	0	0	0	155	307
Red Pine	0	0	0	0	0	0	0	0	0	44	14	0	0	0	0	58
Sand, Soil	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Treed Bog	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
Upland Mixed Forest	0	7	0	0	0	0	0	0	0	13	0	0	0	0	22	42
Water	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
White Pine	0	0	0	35	0	0	0	0	0	0	0	0	0	0	5	40
Total	368	141	39	71	9	27	62	5	39	142	52	0	0	0	586	1541



Table 2 – Proposed Treatment Summaries

Data updated before 10:00 AM

Gladwin Mgt. Unit
Year of Entry 2012

Compartment 105
Total Compartment Acres: 1541

Acres by Treatment Type

Commercial Harvest - 252	Site Prep - 0	Tree Planting - 23	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

		Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Lowland Conifers	0	38	0	0	0	0	0	38
Lowland Deciduous	0	112	0	0	0	0	0	112
Mixed Upland Deciduous	0	0	0	0	27	0	0	27
Oak	29	0	23	0	0	0	0	52
Upland Mixed Forest	0	0	0	0	22	0	0	22
Total	29	150	23	0	49	0	0	252



Data updated before 10:00 AM

S
t
a
n
d

Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
32 73105001-Cut	15.5	6114 - Lowland Oak	High Density Log	86	Harvest	Single Tree Selection	Lowland Oak	Cmpt. Review Proposal

Prescription Harvest all aspen and birch and make the stand down to 70 sq feet. In addition, mark one 80 foot diameter regeneration gap per acre.
Specs: Concentrated the one the removal of the larger diameter trees. Also the harvesting will have to be done in dry or fozen conditions. When marking retain some of the large canopy oak and save obvious den and cavity trees.

Other The stand is fairly dry but has inclusion of low wet ground.

Comments:

Next The stand is expected to regenreate to a a mixture of oak, maple and aspen.

Steps:

16 73105016-Cut	37.4	6119 - Mixed Lowland Deciduous Forest	High Density Log	86	Harvest	Single Tree Selection	Mixed Lowland Deciduous Forest	Cmpt. Review Proposal
-----------------	------	---------------------------------------	------------------	----	---------	-----------------------	--------------------------------	-----------------------

Prescription Harvest all aspen and birch and make the stand down to 70 sq feet. In addition, mark one 60 to 80 foot diameter regeneration gap per acre.
Specs: Concentrate the removal on the larger diameter trees. Also the harvesting will have to be done in dry or fozen conditions.

Other Stand has wet areas.

Comments:

Next The stand is expected to regenerate to mixed lowland decidous forest.

Steps:

21 73105021-Cut	27.3	4199 - Other Mixed Upland Deciduous	Medium Density Log	86	Harvest	Crown Thinning	Other Mixed Upland Deciduous	Cmpt. Review Proposal
-----------------	------	-------------------------------------	--------------------	----	---------	----------------	------------------------------	-----------------------

Prescription Harvest the stand dry or fozen conditions. Do a diameter limit cut to 10". The retention will be the residual. In addition remove all the aspen to 2" DBH and paint out the main drainages.

Other

Comments:

Next The stand is expected to remain an Other Mixed Upland forest and have aspen, maple and oak regeneration

Steps:

22 73105022-Cut	23.4	4125 - Black, N. Pin Oak	High Density Pole	17	Harvest	Seed Tree	Black, N. Pin Oak	Cmpt. Review Proposal
-----------------	------	--------------------------	-------------------	----	---------	-----------	-------------------	-----------------------

Prescription Harvest as a seed tree harvest retaining between 10 and 20 BA. The retention should be a mixture of oak and pine favoring oak.

Specs:

Other Stand has had dead oak removals in the past allowing areas to have heavy regeneration. The very dense areas need to be left untreated to preserve the advance regeneration.

Comments:

Next The stand is expected to regenerate to a mixture of oak and pine, if not interplant with red pine.

Steps:

26 73105026-Cut	16.9	6119 - Mixed Lowland Deciduous Forest	High Density Log	88	Harvest	Single Tree Selection	Mixed Lowland Deciduous Forest	Cmpt. Review Proposal
-----------------	------	---------------------------------------	------------------	----	---------	-----------------------	--------------------------------	-----------------------

Prescription Harvest all aspen and birch and make the stand down to 70 sq feet. Concentrated the one the removal of the larger diameter trees. Also the harvesting will have to be done in dry or fozen conditions.

Other The stand has many wet pockets in the stand.

Comments:

Next The stand is expected to regenerate to a mixed lowland deciduous forest.

Steps:



Data updated before 10:00 AM

Stand

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
46	73105046-Cut	28.6	4125 - Black, N. Pin Oak	High Density Pole	63	Harvest	Clearcut with Reserves	Black, N. Pin Oak	Cmpt. Review Proposal

Prescription The stand is to be harvested to 4" DBH. In addition 1 to 2 trees per area needs to be marked to retain for retention.

Specs:

Other Comments: There are large inclusion of lowland that will need to be marked out. The estimate of the low wet area is around 2 to 3 acres.

Next Steps: The stand is expected to regenerate to a mixture of oak, maple and aspen.

57	73105057-Cut	38.2	6127 - Lowland Pine	High Density Log	78	Harvest	Single Tree Selection	Lowland Pine	Cmpt. Review Proposal
----	--------------	------	---------------------	------------------	----	---------	-----------------------	--------------	-----------------------

Prescription Harvest the stand down to 80 sq ft. In marking do not eliminate any one species. Harvest the stand in dry or frozen condition.

Specs:

Other Comments: Keep the residual around 80 and not much lower because of the potential for wind throw. The trail through the stand is in sorry shape having deep ruts.

Next Steps: The stand is expected to regenerate to white pine and oak, and maple.

1	73105057-Cut1	40.7	6119 - Mixed Lowland Deciduous Forest	High Density Pole	86	Harvest	Single Tree Selection	Mixed Lowland Deciduous Forest	Cmpt. Review Proposal
---	---------------	------	---------------------------------------	-------------------	----	---------	-----------------------	--------------------------------	-----------------------

Prescription Harvest all aspen and birch and make the stand down to 70 sq feet. In addition, mark one 60 to 80 foot diameter regeneration gap per acre.

Specs: Concentrated the one the removal of the larger diameter trees. Also the harvesting will have to be done in dry or frozen conditions.

Other Comments: When marking retain some of the large canopy oaks.

Next Steps: The stand is expected to regenerate to a mixed lowland forest

63	73105063-Cut	22.0	4310 - Pine, Oak Mix	High Density Log	86	Harvest	Crown Thinning	Pine, Oak	Cmpt. Review Proposal
----	--------------	------	----------------------	------------------	----	---------	----------------	-----------	-----------------------

Prescription Harvest the stand as an overstory removal cut all trees above 10" DBH.

Specs:

Other Comments:

Next Steps: The stand is expected to regenerate to a mixture of oak, pine, and maple.

36	73105036-Plant	14.1	42210 - Natural Red Pine	Medium Density Log	91	Tree Planting	Hand Plant	Natural Red Pine	Cmpt. Review Proposal
----	----------------	------	--------------------------	--------------------	----	---------------	------------	------------------	-----------------------

Prescription Interplant red pine in sparse areas.

Specs:

Other Comments: Stand was harvested in 2007. The residual is 60 BA and in patches. Some wind throw is occurring.

Next Steps:

60	NF_73105060-Plant	8.7	Non-Forested		0	Tree Planting	Hand Plant	Planted Jack Pine	Cmpt. Review Proposal
----	-------------------	-----	--------------	--	---	---------------	------------	-------------------	-----------------------

Prescription Hand plant the area of bear sand with jack pine.

Specs:

Other Comments:

Next Steps:



S
t
a
n
d

Data updated before 10:00 AM

Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
----------------	-------	------------------	--------------	-----------	----------------	------------------	----------------------	-----------------

Total Treatment
Acreage Proposed: 272.7



S
t
a
n
d

Data updated before 10:00 AM

Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
----------------	-------	------------------	--------------	-----------	----------------	------------------	----------------------	-----------------

#Error

Prescription Specs:

Other Comment:

Next Steps:

Limiting Factor and No Treatment Reason

Total Treatment Acreage Proposed: 0

Data updated before 10:00 AM

Out of YOE -- Treatments
Prescribed with No Limiting Factor

Year of Entry: 2012



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
----------------	-------	------------------	--------------	-----------	----------------	------------------	----------------------	-----------------

Prescription
Specs:

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 0**



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6119 - Mixed Lowland Deciduous Forest	High Density Pole	40.7	Uneven Age	81-110	The stand is declining with many of the swamp white oak having dead tops especially in the low wet ground. There are some wind throws but it is in the wettest parts of the stand. The terrain is hummocky and very wet there are areas but overall much of the stand appears to dry out late summer. The stand has a component of upland mixed in. These areas are in small patches but they do not make up a minority of the total acres.
3	4126 - White, Black, N. Pin Oak	Medium Density	5.7	5		The southern 3/4 of the stand was burned in 2004 then salvaged in 2005. The regeneration is variable going from poorly stocked to fully stocked. There are inclusions of low wet ground in the stand.
4	4125 - Black, N. Pin Oak	Medium Density Pole	2.1	Uneven Age	1-50	The stand is on a knob and goes down to just a little higher than the leatherleaf bog to the east. There is an open area in the stand that could be a hunting camp or just an area used for parking. The area was also burned in 2004.
5	4131 - Aspen, Oak	Medium Density	13.5	18		The stand is a mixture of oak and aspen with some red maple. The north end is more aspen being an A3O2 but overall oak is the majority. There are also some sawlog trees that were left after the stand had a fire salvage done in it. The fire burned in 2004.
6	4125 - Black, N. Pin Oak	Medium Density	18.4	6		This stand is on a ridge. Most of it burned in 2004. Overall the stand has regenerated as a medium stocked oak stand but there are pockets of well and poorly stocked oak present. There are also some oak > 4" that survived the burn.
7	4121 - Oak, Aspen	High Density Sapling	5.5	6		The stand was burned in 2004. It has regenerated well to a mix of oak and aspen with the oak being the majority.
8	6113 - Lowland Maple	Low Density Sapling	30.3	6		This stand is a mixture of upland and lowland. The majority is lowland and has regenerated to maple mixed with quaking aspen, red and black oak. The stand was burned in 2004.
9	6119 - Mixed Lowland Deciduous Forest	Medium Density Log	14.2	Uneven Age	51-80	The stand was partly burned in 2004. It is variable in density going from fully stocked to poorly stocked. There are inclusions of marsh in the stand.
11	4121 - Oak, Aspen	Medium Density	26.2	6		The stand was harvested in 2003 then burned in 2004. The east side of the stand was not cut but was later salvaged in 2005 after the wildfire. It is now a sparse oak log stand. The regeneration is good on the upland ridges but poor in the lower areas. Overall the stand has regenerated as an A3O2.
12	4126 - White, Black, N. Pin Oak	Medium Density	8.9	5		The stand was burned in 2004 and salvaged in 2005. The south end is low and wet and has a lot of blow down. Regeneration is variable going from medium to poorly stocked.
13	6119 - Mixed Lowland Deciduous Forest	High Density Log	11.2	Uneven Age		New stand added. The stand is on the flood plain of the Black Creek.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	4130 - Aspen	High Density Sapling	22.3	25		The stand has several drainages running through bisecting the stand. There is a closed trail that runs along the southern portion of the stand. The quaking aspen is concentrated along the drainages and bigtooth aspen is in the upland areas.
15	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density	13.0	5		The stand burned in 2005. It has regenerated well but a lot of the poles that were standing are now down. The terrain is hummocky and is a mixture of upland and lowland with the lowland being the majority.
16	6119 - Mixed Lowland Deciduous Forest	High Density Log	37.4	Uneven Age	81-110	The stand is a mixture of upland and lowland with the lowland being just a little more than the upland. The matrix of upland and lowland is too mixed to separate. There is some blow down in the lowest and wettest areas but it is not sever.
17	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	14.6	75		The stand is variable going from seedling to poles. The ground cover is very brushy with lowland shrubs. The terrain is hummocky.
18	4119 - Mixed Northern Hardwoods	High Density Pole	13.1	28		Stand is a thick layer of red maple sapling and some poles under a scatted super canopy of oak and white pine.
19	4310 - Pine, Oak Mix	Medium Density Log	13.4	86	81-110	The stand is on a ridge that goes between two leatherleaf bogs. The access to the stands is difficult. There is some advance oak and maple regeneration present in the stand.
21	4199 - Other Mixed Upland Deciduous	Medium Density Log	27.3	86	81-110	The stand is one level above the flood plain of the Black Creek. There are some wet pockets and at the north end there is an aspen pocket on a ridge boarder along the south by drainage.
22	4125 - Black, N. Pin Oak	High Density Pole	23.4	Uneven Age	1-50	The stand has had the dead oak harvested in the past. It now has a good layer of advance oak regeneration. The regeneration is patchy being thickest in the more open areas of the stand.
24	6127 - Lowland Pine	High Density Log	13.3	72	111-140	Stand is very hummocky and wet. The density of the trees is variable and goes from poorly stock to fully stocked. The size is variable and goes from seedling to logs.
25	4131 - Aspen, Oak	High Density Sapling	9.0	13		This stand is heavy to oak in the west end. The aspen has some hypoxylon canker but it is not heavy.
26	6119 - Mixed Lowland Deciduous Forest	High Density Log	16.9	Uneven Age	81-110	The stand is a mixture of upland and lowland with the lowland being just a little more than the upland. The matrix of upland and lowland is too mixed to separate. There is some blow down in the lowest and wettest areas but it is not sever.
29	42210 - Natural Red Pine	Medium Density Log	29.6	84	51-80	The stand is a mix of thick pocket of red pine saw and white pine sapling and poles with area that are open. The regeneration is a mixture of white pine and oak. The stand was harvested in 2007 by removing aspen, maple, oak and marked pine. The regeneration is coming in but it would not be considered established yet.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	6113 - Lowland Maple	High Density Pole	8.7	31		The stand is in a depression. There is a thick overstory of lowland hardwoods with the ground cover of shrubs. There are inclusions of open lowland shrub.
32	6114 - Lowland Oak	High Density Log	15.5	Uneven Age		The stand is a mixture of upland and lowland with the lowland being the majority.
33	6113 - Lowland Maple	High Density Pole	24.3	54		The stand has some blown down but not bad.
34	4126 - White, Black, N. Pin Oak	High Density Sapling	16.9	13		The stand is undulating and droughty
36	42210 - Natural Red Pine	Medium Density Log	14.1	91	51-80	The stand was harvested in 2007. The residual that was left was 61 Sq Ft. Some of the trees have since wind thrown. The regeneration is poor to moderate. The residual density is also variable.
37	6113 - Lowland Maple	Medium Density Pole	16.6	54		New stand added. The stand is very wet with heavy blown down. The stand is structured as a shelterwood harvest in crown closer and the oak is responding.
38	6113 - Lowland Maple	High Density Pole	29.4	Uneven Age	51-80	The stand has a lot of overstory oak that has died and come down. Red maple is replacing it. The terrain is hummocky and a mixture of upland and lowland. The lowland makes up the majority.
39	4199 - Other Mixed Upland Deciduous	Medium Density Log	11.1	86	1-50	The stand is hummocky with heavy blown down. There is a significant portion of the overstory oak as died and fallen over. The stand is in the process of regenerating. The regeneration is a mixture of oak and maple.
41	6113 - Lowland Maple	High Density Pole	9.8	Uneven Age	51-80	The stand is a mixture of upland and lowland with the lowland having the highest percentage. There is good advance red maple regeneration present in the stand. There is some wind throw also present.
44	4124 - Red with White Oak	High Density Pole	47.0	Uneven Age	51-80	The stand had a 4" diameter harvest with marked red and white oak logs to retain. The regeneration in the stand is a mix of residual advance regeneration of maple, oak, and white pine and seed source and stump sprouts from the harvest in 2007. When the stand was harvested a small patch of white pine was painted out it is less than 3 acre in size but had a high density of about 150 sq ft.
45	6113 - Lowland Maple	High Density Sapling	21.5	50		The stand is lowland with swamp hardwood pole overstory and a thick lowland shrub understory.
46	4125 - Black, N. Pin Oak	High Density Pole	28.6	Uneven Age	51-80	The stand is hummocky. The structure of the stand has an overstory of oak and an oak/maple understory with some beech. There is an inclusion of low swamp hardwood but the area is less than 5 acres in size.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
47	4125 - Black, N. Pin Oak	High Density Log	34.2	Uneven Age	81-110	The stand has nice overstory oak and maple. It is some what hummocky with wet pockets.
49	42200 - Natural White Pine	Medium Density Log	35.4	22	1-50	The stand had the oak removed retaining conifer. Regeneration is variable but heavy to white pine. Oak regeneration is heavily browsed.
50	4125 - Black, N. Pin Oak	Medium Density	26.3	3		The stand was 4" spec clearcut in 2007. There are some oak poles but overall it make up < 15% of the crown closure. The trail through the stand has been blocked and not one is using it. The stand is a mixture of regeneration density going from non-stocked to well stocked. The regeneration is mainly from stump sprouts with some seed source.
51	6127 - Lowland Pine	High Density Pole	10.2	48		The stand is a pine stand over a leatherleaf bog.
53	6127 - Lowland Pine	Medium Density Log	5.8	93		The stand is very hummocky with a lot of shrubs including huckleberry, dogwood, tag alder and willow.
54	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	37.6	Uneven Age	51-80	The stand looks like it was an oak stand that the overstory died and now has come down. It is converting to oak/maple/white pine stand.
56	6113 - Lowland Maple	High Density Pole	16.8	Uneven Age	51-80	The stand is mainly pole maple wit oak. There are inclusions of lowland shrubs in the stand.
57	6127 - Lowland Pine	High Density Log	38.2	Uneven Age	111-140	The stand is a mixture of upland and lowland. The majority is lowland. The trail through the stand is in sorry shape with deep ruts.
58	4129 - Mixed Oak	Medium Density Log	15.8	90	1-50	The stand was harvested and is now a two aged stand. There was significant rutting along the edges when the stand was harvested.
59	6119 - Mixed Lowland Deciduous Forest	Low Density Pole	10.8	70		Stand swapped from Non-Forested to Forested. The stand is mainly swamp hardwoods over lowland shrubs. The center portion of the stand is open with paper birch overstory with a crown closer of < 25%. The age is take from the overstory trees along the edges. However, much of the stand is younger.
61	4126 - White, Black, N. Pin Oak	High Density Pole	28.3	87		The stand is a mixture of upland and lowland with the upland being the majority. It looks like a two aged stand that when it was harvested they marked overstory to retain and cut the under story to 4" DBH. So now there are large oak and small poles to saplings.
62	6113 - Lowland Maple	High Density Log	15.9	Uneven Age		The stand is currently set up for a sale Burns 104.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
63	4310 - Pine, Oak Mix	High Density Log	22.0	Uneven Age	81-110	New Stand, The stand is mostly upland. The west side of the stand is heavily dissected by drainages. The white pine in the stand is concentrated on a ridge along the south edge of the stand. The area was put up for harvest last YOE but was not cut. It appears that the residual density was too high and access was tricky.
64	4199 - Other Mixed Upland Deciduous	High Density Pole	15.0	Uneven Age	81-110	The stand is undulating and it is a mixture of upland and lowland with the upland being the majority.
65	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	6.7	86		The stand is low and very wet. The marsh type to the north and west of the stand drains through it.
66	42260 - Natural Pine, Mixed Deciduous	Medium Density Log	11.5	83	81-110	The stand was split into two part by a sale last YOE. The white pine in the stand is in wetter ground.
68	42210 - Natural Red Pine	Medium Density Log	14.0	83	81-110	The stand was harvested in 2007. The harvest removed all the hardwoods and marked pine. The residual is variable as well as the regeneration. What is coming is a mixture of white pine and oak. The oak seedlings currently are less than 3' so not considered established. The regeneration goes from non stocked to fully stocked.
69	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	12.8	Uneven Age	141-170	New stand added. The stand is hummocky with areas of upland and lowland.
70	6113 - Lowland Maple	High Density Log	23.2	Uneven Age		The stand is a mixture of upland and lowland with the lowland making up the majority. It was set up to be harvested last YOE but was not cut. The residual was left too high and the soil is some what wet. Overall the stand appears to dry out in late summer. The cottonwood in the stand is concentrated in the south east corner.
72	4124 - Red with White Oak	High Density Log	19.4	Uneven Age	111-140	New stand added. This stand had the Black Creek Campground in it.
75	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	15.5	Uneven Age	111-140	This stand is hummocky with cinnamon fern.
76	4113 - R.Maple, Conifer	High Density Log	36.2	Uneven Age	81-110	The stand is hummocky and has areas of lowland. Overall the stand is upland with significant wet pockets.
78	6127 - Lowland Pine	Medium Density Pole	4.9	60		Stand swapped from Non-Forested to Forested. The stand is stunted white pine over leather leaf.
80	42200 - Natural White Pine	High Density Pole	5.0	Uneven Age	141-170	The stand is an area of white pine that is mainly poles with a few supercanopy white pines and red pine.
81	6131 - Hemlock, White Pine, Maple, Birch	High Density Pole	6.9	49	51-80	The stand is a mixture of upland and lowland with the lowland being the majority. Terrain is hummocky.

S
t
a
n
d

Gladwin Mgt. Unit

5 – Forested Stands

Compartment: 105

Data updated before 10:00 AM

Year of Entry: 2012



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
82	42260 - Natural Pine, Mixed Deciduous	Medium Density Log	16.1	93	1-50	The stand was harvested retaining pine. Currently it has a super canopy of red pine with stump sprouts of maple and oak. There is some advanced regeneration of white pine in the stand. The stump sprouts are heavily browsed by deer.
83	6127 - Lowland Pine	High Density Pole	10.4	49	171-200	The stand is a mixture of upland and lowland with the lowland makes up the majority.
84	4310 - Pine, Oak Mix	Medium Density	6.7	5		The stand was harvested retaining some oak and white pine. Terrain is hummocky.
85	42260 - Natural Pine, Mixed Deciduous	High Density Log	13.2	Uneven Age	111-140	The stand is a mixture of upland and lowland with the upland being the majority.
86	6113 - Lowland Maple	High Density Pole	5.1	Uneven Age	81-110	Stand swapped from Non-Forested to Forested.



Stand	Cover Type	Acres	Gen Cmts:
2	6225 - Bog	35.4	This stand is a large leather leaf bog with a few scattered trees of jack, red and white pine. The crown closure is < 15%
10	6229 - Mixed lowland shrub	28.9	The stand is a mixture of leather leaf and tag alder. There are some scattered trees mainly paper birch, White pine and quaking aspen. These trees have < 15% crown closer.
20	50 - Water	9.2	The stand is made up of two beaver flooding. The north portion look old and may or may not be holding water the southern one is new and the overstory is just starting to die.
23	6224 - Treed Bog	25.9	This is a leather leaf bog with small islands of pine. They're inclusions of a wet grass type in the south end. The trees in the bog are mainly red pine with some jack pine they have > 15% but < 25% crown closure.
27	6224 - Treed Bog	4.8	Stand swapped from Forested to Non-Forested. The stand is white pine and red pine over leather leaf.
28	6224 - Treed Bog	13.4	Stand is a mixture of lowland shrubs and leather leaf with some white pine, oak, and paper birch.
31	6225 - Bog	6.3	The stand has some white pine but < 15% crown closer.
35	6225 - Bog	9.8	This is a leather leaf bog with some red and white pines in it. The trees are scattered and have < 15% crown closure.
40	622 - Lowland Shrub	45.4	The stand is a lowland shrub type that is a mixture of lowland shrubs and open marsh grass. The stand overall is very wet and the shrub are heavy to tag alder and michigan holly.
42	6225 - Bog	47.5	The stand is a lowland type and is a mixture of leather leaf, marsh grass, tag alder, willow, and michigan holly. These exist in a matrix. The majority of the stand is leather leaf.
43	623 - Emergent Wetland	6.7	This stand is part of the back waters of the Tittabawasee River. Currently it is more of a marsh with island of lowland shrubs.
48	629 - Mixed non-forested wetland	65.8	This is an lowland type that is a mixture of marsh, lowland shrub, The ground cover goes from tag alder, michigan holly to holly and willow then to marsh.
52	623 - Emergent Wetland	8.9	This was part of a flooding. Currently it is a marsh type with open water. The water is shallow. The ground cover is marsh type, cattails, and phragmites.
55	622 - Lowland Shrub	6.5	This is a lowland shrub type with a pocket of marsh in the north end. The shrubs are heavy to tag alder and michigan holly.



Stand	Cover Type	Acres	Gen Cmts:
60	710 - Sand, Soil	9.2	This area is a sand drag with some grass in the undisturbed edges. When and if the waterfowl flooding is reestablished in Compartment 104 it will close off this area. Then it is likely to heal.
67	6225 - Bog	2.0	This is a small depression of leather leaf.
71	50 - Water	12.9	This is the back waters of the Tittibawasee River.
73	622 - Lowland Shrub	8.2	The stand is mainly a lowland shrub type with scattered white pine. The white pine has > 15% crown closure but lack bog characteristics. The stand should fill in with ash, maple, white pine, and other species.
74	50 - Water	12.6	This stand is the Turtle pond which is an old barrow pit.
77	310 - Herbaceous Openland	2.1	This was a parking area before the road to the turtle pond was closed. There is some spotted knapweed present in the stand.
79	622 - Lowland Shrub	6.6	This stand is a lowland shrub stand of tag alder and michigan holly. There are some pole size white pines in the stand but they are scattered.



7 – 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.

Data updated before 10:00 AM

Stand	SCA Type	SCA Name	Acres	Comments
-------	----------	----------	-------	----------



8 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

Data updated before 10:00 AM

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

Conservation Area	Type	Description
SCA	Concentrated Recreation Area	Facilities that are designed and maintained for routine or heavy recreational use, including State Parks, State Forest campgrounds, motorized and non-motorized trails, trailheads, staging areas and public access sites.