



**FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 107 ENTRY YEAR: 2009

Compartment Acreage: 1719 County: Gladwin

Revision Date: 9-12-2007 DRAFT

Stand Examiner: Mark Reichel

Legal Description: T 15N, R 2W, Sec. 19, 20, 28, 29, 30

RMU (if applicable): N/A

Management Goals:

Continue to manage for aspen and grouse/deer/early seral species habitat. Manage swamp hardwoods on selection system when they reach maturity and where stands are operable. Create even aspen age class distribution by early harvest of 115 acres of aspen in the 30-39 year old age class. Diversify cover types and improve wildlife hiding/thermal cover by planting 70 acres of failed aspen regeneration to a mixture of conifer species. Better photos and stand delineation identified 188 acres of swamp hardwoods that had previously been included in aspen stands. Combined with failed aspen clearcuts, this reduced aspen acreage (including swamp aspen) from 1301 to 845. All aspen harvests in this compartment must occur during dormant season to ensure aspen regeneration. Close old gas pipeline corridor, and a few 2 tracks that are through very wet areas and susceptible to resource damage.

Soil and Topography:

The compartment lies on a large upland area between the Salt River (1 ½ miles North) and the Chippewa River (3 miles South). The compartment gradually slopes down to the East and toward the rivers. Although the compartment is generally an upland, slopes are gradual to flat, so there is a lot of wetland. There are no creeks in the compartment, only sheet flow. Soils are predominantly Pipestone (about 50% of compartment) and Kingsville (about 40%). Pipestone sand, 0 to 3% slopes is somewhat poorly drained with a high water table depth of ½ to 1 ½ feet. Kingsville loamy fine sand is poorly drained with a high water table depth of 1 foot. Kingsville soils are wetter and less suited to forest productivity and management than Pipestone. 10% of the compartment is lowland brush or marsh. Another 30% is lowland hardwoods or swamp aspen; thus a total of 40% of the compartment is lowland vegetation that is flooded during a portion of the year.

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

A private 40 was purchased in section 29; the section is now 100% state ownership. The Southwest corner of sec 30 is isolated from the rest of the compartment, only attached at one corner. A 2 acre parcel at the center of section 30 is fenced and mowed by the adjacent landowner, and has been recommended for disposal. A second trespass was identified in stands 11 and 111 (fence). Overall the compartment has minimal trespass issues. The compartment is mostly surrounded by private agricultural land, but is adjacent to some state land to the West and South. The West edge of the compartment runs along the Isabella County/Isabella Reservation line.

Dumping/litter is light to moderate in this compartment. There are dumping sites at the following locations: stand 30 and 402, both adjacent to Coleman Rd; adjacent to the road on the border of stands 2 and 4; on the same road just west of the pipeline clearing (West of Coleman Rd.); at Southeast end of newly acquired 40 in sec. 29. Only 2 illegal blinds were observed; one each in stands 15 and 115.

Unique, Natural Features (include only non-site specific and non-sensitive information): None per MNFI.

Archeological, Historical, and Cultural Features:

There is an archeological, historical or cultural concern in section 19, which contains both state and private ownership.

Special Management Designations or Considerations: None

Watershed and Fisheries Considerations:

There are no streams in the compartment and hence no fisheries considerations.

Wildlife Habitat Considerations:

The compartment is dominated by early successional habitats, especially aspen. Wildlife focus in this area is grouse, woodcock, deer, and early successional nongame species. The grouse population appears to be good in the compartment. To increase habitat diversity, natural pine regeneration areas should be promoted. Many of the recent aspen cuts have not regenerated well. Consideration should be given to early entry into some stands to ensure resprouting is maximized.

Mineral Resource and Development Concerns and/or Restrictions:

Surface sediments consist of lacustrine (lake) sand and gravel and minor dune sand. The glacial drift thickness varies between 200 and 400 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. The abandoned Geneva Field(s) is located in the Compartment. The Field produced over 63,000 BO from the Dundee Formation since its discovery in 1935. There are not current State oil and gas leases in the Compartment. An old gas pipeline running SW to NE through the compartment was removed recently (the portion West of Coleman Rd.). The pipeline corridor will be blocked off and allowed to revegetate.

Vehicle Access:

The berms blocking access to the pipeline corridor East and West of Coleman Rd. have been breached and should be reconstructed. There are a number of roads in the compartment that are unnecessary or prone to resource damage. 3 new road closures and 2 re-closures are proposed, which will require 8 new berms.

Survey Needs: Sign/fence trespass in NW ¼ SW ¼ Sec 30 needs to be addressed. Survey needs to be determined.

Recreational Facilities and Opportunities:

The primary recreational use of the compartment is hunting and a moderate amount of camping.

Fire Protection: No comments this year of entry.

Additional Compartment Information:

There is a significant problem with knapweed in grass clearings and along roads in the compartment. This problem is becoming general on public and private lands.

****** Cover type details, proposed treatments and stands designated as FDF are listed in the attached reports:**

- Cover Type by Age Class**
- Cover Type by Management Objective**
- Compartment Volume Summary**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**

****** The following information is displayed on the attached compartment maps:
Base feature information, stand numbers, cover types**

Proposed treatments
Proposed road access system
Suggested potential old growth

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Michigan Department of Natural Resources - Operations Inventory System
Individual Compartment Report

AUSABLE STATE FOREST

GLADWIN FOREST MGT UNIT

MIDLAND COUNTY

COMPARTMENT: 107

Table 3

(acres shown in boxes)

STAND AGE CLASS

COVER TYPE	Not Coded	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150-159	All Aged	Total
Aspen		12	283		577	17												33	922
Bog or Marsh	20																		20
Grass	50																		50
Local Name	3																		3
LowInd Brush	10																		10
LowInd Poplr					103													20	123
Marsh	29																		29
Non Stocked	7																		7
Oak																		8	8
Red Pine					6			11											17
Swamp Hrdwds			102	24	82													285	493
Upland Hdwds																		32	32
Water	2																		2
White Pine						3													3
Total	121	12	385	24	768	20		11										378	1719

AUSABLE STATE FOREST

GLADWIN FOREST MGT UNIT

MIDLAND COUNTY

COMPARTMENT: 107

Table 3A

(acres shown in boxes)

MANAGEMENT OBJECTIVE TYPE

COVER TYPE	A	S	V	C	G	H	J	I	L	P	N	Q	X	O	B	R	K	Y	F	E	T	D	U	M	Z	W	Total
A Aspen	893						18												11								922
V Bog or Marsh			20																								20
G Grass					21										19										10		50
I Local Name					3																						3
L Lowlnd Brush									10																		10
P Lowlnd Poplr							17			106																	123
N Marsh											29																29
X Non Stocked													7														7
O Oak														8													8
R Red Pine															17												17
E Swamp Hrdwds							14												479								493
M Upland Hdwds																								32			32
Z Water																									2		2
W White Pine																										3	3
Total	893		20		24		49		10	106	29		7	8	36				490					32	2	13	1719

AUSABLE STATE FOREST

GLADWIN FOREST MGT UNIT

MIDLAND COUNTY

COMPARTMENT: **107**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	8466 Cds	Hardwood	1133 Cds
Hardwood	1304 Mbf	Hardwood	195 Mbf
Softwood	563 Cds	Softwood	72 Cds
Softwood	90 Mbf	Softwood	2 Mbf
Sum TotVol	11817 Cds	Sum CutVol	1599 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	184
1719			

GLADWIN FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 107 Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
20	R6	6	29	58	red pine	immature	thinning	1		
comnts Fmd : 3rd row thin. Very branchy. Roughly 50% LCR. GC pine needles.										
32	A5	58	37	65	aspen (upland)	immature	final harvest	1		
comnts Fmd : Upland site; early harvest to even age class dist. Harvest should increase stem density. Harvest dormant season to max. regen (NON-NEGOTIABLE- concerned about regen failure in comp). Leave all oak, and mark 1 to 2 ac of lower M type pockets for retention (with some upland aspen on edge). Adequate vol for sale but somewhat sparse (barely an A5)DO NOT CUT ANY OAK. Selected from among early harvest candidates b/c of best potential to increase stem density (combo if highest SI and lowest BA). Pipestone soil (drier). Heavy brack frn and wintergreen g cover. O1/M1 understory with some aspen. Haul wood E to Lewis Rd. Lower areas are not super wet- more M type.										
36	A5	28	37	58	aspen (upland)	immature	final harvest	1		
comnts Fmd : Early harvest to even aspen age class dist. Harvest dry/frozen- NON NEGOTIABLE. Concerned about aspen regen failure and decrease of aspen acreage in comp. Selected for early harvest because it is most at risk to not regenerate of candidate stands (worst combination of SI and BA). Former st 36 is narrow band of A3/V in SE corner of this st. Mark average of 1-2 white oak and red pine per acre with green for retention, plus all other representative spp. SI adjusted from old st 32, which this stand was broken out of.										
107	A1	18	34	50	jack pine	low quality		0	planting	
comnts Fmd : Very sparse, low qual/vigor aspen w/ shrub and vacc/moss GC. Broken out from old st 7. Completely dry currently (unusually dry summer). Interplant spruce or JP (in order of priority). Soil is pipestone: low available water capacity, high water table. Soil survey recommends WP planting.										
111	A8	16		60	aspen (upland)	mature	final harvest	1		
comnts Fmd : Final harvest, along w/ 2-3 ac of same timber @ N end of S11. Broken out of old S11 b/c upland A8 vs. wet E8. Also about 7 BA of B. Mark out 0.4 ac island with red paint for retention; pick area with all representative spp.										
112	E1	14	16	51	jack pine	sparse		0	direct seeding	
comnts Fmd : Direct seed with JP per pre-review. Broken off from st 12. Cover rushes/sedges, g, dgwd, willow. Small saps coming in: swo, rd map, asp. Barely an E. Really L/N w/ seedlings, but less than 100 per ac.										
128	G0	15			red pine	nonstocked		0	planting	
comnts Fmd : Part of old st 28 that didn't regen. Plant RP, WP or JP in order of priority. Scattered aspen clumps. GC bracken.										
218	P4	17	28	50	jack pine	sparse		0	planting	
comnts Fmd : Machine plant J pine or wp in E end of stand, going as far west as operable. Formerly in st 18. Much less dense and lower SI than 18. W end is much wetter w/ vac/lthrlf and nannyberry GC. E end has bracken and shallow v/moss depressions (5-10%), and higher SI.										
234	A8	17	47	55	aspen (upland)	mature	final harvest	1	natural regeneration	
comnts Fmd : In newly acquired 40 ac parcel. Old aspen w/ very sparse u.s. Fin harv, reserving all non-aspen. Age and SI are estimates. Mark 1/2 ac island with red paint for retention; pick area with pin oak and other representative spp, possibly at N end of stand.										
332	A5	59	37	61	aspen (upland)	two aged	final harvest	1	natural regeneration	
comnts Fmd : Final harvest early to create even aspen age class distribution. Mark out with red paint 1.5 ac of P/E in stand for retention. SI adjusted from old st 32; based on tree size/age.										
401	G0	17		58	grass	nonstocked		0	planting	
comnts Fmd : Plant Red pine. Cover is bracken frn, vacc, sweet fern, w/ shallow depressions w/ moss and willow (1-5%). Trace of red maple, aspen, pin oak and cherry coming in. Soil is pipestone 0-3% slopes, which has high seasonal water table, low moisture capacity, and is suited to WP according to soil survey.										
402	I0	3			grass	nonstocked		0	planting	
comnts Fmd : Heavy knapweed; dry site. Plant red pine for visual, diversity and to shade out and control knapweed. Sweet fern, forbs, willow, G, Pin ch, few aspen seedlgs also.										
403	G0	4			red pine	nonstocked		0	planting	
comnts Fmd : Plant w/ WP, JP or RP, in order of priority. Grnd cov swt fern, brack frn, vacc. R maple, Pin O, A, Ch coming in. Soils are Pipestone in E 1/2, Kingsville in W 1/2. These soils both have low water holding capacity and high water tables. Kingsville has severe seedling mortality concerns. Survey recommends WP for machine planting.										
404	G0	10			white pine	nonstocked		0	planting	
comnts Fmd : Plant with JP, WP or RP, in order of priority. Cover brack fern 70%, vac/leatherlf 15%, moss 5%, swt fern 5%, trees 5% (RM, BO, QA). Mostly high area w/ shallow depressions w/ blueb/ferns. 100% dry today (unseasonably dry). Soil Pipestone (80%), Kingsville (wetter) 20%.										

Total Acres..... 282

**Proposed Treatments
With Limiting Factors**

Compartment: 107

Entry Year: 2009

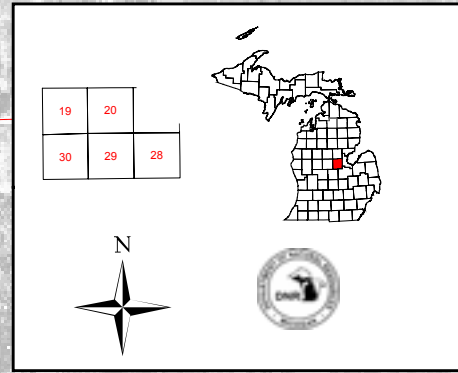
Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
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TREATMENT LIMITING FACTORS:

Total Acres..... **o**

Field Map

Compartment 107
 T15N, R02W, Sec. 19-20, 28-30
 County: Midland
 Unit: Gladwin
 YOE: 2009
 Acres: 1,719 GIS Calculated
 Stand Examiner: Mark Reichel
 Map Revised: 10/23/2007
 Map Phase: Pre-Review



Legend

- Miris Corners
- County Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- Pipelines
- Trails
- Stand Boundary
- 016 - Planting
- 033 - Direct Seeding/Ground Application
- 100 - Final Harvest
- 148 - Final Harvest/Natural Regeneration/Other
- 400 - Thinning

