

Gladwin Forest Management Unit Compartment Review Presentation Compartment #36 Entry Year: 2011 Compartment Acreage: 796 County: Gladwin

Revision Date: June 2011

Stand Examiner: Steven Nyhoff

Legal Description: T20N, R01W, Section 36 T19N, R01W, Sections 1 & 12

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

**Management Goals:** The compartment is heavy to lowland types, mainly swamp hardwoods. There is a significant component of aspen and pine. The aspen type is made up of both upland and lowland types. The conifer component is heavy to white pine. However, there are red and jack pine in the compartment.

Continue to manage for the current cover types where possible; look for opportunities to increase the aspen component. Also, when harvesting the conifer seek to improve the quality of the trees by harvesting trees with poor form.

**Soil and Topography:** The terrain is generally level with extensive micro relief. This is true except along the Sugar River, which has a flood plain bordered by steep slopes.

The main soil type is AuGres. This soil makes up about 2/3 of the compartment. It is somewhat poorly drain with extensive cradle knoll topography. The other main soil type is Croswell. This soil makes up the slight ridges and knolls that are scattered throughout the compartment. It is more common in the northern portion of the compartment. Other soil types in the compartment are; very poorly drain Ceresco in the flood plain of the Sugar River; Poorly to very poorly drained Roscommon, Epoufette, and Brevort; and somewhat poorly drained Iosco, and Gladwin.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** The State Land is in one contiguous block but it is surrounded by many small ownerships. The ownerships range in size from small tracks (< 5 acres) to larger track (> 80 acres). Most of these have permanent residences on them.

**Unique, Natural Features:** There are no known records in the compartment. No new occurrences were located during the inventory process.

There are records of elktoe, slippershell, and ellipse mussels in the Sugar River outside of the compartment. There are also records of a heron rookery to the east, bald eagle to the southwest, and blanding and wood turtles to the north of the compartment.

**Archeological, Historical, and Cultural Features**: There are no known records in the compartment. No new occurrences were located during the inventory process.

**Special Management Designations or Considerations:** There are no special designations at the current time.

**Watershed and Fisheries Considerations:** The Sugar River flows through the southern portion of the compartment. This is a warm water fishery with a gravel bottom in many areas.

**Wildlife Habitat Considerations:** The compartment contains a variety of vegetative types resulting from both upland and lowland systems being present, making it suitable for a number of wildlife species. Game species likely to be present in this compartment include black bear, bobcat, raccoon, coyote, wild turkey, ruffed grouse, snowshoe hare, and white-tailed deer. Many bird species stand to benefit from the juxtaposition of lowland and upland habitats present in the compartment. These include common yellowthroat, yellow-rumped warbler, gray catbird, redeyed vireo, white-throated sparrow, hermit thrush, red-breasted nuthatch, ruffed grouse, and American woodcock. The compartment is easily accessible to hunters via M-30, Wirtz Road and Fitzwater Road.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of Lacustrine (lake) clay and silt. The glacial drift thickness varies between 100 and 400 feet. Beneath the glacial drift are 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. There have been seven wells drilled in the compartment, four on State land. This area is located six miles north of Buckeye North Field. Discovered in 1936, it has produced more than 20 Million BO from the Dundee and is in secondary recovery operations. All of the state lands are leased for oil and gas development in the compartment.

**Vehicle Access:** The compartment has county roads on the east and west sides. In addition, along M-30 several parking areas have been established to provide access to the compartment. Overall the access is good.

**Survey Needs:** The compartment has very little in the way of good survey corners. There are also many areas that appear to have trespass issues. These cannot be easily identified because of the lack of survey corners. There are some survey corners in M-30. However, it is not clear if they are for Range 1W or 1E. There are also some corners established on Wirtz and Ritchie Roads. Most are not close enough to be useable to resolve the trespass issues, therefore the compartment boundary needs resurveyed and established.

**Recreational Facilities and Opportunities:** There are no established recreational facilities in the compartment. It is heavily use by hunters.

Fire Protection: The soils are wet, for the most part, so fire danger is low to moderate.

Additional Compartment Information: The northern parking area along M-30 is being used to dump yard waste. Many of the other areas are being used but not to the same extent. There is also a dug trench that may be on state land in stands 22 and 26. The trench is being used to dump household garbage. Also the two-track off Wirtz Road has several areas where garbage and yard waste are being dumped.

# Table 1 – Total Acres by Cover Type and Age Class

Gladwin Mgt. Unit

### Steven Nyhoff : Examiner





|                             | Age Class |                 |     |                  |                   |  |                   |                   |          |       |                   |   |         |         |          |   |                 |
|-----------------------------|-----------|-----------------|-----|------------------|-------------------|--|-------------------|-------------------|----------|-------|-------------------|---|---------|---------|----------|---|-----------------|
|                             | Hor       | n for the steed | 6.7 | 6 <sup>7,0</sup> | 10 <sup>-21</sup> | 60-100-100-100-100-100-100-100-100-100-1 | 40 <sup>-12</sup> | 19.<br>19.<br>19. | 00<br>00 | R. R. | 89.<br>89.<br>89. |   | 601.001 | 170,779 | 200× 200 | AND | , <sup>50</sup> |
| Aspen                       | 0         | 0               | 52  | 9                | 62                | 0  | 0                 | 0                 | 0        | 0     | 0                 | 0 | 0       | 0       | 0        | 123                                     |                 |
| Herbaceous Openland         | 10        | 0               | 0   | 0                | 0                 | 0  | 0                 | 0                 | 0        | 0     | 0                 | 0 | 0       | 0       | 0        | 10                                      |                 |
| Low-Density Trees           | 2         | 0               | 0   | 0                | 0                 | 0  | 0                 | 0                 | 0        | 0     | 0                 | 0 | 0       | 0       | 0        | 2                                       |                 |
| Lowland Aspen/Balsam Poplar | 0         | 0               | 8   | 7                | 29                | 0  | 0                 | 0                 | 13       | 0     | 0                 | 0 | 0       | 0       | 0        | 58                                      |                 |
| Lowland Conifers            | 0         | 0               | 0   | 0                | 0                 | 0  | 0                 | 0                 | 0        | 0     | 0                 | 0 | 0       | 0       | 8        | 8                                       | 1               |
| Lowland Deciduous           | 0         | 0               | 0   | 0                | 26                | 0  | 0                 | 0                 | 29       | 0     | 0                 | 0 | 0       | 0       | 226      | 280                                     | 1               |
| Lowland Mixed Forest        | 0         | 0               | 0   | 0                | 0                 | 0  | 0                 | 0                 | 5        | 0     | 0                 | 0 | 0       | 0       | 0        | 5                                       | 1               |
| Lowland Shrub               | 81        | 0               | 0   | 0                | 0                 | 0  | 0                 | 0                 | 0        | 0     | 0                 | 0 | 0       | 0       | 0        | 81                                      |                 |
| Marsh                       | 1         | 0               | 0   | 0                | 0                 | 0  | 0                 | 0                 | 0        | 0     | 0                 | 0 | 0       | 0       | 0        | 1                                       |                 |
| Mixed Upland Deciduous      | 0         | 0               | 0   | 0                | 18                | 0  | 9                 | 9                 | 0        | 0     | 0                 | 0 | 0       | 0       | 0        | 36                                      |                 |
| Natural Mixed Pines         | 0         | 0               | 0   | 0                | 7                 | 0  | 0                 | 45                | 0        | 0     | 0                 | 0 | 0       | 0       | 0        | 52                                      |                 |
| Red Pine                    | 0         | 0               | 0   | 0                | 0                 | 0  | 0                 | 9                 | 0        | 0     | 0                 | 0 | 0       | 0       | 0        | 9                                       |                 |
| Upland Mixed Forest         | 0         | 0               | 0   | 0                | 41                | 0  | 0                 | 0                 | 0        | 0     | 0                 | 0 | 0       | 0       | 0        | 41                                      |                 |
| Upland Shrub                | 2         | 0               | 0   | 0                | 0                 | 0  | 0                 | 0                 | 0        | 0     | 0                 | 0 | 0       | 0       | 0        | 2                                       |                 |
| Urban                       | 1         | 0               | 0   | 0                | 0                 | 0  | 0                 | 0                 | 0        | 0     | 0                 | 0 | 0       | 0       | 0        | 1                                       |                 |
| White Pine                  | 0         | 0               | 0   | 0                | 0                 | 0  | 0                 | 80                | 9        | 0     | 0                 | 0 | 0       | 0       | 0        | 89                                      |                 |
| Total                       | 97        | 0               | 60  | 16               | 183               | 0  | 9                 | 142               | 56       | 0     | 0                 | 0 | 0       | 0       | 233      | 796                                     |                 |



# Table 2 – Proposed Treatment Summaries

| MICHIGAN | Gladwin Mgt. Unit<br>Year of Entry 2013 |                 |            |              |          |            |            |         |       |                 | Compartment<br>Total Compartment Acres: | 036<br>796.2 |
|----------|---|-----------------|------------|--------------|----------|------------|------------|---------|-------|-----------------|---|--------------|
|          |   |                 |            | Acre         | s by T   | reatm      | ent Ty     | ре      |       |                 |   |              |
|          | Commercial Harvest - 109                | Site Prep - 0   |            | Т            | ree P    | lanting    | - 0        |         | Pres  | cribed Burn - 0 | Other - 0                               |              |
|          | Habitat Cut - 22                        | Opening Mainte  | enance - ( | ) Т          | ree S    | eeding     | - 0        |         | Pesti | cide - 0        |   |              |
|          |   |                 |            | Cov          | ver Tyj  | pe by H    | larves     | st Meth | od    |                 |   |              |
|          |   |                 |            | Selection of | Clock di | 000/1/0000 | Sternood 2 | in Ore  |       | A CONTRACTOR    |   |              |
|          | Lowland                                 | l Deciduous     | 0          | 15           | 0        | 0          | 0          | 0       | 15    |                 |   |              |
|          | Mixed U                                 | pland Deciduous | 18         | 9            | 0        | 0          | 0          | 0       | 28    |                 |   |              |
|          | Natural                                 | Mixed Pines     | 0          | 15           | 0        | 0          | 0          | 0       | 15    |                 |   |              |
|          | Red Pine                                | 9               | 0          | 3            | 0        | 0          | 0          | 0       | 3     |                 |   |              |
|          | White Pi                                | ine             | 28         | 42           | 0        | 0          | 0          | 0       | 70    |                 |   |              |
|          |   | Total           | 47         | 85           | 0        | 0          | 0          | 0       | 131   |                 |   |              |

Gladwin Mgt. Unit

# Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 036 Year of Entry 2013 ATOF NATURAL PLAN

| S<br>t                       |  |  |  | wit  | th No I                              | Limiting Fac   | tor   | Year of Entry 2013  | DNR DNR BUNCE                                  |
|------------------------------|--|--|--|--|--------------------------------------|--|---|---|--|
| a<br>n<br>d                  | Treatment<br>Name  | Acres  | Stage1<br>CoverType  | Size<br>Density  | Stand<br>Age                         | Treatment<br>Type  | Treatment<br>Method   | Cover Type<br>Objective   | Approval<br>Status                             |
| 2                            | 73036002-Cut   | 3.3  | 42210 - Natural<br>Red Pine  | High Density Log   | 68                                   | Harvest  | Single Tree Selection   | 42210 - Natural Red<br>Pine   | Cmpt. Review<br>Proposal                       |
| Presc<br>Specs               | ription Mark the<br><u>s:</u>                                      | e stand a<br>. Do not                          | is a selection down to<br>eliminate all the larg   | around 90 BA. The<br>er pine, leave some   | e stand :<br>for lega                | should be marke<br>cy and structura                      | ed favoring the retention on a line of the section | of red pine with good fo  | rm that are <                                  |
| <u>Other</u><br>Comn         | -<br>nents:  |  |  |  |                                      |  |   |   |  |
| <u>Next</u><br>Steps         | <u>:</u>   |  |  |  |                                      |  |   |   |  |
| 3                            | 73036003-Cut   | 9.3  | 42200 - Natural<br>White Pine  | High Density Log   | 62                                   | Harvest  | Single Tree Selection   | 42200 - Natural<br>White Pine   | Cmpt. Review<br>Proposal                       |
| Presc<br>Specs               | ription Mark the<br><u>s:</u> that are -<br>stand.                 | stand a:<br>< 18" DB                           | s a selection down to<br>H. Do not eliminate   | around 90 BA. The all the larger pine, le  | e stand s<br>ave son                 | should be marke<br>ne for legacy an                      | d favoring the retention o<br>d structural diversity. In a  | f white and red pine wit<br>ddition, remove all the                         | th good form<br>aspen from the                 |
| <u>Other</u><br>Comn         | Access t <u>nents:</u> east. Th                                    | o the sta<br>erefore,                          | nd will be from stand<br>rutting could be a pro  | 2 and it will be trick blem, so restrict ha  | y. The a<br>rvesting                 | ccess will have to dry or frozen                         | to cross a wetter area. Ir conditions.  | n addition, the stand ge  | ts wetter going                                |
| <u>Next</u><br>Steps         | <u>:</u>   |  |  |  |                                      |  |   |   |  |
| 22                           | 73036022-Cut   | 15.2   | 42260 - Natural<br>Pine, Mixed<br>Deciduous  | High Density Pole  | 63                                   | Harvest  | Single Tree Selection   | 42290 - Natural<br>Mixed Pine   | Cmpt. Review<br>Proposal                       |
| Presc<br>Specs               | ription Mark the<br><u>s:</u> that are -<br>stand.                 | stand as<br>< 18" DB                           | s a selection down to<br>H. Do not eliminate   | around 90 BA. The all the larger pine, le  | e stand s<br>eave son                | hould be marke<br>ne for legacy an                       | d favoring the retention o<br>d structural diversity. In a  | f white and red pine wi<br>ddition, remove all the                          | th good form<br>aspen from the                 |
| <u>Other</u><br>Comn<br>Next | nents:   |  |  |  |                                      |  |   |   |  |
| <u>Steps</u>                 | <u>:</u>   |  |  |  |                                      |  |   |   |  |
| 23                           | 73036023-Cut   | 15.1   | 6113 - Lowland<br>Maple  | High Density Pole  | 64                                   | Harvest  | Single Tree Selection   | 6113 - Lowland<br>Maple   | Cmpt. Review<br>Proposal                       |
| Presc<br>Specs               | ription The stan<br><u>s:</u> retaining<br>have to to<br>the large | d is to be<br>around so<br>detern<br>r pines s | e harvested by select<br>50 BA. The eastern<br>nined at time of timbe<br>hould be retained for | ion. The selection v<br>portion should be ha<br>er sale set up and wi<br>legacy trees. | vill be va<br>irvested<br>ill probal | ariable. In the w<br>like a selection<br>bly be gradual. | estern portion of the stan<br>retaining around 80 BA.<br>The marking should not e   | d it should be more of<br>The transition between<br>eliminate any one speci | a shelterwood<br>these two will<br>es. Some of |
| <u>Other</u><br>Comn         | _ The stan   | d is a mi                                      | ixture of dry and wet  | ground. The harves   | t should                             | be restricted to   | dry or frozen conditions.   |   |  |
| <u>Next</u><br>Steps         | The stan<br>the next   | d is expe<br>inventory                         | ected to regenerate to<br>y cycle or 6 years, wh   | a mixture of aspen<br>ich ever is sooner.  | and ma                               | ple with some c  | onifer component. The re  | egeneration should be   | checked during                                 |
| 25                           | 73036025-Cut   | 9.3  | 4191 - Mixed<br>Upland Deciduous<br>with Conifer   | High Density Log   | 51                                   | Harvest  | Group Selection   | 42201 - Natural<br>White Pine, Mixed<br>Deciduous                           | Cmpt. Review<br>Proposal                       |
| Presc<br>Specs               | ription Mark the<br><u>s:</u> that are -<br>stand.                 | stand as<br>< 18" DB                           | s a selection down to<br>H. Do not eliminate   | around 90 BA. The all the larger pine, le  | e stand s<br>ave son                 | should be marke<br>ne for legacy an                      | d favoring the retention o<br>d structural diversity. In a  | f white and red pine wir<br>ddition, remove all the                         | th good form<br>aspen from the                 |
| <u>Other</u><br>Comn         | _ The stan<br>nents: to damag                                      | d has a o<br>ge loggin                         | dug trench along the<br>g equipment.   | north edge that is be  | eing use                             | d as a dump by   | the private land owner.   | This ditch may be signi   | ficant enough                                  |
| <u>Next</u><br>Steps         | The stan   | d is expe                                      | ected to regenerate ir   | n to a two-aged stan   | d. The v                             | white pine overs   | tory and aspen clones wi  | Il be in a patchy matrix.   |  |
|                              |  |  |  |  |                                      |  |   |   |  |

Gladwin Mgt. Unit

#### Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 036 Year of Entry 2013



| a<br>n<br>d | Treatment<br>Name | Acres | Stage1<br>CoverType           | Size<br>Density  | Stand<br>Age | Treatment<br>Type | Treatment<br>Method | Cover Type<br>Objective       | Approval<br>Status       |
|-------------|-------------------|-------|-------------------------------|------------------|--------------|-------------------|---------------------|-------------------------------|--------------------------|
| 34          | 73036034-Cut      | 22.2  | 42200 - Natural<br>White Pine | High Density Log | 65           | Harvest           | Group Selection     | 42290 - Natural<br>Mixed Pine | Cmpt. Review<br>Proposal |

 Prescription
 Mark the stand as a selection down to around 90 BA. The stand should be marked favoring the retention of white and red pine with good form

 Specs:
 that are < 18" DBH. Do not eliminate all the larger pine, leave some for legacy and structural diversity. In addition, remove all the aspen from the stand.</td>

 Other
 The stand has an undulating terrain with some of the depressions containing versal ponds. This should be taken into account when marking.

<u>Other</u> The stand has an undulating terrain, with some of the depressions containing vernal ponds. This should be taken into account when marking. <u>Comments:</u> Around these areas the marking should be lighter to protect the obvious ponds.

<u>Next</u> Steps:

S t

| 39                   | 73036                | 039-Cut              | 10.5                   | 42200 - Natural<br>White Pine                       | High Density Log                                       | 65                  | Harvest                                 | Group Selection                                  | 42200 - Natural<br>White Pine                     | Cmpt. Review<br>Proposal        |
|----------------------|----------------------|----------------------|------------------------|---|--|---------------------|---|--|---|---------------------------------|
| Presc<br>Specs       | <u>ription</u>       | The stan should fa   | d is to be             | e harvested by removi<br>retention of trees with    | ing the hardwoods. <sup>.</sup><br>good form, which ar | Then in<br>re not c | areas of high pin<br>oversized (>18" DE | e density mark those a<br>3H). However, retain s | reas down to 90 BA. Th<br>ome of the larger pines | ne marking<br>for legacy trees. |
| <u>Other</u><br>Comr | nents:               | Access is allowed.   | s can be<br>This sta   | e done through stands<br>and will need to be har    | 34 or 40. The acce vest during dry or fr               | ss will<br>ozen co  | be a wet but shou<br>onditions.         | ld be operable if crane                          | mats are used and only                            | skidding is                     |
| <u>Next</u><br>Steps | <u>::</u>            |                      |                        |   |  |                     |   |  |   |                                 |
| 40                   | 73036                | 040-Cut              | 28.2                   | 42200 - Natural<br>White Pine                       | High Density Log                                       | 65                  | Harvest                                 | Clearcut with<br>Reserves                        | 42201 - Natural<br>White Pine, Mixed<br>Deciduous | Cmpt. Review<br>Proposal        |
| Presc<br>Spece       | ription<br>s:        | The stan             | d is to h<br>ees.      | ave a selection harves                              | st marking the stand                                   | down                | to 50 to 70 BA In                       | addition, with some of                           | the larger pine should b                          | e retained for                  |
| <u>Other</u><br>Comr | nents:               |                      |                        |   |  |                     |   |  |   |                                 |
| <u>Next</u><br>Steps | <u>:</u>             | The stan planted.    | d will ne<br>These c   | ed to be interplanted t<br>can either be roller cho | o red pine after har<br>opping or a prescribe          | /est. T<br>ed burn  | he stand may nee                        | ed to have some site pr                          | eparation done before it                          | can be                          |
| 50                   | 73036                | 050-Cut              | 18.4                   | 4199 - Other Mixed<br>Upland Deciduous              | High Density Pole                                      | 37                  | Harvest                                 | Clearcut with<br>Reserves                        | 4136 - Aspen, Mixed<br>Conifer                    | Cmpt. Review<br>Proposal        |
| Presc<br>Spece       | <u>ription</u><br>s: | The stan             | d is to b              | e final harvested dowr                              | n to 2" DBH. Mark s                                    | ome of              | the large white p                       | ine for retention and le                         | gacy trees  |                                 |
| <u>Other</u><br>Comr | _<br>nents:          | The sand<br>use of a | l is a ma<br>small tul | atrix of uplands and lov<br>be.                     | wlands and should b                                    | e harve             | ested during dry o                      | r frozen conditions. Th                          | e access to the stand w                           | ill require the                 |
| <u>Next</u><br>Steps | <u>::</u>            | The stan             | d is expe              | ected to regenerate in                              | to a mixture of aspe                                   | n, map              | le and conifers, if                     | not interplant with red                          | pine.   |                                 |

Total Treatment Acreage Proposed: 131.4

| S<br>t                        |                                   | Glad     | win Mgt. Unit       | Table 4         | <ul> <li>Treatme a Limiti</li> </ul> | ents Prescrib<br>ng Factor | Compartment: 036<br>Year of Entry 2013 | DNR DNR                 |                    |
|-------------------------------|-----------------------------------|----------|---------------------|-----------------|--------------------------------------|----------------------------|--|-------------------------|--------------------|
| a<br>n<br>d                   | Treatment<br>Name                 | Acres    | Stage1<br>CoverType | Size<br>Density | Stand<br>Age                         | Treatment<br>Type          | Treatment<br>Method                    | Cover Type<br>Objective | Approval<br>Status |
|                               |                                   |          | #Error              |                 |                                      |                            |  |                         |                    |
| Preso<br>Spec                 | cription<br>s:                    |          |                     |                 |                                      |                            |  |                         |                    |
| <u>Othe</u><br>Com            | <u>r</u><br>ment:                 |          |                     |                 |                                      |                            |  |                         |                    |
| <u>Next</u><br>Steps          | <u>S:</u>                         |          |                     |                 |                                      |                            |  |                         |                    |
| <u>Limiti</u><br><u>Treat</u> | ng Factor and No<br>ment Reason   | <u>)</u> |                     |                 |                                      |                            |  |                         |                    |
| A                             | Total Treatmen<br>creage Proposed | t<br>J:  | 0                   |                 |                                      |                            |  |                         |                    |

| Year | of | Entry: | 2013 |
|------|----|--------|------|
|------|----|--------|------|

NATUR

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

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

Steps:

Total Treatment Acreage Proposed:

0

| S<br>t      | Gladwin Mgt. Unit             |                         |       | 5 – Foi      | rested Sta  | nds Compartment: 036<br>Year of Entry: 2013  |
|-------------|-------------------------------|-------------------------|-------|--------------|-------------|--|
| a<br>n<br>d | Level 4<br>Cover Type         | Size<br>Density         | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:   |
| 2           | 42210 - Natural Red<br>Pine   | High Density<br>Log     | 3.3   | 68           | 111-140     | This is a mature red pine stand. The pine is getting to be over sized.   |
| 3           | 42200 - Natural White<br>Pine | High Density<br>Log     | 9.3   | 62           | 141-170     | The stand is a matrix of upland and lowland, with upland being<br>about 85% of the stand. It is dryer with more pine in the west<br>though the hardwoods increase going east. The terrain also<br>gets hummockier and wetter going east.   |
| 5           | 6112 - Lowland Aspen          | High Density<br>Sapling | 21.3  | 32           | 81-110      | The stand is a stereotypical P-Type. It is very wet with a lot of sensitive fern, spinulose shield fern, and horsetail   |
| 6           | 4130 - Aspen                  | High Density<br>Pole    | 14.5  | 38           | 81-110      | The stand has a variable density. The hardwoods were removed about 37 years ago. The aspen has regenerated well were the stand was open.   |
| 7           | 4133 - Aspen, Mixed<br>Pine   | High Density<br>Sapling | 7.1   | 14           | 1-50        | The stand had the hardwoods removed about 14 years ago.<br>Aspen regeneration is now in the canopy. The distribution of<br>aspen and white pine is patchy.   |
| 8           | 4130 - Aspen                  | High Density<br>Pole    | 14.0  | 38           | 81-110      | The stand is variable in species mix. The bigtooth aspens,<br>quaking aspens, and red maples are not uniformly distributed.<br>There are inclusions of lowlands but it is around 15%.  |
| 9           | 42200 - Natural White<br>Pine | Medium<br>Density Log   | 6.5   | 77           | 51-80       | The stand was harvested in 2010. In the harvest all the hardwoods were removed leaving the white pine. The cut has not started to regenerate yet. The damage to the residual trees was significant.  |
| 10          | 6113 - Lowland Maple          | High Density<br>Pole    | 5.0   | 38           | 1-50        | The stand goes from low stocked to well stocked swamp hardwood heading north in the stand. Overall it is too wet to harvest.   |
| 12          | 4133 - Aspen, Mixed<br>Pine   | High Density<br>Pole    | 5.5   | 38           | 51-80       | The stand is wetter south eastern portion of the stand. Overall, it is a matrix of upland and lowland with the lowland being about 45%. The terrain is hummocky.   |
| 13          | 4130 - Aspen                  | Medium<br>Density       | 16.2  | 14           |             | The regeneration in the stand is patchy leaving some large<br>openings. The white pine is fairly evenly distributed in the<br>stand. It appears to be having some problem with weevil<br>damage but not severe.                            |
| 15          | 4133 - Aspen, Mixed<br>Pine   | High Density<br>Pole    | 10.2  | 38           | 51-80       | This stand was harvested by removing the hardwoods about 38 years ago. The white pines in the stand are co-dominant. The pines look like they have had heavy weevil damage in the past. Many of the pines have significant crook or sweep. |
| 16          | 6127 - Lowland Pine           | High Density<br>Pole    | 7.6   | Uneven Age   | 1-50        | The stand is mainly lowlands. However there are inclusions of uplands. The terrain is hummocky.  |
| 17          | 4130 - Aspen                  | Medium<br>Density       | 28.6  | 15           |             | The regeneration in the stand is patchy. This has left some large openings. Where there is regeneration it is often thick. White pine is scattered throughout the stand. However, the red pine is heavier along the east side.             |

| S<br>t      | Gladwin Mgt. Unit                             |                         |       | 5 – For      | ested Sta   | nds Compartment: 036<br>Year of Entry: 2013   |
|-------------|---|-------------------------|-------|--------------|-------------|---|
| a<br>n<br>d | Level 4<br>Cover Type                         | Size<br>Density         | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:  |
| 18          | 4130 - Aspen                                  | High Density<br>Pole    | 17.7  | 38           | 51-80       | This stand is mostly uplands with a couple of lowland inclusions.   |
| 19          | 6112 - Lowland Aspen                          | High Density<br>Pole    | 8.0   | 38           | 1-50        | The stand is hummocky. This area is low and wet.  |
| 20          | 6112 - Lowland Aspen                          | High Density<br>Sapling | 7.8   | 15           |             | The stand is hummocky. When it was harvested there was significant rutting. The rutted skid trails are sparse. However, trees are now starting to grow over the old skid trails.  |
| 22          | 42260 - Natural Pine,<br>Mixed Deciduous      | High Density<br>Pole    | 15.2  | 63           | 111-140     | The stand is variable. It has areas that are heavy to red pine.<br>Other areas are heavy to white pine. The aspen, in the stand, is<br>fairly evenly distributed.   |
| 23          | 6113 - Lowland Maple                          | High Density<br>Pole    | 15.1  | Uneven Age   | 81-110      | The stand has more uplands in the western portion. However, it grades to lowlands heading east. The stand is showing some decline, especially in the west end. It is a matrix of uplands and lowlands with the lowlands being the majority.   |
| 24          | 42260 - Natural Pine,<br>Mixed Deciduous      | High Density<br>Pole    | 7.0   | 38           | 111-140     | The stand is a mixture of red pine, white pine, and bigtooth aspen. Red pines are heavier in the western 2/3, while the white pines are heavier in the eastern 1/3. The aspen in the stand is scattered throughout.   |
| 25          | 4191 - Mixed Upland<br>Deciduous with Conifer | High Density<br>Log     | 9.3   | 51           | 81-110      | There is a trench that was dug near the private line. This is<br>being used as a dump by the private landowner to the north.<br>The parking area in the stand is being used to dump yard waste.   |
| 26          | 6115 - Lowland Ash                            | High Density<br>Pole    | 210.6 | Uneven Age   | 81-110      | The stand is a matrix of upland and lowland with the lowland<br>being about 80%. Upland areas are heavy to sawlog maple and<br>lowland areas are heavy to pole ash. There are small inclusions<br>of lowland shrubs scattered in the stand. These are mainly less<br>than 1 acre in size. Overall the stand is too wet to harvest. The<br>20% of upland is not feasible to harvest because of the work<br>involve to get to them. |
| 27          | 4319 - Mixed Upland<br>Forest                 | High Density<br>Pole    | 5.8   | 30           | 51-80       | The stand is a matrix of uplands and lowlands with the lowlands<br>being about 35%. The stand has some oversized log trees<br>scattered through out it.   |
| 29          | 4191 - Mixed Upland<br>Deciduous with Conifer | High Density<br>Log     | 8.5   | 64           | 51-80       | This stand is on a ridge. The aspen that was not taken down by the beaver activity is now overmature and declining.   |
| 30          | 42290 - Natural Mixed<br>Pine                 | High Density<br>Log     | 9.6   | 61           | 81-110      | The stand is a matrix of uplands and lowlands with the lowlands<br>being about 30% and in ribbons. The aspen in the stand is<br>mainly in the stand's southern dog leg.   |
| 34          | 42200 - Natural White<br>Pine                 | High Density<br>Log     | 22.2  | 65           | 111-140     | This stand is undulating. Many of the depressions are vernal ponds.   |
| 35          | 42210 - Natural Red<br>Pine                   | High Density<br>Log     | 5.4   | 64           | 111-140     | This is an area that grades from an upland red pine stand to a lowland jack pine stand. The red pine in the western portion of the stand could be thinned with stand 36.  |

| S<br>t      | Gladwir                                  | n Mgt. Unit             |       | 5 – Fo       | prested Sta | nds Compartment: 036<br>Year of Entry: 2013  |
|-------------|--|-------------------------|-------|--------------|-------------|--|
| a<br>n<br>d | Level 4<br>Cover Type                    | Size<br>Density         | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:   |
| 38          | 42260 - Natural Pine,<br>Mixed Deciduous | High Density<br>Log     | 13.1  | 68           | 81-110      | The stand has inclusions of lowlands, especially along M-30.   |
| 39          | 42200 - Natural White<br>Pine            | High Density<br>Log     | 10.5  | 65           | 111-140     | The stand is mainly uplands with some small scattered wet pockets. The aspen in the overstory is declining.  |
| 40          | 42200 - Natural White<br>Pine            | High Density<br>Log     | 28.2  | 65           | 111-140     | The stand has more hardwood in the west end, the white pine is evenly distributed, and red pine is more common in the east end.  |
| 41          | 4133 - Aspen, Mixed<br>Pine              | High Density<br>Sapling | 8.9   | 27           | 51-80       | The stand is a matrix of uplands and lowlands with the lowlands being about 25%. The wettest portions are in the northern end of the stand.  |
| 42          | 42200 - Natural White<br>Pine            | High Density<br>Log     | 2.6   | 71           | 81-110      | The stand is an upland stand with open grown white pines in it.<br>They have multiple leaders and very poor form. The stand is<br>factor limited because of the Sugar River and private land.  |
| 43          | 6139 - Mixed Lowland<br>Forest           | Medium<br>Density Log   | 4.8   | 71           | 51-80       | This stand is in the flood plain of the Sugar River.   |
| 44          | 6113 - Lowland Maple                     | High Density<br>Pole    | 20.9  | 39           | 51-80       | The stand is a matrix of uplands and lowlands with the lowlands<br>being about 55%. There are vernal ponds scattered throughout<br>the stand. There are also some larger swales that are heavy to<br>ash. The stand appears to dry out in late summer. |
| 45          | 6112 - Lowland Aspen                     | High Density<br>Sapling | 7.4   | 27           | 81-110      | This stand is located in a low wet depression.   |
| 46          | 42260 - Natural Pine,<br>Mixed Deciduous | High Density<br>Log     | 7.2   | 65           | 51-80       | The stand was harvested by removing hardwoods. Now the aspen and oak are in the canopy and in the understory.  |
| 47          | 6115 - Lowland Ash                       | Medium<br>Density Pole  | 19.9  | 71           | 51-80       | The stand is on the flood plain of the Sugar River.  |
| 48          | 4311 - Pine, Aspen Mix                   | High Density<br>Pole    | 34.9  | 37           | 81-110      | The stand is on a ridge that slopes to lowland types.  |
| 49          | 6112 - Lowland Aspen                     | High Density<br>Log     | 13.2  | 71           | 81-110      | The stand is a high ridge that slopes down to the river. The slope has numerous wet areas that are fed by seasonal springs.  |
| 50          | 4199 - Other Mixed<br>Upland Deciduous   | High Density<br>Pole    | 18.4  | 37           | 51-80       | The stand is a matrix of uplands and lowlands with the lowlands being about 25%. The low areas are often vernal ponds.   |
| 51          | 6119 - Mixed Lowland<br>Deciduous Forest | Medium<br>Density Pole  | 8.8   | 71           | 51-80       | The stand is on the flood plain of the Sugar River.  |
| 52          | 42200 - Natural White<br>Pine            | High Density<br>Log     | 9.5   | 66           | 111-140     |  |

Gladwin Mgt. Unit

#### 6 – Nonforested Stands

Compartment: 036 Year of Entry: 2013



| Stand | Cover Type                        | Acres | Managed<br>Site | Management Priority<br>(Objective) | General Comments:   |
|-------|-----------------------------------|-------|-----------------|------------------------------------|---|
| 1     | 6220 - Alder/willow               | 2.4   | No              | Unspecified                        |   |
| 4     | 3202 - Autumn Olive/Honeysuckle   | 2.0   | No              | Low (NonForested)                  | This stand is an autumn olive planting that has been filling in with white pines and jack pine.   |
| 11    | 629 - Mixed non-forested wetland  | 19.5  | No              | Low (NonForested)                  | The stand is mainly cattails, marsh grass with areas of willow. The fringes of the stand also have tag alder.                                   |
| 14    | 6220 - Alder/willow               | 3.5   | No              | Low (NonForested)                  | The stand is mainly tag alder/willow with leather leaf.   |
| 21    | 3103 - Rubus-Fern                 | 9.6   | Natural Regen   | Aspen                              |   |
| 28    | 6220 - Alder/willow               | 4.6   | No              | Low (NonForested)                  |   |
| 31    | 629 - Mixed non-forested wetland  | 42.1  | No              | Unspecified                        | The stand is a mixture of lowland shrubs, emergent wetland,<br>and low density trees (ash). These are intermixed<br>throughout the stand.       |
| 32    | 629 - Mixed non-forested wetland  | 7.5   | No              | Low (NonForested)                  | This stand is an old beaver flooding. It is just starting to fill in with shrubs.   |
| 33    | 6233 - Wet Meadow                 | 1.4   | No              | Low (NonForested)                  | This is a low wet depression. The ground cover is mainly slender rush and marsh grass.  |
| 36    | 3301 - Low Density Deciduous Tree | 1.6   | No              | Low (NonForested)                  | This stand is an old barrow area. It is filling in with white pine and balsam popular. There are areas that are quite wet along the south edge. |
| 37    | 6220 - Alder/willow               | 1.5   | No              | Unspecified                        | The stand is heavy to willow with some tag alder in it.   |
| 53    | 122 - Road/Parking Lot            | 1.0   | No              | Unspecified                        | This area is a parking area.  |



## 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 |
|-------|----------|----------|-------|----------|
|       |          |          |       |          |



#### **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<br>Area | Туре | Description | ERA = Ecological Reference Area<br>HCVA = High Conservation Value Area<br>SCA = Special Conservation Area |
|----------------------|------|-------------|---|
|----------------------|------|-------------|---|





