



# Compartment Review Presentation

Gladwin Forest Management Unit

Compartment 73116

Entry Year 2017

Acreage: 3,117

County Midland

Management Area: Midland-Isabella

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**Revision Date:** 2015-06-12

**Stand Examiner:** Scott Shooltz

**Legal Description:**

T13N, R2W, Sec. 1, 2, 4, 9-14, and 25

T13N, R1W, Sec. 7, 8, and 18

**Identified Planning Goals:**

Midland-Isabella management area (MA) will provide forest products; maintain or enhance wildlife habitat; protect areas of unique character; threatened, endangered and special concern species; and provide for forest-based recreational uses. A significant portion of the management area is swampy and therefore relatively inaccessible. Timber management for this 10-year planning period will focus on balancing the age-class distributions for aspen and oak. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests for hunting and other wildlife-related recreation opportunity. The aspen in the compartment has been heavily managed in the last 40 years with much of it less than 30 years old. In addition, the most recent aspen cuts have not regenerated well. This poor regeneration appears to be associated, at least partly, to a high deer population in the area. The other factor is poor site indexes and low vigor. The swamp hardwoods in the compartment have not been managed extensively in the last 30 year; this is mainly due to high water table under the compartment making many of these stands too wet to manage. Most stands are a mixture of upland and lowland. Therefore, the stands were called based on the observed percentage of one or the other. Some of these stands are only marginally upland or lowland. This makes management more challenging and when stands are put up for harvest, the cut acres may vary from the inventory acres significantly. One of the main concerns is the deer population in the compartment. Any final harvest done in the area may not regenerate well and will need to be interplanted with conifers to bring up to full stocking.

**Soil and topography:**

The soils in the compartment are mainly a mixture of Covert, Pipestone, and Kingsville soil associations. There are smaller areas of Kinross association and Adrian muck in the wettest areas. The terrain is a matrix of upland and lowland. There are large areas that are mainly upland as well as large extensive marshes and lowland brush types. This mixture of upland and lowland is also present in the majority of stands. In addition, many stands have extensive micro relief in the form of hummocky ground.

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

Much of the stand land is in two contiguous areas. The private land in the area is used for both private residences and recreational properties. These recreational properties have a high turn over rate which may present opportunities for land consolidation in the future. Sub-division of these properties has also been minimal resulting in more contiguous forest cover throughout the area.

**Unique Natural Features:**

There is an eagle nest in the compartment in section 3 of T13N R1W. Other records are near the compartment. There are records of Wood Turtles to the north and south, Red-shouldered Hawks to the north, Rainbow and Elktoe mussel to the south west, Beak Grass to the north and east, and Broad-leafed Puccoon to the north and south.

**Archeological, Historical, and Cultural Features:**

This compartment is part of the Porter Oil Fields that were started in the early 1900s. Therefore, there are numerous cultural features in the compartment associated with this development. Currently it is being reclaimed and old well sites are being restored. It appears that there was an old dump associated with this near McGrudder Road. This dump has been abandoned for many years. Some of the trees growing in the dump appear to be 40+ years old.

**Special Management Designations or Considerations:**

None recorded.

**Watershed and Fisheries Considerations:**

This compartment has an extensive wetlands complex that drains into the Chippewa River. However, there are very few creeks or rivers flowing through the compartment. Therefore, the fisheries considerations are minimal but the watershed

considerations are significant.

### **Wildlife Habitat Considerations:**

The following have been identified as featured species for this management area during this 10-year planning period:

- American woodcock
- Beaver
- Golden-winged warbler
- Pileated woodpecker
- Red-headed woodpecker
- Ruffed grouse
- White-tailed deer

The primary focus of wildlife habitat management in the Midland-Isabella management area will be to address the habitat requirements identified for the listed featured species. Based on the selected featured species, some of the most significant wildlife management issues in the management area are the maintenance of young forest; the retention of large over-mature trees and snags; the maintenance and expansion of hard mast; and mesic conifer components. Deer browse has been a significant management issue over the past 10 - 20 years within the compartment. Many of the aspen stands that were harvested in the last 20 years have had mixed results in regeneration. This is especially evident in the last YOY. The regeneration is very patchy with many dead stems around live clones with signs of deer browse. Although deer browse is only one of the contributing factors to the poor regeneration it is most likely a significant one. Regenerating current aspen stands to full stocking may prove difficult and may alter habitat within this compartment.

### **Mineral Resource and Development Concerns and/or Restrictions**

The majority of this compartment is part of the Porter Oil Fields. This is among the oldest oil field developments in Michigan. Currently Chevron is closing down much of the oil field and they are in the process of reclaiming many of the old well sites. Surface sediments consist of lacustrine (lake) clay, silt, sand and gravel and dune sand. The glacial drift thickness varies between 200 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. The Porter-Jasper Field is located in the Compartment. The Field produced over 50 MBO from the Dundee Formation since its discovery in 1933. Most of the Compartment is currently leased.

### **Vehicle Access:**

The main access for the majority of the compartment is through a gate on McGrudder Road. The trail system behind that gate is in good shape and provides good access to most of the compartment. The western section of the compartment is accessed from S. Alamando Road and S. Lewis Road using some existing two-track. The access to this area is fair but a large area in sections 9 and 10 has limited access.

### **Survey Needs:**

There have been several private surveys done and parts of the Porter Oil Field have been surveyed by Chevron. Survey needs are still required in multiple sections throughout the compartment to complete management activities.

### **Recreational Facilities and Opportunities:**

There is no developed recreational facility in the compartment. In addition, much of the area, Porter Oil Field, has been gated and blocked, restricting vehicular access. There are some two-tracks present around the edges of the compartment, so the area is still heavily hunted. The gate into the Porter Oil Field is proposed to be open for deer season. This will improve recreational use of the compartment. Due to the proximity of private land ownership some undesignated ORV trails are highly likely within the compartment where gates are not present. Utilize forest management practices to curtail damage by off road vehicle use.

### **Fire Protection:**

This area is a mixture of lowland forests, non-forested wetland, and forested/non-forested dry ridges. Wildfire danger overall is minimal in this compartment although occasional small fires do occur do to dispersed recreation activities. Fire as a management tool may have a place within this compartment. Consider opportunities to re-introduce fire in the oak/pine areas to encourage pine and oak regeneration and to discourage competition; to incorporate fire as a tool to restore or maintain managed openings; and restore wetlands to native vegetation.

### **Additional Compartment Information:**

In section 4 of T13NR2W is an 800 MHz radio tower. Stand 127 in section 10 is a DEQ clean up site. Multiple forty acre parcels will be designated for disposal or trade. This compartment also contains multiple isolated parcels 10 acres and under. These will be recommended for disposal as well.

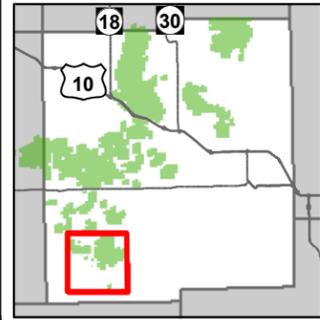
**The following reports from the Inventory are attached:**

- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

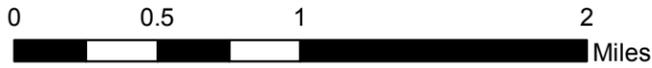
**The following information is displayed, where pertinent, on the attached compartment maps:**

- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments

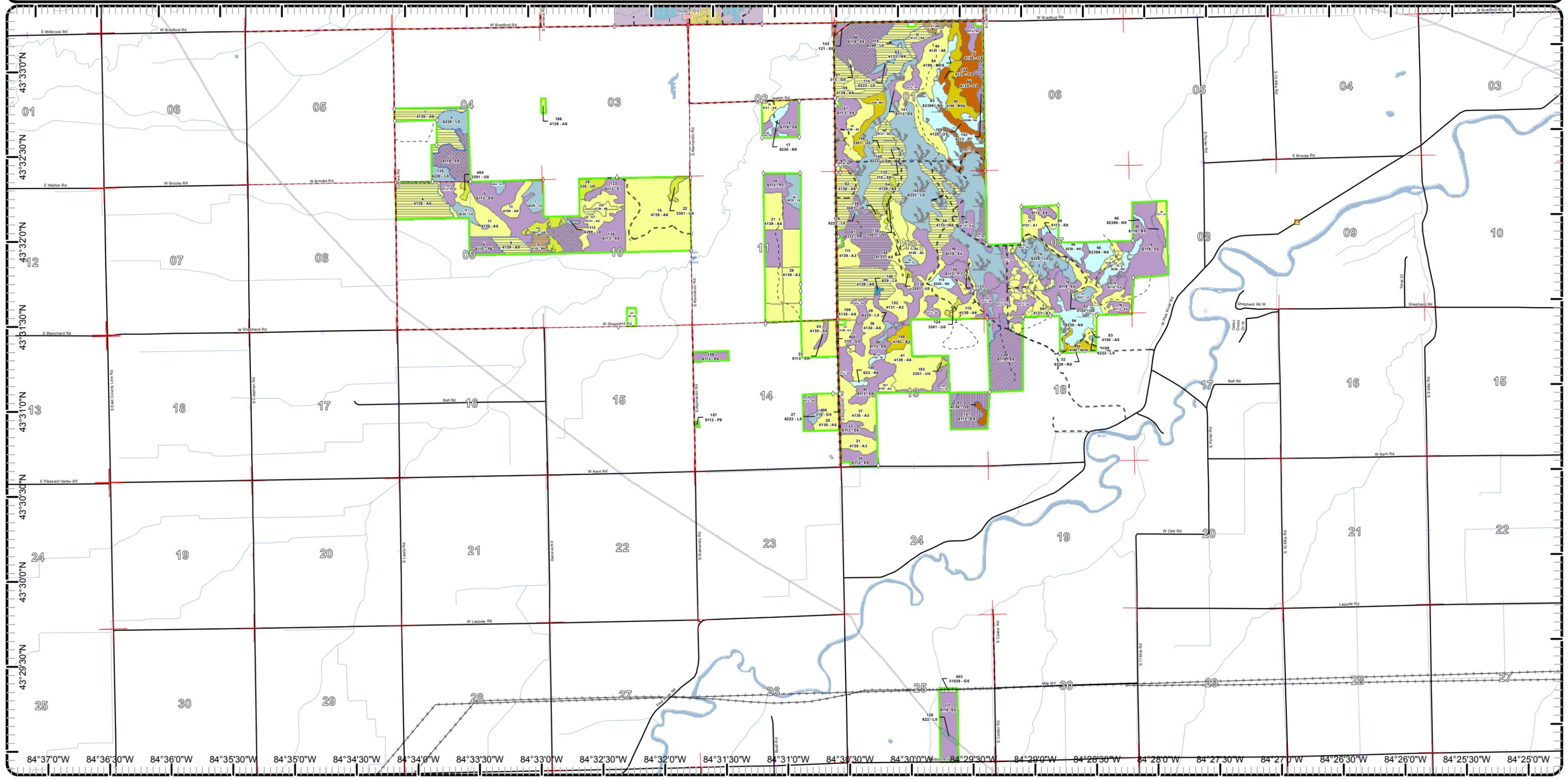


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 T13N R01W 7,8,18  
 County: Midland  
 Unit: Gladwin  
 Mgmt Area: Midland-Isabella  
 YOE: 2017  
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 Examiner: Scott Shooltz  
 Map Revised: 6/12/2015  
 Map Phase: Pre-Review

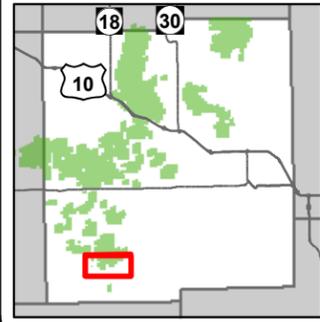


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- ◇ Field Grade GPS Corners
- Miris Corners
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- ⚡ Bridges
- ⚡ Culverts
- ⚡ Campground
- Rivers
- Lakes
- Pipeline
- Powerline
- Treatments with Site Conditions
- Site Prep
- Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- Pesticide
- Other Treatment - See Comments
- Prescribed Burn
- Opening Maintenance
- Mowing
- Thinning (Crown, Low, Systematic)

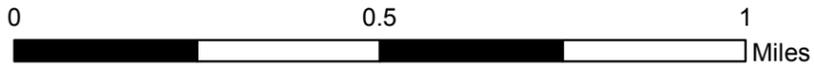
- Shelter Wood (w/Reserves)
- Seed Tree (w/Reserves)
- Forest Covertypes
  - 411 - Northern Hardwood
  - 412 - Oak Types
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 430 - Upland Mixed Fores
  - 611 - Lowland Deciduous Forest
- Non-Forest Covertypes
  - 110 - Low Intensity Urban
  - 121 - Airport
  - 310 - Herbaceous Openland
  - 330 - Low Density Trees
  - 622 - Lowland Shrub
  - 623 - Emergent Wetland
  - 629 - Mixed non-forested wetland



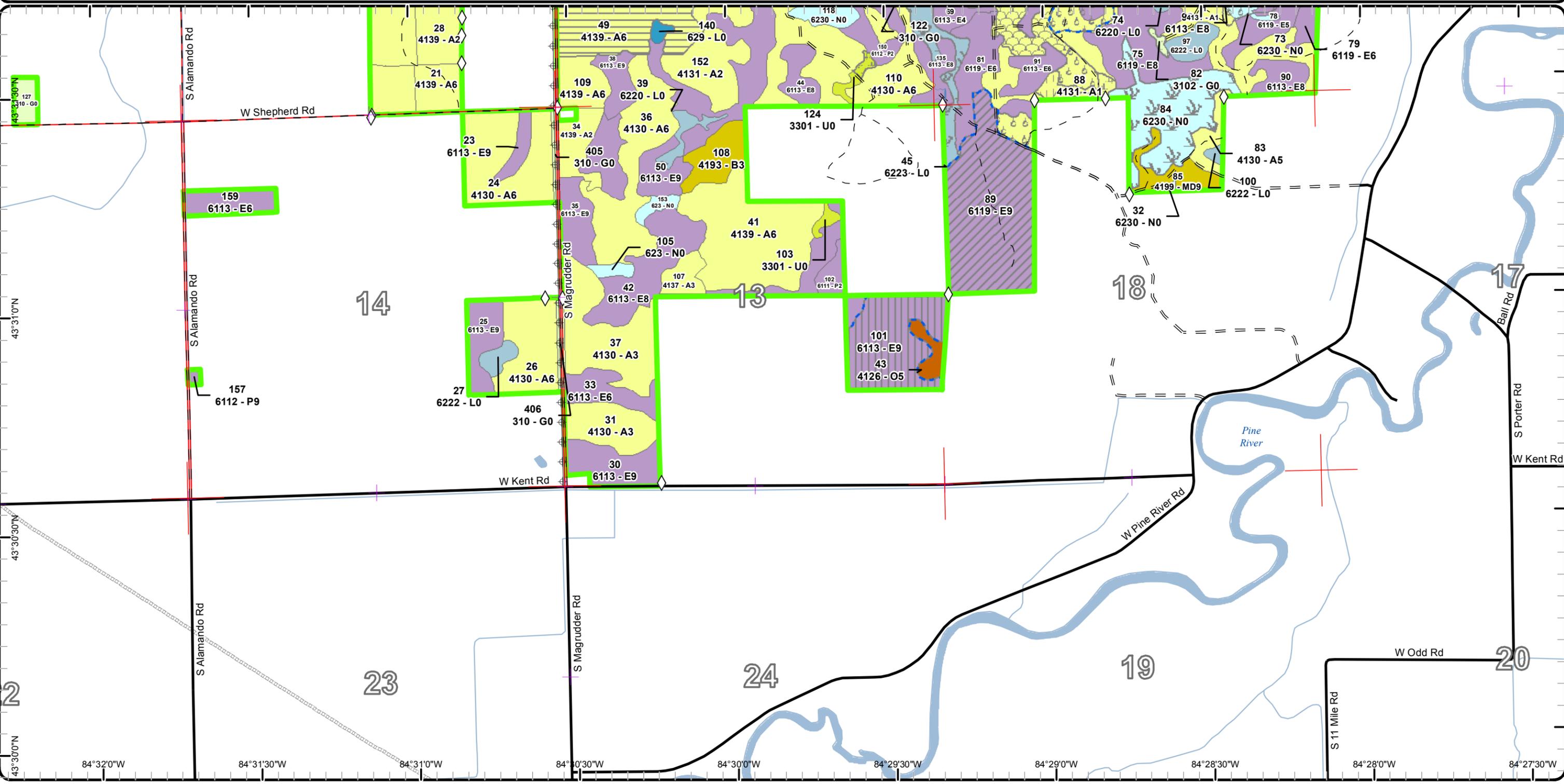
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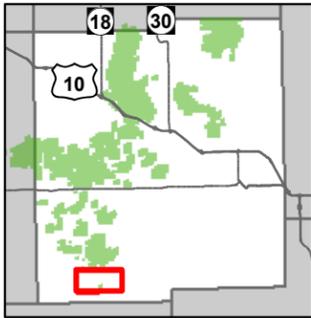
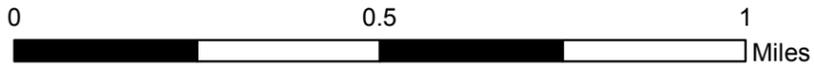
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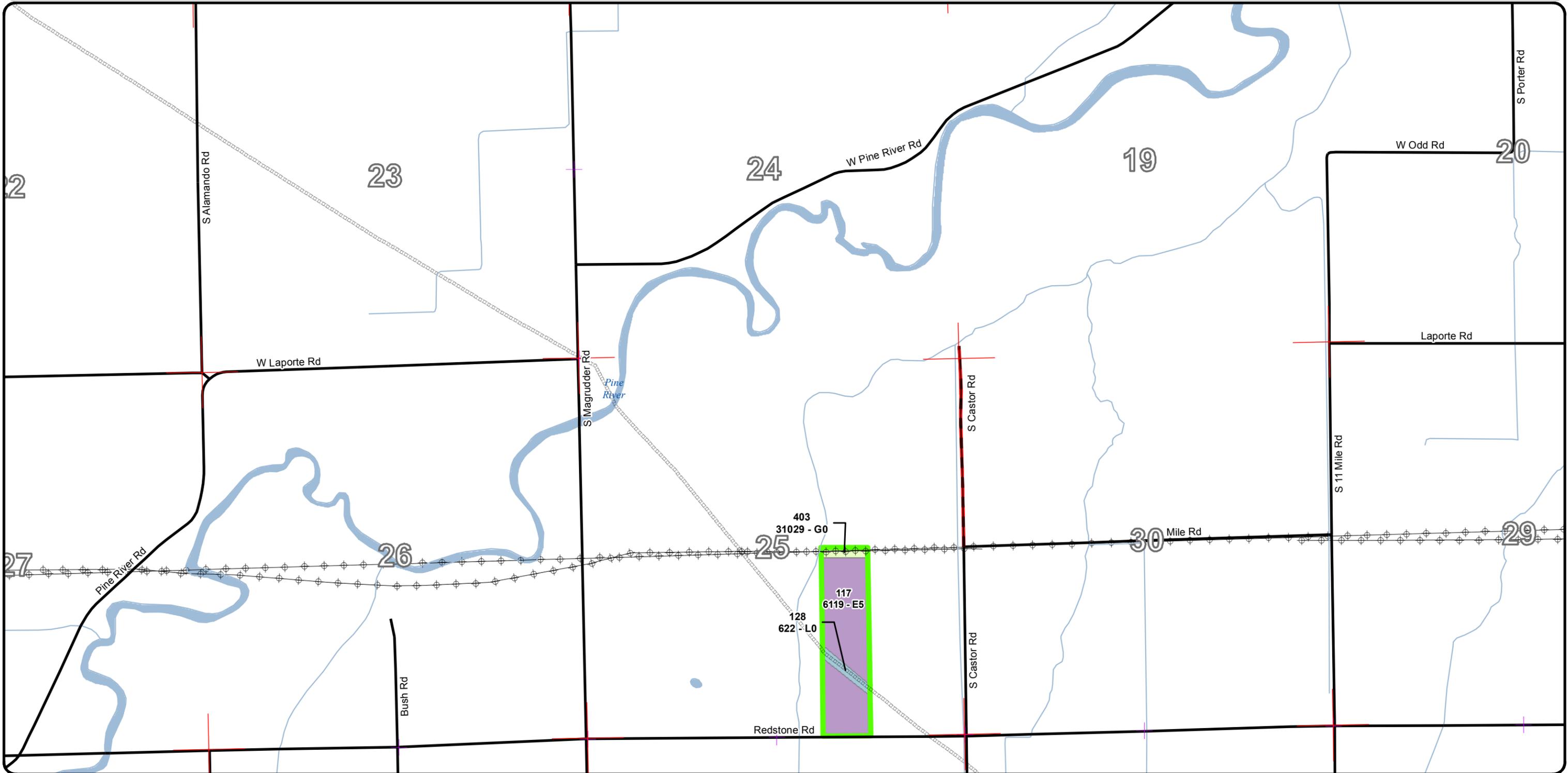
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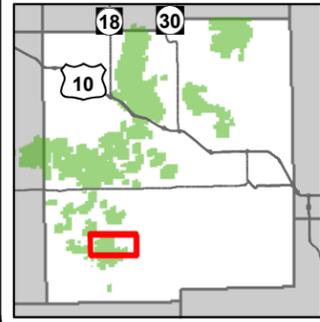
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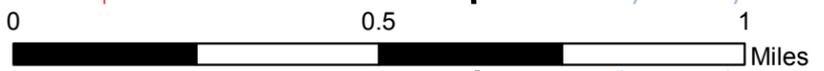
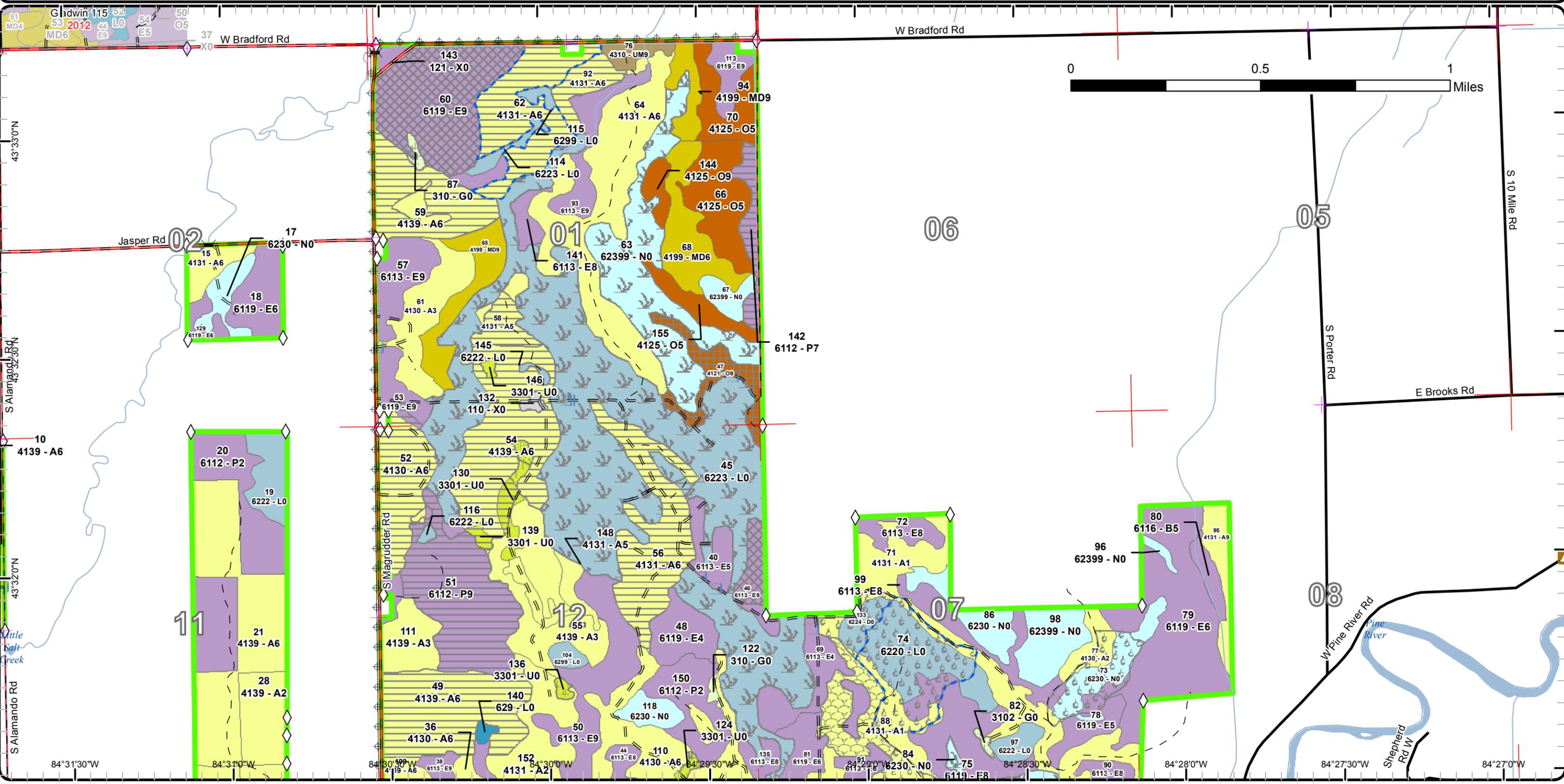


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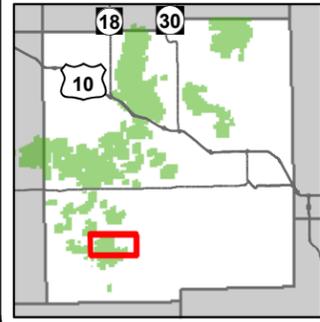
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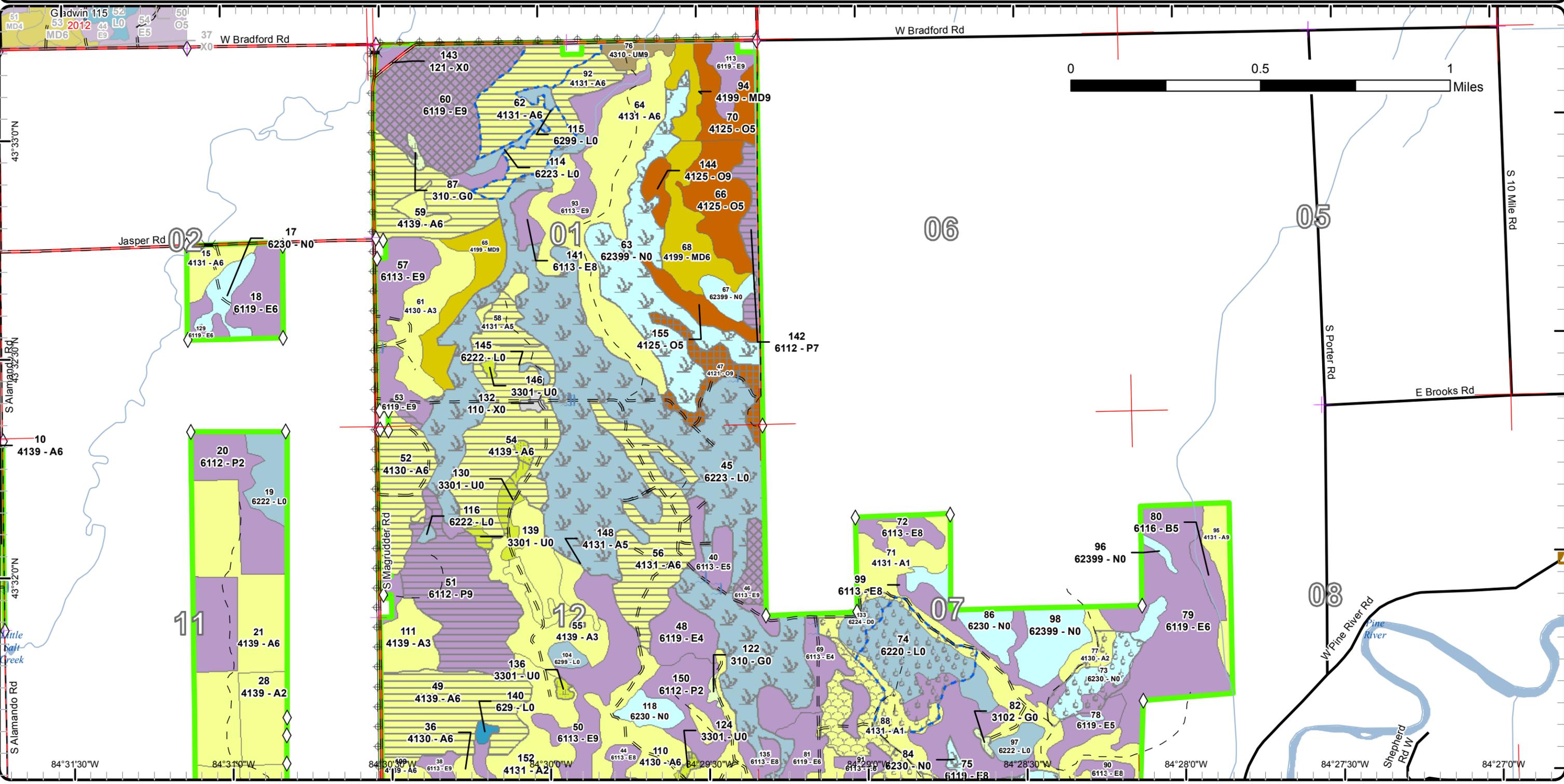


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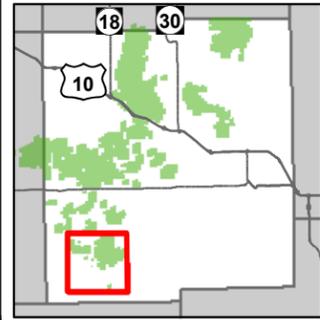
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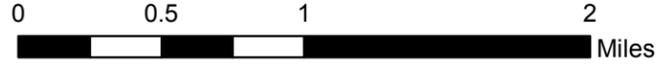




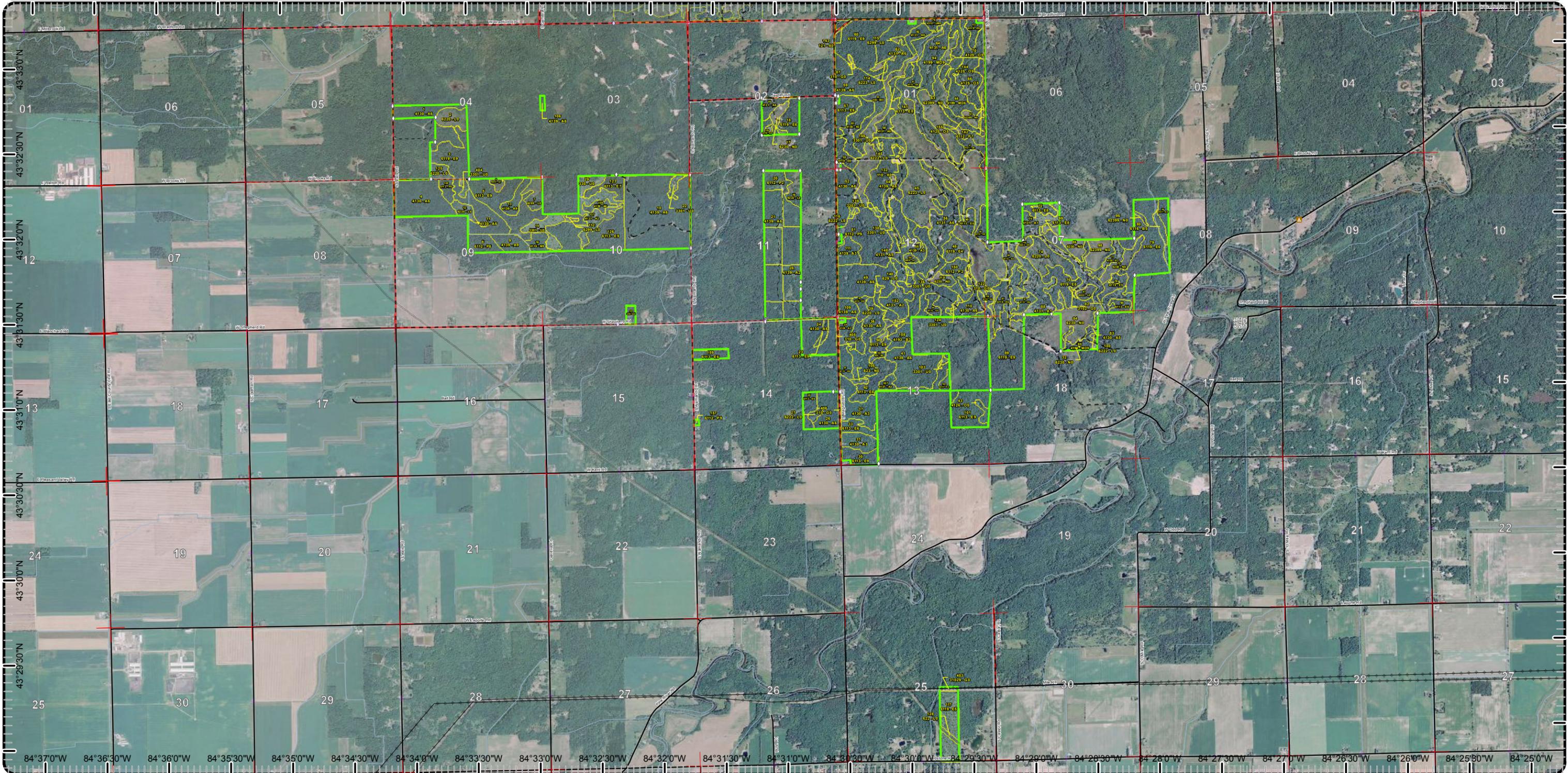
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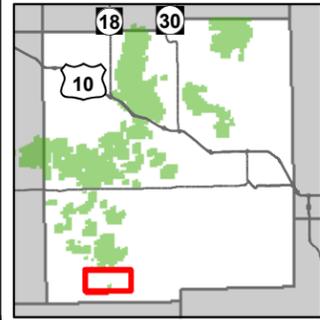


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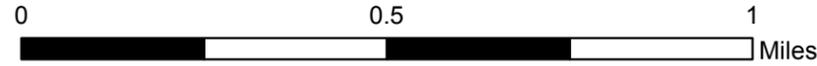




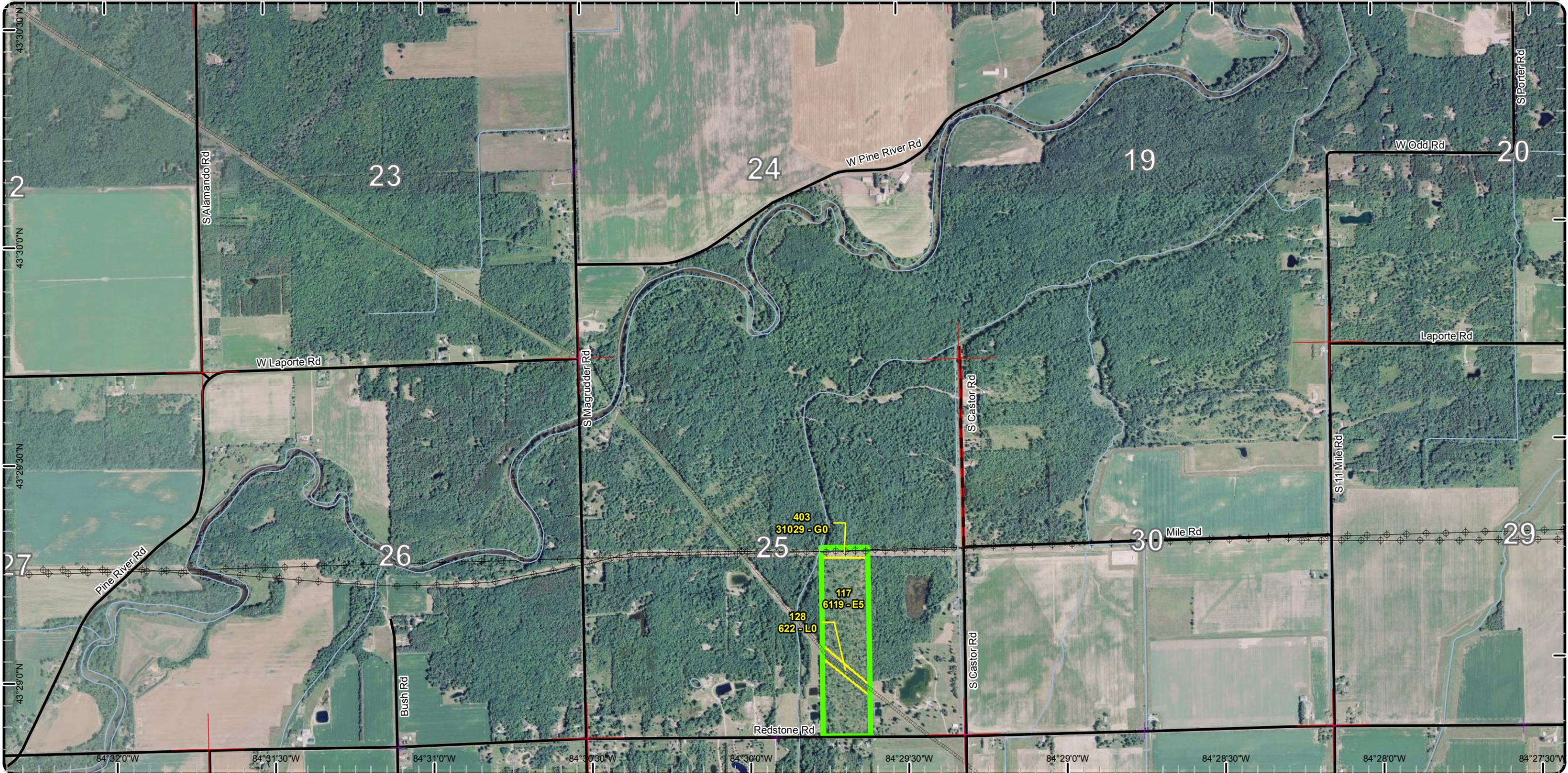
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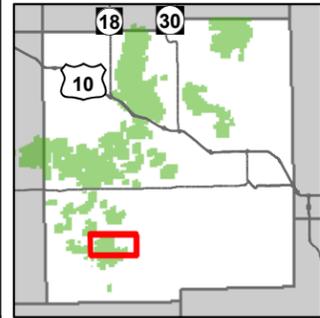
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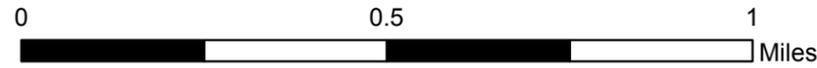
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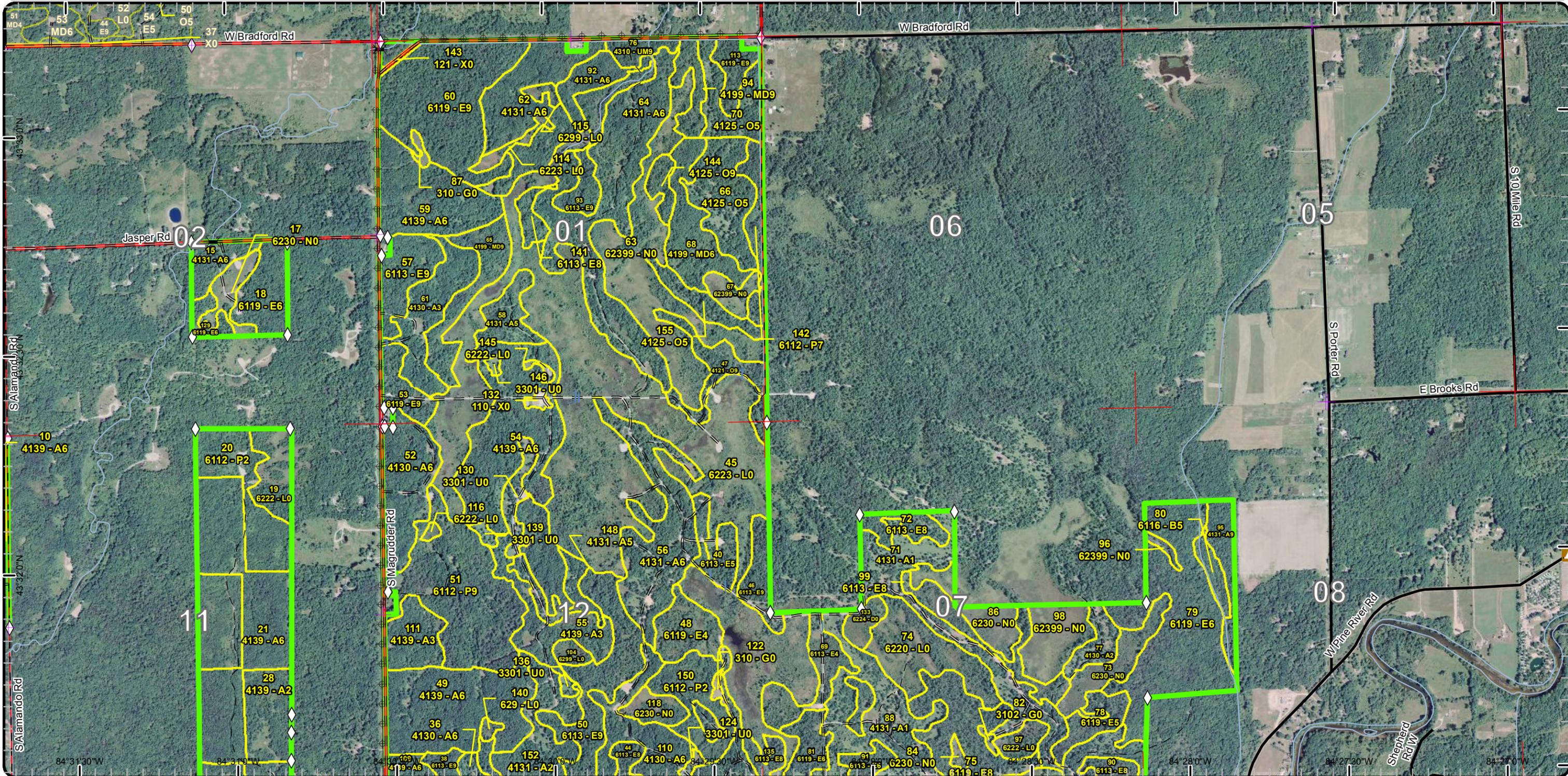
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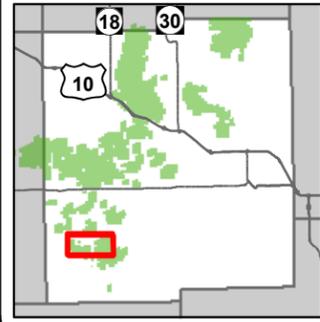
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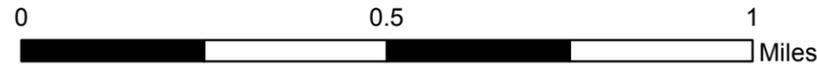
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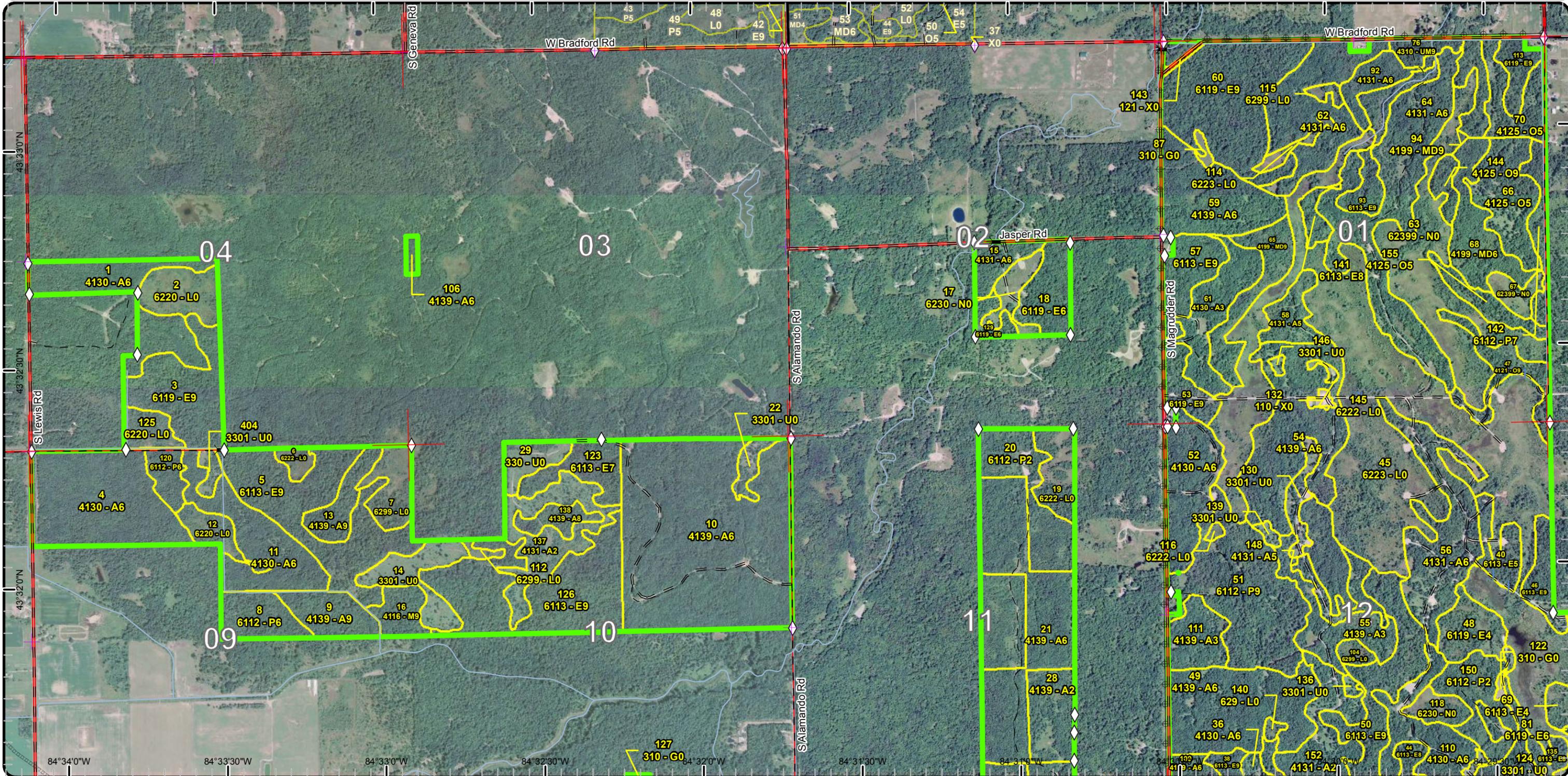
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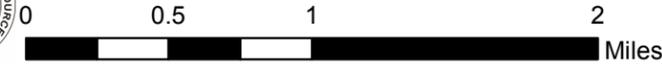
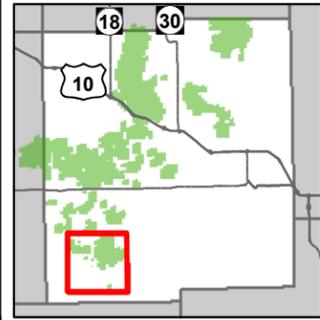
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# Special Conservation Areas & Site Conditions Map

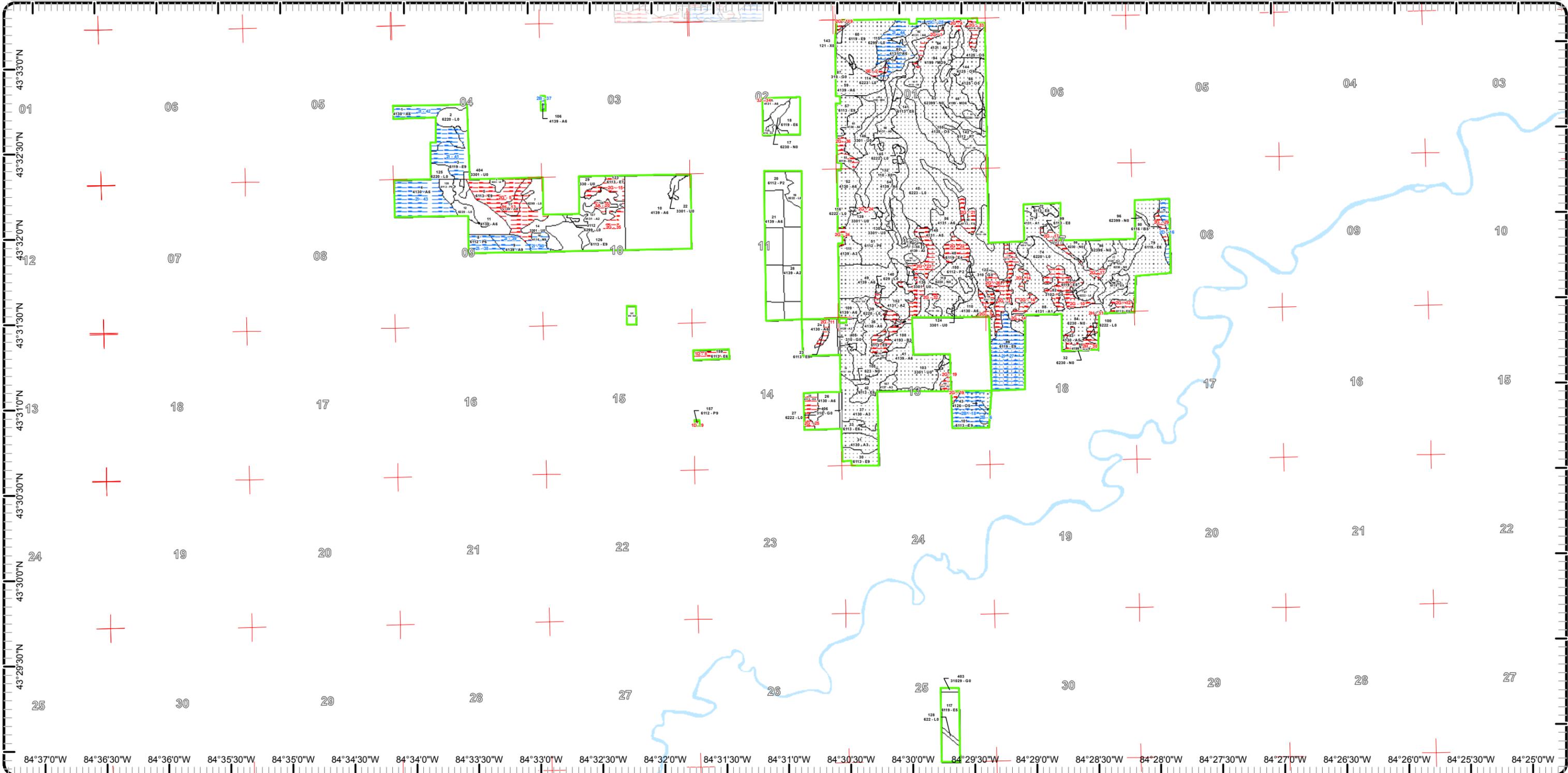
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 Acres: 3117 GIS Calculated  
 Examiner: Scott Shooltz  
 Map Revised: 6/12/2015  
 Map Phase: Pre-Review



- Miris Corners
- Stand Boundaries
- ▨ SCA
- Site Condition
- Available w/ Constraints
- Unavailable
- Available Factors W/ Constraints
- 2B: Unknown if access through adjacent landowner(s) is possible
- 2D: Portable Bridge Needed (Dept. bridge will be adequate)
- 2I: Survey needed

- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable Factors
- 1D: Interest Group / Neighbor
- 2G: Too wet (sensitive soils, does not include access issues)
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3J: Water quality / BMPs (stream, river, or lake)

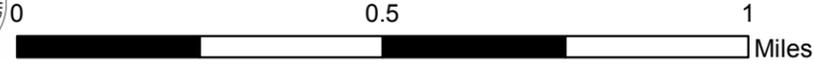
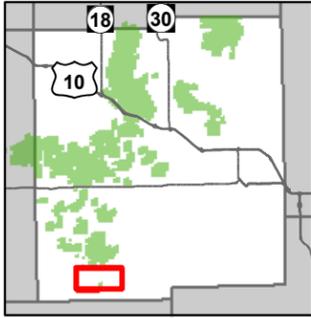
- 5A: Not able to obtain desirable regeneration
- 5E: Long-Term Retention Special Conservation Areas
- Cold Water Lakes



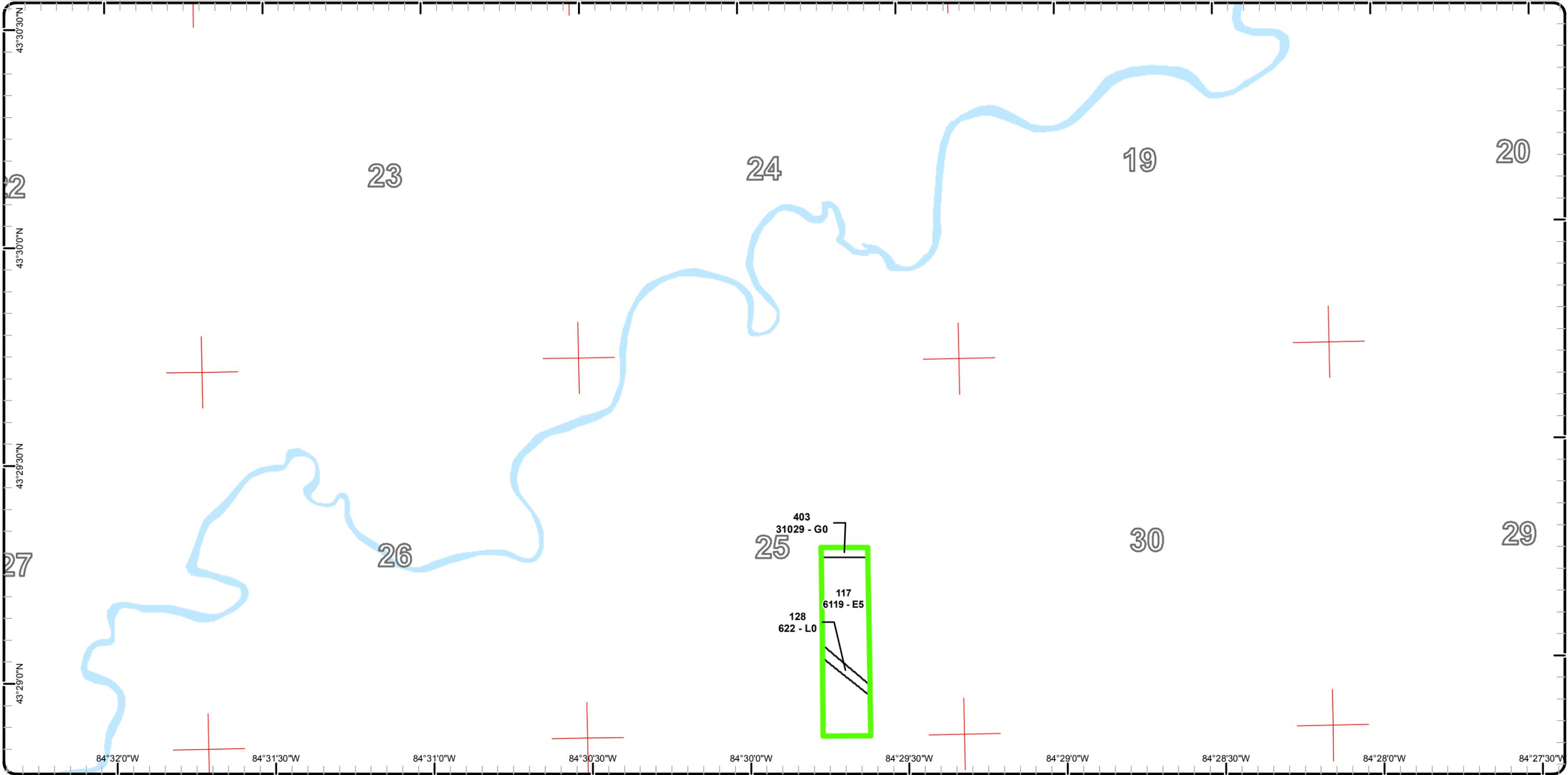


# Special Conservation Areas & Site Conditions Map

Compartment: 116  
T13N R02W 1-4, 9-14, 25  
T13N R01W 7,8,18  
County: Midland  
Unit: Gladwin  
Mgmt Area: Midland-Isabella  
YOE: 2017  
Acres: 3117 GIS Calculated  
Examiner: Scott Shooltz  
Map Revised: 6/12/2015  
Map Phase: Pre-Review



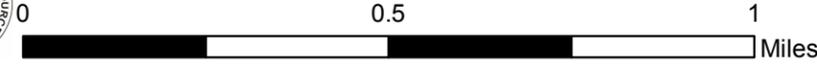
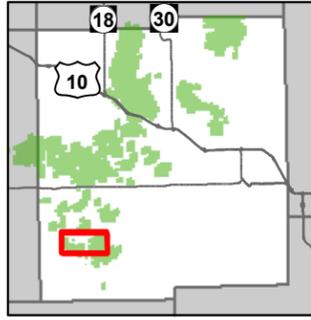
- Miris Corners
- Stand Boundaries
- Special Conservation Areas
- Cold Water Lakes





# Special Conservation Areas & Site Conditions Map

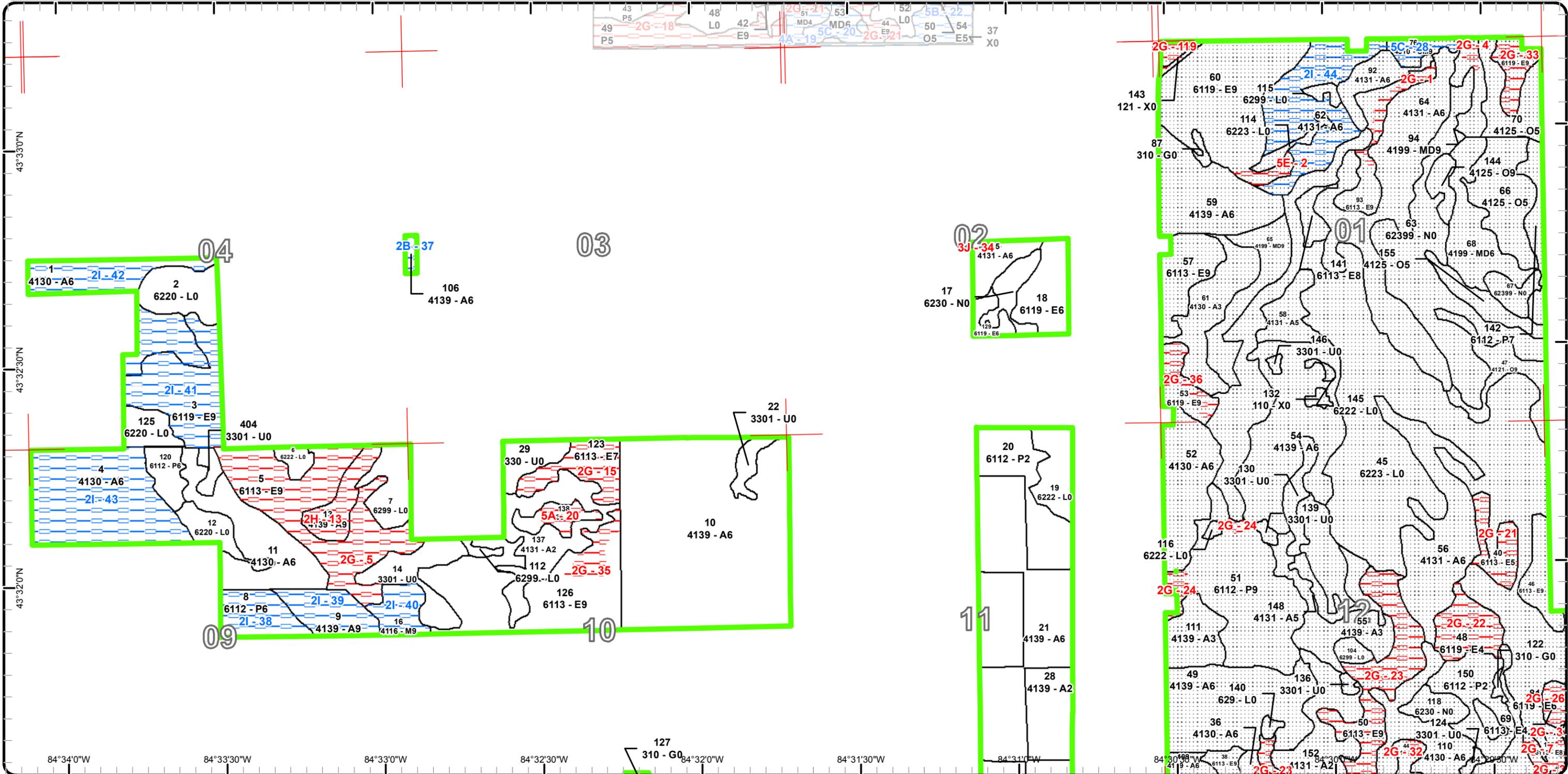
Compartment: 116  
 T13N R02W 1-4, 9-14, 25  
 T13N R01W 7,8,18  
 County: Midland  
 Unit: Gladwin  
 Mgmt Area: Midland-Isabella  
 YOE: 2017  
 Acres: 3117 GIS Calculated  
 Examiner: Scott Shooltz  
 Map Revised: 6/12/2015  
 Map Phase: Pre-Review



- Miris Corners
- Stand Boundaries
- ▨ SCA
- Site Condition
- Available w/ Constraints
- Unavailable
- Available Factors W/ Constraints
- 2B: Unknown if access through adjacent landowner(s) is possible
- 2I: Survey needed

- Unavailable Factors
- 2G: Too wet (sensitive soils, does not include access issues)
  - 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
  - 3J: Water quality / BMPs (stream, river, or lake)

- 5A: Not able to obtain desirable regeneration
- 5E: Long-Term Retention Special Conservation Areas



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

Gladwin Mgt. Unit

Compartment 116 Year of Entry 2017

Scott Shooltz : Examiner



## Age Class

	Non-Forest	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+	Uneven-Aged	Total
Aspen	0	0	170	404	635	39	14	15	7	0	12	0	0	0	0	0	0	0	1296
Herbaceous Openland	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Low-Density Trees	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
Lowland Aspen/Balsam Poplar	0	0	7	65	8	15	70	1	0	0	0	0	0	0	0	0	0	0	166
Lowland Deciduous	0	0	0	0	0	35	127	42	214	21	221	0	0	0	0	0	0	192	852
Lowland Shrub	380	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	380
Marsh	169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	169
Mixed Upland Deciduous	0	0	0	0	0	20	24	9	10	0	0	0	0	0	0	0	0	0	63
Northern Hardwood	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	10
Oak	0	0	0	0	5	0	52	22	0	0	0	0	0	0	0	0	0	0	79
Paper Birch	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Treed Bog	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Upland Mixed Forest	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6
Urban	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
<b>Total</b>	<b>626</b>	<b>0</b>	<b>177</b>	<b>487</b>	<b>648</b>	<b>109</b>	<b>287</b>	<b>105</b>	<b>231</b>	<b>21</b>	<b>233</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>192</b>	<b>3116</b>



## Report 2 – Treatment Summary

Gladwin Mgt. Unit

Year of Entry: 2017

Acres of Harvest

Compartment 116

Total Compartment Acres: 3,117

Commercial Harvest - 0  
 Harvests with Site Condition - 298  
 Next Step Harvest - 0  
 Habitat Cut - 470

### Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	380	0	0	0	0	0	0	0	0	380
Lowland Aspen/Balsam Poplar	81	0	0	0	0	0	0	0	0	81
Lowland Deciduous	0	120	0	0	35	63	0	0	0	217
Northern Hardwood	10	0	0	0	0	0	0	0	0	10
Oak	0	0	0	16	0	0	0	0	0	16
<b>Total</b>	<b>471</b>	<b>120</b>	<b>0</b>	<b>16</b>	<b>35</b>	<b>63</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>705</b>

### Proposed and Next Step Treatments by Harvest Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	705	18	0	0	96	345	0	0	12	1175
Next Step	0	46	46	0	30	0	729	0	362	1213
<b>Total</b>	<b>705</b>	<b>63</b>	<b>46</b>	<b>0</b>	<b>126</b>	<b>345</b>	<b>729</b>	<b>0</b>	<b>374</b>	<b>2388</b>



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
1	73116001-Cut	33.2	4130 - Aspen	Poletimber Well	41	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal

**Habitat Cut: No Site Condition: Survey Needed**

Prescription Final harvest 2" and up. Apply standard area retention and grouse drumming log specifications.

Specs:

Next Step

Treatments:

Acceptable Management objective is aspen but will accept any mix of species which meets minimum stocking.

Regen:

Other MSP Tower site is located and State Building Authority property. An access road is present, use if permission obtained. Possibly harvest aspen  
Comment: on this parcel as well. Old next step comments:

Proposed Start Date: 10/1 /2016

3	73116003-Cut	33.5	6119 - Mixed Lowland Deciduous Forest	Sawtimber Well	90	81-110	Harvest	Group Selection	611 - Lowland Deciduous Forest	Two-Aged	Proposal
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**Habitat Cut: No Site Condition: Survey Needed**

Prescription Mark stand to 70 BA. Focus on creating large regeneration gaps (100ft +) around upland aspen pockets, smaller gaps (50 - 60ft) throughout the  
Specs: rest of the stand, and releasing crop trees in both the pole and log classes. Harvest all aspen.

Next Step

Treatments:

Acceptable Any mix of aspen, red maple, oak, & associated lowland species meeting full stocking.

Regen:

Other Harvest during dry or frozen conditions. Avoid marking in lowest wet areas. Best access is from the south but may require a DEQ permit to  
Comment: cross Hevel Drain. Locate landing in stand 404. Old next step comments:

Proposed Start Date: 10/1 /2016

4	73116004-Cut	53.5	4130 - Aspen	Poletimber Well	33	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal
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**Habitat Cut: No Site Condition: Survey Needed**

Prescription Clearcut 2" and up. Apply area retention around low aspen pockets and individually mark scattered oak throughout the stand. Harvest during dry  
Specs: or frozen conditions. Apply grouse drumming specifications.

Next Step

Treatments:

Acceptable Management objective is aspen but will accept any upland mix which meets minimum stocking levels.

Regen:

Other A forested drain splits the stand from the NW to the SE. A power line runs along the west side of the stand. North road is Brooks McNitt. Old  
Comment: next step comments:

Proposed Start Date: 10/1 /2016

8	73116008-Cut	15.5	6112 - Lowland Aspen	Poletimber Well	45	51-80	Harvest	Clearcut with Retention	6112 - Lowland Aspen	Even-Aged	Proposal
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**Habitat Cut: No Site Condition: Survey Needed**

Prescription Clear cut stand 2" and up. Apply retention in the form of individually marked trees throughout the stand. Remove wet areas from sale boundary.  
Specs: Apply grouse drumming specifications.

Next Step

Treatments:

Acceptable Management objective is lowland aspen but will accept any mix of lowland deciduous species.

Regen:

Other Dormant season harvest in order to obtain best regeneration. Deer browse may be an issue. A DEQ permit may be required to cross Hevel  
Comment: Drain. Access road is soft in spots and may need gravel. Old next step comments:

Proposed Start Date: 10/1 /2016



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
9	73116009-Cut	15.4	4139 - Aspen, Mixed Deciduous	Sawtimber Well	60	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal

**Habitat Cut: No**      **Site Condition: Survey Needed**

Prescription Clear cut stand 2" and up. Apply retention in the form of individually marked trees throughout the stand. Remove wet areas from sale boundary.

Specs: Apply grouse drumming specifications.

Next Step

Treatments:

Acceptable Any mix of aspen, red maple, and oak which meets full stocking.

Regen:

Other Dormant season harvest in order to obtain best regeneration. Deer browse may be an issue. A DEQ permit may be required to cross Hevel  
Comment: Drain. Access road is soft in spots and may need gravel. Old next step comments:

Proposed Start Date: 10/1 /2016

14	73116014- Burn	17.4	3301 - Low Density Deciduous Trees	Nonstocked	0	Unspec ified	Burn	Opening	31022 - Warm Season Grass		Proposal
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**Habitat Cut: Yes**      **Site Condition:**

Prescription Low intensity surface fire to reduce tree & herbaceous completion of warm season grasses.

Specs:

Next Step Burn, Opening; NonForestMgt, Herbaceous/Crop/Grass Planting

Treatments:

Acceptable Native warm season grasses, rubus patches & low density trees.

Regen:

Other Burn stand several times to establish native warm season grasses. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

16	73116016-Cut	10.3	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	68	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal
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**Habitat Cut: No**      **Site Condition: Survey Needed**

Prescription Clear cut stand 2" and up. Apply retention in the form of individually marked trees throughout the stand. Remove wet areas from sale boundary.

Specs: Apply grouse drumming specifications.

Next Step

Treatments:

Acceptable Any mix of aspen, red maple, and oak which makes a fully stocked stand.

Regen:

Other Dormant season harvest in order to obtain best regeneration. Deer browse may be an issue. Access road is soft in spots and may need gravel.

Comment: Old next step comments:

Proposed Start Date: 10/1 /2016

45	73116045- Spray	252.5	6223 - Inundated Shrub Swamp	Nonstocked		Unspec ified	Pesticide	Hand Application	6223 - Inundated Shrub Swamp		Proposal
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**Habitat Cut: Yes**      **Site Condition:**

Prescription Treat pockets of exotic Phragmites with Rodeo or other wetland approved herbicides.

Specs:

Next Step

Treatments:

Acceptable Lowland shrub species and cattail.

Regen:

Other Phragmites is located in multiple pockets throughout the stand which are typically less than an acre. Treatment should be manageable. Old next  
Comment: step comments:

Proposed Start Date: 10/1 /2016



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
46	73116046-Cut	8.5	6113 - Lowland Maple	Sawtimber Well	82	81-110	Harvest	Group Selection	611 - Lowland Deciduous Forest	Two-Aged	Proposal

**Habitat Cut: No****Site Condition:**

Prescription Harvest all aspen. Focus on creating large regeneration gaps (100ft +) around upland aspen pockets and releasing crop trees in both the pole and log classes through the low drainages. Maintain at least 70 BA in the low areas. Harvest during dry or frozen conditions.

Next Step  
Treatments:

Acceptable Any mix of aspen, red maple, and oak meeting full stocking.  
Regen:

Other Multiple low drainages bisect the stand east to west. May have to mark skid trails across these. No retention due to small stand size. Old next  
Comment: step comments:

Proposed Start Date: 10/1 /2016

47	73116047-Cut	16.4	4121 - Oak, Aspen	Sawtimber Well	64	1-50	Harvest	Seed Tree with Retention	4121 - Oak, Aspen	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Mark 20 BA of oak to leave. Protect oak under 4 inches DBH. Apply standard area retention away from S. Castor McNitt ROW.  
Specs:

Next Step  
Treatments:

Acceptable Management objective is oak/aspen but will accept any mix of upland deciduous species.  
Regen:

Other A private easement is located in the SE corner of the stand. Must remain passible and maintain in its current condition. Old next step  
Comment: comments:

Proposed Start Date: 10/1 /2016

49	73116049-Cut	50.3	4139 - Aspen, Mixed Deciduous	Poetimber Well	34	51-80	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Clearcut 2" and up. Apply standard area retention and in addition individually mark scattered oak to leave. Apply grouse drumming  
Specs: specifications. Apply coppice regeneration specs.

Next Step  
Treatments:

Acceptable Management objective is aspen but will accept any mix of upland species which meet minimum stocking levels.  
Regen:

Other Low drains run through this stand, some may need to be removed from the sale. Harvest during dry/frozen conditions and dormant season. Old  
Comment: next step comments:

Proposed Start Date: 10/1 /2016

51	73116051-Cut	54.1	6112 - Lowland Aspen	Sawtimber Well	55	81-110	Harvest	Clearcut with Retention	6112 - Lowland Aspen	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Clear cut 2" and up applying standard area retention. Remove low pockets and areas dominated by single stemmed red maple poles from the  
Specs: sale boundary. Apply grouse drumming specifications.

Next Step  
Treatments:

Acceptable Any mix of aspen, red maple, and oak which meets full stocking.  
Regen:

Other Stand topography primarily consists of ridges and drainages running north and south. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
52	73116052-Cut	30.1	4130 - Aspen	Poletimber Well	33	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal

**Habitat Cut: No**

**Site Condition:**

Prescription Clear cut 2" and up. Apply standard area retention. Mark additional scattered oak for mast. Dormant season harvest only. Apply coppice regeneration specs.

Next Step  
Treatments:

Acceptable Management objective is aspen but will accept any mix of species which meets minimum stocking levels.  
Regen:

Other Concentrate retention towards the north near private parcel. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

54	73116054-Cut	59.6	4139 - Aspen, Mixed Deciduous	Poletimber Well	33	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Clear cut 2" and up. Apply standard area retention around maintained openings. Mark additional scattered oak for mast. Dormant season harvest only. Apply coppice regeneration specs.

Next Step  
Treatments:

Acceptable Management objective is aspen but will accept any mix of species which meets minimum stocking levels.  
Regen:

Other Remove low wet areas from the treatment boundary. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

56	73116056-Cut	45.8	4131 - Aspen, Oak	Poletimber Well	33	51-80	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Clear cut 2" and up except do not cut any white pine. Apply standard area retention. In addition mark scattered oak along the north finger for mast. Apply coppice regeneration specs. Dormant season harvest.

Next Step Monitoring, Natural Regen (Re-Inventory); SitePrep, Roller Chopping; Planting, Interplant  
Treatments:

Acceptable Management objective is medium stocked aspen and mixed deciduous. Plant openings to red pine if regeneration fails.  
Regen:

Other Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

58	73116058-Cut	8.8	4131 - Aspen, Oak	Poletimber Medium	25	Immature	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Clear cut 2" and up. Apply standard area retention. Mark additional scattered oak for mast. Dormant season harvest only. Apply coppice regeneration specs.

Next Step  
Treatments:

Acceptable Management objective is aspen but will accept any mix of species which meet minimum stocking levels.  
Regen:

Other Remove low wet areas from sale boundary. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
59	73116059-Cut	31.8	4139 - Aspen, Mixed Deciduous	Poletimber Well	33	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal

**Habitat Cut: No****Site Condition:**

Prescription Clearcut 2" and up. Apply standard area retention around small diameter pockets and low areas. Apply grouse drumming specifications. Mark  
Specs: additional scattered oak for mast. Harvest during dormant season. Apply coppice regeneration specs.

Next Step  
Treatments:

Acceptable Management objective is aspen but will accept any mix of species meeting minimum stocking levels.  
Regen:

Other Some areas of the stand are too wet to harvest and have been removed from the treatment area. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

60	73116060-Cut	55.3	6119 - Mixed Lowland Deciduous Forest	Sawtimber Well	92	81-110	Harvest	Group Selection	6119 - Mixed Lowland Deciduous Forest	Two-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Mark to cut stand. Focus on creating large regeneration gaps (100ft +) around upland aspen pockets, smaller gaps (50 - 60ft) throughout the  
Specs: rest of the stand. Leave scattered wind firm oak and maple for seed source. Individually mark through the rest of the stand as needed for operability. Harvest in frozen/dry conditions only.

Next Step  
Treatments:

Acceptable Any mix of red maple, oak, and aspen meeting full stocking.  
Regen:

Other Objective of harvest is to regenerate aspen/maple/oak in pockets while maintaining sufficient wind firm canopy cover to act as a hydraulic pump.  
Comment: Locate landing in stand 87. North central portion of stand is wet and may not be operable. Old next step comments:

Proposed Start Date: 10/1 /2016

62	73116062-Cut	38.9	4131 - Aspen, Oak	Poletimber Well	31	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition: Survey Needed**

Prescription Clear cut 2" and up. Apply standard area retention. Mark additional scattered oak for mast. Dormant season harvest only. Apply coppice  
Specs: regeneration specs.

Next Step  
Treatments:

Acceptable Management objective is aspen but will accept any mix of species which meets minimum stocking levels.  
Regen:

Other Remove low wet depressions from harvest area. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

63	73116063- Spray	58.7	62399 - Marsh (OI)	Nonstocked		Unspec ified	Pesticide	Hand Application	6230 - Cattail		Proposal
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**Habitat Cut: Yes****Site Condition:**

Prescription Treat pockets of exotic Phragmites with Rodeo or other wetland approved herbicides.  
Specs:

Next Step  
Treatments:

Acceptable Cattails/Shrub-Carr.  
Regen:

Other Phragmites is located in multiple clumps which are typically less than an acre. Treatment should be manageable. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
73	73116073- Burn	19.4	6230 - Cattail	Nonstocked		Unspec ified	Burn	Lowland	6230 - Cattail		Proposal

**Habitat Cut: Yes****Site Condition:**

Prescription Spring burn to reduce cattail density and set back lowland brush. Spread burn area onto adjacent upland ridges.

Specs:

Next Step

Treatments:

Acceptable Cattail and associated lowland herbaceous plants.

Regen:

Other Removed narrow fingers and heavy willow pockets from the burn area. West line established by existing road. East line will need to be established. Place as topography and vegetative cover dictate. Old next step comments:

Proposed Start Date: 10/1 /2016

74	73116074- Burn	40.9	6220 - Alder/willow	Nonstocked		Unspec ified	Burn	Lowland	6230 - Cattail		Proposal
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**Habitat Cut: Yes****Site Condition: Too Wet**

Prescription Spring burn creating a mosaic of cattails and open areas. Eliminate or set back lowland brush competition in order to enhance native

Specs: herbaceous plant cover.

Next Step

Treatments:

Acceptable Cattails, lowland grasses, and other herbaceous plants.

Regen:

Other West, north & east lines are established roads. The south line needs to be established. Place line as topography dictates. Old next step comments:

Proposed Start Date: 10/1 /2016

82	73116082-NF	1.0	3102 - Grass	Nonstocked	0	Unspec ified	NonForestMgt	Other - Specify	3102 - Grass		Proposal
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**Habitat Cut: Yes****Site Condition:**

Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, brushing, burning and herbicide application.

Next Step

Treatments:

Acceptable

Regen:

Other Old well pad site. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

84	73116084- Spray	33.7	6230 - Cattail	Nonstocked		Unspec ified	Pesticide	Hand Application	6230 - Cattail		Proposal
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**Habitat Cut: Yes****Site Condition:**

Prescription Hand application of an aquatic herbicide during the growing season to kill non-native phragmites.

Specs:

Next Step

Treatments:

Acceptable Cattail and other lowland herbaceous plants.

Regen:

Other Apply treatment on adjacent private property if permission granted. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
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87	73116087-NF	1.4	310 - Herbaceous Openland	Nonstocked		Unspec ified	NonForestMgt	Other - Specify	3102 - Grass		Proposal
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**Habitat Cut: Yes**                      **Site Condition:**

Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing,  
Specs: brushing, burning and herbicide application.

Next Step  
Treatments:

Acceptable  
Regen:

Other Perform work after stand 60 is treated as this will most likely be the landing location. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

88	73116088- Burn	4.8	4131 - Aspen, Oak	Sapling Poor	16	1-50	Burn	Opening	31022 - Warm Season Grass		Proposal
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**Habitat Cut: Yes**                      **Site Condition:**

Prescription Objective of burn is to maintain area in an early successional stage while promoting native warm season grasses. A low intensity fire would be  
Specs: best.

Next Step  
Treatments:

Acceptable Native warm season grasses with low density oak and aspen.  
Regen:

Other Burn with adjacent maintained opening to the south. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

88	73116088- Burnx	4.0	4131 - Aspen, Oak	Sapling Poor	16	1-50	Burn	Opening	31022 - Warm Season Grass		Proposal
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**Habitat Cut: Yes**                      **Site Condition:**

Prescription Periodic burn to promote native warm season grasses & other native herbaceous plants. Utilize a low intensity surface fire.  
Specs:

Next Step  
Treatments:

Acceptable Native warm season grasses, native herbaceous plants & low density trees.  
Regen:

Other Three sides of burn boarder roads. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

88	73116088-NF	1.4	4131 - Aspen, Oak	Sapling Poor	16	1-50	NonForestMgt	Other - Specify	3102 - Grass		Proposal
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**Habitat Cut: Yes**                      **Site Condition:**

Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing,  
Specs: brushing, burning and herbicide application.

Next Step  
Treatments:

Acceptable  
Regen:

Other East side of road only. Private boundary to the south. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016



Stand Name	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
88	73116088-NFx	3.1	4131 - Aspen, Oak	Sapling Poor	16	1-50	NonForestMgt	Herbaceous/Crop /Grass Planting	31022 - Warm Season Grass		Proposal

**Habitat Cut: Yes****Site Condition:**

Prescription Native grass planting, that may include disking, fertilizing, no-till prairie grass drill seeding, mowing, brushing, burning and herbicide application.  
Specs:

Next Step  
Treatments:

Acceptable A mix of warm season grasses and low density trees.

Regen:

Other Once warm season native grasses are established. Burn area periodically to maintain grass cover. Extend burn out to north road. Old next step  
Comment: comments:

Proposed Start Date: 10/1 /2016

88	73116088-Prep	17.6	4131 - Aspen, Oak	Sapling Poor	16	1-50	SitePrep	Other - Specify	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal
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**Habitat Cut: Yes****Site Condition:**

Prescription Utilize the Ruffed Grouse Society machine to mow aspen clones. Avoid oak stems during operation. Treatments should be done during the dormant period for aspen and when snow accumulation is minimal.  
Specs:

Next Step  
Treatments:

Acceptable A fully stocked stand of aspen, oak & maple.

Regen:

Other Objective of treatment is to restart aspen in this stand while young and vigorous in order to increase stem density. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

89	73116089-Cut	63.0	6119 - Mixed Lowland Deciduous Forest	Sawtimber Well	75	81-110	Harvest	Crown Thinning	611 - Lowland Deciduous Forest	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition: Survey Needed**

Prescription Mark down to 70 BA focusing on releasing crop trees in both the log class and pole class. Harvest during dry frozen conditions.  
Specs:

Next Step  
Treatments:

Acceptable  
Regen:

Other Areas heavy to ash may not need to be marked. Red line was established from previous sale prep activity. Would be best to have SW corner surveyed and blue line run to establish property line. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

92	73116092-Cut	10.2	4131 - Aspen, Oak	Poletimber Well	24	1-50	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Clear cut 2" and up. Apply standard area retention. Mark additional scattered oak for mast. Dormant season harvest only. Apply coppice regeneration specs.  
Specs:

Next Step  
Treatments:

Acceptable Management objective is aspen but will accept any mix of species which meets minimum stocking levels.

Regen:

Other A drainage bisects the stand in the east half. Best access may be from the west. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
101	73116101-Cut	34.9	6113 - Lowland Maple	Sawtimber Well	70	81-110	Harvest	Shelterwood with Retention	611 - Lowland Deciduous Forest	Even-Aged	Proposal

**Habitat Cut: No**      **Site Condition: Unknown Access**

Prescription Shelterwood stand reducing residual BA to 40. Mark residual in pockets rather than evenly spaced to increase wind firmness. Harvest all  
Specs: aspen. Protect advanced understory where possible.

Next Step  
Treatments:

Acceptable Any mix of red maple, oak, and aspen which meets minimum stocking levels.  
Regen:

Other Unknown if access across private land owner will be possible. Harvest during frozen/dry conditions. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

124	73116124-NF	1.2	3301 - Low Density Deciduous Trees	Nonstocked	0	Unspec ified	NonForestMgt	Other - Specify	3102 - Grass		Proposal
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**Habitat Cut: Yes**      **Site Condition:**

Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing,  
Specs: brushing, burning and herbicide application.

Next Step  
Treatments:

Acceptable  
Regen:

Other New opening location. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

126	73116126-Cut	22.3	6113 - Lowland Maple	Sawtimber Well	68	81-110	Harvest	Group Selection	611 - Lowland Deciduous Forest	Two-Aged	Proposal
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**Habitat Cut: No**      **Site Condition:**

Prescription Mark stand to 70 BA. Focus on creating large regeneration gaps (100ft +) around upland aspen pockets, smaller gaps (50 - 60ft) throughout the  
Specs: rest of the stand, and releasing crop trees in both the pole and log classes. Harvest all aspen.

Next Step  
Treatments:

Acceptable Any mix of red maple, aspen, and oak moderately to fully stocked.  
Regen:

Other Marking of operational skid trails between aspen pockets may be necessary. Harvest during dry or frozen conditions. Access road is soft and  
Comment: may need gravel. Old next step comments:

Proposed Start Date: 10/1 /2016

130	73116130-NF	1.3	3301 - Low Density Deciduous Trees	Nonstocked		Unspec ified	NonForestMgt	Mowing	3102 - Grass		Proposal
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**Habitat Cut: Yes**      **Site Condition:**

Prescription Periodically mow in order to maintain in an open condition.  
Specs:

Next Step  
Treatments:

Acceptable Mix of native grasses.  
Regen:

Other Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
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130	73116130-NFx	1.0	3301 - Low Density Deciduous Trees	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	31022 - Warm Season Grass		Proposal
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**Habitat Cut: Yes**                      **Site Condition:**

Prescription Warm season grass establishment that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, brushing, burning and herbicide application.  
Specs:

Next Step  
Treatments:

Acceptable Warm season grass & other herbaceous plants.  
Regen:

Other Burn after grass has established. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

133	73116133- Burn	9.4	6224 - Treed Bog	Nonstocked		Unspec ified	Burn	Lowland	6224 - Treed Bog		Proposal
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**Habitat Cut: Yes**                      **Site Condition:**

Prescription Spring burn in order to reduce tree competition within this stand and enhance blueberry/cranberry.  
Specs:

Next Step  
Treatments:

Acceptable Blueberry/cranberry and paper birch.  
Regen:

Other Burn with stand 74 if possible. West, north & east lines are established roads. The south line needs to be established. Place line as topography dictates. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

136	73116136-NF	1.3	3301 - Low Density Deciduous Trees	Nonstocked	0	Unspec ified	NonForestMgt	Other - Specify	3102 - Grass		Proposal
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**Habitat Cut: Yes**                      **Site Condition:**

Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, brushing, burning and herbicide application.  
Specs:

Next Step  
Treatments:

Acceptable Warm and cool season plantings.  
Regen:

Other New opening location. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016

138	73116138-Cut	2.0	4139 - Aspen, Mixed Deciduous	Sawtimber Medium	75	51-80	Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal
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**Habitat Cut: No**                      **Site Condition:**

Prescription Clearcut 2" and up. Do not apply retention because of small prescription size.  
Specs:

Next Step  
Treatments:

Acceptable Management objective is aspen but will accept any mix of species which meet minimum stocking levels. Terrain is less hummocky than east of closed road and should regenerate.  
Regen:

Other Harvest west side of closed road plus 20 feet on the east side of the road in order to open it up to sun light. Old next step comments:  
Comment:

Proposed Start Date: 10/1 /2016



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
142	73116142-Cut	11.4	6112 - Lowland Aspen	Sawtimber Poor	55	81-110	Harvest	Clearcut with Retention	6112 - Lowland Aspen	Even-Aged	Proposal

**Habitat Cut: No**

**Site Condition:**

Prescription Final harvest 2" and up. Apply area retention around wet areas. In addition individually mark scattered oak for mast. Apply grouse  
Specs: specifications. Harvest during dry/frozen conditions.

Next Step  
Treatments:

Acceptable Aspen or any mix of deciduous species.  
Regen:

Other Access will be from the north off Bradford Rd. utilizing closed road. South portion of stand may not be accessible unless a crossing is placed on  
Comment: Caywood Drain or a road is built through stands 68 & 155. Old next step comments:

Proposed Start Date: 10/1 /2016

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**Total Treatment**  
**Acreage Proposed: 1174.8**

## Report 5 – Site Conditions

Gladwin Mgt. Unit  
Scott Shooltz : Examiner

Compartment: 116  
Year of Entry: 2017

### Dominant Site Conditions

	2B	2D	2G	2H	2I	3J	5A	5C	5E
Aspen	2	12	0	18	144	1	5		
Herbaceous Openland									
Low-Density Trees									
Lowland Aspen/Balsam Poplar			11		15				
Lowland Deciduous	35		306		96				4
Lowland Shrub									
Marsh									
Mixed Upland Deciduous			2	10					
Northern Hardwood					10				
Oak	5								
Paper Birch			6						
Treed Bog									
Upland Mixed Forest								6	
Urban			0						
Total Forested Acres	42	12	326	28	266	1	5	6	4
Relative Percent									

*\*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
2	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 5 – Site Conditions

Gladwin Mgt. Unit  
 Scott Shooltz : Examiner

Compartment: 116  
 Year of Entry: 2017

3	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	15	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
4	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
5	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	56	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
6	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
7	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
8	<b>Unavailable</b>	<b>1D: Interest Group / Neighbor</b>	10	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 5 – Site Conditions

Gladwin Mgt. Unit  
Scott Shooltz : Examiner

Compartment: 116  
Year of Entry: 2017

9	Unavailable	1D: Interest Group / Neighbor	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	31	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
11	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
12	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
13	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
14	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	13	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 5 – Site Conditions

Gladwin Mgt. Unit  
Scott Shooltz : Examiner

Compartment: 116  
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15	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	16	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
16	<b>Available</b>	<b>2D: Portable Bridge Needed (Dept. bridge will be adequate)</b>	12	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Turkey Drain runs along west boundary of stand.							
17	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
18	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	35	2I: Survey needed	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
19	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	7	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
20	<b>Unavailable</b>	<b>5A: Not able to obtain desirable regeneration</b>	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Terrain becomes more hummocky east of closed road. Surrounding stand had poorest regeneration in this terrain type.							

## Report 5 – Site Conditions

Gladwin Mgt. Unit  
Scott Shooltz : Examiner

Compartment: 116  
Year of Entry: 2017

21	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	11	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
22	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	15	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
23	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	56	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
24	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
25	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
26	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	16	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 5 – Site Conditions

Gladwin Mgt. Unit  
 Scott Shooltz : Examiner

Compartment: 116  
 Year of Entry: 2017

27	Available	2I: Survey needed	63	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
28	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
29	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
30	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	10	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
31	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	6	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
32	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 5 – Site Conditions

Gladwin Mgt. Unit  
Scott Shooltz : Examiner

Compartment: 116  
Year of Entry: 2017

33	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	9	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
34	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Little Salt Creek buffer 100 ft.							
35	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
36	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	7	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
37	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
38	<b>Available</b>	<b>2I: Survey needed</b>	16	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 5 – Site Conditions

Gladwin Mgt. Unit  
Scott Shooltz : Examiner

Compartment: 116  
Year of Entry: 2017

39	Available	2I: Survey needed	15	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
40	Available	2I: Survey needed	10	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
41	Available	2I: Survey needed	34	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
42	Available	2I: Survey needed	33	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
43	Available	2I: Survey needed	57	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
44	Available	2I: Survey needed	39	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
119	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							



**Report 6 – 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.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Porter Oil Field Director's Order	Mineral Resource Area	Unspecified	Proposed SCA	2163
<b>Comments</b>				
Closed to public January 1st - November 6th.				



**Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS**

\* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

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

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	Poletimber Well	33.2	41	81-110	SE block separated by a forested drain approximately 40 - 50 feet wide. Accessing from the south may be the better option.
3	6119 - Mixed Lowland Deciduous Forest	Sawtimber Well	33.5	90	81-110	The stand is split by low drainages and dry ridges running predominantly east and west. It is mainly red maple but there is a component of swamp white oak, black tupelo, and cottonwood. Primary canopy is 90 years old but a second age exists in the form of red maple which has succeeded into the canopy. The main soil under the area is Kingsville.
4	4130 - Aspen	Poletimber Well	56.6	33	81-110	Stand cut under contract # 73-011-82-01 Lewis Road Block. Cut all aspen, red maple, ash, paper birch, white oak, elm, & black cherry which met minimum piece utilization. Aspen & red maple made up a majority of the volume cut. Residual trees were left during harvest. Contracts 73-001-84-01 & 73-005-84-01 were set up to cut leftover residual trees. This stand is a mixture of upland and lowland. However, overall the area is upland. In addition, within the stand boundaries there are inclusion of very wet soils which are concentrated towards the south and east.
5	6113 - Lowland Maple	Sawtimber Well	55.4	90	81-110	The terrain in the stand is very hummocky with large areas that appear to hold standing water most of the year. The south end of this stand is experiencing heavy mortality in all species due to a higher component of ash which is dying. This portion is converting to lowland grasses. The main soil type is Pipestone.
8	6112 - Lowland Aspen	Poletimber Well	15.5	45	51-80	Aspen and other species appear to have been harvested out of this stand leaving maple and oak in low spots of the stand. No standing water in the majority of this stand but the soil type (Belleville) is very soft and retains moisture due to a heavy organic component. Because of this let the stand mature to reduce the number of entries and soil impact. Stand is isolated by Hevel Drain to the north and east and private property the west and south.
9	4139 - Aspen, Mixed Deciduous	Sawtimber Well	15.4	60	81-110	The stand is mostly dry except for a few narrow forested drains and the NE corner of the stand. It is isolated by a drainage and private land making access difficult. Minor component of paper birch poles, larger diameter cottonwood, and large diameter swamp white oak. The stand is converting to red maple. The main soil type under the stand is Pipestone.
10	4139 - Aspen, Mixed Deciduous	Poletimber Well	138.5	31	81-110	Harvested under contract # 73-035-82-01 Alamando Rd. Cut all species which met minimum piece utilization. Stand includes portions of contract # 73-017-90-01 Alamando Petite which was closed in '91, same prescription. The species are heavy to trembling aspen with some bigtooth especially along the two-track. In addition, there is a component of red maple and oak in the stand. Some areas are wet and dominated by lowland brush. The soil under the stand is a mixture of Covert, Pipestone, and Kingsville.
11	4130 - Aspen	Poletimber Well	34.9	26	51-80	Harvested under contract # 73-030-85-01 Lewis Road Repeat. Cut all trees which met minimum piece utilization. The stand is an A6 with areas of P6. In addition, it has several openings that are more of a heavy A4 or light A5. Hevel Drain bisects the stand. The main soil type is Pipestone.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
13	4139 - Aspen, Mixed Deciduous	Sawtimber Well	12.0	90	81-110	This stand is a dry upland ridge surrounded by very wet lowland forest and private land. The aspen in the stand is beginning to wind throw creating natural gaps. This should allow the understory maple to succeed through the canopy and will eventually convert the stand to upland maple with components of oak and aspen.
15	4131 - Aspen, Oak	Poletimber Well	9.3	35	81-110	Stand includes a small inclusion of floodplain forest in the NW corner which contains the Little Salt Creek. Upland stand with a lowland edge along stand 17.
16	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	10.3	68	81-110	Upland stand with low depressions which hold water in the spring. The main soil types under the stand are Pipestone and Covert.
18	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	17.3	42	51-80	Appears to have been harvested in the early 70's although no records available. Residual large diameter stems and inconsistency in ages indicates a minimum piece utilization cut was performed. Hummocky terrain with pools of standing water in the spring.
20	6112 - Lowland Aspen	Sapling Medium	44.9	24	1-50	This stand was clearcut in 1992 under contract # 73-022-90-01 Patchwork Sale and is much lower than other units of the same sale. Cut all species meeting minimum piece utilization. It has regenerated as a patchy lowland aspen stand with much of the canopy cover represented by tag alder. The tag alder is beginning to decline as the stand ages and tress species grow, lowering the water table. This stand should fill in to some degree. The soil in the stand is a mixture of upland and lowland being a mixture of Pipestone, Covert, and Kingsville.
21	4139 - Aspen, Mixed Deciduous	Poletimber Well	71.5	31	81-110	Harvested under contract # 73-020-84-01 Better In The Back. Cut all species which met minimum piece utilization. The stand is a mixture of upland and lowland with the upland being the majority. The access road is impassable during wet periods of the year. Cutting blocks become more wet to the north with a forested drain present. Red maple becomes more prevalent in these low areas reducing BA and average diameter but increasing stem density as they are growing in clumps. Currently the BA in the stand ranges from 10 to 140, averaging 90. The main soil types are Pipestone, Covert, and Kingsville.
23	6113 - Lowland Maple	Sawtimber Well	4.6	89	81-110	Drainage runs through the center of this stand with water present throughout most of the year. Stand was excluded from surrounding harvest because of its soil moisture. There is a dead ash component but it doesn't reduce the canopy closure under 75%. The main soil type is Kingsville.
24	4130 - Aspen	Poletimber Well	32.5	30	51-80	Harvested under contract # 73-029-85-01 Shepherd Road Repeat. Cut all aspen, red maple, ash, paper birch, & black cherry which met minimum piece utilization. The stand is mainly trembling aspen mixed with big tooth aspen, red maple, and oak. The ground is hummocky. It has inclusions of low wet ground and grassy opening. The quad trail is present within this stand and begins at the private residence to the south. The soils are a mixture of Kingsville and Covert.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	6113 - Lowland Maple	Sawtimber Well	11.5	98	51-80	The stand is overall wet with flowing water during the spring but does dry out going to the west with an aspen oak ridge present there. There are inclusions of L-Types in the stands. There is a dead ash component throughout the stand but is being reduced through fuel wood collection. Down woody debris will still be a major component of this stand. The main soil type is Kingsville.
26	4130 - Aspen	Poletimber Well	22.5	34	81-110	Harvested under contract # 73-013-81A Shepherd Road Sale. Cut all aspen, soft maple, ash, black cherry, & paper birch which made a 100" stick. Left all oak and protected hardwood understory. This stand is classified as upland but holds a lot of standing water in the spring. In addition, within the stand boundaries there are inclusion of L-Type. The main soil type is Pipestone.
28	4139 - Aspen, Mixed Deciduous	Sapling Medium	28.9	24	51-80	This stand was clearcut in 1992 under contract # 73-022-90-01 Patchwork Sale. Cut all species meeting minimum piece utilization. It has regenerated as a light or patchy aspen stand. Within the stand boundaries, there are areas that are open and may be A1 or even G-Types. However, the stand is an A2 overall. The main species is trembling aspen but this is mixed with swamp white oak, red maple, bigtooth aspen, and northern pin oak. The soil in the stand is a mixture of upland and lowland being a mixture of with Pipestone, Covert, and Kingsville. Historic deer browse damage is evident through a visual crook in a majority of the aspen stems at approximately 3 feet high. Stand should fill in over time but obvious aspen stem density was lost compared to adjacent stand 21 which was cut 6 year prior.
30	6113 - Lowland Maple	Sawtimber Well	15.5	95	51-80	This stand is split by a forested drain which runs from west to east. The soils also get wetter going from the west to east. Overall, the stand is low and wet so it was classified as an E-Type, though there are areas that are M-Types. The main soil type is Kingsville.
31	4130 - Aspen	Sapling Well	16.5	16	1-50	T.Sale #17-99-1 Bradford MacGrudder. The edges of the stand along stands 30 and 33 are E3 with the largest lowland portion in the SE corner. However, much of the stand is upland and heavy to aspen and it is a light A3. The aspen in the stand is heavy to bigtooth but there is also trembling. Aspen is mixed with a component of maple and oak including swamp white oak. Within the stand boundaries, there is a lot of mortality on the aspen regeneration because of deer browse. Also within the stand there are inclusions of G-Types. Autumn olive patch exists along the south side of the closed forest road. The main soil is Pipestone.
33	6113 - Lowland Maple	Poletimber Well	11.7	60	81-110	The east end of the stand is wetter than the west end. In addition, the ground gets hummockier going east. Minor dead ash component located in the west end. Lowland brush becomes more prevalent going east. The main soil type is Pipestone.
34	4139 - Aspen, Mixed Deciduous	Sapling Medium	10.1	16	Immature	T.Sale #17-99-1 Bradford MacGrudder. The aspen regeneration shows signs of heavy deer browsed but is above browse height at this time. The stand is an A2 with numerous openings both wet L-Types and dry G-Types. These should fill in some what but repeated browsing is still an issue within this area. When the stand was harvested, the oak 4" DBH and under was left. The main soil type was Pipestone.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	6113 - Lowland Maple	Sawtimber Well	20.9	85	51-80	The stand is a mixture of upland and lowland. However, most of the land is lowland. The soil under the stand is a mixture of Kingsville, Pipestone, and Covert. A raptor nest was located in the south end of the stand it appeared to be a Goshawk. Dead ash & elm component within the stand. Un-even aged stand with 3 plus ages measured. form is best along Magruder Rd. but only marginal overall.
36	4130 - Aspen	Poletimber Well	36.4	25	51-80	Harvested under contract # 73-049-90-01 Lost Hipchain Sale. Cut all species 2" and up. Stand is mainly on a ridge, which slopes down to wetter ground. The stand is a matrix of open grassy areas and areas that are very dense. The stand overall is an A3. 8 acres of stand along the north side of stand 35 may have been part of contract # 73-029-81A Snowshoe Sale #2 (33 yrs old). Cut all aspen, elm, ash, red maple, & paper birch which met minimum piece utilization. Left all oak, white pine, & black cherry. The soil is a matrix of Pipestone and Kingsville.
37	4130 - Aspen	Sapling Well	33.9	25	51-80	Harvested under contract # 73-019-90-01 MacGruder Road Sale. Cut all species 2" and up. This stand is an A3 with inclusion of L and G-Types. It also has areas that are lower that are E3. However, the stand is mainly upland. The species is mostly bigtooth aspen but there is a component of trembling aspen, red maple and oak present. A 1 1/2 acre inclusion of 64 year old red maple is located in the NW corner along Magruder Rd. The main soil type is Pipestone.
38	6113 - Lowland Maple	Sawtimber Well	7.5	72	81-110	Stand prescribed for an ash salvage last YOE but did not sell. Ash and aspen are beginning to tip over and have lost merchantability. Stand BA has dropped by approximately 10% due to loss of ash. Single stem maple poles of good form are recruiting into the canopy gaps. Let stand succeed to lowland hardwood. The main soil type is Pipestone.
40	6113 - Lowland Maple	Poletimber Medium	10.5	82	1-50	The stand is low and wet with a few upland knobs. Heavy dead ash component. Will fill in with maple in spots and lowland brush in others. The main soil type is Kingsville.
41	4139 - Aspen, Mixed Deciduous	Poletimber Well	50.4	34	51-80	Inventoried as an A3 in '88 currently and A6. The stand is mostly upland and is just starting to come into poles. It does have inclusion of L and G-Types. There are also areas of E3. A pocket of lower density aspen exists in the east on a higher ridge. The soils are a mixture of Pipestone and Kingsville.
42	6113 - Lowland Maple	Sawtimber Medium	35.2	70	51-80	Ash salvage was prescribed last YOE but did not sell. Ash trees are beginning to snap approximately 30 - 40 feet high. 30% reduction in BA due to loss of ash. Adequate red maple saplings and poles in the sub-canopy to recruit into canopy gaps. The stand is a mixture of upland and lowlands with the east portion containing the most upland.. The northeast end of the stand is sparse and has inclusion of L-Types and G-Types. The main soil type is Kingsville
43	4126 - White, Black, N. Pin Oak	Poletimber Medium	4.8	34	51-80	The stand is and upland ridge dominated by oak. It does have inclusion of L and G-Types. The soils are a mixture of Pipestone and Kingsville.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	6113 - Lowland Maple	Sawtimber Medium	7.5	77	81-110	The stand is overall lowland but there are some upland knobs. There are some very low areas in the stand, which are L and N-Types which are concentrated towards the north. There is a dead ash component in this stand which reduces the canopy closure to 50 - 75 this YOE. The canopy gaps should fill in with red maple over time given the density of red maple in the sub-canopy. The soils are a mixture of Kingsville and Pipestone.
46	6113 - Lowland Maple	Sawtimber Well	11.1	82	81-110	The stand is a mixture of upland and lowland. Multiple low drainages bisect the stand with dispersed higher ground. Low areas in this stand are very wet and rutting could be an issue. The main soil type is Kingsville.
47	4121 - Oak, Aspen	Sawtimber Well	16.4	64	1-50	The stand is on a ridge that tapers down to low wet ground. There is a dead ash component in the low areas of the stand and in surrounding lowlands. The main soil type is Kingsville.
48	6119 - Mixed Lowland Deciduous Forest	Poletimber Poor	15.2	52	1-50	The stand is mainly an E4/L. The understory is an O2E2 with the oak being swamp white oak. Overall, the stand is very wet and there are L-Types scattered throughout the stand. Marsh grass is the main ground cover. Multiple drainages bisect this stand. The main soil type is Kingsville.
49	4139 - Aspen, Mixed Deciduous	Poletimber Well	50.3	34	51-80	Portion of contract # 73-029-81A Snowshoe Sale #2. Cut all aspen, elm, ash, red maple, & paper birch which met minimum piece utilization. Left all oak, white pine, & black cherry. The stand is a mixture of upland and lowland with the upland being the majority. The upland is heavy to bigtooth aspen and oak and the lowland is heavy to trembling aspen and red maple. The eastern end is wet and has a component of dead ash. The soil is a mixture of Pipestone and Kingsville.
50	6113 - Lowland Maple	Sawtimber Well	56.3	73	1-50	This stand has inclusions of L-Types and N-Types. Overall, the stand is too wet to harvest. The ground cover in the stand is heavy to sensitive fern. In addition, the stand show signs of heavy deer browse on the regeneration. 30% of the stands BA was lost due to EAB. The main soil types are Kingsville and Pipestone.
51	6112 - Lowland Aspen	Sawtimber Well	58.6	55	81-110	Ash salvage plus cut all aspen prescribed last YOE but did not sell. Two ages dominate the canopy, 85 & 55. Third age class present in the understory & co-dominant position but not a significant portion of the canopy. Stand is fairly open underneath with minimal brush or seedlings. Swamp white oak & black cherry present in the canopy but under 2% each. Red maple is predominantly 55 years old with younger & older stems present. The stand is a mixture of upland and lowland with several higher ridges running north and south. Inclusions of L-Types and N-Types present. The main soil types are Kingsville and Pipestone.
52	4130 - Aspen	Poletimber Well	29.0	33	81-110	Stand is a well-stocked aspen stand and putting on good growth. This area does taper to E-Types along the edges. Overall the stand is mainly upland but there are inclusions of low wet ground the main soil type is Covert and Pipestone. Red maple is multi-stemmed for the most part. Multiple oil and gas roads pass through the stand. Part of North Magruder Rd. Sale 73-016-81-01. Cut all aspen, red maple, ash, and paper birch which met minimum piece utilization. Left all oak and protected hardwood understory.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
53	6119 - Mixed Lowland Deciduous Forest	Sawtimber Well	10.7	95	51-80	The stand is low and wet with the ground cover of cinnamon fern, royal fern, dwarf raspberry, iris and New York fern. The oak regeneration in the stand is swamp white oak. The main soil is Pipestone.
54	4139 - Aspen, Mixed Deciduous	Poletimber Well	54.9	33	81-110	The stand is on a ridge with an oil and gas road running through it. The low areas are just coming into poles. There are sparse areas in the stand but overall it meets 75% canopy closure. The stand does taper off to E-Types along the edges. The main soil types are Kingsville and Pipestone. Part of North Magruder Rd. Sale 73-016-81-01. Cut all aspen, red maple, ash, and paper birch which met minimum piece utilization. Left all oak and protected hardwood understory.
55	4139 - Aspen, Mixed Deciduous	Sapling Well	35.4	24	Immature	Harvested under contract # 73-049-90-01 Lost Hipchain Sale. Cut all species 2" and up. Aspen was considered over mature at time of harvest. The stand is an upland lowland matrix with hummocky terrain. This stand was cut with the adjacent ridge but because of its lower elevation regenerated to better stocking and with more red maple. The main soil types are Pipestone and Kingsville.
56	4131 - Aspen, Oak	Poletimber Well	45.0	33	51-80	Stand is closer to 75% canopy closure. Open pockets along forest road most likely from historic ORV use. North finger is primarily oak with scattered log size trees. Small white pine inclusions located near center. Scattered older oak left from previous harvest. The stand is mainly an aspen ridge that tapers into lowland along the edges of the stand. The main soil type is Covert.
57	6113 - Lowland Maple	Sawtimber Well	17.2	74	81-110	Stand is a mix of lowland with upland hummocks. Stand is predominantly 74 years old but a younger age class of red maple is beginning to recruit into canopy gaps created by the declining aspen. The red maple is of decent quality, only older stems appear to be growing in clumps. Recruiting red maple is single stemmed.
58	4131 - Aspen, Oak	Poletimber Medium	11.6	25	Immature	Harvested under contract # 73-018-90-01 Bradford Road Sale. Cut all species 2" and up. The stand is a mixture of aspen and maple regeneration with some oak regeneration. Individual oak were left from Bradford harvest and are now log size. The stand is on a ridge that tapers off to E-Types. Overall the stand is aspen but red maple makes a good percentage of the stand. There is also a lot of Juneberry in the stand. This stand just makes pole size. The main soil is Pipestone and Kingsville.
59	4139 - Aspen, Mixed Deciduous	Poletimber Well	36.0	33	81-110	This stand is a mixture of upland ridges and lowland swales. Within the stand boundaries, there are inclusions of L-Types. The low areas are a mixture of birch, red maple with quaking aspen and upland is heavy to aspen. When the stand was harvested, there was substantial rutting. The main soil type is Pipestone. Part of North Magruder Rd. Sale 73-016-81-01. Cut all aspen, red maple, ash, and paper birch which met minimum piece utilization. Left all oak and protected hardwood understory. Maple that was left is mostly poor formed.
60	6119 - Mixed Lowland Deciduous Forest	Sawtimber Well	61.2	92	81-110	The stand is a mixture of upland ridges and lowland forest. The wettest areas are identified by Michigan holly and tag alder understory. There is a component of dead ash within this stand but is not substantial enough to be an issue.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
61	4130 - Aspen	Sapling Well	24.7	25	51-80	Harvested under contract # 73-018-90-01 Bradford Road Sale. Cut all species 2" and up. Stand varies in density. The main species in the stand is bigtooth aspen mixed with some oak and red maple. Some advanced oak regeneration was left from previous harvest creating two ages within the oak type. The main soil type is Covert and Pipestone.
62	4131 - Aspen, Oak	Poletimber Well	38.9	31	81-110	Harvested under contract # 73-106-83-01 Bald Face Sale. Cut all species which met minimum piece utilization. The stand just makes an A6 and is mixed with some oak and red maple. The area is a mixture of upland and lowland. The lower areas are dominated by Michigan Holly in the understory with red maple in the canopy. The main soil type under the stand is Pipestone.
64	4131 - Aspen, Oak	Poletimber Well	67.0	25	Immature	Harvested under contract # 73-018-90-01 Bradford Road Sale. Cut all species 2" and up. A few islands of uncut timber were left in low wet areas. This stand is grassy with some ORV use but it is minimal. The stand is on a ridge that tapers to low wet ground. The overstory is a mixture of aspen and oak. The majority of the stand just makes pole size. Sapling pockets still exist. There are also inclusions of G-Types. Overall, the stand is a light A6 with some oak, red maple and paper birch.
65	4199 - Other Mixed Upland Deciduous	Sawtimber Well	19.6	48	81-110	Previous harvest left scattered residual oak & maple. The stand has a two aged appearance because of smaller suppressed maple and advanced understory but the dominant age is 48. Stand is primarily upland with lowland pockets. An overflow from stand 45 cuts off the south portion of this stand effectively creating an island.
66	4125 - Black, N. Pin Oak	Poletimber Medium	25.9	53	1-50	Stand was harvested 34 years ago in which the advanced oak regeneration was protected along with some older individuals and some aspen. Regeneration failed except for low areas which were not rutted heavily. A dry ridge makes up the majority of the stand but low pockets are scattered throughout (maple regeneration is concentrated here). The soil is mainly Pipestone with some area of Covert.
68	4199 - Other Mixed Upland Deciduous	Poletimber Well	23.8	50	1-50	The stand was cut with stand 66 34 years ago in which all advanced oak was left resulting in a 50 year old stand. The understory maple is growing in clumps but there are some nicer single stems which made it to the canopy. The area is lower in elevation but overall flooding doesn't appear to be common. There are lowland inclusions towards the south part of this stand which were cut and regenerated to low density swamp white oak which is much smaller in diameter.
69	6113 - Lowland Maple	Poletimber Poor	15.9	77	1-50	Very wet stand which just meets forested criteria. Lowland brush dominates the majority of the stand. eventually will convert to non-forested lowland. The main soil type is Kingsville.
70	4125 - Black, N. Pin Oak	Poletimber Medium	16.6	50	1-50	The stand was a 4" clearcut done in 2000 under contract # 73-017-99-01 Bradford MacGrudder. Comments indicate a good stocking of oak under 4" was left. The aspen in the stand did not regenerate well and it has come back as an oak and maple stand. Overall, the stand is a 50 year old oak stand because of the advanced regeneration left which has now become the canopy. The red maple in the stand is a mix of ages between 15 and 50. The soil under the stand is mainly Pipestone and Covert.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
71	4131 - Aspen, Oak	Sapling Poor	51.8	16	1-50	Harvested under contract # 73-018-99-01 Porter Oil Field. The regeneration in the stand is patchy and it is mainly in the form of isolated clones. When the stand was harvested the oak <= 4" DBH was left. There was a lot of mortality in the aspen regeneration that seemed to be associated with deer browse pressure. The main soil types are Pipestone and Covert.
72	6113 - Lowland Maple	Sawtimber Medium	8.2	70	1-50	The stand is in a depression and is heavy to red maple. Dead ash component in the west end reduces canopy closure but still is higher than the east portion. The east portion is less dense with an understory dominated by lowland brush. The main soil type is Kingsville
75	6119 - Mixed Lowland Deciduous Forest	Sawtimber Medium	30.9	105	1-50	The stand is low and wet with lots of standing water present most of the year. There are a few higher spots in this stand with red oak present. Dead ash component throughout but should be succeeded by red maple and swamp white oak in the understory. Low stand vigor because of anaerobic conditions throughout most of the year. The main soil type is Kinross.
76	4310 - Pine, Oak Mix	Sawtimber Well	6.0	67	141-170	This stand has some larger overstory oak and white pine along with hand planted red pine. The oak is larger in DBH than the pine. In addition, the area appears to have been a barrow area for Bradford Rd. This stand is also the only conifer stand in the compartment; and it should be held for diversity. The main soil type is Covert and Pipestone.
77	4130 - Aspen	Sapling Medium	8.5	16	1-50	Harvested under contract # 73-018-99-01 Porter Oil Field. Cut 2" and up except left oak 4" and under, protected regeneration. Stand has been heavily browsed by deer. Much of the regeneration has died leaving the stand with patches of clones and many open areas. The main soil type is Covert and Pipestone.
78	6119 - Mixed Lowland Deciduous Forest	Poletimber Medium	10.6	50	51-80	This stand has a significant dead ash component which resulted in approximately a 45% canopy closure reduction. Ash is also a dominant species in the sub-canopy but lowland brush is expanding. The wettest area of the stand is in the center and contains the largest portion of dead ash. The main soil type is Belleville.
79	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	67.5	55	81-110	Stand is a mixture of upland ridges and lowland flats (predominantly lowland). The aspen looks to be declining. There is a survey corner present in the stand and it is located at N 43° 31.898' W84° 28.139' Cap # 17741. A forested drain flows from stand 96 into Turkey Drain and bisects this stand. The ground cover goes from bracken fern on the upland to sensitive fern and iris in the lowlands. The wettest portions of the stand are located to the west along the PVT. line. The main soil is Wixom.
80	6116 - Lowland Birch	Poletimber Medium	5.5	25	1-50	The stand looks like it might have been a beaver flooding. However, it is now a pole size stand dominated by paper birch. The Turkey Creek flows through the stand. The main soil is Wixom.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
81	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	15.0	60	81-110	Natural succession of red maple and swamp white oak through the declining ash canopy has resulted in a 60 year old pole stand. Ash should begin to fall down in the next 10 years, releasing the understory more. 25% reduction in BA due to ash mortality.
83	4130 - Aspen	Poletimber Medium	6.4	45	51-80	This stand is an A5. The area is mainly a ridge that tapers down to L and N-Types. Access is limited due to private property and lowland marshes. Currently a oil and gas road accesses stand from the SW. The main soil type is Belleville.
85	4199 - Other Mixed Upland Deciduous	Sawtimber Well	9.9	72	81-110	This stand has some well sites restoration going on at the current time. The area is inaccessible due to private property and large non-forested wetlands, let it convert to maple and oak. The stand is small and tapers to L and N-Types. The soils are mainly Covert and Belleville.
88	4131 - Aspen, Oak	Sapling Poor	54.3	16	1-50	Harvested under contract # 73-018-99-01 Porter Oil Field. The stand is a mixture of good regeneration and areas of open land. Old comments indicate dead aspen regeneration in the stand that appears to be linked with deer browse. When the stand was harvested, the oak <= 4" was left. A 4 acre inclusion of sparse aspen is located between stands 91 and 75. The main soil type is Pipestone. Trenching and planting need to be done in fall to avoid disturbance of an eagle's nest in the area.
89	6119 - Mixed Lowland Deciduous Forest	Sawtimber Well	63.0	75	81-110	Ash salvage plus cut all aspen prescribed last YOE but did not sell. Ash are beginning to tip over resulting in a 15% reduction in BA. The stand is a mixture of sawlog pockets and pole pockets. Two ages recorded in the red maple and swamp white oak, 75 & 50, with the majority being 75. Scattered older stems present. The stand is a mixture of upland and lowland with the majority being lowland. The terrain is hummocky and has areas of standing water in the spring. The soil under the stand is Kingsville.
90	6113 - Lowland Maple	Sawtimber Medium	7.7	95	51-80	This stand is in a depression and is wet and hummocky. Within the stand's boundaries, there are inclusion of both L and N-types. There is a significant dead ash component within this stand which reduces the BA by half as well as canopy closure. The regeneration in the stand is a mixture of green ash, red maple and swamp white oak but dominated by red maple. The red maple regeneration is free to grow and should help push the stand to an un-even aged structure. The main soil type is Belleville.
91	6113 - Lowland Maple	Poletimber Well	13.4	50	51-80	Areas that were not cut along with stand 88 because they are lower and wetter. The ground in the stand is hummocky and has inclusion of L-Types. The aspen in it is scattered and declining quickly. Therefore let it convert fully to swamp hardwoods. The main soil type is Pipestone.
92	4131 - Aspen, Oak	Poletimber Well	11.0	24	1-50	Harvested under contract # 73-018-90-01 Bradford Road Sale. Cut all species 2" and up. A forested drain runs north to south through east portion. A low area borders the west side. Overall, the stand is upland. The main soil type is Pipestone.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
93	6113 - Lowland Maple	Sawtimber Well	15.2	65	81-110	This stand is an E-Type with subtle elevation changes throughout. An intermittent stream flows through the north half of the stand and standing water is present in other parts. There is a dead ash component along the intermittent stream. The understory is primarily maple with oak present on slightly higher elevations. This understory is approximately 45 years old and is succeeding into the canopy through holes created by the declining aspen. The main soil type is Pipestone.
94	4199 - Other Mixed Upland Deciduous	Sawtimber Well	9.2	67	51-80	The stand is located mostly on two slight ridges between tapering into low ground. A forested drain separates the north from the south. The terrain is slightly hummocky and many of the trees have fluted butts in the low edges. The ground cover goes from bracken fern on the upland to sensitive fern and iris in the depressions. There is a lot of down woody debris in the stand from the declining aspen. The main soil is Wixom.
95	4131 - Aspen, Oak	Sawtimber Well	12.2	55	51-80	North half is higher and drier than south. Aspen and maple are concentrated to the south with oak dominating the north. The main soil is Wixom.
99	6113 - Lowland Maple	Sawtimber Medium	15.4	70	1-50	The stand is a mixture of upland and lowland with the majority being lowland. The terrain is hummocky and has areas of standing water in the spring. Dead ash component heaviest in the north finger with this portion converting to lowland brush. It is also the wettest in this portion. The soil under the stand is Kingsville.
101	6113 - Lowland Maple	Sawtimber Well	34.9	70	81-110	The stand is a mixture of upland and lowland with slight elevation changes resulting in changes from maple to oak aspen. This forty is land locked by adjacent private ownerships with very limited close access roads. Heavy stocking of vigorous understory maple throughout the stand. The main soil type is Pipestone.
102	6111 - Lowland Balsam Poplar	Sapling Medium	6.9	15	Immature	The stand is a thick stand of trembling aspen and balsam poplar on wet soils. There are areas of L-Type in it. This stand appears to have been a beaver flooding that converted to a beaver meadow then seeded in with aspen becoming a P-Type. The main soil under the stand is Kingsville.
106	4139 - Aspen, Mixed Deciduous	Poletimber Well	2.0	50	Unspecified	Remote call. No legal access to this parcel. Appears to be upland.
107	4137 - Aspen, Birch	Sapling Well	6.1	25	51-80	Harvested under contract # 73-019-90-01 MacGruder Road Sale. Cut all species 2" and up. The stand is an A3 that is a mixture of aspen, birch, maple and oak. The area is also a mix of upland and lowland with the majority being upland. There are also inclusion of both L and G-Types. The main soil type is Pipestone.
108	4193 - Birch, Aspen	Sapling Well	12.5	25	51-80	Harvested under contract # 73-019-90-01 MacGruder Road Sale. Cut all species 2" and up. The stand is a mixture of upland and lowland with the majority being upland. Overall, the stand is an A3 but has pockets of wet E2 and areas that are closer to G-Types. The species are a mixture of aspen, birch and maple. The soils are a mixture of Pipestone and Covert.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
109	4139 - Aspen, Mixed Deciduous	Poletimber Well	10.7	25	51-80	Harvested under contract # 73-019-90-01 MacGruder Road Sale. Cut all species 2" and up except left all oak and maple. The stand is an A3 of mainly bigtooth aspen mixed with red maple. In the stand there is a component of mussel wood and hop horn that indicate some moister conditions. The terrain is hummocky but it is predominantly upland. The main soil type is Pipestone.
110	4130 - Aspen	Poletimber Well	50.0	24	51-80	Harvested under contract # 73-049-90-01 Lost Hipchain Sale. Cut all species 2" and up. Aspen was considered over mature at time of harvest. The stand is a mixture of upland and lowland. Overall, the stand is a light A3 mixed with red maple and oak. The low areas of the stand are split between red maple and quaking aspen while big tooth dominates the upland ridges.
111	4139 - Aspen, Mixed Deciduous	Sapling Well	15.2	25	51-80	Harvested under contract # 73-019-90-01 MacGruder Road Sale. Cut all species 2" and up. This stand is an A3 overall. However, there are numerous grassy openings and L-Types in the stand. The diameter of the aspen ranges from 2 - 6" DBH. In addition, within the stand there is some oak and maple. The main soil types are Kingsville and Pipestone.
113	6119 - Mixed Lowland Deciduous Forest	Sawtimber Well	8.8	95	81-110	This stand is low and wet. The ground cover is heavy to marsh grass and sensitive fern. The regeneration in the stand is heavy to ash. The overstory in the stand is swamp white oak and red maple. Understory red maple will eventually succeed through the canopy. Dead ash component. The main soil type is Kingsville.
117	6119 - Mixed Lowland Deciduous Forest	Poletimber Medium	35.2	45	1-50	The stand is a fairly even mixture of upland and lowland and could be classified as either. The terrain is hummocky. Because of this and the species mix, the stand was classified as an E-Type. The main soil type is Pipestone. The stand was harvested in 2011 with the Redstone Harvest 73-001-11-01. The harvest was a 4" spec final harvest marking 1 to 2 trees per acres for retention. Stand was classified as two-aged due to a high density of maple 3 - 6 inches which were left during the harvest. Most appear to have broken tops, stunted growth, or poor form which should allow the 4 year old age class to succeed and may result in this stand reverting back to even aged. Aspen is patchy but should maintain as it is above browse height.
120	6112 - Lowland Aspen	Poletimber Well	8.4	33	Immature	Stand cut under contract # 73-011-82-01 Lewis Road Block. Cut all aspen, red maple, ash, paper birch, white oak, elm, & black cherry which met minimum piece utilization. Aspen & red maple made up a majority of the volume cut. Residual trees were left during harvest. Contracts 73-001-84-01 & 73-005-84-01 were set up to cut leftover residual trees. Stand is now a mixture of lowland brush pockets and lowland deciduous canopy. The main soil type under the stand is Kingsville.
123	6113 - Lowland Maple	Sawtimber Poor	15.9	90	1-50	Very wet stand with ground cover including graceful sedge, buttonbush, iris, sensitive fern, and royal fern. Most of the stand is forested wetlands. Canopy is declining quickly due to a significant loss of ash and declining maple. Some areas are succeeding with lowland hardwood while others are converting to non-forested wetland. Some of the ash appears to have been cut for research. The main soil type is Kingsville.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
126	6113 - Lowland Maple	Sawtimber Well	61.4	68	81-110	The stand is a mixture of upland and lowland. Most of the area is lowland with the NE corner being the wettest. Down woody debris of ash, aspen, and even some red maple due to natural causes throughout stand creating canopy gaps for sub-canopy species. Overall BA was reduced by 10 square feet because of ash mortality. The largest diameter trees are located in the wettest areas of the stand indicating the stand most likely was logged to some degree. The NW corner is the highest and driest. The main soil under the stand is Pipestone.
129	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	5.0	55	81-110	Hummocky terrain with ponding water in depressions during the spring. Associated oak knolls throughout transitioning to pure upland in the west.
135	6113 - Lowland Maple	Sawtimber Medium	8.4	77	51-80	Stand is very wet and hummocky. The stands canopy closure dropped because of the dead ash component. Canopy gaps should fill in with non-ash sub-canopy species. Sub-canopy is above lowland brush and shouldn't be an issue. The main soil type is Kingsville.
137	4131 - Aspen, Oak	Sapling Medium	28.5	13	Immature	Harvested under contract # 73-026-99-01 Little Salt Aspen. Cut all species 2" and up except left all white pine, white oak, & beech. The stand was clearcut in 2002, portions have not come back. Old comments indicate the aspen regeneration in the stand appeared to have been hit with some disease, many dead aspen root sucker in the stand.
138	4139 - Aspen, Mixed Deciduous	Sawtimber Medium	7.4	75	51-80	Stand is a mix of upland and lowland with upland being the majority. Canopy aspen are declining allowing red maple in the understory to succeed. This process is creating single stem red maple.
141	6113 - Lowland Maple	Sawtimber Medium	5.2	59	81-110	Aspen has died out of this stand for the most part. Stand has converted to maple/oak. Mostly low ground w/ non-forested swales dominated by lowland shrubs. One upland ridge in the north. South has least canopy closure. The main soil type is Pipestone.
142	6112 - Lowland Aspen	Sawtimber Poor	11.4	55	81-110	A small portion in the NW corner was harvested under contract # 73-036-82-01 Castor Road Sale. Cut all aspen, oak, red maple, ash, & paper birch. The overstory in the stand is mainly quaking aspen but it is mixed with maple and oak. The oak is more common to the north and along the ridge boarding the west. Stand is wettest to the south and along Castor Rd. Caywood drain runs along the east side of this stand parallel to Castor Rd. There is a dead ash component within this stand, approximately 6% of the canopy with the largest pockets located at the far north end of the stand. The oak understory is concentrated along Castor Rd. East of the drain. The soil is mainly Pipestone with some area of Covert.
144	4125 - Black, N. Pin Oak	Sawtimber Well	5.7	62	81-110	The stand is a slight ridge between two low drainages making access difficult but not impossible. The ground cover goes from bracken fern on the upland to sensitive fern and iris in the surrounding depressions. There is a lot of down woody debris in the stand that is mainly aspen. The main soil is Wixom.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
148	4131 - Aspen, Oak	Poletimber Medium	10.2	24	1-50	Harvested under contract # 73-049-90-01 Lost Hipchain Sale. Cut all species 2" and up. Aspen was considered over mature at time of harvest. This stand was cut the same time as stand 55 but did not regenerate as well. There are small openings throughout and the trees have a wide spacing resulting in a larger DBH compared to stand 55. The stand sits on a ridge. The main soil types are Pipestone and Kingsville.
150	6112 - Lowland Aspen	Sapling Medium	20.0	24	Immature	Harvested under contract # 73-049-90-01 Lost Hipchain Sale. Cut all species 2" and up. Aspen was considered over mature at time of harvest. The stand is a lowland portion of the parent stand which partially converted to lowland brush.
152	4131 - Aspen, Oak	Sapling Medium	28.3	25	Immature	Harvested under contract # 73-019-90-01 MacGruder Road Sale and 73-049-90-01 Lost Hipchain Sale. Cut all species 2" and up. Stand is mainly on a ridge, which slopes down to wetter ground. The stand is a matrix of open grassy areas and areas that are very dense. Aspen was considered over mature at time of harvest. The main soil types are Pipestone/Kingsville/Covert.
155	4125 - Black, N. Pin Oak	Poletimber Medium	9.9	50	81-110	Ridge tapering to low ground. Aspen dying out of stand. Oak varies in size & age but on average not more than 20 years. This is most likely because of the decline/cutting of aspen. Stand is closer to 75% canopy closure.
157	6112 - Lowland Aspen	Sawtimber Well	0.9	65	51-80	Tax reverted in 1988. Dispose of parcel.
159	6113 - Lowland Maple	Poletimber Well	10.1	50	81-110	Tax reverted in 1984. Dispose of parcel.



Stand	Cover Type	Acres	Managed Site	General Comments:
2	6220 - Alder/willow	16.5	No	The stand is an L-Type of willow, tag alder and buttonbush. There are pockets in the stand that are closer to an N-Type with cattails and marsh grass. Dead ash around the perimeter.
6	6222 - Shrub-Carr	3.9	No	This stand is an L-Type that has a large area of cattails and marsh grass. In addition, in the area, there are some swamp hardwoods but they are widely scattered.
7	6299 - Lowland Shrub (OI)	13.8	No	Stand is an L-Type made up of shrubs over marsh grass.
12	6220 - Alder/willow	9.3	No	Harvested under contract # 73-030-85-01 Lewis Road Repeat. Cut all trees which met minimum piece utilization. This area has been flooded by beavers. The signs of beaver activity around the flooding are old, > 2 years. This flooding show up on the 1998 DOQ as very wet and on the 2005 NAIP imagery it show up as an area lacking an overstory but without open water. Therefore, the flooding may now be abandoned but the dam is still restricting water flow. The main soil type under the stand is Kingsville.
14	3301 - Low Density Deciduous Tree	17.4		Harvested under contract # 73-026-99-01 Little Salt Aspen. Cut all species 2" and up except left all white pine, white oak, & beech. The stand was clearcut in 2002 and did not regenerate. Old comments indicate aspen regeneration in the stand appeared to have been hit with some disease, many dead root suckers in the stand. What little oak that did regenerate is currently being browsed.
17	6230 - Cattail	8.9	No	Cattail marsh with no phragmites. Gravel oil and gas road runs through this stand.
19	6222 - Shrub-Carr	14.0	No	This stand is low and wet and is mainly made up of narrow leaf cattails. Within the stand there is scatted swamp white oak that are now becoming pole size, however, the trees make up < 10 BA. The stand had very little stand water in it when inventoried in early July, which was surprising.
22	3301 - Low Density Deciduous Tree	5.3	No	Possible old landing site from surrounding sale. Did not regenerate to full stocking.
27	6222 - Shrub-Carr	3.6	No	The stand is in a depression that is mainly an L-Type that has areas of marsh in it. The soil under the stand is Kinross.
29	330 - Low-Density Trees	9.4		Harvested under contract # 73-026-99-01 Little Salt Aspen. Cut all species 2" and up except left all white pine, white oak, & beech. The stand was clearcut in 2002 and it has not come back. Old comments indicated aspen regeneration in the stand appeared to have been hit with some disease, many dead aspen root sucker in the stand. Many of the ash trees along the edges of the cut have been girdled. There is a 1 acre retention patch along the north boundary of this stand.
32	6230 - Cattail	0.5	No	No phragmites at this time.
39	6220 - Alder/willow	4.0	No	This stand is in a depression and it is an L-Type with areas of N-Type. Swamp white oak is present in the stand, but it is scattered. The main soil type is Kinross.



Stand	Cover Type	Acres	Managed Site	General Comments:
45	6223 - Inundated Shrub Swamp	253.3	No	This is a large cattail marsh with perimeters of lowland shrubs. Small treed islands and fingers exist along the perimeter of the stand along with scattered trees throughout which range in size. There are multiple patches of phragmites which also range in size.
63	62399 - Marsh (OI)	58.7	No	The stand is mainly cattails with clumps/fingers of lowland brush and hardwood. The southern end of the stand has the largest patch of swamp hardwood but overall there is not enough to call it an E1. Exotic phragmites is present within this stand.
67	62399 - Marsh (OI)	6.6	No	The stand is a depression of mainly cattail and sedges. There are areas of lowland brush especially along the edges. No phragmites.
73	6230 - Cattail	15.6	No	Cattail marsh with alder throughout. North finger is primarily lowland brush with willow dominant.
74	6220 - Alder/willow	29.6	No	This stand is an L-Type of willow and tag alder with marsh grass and areas of cattails. There are swamp hardwood island in the stand but they do not have enough canopy closure to make this stand an E4. The main soil type is Kinross.
82	3102 - Grass	1.0	No	Old well pad site. Has been seeded with grasses. The main soil type is Kinross.
84	6230 - Cattail	33.7	No	This is a large cattail marsh with scattered pockets of lowland brush and hardwood around the perimeter. Phragmites exists in two small pockets along the south edge.
86	6230 - Cattail	13.2	No	Cattail marsh with lowland hardwood and brush around the perimeter.
87	310 - Herbaceous Openland	1.4	No	Old oil & gas site. Would make a good Wildlife Opening. Old access road through stand 59.
96	62399 - Marsh (OI)	1.7	No	This stand is a low drainage which flows into Turkey Creek. The main soil is Wixom.
97	6222 - Shrub-Carr	5.9	No	The stand is an L/N with a fair amount of swamp hardwoods around the edges and through the NE corner. Overall this stand is close to 25% canopy closure all though it is converting to lowland brush and cattail. The soil under the stand is Kinross.
98	62399 - Marsh (OI)	18.0	No	This is a cattail marsh.
100	6222 - Shrub-Carr	1.2	No	Low depression which was cut with stand 83 and swamped out. This is indicated by the scattered 45 year old aspen and maple. The main soil type is Pipestone.
103	3301 - Low Density Deciduous Tree	1.9	No	Non-forested opening due to regeneration failure. The soils are a mixture of Pipestone and Kingsville.



Stand	Cover Type	Acres	Managed Site	General Comments:
104	6299 - Lowland Shrub (OI)	3.4	No	This stand is sparse with areas that are heavy to willow and tag alder. There are areas in the stand that are mainly cattails and marsh grass. There is also swamp hardwoods scattered in the stand but much of this is concentrated along the edges. The soil under that stand is Kingsville.
105	623 - Emergent Wetland	2.4	No	Dominated by lowland grasses with a perimeter of lowland brush and hardwood.
112	6299 - Lowland Shrub (OI)	1.7	No	This stand is an L-Type that has swamp hardwood around the edges, especially at the east end.
114	6223 - Inundated Shrub Swamp	3.8	No	The stand is in a depression and has the edges of lowland brush going to marsh grass.
115	6299 - Lowland Shrub (OI)	2.2	No	The stand is in a depression and is mainly lowland brush with some scattered swamp hardwoods. However, the swamp hardwoods are not sufficient to qualify as an E1.
116	6222 - Shrub-Carr	1.0	No	Cattails with pockets of lowland brush and a lowland hardwood perimeter. The main soil types are Kingsville and Pipestone.
118	6230 - Cattail	7.3	No	This cattail marsh has islands of swamp hardwoods.
122	310 - Herbaceous Openland	1.1	No	Larger oil and gas reclamation opening. Appears to be a lot of knapweed.
124	3301 - Low Density Deciduous Tree	2.8	No	Stand cut with 110 but did not regenerate well enough to be called a forested stand.
125	6220 - Alder/willow	8.4	No	This area has historically been flooded by beavers. This flooding show up on the 1998 DOQ as very wet and on the 2005 NAIP imagery it show up as an area lacking an overstory but without open water. Therefore, the flooding may now be abandoned but the dam is still restricting water flow. The main soil type under the stand is Kingsville.
127	310 - Herbaceous Openland	5.0	No	DEQ ENVIRONMENTAL RESPONSE SITE. Tax reverted in the 1990's. Dispose of parcel.
128	622 - Lowland Shrub	2.5	No	The stand is a pipeline easement maintained by MP Michigan LLC. Patches of upland and lowland shrubs. There are also areas that are open grassy areas.
130	3301 - Low Density Deciduous Tree	7.7	No	Part of North Magruder Rd. Sale 73-016-81-01. Cut all aspen, red maple, ash, and paper birch which met minimum piece utilization. Left all oak and protected hardwood understory. This stand did not regenerate well enough to meet forested stand guidelines.
132	110 - Low Intensity Urban	1.5	No	Oil & gas remediation site. Graveled surface with non-forested edges and exposed sand.



Stand	Cover Type	Acres	Managed Site	General Comments:
133	6224 - Treed Bog	5.9	No	Blueberry bog with scattered paper birch and maple. The main soil type is Kinross.
136	3301 - Low Density Deciduous Tree	1.3	No	Harvested under contract # 73-049-90-01 Lost Hipchain Sale. Cut all species 2" and up. Aspen was considered over mature at time of harvest. This portion of the sale did not regenerate to meet stocking requirements. Pipestone and Kingsville.
139	3301 - Low Density Deciduous Tree	1.6	No	The main soil types are Kingsville and Pipestone. Part of North Magruder Rd. Sale 73-016-81-01. Cut all aspen, red maple, ash, and paper birch which met minimum piece utilization. Left all oak and protected hardwood understory. This area did not regenerate to meet forested guidelines.
140	629 - Mixed non-forested wetland	1.4	No	
143	121 - Airport	1.1	No	Bradford Rd.
145	6222 - Shrub-Carr	1.1	No	Part of North Magruder Rd. Sale 73-016-81-01. Cut all aspen, red maple, ash, and paper birch which met minimum piece utilization. Left all oak and protected hardwood understory. This part flooded out and was most likely already a low spot.
146	3301 - Low Density Deciduous Tree	1.0	No	Part of North Magruder Rd. Sale 73-016-81-01. Cut all aspen, red maple, ash, and paper birch which met minimum piece utilization. Left all oak and protected hardwood understory. This area did not regenerate. Dominated by fern cover.
153	623 - Emergent Wetland	2.8	No	Lowland grasses with dispersed willow and lowland hardwood perimeter. The main soil type is Kingsville
403	31029 - Grass (OI)	2.0	No	This is a maintained overhead powerline.
404	3301 - Low Density Deciduous Tree	3.5	No	Harvested under contract # 73-030-85-01 Lewis Road Repeat. Cut all trees which met minimum piece utilization. This stand was most likely utilized as a landing and is mainly an opening of bracken fern over grass with scattered aspen and oak clumps.
405	310 - Herbaceous Openland	2.7	No	This is the cleared portion of a power line ROW along McGrudder Rd. and also contains the Sinif Drain ROW.
406	310 - Herbaceous Openland	3.0	No	This is the cleared portion of a power line ROW along McGrudder Rd. and also contains the Sinif Drain ROW.