

Gladwin Forest Management Unit Compartment Review Presentation

Compartment #120 Entry Year: 2013 Compartment Acreage: 2,300 County: Isabella

Revision Date: October 26, 2011

Stand Examiner: Richard A. Myrick

Legal Description: T15N-R03W, Sections 24 thru 27, and 34 thru 36

Identified Planning Goals: None.

Management Goals: Managing for timber, wildlife habitat and recreation comprise the general management

goals

Soil and Topography: This Compartment is comprised of the Pipestone-Kingsville soil association of nearly level, somewhat poorly drained and poorly drained sandy soils; typical of glacial deltas, till plains, outwash plains, and beach ridges.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This is the only Compartment of State forest land within Isabella County and as such receives much use. The Compartment is somewhat fragmented and surrounded by numerous parcels of private residential, hunting and agricultural land.

Unique, Natural Features: None listed in the Archeological & MNFI database.

Archeological, Historical, and Cultural Features: None listed in the Archeological & MNFI database.

Special Management Designations or Considerations: None.

Watershed and Fisheries Considerations: There are no recreational fishing opportunities within the Compartment.

Wildlife Habitat Considerations: Compartment 120 provides habitat for many game and non-game species. This area will continue to benefit wildlife from species diversity within stands. No net loss of aspen acres is desired within the compartment due to the food and cover resource provided to numerous wildlife species. Oak species should be encouraged and not be entirely removed from any one stand. Grassy openings are an important aspect of wildlife habitat and should be maintained as non-forested stands. The Salt River and the numerous drains throughout the area; as well as the variety of early succession stands adjacent to the lowlands provide wildlife benefit. This is also a popular hunting area due to its proximity to the US127 and M-20 corridor.

Mineral Resource and Development Concerns and/or Restrictions: Within this Compartment surface sediments consist of Lacustrine (lake) sand and gravel. 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 nearest gravel pits are located one mile to the south. This area offsets the Mt. Pleasant Field, discovered in 1928. It has

produced more than 29 Million BO and nearly 8 Bcf gas from the Dundee. The Compartment is leased for both oil and gas and potash development.

Vehicle Access: The Compartment can be accessed by vehicle through Loomis, Wise, and Chippewa Roads.

Survey Needs: A number of isolated State owned 40 acre parcels within the Compartment require surveys.

Recreational Facilities and Opportunities: The Compartment is used heavily for off-road vehicle recreation and large and small game hunting.

Fire Protection: Fire suppression vehicles will be able to access much of the Compartment, however, there are interior areas that may prove difficult to reach.

Additional Compartment Information: None.

- ➤ The following reports from the Inventory are attached:
 - **♦** Total Acres by Cover Type and Age Class
 - **♦** Proposed Treatment Summary
 - **♦** Proposed Treatments No Limiting Factors
 - **♦** Proposed Treatments With Limiting Factors
 - **♦ Stand Details (Forested and Nonforested)**
 - **♦** Dedicated and Proposed Special Conservation Areas
- > The following information is displayed, where pertinent, on the attached compartment maps:
 - ♦ Base feature information, stand boundaries, cover types, and numbers
 - **♦** Proposed treatments
 - ♦ Details on the road access system

Gladwin Mgt. Unit
Richard Myrick : Examiner



Age Class

Age class																	
	Hoc	Do Jago	0°2/	02.00	, p	No. No.	LO.AS	18 / S	8.0	10.1° / "	\$ 6.	8.00	00'.00'	SZ. ZZ	20 [*] /30	AS /	, \$ ²
Aspen	0	245	351	287	0	29	27	46	0	40	0	0	0	0	0	1025	
Lowland Aspen/Balsam Poplar	0	46	60	89	0	0	0	0	0	0	0	0	0	0	0	195	
Lowland Deciduous	0	0	50	70	7	0	55	43	8	63	0	0	0	0	0	295	
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	20	45	0	0	0	0	65	
Lowland Shrub	167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	167	
Marsh	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	
Mixed Upland Deciduous	0	0	34	67	108	0	0	0	0	0	0	0	0	0	0	210	
Northern Hardwood	0	12	37	0	163	14	0	0	0	43	0	0	0	0	0	269	
Water	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	l
Total	242	303	532	514	279	42	82	89	8	166	45	0	0	0	0	2301	1



Table 2 – Proposed Treatment Summaries

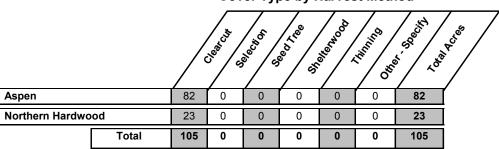
Gladwin Mgt. Unit Compartment 120 Year of Entry 2013 **Total Compartment Acres: 2301**

Acres by Treatment Type

Commercial Harvest - 105 Site Prep - 0 Tree Planting - 0 Prescribed Burn - 0 Other - 0

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

Cover Type by Harvest Method



Gladwin Mgt. Unit

Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 120
Year of Entry 2013

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t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
71	73120071CCR -Cut	23.2	4116 - Mixed N. Hardwood - Aspen	High Density Log	82	Harvest	Clearcut with Reserves	4116 - Mixed N. Hardwood - Aspen	Cmpt. Review Proposal

<u>Prescription</u> Remove all species 2" or greater.

Specs:

s

Other Leave 3 - 4% retention of a mix of representative species in a few patches scattered throughout the stand. Favor the retention of under-

<u>Comments:</u> represented paper birch and larger DBH white oak mast and legacy trees.

MO is the regeneration of mixed northern hardwoods and aspen.

Next Steps:

Total Treatment

Acreage Proposed: 23.2

Gladwin Mgt. Unit Table 4 -- Treatments Prescribed with Compartment: 120 a Limiting Factor s Year of Entry 2013 t а **Treatment** Acres Size Stand **Treatment Treatment** Cover Type **Approval** n Stage1 Method Status Name **Density** Objective CoverType d Age Type 3 73120003CCR 27.3 4139 - Aspen, High Density Pole 52 Harvest Clearcut with 4139 - Aspen, Mixed Cmpt. Review -Cut Mixed Deciduous Reserves Deciduous Proposal Prescription Remove all species 2" or greater. Specs: Other Leave 3 - 4% retention of aspen species and under-represented paper birch in a few scattered patches, ideally along the stand edge when practicable. Prefer live cavity trees where possible. Comment: MO is the regeneration of aspen and mixed deciduous species and an increase in the aspen component. <u>Next</u> Steps: Limiting Factor and No 2H: Survey needed **Treatment Reason** Determined at pre-review 73120011CCR 23.3 4139 - Aspen, High Density Log 87 Harvest Clearcut with 4139 - Aspen, Mixed Cmpt. Review Mixed Deciduous -Cut Reserves Deciduous Proposal Prescription Remove all species 2" or greater. Harvest during the dormant period in order to maximize aspen regeneration and under dry and/or frozen Specs: conditions to protect soil. Leave 3 - 4% retention of a mix of aspen, maple and oak species within a few pockets throughout the stand. Favor white oak legacy trees and **Other** log size live aspen cavity trees when possible. Comment: MO is the regeneration of aspen and mixed deciduous species. <u>Next</u> Steps: Limiting Factor and No 2H: Survey needed **Treatment Reason** 73120015CCR 17.1 4139 - Aspen, High Density Log Harvest Clearcut with 4139 - Aspen, Mixed Cmpt. Review Mixed Deciduous -Cut Reserves Deciduous Proposal Prescription Remove all species 2" or greater. Harvest during the dormant period to maximize aspen regeneration and during dry and/or frozen conditions to Specs: **Other** Leave 3 - 4% retention of a mix of larger DBH white oak mast trees and under-represented white pine. Comment: MO is the regeneration aspen and a mix of conifer and deciduous species. <u>Next</u> Steps: Limiting Factor and No 2H: Survey needed **Treatment Reason** 73120021CCR 14.4 21 4130 - Aspen High Density Pole Harvest Clearcut with 4131 - Aspen, Oak Cmpt. Review -Cut Reserves Proposal

Prescription Remove all species 2" or greater. Harvest during the dormant period to maximize aspen regeneration. Specs:

Leave all white oak and two to three larger DBH white pine as legacy trees.

Other MO is the regeneration of aspen and white oak.

Comment:

Steps: 2H: Survey needed

Limiting Factor and No **Treatment Reason**

Next

Total Treatment Acreage Proposed: 82.0

Out of YOE -- Treatments **Prescribed with No Limiting Factor**

Year of Entry: 2013

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:

Total Treatment Acreage Proposed:

<u>Next</u> Steps:

0

s t	Gladwin Mgt. Unit			5 – Fo	orested Stands	Compartment: 120 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6119 - Mixed Lowland Deciduous Forest	High Density Pole	8.0	74	51-80	
2	4130 - Aspen	High Density Sapling	29.5	5		
3	4139 - Aspen, Mixed Deciduous	High Density Pole	27.3	52	81-110	Matrix of uplands with lowland swales.
6	4131 - Aspen, Oak	High Density Sapling	8.8	6		
7	4131 - Aspen, Oak	High Density Pole	31.4	67	51-80	
8	6119 - Mixed Lowland Deciduous Forest	High Density Pole	28.5	52	81-110	Very wet.
10	6113 - Lowland Maple	High Density Sapling	4.3	11	51-80	Very wet.
11	4139 - Aspen, Mixed Deciduous	High Density Log	23.3	87	81-110	
12	4130 - Aspen	Medium Density	14.3	15		
13	4199 - Other Mixed Upland Deciduous	High Density Sapling	7.2	15		
14	6119 - Mixed Lowland Deciduous Forest	High Density Pole	30.4	25		
15	4139 - Aspen, Mixed Deciduous	High Density Log	17.1	87	51-80	
16	4199 - Other Mixed Upland Deciduous	High Density Sapling	26.9	15	1-50	
17	6112 - Lowland Aspen	Medium Density	6.2	15		Very wet.
18	4130 - Aspen	High Density Sapling	45.9	15		Excellent regeneration.
19	6119 - Mixed Lowland Deciduous Forest	High Density Pole	10.4	68	111-140	Very wet.
20	4130 - Aspen	High Density Pole	28.6	40	51-80	
21	4130 - Aspen	High Density Pole	14.4	68	81-110	

S t	Gladwin Mgt. Unit			5 – FC	orested Stands	Compartment: 120 Year of Entry: 2013		
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	ngan .	
23	4139 - Aspen, Mixed Deciduous	High Density Sapling	15.7	15				
24	6115 - Lowland Ash	High Density Pole	7.1	30				
25	6112 - Lowland Aspen	Medium Density	2.4	5			_	
26	6113 - Lowland Maple	High Density Pole	24.3	67	111-140	Very wet.		
27	4130 - Aspen	High Density Sapling	44.0	15				
30	6139 - Mixed Lowland Forest	High Density Log	20.2	87				
32	6119 - Mixed Lowland Deciduous Forest	High Density Log	21.0	82				
33	4131 - Aspen, Oak	High Density Sapling	34.4	6				
34	4130 - Aspen	High Density Sapling	34.7	14			_	
35	6119 - Mixed Lowland Deciduous Forest	High Density Sapling	41.6	15		New stand added.		
36	6112 - Lowland Aspen	High Density Sapling	34.8	15		Matrix of lowland with upland ridges.		
37	6112 - Lowland Aspen	High Density Pole	44.2	25		Martix of lowland with upland hummucks.		
39	4130 - Aspen	High Density Sapling	98.9	5				
40	4119 - Mixed Northern Hardwoods	High Density Pole	88.2	31				
41	4130 - Aspen	Low Density Sapling	18.6	6				
43	4130 - Aspen	Medium Density	13.9	14				
44	4130 - Aspen	High Density Sapling	55.7	25				
45	6113 - Lowland Maple	High Density Sapling	39.8	25				

Gladwin		5 – Fo	orested Stan	ds Compartment: 120 Year of Entry: 2013	
Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
6115 - Lowland Ash	Low Density Log	41.6	80	1-50	
4119 - Mixed Northern Hardwoods	High Density Sapling	12.0	6		
4131 - Aspen, Oak	High Density Sapling	37.2	15		
4130 - Aspen	Low Density Sapling	9.7	6		
4112 - Maple, Beech, Cherry Association	High Density Pole	13.7	40	51-80	
6112 - Lowland Aspen	High Density Sapling	9.0	13		Matrix of lowland with upland ridges.
4199 - Other Mixed Upland Deciduous	High Density Pole	68.8	36	1-50	
4130 - Aspen	High Density Pole	29.6	25		
4130 - Aspen	Medium Density	20.4	13		
4199 - Other Mixed Upland Deciduous	High Density Pole	30.1	25		
6112 - Lowland Aspen	High Density Sapling	43.4	5		Clear cut 5 years ago leaving a minor component of pole sized black oak.
4119 - Mixed Northern Hardwoods	Medium Density	36.7	15		New stand added.
6112 - Lowland Aspen	Low Density Sapling	10.3	13		
4130 - Aspen	High Density Pole	45.5	25		Matrix of upland ridges and lowland swales.
6113 - Lowland Maple	High Density Log	8.6	60	51-80	
4130 - Aspen	Medium Density	13.2	6		Clear cut in 2005.
4130 - Aspen	High Density Sapling	19.4	25		
4130 - Aspen	High Density Pole	15.9	25		
	Level 4 Cover Type 6115 - Lowland Ash 4119 - Mixed Northern Hardwoods 4131 - Aspen, Oak 4130 - Aspen 4112 - Maple, Beech, Cherry Association 6112 - Lowland Aspen 4199 - Other Mixed Upland Deciduous 4130 - Aspen 4199 - Other Mixed Upland Deciduous 6112 - Lowland Aspen 4190 - Other Mixed Upland Deciduous 6112 - Lowland Aspen 4110 - Mixed Northern Hardwoods 6112 - Lowland Aspen 4130 - Aspen 4130 - Aspen	Cover TypeDensity6115 - Lowland AshLow Density Log4119 - Mixed Northern HardwoodsHigh Density Sapling4131 - Aspen, OakHigh Density Sapling4130 - AspenLow Density Sapling4112 - Maple, Beech, Cherry AssociationHigh Density Pole6112 - Lowland AspenHigh Density Sapling4199 - Other Mixed Upland DeciduousHigh Density Pole4130 - AspenMedium Density4199 - Other Mixed Upland DeciduousHigh Density Pole6112 - Lowland AspenHigh Density Pole6112 - Lowland AspenHigh Density Sapling4119 - Mixed Northern HardwoodsMedium Density6112 - Lowland AspenLow Density Sapling4130 - AspenHigh Density Log4130 - AspenMedium Density4130 - AspenMedium Density4130 - AspenHigh Density Sapling4130 - AspenHigh Density Sapling	Level 4 Cover TypeSize DensityAcres6115 - Lowland AshLow Density Log41.64119 - Mixed Northern HardwoodsHigh Density Sapling12.04131 - Aspen, OakHigh Density Sapling37.24130 - AspenLow Density Sapling9.74112 - Maple, Beech, Cherry AssociationHigh Density Pole13.76112 - Lowland AspenHigh Density Sapling9.04199 - Other Mixed Upland DeciduousHigh Density Pole68.84130 - AspenMedium Density29.64199 - Other Mixed Upland DeciduousHigh Density Pole30.14199 - Other Mixed 	Level 4 Cover Type Size Density Acres Stand Age 6115 - Lowland Ash Low Density Log 41.6 80 4119 - Mixed Northern Hardwoods High Density Sapling 12.0 6 4131 - Aspen, Oak High Density Sapling 37.2 15 4130 - Aspen Low Density Sapling 9.7 6 4112 - Maple, Beech, Cherry Association High Density Pole 13.7 40 6112 - Lowland Aspen High Density Sapling 9.0 13 4199 - Other Mixed Upland Deciduous High Density Pole 29.6 25 4130 - Aspen Medium Density Pole 30.1 25 4199 - Other Mixed Upland Deciduous High Density Pole 30.1 25 6112 - Lowland Aspen High Density Sapling 43.4 5 6112 - Lowland Aspen Low Density Sapling 10.3 13 4119 - Mixed Northern Hardwoods Medium Density Sapling 10.3 13 6112 - Lowland Aspen Low Density Log 45.5 25 6113 - Lowland Maple High Density Log 8.6	Level 4 Cover Type Size Density Acres Stand Age BA Range 6115 - Lowland Ash Low Density Log 41.6 80 1-50 4119 - Mixed Northern Hardwoods High Density Sapling 12.0 6 4131 - Aspen, Oak High Density Sapling 37.2 15 4130 - Aspen Low Density Sapling 9.7 6 4112 - Maple, Beech, Cherry Association High Density Pole 13.7 40 51-80 6112 - Lowland Aspen High Density Sapling 9.0 13 13 4199 - Other Mixed Upland Deciduous High Density Pole 68.8 36 1-50 4130 - Aspen Medium Density 29.6 25 4199 - Other Mixed Upland Deciduous High Density Pole 30.1 25 6112 - Lowland Aspen High Density Sapling 43.4 5 4119 - Mixed Northern Hardwoods Medium Density 10.3 13 4119 - Mixed Northern Hardwoods Low Density Sapling 45.5 25 6112 - Lowland Aspen High Density Pole 45.5 25 <tr< td=""></tr<>

s t	Gladwi		5 – Fo	orested Stands	Compartment: 120 Year of Entry: 2013	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
70	4130 - Aspen	High Density Sapling	70.8	14		
71	4116 - Mixed N. Hardwood - Aspen	High Density Log	43.3	82	81-110	Mature aspen showing signs of decadence.
74	4119 - Mixed Northern Hardwoods	High Density Sapling	75.0	33		
76	4130 - Aspen	Medium Density	14.2	6		
78	6112 - Lowland Aspen	High Density Pole	15.9	25		
79	6112 - Lowland Aspen	High Density Pole	28.9	25		Generally lowland.
80	4199 - Other Mixed Upland Deciduous	High Density Sapling	37.2	25		
81	4130 - Aspen	High Density Sapling	37.0	14		
82	4130 - Aspen	Medium Density	17.4	6		
83	4199 - Other Mixed Upland Deciduous	High Density Sapling	39.6	33		
84	4130 - Aspen	High Density Sapling	30.2	25		
86	6119 - Mixed Lowland Deciduous Forest	High Density Pole	26.1	50	51-80	
87	4130 - Aspen	High Density Pole	24.3	25		
88	4139 - Aspen, Mixed Deciduous	High Density Sapling	26.2	25		
89	6119 - Mixed Lowland Deciduous Forest	Medium Density	3.6	10		
90	4131 - Aspen, Oak	High Density Sapling	17.5	13		
92	4130 - Aspen	High Density Sapling	40.3	25		
93	6139 - Mixed Lowland Forest	High Density Log	44.6	90		

6 - Nonforested Stands

Compartment: 120 Year of Entry: 2013



20 - Alder/willow				
	15.0	No	Low (NonForested)	
- Water	5.7	No	Low (NonForested)	Open water. Large beaver lodge in north. Impounded by a beaver dam.
20 - Alder/willow	1.9	No	Low (NonForested)	Riparian Zone. Narrow creek running through Stand.
39 - Mixed Emergent Wetland	57.1	No	Unspecified	
23 - Inundated Shrub Swamp	8.6	No	Unspecified	
20 - Alder/willow	6.4	No	Unspecified	
20 - Alder/willow	2.0	No	Unspecified	
20 - Alder/willow	23.4	No	Unspecified	
20 - Alder/willow	8.7	No	Unspecified	
20 - Alder/willow	7.3	No	Unspecified	
20 - Alder/willow	18.8	No	Low (NonForested)	
20 - Alder/willow	11.7	No	Unspecified	
20 - Alder/willow	5.6	No	Unspecified	
20 - Alder/willow	1.8	No	Unspecified	
39 - Mixed Emergent Wetland	11.3	No	Low (NonForested)	
20 - Alder/willow	3.1	No	Unspecified	
20 - Alder/willow	4.0	No	Unspecified	
20 - Alder/willow	5.0	No	Unspecified	
	20 - Alder/willow 23 - Mixed Emergent Wetland 23 - Inundated Shrub Swamp 20 - Alder/willow 20 - Alder/willow	20 - Alder/willow 1.9 39 - Mixed Emergent Wetland 57.1 23 - Inundated Shrub Swamp 8.6 20 - Alder/willow 20 - Alder/willow 20 - Alder/willow 7.3 20 - Alder/willow 18.8 20 - Alder/willow 11.7 20 - Alder/willow 5.6 20 - Alder/willow 11.7 20 - Alder/willow 11.7 20 - Alder/willow 1.8 39 - Mixed Emergent Wetland 11.3 20 - Alder/willow 3.1	20 - Alder/willow 1.9 No 39 - Mixed Emergent Wetland 57.1 No 23 - Inundated Shrub Swamp 8.6 No 20 - Alder/willow 20 - Alder/willow 20 - Alder/willow 20 - Alder/willow 3.4 No 20 - Alder/willow 7.3 No 20 - Alder/willow 18.8 No 20 - Alder/willow 11.7 No 20 - Alder/willow 5.6 No 20 - Alder/willow 1.8 No 39 - Mixed Emergent Wetland 11.3 No 20 - Alder/willow 3.1 No 20 - Alder/willow 3.1 No	20 - Alder/willow 1.9 No Low (NonForested) 39 - Mixed Emergent Wetland 57.1 No Unspecified 23 - Inundated Shrub Swamp 8.6 No Unspecified 20 - Alder/willow 20 - Alder/willow 20 - Alder/willow 21.0 No Unspecified 20 - Alder/willow 21.1 No Unspecified 20 - Alder/willow 21.1 No Unspecified 20 - Alder/willow 21.2 No Unspecified 21.3 No Unspecified 22.4 No Unspecified 23.4 No Unspecified 24.5 No Unspecified 25.6 No Unspecified 26.7 Alder/willow 27.8 No Unspecified 28.8 No Low (NonForested) 29.7 Alder/willow 39.7 No Unspecified

6 - Nonforested Stands

Compartment: 120 Year of Entry: 2013



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
77	6220 - Alder/willow	17.1	No	Unspecified	
85	6220 - Alder/willow	10.3	No	Unspecified	
91	6220 - Alder/willow	16.7	No	Unspecified	

Gladwin Mgt. Unit

Compartment: 120 Year of Entry: 2013



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

Gladwin Mgt. Unit

Compartment: 120 Year of Entry 2013



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

