

Gladwin Forest Management Unit Compartment Review Presentation Compartment #106 Entry Year: 2013

Compartment Acreage: 1253 County: Midland

Revision Date: February 2011

Stand Examiner: Steven Nyhoff

Legal Description: T15N, R1W, Sections 5, 6, 9, 10, 15 - 17, 19 - 22

Identified Planning Goals ('Management Area' or 'RMU', if applicable):

Management Goals: The compartment has significantly less aspen (9%) than what is average for the Gladwin Unit. However, it has significantly more swamp hardwoods (40%) and oak (25%) with an average amount of non-forested types (17%).

This has led to a compartment having 40% of the stands being uneven aged. In addition, 14% of the compartment is old growth. The reason for this is the Pine Haven Recreational Area. This area is leased annually to the Midland Parks System and is heavily used for hiking, cross country skiing, mountain biking and other non-motorized recreation.

Continue to manage the compartment for the current cover types. Where possible harvest the swamp hardwoods stands. The stand structure of many of them is heavy to the larger diameter trees. This structure is not silviculturally desirable to maintain these stands. All harvesting will need to be done during dry or frozen conditions to minimize rutting. Many of the stands or the accesses to them are wet.

Soil and Topography: The terrain is mostly level to slightly rolling, with steep banks along the Big Salt River, Teed Drain, Bluff Creek, and Mud Creek. The soils are mostly poorly drained sands and sandy loams with scattered dry, sandy ridges. The major soil types are Kingsville loamy fine sand, Kinross mucky sand, Pipestone sand, and Covert Sand. The majority of the compartment is low and wet.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment has broken ownership generally, with the exception of the portion of the compartment lying between 9 mile and $10 \frac{1}{2}$ mile road, and section 19. There are areas that are inaccessible in section 5 and 6 which consist of 3 barrow areas that were used to build up US-10.

The private land around the compartment is mostly in 40+ acre parcels which are used for recreational and permanent residences. There are areas that are broken up into smaller parcels. These are mainly along 9, $10 \frac{1}{2}$ and 11 mile roads. In addition, the Village of Sanford is just to the east of the compartment.

Unique, Natural Features: There have been numerous sightings of wood turtles along the Big Salt River, including in section 9 and 16. There are historical records of Snuffbox mussel reported in the rivers and creeks near the compartment. Also to the east are reports of Ellipse and Slippershell (mussel). To the southeast of the compartment are reports of red shoulder hawk and bald eagle. To the southwest there are records of Riverine snaketail (dragonfly).

In addition, there are records of Three-awned grass located in the compartment. There are also many rare flood plain plants reported near the compartment, including forked aster, American beak-grass, and broad-leaves puccoon. There are also historical records of Hayden's sedge and Carex seorsa (sedge).

Archeological, Historical, and Cultural Features: There are HAL concerns in sections 10, 15, and 21.

Special Management Designations or Considerations: The area of Pine Haven Recreational Area has been designated as an old growth area.

Watershed and Fisheries Considerations: The Mud Creek, Bluff Creek and the Big Salt River flow through the compartment. These are warm water fisheries.

Wildlife Habitat Considerations: The compartment has game species such as white tail deer, black bear, and wild turkey. Deer hunters will find abundant deer populations, with many lowland areas that provide excellent cover and areas of deer. Antlerless permits are unlimited issued in this area and the area has been opened to early hunting opportunities in the past to control the deer populations. 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. Grassy opening are an important aspect of wildlife habitat and should be maintained as non-forested stands.

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 are the Jurassic Red Beds and the Pennsylvanian Grand River and Saginaw Formations. 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. This area is sparsely explored for oil and gas. Jerome Field, discovered in 1951, is the closest field. It has produced more than 265,648 BO from the Dundee. There has been recent oil and gas leasing of State minerals two miles to the northeast of the compartment. The Compartment is leased for oil and gas development, and most of it is also leased for nonmetallic potash.

Vehicle Access: Access to the compartment is generally good and off county roads. The areas that do not have good access are sections 17, 20, and the west side of section 21. This is mainly because of wet soil conditions.

Survey Needs: The compartment is fairly well surveyed so no new survey is needed at this time.

Recreational Facilities and Opportunities: The compartment has several established recreational facilities. There is Pine Haven Recreational Area which operates under an annual use permit from the DNR. This area provides non-motorized recreational opportunities of hiking, mountain bike riding, and cross-country skiing. Also the Pere-Marquette Rail to Trail runs through the compartment paralleling Saginaw road. This trail is paved and offers other opportunities for non-motorized recreation.

The compartment itself is heavily hunted and used for dispersed recreation.

Fire Protection: This compartment is located near the DNR Sanford Field Office and the Jerome Township Fire Department. The fuel load is mainly hardwood leaf litter and bracken fern. There are some urban interface concerns along 9, $10 \frac{1}{2}$, and 11 mile roads and the day use area of Pine Haven Recreational Area. The terrain could be a problem for fire suppression because of soil wetness. However there are numerous rivers, creeks, and drainages that should act as natural fuel breaks. Therefore, over all, the fire concern is low to moderate for the compartment.

Additional Compartment Information: In the compartment, outside of Pine Haven Recreational Area, there is significant illegal use of ORVs going on. There are several illegal deer blinds on State Land with shooting lanes as well.

Compartment 106 Year of Entry 2013

Gladwin Mgt. Unit Steven Nyhoff: Examiner



Age Class

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Aspen	0	0	25	87	53	0	0	0	0	0	0	0	0	0	45	211
Bog	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
Herbaceous Openland	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Low-Density Trees	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
Lowland Aspen/Balsam Poplar	0	0	0	9	0	0	0	13	0	0	0	0	0	0	0	22
Lowland Conifers	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
Lowland Deciduous	0	0	0	35	35	0	0	39	15	98	59	0	0	0	665	946
Lowland Shrub	147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147
Marsh	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Mixed Upland Deciduous	0	0	0	18	0	0	20	15	0	11	0	0	0	0	11	76
Natural Mixed Pines	0	0	0	0	13	0	24	0	0	0	0	0	0	0	0	37
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	54
Oak	0	48	86	9	41	0	15	13	23	166	0	0	0	0	194	594
Paper Birch	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6
Treed Bog	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
Upland Mixed Forest	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	23
Upland Shrub	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Urban	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Water	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
White Pine	0	0	0	0	0	0	0	0	0	10	0	0	0	0	8	17
Total	422	48	111	159	148	0	64	103	38	285	59	0	0	0	977	2413



Table 2 – Proposed Treatment Summaries

Gladwin Mgt. Unit

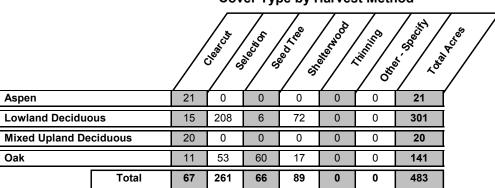
Compartment 106 Year of Entry 2013 **Total Compartment Acres: 2413**

Acres by Treatment Type

Commercial Harvest - 483 Site Prep - 0 Tree Planting - 0 Prescribed Burn - 0 Other - 0

Habitat Cut - 0 Pesticide - 0 Opening Maintenance - 0 Tree Seeding - 0

Cover Type by Harvest Method



S t			Gla	dwin Mgt. Unit			atments Pre imiting Fac		Compartment: 106 Year of Entry 2013	ONR DIRECTION
a n d		atment ame	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
10	73106	6010-Cut	5.8	6113 - Lowland Maple	High Density Pole	81	Harvest	Seed Tree with Reserves	6113 - Lowland Maple	Cmpt. Review Proposal
Presci Specs		species.	When m						tion of oak but do not el rvesting the stand try to	
Other Comm	-	There ar acres.	e areas o	f low wet ground tha	t may need to be pa	ainted out	. Therefore, the	e harvest acres may be	significantly less than the	ne inventory
Next Steps:	<u>:</u>			cted to regenerate to ective is needed.	o a mixture of maple	e, ash, an	d oak. It will be	medium to well-stocked	d after harvest so no alte	ernative
11	73106	6011-Cut	17.2	4126 - White, Black, N. Pin Oak	High Density Pole	81	Harvest	Shelterwood	4126 - White, Black, N. Pin Oak	Cmpt. Review Proposal
Presci Specs		pine. W	hen the s		etain some of the la	rger trees	for supercanor		ss than or equal to 10" d structural diversity. Wh	
Other Comm	-			ood size natural G-t			e landing when	the stand is harvested.	This could be used for	both stands 10
Next Steps:	<u>:</u>	The stan	d is expe	cted to regenerate to	o a mixture of oak a	nd maple	, if not interplan	t red pine.		
45	73106	6045-Cut	38.4	6113 - Lowland Maple	High Density Log	80	Harvest	Shelter Wood with Reserves	6113 - Lowland Maple	Cmpt. Review Proposal
Presci Specs		and mult	i stem ma		od advanced oak re	generatio	n mark the stan	d to release the oak un	he retention of oak and derstory. When the stan	
Other Comm	-	The stan		me wet areas that wi	II need to be painte	d out. Th	erefore, the har	vest acres are expected	d to be significantly less	than the
Next Steps:	<u>.</u>	The stan	d is expe	cted to regenerate w	ell to a mixture of n	naple, oał	c and swamp ha	ardwoods.		

73106052-Cut 48.3 6119 - Mixed High Density Log Harvest **Group Selection** 6119 - Mixed Cmpt. Review Lowland Deciduous **Lowland Deciduous** Proposal Forest Forest

Prescription Harvest the stand as a group selection by making one 80' diameter regeneration opening per acre. In addition, mark the skid trail between the regeneration open to facilitate logging activities Specs:

The stand is fairly wet and will need to be harvested in dry or frozen conditions. The stand grades from operable land to inoperable land. This <u>Other</u> will cause a significant reduction in acres. Comments:

The stand is expected to regenerate to a mixture of swamp hardwoods. **Next**

Steps:

73106054-Cut 30.3 4126 - White, 4126 - White, Black, Cmpt. Review 54 High Density Log Seed Tree with Harvest Black, N. Pin Oak Reserves N. Pin Oak Proposal

Prescription The stand is to be harvested as a seed tree harvest, retain 10-20 BA. When it is marked favor the retention of oak but do not eliminate any one Specs: species.

Other_ The stand's over story is declining and coming down. The access to the stand may be tricky because of wet soil conditions. So the harvest will need to be done in dry or frozen conditions. Comments:

The stand is expected to regenerate as a mixture of oak and maple. If the regeneration is not adequate stand may need to be treated chemically **Next** or mechanically to control red maple then interplant the stand with red pine. Steps:

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S t		GI	adwin Mgt. Unit			atments Pres _imiting Fact	Compartment: 106 Year of Entry 2013	DNR DNR	
a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
57	73106057-Cut	29.8	4126 - White, Black, N. Pin Oak	High Density Log	84	Harvest	Seed Tree with Reserves	4126 - White, Black, N. Pin Oak	Cmpt. Review Proposal
Pres		nd needs	to be harvested as a	seed tree harvest,	retain 10	-20 BA. The rete	ention should favor oak	but do not eliminate an	y one species.
Othe Com			ridge and it is declin pe will need to be cro		n. Access	s into the stand m	nay be tricky. The acce	ess from the north may b	e wet, and from
Next Step		nd is exp	ected to regenerate to	o a mixture of swam	ıp hardwo	oods.			
81	73106081-Cut	20.3	4199 - Other Mixed Upland Deciduous	High Density Pole	e 50	Harvest	Clearcut with Reserves	4199 - Other Mixed Upland Deciduous	Cmpt. Review Proposal
Pres Spec		nd is to b	e harvested as a 2" S	pec final harvest, m	nark 1 to	2 trees per acre	for retention.		
Othe Com			rs to be moist but not ccess, the harvest sh				tricky; the main two-tr	ack off 9 mile road has v	wet pockets.
Next Step		nd is exp	ected to regenerate a	s a mixture of oak, ı	maple an	d aspen.			
86	73106086-Cut	52.6	4126 - White, Black, N. Pin Oak	High Density Log	84	Harvest	Group Selection	4126 - White, Black, N. Pin Oak	Cmpt. Review Proposal
Pres Spec			d as a group selectior n to facilitate logging		diamete	r regeneration op	pening per acre. In ad	dition, mark the skid trail	between the
Othe							ed when the stand is he	arvested. Also, the acces	ss to the stand

Comments: will be along a two-track that has wet areas in it. Therefore, that stand will need to be harvested in dry or frozen conditions.

The stand is expected to regenerate as a mixed oak, maple, and aspen stand. If the regeneration is not adequate stand may need to be treated <u>Next</u> Steps: chemically or mechanically to control red maple then interplant the stand with red pine.

99 73106099-Cut 69.5 6119 - Mixed High Density Log Harvest **Group Selection** 6119 - Mixed Cmpt. Review Lowland Deciduous **Lowland Deciduous** Proposal Forest Forest

Prescription Harvest the stand as a group selection by making one 80' diameter regeneration opening per acre. In addition, mark the skid trail between the Specs: regeneration open to facilitate logging activities. Leave the portion of the stand east of 9 mile road as retention. This is approximatly 1.5 acres in size.

The stand has some wet areas that may need to be painted out. Therefore, the harvest acres may be significantly less than the inventory acres. Other_ Comments:

Next The stand is expected to regenerate to a mixture of swamp hardwoods. Steps:

Clearcut with 4126 - White, Black, 107 73106107-Cut 11.0 4126 - White, High Density Pole Harvest Cmpt. Review Black, N. Pin Oak N. Pin Oak Reserves Proposal

Prescription The stand is to be harvested as a 4" spec clearcut retaining all the white pines. The retention in the stand should be kept around the low wet Specs:

<u>Other</u> The wet pockets will need to be painted out. This will cause a significant reduction in acres. Access to the stand may be tricky, for the main two-Comments: track has wet pockets. Because of this, harvest will need to be done in dry or frozen conditions.

<u>Next</u> The stand is expected to regenerate as a mixture of oak, maple and aspen, if not interplant red pine. Steps:

Table 3 -- Treatments Prescribed Compartment: 106 Gladwin Mgt. Unit with No Limiting Factor Year of Entry 2013 s t а **Treatment** Size Stand **Treatment Treatment** Cover Type n Acres Stage1 **A**pproval Method Name Density Objective Status CoverType Type d Age 73106114-Cut 33.7 6119 - Mixed High Density Log Harvest Single Tree Selection 6119 - Mixed Cmpt. Review **Lowland Deciduous** Proposal Lowland Deciduous Forest Forest Prescription The stand can be harvested using selection, retain 70-80 BA. There are areas in the stand that are dryer. In these areas the BA could be left Specs: lower than 70. However, there are other areas where it is wetter and should be left higher that 80 BA. <u>Other</u> The stand has low wet areas so harvest should be done in dry or frozen conditions. Comments: **Next** The stand is expected to regenerate to a mixture of swamp hardwoods including some oaks. Steps: Shelter Wood with 6119 - Mixed 117 73106117-Cut 33.4 6119 - Mixed High Density Log Harvest Cmpt. Review **Lowland Deciduous** Reserves **Lowland Deciduous** Proposal Forest Forest Prescription Stand could be harvested as a selection retaining 70 BA. Another option is to do a group selection making an 80' diameter regeneration opening per acre. Then making the skid trails to connect the opening in order to facilitate logging activities. These two options could be combined to Specs: variable degrees as well if the soil and stand conditions are favorable. If the options are combined then the regeneration opening should be reduced to 60' then doing a selection between the openings. Other The stand was heavily snow covered. Therefore, it was difficult to determine how much of the stand is operable. As such, the reduction in acres may be significant when it is set up for harvest. Also it will need to be harvested in dry or frozen conditions. Comments: **Next** The stand is expected to regenerate as a mixture of swamp hardwoods. Steps: 73106132-Cut 56.8 6119 - Mixed Harvest 6119 - Mixed Cmpt. Review High Density Log Single Tree Selection **Lowland Deciduous Lowland Deciduous** Proposal Forest Forest Prescription The stand should be harvested by selection, retain 80-90 BA. When it is marked make one 60' regeneration gap per acre. In addition, there are some areas of aspen that are on knolls or ridges. These could be harvested as patch clear cuts. Specs: The wettest areas of the stand will need to be painted out. This will cause a significant reduction in acres. Also, because much of the stand is Other somewhat wet, it should be harvested in dry or frozen conditions. Comments:

The stand is expected to regenerate with swamp hardwoods. Next Steps:

136 73106136-Cut 14.6 6113 - Lowland

Cmpt. Review High Density Pole Harvest Clearcut with 6113 - Lowland Maple Reserves Maple Proposal

Prescription The portion of the stand that lies south of the trail should be harvested as a 4" Spec final harvest. The harvest boundary should go to the top of the bluff overlooking the Teed Drain. Along the bluff is where the retention should be placed. In addition mark some trees for mast, dens, future Specs: dens and legacy trees. The trees marked should not exceed 3 trees per acre.

The stand is driest in the southern portion of it. However, the stand should still be harvested under dry or frozen conditions. Other Comments:

Next The portion of the stand to be treated is expected to regenerate to oak and maple if not interplant red pine.

Steps:

143 73106143-Cut 20.9 4130 - Aspen 4130 - Aspen High Density Pole Harvest Clearcut with Cmpt. Review Reserves Proposal

Prescription This stand is to be final harvested to 2" DBH. The retention should be kept in patches. Specs:

Other The stand has wet areas so harvest during dry or frozen conditions. Comments:

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

Total Treatment Acreage Proposed:

482.7

Gladwin Mgt. Unit Table 4 -- Treatments Prescribed with Compartment: 106 a Limiting Factor s Year of Entry 2013 t **Treatment Cover Type** n Treatment **Acres** Stage1 Size Stand **Treatment Approval** Name CoverType Density Method Objective Status Age Type d #Error **Prescription** Specs: <u>Other</u> Comment: <u>Next</u> Steps:

Total Treatment
Acreage Proposed:

0

<u>Limiting Factor and No</u> <u>Treatment Reason</u>

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Out of YOE -- Treatments Prescribed with No Limiting Factor

Year of Entry: 2013

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Cover Type Objective Treatment Approval Status **Treatment** Treatment **Acres** Stage1 Size Stand Name CoverType Density Method Age Type <u>Prescription</u> Specs: <u>Other</u> Comments: <u>Next</u>

Total Treatment Acreage Proposed:

Steps:

0

s t	Gladwin Mgt. Unit			5 – For	ested Sta	nds Compartment: 106 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
3	4119 - Mixed Northern Hardwoods	High Density Log	54.2	Uneven Age	81-110	The stand is land locked by private land and US-10. The terrain is undulating. It is a matrix of uplands and lowlands with the uplands being the majority. The stand surrounds old barrow pits.
7	4124 - Red with White Oak	High Density Log	5.1	81	51-80	The stand was harvested; the residual was around 60 BA. There is an abundance of small limbs on the ground, but not much in larger materials.
8	4124 - Red with White Oak	High Density Log	15.3	81	51-80	The stand was harvested leaving 60BA. There are an abundance of small limbs on the ground, but not many larger diameter limbs. The regeneration in the stand is not obvious. However, what is visible is being browsed.
9	6119 - Mixed Lowland Deciduous Forest	High Density Log	17.2	Uneven Age	111-140	The stand is hummocky and is a matrix of uplands and lowlands with the lowlands being the majority. Some of the dead trees have been marked with orange paint. This may be an area to watch for timber theft.
10	6113 - Lowland Maple	High Density Pole	5.8	Uneven Age	51-80	The stand is a matrix of uplands and lowlands with the lowlands being the majority. The over story is declining especially the oaks. It is a little lower than the surrounding stands making it wetter. However, it looks like it may dry out in late summer.
11	4126 - White, Black, N. Pin Oak	High Density Pole	17.2	81	1-50	The stand is variable going from well stocked to poorly stocked. There are inclusions of G-types in the stand.
12	6119 - Mixed Lowland Deciduous Forest	High Density Log	3.5	Uneven Age	81-110	The stand is a narrow ridge, which lies between US-10 Right of Way and Bluff Creek. It has a pocket of red pine at the east end of the stand.
14	4199 - Other Mixed Upland Deciduous	High Density Log	10.9	Uneven Age	81-110	The over story aspen and oak are declining. There is significant gap dynamics occurring in the stand. These gaps are regenerating well to maple with some oak and ash as well.
16	4131 - Aspen, Oak	High Density Pole	32.5	37	1-50	The stand is just coming into poles. The terrain is hummocky to undulating. As such it is a matrix of uplands and lowlands with the lowlands being about 40%. The dryer ridges are heavy to oak and bigtooth aspen. The lower areas are heavy to red maple, oak, ash, and quaking aspen.
17	4121 - Oak, Aspen	High Density Log	6.8	Uneven Age		From the aerial imagery, soil types, and the age of the stand, this stand should be very similar to pre-inventory stand 28.
19	6119 - Mixed Lowland Deciduous Forest	High Density Log	6.8	90	81-110	This stand is on the flood plain of the Big Salt River
20	4199 - Other Mixed Upland Deciduous	High Density Log	6.1	81	111-140	The stand has some indications that it is wet in the spring. However, it looks like it dries out in late summer.
21	6119 - Mixed Lowland Deciduous Forest	High Density Log	29.8	90	111-140	The stand is on the flood plain of the Big Salt River. The over story in the stand shows signs of declining and is starting to come down. Much of what is coming down is ash, aspen, and oak.

s t	Gladwi	n Mgt. Unit		5 – For	ested Sta	Compartment: 106 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	4139 - Aspen, Mixed Deciduous	High Density Pole	14.1	Uneven Age	81-110	This is a knoll that is isolated by the Mud and Bluff Creeks.
24	4124 - Red with White Oak	Low Density Log	11.4	81	1-50	The stand was harvested in 2010. So the stand has not had time to regenerate.
<u></u> 25	4131 - Aspen, Oak	Medium Density	18.6	23	1-50	The stand is an upland ridge that has some areas that are well stocked and other areas that are sparse. The aspen and the oak are fairly evenly mixed. There are inclusions of lowland in the stand but it makes up < 15% of the area.
26	6119 - Mixed Lowland Deciduous Forest	Medium Density Log	45.3	Uneven Age	51-80	The stand is on the flood plain of Mud Creek. There are inclusions of L-type that are heavy to red osier dogwood. Steep bluffs boarder the flood plain.
27	6119 - Mixed Lowland Deciduous Forest	High Density Pole	24.4	Uneven Age	81-110	The stand is mainly lowland with inclusions of upland. The over story is declining, especially the oaks. There is a thick understory of red maple, oaks, and ash present. The amount of downed woody material is significant. There is also a significant shrub layer.
28	6112 - Lowland Aspen	Medium Density Pole	9.3	23	1-50	This area is low and wet. It has a thick layer of deciduous shrubs. The stand has some medium stocked pockets of trees, but much of it only has scattered trees. There are also inclusions of upland but they make up < 20% of the stand.
29	4131 - Aspen, Oak	High Density Log	31.3	Uneven Age	51-80	The stand is developing good gap dynamics. The gaps have good advanced regeneration in them of maple and oak.
32	6119 - Mixed Lowland Deciduous Forest	High Density Log	22.9	86	81-110	The stand is a matrix of uplands and lowlands, with the lowlands being the majority. The over story is declining and has started coming down.
33	6119 - Mixed Lowland Deciduous Forest	Low Density Sapling	17.4	24	1-50	The stand is low and wet with some seeding and sapling in it. Currently the trees are in patches. There are areas of high stocking and other areas that are open. The north end of the stand is dryer then the south end.
36	6110 - Cottonwood	High Density Log	8.2	99	81-110	This stand is on the flood plain of the Big Salt River. It is very heavy to oversized cottonwood logs. They're a few log size maples scattered around the stand.
38	4131 - Aspen, Oak	Medium Density	25.2	15	1-50	The stand is on a ridge mainly. However, there are inclusions of lowland. These are in patches and they are small in size. The aspen and oak are fairly evenly mixed. There are also patches of open ground. When the stand was harvested some oaks were left. It appears that the stand was harvested to 6" DBH with some additional trees marked.
39	4126 - White, Black, N. Pin Oak	Medium Density	8.3	17	1-50	The stand has become a natural seed tree/shelter wood. Over story is declining and coming down. There is a decent amount of oaks seeded into the stand, though at the current time, the regeneration is patchy

S t	Gladwii	n Mgt. Unit		5 – For	ested Sta	nds Compartment: 106 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
40	4126 - White, Black, N. Pin Oak	High Density Sapling	9.4	24	1-50	The over story trees are coming down. There are areas in the stand, of denser over story. These are mainly in wetter depression and are heavy to red maple. There is also an intermittent creek flowing through the stand.
42	6119 - Mixed Lowland Deciduous Forest	High Density Log	26.2	61	51-80	The stand is low and wet with inclusions of uplands. The uplands make up about 20%. The overstory oaks are declining.
44	4126 - White, Black, N. Pin Oak	High Density Sapling	28.1	17	51-80	The stand was harvested 17 years ago. Currently there is a well stocked layer of advance regeneration. There are some areas that are open. In addition, the stand had a landing placed in it when pre inventory stand 61 was harvested in 2010.
45	6113 - Lowland Maple	High Density Log	38.4	80	81-110	The stand is variable and it is a matrix of upland and lowland. The lowland in the stand is the majority. Some areas appear to be very wet while others look like they dry up in late summer. The upland in the stand is heavy to oak. All the over story trees in the stand are declining regardless of species.
46	42260 - Natural Pine, Mixed Deciduous	High Density Pole	8.1	50	111-140	The stand is variable going from oaks to white pines. The density is also variable going from low density oak poles to high density white pines poles.
48	6119 - Mixed Lowland Deciduous Forest	High Density Pole	47.7	Uneven Age	81-110	The stand is a matrix of upland and lowland with the upland being about 30%. The oak in the stand is declining. This decline is most noticeable on the upland. Some of the low areas have heavy tree fall but regeneration is filling in.
49	6119 - Mixed Lowland Deciduous Forest	High Density Sapling	14.0	20	51-80	The stand is a matrix of uplands and lowlands, with the lowlands being about 75%. The terrain is made up of slight ridges and draws. Most of the ridges are less than 1 chain wide.
50	6119 - Mixed Lowland Deciduous Forest	Medium Density	3.5	20	1-50	This stand is low and wet and is heavy to red maple, oak and paper birch. Many of the over story trees are coming down.
51	6119 - Mixed Lowland Deciduous Forest	High Density Pole	18.7	Uneven Age	51-80	The stand is a matrix of uplands and lowlands with the lowlands being about 70%. There are inclusions of L-types. These inclusions are less than a half acre in size. The over story is declining, especially the oaks.
52	6119 - Mixed Lowland Deciduous Forest	High Density Log	48.3	Uneven Age	81-110	The stand is a matrix of upland and lowland with the lowland being about 75%. The stand appears to dry out in late summer. The over story oaks and aspen are declining. There are areas of thick understory, being mainly red maple mixed with ash and oak.
53	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	5.5	86	81-110	This stand is in a slight depression. The western portion of the stand is dryer and heavier to white pine and oaks. The eastern portion of the stand is wetter and is heavier to green ash and red maple.
54	4126 - White, Black, N. Pin Oak	High Density Log	30.3	Uneven Age	81-110	New stand added. The stand is a matrix of uplands and lowlands, with the uplands being about 75%. The oak over story is declining and coming down.

s t	Gladwin Mgt. Unit			5 – Foi	ested Sta	Compartment: 106 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
56	4124 - Red with White Oak	High Density Log	30.8	Uneven Age	111-140	This stand is a matrix of uplands and lowlands, with the uplands being about 80%. The stand is mainly on a ridge. However, there are some draws running through it.
57	4126 - White, Black, N. Pin Oak	High Density Log	29.8	84	1-50	The stand is on a ridge. The over story oaks are declining. When the dead oak falls down, it is being collected by the private land owner to the north. The stand has a network of lightly used ORV trails in it that look to be used for removing the downed wood.
58	4126 - White, Black, N. Pin Oak	High Density Sapling	7.8	17	1-50	New stand added. Over story is declining especially oak. Much of the over story is down. This has made the stand look like a seed tree/shelter wood harvest. It has good advanced regeneration.
60	42260 - Natural Pine, Mixed Deciduous	High Density Pole	15.7	59	141-170	The stand is thick with white pine saplings and poles. There are some over story oak in the stand as well.
61	42200 - Natural White Pine	High Density Pole	7.7	Uneven Age	51-80	The stand is variable going from open to fully stocked poles to oversized white pine logs.
64	4124 - Red with White Oak	High Density Pole	5.0	81	51-80	This is a stand of hardwood surrounded by a pine/hardwood stand. The over story is declining and it is coming down. Much of what is on the ground is oak. The stand has advanced maple regeneration under the over story. In the crown gaps the regeneration is a mixture of maple and oak.
66	4319 - Mixed Upland Forest	High Density Pole	23.3	60	111-140	This stand looks to be made up of several stands. However, they could not be separated on the imagery or on the ground. The stand therefore was left together. The stand goes from a W6O5 to O8W3 to O5W2. Part of the problem is that the over story is declining and is coming down. Much of the new tree fall appears to have been recent.
67	6119 - Mixed Lowland Deciduous Forest	High Density Pole	25.6	30	1-50	The stand is variable going from aspen/maple along the road to maple/ash/oak along the western edge of the stand. There are inclusions of L-type in the stand but they are < 1 acre in size.
68	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	13.1	Uneven Age	51-80	The stand was harvested by selection removing 50 BA. The residual that was left, after harvest, was around 70 BA. During the harvest there was significant damage to the residual but it was acceptable. Also there were small areas that were heavily rutted. The stand was harvested in 2010, so regeneration is hard to see with the snow.
70	4124 - Red with White Oak	High Density Log	73.0	Uneven Age	111-140	The stand is undulating and is a matrix of uplands and lowlands. The uplands are about 75% of the stand. There are many over sized log trees. Also, there is signs of decline in the over story and significant down woody material.
71	4125 - Black, N. Pin Oak	High Density Pole	9.1	85	51-80	The over story is declining. However, the stand has an under story of poles. The eastern portion of the stand has more aspen and white pines. The western portion of the stand is heavier to oak

s t	Gladwin		5 – Foi	rested Sta	nds Compartment: 106 Year of Entry: 2013	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
73	4131 - Aspen, Oak	High Density Pole	33.3	23	1-50	This area is upland and the regeneration is good. The stand is a mixture of oak and aspen mainly. There are some small patches of lowland in the stand.
74	6113 - Lowland Maple	High Density Pole	11.0	86	51-80	This stand is in a slight depression. There are large over story oaks and maples and a thick understory of maple, ash, and deciduous shrubs
75	6119 - Mixed Lowland Deciduous Forest	High Density Log	10.1	Uneven Age	81-110	This stand is a matrix of uplands and lowlands, with the lowlands being the majority. The stand has several drainages running through it.
77	6119 - Mixed Lowland Deciduous Forest	High Density Log	42.1	Uneven Age	141-170	The stand is the flood plain of the Teed Drain. The terrain is rolling to undulating. It is a matrix of upland and lowland with the lowland being the majority.
78	4131 - Aspen, Oak	Medium Density	34.6	23	1-50	The stand is a matrix of upland and lowland. The lowland makes up about 40% of the stand.
81	4199 - Other Mixed Upland Deciduous	High Density Pole	20.3	50	111-140	The stand is moist but not overly wet. The aspen in the stand is located in the eastern portion of the stand while the oak is more in the western portion.
83	6113 - Lowland Maple	High Density Sapling	5.0	63	1-50	The stand is low and wet. There are some larger over story trees. However, most of them have come down.
86	4126 - White, Black, N. Pin Oak	High Density Log	52.6	Uneven Age	81-110	The stand is mainly upland. It has inclusions of lowlands, with the lowlands being about 20%. Most of the lowlands are in veins through the stand.
90	6119 - Mixed Lowland Deciduous Forest	High Density Pole	83.7	Uneven Age	81-110	The stand is a matrix of upland and lowland with the lowland being about 80% of the stand. The upland is concentrated in the western half of the stand. There are significant areas of wind thrown trees. These areas are regenerating well as E3 which are heavy to ash, maple, and swamp white oak.
91	4125 - Black, N. Pin Oak	Medium Density Pole	13.7	30	1-50	The stand is a fine matrix of upland and lowland with the lowland being about 55%. It appears that the stand does dry out in late summer. The ground cover is heavy to sheep laurel.
92	4125 - Black, N. Pin Oak	High Density Pole	31.9	80	51-80	The stand is a matrix of upland and lowland with the lowland being about 40%. There is a man-made drain going through the stand. Around the drain the stand is more of an E-type. There is an inclusion of L-type in the stand as well.
93	42260 - Natural Pine, Mixed Deciduous	Medium Density Pole	13.5	38	51-80	The stand is a fine matrix of upland and lowland, with the upland being the majority. The soils go from droughty to very wet. It also goes from a G-Type to an L-type to a fully stocked pole stand. The white pine in the stand shows signs of weevil activity.
94	6113 - Lowland Maple	High Density Pole	8.6	80	81-110	The stand is undulating and has inclusions of upland mainly along the south side of the stand. There are significant areas of wind throw especially along the pipeline.

S t	Gladwi	n Mgt. Unit		5 – For	ested Sta	nds Compartment: 106 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
95	42200 - Natural White Pine	Medium Density Log	9.7	80	51-80	The stand is variable going from dense sawlog white pines to grass. There is a maintenance structure in the stand. The terrain is rolling with some steep draws in it.
96	4126 - White, Black, N. Pin Oak	Medium Density	4.8	17	1-50	The stand was harvested to 2" DBH except oak which appears to have been harvest to 4" DBH. The overall residual BA in the stand is less than 10 Sq Ft. The terrain is hummocky leading to a fine matrix of upland and lowland. The upland makes up about 75% of the stand.
98	6112 - Lowland Aspen	High Density Pole	12.6	60	81-110	The stand goes from wet to very wet.
99	6119 - Mixed Lowland Deciduous Forest	High Density Log	69.5	Uneven Age	141-170	The stand is a matrix of uplands and lowlands, with the lowlands being about 75%. The terrain is a mixture of ridges and draws.
100	6119 - Mixed Lowland Deciduous Forest	High Density Log	14.1	91	111-140	The stand is rolling to undulating. It is on the flood plain of the Big Salt River
101	4126 - White, Black, N. Pin Oak	High Density Sapling	11.5	17	1-50	The stand is variable but heavy to oak. There are areas of open land.
102	4124 - Red with White Oak	Medium Density	30.5	84	1-50	The stand was harvested in 2007. There was some advanced regeneration left after the harvest. Now there is a fair amount of stump sprouts in addition to what was left. The sprouts are a mixture of oaks and maples.
103	4126 - White, Black, N. Pin Oak	Medium Density Pole	14.7	50	1-50	The stand is a fine matrix of upland and lowland with the lowland being about 40%. The terrain is hummocky.
104	6119 - Mixed Lowland Deciduous Forest	High Density Log	19.4	Uneven Age	51-80	The stand is a matrix of lowland and upland with the lowland making up about 85% of the stand.
106	4126 - White, Black, N. Pin Oak	Medium Density	15.0	15	1-50	The stand is on an upland ridge. The over story is declining, especially in the oaks. There is good regeneration of oak and maple happening naturally in the stand.
107	4126 - White, Black, N. Pin Oak	High Density Pole	11.0	81	51-80	The stand is mainly upland. There are inclusions of lowland in the stand. Therefore, it would be expected to have a significant reduction in acreage when it was harvested.
108	4199 - Other Mixed Upland Deciduous	High Density Sapling	18.3	23	1-50	The stand is a matrix of upland and lowland with the lowland being about 35%. Regeneration is good but the species are in patches. The terrain is hummocky to undulating.
111	6116 - Lowland Birch	Medium Density	5.7	30	1-50	The stand is in a depression and has scattered paper birch. There are a couple of dry knobs in the stand, but they are less than 1 acre in size.

s t	Gladwin	Gladwin Mgt. Unit			rested Sta	nds Compartment: 106 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
113	4124 - Red with White Oak	Medium Density	23.0	75	1-50	The stand was harvested in 2007 as a seed tree harvest. It is regenerating fairly well with some decent aspen clones coming in. There is also some seed source and stump sprouts oak and maple. The stand is on a ridge.
114	6119 - Mixed Lowland Deciduous Forest	High Density Log	33.7	Uneven Age	111-140	The stand is slightly undulating and it is a mixture of upland and lowland. The upland is about 30% and more concentrated in the eastern end of the stand. The over story is declining. There is a greater proportion of oak down than other species.
115	6113 - Lowland Maple	High Density Sapling	8.2	63	1-50	The shrub layer is very dense. The over story trees are mainly pole size oak with some larger trees.
116	4199 - Other Mixed Upland Deciduous	Medium Density Pole	5.3	81	1-50	New stand added. This stand has been filling in with oaks and maple. There are inclusions of low wet ground.
117	6119 - Mixed Lowland Deciduous Forest	High Density Log	33.4	Uneven Age	81-110	The stand is a matrix of upland and lowland, with the lowland being the majority. Because of the snow conditions it was hard to tell if the stand would be operable in summer. Parts of the stand will be operable, but if harvested there will probably be a significant reduction in acreage.
118	4126 - White, Black, N. Pin Oak	Medium Density	22.8	5	1-50	The stand was harvested in 2005 and had regenerated well. The aspen regeneration in the stand is in patches and is not uniformly distributed. The residual in the stand is around 15% plus the oak that was < 4" DBH when the stand was harvested.
119	6119 - Mixed Lowland Deciduous Forest	High Density Pole	11.5	Uneven Age	81-110	The stand is mainly lowland with inclusion of upland. The upland makes up about 20% of the stand. The over story is declining especially in the oaks. There appears to have been some small salvage harvest done in the stand.
120	6119 - Mixed Lowland Deciduous Forest	High Density Pole	38.2	Uneven Age	51-80	The stand is mainly lowland with about 20% upland. The over story is declining especially the aspen and oak.
122	4125 - Black, N. Pin Oak	High Density Pole	13.0	63	1-50	The stand is hummocky and is mainly oak poles. There are some larger saw log oaks that were left, when the stand was harvested. Most of these trees are white oaks.
125	6119 - Mixed Lowland Deciduous Forest	Medium Density	8.7	Uneven Age		The stand is very wet. The regeneration is hard to distinguish because of the thick tag alder and dogwood shrubs. The musclewood is mainly along the edges of the stand.
127	6127 - Lowland Pine	High Density Log	5.2	59	141-170	This stand appears to be wet. The ground cover is mainly huckleberry/blueberry with some inclusions of leather leaf and lowland shrubs. The low areas are most obvious in the eastern portion of the stand that goes along pre-inventory stand 121.
128	4126 - White, Black, N. Pin Oak	Medium Density	24.9	5	1-50	The stand was harvested in 2005 as a seed tree harvest. The regeneration is good. The harvest left around 15 BA of oak and the oak less than 4" DBH.

s t	Gladwin	n Mgt. Unit		5 – For	ested Sta	Compartment: 106 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
129	4125 - Black, N. Pin Oak	High Density Sapling	10.1	15	1-50	The stand is on a ridge. There are areas of high density trees and areas of low density trees.
132	6119 - Mixed Lowland Deciduous Forest	High Density Log	56.8	Uneven Age	111-140	Oaks are declining in the stand. There are inclusions of upland making up about 33% of the stand. In some of the wetter areas wind thrown is present as well as standing water.
135	4191 - Mixed Upland Deciduous with Conifer	High Density Log	14.8	63	1-50	The stand is on a ridge. The stand has a mixture of mature oak, pine and maple with regenerating pine, oak, maple, and aspen. The stand appears to have been shelter wood harvested.
136	6113 - Lowland Maple	High Density Pole	14.6	79	111-140	The stand appears to dry out going south. The saw logs increase in percentage going from north to south. It also goes from a maple/ash stand to maple/oak stand going from north to south.
137	6113 - Lowland Maple	High Density Sapling	9.6	36	1-50	The stand is in a depression and is heavy to pole size maple with some ash and aspen.
138	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	11.5	84	51-80	The stand is variable going from well stocked to poorly stocked. The over story is declining especially in the oaks and ash. However, there is significant maple and ash regeneration in the understory. There is an area in the stand were the water is high enough to kill off the over story. This area is less then 1 acre in size at the current time.
139	6119 - Mixed Lowland Deciduous Forest	High Density Log	23.9	Uneven Age	111-140	This stand is along the Teed Drain. The terrain is undulating to rolling. It is also a matrix of uplands and lowlands with the lowlands being the majority. In addition, the bluffs to the south were included in the stand.
142	4122 - Oak, Pine	High Density Sapling	13.7	36	1-50	The stand is a mixture of fully stocked areas and areas that are poorly stocked. The open areas are seeding in with pine.
143	4130 - Aspen	High Density Pole	20.9	36	81-110	The stand is a matrix of upland and lowland with the lowland being about 20%. The paper birch and oak are heaviest in the lowland areas.
144	4125 - Black, N. Pin Oak	High Density Pole	13.1	36	1-50	The stand is a matrix of upland and lowland with the lowland being about 25%. There is an inclusion of L-type in the stand but it is < 0.5 acres in size.
145	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	10.2	Uneven Age	81-110	The stand is mainly on the flood plain of the Teed Drain. The two bluffs along the flood plain to the south of the drain were included. These areas together are less than 3 acres in size. The white pine in the stand is mainly on the bluffs south of the drain.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:	
1	6239 - Mixed Emergent Wetland	17.8	No	Low (NonForested)	The stand is heavy to cattails and marsh grass. There is an area of open water, for the stand is an old barrow pit.	
2	6239 - Mixed Emergent Wetland	15.2	No	Low (NonForested)	The stand is an old barrow pit that is now heavy to cattails with some shrubs. There is some open water present in the stand.	
4	629 - Mixed non-forested wetland	5.6	No	Low (NonForested)	The stand is an old barrow pit. It is now filled in with cattails and lowland shrubs.	
5	6239 - Mixed Emergent Wetland	7.1	No	Low (NonForested)	The stand is an old barrow pit. It is filling in with cattails and some lowland shrubs. There is some open water in the stand.	
6	3102 - Grass	2.0	No	Unspecified		
13	3102 - Grass	3.3	No	Low (NonForested)	This stand has the Teed Drain running through it. It's bordered on the north side by a road and a grass stand. The sides of the banks along the drain are also grassy.	
15	629 - Mixed non-forested wetland	7.2	No	Low (NonForested)	This looks to be an old beaver flooding that has drained. It is mainly cattails and marsh grass. The north end of it is full of willow brush.	
18	50 - Water	4.2	No	Unspecified		
23	6224 - Treed Bog	3.4	No	Unspecified		
30	6229 - Mixed lowland shrub	1.8	No	Low (NonForested)	This stand is mainly lowland shrubs with some leather leaf present. The edges have some oaks.	
31	629 - Mixed non-forested wetland	11.4	No	Unspecified		
34	6229 - Mixed lowland shrub	2.2	No	Low (NonForested)	The stand is mainly lowland shrubs with the scattered red maple and oak. In 10 years the crown closure maybe > 25%, currently it is a little below 15%.	
35	50 - Water	4.9	No	Unspecified		
37	6229 - Mixed lowland shrub	7.0	No	Low (NonForested)	Stand swapped from Forested to Non-Forested. This is a tag alder stand that has oak saplings around the edges.	
41	6225 - Bog	2.9	No	Low (NonForested)		



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:	
43	6225 - Bog	4.9	No	Low (NonForested)	This stand has a lot of leatherleaf mixed with sedges. There is a lot of lowland shrub along the east edge of the stand as it grades into pre-inventory stand 48.	
47	6220 - Alder/willow	25.2	No	Low (NonForested)	The stand has some trees but it is mostly open. The trees are concentrated along the road and along stand 53.	
55	3302 - Low Density Conifer Trees	4.0	No	Low (NonForested)	The stand is open with heavy blueberry and other deciduous shrubs. There is also a component of grass.	
59	6220 - Alder/willow	6.4	No	Low (NonForested)		
62	3105 - Mixed Upland Herbaceous	20.7	No	Unspecified	This is the ROW for US-10. This is mostly grassy but the road is paved and is in the stand. There are some lower areas in it were the lowlands touch the stand.	
63	6224 - Treed Bog	18.5	No	Low (NonForested)		
65	50 - Water	1.3	No	Unspecified		
69	6225 - Bog	13.5	No	Unspecified		
72	3201 - Sweet Fern	6.0	No	Low (NonForested)	This stand is heavy to sweet fern and bracken fern in the west end of the stand. In the east end of the stand it is heavy to blackberry, bracken fern and sweet fern.	
76	122 - Road/Parking Lot	17.1	N\A	Unspecified	This is the ROW for Saginaw road and the Pere-Marquette rail to trail. This is mostly grassy but the road and the trail are paved. There are some lower areas in the stand. They are located were the lowland stand, to the south, touch this stand. south touch the stand.	
79	3301 - Low Density Deciduous Tree	30.9	No	Low (NonForested)	The stand has some slight ridges in it that has a higher density of tree. These areas are < 3 acres in size. There are scattered trees as well but the crown closure is < 25%.	
80	6229 - Mixed lowland shrub	15.1	No	Unspecified		
82	629 - Mixed non-forested wetland	5.0	No	Low (NonForested)	The stand is heavy to red osier dogwood and marsh grass.	
84	3105 - Mixed Upland Herbaceous	4.9	Yes	Medium (NonForested)	This is a pipeline that is a mixture of upland and lowland. The upland is the majority. The notice on the pipeline markers are for Quicksilver Resources 989-732-0869	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
85	3105 - Mixed Upland Herbaceous	3.0	Yes	Low (NonForested)	This is a pipeline that is mostly upland. The markers on the pipeline are for Michigan Gas Storage Company 517-789-6811
87	629 - Mixed non-forested wetland	24.4	No	Low (NonForested)	The stand has scattered aspen and oak but the crown closure is < 15%.
88	6225 - Bog	2.6	No	Low (NonForested)	
89	3105 - Mixed Upland Herbaceous	3.1	No	Low (NonForested)	This stand is an herbaceous opening, heavy to grass with some sweet fern, and blackberries.
97	122 - Road/Parking Lot	1.6	Yes	Low (NonForested)	This is a gravel parking lot and trail head for the Pine Haven Recreational Area.
105	3301 - Low Density Deciduous Tree	6.6	No	Low (NonForested)	
109	6220 - Alder/willow	3.1	No	Low (NonForested)	The stand is heavy to tag alder.
110	3301 - Low Density Deciduous Tree	4.2	No	Low (NonForested)	The L-type makes up the majority of the stand. It has a band of swamp hardwoods along the edges that were left when the oak stand was harvested.
112	6224 - Treed Bog	12.2	No	Low (NonForested)	The stand is mostly leatherleaf with a few pockets of slightly dryer red pine.
121	3105 - Mixed Upland Herbaceous	22.8	Yes	Low (NonForested)	This has a high voltage overhead power line running its length. The ground cover under it is mainly grass. The stand is upland, for the most part, but there are inclusions of lowland.
123	3301 - Low Density Deciduous Tree	11.1	No	Low (NonForested)	The stand has an inclusion of leatherleaf, but much of the stand is lowland shrubs. The trees, in the stand, have a crown closure that is less than 25%.
124	6229 - Mixed lowland shrub	20.1	No	Low (NonForested)	The stand is mainly lowland shrubs. There are inclusions of trees especially along the edges and the paper birch is scattered throughout the stand.
126	6229 - Mixed lowland shrub	2.6	No	Low (NonForested)	The stand is heavy to red osier dogwood.
130	6225 - Bog	3.1	No	Low (NonForested)	This is mainly a leather leaf bog with some scattered trees in it. The trees are mainly white and red pines with some oak and paper birch. The eastern side of the stand changes, becoming more of an L-Type mixed with leather leaf.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
131	629 - Mixed non-forested wetland	6.5	No	Low (NonForested)	Stand swapped from Forested to Non-Forested. This stand is mainly marsh grass and leatherleaf. There are some trees present. However, they are widely scattered or they're concentrated along the edges.
133	6225 - Bog	14.8	No	Low (NonForested)	The stand is almost a treed bog but the crown closured is < 15%. There are scattered birch, maple, white pine and oaks trees in the stand.
134	6229 - Mixed lowland shrub	3.3	No	Unspecified	
140	3205 - Mixed Upland Shrub	1.8	No	Unspecified	This stand is mostly upland shrubs. There are some areas that are a little lower and wetter but the majority of the stand is upland.
141	3302 - Low Density Conifer Trees	5.8	No	Unspecified	This is a lowland shrub stand. It has scattered white pine and paper birch in it. The trees have a crown closure of a little lower then 15%. In 10 years the stand should be a low density conifer stand.

Gladwin Mgt. Unit

Compartment: 106
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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.

Stand	SCA Type	SCA Name	Acres	Comments
multiple - see	Unique Site - SCA	Pine Haven Recreational Area	350.9	This area is on an annual least with Midland County Parks. It is heavily used for hiking, cross county skiing, and mountain biking. The forest has been unmanaged. Currently it is starting to take on some old grow characteristics. Any management, beside hazard tree removal, would confict with the activites the land is leased for.

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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.

Conservation Type Description
Area

ERA = Ecological Reference Area

HCVA = High Conservation Value Area

SCA = Special Conservation Area

