



# Compartment Review Presentation

Gladwin Forest Management Unit

Compartment 73116

Entry Year 2027

Acreage: 3,025

County: Midland

Management Area: Gladwin Lake Plain

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**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 50 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 additional monitoring time to determine treatment success.

## 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 with the majority purchased with Pittman-Robertson and State Game Fund dollars. Private ownership adjacent to the compartment is a mix of residential and recreational properties ranging from 10 to 160 acres. Several interior parcels require access through state land. No easements are in place.

## Unique Natural Features:

Multiple eagle's nest are located in the compartment. 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. Little Salt Creek passes through a small area of 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 YOE. 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**

No active sand/gravel operations are known to exist in the area, and potential for development of sand & gravel within the compartment may be limited due to the presence of a shallow water table and wetlands and oil & gas infrastructure, which could inhibit surface mining. A significant portion of the Porter Jasper Oil & Gas Field coincides with the compartment, but the field is mostly abandoned with just a few remaining producing wells. There have been a few in-field wells drilled within the last ten years and some recent leasing activity involving adjacent State-owned mineral rights within the compartment, but overall potential for future oil & gas production within the compartment is considered low at this time. Some natural brine production occurs in areas around the compartment. There may be potential for additional brine resources beneath the compartment, but the likelihood for development of additional brine production wells within the compartment is considered low. No known potential exists for commercial production of metallic minerals in this part of the state. The State does not own all the mineral rights within the compartment. Because the mineral estate is the dominant estate, reasonable access to the surface must be provided to private owners if they choose to explore or develop their mineral rights.

### **Vehicle Access:**

The main access for the majority of the compartment is through a gate on McGrudder Road. This gate is seasonally open from November 6th to January 1st. 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. All roads in the compartment are restricted to state highway licensed vehicle use.

### **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 seasonally blocked, restricting vehicular access. There are some two-tracks present around the edges of the compartment. The area is still heavily hunted. The gate into the Porter Oil Field is open from November 1st until January 1st. 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. This compartment also contains multiple isolated parcels 10 acres and under. These will be recommended for disposal as well.

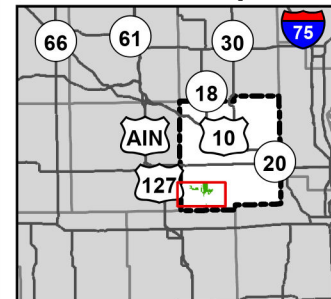
**The following reports from the Inventory are attached:**

- 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 Map



Compartment: 73116  
T13N R02W 1-4, 9-14, 25  
County: Midland  
Unit: Gladwin  
Mgmt. Area: Gladwin Lake Plain  
YOE: 2027  
Acres: 3,025 GIS Calculated  
Examiner: Scott Shooltz  
Date Exported: 5/27/2025  
Map Phase: Pre-Review

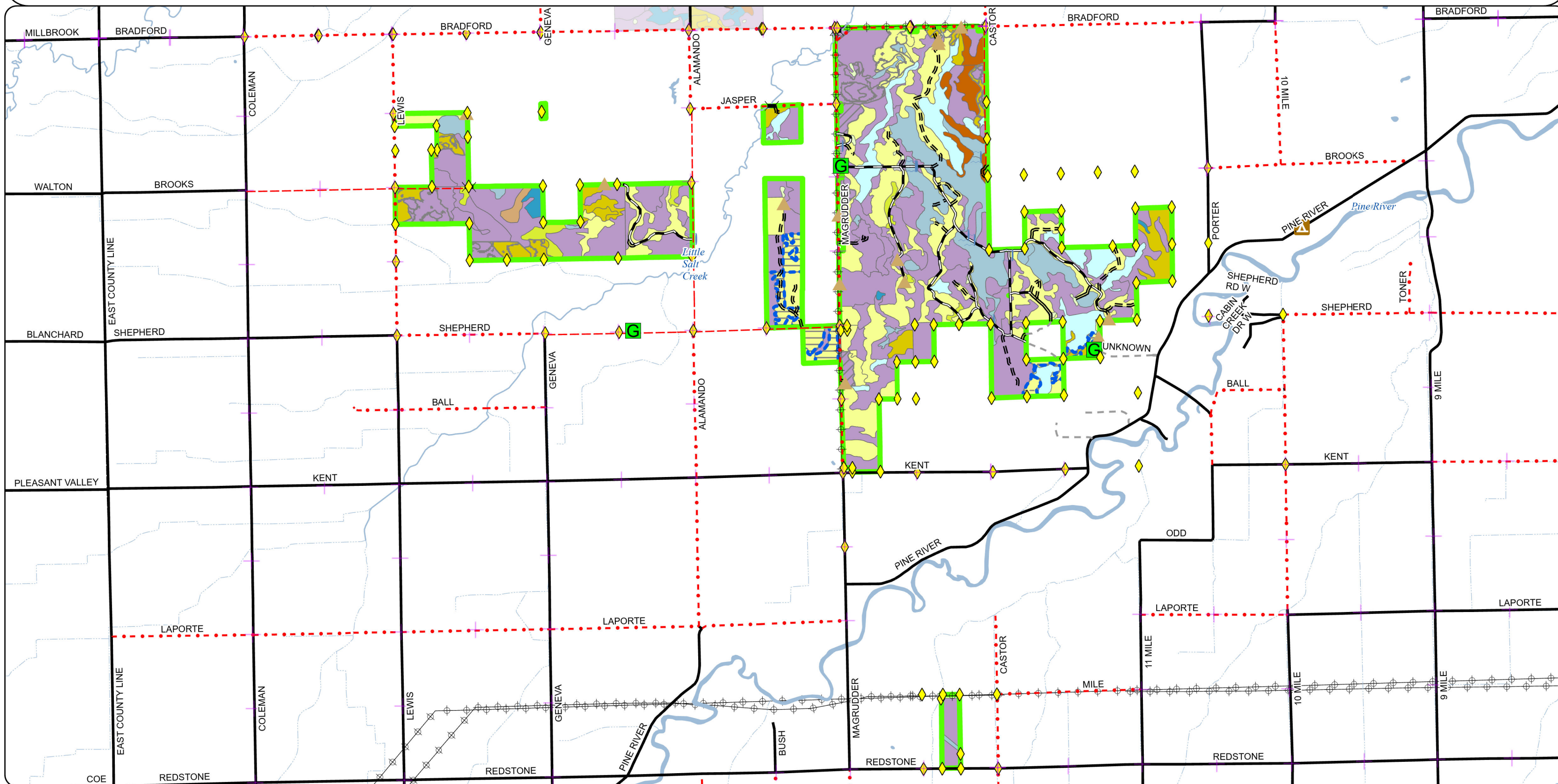
- Remonumented Section Corners
- Survey Grade Corners
- Berms
- Gate
- Bridges
- Culvert
- Campground

- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Paved Road
- Private - Dirt / Gravel Road

- Intermittent Stream
- Perennial River
- Lakes and Rivers
- Counties
- Powerline
- Compartment Boundary
- Clearcut
- Thinning

- Overstory Removal
- Monitoring - Regeneration
- Treatments with Site Conditions
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 611 - Lowland Deciduous Forest

- 110 - Low Intensity Urban
- 122 - Road/Parking Lot
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested Wetland





A horizontal scale bar with a black border. It is divided into four equal segments by three vertical lines. The first segment is solid black, the second is white, the third is solid black, and the fourth is white. Above the bar, the numbers 0, 0.5, and 1 are placed at the first, second, and third vertical lines respectively. To the right of the bar, the word "Miles" is written.

 DNR - Primary Forest Road

-  DNR - Secondary Forest Road
-  DNR - Forest Access Route
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-  County - Gravel Road
-  County - Dirt Road (Seasonal)
-  Intermittent Stream
-  Perennial River
-  Lakes and Rivers
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0 0.5 1 Miles

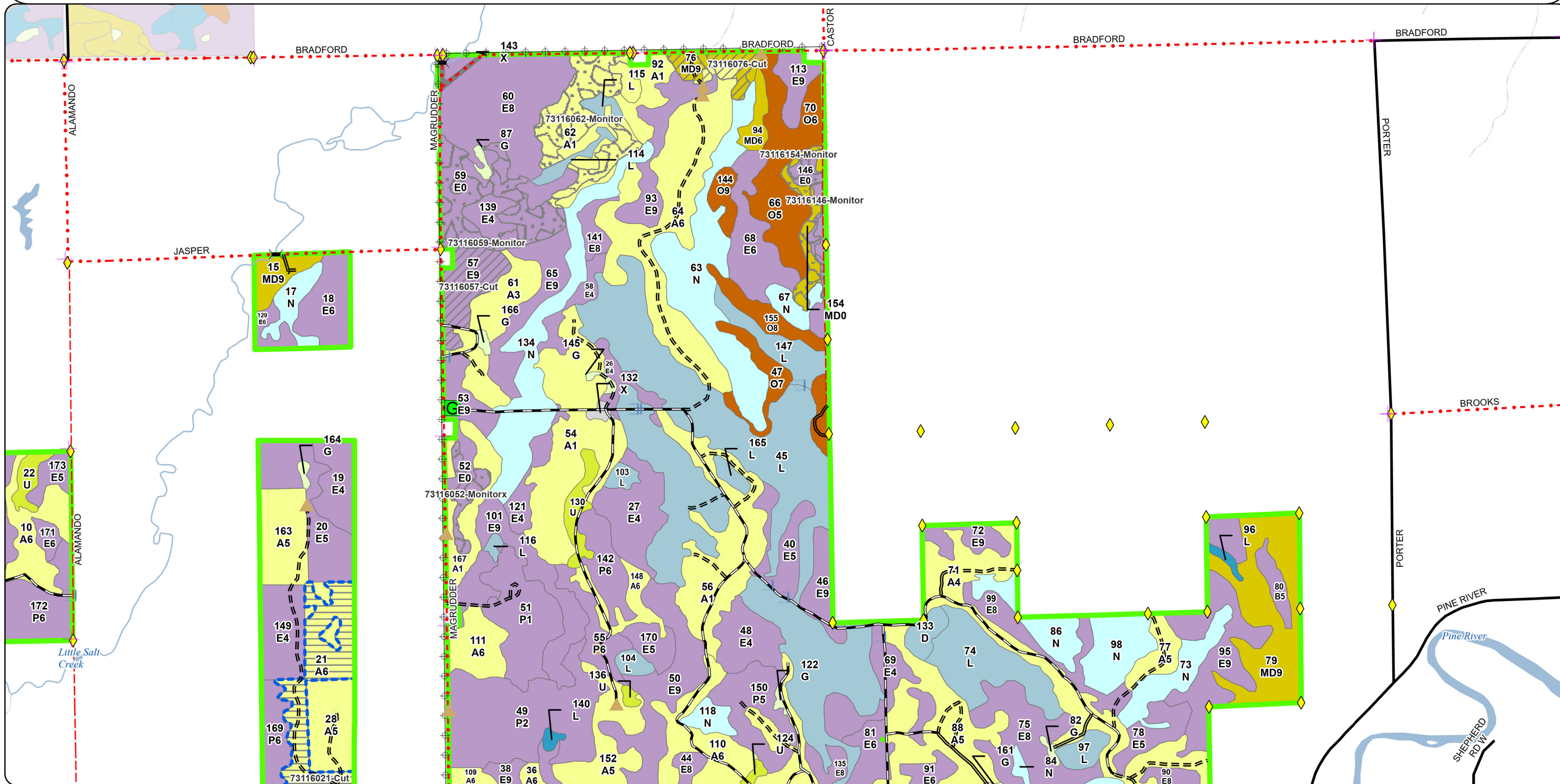
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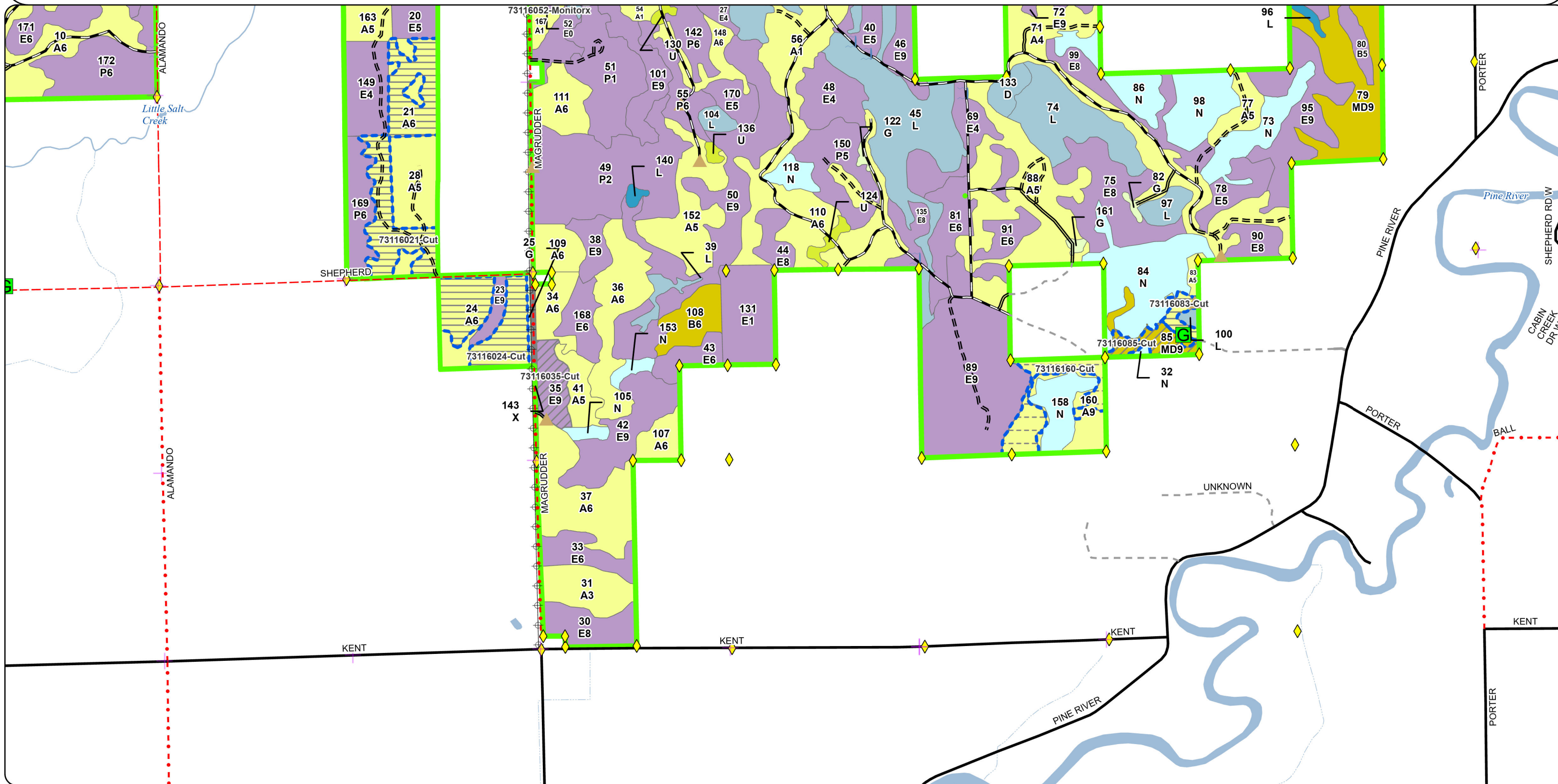
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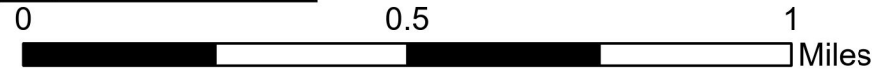
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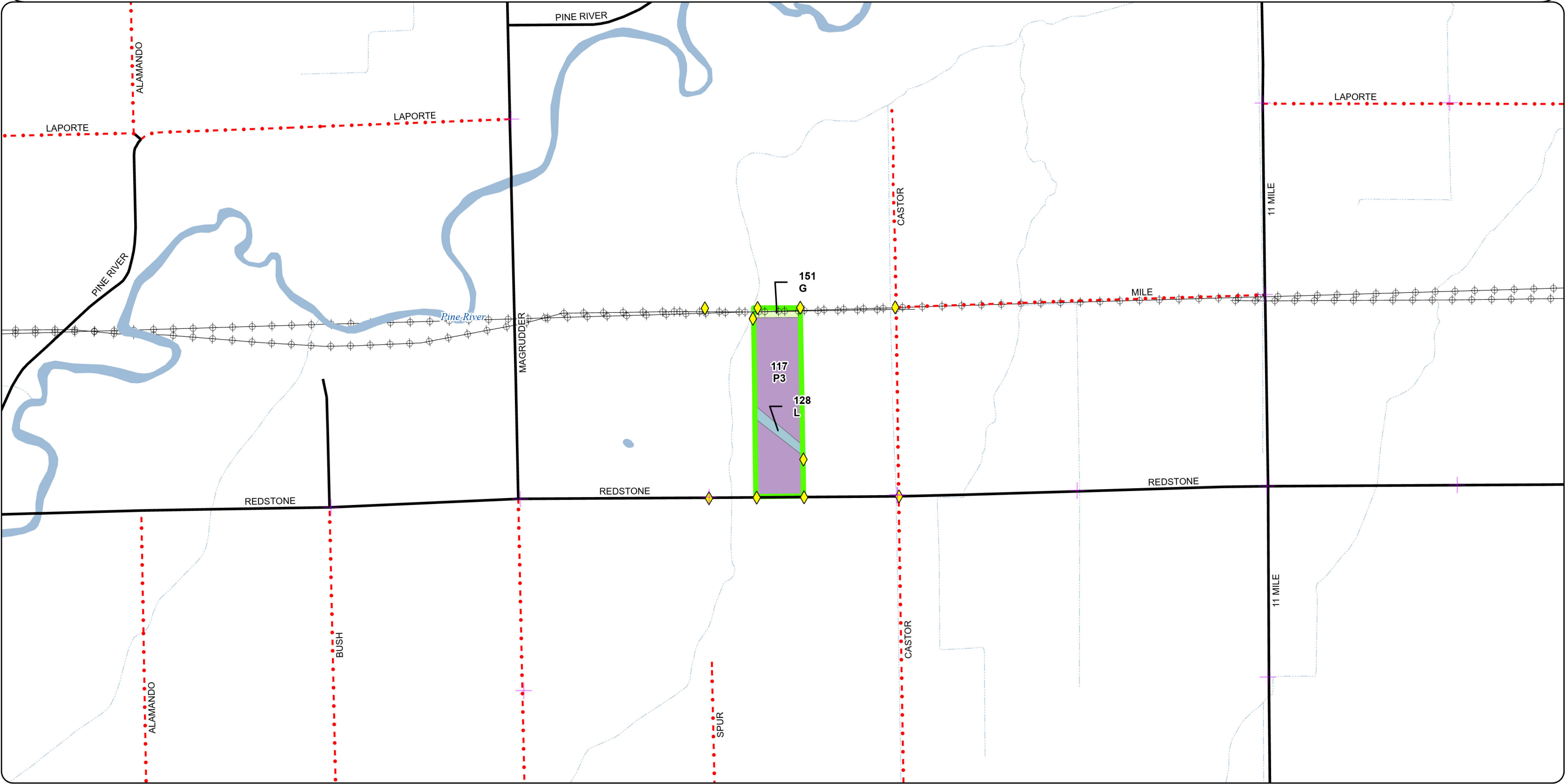


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- Survey Grade Corners

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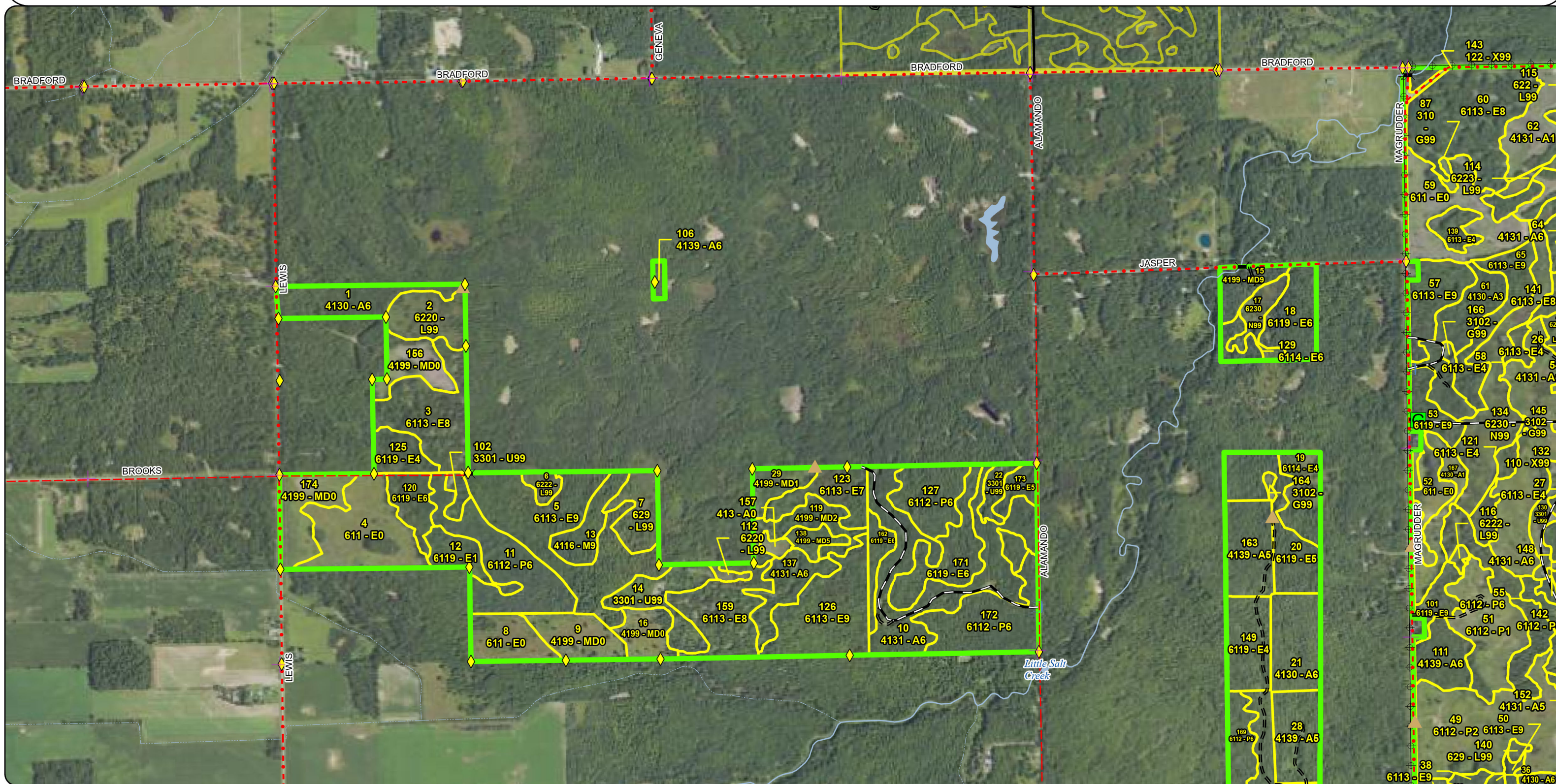
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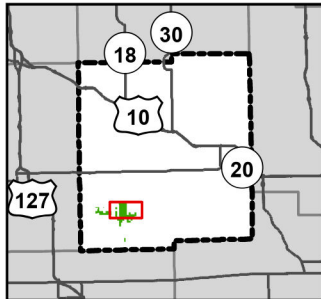
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# Stand Boundary Map

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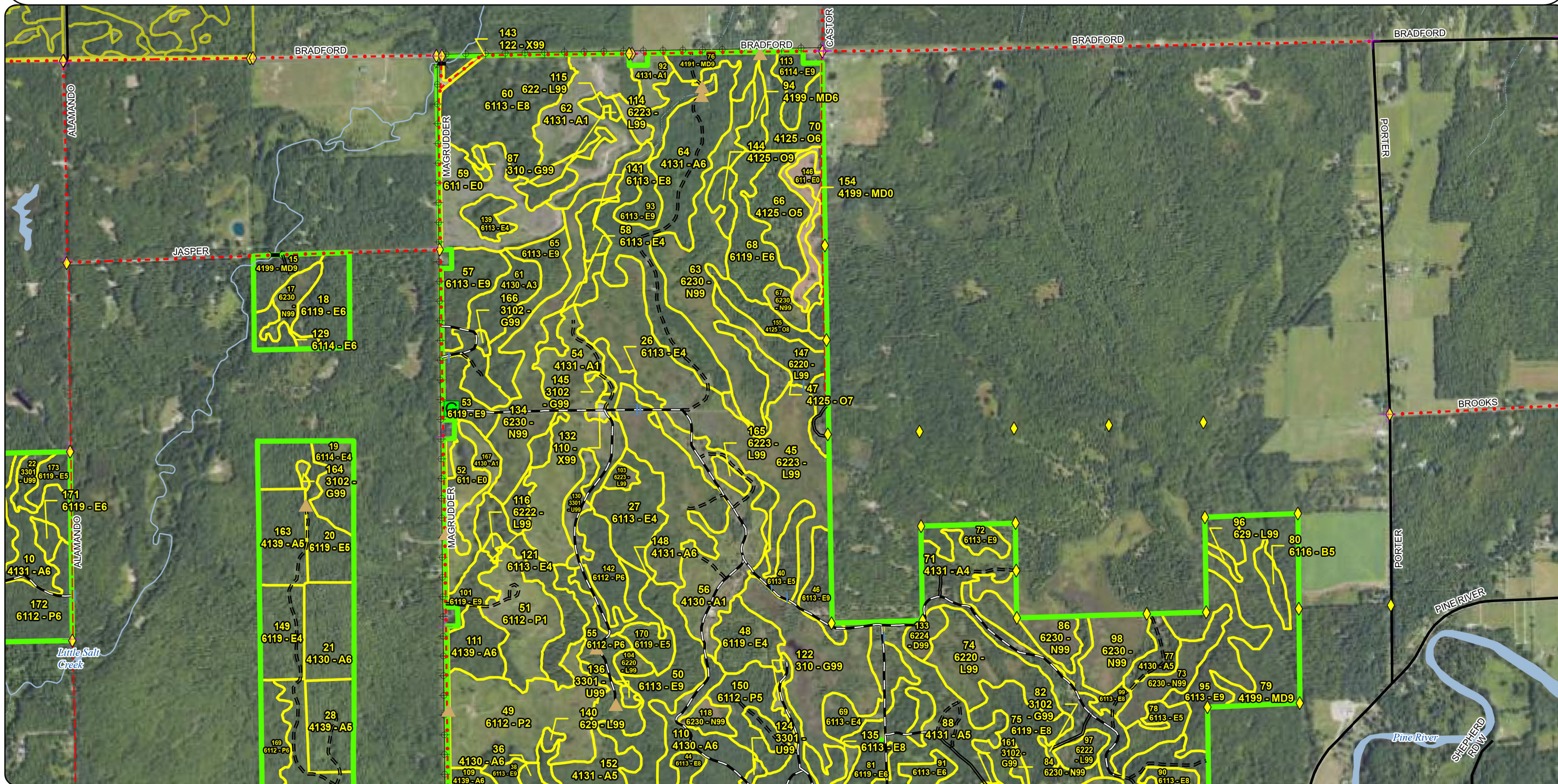
0 0.5 1 Miles

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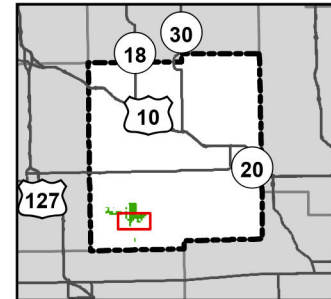
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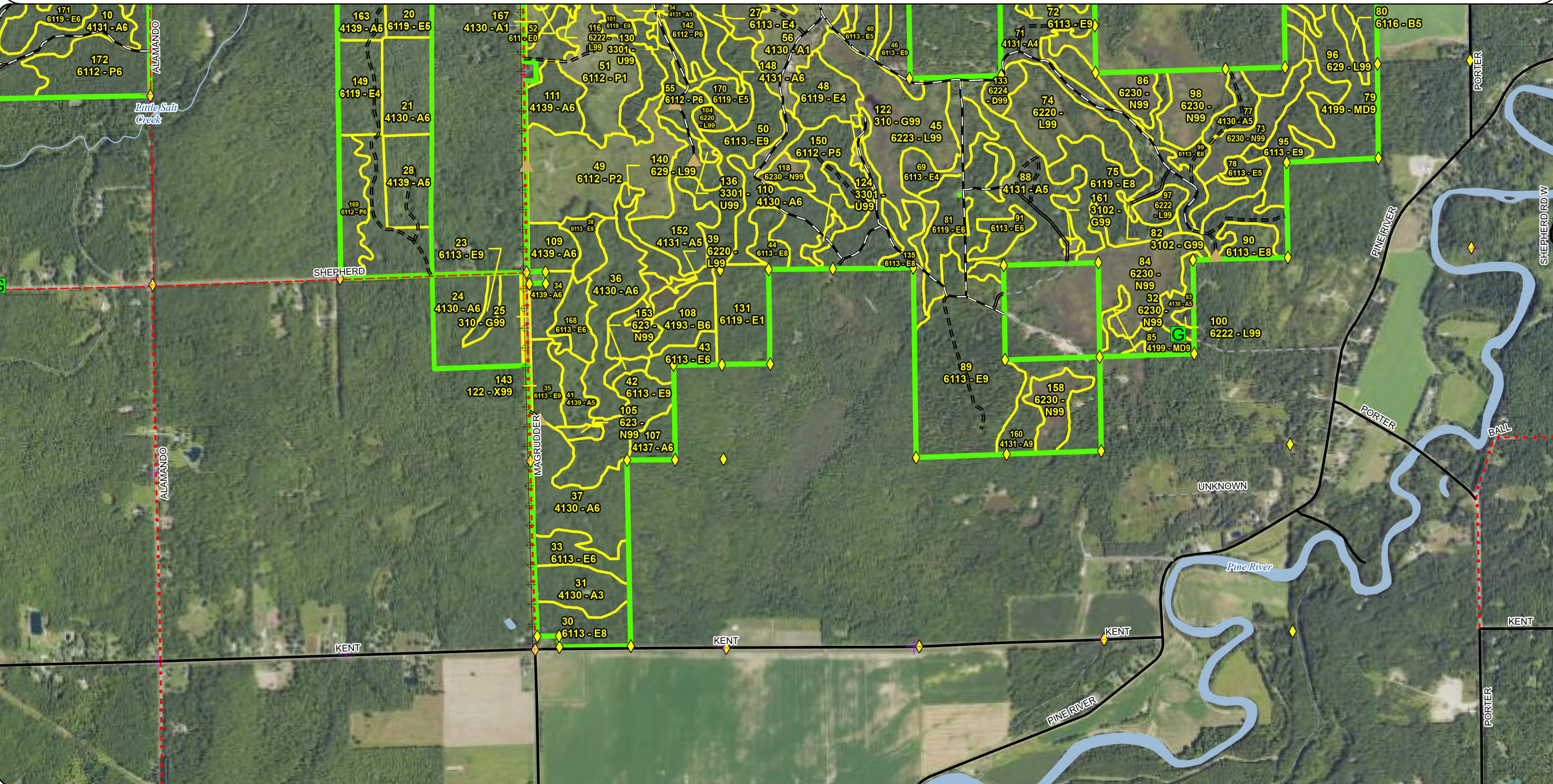
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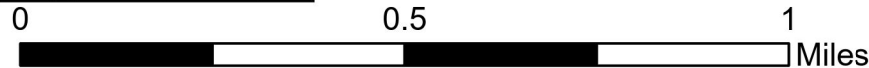
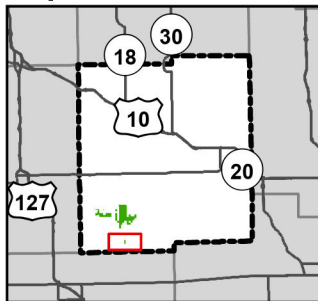
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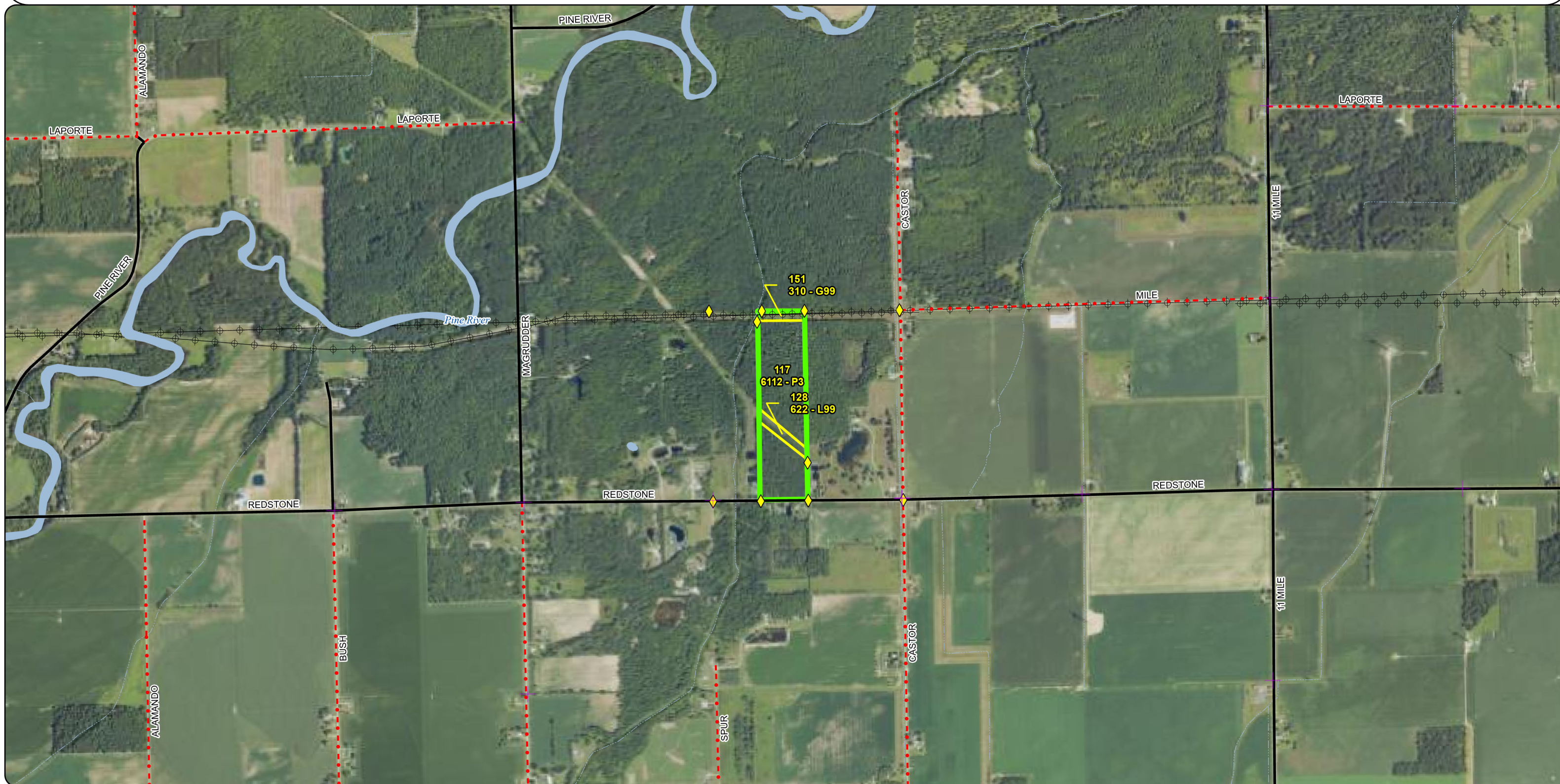
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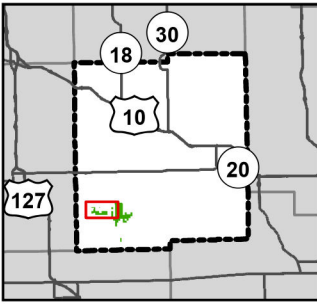
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# Special Conservation Areas & Site Conditions Map

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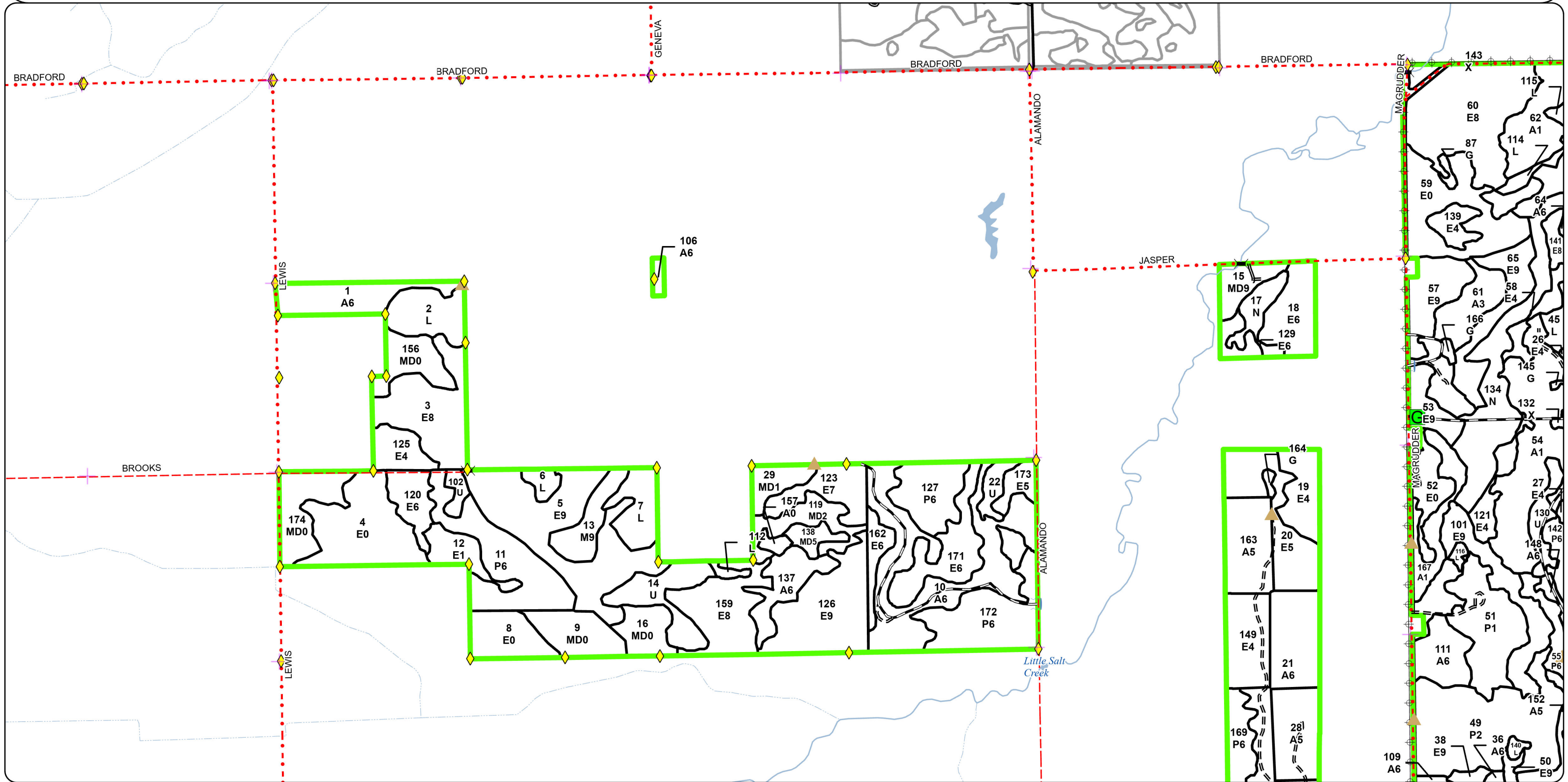


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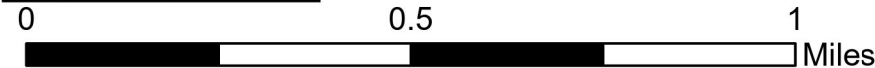
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- Compartment Boundary
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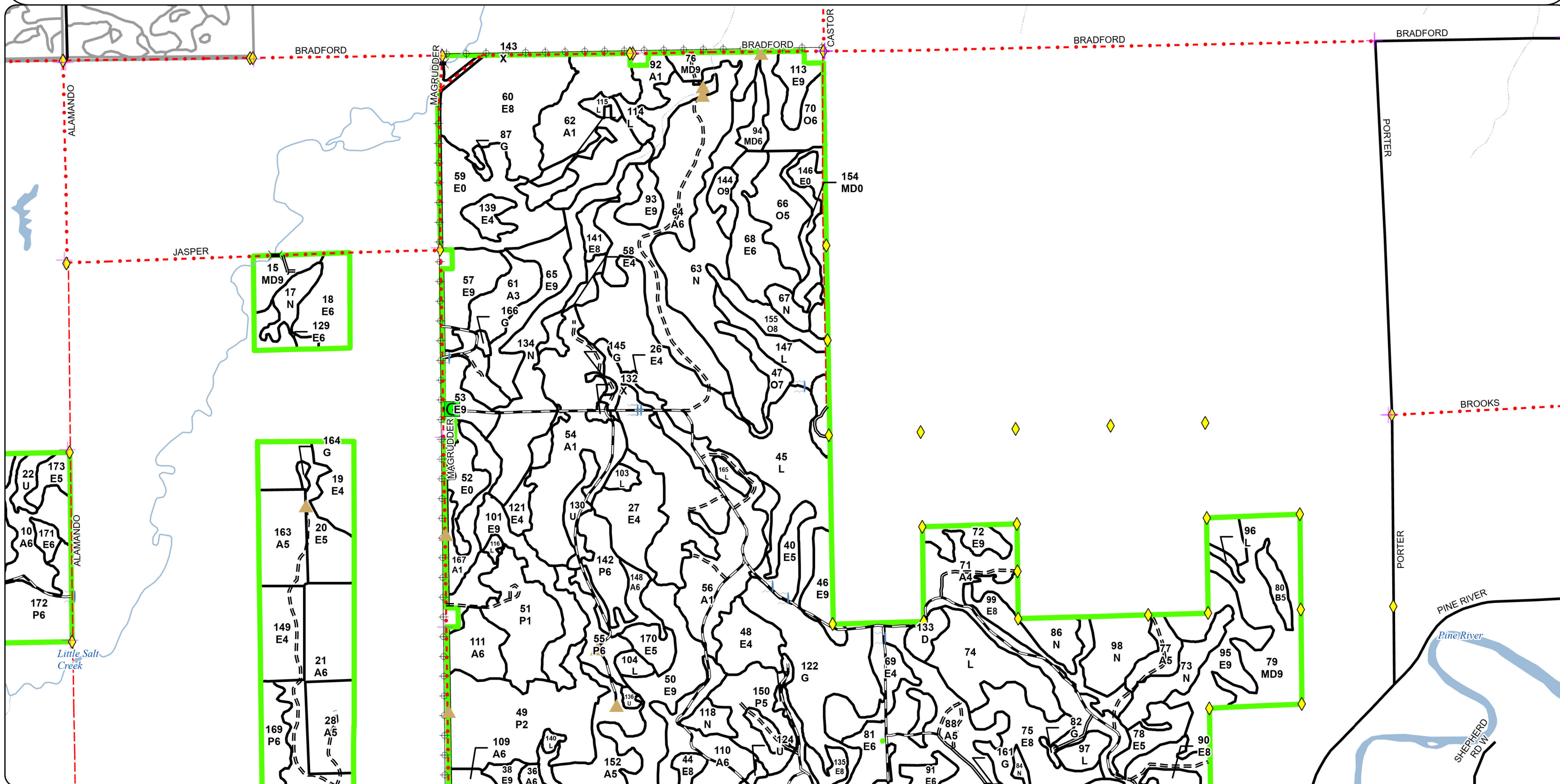




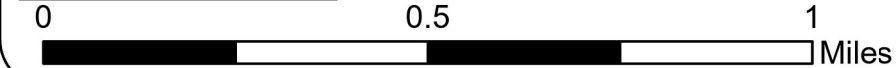






















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-  Gate
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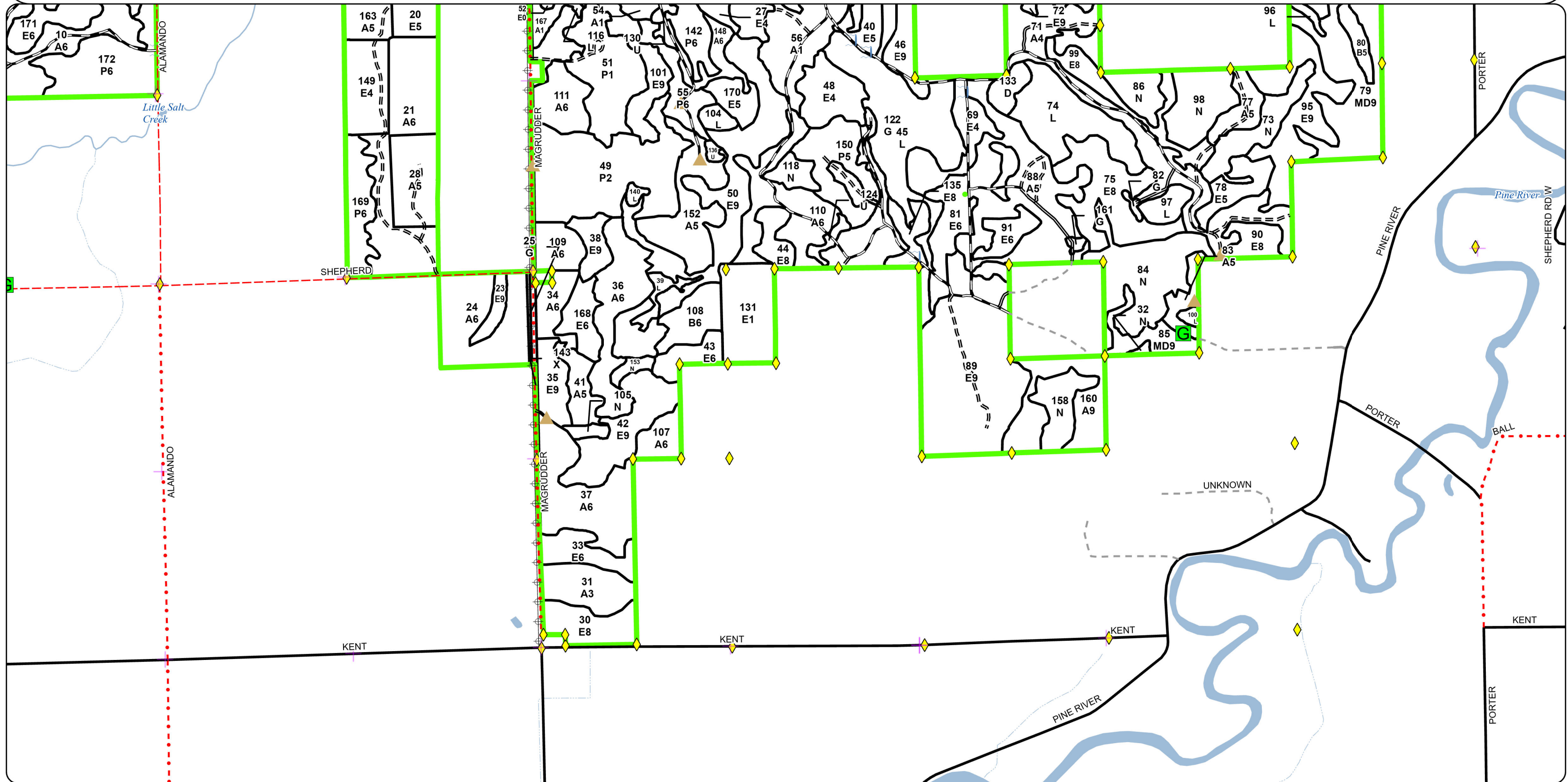
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|---|---------------------------------------|---|----------------------|
|    | DNR - Primary Forest Road             |    | Perennial River      |
|  | DNR - Secondary Forest Road           |  | Lakes and Rivers     |
|  | DNR - Forest Access Route             |  | Counties             |
|  | Federal / State / County - Paved Road |  | Powerline            |
|  | County - Gravel Road                  |  | Compartment Boundary |
|  | County - Dirt Road (Seasonal)         |  | Stand Boundaries     |
|  | Intermittent Stream                   |   |                      |





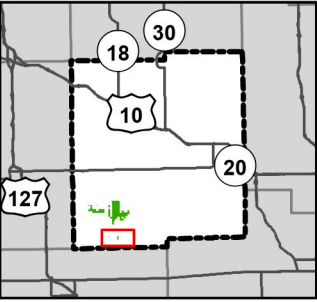
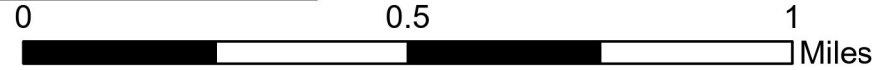


- |   |                              |   |                                       |   |                      |
|---|------------------------------|---|---------------------------------------|---|----------------------|
|    | Remonumented Section Corners |    | DNR - Secondary Forest Road           |    | Intermittent Stream  |
|   | Survey Grade Corners         |   | DNR - Forest Access Route             |   | Perennial River      |
|  | Berms                        |  | Federal / State / County - Paved Road |  | Lakes and Rivers     |
|  | Gate                         |  | County - Gravel Road                  |  | Counties             |
|  | Culvert                      |  | County - Dirt Road (Seasonal)         |  | Powerline            |
|   |                              |  | Private - Paved Road                  |  | Compartment Boundary |
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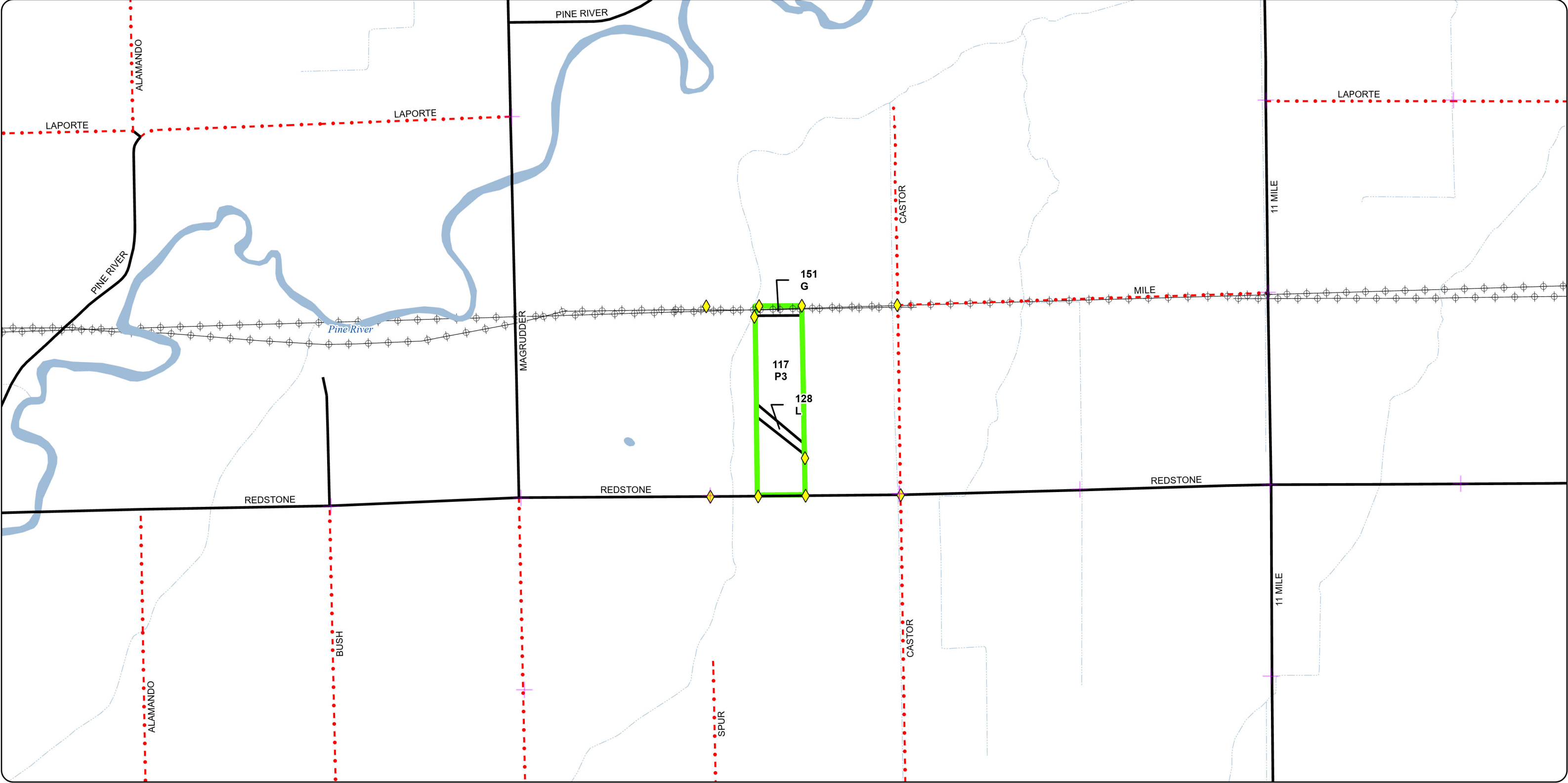


Remonumented Section Corners  
Survey Grade Corners

County - Gravel Road  
Intermittent Stream  
Perennial River  
Lakes and Rivers

Counties  
Powerline  
Compartment Boundary  
Stand Boundaries

Federal / State / County - Paved Road





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



## 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	2	162	0	156	297	172	7	2	0	25	0	0	0	0	0	0	0	0	821
Herbaceous Openland	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Low-Density Trees	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
Lowland Aspen/Balsam Poplar	0	83	35	0	81	63	0	0	0	0	0	0	0	0	0	0	0	0	262
Lowland Deciduous	104	0	0	10	110	46	51	204	44	191	23	166	0	0	0	0	0	152	1100
Lowland Shrub	291	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	291
Marsh	210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210
Mixed Upland Deciduous	67	0	0	14	8	14	0	45	15	10	0	0	0	0	0	0	0	0	173
Northern Hardwood	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	12
Oak	0	0	0	0	0	0	0	45	21	0	0	0	0	0	0	0	0	0	66
Paper Birch	0	0	0	0	19	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
Urban	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
<b>Total</b>	<b>743</b>	<b>245</b>	<b>35</b>	<b>180</b>	<b>515</b>	<b>295</b>	<b>58</b>	<b>308</b>	<b>80</b>	<b>226</b>	<b>23</b>	<b>166</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>152</b>	<b>3022</b>



## Report 2 – Treatment Summary

Gladwin Mgt. Unit  
Year of Entry: 2027

Acres of Harvest

Compartment 116  
Total Compartment Acres: 3,025

Commercial Harvest - 37  
Harvests with Site Condition - 134  
Next Step Harvest - 0  
Habitat Cut - 0

### Cover Type by Harvest Method

	Clearecut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	71	0	0	0	0	0	16	0	0	87
Lowland Deciduous	0	0	0	0	0	27	0	0	0	27
Mixed Upland Deciduous	0	0	0	0	0	18	0	0	0	18
Total	71	0	0	0	0	45	16	0	0	132

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	132	0	0	0	0	0	183	0	0	314
Next Step	0	0	0	0	0	0	40	0	0	40
Total	132	0	0	0	0	0	222	0	0	354



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	Habitat Cut
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**Proposed Treatments:**

<b>62</b>	<b>73116062-Monitor</b>	28.9	4131 - Aspen, Oak	1	4	Immature	Monitoring	Monitoring - Regeneration	4131 - Aspen, Oak	Planting Record	No
<u>Prescription</u> Monitor to determine if acceptable levels of regeneration are above 4 ft. <u>Specs:</u>  <u>Next Step</u> <u>Treatments:</u>  <u>Acceptable</u> Expecting aspen mixed with oak and maple but will accept any mix of species meeting stocking levels. <u>Regen:</u>  <u>Other</u> <u>Comment:</u>  <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2029											
<b>8</b>	<b>73116008-Monitor</b>	13.8	611 - Lowland Deciduous Forest	0	3	Unspecified	Monitoring	Monitoring - Regeneration	611 - Lowland Deciduous Forest	Planting Record	No
<u>Prescription</u> Determine if adequate amounts of regeneration are established and over browse height. <u>Specs:</u>  <u>Next Step</u> <u>Treatments:</u>  <u>Acceptable</u> Any mix of species meeting minimum stocking levels. <u>Regen:</u>  <u>Other</u> Several pockets of aspen noted along north edge during 2027 YOE. A few smaller pockets of heavily browsed regeneration in the center of the stand. <u>Comment:</u>  <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2029											
<b>9</b>	<b>73116009-Monitor</b>	15.4	4199 - Other Mixed Upland Deciduous	0	3	Immature	Monitoring	Monitoring - Regeneration	4199 - Other Mixed Upland Deciduous	Planting Record	No
<u>Prescription</u> Determine if adequate amounts of regeneration are established and over browse height. <u>Specs:</u>  <u>Next Step</u> <u>Treatments:</u>  <u>Acceptable</u> Any mix of species meeting minimum stocking levels. <u>Regen:</u>  <u>Other</u> A small amount of heavily browsed regeneration observed along the western and northern edge. <u>Comment:</u>  <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2029											

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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
<b>16 73116016-Monitor</b>	9.9	4199 - Other Mixed Upland Deciduous	0	3	Immature	Monitoring	Monitoring - Regeneration	4199 - Other Mixed Upland Deciduous	Planting Record	No
<u>Prescription</u> Determine if adequate amounts of regeneration are established and over browse height. <u>Specs:</u> <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> Any mix of species meeting minimal stocking levels. <u>Regen:</u> <u>Other</u> Minimal regeneration noted during 2027 YOE inventory. Heavy browse. Seasonal flooding of the stand. Competition from sedges and blackberry. <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2029										
<b>21 73116021-Cut</b>	39.6	4130 - Aspen	6	41	111-140	Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Planting Record	No
<u>Prescription</u> Clear cut 2" and up. Remove wettest pockets from harvest area. Apply Gladwin grouse habitat specifications. No retention due to narrow stand geometry and deer browse concerns. <u>Specs:</u> <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> <u>Acceptable</u> Moderate to poor stocking of aspen, maple, birch, and oak. Browse pressure is expected to be high. <u>Regen:</u> <u>Other</u> Harvest during dry or frozen conditions. Utilize timber sale to block vehicle to access administrative access route. Harvest acres may vary significantly from prescribed due to wet ground. <u>Comment:</u> <u>Site Condition:</u> Survey Needed <u>Proposed Start Date:</u> 10/01/2026										
<b>24 73116024-Cut</b>	27.4	4130 - Aspen	6	40	111-140	Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Planting Record	No
<u>Prescription</u> Clearcut 2" and up. Remove southern wet pocket from harvest boundary. Harvest during dry or frozen conditions. Apply Gladwin Grouse specifications. <u>Specs:</u> <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> A moderate stocking of aspen mixed with red maple, oak, and birch. Browse damage may be less in this stand because of proximity to roads and houses. <u>Regen:</u> <u>Other</u> New temporary driveway required to access the stand. Temporary culvert required to cross Sinf Drain. Open area in western portion of the stand is suitable for landing. Old skid road can be used to cross wet ground. Drain along Shepherd Rd is under DNR easement. <u>Comment:</u> <u>Site Condition:</u> Survey Needed <u>Proposed Start Date:</u> 10/01/2026										
<b>35 73116035-Cut</b>	10.4	6113 - Lowland Maple	9	95	111-140	Harvest	Thinning	611 - Lowland Deciduous Forest	Planting Record	No
<u>Prescription</u> Thin stand to 70 sq ft. <u>Specs:</u> <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> <u>Regen:</u> <u>Other</u> Harvest during dry frozen conditions. Re- enforce road closure at the south end of the stand during harvest. <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2026										



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
<b>52 73116052-Monitorx</b>	6.9	611 - Lowland Deciduous Forest	0	5		Monitoring	Monitoring - Regeneration	611 - Lowland Deciduous Forest	Planting Record	No
<u>Prescription</u> Monitor during FY 2030. <u>Specs:</u>  <u>Next Step</u> <u>Treatments:</u>  <u>Acceptable</u> Any mix of species meeting minimum stocking levels. <u>Regen:</u>  <u>Other</u> <u>Comment:</u>  <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2029										
<b>4 73116004-Monitor</b>	32.0	611 - Lowland Deciduous Forest	0	5		Monitoring	Monitoring - Regeneration	611 - Lowland Deciduous Forest	Planting Record	No
<u>Prescription</u> Monitor to determine if acceptable levels of regeneration make it above 4 ft. <u>Specs:</u>  <u>Next Step</u> <u>Treatments:</u>  <u>Acceptable</u> Any mix of species meeting minimum stocking levels. <u>Regen:</u>  <u>Other</u> <u>Comment:</u>  <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2029										
<b>59 73116059-Monitor</b>	30.5	611 - Lowland Deciduous Forest	0	4		Monitoring	Monitoring - Regeneration	611 - Lowland Deciduous Forest	Planting Record	No
<u>Prescription</u> Determine if acceptable natural regeneration is established. <u>Specs:</u>  <u>Next Step</u> <u>Treatments:</u>  <u>Acceptable</u> Any mix of species meeting minimum stocking levels. <u>Regen:</u>  <u>Other</u> <u>Comment:</u>  <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2029										



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Treatment Name Acres Stand CoverType Size Density Stand Age BA Range Treatment Type Treatment Method Cover Type Objective Age Structure Habitat Cut

**174 73116174-Monitor** 18.4 4199 - Other Mixed Upland Deciduous 0 5 Immature Monitoring Monitoring - Regeneration 4199 - Other Mixed Upland Deciduous Planting Record No

Prescription Monitor to determine if acceptable levels of regeneration make it above 4 ft.

Specs:

Next Step

Treatments:

Acceptable Any mix of species meeting minimum stocking levels.

Regen:

Other

Comment:

Site Condition:

Proposed Start Date: 10/01/2029

**76 73116076-Cut** 10.3 4191 - Mixed Upland Deciduous with Conifer 9 77 141-170 Harvest Thinning 4199 - Other Mixed Upland Deciduous Planting Record No

Prescription Thin stand down to 100 BA to promote canopy development in oak and pine. Cut all aspen.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Apply oak wilt specifications. Two landings required due to a stream. Berm administrative access routes after sale. Harvest acres may vary significantly from prescribed due to wet ground.

Comment:

Site Condition:

Proposed Start Date: 10/01/2026

**83 73116083-Cut** 4.3 4130 - Aspen 5 55 51-80 Harvest Clearcut 4139 - Aspen, Mixed Deciduous Planting Record No

Prescription Clearcut all trees 2" and up. No retention due to narrow stand geometry and small acreage. Apply Gladwin grouse habitat specification.

Specs:

Next Step

Treatments:

Acceptable Any mix of aspen, oak or maple meeting minimum stocking levels. Regeneration will be heavily impacted by browse.

Regen:

Other Private property access required. Harvest acres may vary significantly from prescribed due to wet ground. Trucking will impact a bald eagle nest located to the west. Apply timing restrictions to hauling as outlined in the USFW National Bald Eagle Management Guidelines (2007).

Comment:

Site Condition: Unknown Access

Proposed Start Date: 10/01/2026

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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
<b>85 73116085-Cut</b>	7.4	4199 - Other Mixed Upland Deciduous	9	82	81-110	Harvest	Thinning	4199 - Other Mixed Upland Deciduous	Cutting Record	No
<u>Prescription</u> Thin stand to 60 BA. Focus on removing aspen and protecting understory sapling and pole hardwood. Apply oak wilt restrictions. <u>Specs:</u> <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> Released cohort of understory red maple and oak along with scattered pockets of aspen, red maple and oak. <u>Regen:</u> <u>Other</u> Access requires permission from private landowner. Harvest during dry or frozen conditions. Harvest acres may vary significantly from <u>Comment:</u> prescribed due to wet ground. Trucking will impact a bald eagle nest located to the west. Apply timing restrictions to hauling as outlined in the USFW National Bald Eagle Management Guidelines (2007). <u>Site Condition:</u> Unknown Access <u>Proposed Start Date:</u> 10/01/2026										
<b>146 73116146-Monitor</b>	7.0	611 - Lowland Deciduous Forest	0	3		Monitoring	Monitoring - Regeneration	611 - Lowland Deciduous Forest	Planting Record	No
<u>Prescription</u> Monitor during FY 2030. <u>Specs:</u> <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> Any mix of species meeting minimum stocking levels. <u>Regen:</u> <u>Other</u> <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2029										
<b>154 73116154-Monitor</b>	8.9	4199 - Other Mixed Upland Deciduous	0	3	Immature	Monitoring	Monitoring - Regeneration	4199 - Other Mixed Upland Deciduous	Planting Record	No
<u>Prescription</u> Monitor during FY 2030. <u>Specs:</u> <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> Any mix of deciduous species meeting regeneration stocking levels. <u>Regen:</u> <u>Other</u> <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2029										



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
<b>156 73116156-Monitor</b>	10.8	4199 - Other Mixed Upland Deciduous	0	3	Immature	Monitoring	Monitoring - Regeneration	4139 - Aspen, Mixed Deciduous	Planting Record	No
<u>Prescription</u> Monitor in 5 years to determine regeneration success. <u>Specs:</u> <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> Any mix of species meeting minimum stocking levels. <u>Regen:</u> <u>Other</u> Upland knolls had regeneration in place during 2027 YOE inventory but was not over browse height. <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2029										
<b>160 73116160-Cut</b>	15.6	4131 - Aspen, Oak	9	87	81-110	Harvest	Overstory Removal	4199 - Other Mixed Upland Deciduous	Planting Record	No
<u>Prescription</u> Remove all aspen. Mark to cut other species as necessary for access. Apply oak wilt restrictions. Apply bald eagle restrictions as outlined in the USFW National Bald Eagle Management Guidelines (2007). See Conservation Area Reviewer for nest location. <u>Specs:</u> <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> Small scattered pockets of aspen and released understory maple. Browse damage will be prevalent. <u>Regen:</u> <u>Other</u> Harvest during dry/frozen conditions. Best spot for landing and access is on private property to the north. If private property access is denied then skidding through stand 89 will be required. Harvest acres may vary significantly from prescribed due to wet ground. <u>Comment:</u> <u>Site Condition:</u> Unknown Access <u>Proposed Start Date:</u> 10/01/2026										
<b>57 73116057-Cut</b>	16.6	6113 - Lowland Maple	9	84	81-110	Harvest	Thinning	611 - Lowland Deciduous Forest	Planting Record	No
<u>Prescription</u> Thin canopy to 60 BA by removing multi-stemmed and poor formed trees. Apply oak wilt restrictions. <u>Specs:</u> <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> <u>Regen:</u> <u>Other</u> Harvest during dry or frozen conditions. <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2026										

Total Treatment 0  
Acreage Proposed:

## Report 4 – Site Conditions



### Availability for Management

Total Acres    Acres Available    Acres With Condition    Acres Not Available

### Dominant Site Conditions

2B    2I    5C    1D    2G    3J    5A    5E

700	574	93	34	Aspen	25	68		2	16			16
11	11	0	0	Herbaceous Openland								
38	38	0	0	Low-Density Trees								
237	213	0	24	Lowland Aspen/Balsam Poplar					21			3
854	284	0	570	Lowland Deciduous					551			19
291	291	0	0	Lowland Shrub								
210	210	0	0	Marsh								
136	70	10	55	Mixed Upland Deciduous	10				4	2	50	
12	12	0	0	Northern Hardwood								
55	45	6	4	Oak			6		3			1
18	13	0	6	Paper Birch					6			
6	6	0	0	Treed Bog								
14	14	0	0	Urban								
2,581	1,780	109	693	Total Forested Acres	35	68	6	2	599	2	50	40
	69%	4%	27%	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)	18	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
<b>Comments:</b> North 2 acres of aspen is retention for stand to the west.							
2	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

# Report 4 – Site Conditions

Gladwin Mgt. Unit  
Scott Shooltz: Examiner

Compartment: 116  
Year of Entry: 2027



3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	31	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6				
Comments: Delay harvest to allow succession to continue and to diversify size class in the area.							
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	55	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							



# Report 4 – Site Conditions

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8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	30	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
13	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	0	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

# Report 4 – Site Conditions

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14	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	13	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
15	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
16	Unavailable	5A: Not able to obtain desirable regeneration	13	2D: Portable bridge needed (Dept. bridge will be adequate)	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified
Comments: Deer browse is very high in this area. Unable to establish desired regeneration as a result. Turkey Drain runs along west boundary of stand portable bridge needed to cross. Unknown if access across private is possible.							
17	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	106				
Comments:							
18	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
20	Unavailable	5A: Not able to obtain desirable regeneration	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Terrain becomes more hummocky east of closed road. Surrounding stand had poorest regeneration in this terrain type.							

# Report 4 – Site Conditions

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21	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	13	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
22	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	37	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
23	Available	2I: Survey needed	40	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
24	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	37	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
25	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
26	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	47				
Comments:							

# Report 4 – Site Conditions

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27	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
28	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Central portion of the stand is very wet.							
29	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
30	Available	2B: Unknown if access through adjacent landowner(s) is possible	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Access is likely possible through Summits Petroleum's land.							
31	Available	2B: Unknown if access through adjacent landowner(s) is possible	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Access is likely possible through Summits Petroleum's land.							

# Report 4 – Site Conditions

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32	Available	2B: Unknown if access through adjacent landowner(s) is possible	19	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
33	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
34	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Little Salt Creek buffer 100 ft.							
35	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
36	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
37	Unavailable	1D: Interest group/neighbor	2	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
Comments: Landlocked parcel. Unknown if access through adjacent parcels is possible. Parcel is too small to accommodate management activities. Place on the disposal list.							

# Report 4 – Site Conditions

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38	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
39	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
40	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
41	Unavailable	5E: Long-Term Retention	3	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments:							
42	Unavailable	5E: Long-Term Retention	1	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments:							
43	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	24				
Comments:							

# Report 4 – Site Conditions

Gladwin Mgt. Unit  
Scott Shooltz: Examiner

Compartment: 116  
Year of Entry: 2027



44	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
45	Unavailable	3L: Other wildlife concerns	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Visual buffer for wildlife opening.							
46	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
48	Unavailable	5E: Long-Term Retention	7	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments: Retention for stand 59 (surrounding stand). Also too wet to harvest.							
49	Unavailable	5E: Long-Term Retention	5	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments: Retention for stand 62 also too wet.							
50	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

# Report 4 – Site Conditions

Gladwin Mgt. Unit  
Scott Shooltz: Examiner

Compartment: 116  
Year of Entry: 2027



51	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
52	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
53	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
54	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
56	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
57	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							



## Report 4 – Site Conditions



58	Unavailable	5E: Long-Term Retention	4	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments:							
59	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	31	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
60	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
61	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
62	Available	2I: Survey needed	28	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Survey needed to determine trespass along western edge of stand and southern boundary line of the timber sale.							
63	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
64	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

## Report 4 – Site Conditions



65	Unavailable	5E: Long-Term Retention	3	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments:							
66	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
68	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
69	Unavailable	5A: Not able to obtain desirable regeneration	32	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
70	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
71	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

## Report 4 – Site Conditions



72	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
76	Unavailable	5E: Long-Term Retention	2	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments:							

Mgt. Unit

Compartment: #Type!

Year of Entry:

## Report 5 – 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
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Comments
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																	
1	4130 - Aspen	Poletimber Well	19.2	40	111-140	N/A	2022 Sale Closure: Former stand 1 separated into 2 stands. Southern portion (now stand 210) was harvested during the winter of 2021 under contract High Tower Mix.  2017 YOIE Inventory: SE block separated by a forested drain approximately 40 - 50 feet wide. Accessing from the south may be the better option.																																																	
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Quaking Aspen</td><td>20</td><td></td><td>9</td><td>40</td></tr><tr><td>Red Maple</td><td>15</td><td>Sapling</td><td>7</td><td>40</td></tr><tr><td>Bigtooth Aspen</td><td>60</td><td></td><td>9</td><td>40</td></tr><tr><td>Northern Pin Oak</td><td>5</td><td></td><td>9</td><td>40</td></tr></table>								Canopy Species	% Cover	Size Class	DBH	Age	Quaking Aspen	20		9	40	Red Maple	15	Sapling	7	40	Bigtooth Aspen	60		9	40	Northern Pin Oak	5		9	40																								
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2	6220 - Alder/Willow		16.2			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.																																																	
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3	6113 - Lowland Maple		30.7	69	51-80	N/A	2027 YOIE Inventory: Aspen regenerating in pockets on uplands. Lowlands have some stump sprout maple stems. All being browsed. Released pole red maple look great. Stand will seed in overtime.2022 Sale Closure: Harvested during the winter of 2021 under contract High Tower Mix. Removed aspen. Marked over mature and poor form maple to cut in order to release co-dominant and understory maple of good form.2017 YOIE Inventory: 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.																																																	
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4	611 - Lowland Deciduous Forest		34.5	5			2027 YOIE Inventory: New stand. Split out lowland. Regeneration doesn't meeting stocking standards. Seedlings under 4" is also inadequate. Regeneration is patchy at approximately 5-10% of the area. Most of the stand is covered in marsh grass. Browse is a major factor. Stand is boarderline lowland. Keep monitoring.2022 Sale Closure: Harvested during the summer/fall of 2019 under contract High Tower Mix. Clear-cut 2" and up.2017 YOIE Comments: 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.																																																	
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5	6113 - Lowland Maple	Sawtimber Well	54.5	100	111-140	N/A	2017 YOIE Inventory: 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.																																																	
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
6	6222 - Shrub-Carr	Unspecified	3.9			No	2017 YOE Inventory: 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	629 - Mixed non-forested Wetland	Unspecified	13.3			No	2017 YOE Inventory: Stand is an L-Type made up of shrubs over marsh grass.
8	611 - Lowland Deciduous Forest		15.0	3	Unspecified		2027 YOE Inventory: Regeneration is patchy. Upland areas are moderately stocked with saplings over 4ft. Lowland areas are non-stocked. Browse is an issue. Switched covertype objective from lowland aspen to lowland deciduous forest.2022 Sale Closure: Harvested during the summer/fall of 2020 under contract High Tower Mix. Clear-cut 2" and up except green marked trees.2017 YOE Inventory: 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	4199 - Other Mixed Upland Deciduous		15.4	3	Immature		2027 YOE Inventory: No regeneration on this site thus far. Timber was mature at time of harvest, browse pressure is extreme, parts of the stand swamped out, and ground cover vegetation exploded. Switched covertype objective from aspen to other mixed deciduous.2022 Sale Closure Comments: Harvested during the summer/fall of 2020 under contract High Tower Mix. Clear-cut 2" and up except green marked trees.2017 YOE Inventory: 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.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																			
10	4131 - Aspen, Oak	Poletimber Well	53.6	41	81-110	N/A	2027 YOE Inventory: New stand. Formerly part of a larger aspen stand. Upland ridge of aspen with a few isolated low pockets. Pocket of oak is located in the SE corner.2017 YOE Inventory: 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.																																																			
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11	6112 - Lowland Aspen		34.5	36	81-110	N/A	2027 YOE Inventory: Switching stand from upland to lowland majority. Aspen is dense through most of the stand but regeneration could still be an issue if clearcut. West edge is very wet.2017 YOE Inventory: 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.																																																			
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12	6119 - Mixed Lowland Deciduous Forest		10.0	20	1-50	N/A	2027 YOE Inventory: Canopy closure is now above 25%. Swamp white oak and ash will continue to fill in.2017 YOE Inventory: 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.																																																			
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13	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	11.9	65	111-140	N/A	2027 YOE Inventory: Allow this stand to naturally convert to mixed upland deciduous. 2017 YOE Inventory: 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.																																																			
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14	3301 - Low Density Deciduous Trees		17.5		No	2027 YOE Inventory: Stand is slowly filling in with oak and birch. Very high deer usage. Density will remain sparse for a long time but will convert to at least forested in the next 10 to 20 years.2017 YOE Inventory: 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.																																																				
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																														
20	6119 - Mixed Lowland Deciduous Forest		25.3	34	51-80	N/A	2027 YOE Inventory: Aspen is not as abundant as previously thought. Upland areas are heavy to oak. Lowland areas are mostly maple and birch over holly and alder.2017 YOE Inventory: 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.																																														
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21	4130 - Aspen		45.3	41	111-140	N/A	2027 YOE Inventory: Split former stand into multiple stands based off species density differences and hydrology differences. New block has the best stocking is majority upland with a fairly well defined drain bisecting it. Aspen is above average quality for the area.2017 YOE Inventory: 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.																																														
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22	3301 - Low Density Deciduous Trees	Unspecified	5.1			No	Possible old landing site from surrounding sale. Did not regenerate to full stocking.																																														
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23	6113 - Lowland Maple		4.6	99	81-110	N/A	2017 YOE Inventory: 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.																																														
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Stand	Level 4 Cover Type	Size Density				Acres	Stand Age	BA Range	Managed Site	General Comments	
24	4130 - Aspen					32.5	40	111-140	N/A	2027 YOE Inventory: Aspen is above average quality for the area and has uniform stocking across most of the stand. Trembling aspen is located along the wet E-Type then transitions to bigtooth toward drier soils. Red maple is a common understory and subordinate component of the stand.2017 YOE Inventory: 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.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>		<b>Size</b>
Quaking Aspen		30	Seedling	8	40	Red Maple		High	10 - 20 feet		10 - 20 feet
Red Oak		2	Seedling	8	40	Michigan Holly		Low	5 - 10 feet		5 - 10 feet
Northern Pin Oak		5		9	40						
Red Maple		30	Sapling	6	40						
Paper Birch		3	Sapling	5	40						
Bigtooth Aspen		30	Seedling	8	40						
25	310 - Herbaceous Openland	Unspecified				1.2			No	2027 YOE Inventory: This is the cleared portion of a power line ROW along McGrudder Rd. and also contains the Sinif Drain ROW.	
26	6113 - Lowland Maple	Unspecified				7.0	62	1-50	N/A	2027 YOE Inventory: New stand. Sparse E-type.2018 YOE Inventory: 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.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>		<b>Size</b>
Northern Pin Oak		15		8		Cattail spp.		High	Not Applicable		Not Applicable
Swamp White Oak		10		8		Tag Alder		Medium	5 - 10 feet		5 - 10 feet
Red Maple		75		8	62	Phragmites (spp.)		Medium	Not Applicable		Not Applicable
						Michigan Holly		Medium	5 - 10 feet	5 - 10 feet	
27	6113 - Lowland Maple	Unspecified				21.6	84	1-50	N/A	2027 YOE Inventory: New stand. Sparse lowland hardwood stand over alder, holly and cattails. Isolated upland island along the eastern edge.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>		<b>Size</b>
Swamp White Oak		15		8		Tag Alder		Medium	5 - 10 feet		5 - 10 feet
Northern Pin Oak		10		8		Phragmites (spp.)		Medium	Not Applicable		Not Applicable
American Elm		5	Sapling	7		Michigan Holly		Medium	5 - 10 feet		5 - 10 feet
Red Maple		60		8	84	Cattail spp.		Low	Not Applicable		Not Applicable
Paper Birch		10	Sapling	6							
28	4139 - Aspen, Mixed Deciduous					19.2	34	51-80	N/A	2027 YOE Inventory: Split out southern block of former stand and added to adjacent aspen type. Size class is now pole but stocking is still sparse. Understory minimal.2017 YOE Inventory: 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.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>		<b>Size</b>
Quaking Aspen		35	Sapling	5	34	Paper Birch		Low	5 - 10 feet		5 - 10 feet
Northern Pin Oak		5	Pole	4	34	Michigan Holly		Low	5 - 10 feet		5 - 10 feet
Red Maple		30	Pole	4	34	Swamp White Oak		Low	5 - 10 feet		5 - 10 feet
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																						
29	4199 - Other Mixed Upland Deciduous	Sapling Poor	8.2	37	1-50	N/A	2027 YOE Inventory: Canopy closure is above 25% and will continue increasing with new saplings. Stocking will still be marginal for a long time. Stand is upland but not by much.2017 YOE Inventory: 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.																																																						
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30	6113 - Lowland Maple		14.8	105	51-80	N/A	2027 YOE Inventory: Aspen decline has resulted in canopy closure reduction. Natural regeneration cycle in progress.2017 YOE Inventory: 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.																																																						
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31	4130 - Aspen		16.4	26	Immature	N/A	2017 YOE Inventory: 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.																																																						
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32	6230 - Cattail	Unspecified	0.9			No	No phragmites at this time.																																																						
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33	6113 - Lowland Maple		11.8	70	81-110	N/A	2017 YOE Inventory: 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.																																																						
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34	4139 - Aspen, Mixed Deciduous	Poletimber Well	9.6	26	51-80	N/A	2025 YOE Inventory: Canopy closure at 75% or just above. Aspen is just barely dominant. May be best to manage for other species in the future. 2017 YOE Inventory: 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.																																																						
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35	6113 - Lowland Maple	Sawtimber Well	10.4	95	111-140	N/A	2027 YOE Inventory: Split out area closest to Magruder. Mostly log class maple with areas of poles growing into canopy positions after aspen and ash decline. 2018 YOE Inventory: 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.																																																						
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36	4130 - Aspen	Poletimber Well	27.3	35	51-80	N/A	2017 YOE Inventory: 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.																																																						
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37	4130 - Aspen		34.1	35	81-110	N/A	2017 YOE Inventory: 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.																																																						
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38	6113 - Lowland Maple	Sawtimber Well	7.5	82	81-110	N/A	2027 YOE Inventory: Ash and aspen completely on the ground. Let BA increase. 2017 YOE Inventory: 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.																																																						
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
39	6220 - Alder/Willow	Unspecified	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.
		<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>	
		Willow spp.		High	10 - 20 feet	10 - 20 feet	
		Green Ash		Low	>20 feet	>20 feet	
		Tag Alder		Medium	5 - 10 feet	5 - 10 feet	
40	6113 - Lowland Maple	Poletimber Medium	13.1	92	1-50	N/A	2018 YOE Inventory: 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.
		<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>
		Northern Pin Oak		15		10	92
		Red Maple		75		8	92
		Bigtooth Aspen		2		12	92
		Quaking Aspen		5	Seedling	8	
		Swamp White Oak		3		9	
		<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>	
		Michigan Holly		High	5 - 10 feet	5 - 10 feet	
		Red Maple		Medium	10 - 20 feet	10 - 20 feet	
		Green Ash		Low	10 - 20 feet	10 - 20 feet	
		Tag Alder		High	5 - 10 feet	5 - 10 feet	
41	4139 - Aspen, Mixed Deciduous	Poletimber Medium	9.1	35	51-80	N/A	2027 YOE Inventory: North end is wet with blueberry/red dogwood ground cover. Aspen mortality is already occurring. South end is more sparse. Off-site aspen, manage for oak and maple. 2017 YOE Inventory: 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.
		<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>
		Northern Pin Oak		10		7	35
		Quaking Aspen		30	Sapling	5	35
		Swamp White Oak		5	Sapling	5	
		Red Maple		15	Sapling	5	35
		Paper Birch		15	Log	4	35
		Bigtooth Aspen		25	Sapling	6	35
		<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>	
		Red Maple		Low	5 - 10 feet	5 - 10 feet	
		Serviceberry (Juneberry)		Medium	5 - 10 feet	5 - 10 feet	
		Northern Pin Oak		Low	5 - 10 feet	5 - 10 feet	
		Black Cherry		Low	5 - 10 feet	5 - 10 feet	
42	6113 - Lowland Maple		24.1	80	81-110	N/A	2027 YOE Inventory: Two aged stand moving toward uneven-aged. Previous sub-canopy red maple are now firmly in canopy positions. Canopy closure is just above 75%. NE 1/3rd wettest and most sparse. This portion also too wet to cut. Let stand progress naturally. 2017 YOE Inventory: 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 west 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
		<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>
		Red Maple		75		10	80
		Quaking Aspen		5		13	80
		Swamp White Oak		20		15	105
		<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>	
		Swamp White Oak		Medium	10 - 20 feet	10 - 20 feet	
		Red Maple		Medium	>20 feet	>20 feet	
		Green Ash		Low	10 - 20 feet	10 - 20 feet	
43	6113 - Lowland Maple	Poletimber Well	8.3	44	51-80	N/A	2027 YOE Inventory: Split and switched stand to lowland based of imagery and experience. Aspen along north edge then transitions to lowland maple. 2018 YOE Inventory: 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.
		<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>
		Northern Pin Oak		5	Seedling	7	
		Quaking Aspen		10	Sapling	6	
		Swamp White Oak		10	Sapling	6	
		Red Maple		65	Sapling	7	44
		Paper Birch		5	Sapling	5	
		American Elm		5	Sapling	6	
		<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>	
		Red Mulberry		Medium	10 - 20 feet	10 - 20 feet	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																											
44	6113 - Lowland Maple	Sawtimber Medium	7.5	87	81-110	N/A	2027 YOE Inventory: All ash is now on the ground. Regeneration is mostly holly with some ash. Good release of pole red maple. Most of this stand is too wet to cut.2018 YOE Inventory: 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.																																											
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45	6223 - Inundated Shrub Swamp	Unspecifed	179.0			No	2018 YOE Inventory: 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.																																											
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46	6113 - Lowland Maple		11.2	65	51-80	N/A	2027 YOE Inventory: Canopy closure is around 75%. Regeneration from harvest is minimal and is expected to take decades to develop. Moderate amount of understory red maple released post harvest.2022 Sale Closure: Harvested during the summer of 2022 under contract Magrudder Mix 73-013-17. Removed all aspen. Thinned the rest of the stand.2017 YOE Inventory: 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.																																											
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47	4125 - Black, N. Pin Oak	Sawtimber Poor	15.0	74	1-50	N/A	2027 YOE Inventory: Understory filling in with oak, maple and aspen. Oak is mostly over 5 feet. Stand meets regeneration stocking levels.2022 Sale Closure: Harvested during 2020 under contract Magrudder Mix 73-013-17. Marked 10 - 20 BA of Oak for residual. Protected advanced regeneration.2017 YOE Inventory: 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.																																											
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48	6119 - Mixed Lowland Deciduous Forest	Poletimber Poor	15.9	62	1-50	N/A	2018 YOE Inventory: 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.																																											
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																						
49	6112 - Lowland Aspen	Sapling Medium	54.4	4	Immature	N/A	2027 YOE Inventory: Good regeneration except in wettest areas of the stand located in small pockets throughout and a north to south drainage in the eastern portion of the stand. Stand is an excellent example of how slight variations in Species Over Hydrology Influencing Game and Harvest through time (S.O.H.I.G.H.Time) can change the regeneration outcome. This stand is slightly more elevated overall, larger in size and heavier to aspen than neighboring cuts. It was also cut a year after other stands in the area.2022 Sale Closure: Harvested during the summer/fall of 2021 under contract Magrudder Mix 73-013-17. Clear-cut 2 inches and up.2017 YOE Inventory: 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.																																																						
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50	6113 - Lowland Maple	Sawtimber Well	55.5	83	81-110	N/A	2027 YOE Inventory: Variable stand ranging from lowland brush to XL red maple. Recruitment is in the form of red maple pole release and ash regeneration.2018 YOE Inventory: 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.																																																						
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51	6112 - Lowland Aspen	Sapling Poor	29.0	5	Immature	N/A	2027 YOE Inventory: Canopy closure is around 50%. Scattered pockets of the lowest ground have minimal trees but upland areas are moderately to fully stocked. Eastern edge along wet E-type regenerated the worst. Stand meets regeneration objectives and is expected to fill in more over time.2022 Sale Closure: Harvested during 2020 under contract Magrudder Mix 73-013-17. Clear-cut 2 inches and up. Wet drainages of the former stand were removed.2017 YOE Inventory: 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.																																																						
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52	611 - Lowland Deciduous Forest	Sapling Poor	10.2	5			2027 YOE Inventory: Harvested area was 23 acres. 6.6 acres in the middle of the stand did not regenerate. Cause of regeneration failure in this area is mostly likely a mix of pre-harvest species composition, hydrology, browse and harvest timing. Hydrology is wettest, species were pole maple/birch dominant, stump sprout maple preferred browse. Perimeter areas of the stand regenerated well to aspen.2022 Sale Closure: Harvested during 2020 under contract Magrudder Mix 73-013-17. Clear-cut 2 inches and up.2017 YOE Inventory: 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.																																																					
53	6119 - Mixed Lowland Deciduous Forest		9.8	105	51-80	N/A	2027 YOE Inventory: Stand density decreased due to aspen decline. Canopy closure still above 75%.2017 YOE Inventory: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.																																																					
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54	4131 - Aspen, Oak	Sapling Poor	53.5	5	Immature	N/A	2027 YOE Inventory: Mix of aspen, oak and sparse pockets. Canopy closure is around 40%, only counting individual stems over 4ft. Stand meets regeneration stocking objectives. 2022 Sale Closure: Harvested during 2020 under contract Magrudder Mix 73-013-17. Clear-cut 2 inches and up.2017 YOE Inventory: 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.																																																					
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55	6112 - Lowland Aspen	Poletimber Well	11.8	34	81-110	N/A	2027 YOE Inventory: Switched to lowland based off recent imagery.2018 YOE Inventory: 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.																																																					
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
56	4130 - Aspen	Sapling Poor	43.7	5	Immature	N/A	2027 YOE Inventory: Stand has regenerated to an acceptable level. Canopy closure above 4ft is closer to 50% than 25% and is an acceptable mix of aspen and other deciduous species. This stand is expected to continue filling in over time. 2022 Sale Closure: Harvested during 2020 under contract Magruder Mix 73-013-17. Clear-cut 2 inches and up. 2017 YOE Inventory: 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.
		Canopy Species	% Cover	Size Class	DBH	Age	
		Northern Pin Oak	15	Log	1	5	
		Quaking Aspen	25	Log	1	5	
		Red Maple	5	Log	1	5	
		Bigtooth Aspen	55	Log	1	5	
57	6113 - Lowland Maple		16.6	84	81-110	N/A	2027 YOE Inventory: Stand would benefit from removal of poor formed and older stems. 2017 YOE Inventory: 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.
		Canopy Species	% Cover	Size Class	DBH	Age	
		Quaking Aspen	15		12	84	
		Black Cherry	3	Seedling	8		
		Red Oak	10		15		
		Blackgum	2	Seedling	8		
		Red Maple	65		10	84	
		Paper Birch	5	Seedling	8		
		Sub-Canopy Species	Density	Avg. Height	Size		
		Red Oak	Low	10 - 20 feet	10 - 20 feet		
		Red Maple	High	>20 feet	>20 feet		
		Black Cherry	Low	10 - 20 feet	10 - 20 feet		
58	6113 - Lowland Maple	Sapling Poor	7.0	52	1-50	N/A	2027 YOE Inventory: New stand. Canopy closure is around 50%. Transition between upland to cattail.
		Canopy Species	% Cover	Size Class	DBH	Age	
		Northern Pin Oak	5	Sapling	7		
		Quaking Aspen	5		7		
		Swamp White Oak	15		6		
		Red Maple	70		7	52	
		Paper Birch	5	Sapling	5		
59	611 - Lowland Deciduous Forest		32.8	4			2027 YOE Inventory: Browse pressure is significant throughout the stand. Approximately 30% of the stand area didn't regenerate due to browse and hydrology. The other 70% is low to moderately stocked with seedlings under 3ft and scattered pockets above browse height. Stand doesn't pass monitoring survey. Keep monitoring. 2022 Sale Closure: Harvested during the summer/fall of 2021 under contract Magruder Mix. Clear-cut 2 inches and up. 2017 YOE Inventory: 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.
		Sub-Canopy Species	Density	Avg. Height	Size		
		Quaking Aspen	Low	5 - 10 feet	5 - 10 feet		
		Quaking Aspen	Low	< 5 feet	< 5 feet		
		Red Maple	Medium	10 - 20 feet	10 - 20 feet		
		Red Maple	Low	5 - 10 feet	5 - 10 feet		
		Paper Birch	Low	< 5 feet	< 5 feet		
		Bigtooth Aspen	Medium	< 5 feet	< 5 feet		
		Bigtooth Aspen	Low	5 - 10 feet	5 - 10 feet		
		Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet		
		Northern Pin Oak	Medium	< 5 feet	< 5 feet		



Stand	Level 4 Cover Type	Size	Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																						
60	6113 - Lowland Maple			55.0	102	51-80	N/A	2027 YOE Inventory: Regeneration is below 3ft on average due to browse pressure. Majority species are aspen and oak in upland knob gaps. Overall harvest goals met. Gaps will fill in over the next couple decades.2022 Sale Closure: Harvested during the summer/fall of 2021 under contract Magrudder Mix. Created 100ft canopy gaps throughout the stand.2017 YOE Inventory: 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.																																																						
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61	4130 - Aspen	Sapling Well		23.1	35	51-80	N/A	2027 YOE Inventory: Stand has transitioned to poles. 2018 YOE Inventory: 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.																																																						
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62	4131 - Aspen, Oak			39.7	4	Immature	N/A	2027 YOE Inventory: Regeneration above 3ft is patchy and at low stocking. Seedlings below browse height are moderately stocked. Around 25% of the stand is non-stocked due to hydrology and browse. Stand is expected to fill in over time.2022 Sale Closure: Harvested during the summer/fall of 2021 under contract Magrudder Mix. Clear-cut 2 inches and up.2017 YOE Inventory: 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.																																																						
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63	6230 - Cattail	Unspecified		48.2			No	2027 YOE Inventory: 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.																																																						
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
64	4131 - Aspen, Oak	Poletimber Well	67.3	35	81-110	N/A	2027 YOE Inventory: Canopy closure is around 75%. Density is variable. Switched land position call to upland with lowland. Non-forested lowland pockets included in areas of the stand.2018 YOE Inventory: 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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	10	Sapling	6	35	Red Maple	Low		5 - 10 feet	5 - 10 feet
Paper Birch	5	Sapling	5	35	Northern Pin Oak	Medium		5 - 10 feet	5 - 10 feet
Bigtooth Aspen	65	Sapling	6	35					
Northern Pin Oak	20		8	35					
65	6113 - Lowland Maple	Sawtimber Well	18.7	58	81-110	N/A	2026 YOE Inventory: Switched stand from upland to lowland based off imagery and observation. Hold stand to manage with adjacent aspen. Regeneration will be an issue in this stand due to deer browse. Portions of the stand are too wet to cut.2018 YOE Inventory: 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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Quaking Aspen	10		12	58	Black Cherry	Low		10 - 20 feet	10 - 20 feet
Northern Pin Oak	20		12	58	Red Maple	Medium		10 - 20 feet	10 - 20 feet
Red Maple	60		11	58	Northern Pin Oak	Low		5 - 10 feet	5 - 10 feet
Bigtooth Aspen	10		14						
66	4125 - Black, N. Pin Oak	Poletimber Medium	19.3	63	1-50	N/A	2022 Sale Closure: Eastern edge of the stand was removed after being harvested under contract Magrudder Mix during the summer of 2022.  2017 YOE Inventory: Stand was harvested 34 years ago in which the advanced oak regeneration was protected along with some older individuals and some aspen. Regeneration failed accept 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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Quaking Aspen	5		11	63	Witch Hazel	Low		5 - 10 feet	5 - 10 feet
Red Maple	25		8	44	Red Maple	Medium		>20 feet	>20 feet
Northern Pin Oak	70		9	63	Northern Pin Oak	Medium		>20 feet	>20 feet
					Michigan Holly	Medium		5 - 10 feet	5 - 10 feet
					Serviceberry (Juneberry)	Low	5 - 10 feet	5 - 10 feet	
					Black Cherry	Low	>20 feet	>20 feet	
67	6230 - Cattail	Unspecifed	6.1			No	2018 YOE Inventory: The stand is a depression of mainly cattail and sedges. There are areas of lowland brush especially along the edges. No phragmites.		
68	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	22.7	60	81-110	N/A	2027 YOE Inventory: Switched stand to lowland w/ upland based off more recent imagery and quantity of tranditionally lowland adapted species.2017 YOE Inventory: 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 where cut and regenerated to low density swamp white oak which is much smaller in diameter.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	15		8	44	Red Maple	High		10 - 20 feet	10 - 20 feet
Northern Pin Oak	45		9	60					
Quaking Aspen	30		10	44					
Swamp White Oak	10		8						





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																										
69	6113 - Lowland Maple		15.8	87	1-50	N/A	2017 YOE Inventory: 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.																																										
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70	4125 - Black, N. Pin Oak	Poletimber Well	16.1	60	51-80	N/A	2027 YOE Inventory: Oak stems are on the verge of a log size average. Some nice red oak stems present. Canopy closure around 75%. Maple stems are pole class canopy with a few log size individuals. Maintain stocking at current levels to promote future stand form.2017 YOE Inventory: 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.																																										
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71	4131 - Aspen, Oak	Poletimber Poor	52.2	26	1-50	N/A	2027 YOE Inventory: Diameter has grown into pole class. No new recruitment into the understory. Stand is sparse.2018 YOE Comment: 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.																																										
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72	6113 - Lowland Maple		8.2	80	51-80	N/A	2027 YOE Inventory: Aspen canopy trees declining. Red maple succeeding underneath.2017 YOE Inventory: 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																																										
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73	6230 - Cattail	Unspecified	15.6			No	Cattail marsh with alder throughout. North finger is primarily lowland brush with willow dominant.																																										
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
79	4199 - Other Mixed Upland Deciduous	Poletimber Well	45.2	65	111-140	N/A	2027 YOE Inventory: Split former stand into upland and lowland stands and combined upland stand to the east of Turkey drain. Deer browse is very high in this stand. Natural canopy gaps formed through wind through aren't filling in. Regenerating this stand will be very difficult. 2017 YOE Inventory: 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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Oak	13		16	107	Serviceberry (Juneberry)	Medium		10 - 20 feet	10 - 20 feet
Red Oak	20		12	65	Red Maple	Medium		>20 feet	>20 feet
Red Maple	45		10	65	Red Oak	Low		Variable	Variable
Paper Birch	2		10	65	Alternate-leaved Dogwood	Low		5 - 10 feet	5 - 10 feet
Bigtooth Aspen	20		13	65					
80	6116 - Lowland Birch	Poletimber Medium	5.5	35	51-80	N/A	2017 YOE Inventory: 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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Quaking Aspen	20	Seedling	8	35	Red Osier Dogwood	Low		5 - 10 feet	5 - 10 feet
Paper Birch	75	Seedling	6	35	Willow spp.	Low		5 - 10 feet	5 - 10 feet
Green Ash	5	Log	4	35	Autumn Olive	Low		5 - 10 feet	5 - 10 feet
					Flowering Dogwood	Medium		5 - 10 feet	5 - 10 feet
81	6119 - Mixed Lowland Deciduous Forest		15.1	70	81-110	N/A	2017 YOE Inventory: 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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	55		10	70	Red Maple	Medium		10 - 20 feet	10 - 20 feet
Quaking Aspen	15		12		Swamp White Oak	Medium		10 - 20 feet	10 - 20 feet
Swamp White Oak	30		9	70	Michigan Holly	Medium		5 - 10 feet	5 - 10 feet
82	3102 - Grass	Unspecifed	1.0				2020 Comment: Old well pad site. Has been seeded with grasses. The main soil type is Kinross. Permit 2260 well plugged 5/25/1938		
83	4130 - Aspen	Poletimber Medium	6.6	55	51-80	N/A	2018 YOE Inventory: 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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	10	Sapling	6	55	Red Maple	Low		5 - 10 feet	5 - 10 feet
Bigtooth Aspen	75	Seedling	8	55	Serviceberry (Juneberry)	Low		5 - 10 feet	5 - 10 feet
Red Oak	15	Seedling	8	55	White Oak	Low		10 - 20 feet	10 - 20 feet
84	6230 - Cattail	Unspecified	33.5			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.		
					Sub-Canopy Species	Density		Avg. Height	Size
					Swamp White Oak	Low		>20 feet	>20 feet
					Michigan Holly	Medium		5 - 10 feet	5 - 10 feet
					Red Maple	Low		>20 feet	>20 feet
					Paper Birch	Low		>20 feet	>20 feet
					Tag Alder	Medium		5 - 10 feet	5 - 10 feet
					Cattail spp.	High		Not Applicable	Not Applicable





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																		
85	4199 - Other Mixed Upland Deciduous	Sawtimber Well	10.1	82	81-110	N/A	2027 YOE Inventory: Some mortality has occurred in aspen. Stand actively converting a new age class of hardwood.2018 YOE Inventory: 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.																																																		
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86	6230 - Cattail	Unspecified	13.6			No	Cattail marsh with lowland hardwood and brush around the perimeter.																																																		
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87	310 - Herbaceous Openland	Unspecified	1.4				2020 Comment: Old oil & gas site. Would make a good Wildlife Opening. Old access road through stand 59. the stand has one site at north end and one at south end permits 1574 and 1505																																																		
88	4131 - Aspen, Oak	Poletimber Medium	54.4	26	51-80	N/A	2027 YOE Inventory: Canopy closure is increasing in this stand as aspen canopies develop. Variable diameters as some aspen and oak are open grown single stems while others growing in dense pockets of saplings.2017 YOE Inventory: 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.																																																		
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89	6113 - Lowland Maple	Sawtimber Well	67.0	85	81-110	N/A	2022 Sale Closure: Harvested during the fall of 2019 under contract Magrudder Mix 73-013-17. Marked thinning.																																																		
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																	
90	6113 - Lowland Maple		7.9	105	51-80	N/A	2027 YOE Inventory: Former heavy ash pockets are now marsh grass dominated with scattered maple and swamp white oak. These areas will fill in over time. Former understory maple stems are succeeding into canopy gaps through the rest of the stand. 2017 YOE Inventory: 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.																																																	
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91	6113 - Lowland Maple		13.4	60	51-80	N/A	2017 YOE Inventory: 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.																																																	
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92	4131 - Aspen, Oak		10.0	4	Immature	N/A	2027 YOE Inventory: Regeneration is a mix of aspen, oak, and maple with moderate stocking. Also a moderate stocking of the same species mix under 3ft. Stand is expected to fill in well over time.2022 Sale Closure: Harvested during the summer/fall of 2021 under contract Magrudder Mix. Clear-cut 2 inches and up.2017 YOE Inventory: 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.																																																	
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93	6113 - Lowland Maple	Sawtimber Well	16.6	75	81-110	N/A	2027 YOE Inventory: Natural succession still occurring. Decline of aspen is providing a source of large woody debris and slowly releasing understory.2017 YOE Inventory: 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.																																																	
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94	4199 - Other Mixed Upland Deciduous	Poletimber Well	5.7	77	51-80	N/A	2027 YOE Inventory: Adjusted stand boundary, removing western ridge. Eastern ridge has an average diameter of 9". Reduced to poles class accordingly.2018 YOE Inventory: 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.																																																	
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
95	6113 - Lowland Maple	Poletimber Well	36.7	65	81-110	N/A	2027 YOE Inventory: New stand. Split out lowland from upland. Majority of this stand is very wet. Canopy gaps have formed after ash die off, allowing red maple poles to succeed.2017 YOE Inventory: 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.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Oak		5		12		Red Oak		Low	Variable	Variable
Quaking Aspen		5		14	65	Michigan Holly		Low	5 - 10 feet	5 - 10 feet
Swamp White Oak		15		14	107	Alternate-leaved Dogwood		Low	5 - 10 feet	5 - 10 feet
Red Maple		70		12	65	Red Maple		Medium	>20 feet	>20 feet
Paper Birch		5		10	65	Green Ash		Medium	Variable	Variable
96	629 - Mixed non-forested Wetland	Unspecifed	1.7			No	This stand is a low drainage which flows into Turkey Creek. The main soil is Wixom.			
		Sub-Canopy Species		Density	Avg. Height	Size				
		Cattail spp.		Full	Not Applicable	Not Applicable				
97	6222 - Shrub-Carr	Unspecifed	5.9			No	2018 YOE Inventory: 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.			
		Sub-Canopy Species		Density	Avg. Height	Size				
		Cattail spp.		Medium	Not Applicable	Not Applicable				
		Willow spp.		Low	5 - 10 feet	5 - 10 feet				
		Swamp White Oak		Medium	>20 feet	>20 feet				
		Michigan Holly		High	5 - 10 feet	5 - 10 feet				
		Red Maple		High	>20 feet	>20 feet				
		Tag Alder		Medium	5 - 10 feet	5 - 10 feet				
98	6230 - Cattail	Unspecifed	18.3			No	This is a cattail marsh.			
		Sub-Canopy Species		Density	Avg. Height	Size				
		Cattail spp.		Full	Not Applicable	Not Applicable				
99	6113 - Lowland Maple	Sawtimber Medium	15.5	80	51-80	N/A	2027 YOE Inventory: Leave stand as a buffer between marsh and upland.2018 YOE Inventory: 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.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Quaking Aspen		15		11	80	Black/Red (Hybrid) Oak		Low	5 - 10 feet	5 - 10 feet
Swamp White Oak		10		12		Red Maple		Medium	>20 feet	>20 feet
Black/Red (Hybrid) Oak		5		12		Tag Alder		Medium	5 - 10 feet	5 - 10 feet
Red Maple		65		11	80	Willow spp.		Medium	10 - 20 feet	10 - 20 feet
Paper Birch		5		9		Swamp White Oak		Low	5 - 10 feet	5 - 10 feet
						Michigan Holly		Medium	5 - 10 feet	5 - 10 feet
100	6222 - Shrub-Carr	Unspecifed	1.4			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.			
		Sub-Canopy Species		Density	Avg. Height	Size				
		Quaking Aspen		Medium	>20 feet	>20 feet				
		Michigan Holly		High	5 - 10 feet	5 - 10 feet				
		Red Maple		Low	>20 feet	>20 feet				
		Tag Alder		Low	5 - 10 feet	5 - 10 feet				





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																
101	6119 - Mixed Lowland Deciduous Forest	Sawtimber Well	29.0	65	81-110	N/A	2027 YOE Inventory: Aspen is sparsely scattered throughout the stand. Stand density varies from non-stocked to 200+ BA. Overall, canopy closure is above 75%. Marsh grass ground cover through majority of stand.2022 Sale Closure: New stand created after portions of the original stand were harvested. Stand is more of an E-type as most of the aspen was centrally located and harvested.2017 YOE Inventory: 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.																																																
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102	3301 - Low Density Deciduous Trees	Unspecified	3.5			No	2017 YOE Inventory: 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.																																																
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103	6223 - Inundated Shrub Swamp	Unspecified	2.9			No	2018 YOE Inventory: 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.																																																
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104	6220 - Alder/Willow	Unspecified	3.4			No	2018 YOE Inventory: 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	Unspecified	2.4			No	Dominated by lowland grasses with a perimeter of lowland brush and hardwood.																																																
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106	4139 - Aspen, Mixed Deciduous	Poletimber Well	2.0	60	Unspecified	N/A	Remote call. No legal access to this parcel. Appears to be upland.																																																



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																													
107	4137 - Aspen, Birch	Sapling Well	7.9	35	81-110	N/A	2017 YOE Inventory: 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.																																													
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108	4193 - Birch, Aspen	Poletimber Well	12.5	35	51-80	N/A	2018 YOE Inventory: 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.																																													
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109	4139 - Aspen, Mixed Deciduous	Poletimber Well	9.7	35	81-110	N/A	2017 YOE Inventory: 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.																																													
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110	4130 - Aspen	Poletimber Well	49.6	34	81-110	N/A	2017 YOE Inventory: 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.																																													
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111	4139 - Aspen, Mixed Deciduous	Poletimber Well	13.8	35	81-110	N/A	2027 YOE Inventory: Stand has transitioned to poles. Aspen is distributed in pockets throughout the stand. Lowest pockets are least dense with aspen and trees in general. Regeneration concerns will be present for this stand if clear-cut.2018 YOE Inventory: 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.																																													
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112	6220 - Alder/Willow	Unspecified	1.7			No	2017 YOE Inventory: This stand is an L-Type that has swamp hardwood around the edges, especially at the east end.																																													
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																				
113	6114 - Lowland Oak	Sawtimber Well	8.8	105	81-110	N/A	2017 YOE Inventory: 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.																				
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114	6223 - Inundated Shrub Swamp	Unspecified	3.8			No	The stand is in a depression and has the edges of lowland brush going to marsh grass.																												
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115	622 - Lowland Shrub	Unspecified	2.7			No	2017 YOE Inventory: 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.																								
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116	6222 - Shrub-Carr	Unspecified	1.4			No	Cattails with pockets of lowland brush and a lowland hardwood perimeter. The main soil types are Kingsville and Pipestone.																												
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																									
117	6112 - Lowland Aspen		35.2	14	Immature	N/A	2027 YOE Inventory: Aspen has filled in considerably over the past 10 years. 2011 age class is now dominant although stand is still two-aged. Trace of beech and white pine. 2017 YOE Inventory: 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.																																																																									
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118	6230 - Cattail	Unspecified	5.5			No	2018 YOE Inventory: This cattail marsh has islands and edges of swamp hardwoods.																																																																									
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119	4199 - Other Mixed Upland Deciduous	Sapling Medium	13.6	23	Immature	N/A	2027 YOE Inventory: Split northern and eastern areas of the former stand out due to a lack of aspen. New stand is moderate density maple and oak with scattered individual aspen stems. Birch and oak are slowly filling in the understory. 2017 YOE Inventory: 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.																																																																									
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120	6119 - Mixed Lowland Deciduous Forest		10.8	36	81-110	N/A	2027 YOE Inventory: Aspen is located in small clumps throughout the stand. Regeneration will be an issue if clearcut due to browse and hydrology. 2017 YOE Inventory: 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.																																																																									
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127	6112 - Lowland Aspen	Poletimber Well	18.5	41	81-110	N/A	2027 YOE Inventory: New stand. Formerly part of a larger aspen stand. Hydrology is a mix upland and lowland. Aspen is located in veins and pockets through the central and eastern portions of the stand. Western edge is more sparse with more maple, birch, and oak.2017 YOE Inventory: 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.																																																												
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128	622 - Lowland Shrub		2.5			No	2027 YOE Inventory: Easement was masticated this winter. Mostly cleared willow and birch.2017 YOE Inventory: 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.																																																												
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129	6114 - Lowland Oak	Poletimber Well	5.0	65	51-80	N/A	2027 YOE Inventory: Understory is medium to full with saplings, poles, and brush.2017 YOE Inventory: Hummocky terrain with ponding water in depressions during the spring. Associated oak knolls throughout transitioning to pure upland in the west.																																																												
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130	3301 - Low Density Deciduous Trees	Unspecified	7.9			No	2027 YOE Inventory: Portions of the stand west of the forest road were cut during the adjacent harvest in 2020. Regeneration is minimal at this time.2017 YOE Inventory: 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.																																																												
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131	6119 - Mixed Lowland Deciduous Forest	Sapling Poor	23.8	30	1-50	N/A	2027 YOE Inventory: Newly acquired parcel. Clear-cut prior to 1998 but very recent in that imagery. Low and wet stand with isolated pockets of high ground. Dense understory of holly. Trees still recruiting into the canopy in sparse areas.																																																												
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132	110 - Low Intensity Urban	Unspecified	1.5				2018 YOE Inventory: Oil & gas remediation site. Graveled surface with non-forested edges and exposed sand. well site in west end plugged 9/29/1952 permit 2713.																																																												







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138	4199 - Other Mixed Upland Deciduous	Poletimber Medium	5.2	45	51-80	N/A	2027 YOE Inventory: Former log canopy has declined enough to allow former understory to succeed into the dominant group. Stand is now two-aged.2022 Sale Closure: West portion was split off after harvest.2017 YOE Inventory: 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.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments											
144	4125 - Black, N. Pin Oak	Sawtimber Well	5.7	72	111-140	N/A	2027 YOE Inventory: Aspen is falling out of the stand. Maple and oak succeeding into canopy. Small stand. Allow natural process to continue for another rotation.2017 YOE Inventory: The stand is a slight ridge between two low drainages making access difficult but not imposible. 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.											
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>								
Red Maple		25		10		Red Maple		Medium	>20 feet	>20 feet								
Northern Pin Oak		55		12	72	Swamp White Oak		Low	10 - 20 feet	10 - 20 feet								
Quaking Aspen		10		14	72	Northern Pin Oak		Medium	>20 feet	>20 feet								
Swamp White Oak		10		14														
145	3102 - Grass	Unspecifed	1.1				2027 YOE Inventory: Grass opening. Oil and gas created.											
146	611 - Lowland Deciduous Forest	Unspecifed	11.4	3			<b>Sub-Canopy Species</b>			<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>	2027 YOE Inventory: Sparse regeneration in pockets of the stand. Stand appears to be slowly filling in but does not meet regeneration standards. Keep monitoring progress.Sale Closure: New stand. Harvested during the summer of 2022 under contract Magrudder Mix. Clear-cut 2 inches and up. Stand is mostly lowland.2017 YOE Inventory: Stand was harvested 34 years ago in which the advanced oak regeneration was protected along with some older individuals and some aspen. Regeneration failed accept 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.					
						Quaking Aspen	Low	5 - 10 feet	5 - 10 feet									
						Red Maple	Low	5 - 10 feet	5 - 10 feet									
						Northern Pin Oak	Low	< 5 feet	< 5 feet									
147	6220 - Alder/Willow	Unspecifed	13.3			No	<b>Sub-Canopy Species</b>			<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>	2027 YOE Inventory: Tag alder and willow over marsh grass.					
						Michigan Holly	Medium	5 - 10 feet	5 - 10 feet									
						Alder	High	5 - 10 feet	5 - 10 feet									
						Red Maple	Low	10 - 20 feet	10 - 20 feet									
						Paper Birch	Low	10 - 20 feet	10 - 20 feet									
						Willow spp.	Medium	5 - 10 feet	5 - 10 feet									
						Quaking Aspen	Low	10 - 20 feet	10 - 20 feet									
						Swamp White Oak	Low	10 - 20 feet	10 - 20 feet									
148	4131 - Aspen, Oak	Poletimber Well	10.0	34	51-80	N/A	<b>Canopy Species</b>			<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>	2018 YOE Inventory: 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.
						Quaking Aspen	5	Sapling	6	34	Serviceberry (Juneberry)	Low	5 - 10 feet	5 - 10 feet				
						Northern Pin Oak	25	Sapling	7	34	Red Maple	Low	5 - 10 feet	5 - 10 feet				
						Red Maple	10	Sapling	5	34	Northern Pin Oak	Medium	5 - 10 feet	5 - 10 feet				
						Bigtooth Aspen	60	Seedling	7	34								







Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																													
155	4125 - Black, N. Pin Oak	Sawtimber Medium	9.9	60	81-110	N/A	2027 YOE Inventory: Aspen decline continues, promoting oak. High wildlife value stand because of mast production.2017 YOE Inventory: 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.																																													
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156	4199 - Other Mixed Upland Deciduous		13.2	3	Immature		2027 YOE Inventory: Upland areas will be above browse height in 2 or 3 years. Lowland areas are non-stocked and will take a decade or more to fill in. Browse on red maple is an issue. Switch coverytype objective to other mixed upland deciduous.2022 Sale Closure: Harvested during the winter of 2021 under contract High Tower Mix.2017 YOE Inventory: SE block separated by a forested drain approximately 40 - 50 feet wide. Accessing from the south may be the better option.																																													
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157	413 - Aspen		2.2	3			2027 YOE Inventory: Almost zero woody vegetation. Browse is a factor.2022 Sale Closure: Harvested during the winter of 2021/2022 under contract High Tower Mix. Clear-cut 2" and up. New non-forested stand created after harvest of portion of larger stand. Will eventually be merged into surrounding aspen sapling stand. Harvested to improve road access.2017 YOE Comments: 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.																																													
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158	6230 - Cattail	Unspecifed	12.5			No																																														
159	6113 - Lowland Maple	Sawtimber Medium	26.1	78	51-80	N/A	2027 YOE Inventory: Regeneration from harvest is minimal. Few stump sprouts present have been heavily browsed. Sufficient canopy gaps present to support future regeneration if a seedling cohort can take hold. This is expected to occur slowly over the next two decades.2022 Sale Closure: Harvested during the winter of 2021/2022 under contract High Tower Mix. Removed all aspen. Marked thinning with regeneration gaps. Original stand was split into 2.2017 YOE Comments: 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.																																													
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166	3102 - Grass	Unspecified	1.1				2027 YOE Inventory: Well site permit 3279. Site is restored with herbaceous cover.																																																							
167	4130 - Aspen	Sapling Poor	15.3	5	Immature	N/A	2027 YOE Inventory: Harvested area was 23 acres. This is the upland, regenerated portion of that cut. 6.6 acres in the middle of the stand did not regenerate. Cause of regeneration failure in this area is mostly likely a mix of pre-harvest species composition, hydrology, browse and harvest timing. Hydrology is wettest, species were pole maple/birch dominant, stump sprout maple preferred browse. Perimeter areas of the stand regenerated well to aspen.2022 Sale Closure: Harvested during 2020 under contract Magruder Mix 73-013-17. Clear-cut 2 inches and up.2017 YOE Inventory: 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.																																																							
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168	6113 - Lowland Maple	Sawtimber Well	10.0	65	51-80	N/A	2027 YOE Inventory: Split original stand. This portion is mostly pole timber with pockets of sapling and logs. Lower quality. Originally more aspen which has fallen out of the stand allowing a cohort of younger red maple to succeed into the canopy.2017 YOE Inventory: 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.																																																							
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169	6112 - Lowland Aspen		15.5	41	81-110	N/A	2027 YOE Inventory: Split former stand into multiple stands based off species density differences and hydrology differences. New stand is mostly lowland. In wettest areas, quaking aspen is declining, allowing understory vegetation to grow. Regenerating aspen here will be difficult.2017 YOE Inventory: 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.																																																							
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174	4199 - Other Mixed Upland Deciduous		18.4	5	Immature		2027 YOE Inventory: Split stand. Upland portion. Regeneration doesn't meeting stocking standards but should grow in over the next 5 years. Seedlings under 4" seem to be adequate. Regeneration is patchy at approximately 10 - 20% of the area. Browse is a major factor. Keep monitoring.2022 Sale Closure: Harvested during the summer/fall of 2019 under contract High Tower Mix. Clear-cut 2" and up.2017 YOE Comments: 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.																								
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