

Gladwin Forest Management Unit Compartment Review Presentation

Compartment #79 Entry Year: 2012 Compartment Acreage: 1208 County: Gladwin

Revision Date: April 2010, Oct. 2010

Stand Examiner: Steven Nyhoff

Legal Description: T17N, R2E, Sections 5 & 6

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

Management Goals: The compartment has been heavily managed over the last 30 years. Much of the management has been focused on early successional ecosystems. The compartment is heavy to aspen on lowland soils. In the past the treatments have been successful. However, the harvest from the last Year of Entry was patchy in areas.

Continue to maintain the current covertypes. However, because of the high water table and often saturated soils, look to harvest aspen early in dry or frozen conditions to maximize regeneration. On these wet soils to hold the stand longer than 50 years often shows a significant decrease in regeneration

Soil and Topography: The soils in the compartment are heavy to hydric soil. The compartment has about 67% of the soils being poorly drained Roscommon, Roscommon-Bervort-Tawas association, and Bruce-Brimly-Burleigh association. The soils in the rest of the compartment are a mixture of well drained Rubicon and Croswell associations or somewhat well drained AuGres associations.

The terrain is generally flat except the Rubicon and Croswell ridges.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The state land is in one contiguous block that is surrounded for the most part by state land. The land is mainly used for hunting.

Unique, Natural Features: No known records and none were located during the OI process.

Archeological, Historical, and Cultural Features: No known records and none were located during the OI process.

Special Management Designations or Considerations: None

Watershed and Fisheries Considerations: The drainages in the compartment are small, warm water drainages. There are no planed harvests near these drainages.

Wildlife Habitat Considerations: Wildlife specie diversity throughout this compartment is very varied due to the presence of diverse habitats and cover types. Grouse, woodcock, deer and puddle duck opportunities are aggressively pursued by fall hunters. This area also offers good spring turkey hunting opportunities. Wide varieties of non-game birds are commonly associated with the numerous wetland and open water surface stands. This includes wading and marsh species. Eagles have persistently utilized this compartment for roosting, feeding and nesting. The presence of the Tittabawassee River, immediately to the west, enhances the attractiveness of this compartment for eagles.

Wildlife gates or maintained openings do not exist within these sections. Future timber sales should attempt to implement variable retention practices adjacent to the numerous Z and N stands.

57% of the existing cover type within this compartment is classified as aspen. Wildlife Division would certainly support continued movement toward the establishment of four-five distinct age classes within this cover type, without compromising stem density regeneration capabilities.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of Lacustrine (lake) sand and gravel. The glacial drift thickness varies between 100 and 200 feet. Beneath the glacial drift 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. Very little oil and gas exploration has occurred in this area, but a line of productive fields lies to the southwest. South Billings Field, discovered in 1957, has produced 248,401 BO from the Dundee. Billings Field, 1950, has produced 946,334 BO primarily from the Detroit River Formation. This area is leased for oil and gas and potash development.

Vehicle Access: The access into the compartment is off of Secord Dam Rd and Eastman. There are several two tracks that go into the compartment from the side that gives some access. However, because of the wet soils, the vehicular access is limited.

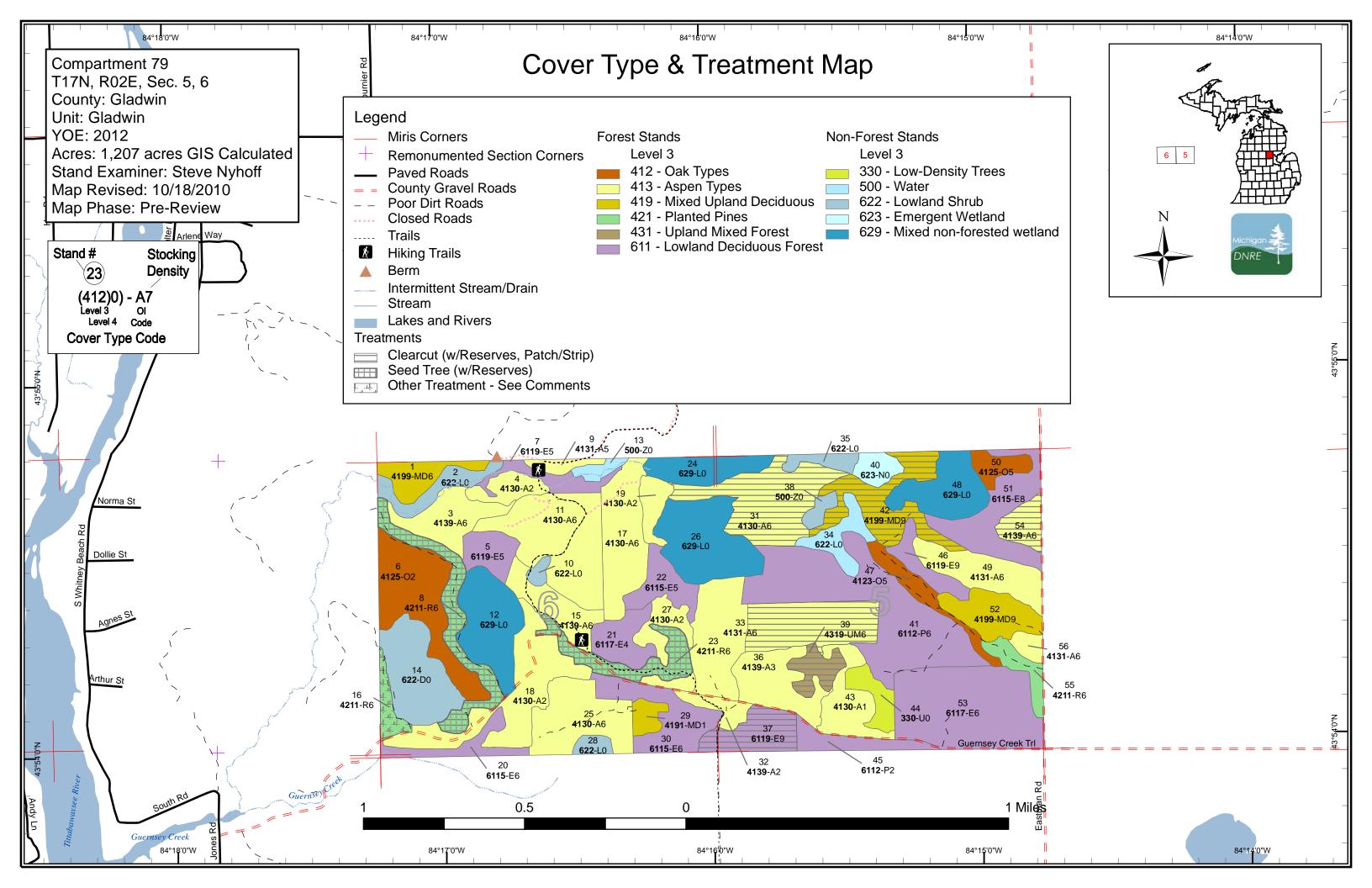
Survey Needs: The compartment has only a little interface with private land holders. The private land next to the compartment has been surveyed. Therefore, there is no need for survey at this time.

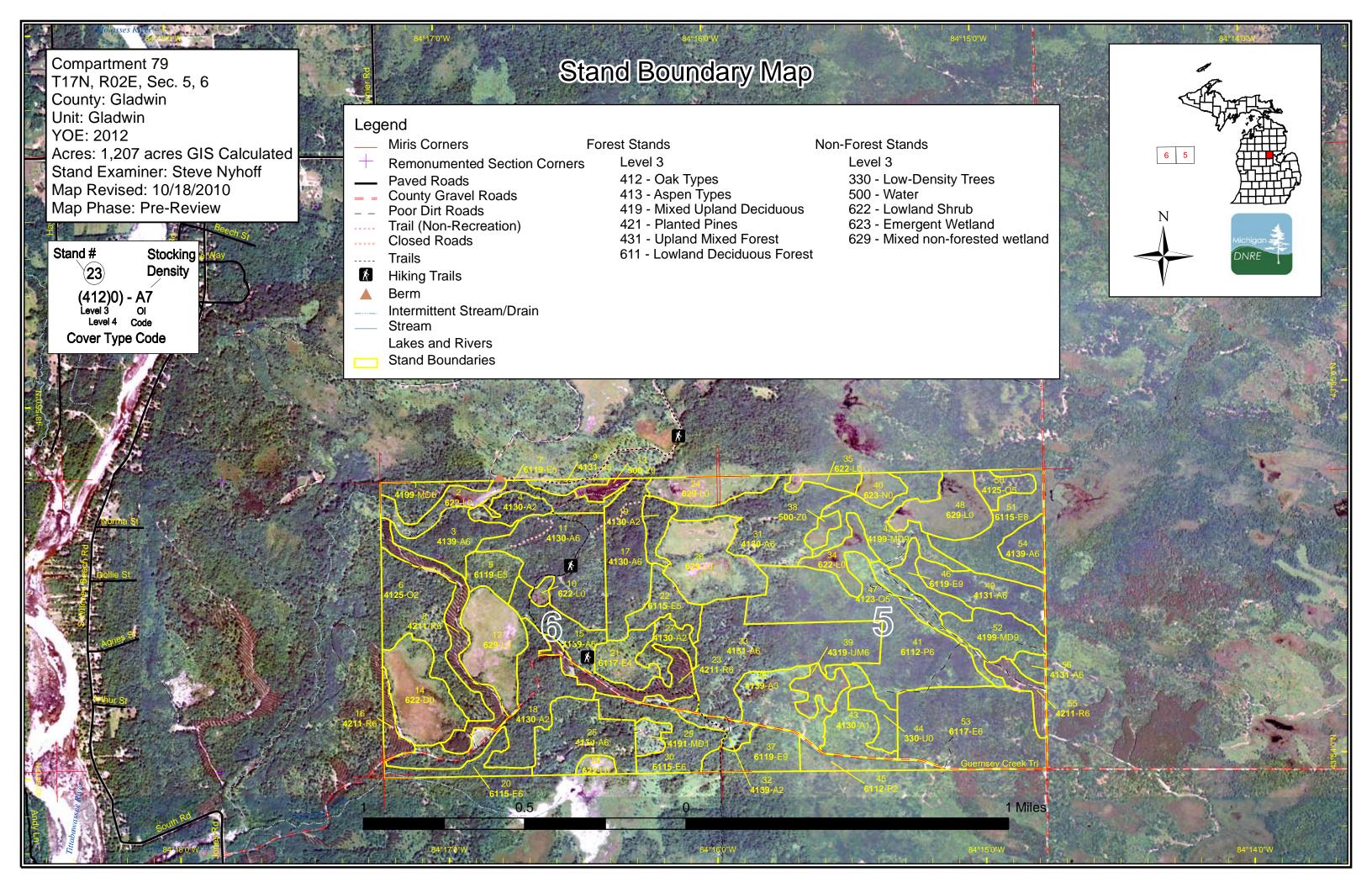
Recreational Facilities and Opportunities: The Midland to Mackinac Boy Scout hiking trail runs through the compartment. The trail is well marked but does goes through two creeks and has no notable structures on them for crossing.

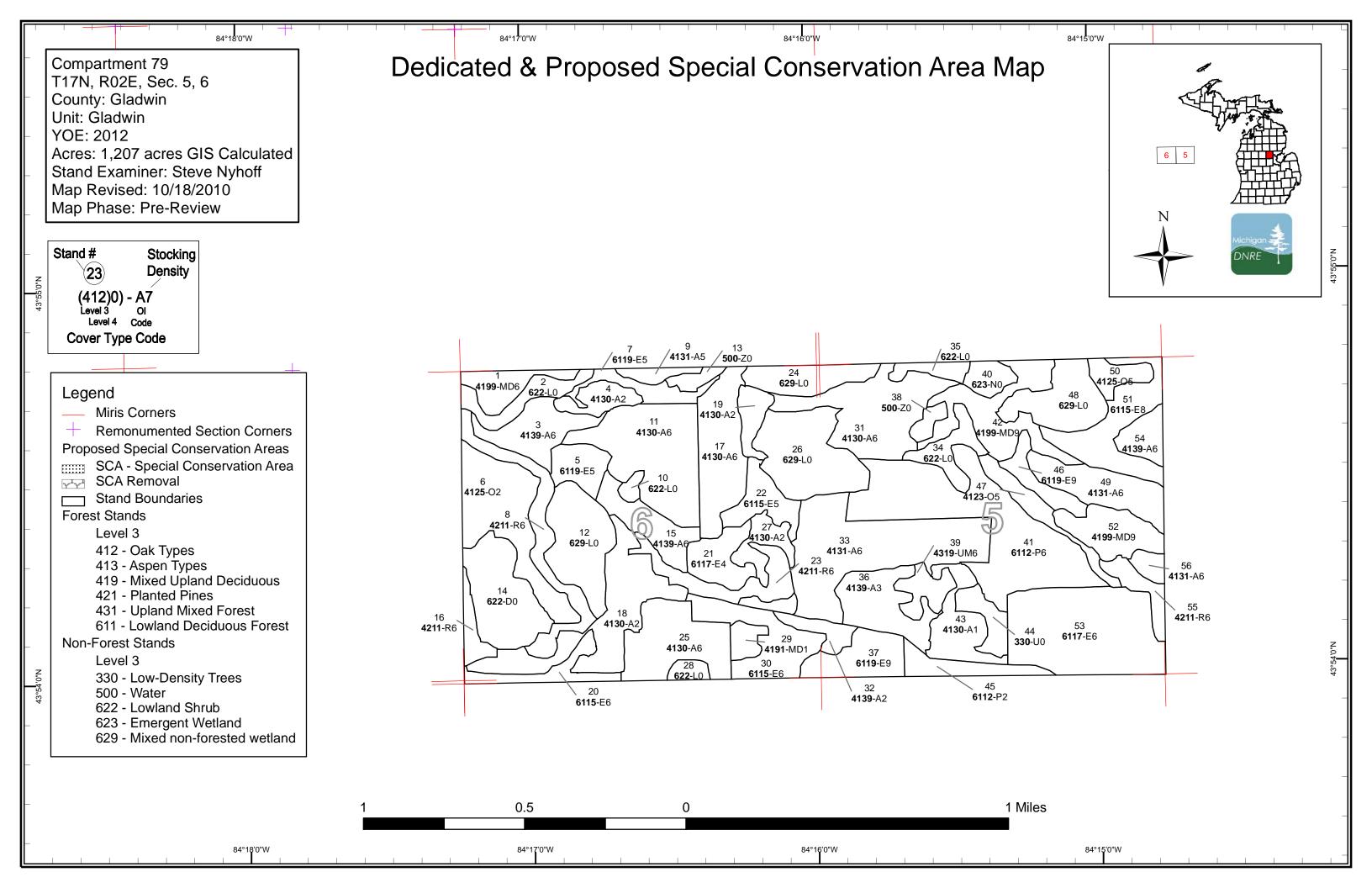
There are no other established recreational facilities in the compartment.

Fire Protection: The terrain is wet so the chances of fire starts are lower than in other areas of the unit. However, the difficulty in accessing the compartment makes the overall fire danger low to moderate.

Additional Compartment Information: Text







Data updated before 10:00 AM

Compartment 079 Year of Entry 2012



Age	Class	
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Aspen	0	106	34	72	249	0	0	0	0	0	0	0	0	0	0	462	
Low-Density Trees	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
Lowland Aspen/Balsam Poplar	0	0	0	97	0	0	0	0	0	0	0	0	0	0	0	97	
Lowland Deciduous	0	0	0	28	69	15	0	0	0	0	41	0	0	0	70	223	
Lowland Shrub	148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	148	
Marsh	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
Mixed Upland Deciduous	0	0	6	13	0	0	0	0	21	0	0	0	0	0	32	72	
Oak	0	0	0	43	13	0	0	0	0	0	8	0	0	0	0	64	
Red Pine	0	0	0	0	0	26	36	0	0	0	0	0	0	0	0	61	
Treed Bog	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	
Upland Mixed Forest	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	10	
Water	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	1
Total	218	106	40	254	331	41	46	0	21	0	50	0	0	0	102	1208	



Table 2 – Proposed Treatment Summaries

Data updated before 10:00 AM

Gladwin Mgt. Unit Year of Entry 2012

Compartment 079
Total Compartment Acres: 1208

Acres by Treatment Type

Commercial Harvest - 198 Site Prep - 0 Tree Planting - 0 Prescribed Burn - 0 Other - 7

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

Cover Type by Harvest Method

		Cover Type by Harvest Method										
		/	15 15 O	To		No O	in or		S. R. S.			
Aspen		91	0	0	0	0	0	91				
Lowland Deciduous		20	0	0	0	0	0	20				
Mixed Upland De	Mixed Upland Deciduous		0	0	0	0	0	32				
Red Pine	0	0	45	0	0	0	45					
Upland Mixed Fo	Upland Mixed Forest			0	0	0	0	10	-			
	Total	153	0	45	0	0	0	198				

Compartment: 079 Gladwin Mgt. Unit Table 3 -- Treatments Prescribed with No Limiting Factor Year of Entry 2012 s Data updated before 10:00 AM t а **Treatment** Acres Stage1 Size Stand **Treatment Treatment Cover Type Approval** n Method Name CoverType Objective **Status** d Density Age Type 8 73079008-Cut 25.5 42110 - Planted High Density Pole 40 Harvest Seed Tree Natural Red Pine, Cmpt. Review Red Pine Proposal Mixed Deciduous Prescription Final harvest the stand retaining around 20 BA for seed source and retention. Specs: <u>Other</u> Stand is on a ridge and in open areas it is seeding naturally to red pine. Comments: The stand is expected to regenerate to red pine and oak with some white pine. <u>Next</u> Steps: 73079023-Cut 19.2 42111 - Planted High Density Pole Seed Tree Natural White Pine, Cmpt. Review Harvest Red Pine, Mixed Mixed Deciduous Proposal Deciduous Prescription Harvest the stand as a seed tree harvest retaining 20 BA. Specs: <u>Other</u> Red pine was noticed to be seeding in were the stand was open. Comments: The stand is expected to regnerate natural to a mixture of red pine and oak. <u>Next</u> Steps: 73079031-Cut 45.2 4130 - Aspen High Density Pole Harvest Clearcut with Aspen Cmpt. Review Reserves Proposal Prescription Final harvest the stand down to 2" DBH. Mark out areas to retain but do not exceed 5%. The retention should be situated around the low wet gournd along the edge or in the stand. Specs: This harvest is a early harvest to help level out the age class distrubution of aspen. Other Property Comments: Next The stand is expected to regenerate naturally to aspen mixed with some oak and maple. Steps: 33 73079033-Cut 35.9 4131 - Aspen, Oak High Density Pole Harvest Clearcut with Aspen, Oak Cmpt. Review Reserves Proposal Prescription Final harvest the stand to 2" Diameter. The retention should be kept in small patches not to exceed 5%. Concentrate the retention in areas of

Specs:

There are areas of wet ground in the stand so may need to apply a dry or frozen spec to the harvest. Other_

Comments:

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

<u>Next</u> Steps:

> 73079037-Cut 19.8 6119 - Mixed High Density Log 81 Harvest Clearcut with Mixed Lowland Cmpt. Review **Lowland Deciduous** Reserves **Deciduous Forest** Proposal

Forest

Prescription The upland portion of the stand is to be final harvested down to 2" DBH. The wettest portion of the stand are to be left uncut.

Specs:

Other_ The stand is about 55% lowland so rutting culs be a problem. Also this stand is a matrix of upland and low land so how much of an acres Comments:

reduction to be expected is unknown. This reduction may be as much as 33%.

<u>Next</u> The stand is expected to regenerate as a mixed stand of maple, aspen and oak.

Steps:

Compartment: 079 Gladwin Mgt. Unit Table 3 -- Treatments Prescribed with No Limiting Factor Year of Entry 2012 s Data updated before 10:00 AM t а **Treatment** Acres Stage1 Size Stand **Treatment Treatment Cover Type Approval** n Method Objective Name CoverType Density **Status** d Age Type Planted Jack Pine. 39 73079039-Cut 10.2 4319 - Mixed High Density Pole 50 Harvest Clearcut Cmpt. Review Proposal Upland Forest Mixed Deciduous Prescription Final harvest down to 2" DBH retain some patches but not to exceed 5% in area. Specs: Other Comments: Interplant the stand with jack pine. The stand is expected to have some natual hardwood regeneration. <u>Next</u> Steps: 42 73079042-Cut 32.2 4199 - Other Mixed High Density Log Harvest Clearcut with Other Mixed Upland Cmpt. Review **Upland Deciduous** Reserves Deciduous Proposal Prescription Final harvest the stand down to 2" DBH except oak which is to be harvested to 4" DBH. In addition mark 1 mast tree per acre. Specs: <u>Other</u> There are some portion of the stand that have some hills and ridges but much of the stand is flat. Comments: The stand is expected to regenerate to a mixture of oak and aspen. <u>Next</u> Steps: 73079054-Cut 10.2 4139 - Aspen, High Density Pole Clearcut with Cmpt. Review Harvest Aspen Mixed Deciduous Reserves Proposal Prescription Final harvest the stand to 2" DBH. The retention should be in patches but not exceed 5% of the area.

Specs:

<u>Other</u> The stand is an early harvest of aspen to even out the age class distrubution. There are some wet areas so rutting could be a problem when the Comments:

stand was harvested.

The stand is expected to regenerate to a mixture of aspen and oak. <u>Next</u>

Steps:

73079016-7.0 42110 - Planted High Density Pole Other Unspecified Natural Red Pine, Cmpt. Review 16 Other Red Pine Mixed Deciduous Proposal

Prescription The stand is already under contract to be harvest as a seed tree.

Specs:

<u>Other</u> The retention in the stand is around 35 sq ft

Comments:

Next Steps:

Total Treatment

205.2 Acreage Proposed:

Gladwin Mgt. Unit Table 4 -- Treatments Prescribed with Compartment: 079 a Limiting Factor s Year of Entry 2012 Data updated before 10:00 AM t **Treatment Treatment Treatment Cover Type** Acres Stage1 Size Stand **Approval** n Method Objective Status Name CoverType Density Age Type

#Error

Prescription

Specs:

Other Comment:

Next Steps:

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

> Total Treatment Acreage Proposed:

0

Data updated before 10:00 AM

Out of YOE -- Treatments Prescribed with No Limiting Factor

Year of Entry: 2012

Michigan
DNRE
Approval

Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status	
Prescription Specs:									
Other Comments:									

Total Treatment Acreage Proposed:

Next Steps:

0

5 – Forested StandsData updated before 10:00 AM

Compartment: 079 Year of Entry: 2012 Michigan

t				Data updat	ed before 1	0:00 AM Year of Entry: 2012
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4199 - Other Mixed Upland Deciduous	High Density Pole	13.2	24		The stand is mostly upland with inclusion of lowland. The terrain is hummocky but dry.
3	4139 - Aspen, Mixed Deciduous	High Density Pole	22.1	39		The stand is a mixture of upland and lowland with the lowland being about 40%. The area gets dryer going north. The terrain is hummocky and along the creek there is old beaver activity.
4	4130 - Aspen	Medium Density	10.2	3		The stand was harvested but regeneration is patchy. There are areas of heavy regeneration and areas of low regeneration.
5	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	12.6	24	1-50	The stand is very wet and there is significant mortality in the overstory.
6	4125 - Black, N. Pin Oak	Medium Density	43.3	28	1-50	The stand was harvested leaving oak <= 4" DBH. The area is a mixture of upland and lowland with upland being about 60%. There are inclusion of leather leaf and lowland shrubs in the stand.
7	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	10.3	91		The stand was part of a beaver flooding that has since drained. The stand has a creek flowing through it
8	42110 - Planted Red Pine	High Density Pole	25.5	40	141-170	The stand was harvested by removing 1/3 the volume. At the current time there is no regeneration.
9	4131 - Aspen, Oak	Medium Density Pole	4.8	7		Stand was harvested with the compartment to the north.
11	4130 - Aspen	High Density Pole	53.7	25		The stand is a matrix of upland and lowland with the upland being about 65%. The terrain is undulating.
15	4139 - Aspen, Mixed Deciduous	High Density Pole	18.7	24	81-110	The stand is a mixture of upland and lowland with the upland being the majority. The terrain is hummocky with some areas that are dry others areas have standing water. There is a small area that appears to be younger.
16	42110 - Planted Red Pine	High Density Pole	7.0	52	141-170	The stand is schedule to be harvested with the compartmen to the west. The sale has bedn marked retaining about 35 BA.
17	4130 - Aspen	High Density Pole	35.3	39	81-110	The stand is undulating but about 80% upland. The low ground is heavy to red maple, the highest ground is heavy to aspen and oak. When the stand was harvested some overstory oaks where left.
18	4130 - Aspen	Medium Density	46.9	5		The stand is regenerating fairly well but patchy. The area is a mixture of upland and lowland with the lowland being 35%.
19	4130 - Aspen	Medium Density	8.8	3		The stand was harvested but regeneration is patchy. The terrain is undulating and the regeneration is concentrated on the upland.

5 – Forested StandsData updated before 10:00 AM

Compartment: 079 Year of Entry: 2012 Michigan

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a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	6115 - Lowland Ash	High Density Pole	11.9	Uneven Age	81-110	The stand is very wet and with mucky soils.
21	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Pole	15.7	26		The stand is quaking aspen and red pine over leather leaf.
22	6115 - Lowland Ash	Medium Density Pole	15.1	43	1-50	The stand is patchy with areas that are well stocked and areas that are non-stocked. There are inclusion upland and these are well stocked. However, overall the stand is very wet.
23	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	19.2	52	171-200	The stand was harvested by removing 1/3 the volume.
25	4130 - Aspen	High Density Pole	35.3	36	81-110	The stand is variable going from dense to sparse. There are inclusion of lowland in the stand but they making up about 15%.
27	4130 - Aspen	Medium Density	14.8	3		The stand is regenerating but it is patchy. The red maple and oaks are heavily browsed. In addition many of the oak seedlings have heavy stem gall midges.
29	4191 - Mixed Upland Deciduous with Conifer	Low Density Sapling	6.0	16		The stand is sparse. It appears that when the stand was harvested oak 4 DBH and less were retained.
30	6115 - Lowland Ash	High Density Pole	27.2	Uneven Age	111-140	The stand is low and wet.
31	4130 - Aspen	High Density Pole	45.2	39	51-80	The stand is a mixture of upland and lowland with the lowland being about 35%. The trees are below rotation age but could be early harvest. There are inclusion of lowland shrubs and grassy areas. The openings are the result of old beaver activities.
32	4139 - Aspen, Mixed Deciduous	Medium Density	7.7	16		The stand is patchy with some areas that are dense and others areas that are non-forested. When the stand was harvested it appears that much of the oak was retained.
33	4131 - Aspen, Oak	High Density Pole	70.4	37	51-80	The stand is a matrix of upland and lowland with the lowland being about 20%. The stand is coming along well and should be harvested next YOE.
36	4139 - Aspen, Mixed Deciduous	High Density Sapling	26.5	16		The terrain is undulating. In the swale of the stand tree species are more red maple, on the knolls there are more oaks. However, aspen is throughout the stand.
 37	6119 - Mixed Lowland Deciduous Forest	High Density Log	19.8	Uneven Age	111-140	The stand is a mixture of upland and lowland with lowland being about 55%. The upland needs to be harvested. However, much of the lowland is too wet to harvest. The stand has numerous vernal ponds.
39	4319 - Mixed Upland Forest	High Density Pole	10.2	50	81-110	The stand is undulating. It appears that a significant amount of jack pine has died and fallen down. There are overstory oak, maple, and aspen in the stand.

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5 – Forested StandsData updated before 10:00 AM

Compartment: 079 Year of Entry: 2012



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a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
41	6112 - Lowland Aspen	High Density Pole	84.7	26	1-50	The stand is just coming into poles. The area is a matrix of upland and lowland with the lowland being about 65%. There are inclusion of lowland shrubs in the stand.
42	4199 - Other Mixed Upland Deciduous	High Density Log	32.2	Uneven Age	111-140	The stand is a mixture of upland and lowland with the lowland being only 20%. The terrain is undulating mostly with areas that are level.
—— 43	4130 - Aspen	Low Density Sapling	20.4	3		The stand was harvested but regeneration is patchy. The area is also a mixture of upland and lowland with the lowland being about 30%.
45	6112 - Lowland Aspen	Medium Density	12.5	21		The stand is a matrix of upland and lowland with the lowland being about 75%. The upland in itis along Gurnsey TT. The area has inclusion of lowland shrubs. The stand was heavily rutted when it was harvested.
 46	6119 - Mixed Lowland Deciduous Forest	High Density Log	10.6	Uneven Age	111-140	The stand is low and wet.
<u></u> 47	4123 - Red Oak	Medium Density Pole	12.8	30	1-50	The terrain is hummocky.
49	4131 - Aspen, Oak	High Density Pole	26.0	39	81-110	The stand is a matrix of upland and lowland with the lowland being about 35%. It is mainly confined to a drainage in the stand. The terrain is hummocky but dry, for the most part.
50	4125 - Black, N. Pin Oak	Medium Density Pole	8.4	92	1-50	The stand is a ridge of oak that grades to swamp hardwoods. The sides of the ridge becomes very steep at the west end.
51	6115 - Lowland Ash	Medium Density Log	31.1	92	81-110	The stand is low and wet with inclusion of upland. The upland in the stand is about 20%. The soil is mucky.
 52	4199 - Other Mixed Upland Deciduous	High Density Log	21.0	70	1-50	The stand was harvested by removing all aspen and birch from 3 ch strips and between the strips were 3 ch wide Clear Cut. The regeneration is good over all and there is a significant amount of aspen in the non Clear Cut strips. The Clear Cut strips have a crown closure of about 80%. The regeneration is heavy to aspen.
	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	68.6	39	51-80	The stand is a matrix of upland and lowland with the lowland being about 55%. The terrain is hummocky, for the most part, but there are several ridges in the stand. When the stand was harvested some overstory oaks and pines were left.
54	4139 - Aspen, Mixed Deciduous	High Density Pole	10.2	39	81-110	The stand is a fine matrix of upland and lowland with the lowland being about 40%. The terrain is hummocky.
	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	9.5	52	141-170	The stand was harvested by removing 1/3 the volume. It is mainly on a ridge.

s t	Gladw	adwin Mgt. Unit 5 – Forested Stands Data updated before 10:00 AM							
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	DNRE		
56	4131 - Aspen, Oak	High Density Pole	4.7	39		The stand is hummocky but dry. When the st some overstory oaks were retained. There a pockets in the stand.			

6 - Nonforested Stands Data updated before 10:00 AM

Compartment: 079 Year of Entry: 2012

Stand	Cover Type	Acres	Gen Cmts:
2	6220 - Alder/willow	12.8	River Flood Plain a portion of the stand was an old beaver pond. This is in the eastern portion of the stand.
10	6220 - Alder/willow	2.7	The stand is in a depression.
12	629 - Mixed non-forested wetland	33.6	The stand is a mixture of cattails, lowland shrubs, and marsh grass.
13	50 - Water	4.3	New stand added. Beaver Flooding
14	6224 - Treed Bog	35.4	Stand swapped from Forested to Non-Forested. The stand is a mixture of dense pockets and open leather leaf. The overall crown closure is < 25%.
24	629 - Mixed non-forested wetland	17.6	
26	629 - Mixed non-forested wetland	40.4	The stand is mainly reed grass with the edges having shrubs.
28	6220 - Alder/willow	4.1	
34	6229 - Mixed lowland shrub	4.3	The stand is a mixture of leather leaf and lowland shrubs. The area has some overstory of swamp hardwoods but it is < 15% crown closure.
35	6229 - Mixed lowland shrub	6.2	The stand has some pockets of swamp hardwoods mainly on the east end. In addition, the edges of the stand has swamp hardwoods mainly ash and maple.
38	50 - Water	12.5	The stand appears to have some beaver activity that has raised the water level. The edges of the stand are lowland shrubs.
40	6239 - Mixed Emergent Wetland	7.6	The stand is an old beaver pond that is no longer holding water.
44	3301 - Low Density Deciduous Tree	10.1	Stand swapped from Forested to Non-Forested. The stand was harvested but regeneration is poor and mainly at the north and south ends.
48	629 - Mixed non-forested wetland	26.1	

Compartment: 079
Year of Entry: 2012



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

Gladwin Mgt. Unit Compartment: 079
Year of Entry 2012

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

Type

Conservation

Area

Description

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