

Compartment Review Presentation

Gladwin Forest Management Unit

Compartment 73116

Entry Year: 2027

Acreage: 3,025

County: Midland

Management Area: Gladwin Lake Plain

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. Alamamdo 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.

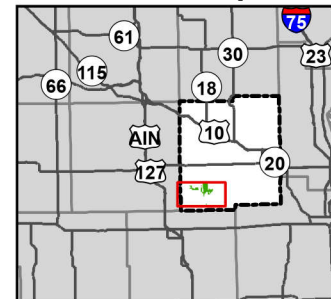
The following reports from the Inventory are attached:

- 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: 9/24/2025
Map Phase: Post Review

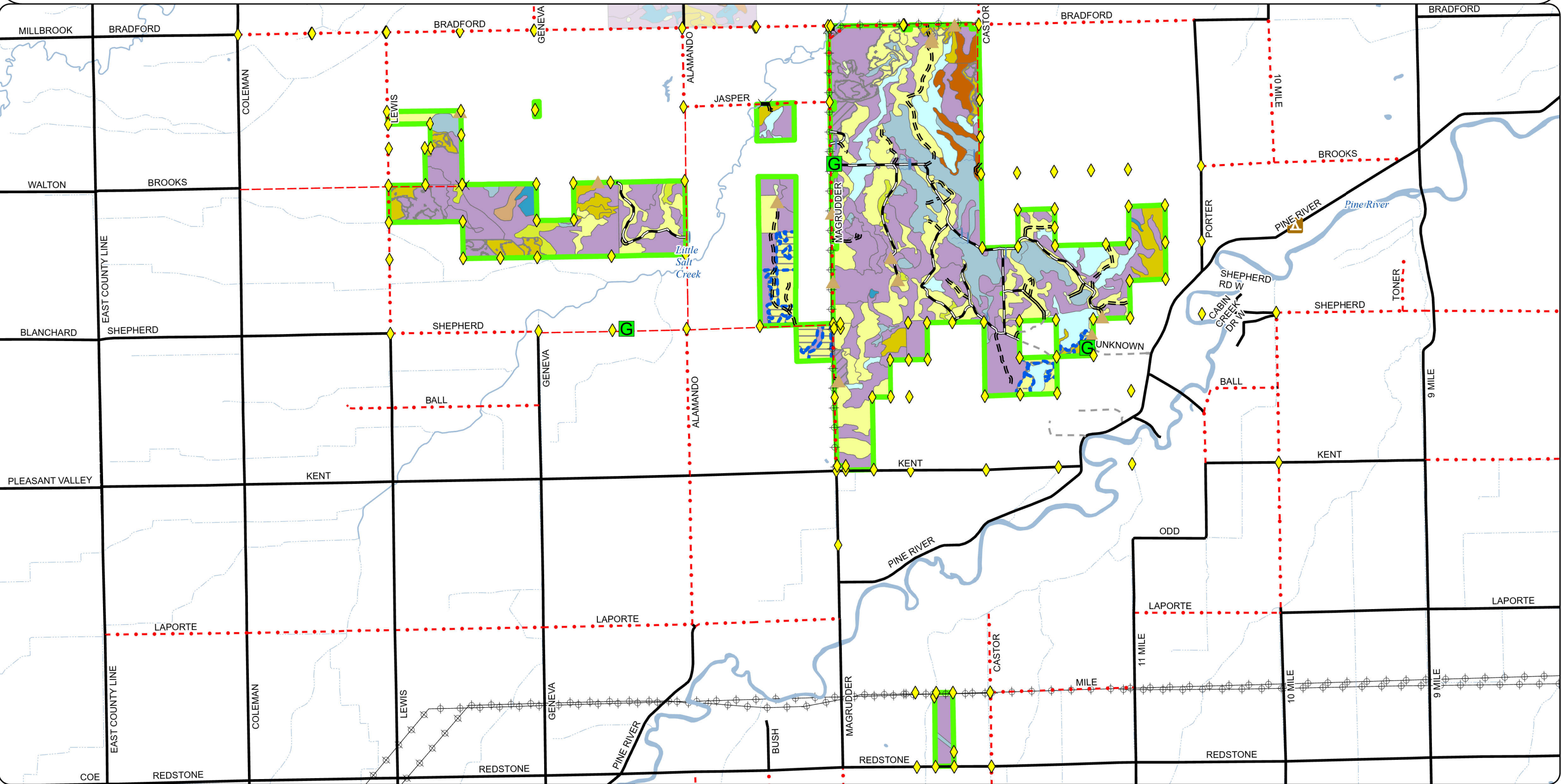
- Survey Grade Corners
- Berms
- Gate
- Bridges
- Culvert
- Campground

- 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
- Powerline
- Lakes and Rivers
- Counties
- Compartment Boundary
- Clearcut
- Thinning

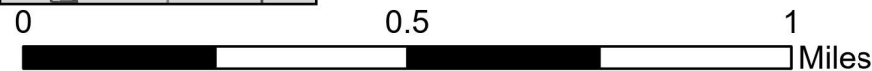
- Overstory Removal
- Monitoring - Regeneration
- Treatments with Site Conditions
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 611 - Lowland Deciduous Forest

- 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



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: 9/24/2025
Map Phase: Post Review

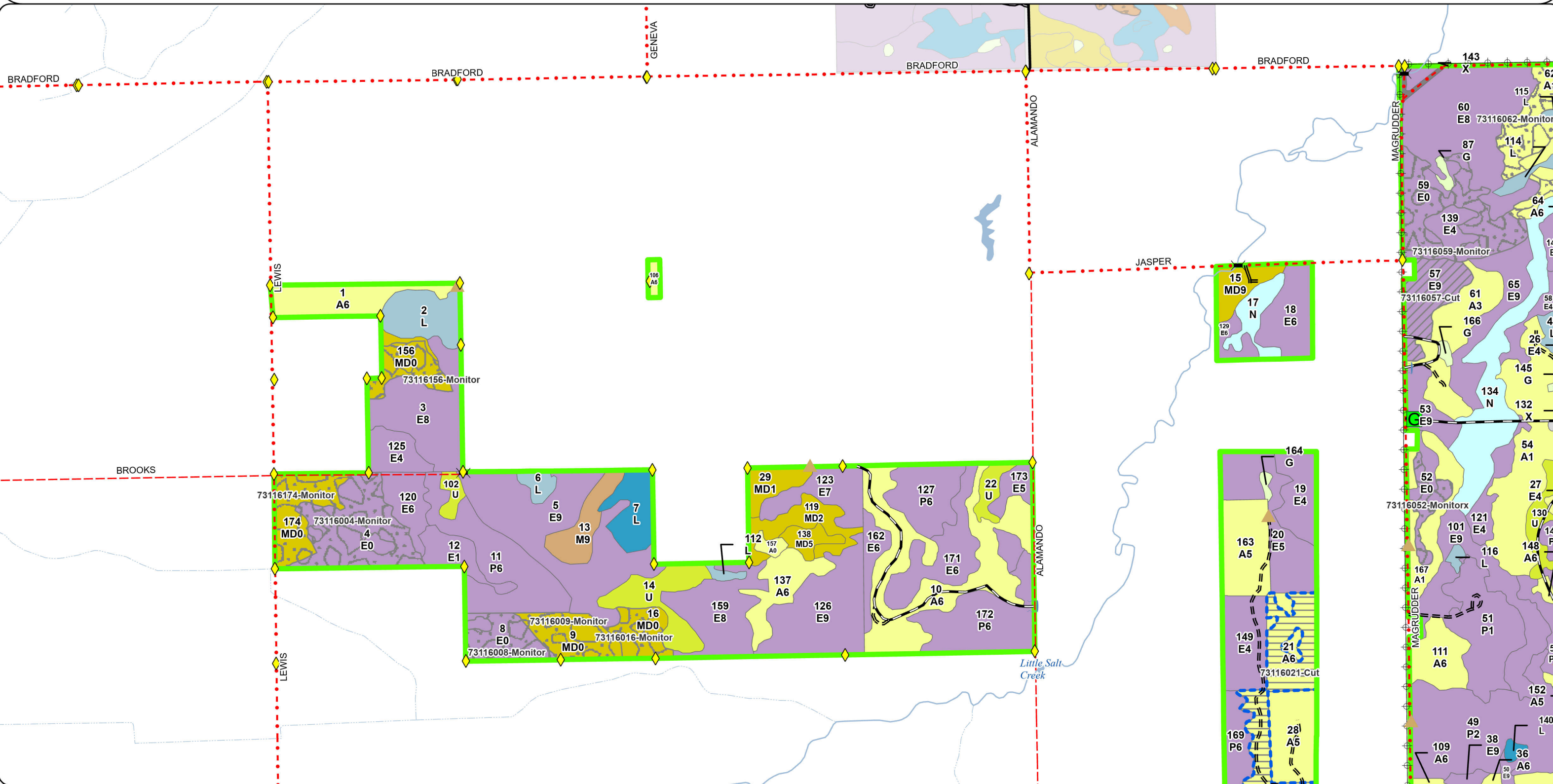


- Survey Grade Corners
- Berms
- Gate
- Bridges
- Culvert
- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route

- Federal / State / County - Paved Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Intermittent Stream
- Perennial River
- Powerline
- Lakes and Rivers
- Counties
- Compartment Boundary

- Clearcut
- Thinning
- Monitoring - Regeneration
- Treatments with Site Conditions
- 411 - Northern Hardwood
- 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



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: 9/24/2025
Map Phase: Post Review



0 0.5 1 Miles

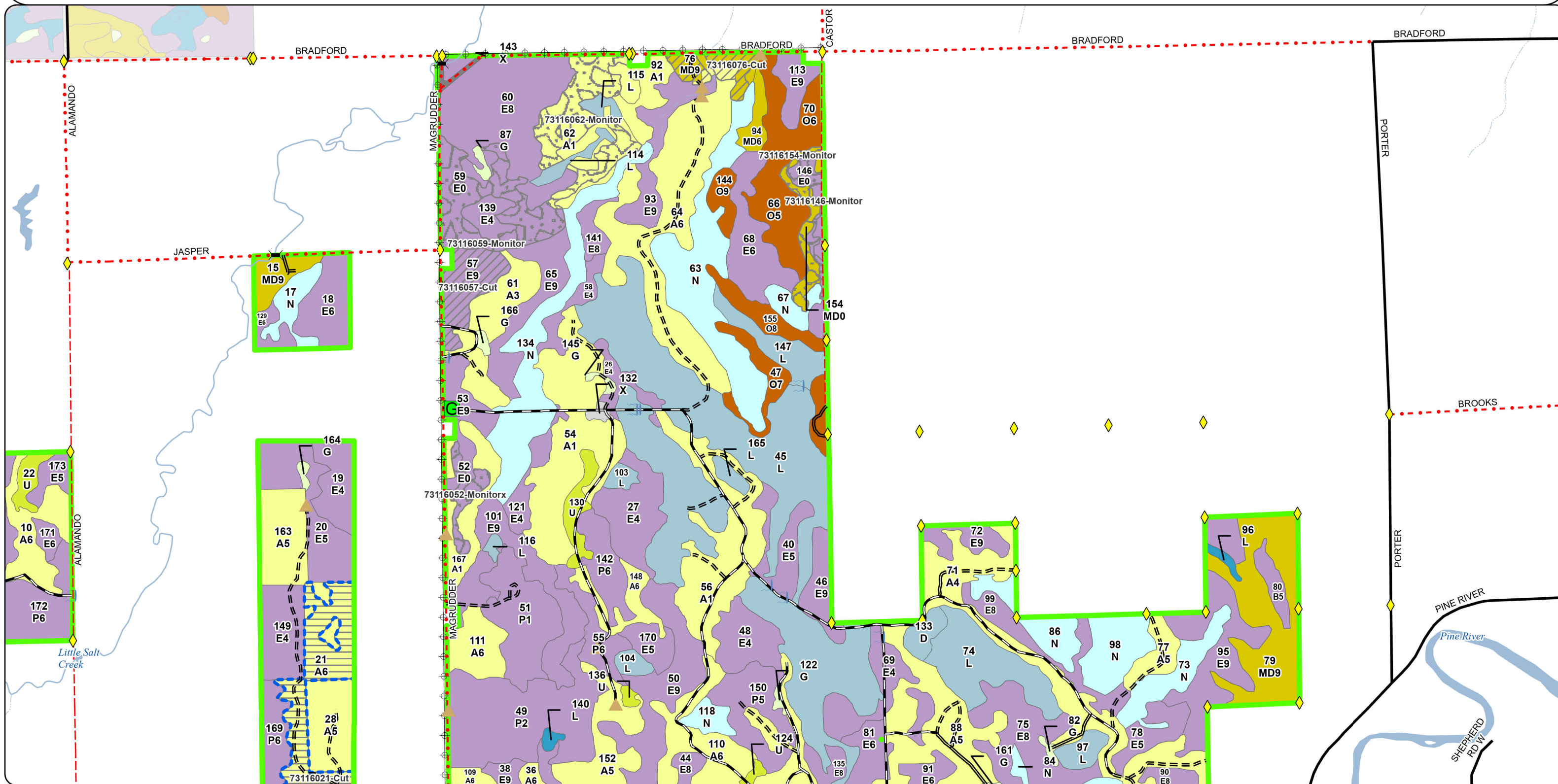
- Survey Grade Corners
- Berms
- Gate
- Bridges
- Culvert

- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route

- Federal / State / County - Paved Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Intermittent Stream
- Perennial River
- Powerline
- Lakes and Rivers
- Counties
- Compartment Boundary

- Clearcut
- Thinning
- Monitoring - Regeneration
- Treatments with Site Conditions
- 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



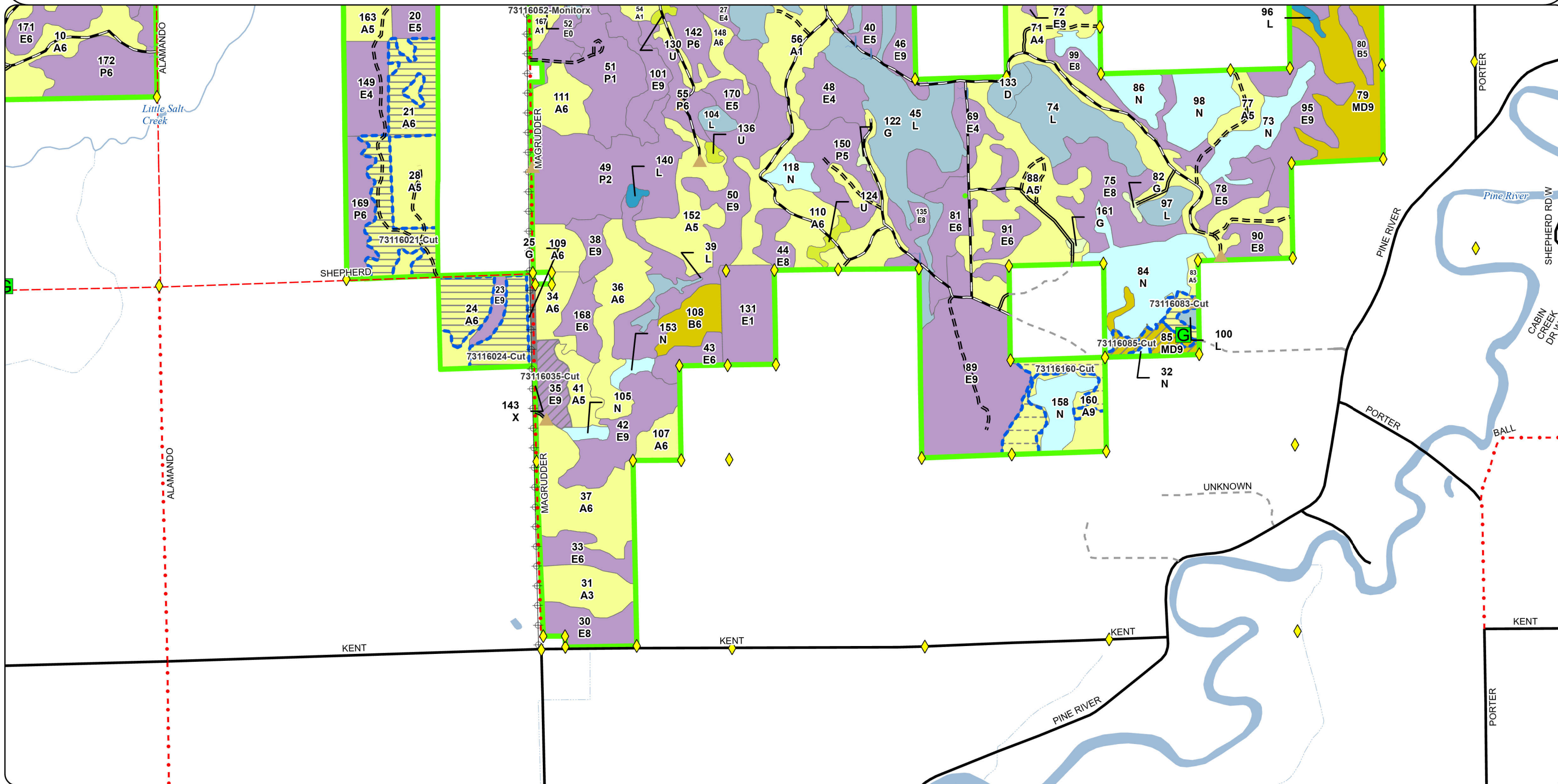
Cover Type & Treatments Map

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: 9/24/2025
Map Phase: Post Review



0 0.5 1 Miles

- | | | | | |
|---|---|--|---|---|
| <ul style="list-style-type: none">Survey Grade CornersBermsGateCulvert | <ul style="list-style-type: none">DNR - Primary Forest RoadDNR - Secondary Forest RoadDNR - Forest Access RouteFederal / State / County - Paved Road | <ul style="list-style-type: none">County - Gravel RoadCounty - Dirt Road (Seasonal)Private - Paved RoadPrivate - Dirt / Gravel RoadIntermittent StreamPerennial RiverPowerlineLakes and RiversCounties | <ul style="list-style-type: none">Compartment BoundaryClearcutThinningOverstory RemovalMonitoring - RegenerationTreatments with Site Conditions413 - Aspen419 - Mixed Upland Deciduous | <ul style="list-style-type: none">611 - Lowland Deciduous Forest122 - Road/Parking Lot310 - Herbaceous Openland330 - Low Density Trees622 - Lowland Shrub623 - Emergent Wetland629 - 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 black, the second is white, the third is 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.

Survey Grade Corners

— Federal / State / County - Paved Road

- • - • County - Gravel Road

Intermittent Stream

— Perennial River

 Powerline

d  Lakes and Rivers

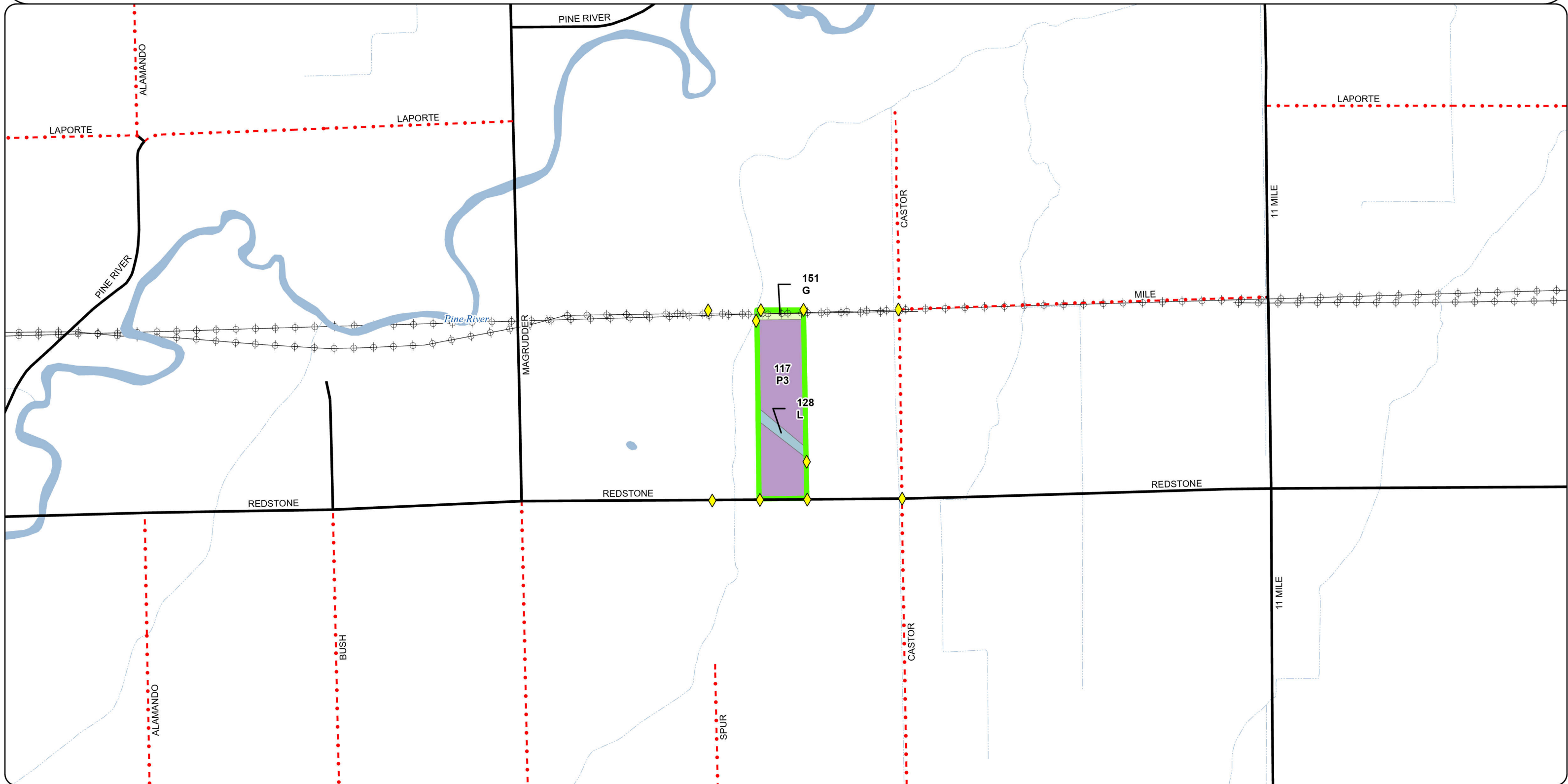
Counties

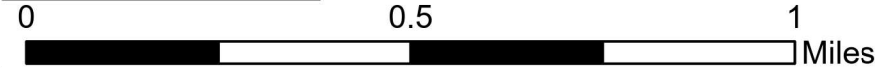
 Compartment Boundary








 611 - Lowland Deciduous Forest

 310 - Herbaceous Openland



 622 - Lowland Shrub



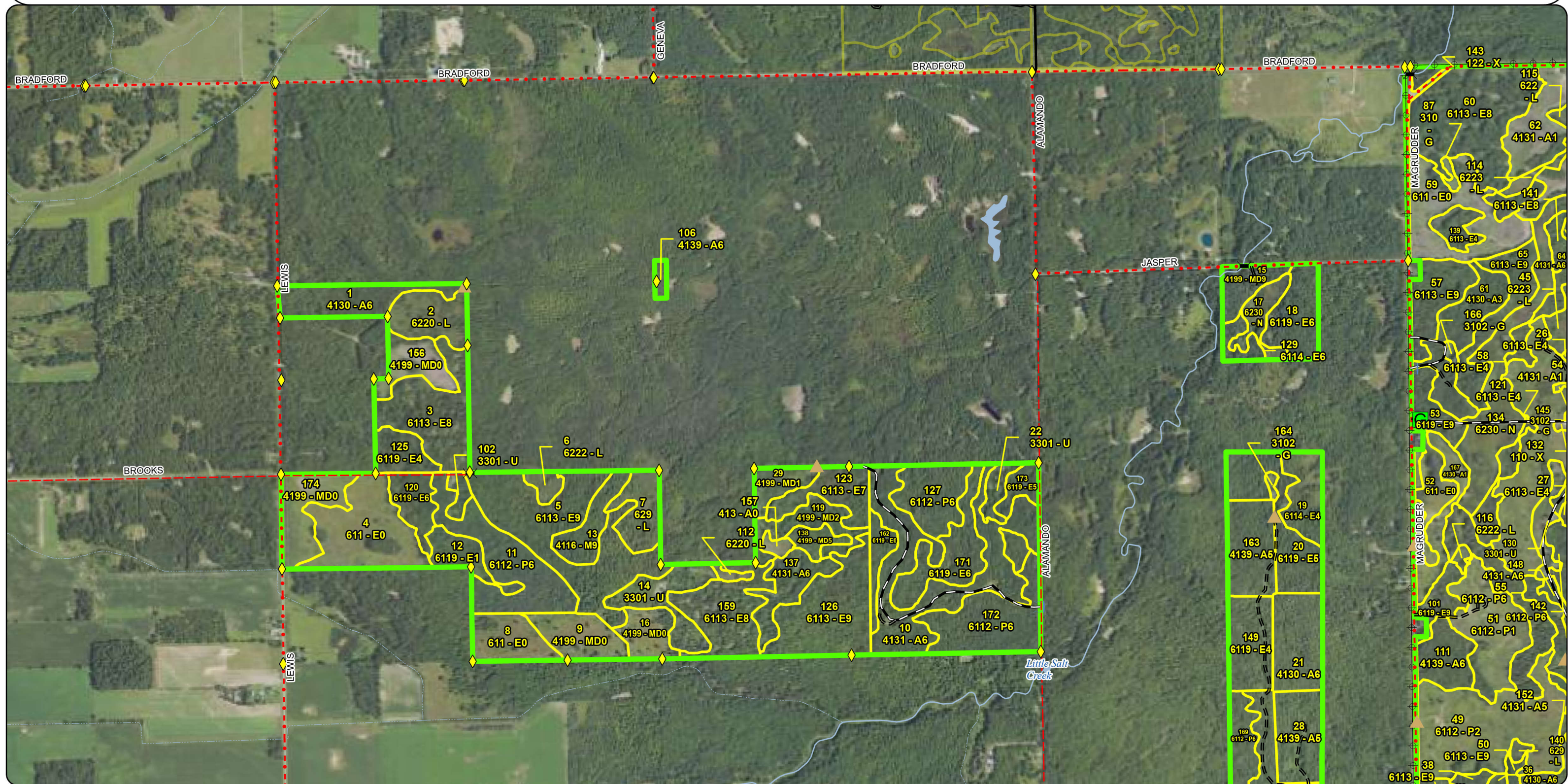


-  Survey Grade Corners
 Berms
 Gate
 Bridges
 Culvert
 DNR - Primary Forest Road
 DNR - Secondary Forest Road

- == DNR - Forest Access Route
- Federal / State / County - Paved Road
- - - County - Gravel Road
- - - County - Dirt Road (Seasonal)
- - - Intermittent Stream
- Perennial River
- ⊕ — ⊕ Powerline
- Lakes and Rivers

-  Counties
 Compartment Boundary
 411 - Northern Hardwood
 413 - Aspen
 419 - Mixed Upland Deciduous
 611 - Lowland Deciduous Forest
 110 - Low Intensity Urban
 122 - Road/Parking Lot

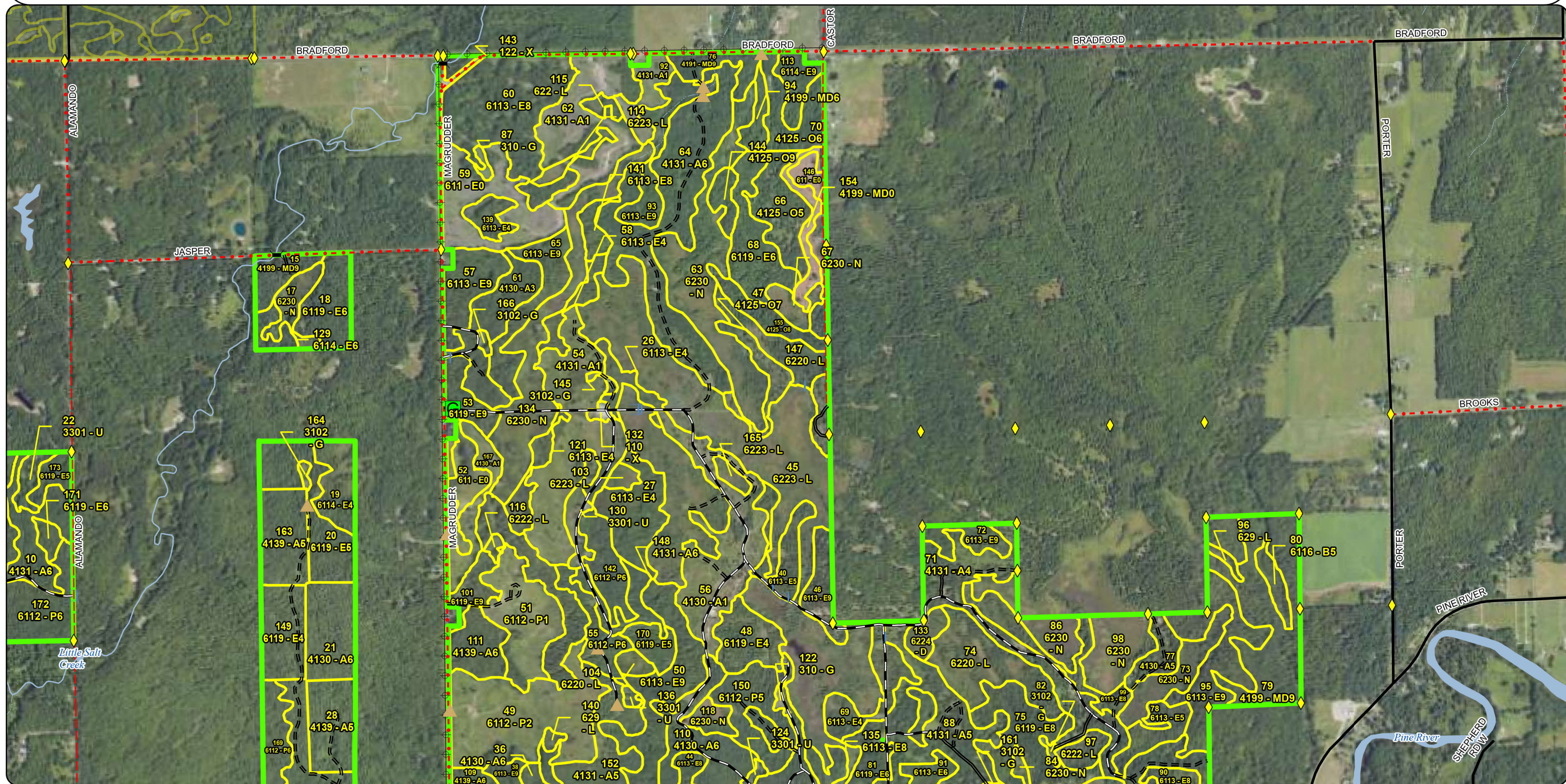
- 310 - Herbaceous Openland
330 - Low Density Trees
622 - Lowland Shrub
623 - Emergent Wetland
629 - Mixed non-forested Wetland





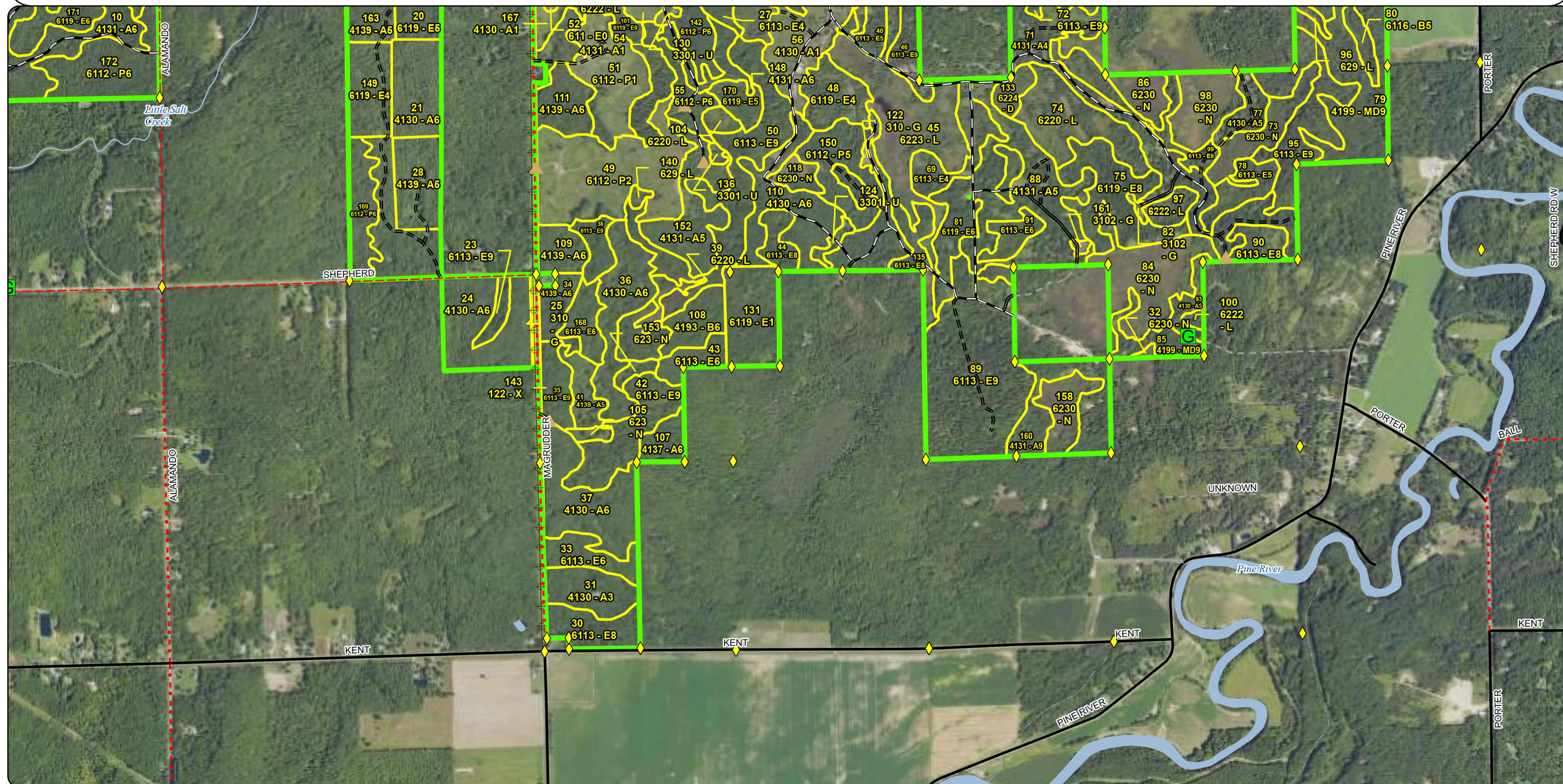
- == DNR - Forest Access Route
- Federal / State / County - Paved Road
- - - County - Gravel Road
- - - County - Dirt Road (Seasonal)
- Intermittent Stream
- Perennial River
- ⊕ — ⊕ Powerline
- Lakes and Rivers

- 310 - Herbaceous Openland
330 - Low Density Trees
622 - Lowland Shrub
623 - Emergent Wetland
629 - Mixed non-forested Wetland

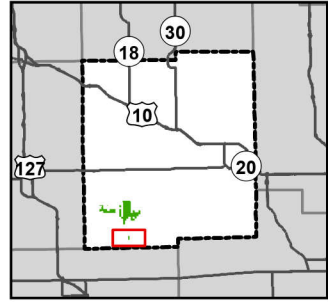


- === DNR - Forest Access Route
- Federal / State / County - Paved Road
- - - County - Gravel Road
- - - County - Dirt Road (Seasonal)
- Private - Paved Road
- - - Private - Dirt / Gravel Road
- Intermittent Stream

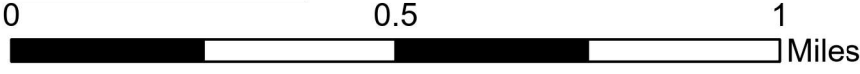
- 611 - Lowland Deciduous Forest
122 - Road/Parking Lot
310 - Herbaceous Openland
330 - Low Density Trees
622 - Lowland Shrub
623 - Emergent Wetland
629 - Mixed non-forested Wetland



Stand Boundary Map

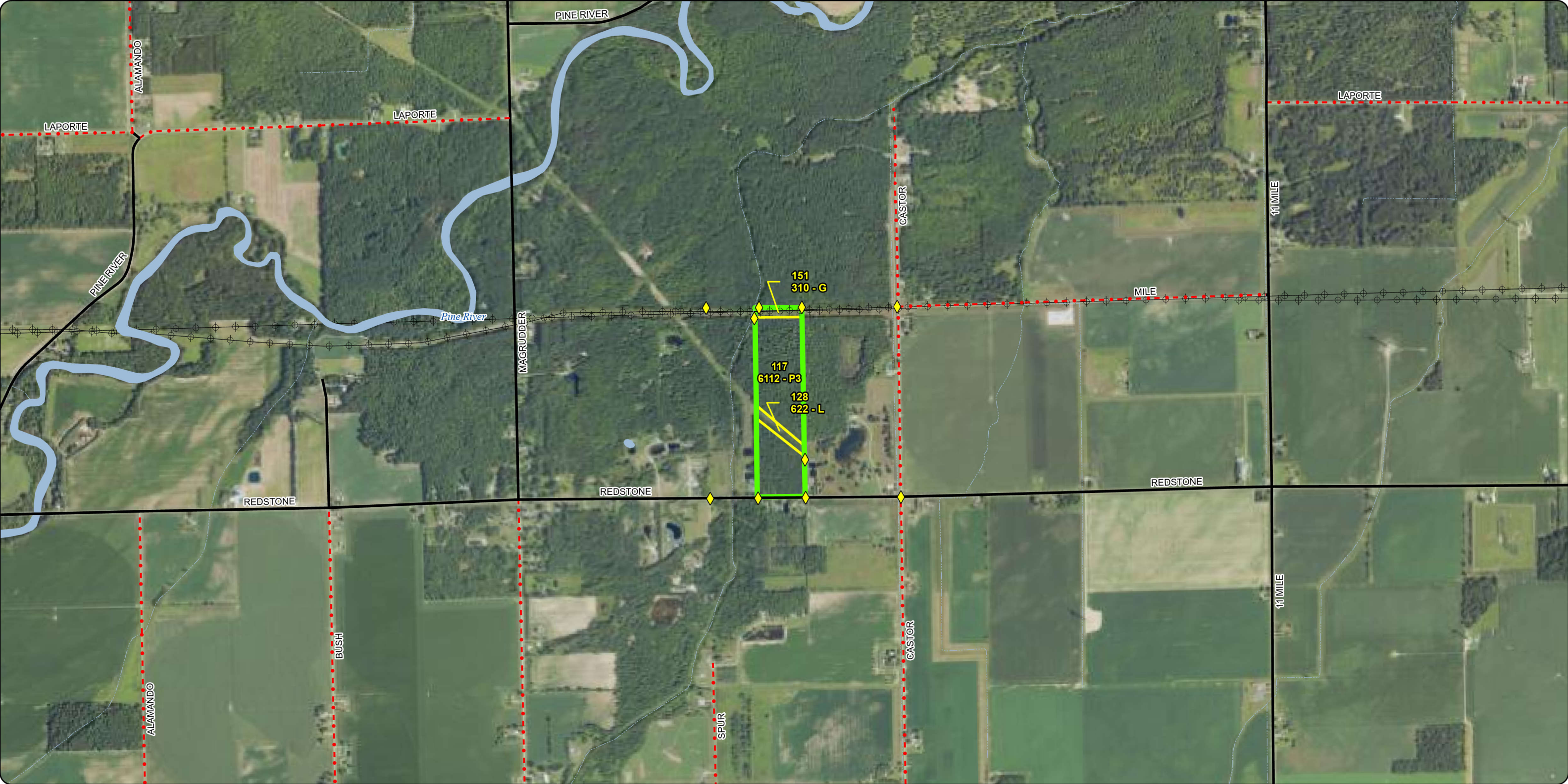


Compartment: 73116
T13N R02W 1-4, 9-14, 25
County: Midland
Unit: Gladwin
Mgmt. Area: Gladwin Lake Plain
YOE: 2027
Acres: 3,025 GIS Calculated
Examiner: Scott Shooltz
Date Exported: 9/24/2025
Map Phase: Post Review



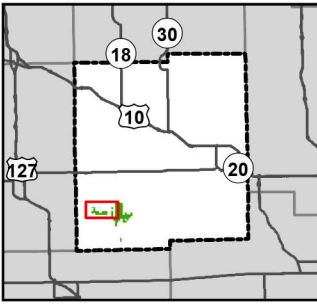
- Survey Grade Corners
- Federal / State / County - Paved Road
- County - Gravel Road
- Intermittent Stream
- Perennial River
- Powerline
- Lakes and Rivers
- Counties
- Compartment Boundary

- 611 - Lowland Deciduous Forest
- 310 - Herbaceous Openland
- 622 - Lowland Shrub



Special Conservation Areas & Site Conditions Map

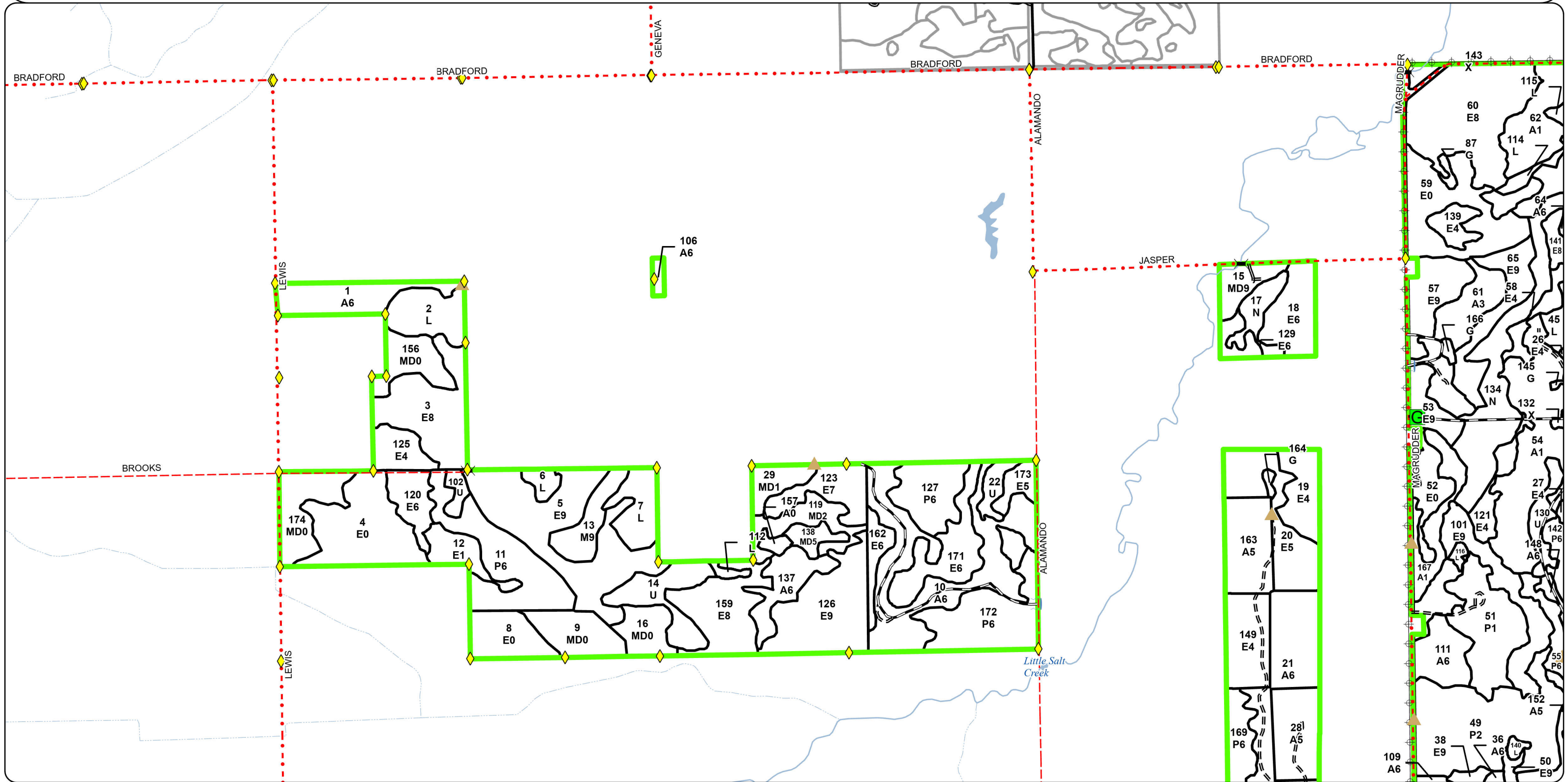
Compartment: 73116
T13N R02W 1-4, 9-14, 25
County: Midland
Unit: Gladwin
Mgmt. Area: Gladwin Lake Plain
YOE: 2027
Acres: 3,025 GIS Calculated
Examiner: Scott Shooltz
Date Exported: 9/24/2025
Map Phase: Post Review



0 0.5 1 Miles



















- Survey Grade Corners
- Berms
- Gate
- Bridges
- Culvert
- DNR - Primary Forest Road

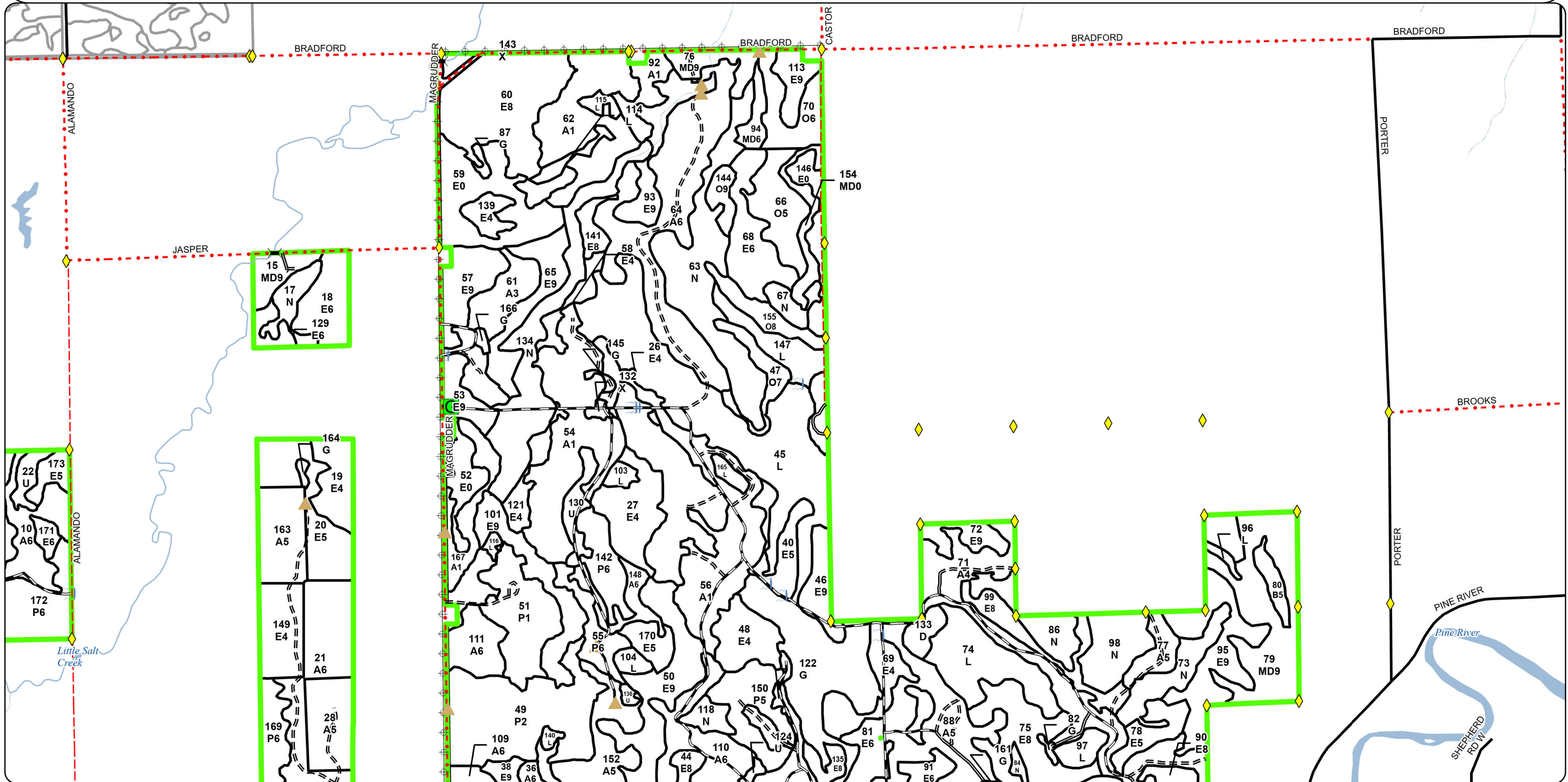
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Intermittent Stream
- Perennial River
- Powerline
- Lakes and Rivers
- Counties
- Compartment Boundary
- Stand Boundaries

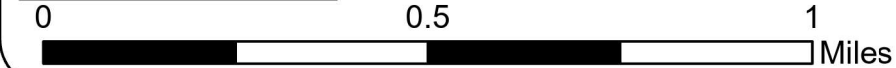























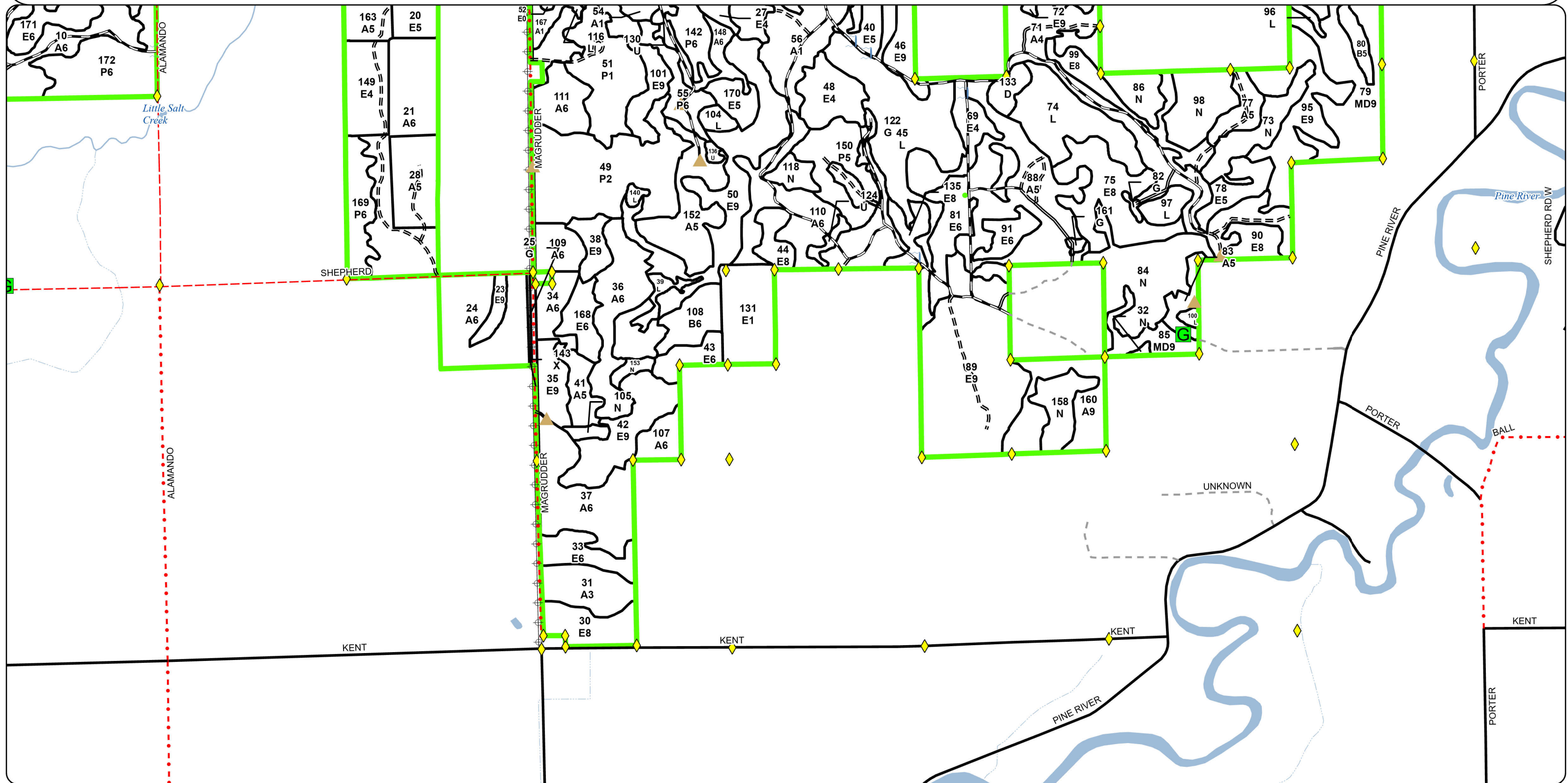
A horizontal scale bar with a black border. It is divided into four equal segments by three vertical lines. The first segment is solid black, the second is white, the third is solid black, and the fourth is white. Above the bar, the numbers 0, 0.5, and 1 are positioned at the first, second, and third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

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



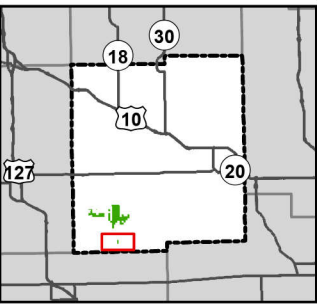


- | | | |
|---|---|--|
|  Survey Grade Corners |  DNR - Forest Access Route |  Perennial River |
|  Berms |  Federal / State / County - Paved Road |  Powerline |
|  Gate |  County - Gravel Road |  Lakes and Rivers |
|  Culvert |  County - Dirt Road (Seasonal) |  Counties |
|  DNR - Primary Forest Road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

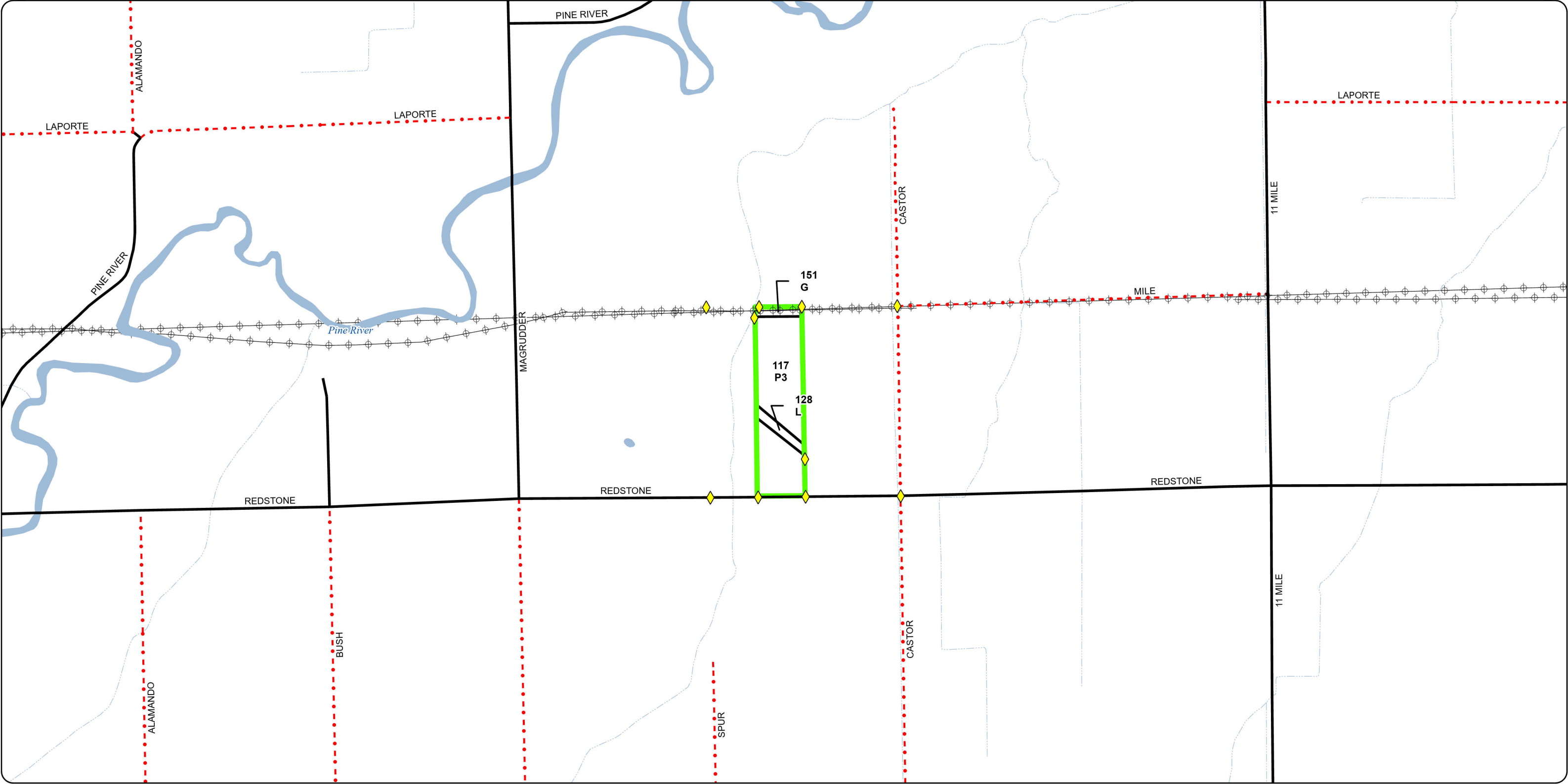


Special Conservation Areas
& Site Conditions Map

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: 9/24/2025
Map Phase: Post Review



- Survey Grade Corners
- Powerline
- Lakes and Rivers
- Counties
- Compartment Boundary
- Stand Boundaries
- Federal / State / County - Paved Road
- County - Gravel Road
- Intermittent Stream
- Perennial River



Report 1 – Total Acres by Cover Type and Age Class

Compartment 116 Year of Entry 2027

	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+	Unseen-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
Total	743	245	35	180	515	295	58	308	80	226	23	166	0	0	0	0	0	152	3022

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 - 232
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Oversory 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	71	67	0	138
Total	132	0	0	0	0	0	254	67	0	452

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
----------------	-------	-----------------	--------------	-----------	----------	----------------	------------------	----------------------	---------------	-------------

Approved Treatments:

4	73116004-Monitor	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											
8	73116008-Monitor	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											
9	73116009-Monitor	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											

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
16 73116016-Monitor	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 <u>Comment:</u> blackberry. <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2029										
21 73116021-Cut	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 <u>Specs:</u> stand geometry and deer browse concerns. <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory); Other, Regeneration Fencing <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 <u>Comment:</u> significantly from prescribed due to wet ground. <u>Site Condition:</u> Survey Needed <u>Proposed Start Date:</u> 10/01/2026										
24 73116024-Cut	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 <u>Specs:</u> specifications. <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory); Other, Regeneration Fencing <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 <u>Regen:</u> and houses. <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 <u>Comment:</u> stand is suitable for landing. Old skid road can be used to cross wet ground. Drain along Shepherd Rd is under DNR eas <u>Site Condition:</u> Survey Needed <u>Proposed Start Date:</u> 10/01/2026										
35 73116035-Cut	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										

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
52 73116052-Monitorx	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										
57 73116057-Cut	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										
59 73116059-Monitor	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										

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
62 73116062-Monitor	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										
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
<u>Prescription</u> Thin stand down to 100 BA to promote canopy development in oak and pine. Cut all aspen. <u>Specs:</u> <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> <u>Regen:</u> <u>Other</u> 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. <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2026										
83 73116083-Cut	4.3	4130 - Aspen	5	55	51-80	Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Planting Record	No
<u>Prescription</u> Clearcut all trees 2" and up. No retention due to narrow stand geometry and small acreage. Apply Gladwin grouse habitat specification. <u>Specs:</u> <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> <u>Acceptable</u> Any mix of aspen, oak or maple meeting minimum stocking levels. Regeneration will be heavily impacted by browse. <u>Regen:</u> <u>Other</u> 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 Manageme <u>Comment:</u> <u>Site Condition:</u> Unknown Access <u>Proposed Start Date:</u> 10/01/2026										
85 73116085-Cut	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 prescribed due to wet ground. Trucking will impact a bald eagle nest located to the west. Apply timing restrictions to ha <u>Comment:</u> <u>Site Condition:</u> Unknown Access <u>Proposed Start Date:</u> 10/01/2026										

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
146 73116146-Monitor	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										
154 73116154-Monitor	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										
156 73116156-Monitor	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										

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
160 73116160-Cut	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 <u>Specs:</u> the USFW National Bald Eagle Management Guidelines (2007). See Conservation Area Reviewer for nest location. <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 <u>Comment:</u> then skidding through stand 89 will be required. Harvest acres may vary significantly from prescribed due to w <u>Site Condition:</u> Unknown Access <u>Proposed Start Date:</u> 10/01/2026										
174 73116174-Monitor	18.4	4199 - Other Mixed Upland Deciduous	0	5	Immature	Monitoring	Monitoring - Regeneration	4199 - Other Mixed Upland Deciduous	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										

Total Treatment 314.1
Acreage Proposed:

Report 4 – Site Conditions

Gladwin Mgt. Unit
Scott Shooltz: Examiner

Compartment: 116
Year of Entry: 2027



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
Comments: North 2 acres of aspen is retention for stand to the west.								
2	Unavailable		5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:								

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

Gladwin Mgt. Unit
Scott Shooltz: Examiner

Compartment: 116
Year of Entry: 2027



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:							



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

Gladwin Mgt. Unit
Scott Shooltz: Examiner

Compartment: 116
Year of Entry: 2027



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

Gladwin Mgt. Unit
Scott Shooltz: Examiner

Compartment: 116
Year of Entry: 2027



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

Gladwin Mgt. Unit
Scott Shooltz: Examiner

Compartment: 116
Year of Entry: 2027



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

Gladwin Mgt. Unit
Scott Shooltz: Examiner

Compartment: 116
Year of Entry: 2027



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
----------	--------------	-------------	----------------	-------

Comments

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 YOE Inventory: SE block separated by a forested drain approximately 40 - 50 feet wide. Accessing from the south may be the better option.					
								Canopy Species	% Cover	Size Class	DBH	Age
								Bigtooth Aspen	60		9	40
								Northern Pin Oak	5		9	40
								Red Maple	15	Sapling	7	40
								Quaking Aspen	20		9	40
2	6220 - Alder/Willow	None	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.					
								Sub-Canopy Species	Density	Avg. Height	Size	
								Willow spp.	Medium	5 - 10 feet	5 - 10 feet	
								Buttonbush	Low	5 - 10 feet	5 - 10 feet	
								Tag Alder	Medium	5 - 10 feet	5 - 10 feet	
3	6113 - Lowland Maple	Sawtimber Medium	30.7	69	51-80	N/A	2027 YOE 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 YOE 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.					
								Canopy Species	% Cover	Size Class	DBH	Age
								Cottonwood	2		22	100
								Paper Birch	3	Seedling	8	69
								Swamp White Oak	25		15	100
								Red Maple	70		9	69
								Sub-Canopy Species	Density	Avg. Height	Size	
								Flowering Dogwood	Medium	5 - 10 feet	5 - 10 feet	
								Bigtooth Aspen	Low	< 5 feet	< 5 feet	
								Blackberry/Raspberry	Low	5 - 10 feet	5 - 10 feet	
Michigan Holly	Low	5 - 10 feet	5 - 10 feet									
Red Maple	Trace	5 - 10 feet	5 - 10 feet									
4	611 - Lowland Deciduous Forest	Unspecified	34.5	5			2027 YOE 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 borderline lowland. 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.					
								Sub-Canopy Species	Density	Avg. Height	Size	
								Quaking Aspen	Low	5 - 10 feet	5 - 10 feet	
								Black/Red (Hybrid) Oak	Low	5 - 10 feet	5 - 10 feet	
								Red Maple	Low	5 - 10 feet	5 - 10 feet	
								Red Maple	Low	< 5 feet	< 5 feet	
								Bigtooth Aspen	Low	5 - 10 feet	5 - 10 feet	
5	6113 - Lowland Maple	Sawtimber Well	54.5	100	111-140	N/A	2017 YOE 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.					
								Canopy Species	% Cover	Size Class	DBH	Age
								Quaking Aspen	10		14	
								Red Maple	80		12	100
								Swamp White Oak	10		13	
								Sub-Canopy Species	Density	Avg. Height	Size	
								Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	
Red Maple	Low	10 - 20 feet	10 - 20 feet									

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
6	6222 - Shrub-Carr	None	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	None	13.3			No	2017 YOE Inventory: Stand is an L-Type made up of shrubs over marsh grass.
8	611 - Lowland Deciduous Forest	Unspecified	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 coverytype 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	Unspecified	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 coverytype 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.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density		Avg. Height	Size
Paper Birch		5	Sapling	5	41	Red Maple		Low		10 - 20 feet	10 - 20 feet
Northern Pin Oak		10		8	41						
Bigtooth Aspen		55	Seedling	8	41						
Red Maple		10	Sapling	6	41						
Swamp White Oak		5	Sapling	5	41						
Red Oak		5		8	41						
Quaking Aspen		10	Seedling	8	41						
11	6112 - Lowland Aspen	Poletimber Well			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.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density		Avg. Height	Size
Red Maple		10	Sapling	6	36	Michigan Holly		High		5 - 10 feet	5 - 10 feet
Bigtooth Aspen		15	Seedling	8	36	Red Maple		Medium		Variable	Variable
Quaking Aspen		70	Sapling	7	36	Swamp White Oak		Low		5 - 10 feet	5 - 10 feet
Swamp White Oak		5	Sapling	6		Green Ash		Low	Variable	Variable	
12	6119 - Mixed Lowland Deciduous Forest	Sapling Poor			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.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density		Avg. Height	Size
Swamp White Oak		35	Log	3	20	Tag Alder		High		5 - 10 feet	5 - 10 feet
Green Ash		15	Log	3		Quaking Aspen		Low		>20 feet	>20 feet
Quaking Aspen		25	Seedling	8	36	Michigan Holly		Medium		5 - 10 feet	5 - 10 feet
Willow spp.		10	Log	2		Willow spp.		High		10 - 20 feet	10 - 20 feet
Red Maple		15	Seedling	5	36	Red Maple		Low		>20 feet	>20 feet
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.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density		Avg. Height	Size
Quaking Aspen		20		16	100	Red Maple		High		10 - 20 feet	10 - 20 feet
Red Maple		60		11	65	White Oak		Low		10 - 20 feet	10 - 20 feet
Bigtooth Aspen		20		16	100	Musclewood/Hornbeam		Medium		10 - 20 feet	10 - 20 feet
						Serviceberry (Juneberry)		Medium	10 - 20 feet	10 - 20 feet	
14	3301 - Low Density Deciduous Trees	None			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.		
						Sub-Canopy Species		Density		Avg. Height	Size
						Blackberry/Raspberry		Medium		< 5 feet	< 5 feet
						Northern Pin Oak		Low		10 - 20 feet	10 - 20 feet
						Swamp White Oak		Low		10 - 20 feet	10 - 20 feet
						White Oak		Medium		10 - 20 feet	10 - 20 feet
						Paper Birch		Medium		10 - 20 feet	10 - 20 feet
						Northern Pin Oak		Medium		5 - 10 feet	5 - 10 feet
						White Oak		Low		5 - 10 feet	5 - 10 feet
						White Pine		Trace		>20 feet	>20 feet

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments	
15	4199 - Other Mixed Upland Deciduous	Sawtimber Well	9.3	45	81-110	N/A	2027 YOE Inventory: Older aspen stems in northern portions of the stand have declined. Manage stand for maple and oak due to its small size and close position to private and Salt Creek.2017 YOE Inventory: Stand includes a small inclusion of floodplain forest in the NW corner which contains the Little Salt Creek. Upland stand with a lowland edge along stand 17.	
		Canopy Species	% Cover	Size Class	DBH	Age		
		Red Oak	30		10			
		Swamp White Oak	5		16			
		Black Cherry	10	Seedling	7	45		
		Quaking Aspen	35		10	45		
		Red Maple	20		9	45		
		Sub-Canopy Species	Density	Avg. Height	Size			
		Alternate-leaved Dogwood	Medium	5 - 10 feet	5 - 10 feet			
		Red Maple	Medium	5 - 10 feet	5 - 10 feet			
16	4199 - Other Mixed Upland Deciduous	Unspecified	11.0	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.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: Upland stand with low depressions which hold water in the spring. The main soil types under the stand are Pipestone and Covert.	
		Sub-Canopy Species	Density	Avg. Height	Size			
		Blackberry/Raspberry	High	5 - 10 feet	5 - 10 feet			
		Mixed Sedges/Grasses	High	Not Applicable	Not Applicable			
17	6230 - Cattail	None	8.9			No	2027 YOE Inventory: Small phragmites patch at edge of reclaimed well pad. Gravel road removed and restored.2017 YOE Inventory: Cattail marsh with no phragmites. Gravel oil and gas road runs through this stand.	
		Sub-Canopy Species	Density	Avg. Height	Size			
		Cattail spp.	Full	Not Applicable	Not Applicable			
		Willow spp.	Low	5 - 10 feet	5 - 10 feet			
18	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	17.3	52	81-110	N/A	2027 YOE Inventory: Older aspen stems falling out of the stand. Not ready to thin yet.2017 YOE Inventory: Appears to have been harvested in the early 70's although no records available. Residual large diameter stems and inconsistency in ages indicates a minimum piece utilization cut was performed. Hummocky terrain with pools of standing water in the spring.	
		Canopy Species	% Cover	Size Class	DBH	Age		
		Red Maple	55		9	52		
		Red Oak	5		10			
		Paper Birch	10	Seedling	7	52		
		Quaking Aspen	10		10	52		
		Swamp White Oak	10		9			
		Blackgum	10	Seedling	8	52		
		Sub-Canopy Species	Density	Avg. Height	Size			
		Red Maple	Medium	10 - 20 feet	10 - 20 feet			
19	6114 - Lowland Oak	Poletimber Poor	14.0	38	51-80	N/A	2027 YOE Inventory: Stand is now forested. Two-aged stand. Swamp white oak is the most prevalent. Most of it is pole size and 40 to 50 years old. Scattered older individuals throughout the stand. Maple and aspen are also two-aged.2017 YOE Inventory: This stand is low and wet and is mainly made up of narrow leaf cattails. Within the stand there is scatted swamp white oak that are now becoming pole size, however, the trees make up < 10 BA. The stand had very little stand water in it when inventoried in early July, which was surprising.	
		Canopy Species	% Cover	Size Class	DBH	Age		
		Northern Pin Oak	5		9	38		
		Red Maple	25		7	38		
		Swamp White Oak	65		9	38		
		Quaking Aspen	5		9	102		
		Sub-Canopy Species	Density	Avg. Height	Size			
		Michigan Holly	Medium	5 - 10 feet	5 - 10 feet			
		Swamp White Oak	Medium	>20 feet	>20 feet			
		Red Osier Dogwood	Medium	5 - 10 feet	5 - 10 feet			
		Tag Alder	Medium	5 - 10 feet	5 - 10 feet			
		Cattail spp.	Medium	Not Applicable	Not Applicable			
		Swamp White Oak	Medium	10 - 20 feet	10 - 20 feet			

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
20	6119 - Mixed Lowland Deciduous Forest	Poletimber Medium	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.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Paper Birch		25	Sapling	5	34	Red Maple		Low	5 - 10 feet	5 - 10 feet	
Red Maple		30	Sapling	5	34	Paper Birch		Low	5 - 10 feet	5 - 10 feet	
Northern Pin Oak		15	Seedling	6	34	Tag Alder		High	10 - 20 feet	10 - 20 feet	
Bigtooth Aspen		10	Sapling	6	34	Michigan Holly		Medium	5 - 10 feet	5 - 10 feet	
Quaking Aspen		20	Sapling	6	34						
21	4130 - Aspen	Poletimber Well	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.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Maple		25		6	41	Nannyberry		Low	5 - 10 feet	5 - 10 feet	
Paper Birch		5	Seedling	6	41	Tag Alder		Low	5 - 10 feet	5 - 10 feet	
Bigtooth Aspen		35	Seedling	9	41	Michigan Holly		Low	5 - 10 feet	5 - 10 feet	
Red Oak		5		8	41	Red Maple		High	>20 feet	>20 feet	
Quaking Aspen		30	Seedling	8	41						
22	3301 - Low Density Deciduous Trees	None	5.1			No	Possible old landing site from surrounding sale. Did not regenerate to full stocking.				
Sub-Canopy Species		Density	Avg. Height	Size							
Northern Pin Oak		Medium	>20 feet	>20 feet							
Bigtooth Aspen		High	>20 feet	>20 feet							
Black/Red (Hybrid) Oak		Medium	>20 feet	>20 feet							
Paper Birch		Low	>20 feet	>20 feet							
23	6113 - Lowland Maple	Sawtimber Well	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.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Maple		85		16	99	Buttonbush		Low	5 - 10 feet	5 - 10 feet	
Quaking Aspen		10	Seedling	8	40	Red Maple		Low	>20 feet	>20 feet	
Swamp White Oak		5		14		Tag Alder		Medium	5 - 10 feet	5 - 10 feet	
						Michigan Holly		Medium	5 - 10 feet	5 - 10 feet	

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
24	4130 - Aspen	Poletimber Well	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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Northern Pin Oak	5		9	40	Red Maple	High		10 - 20 feet	10 - 20 feet
Bigtooth Aspen	30	Seedling	8	40	Michigan Holly	Low		5 - 10 feet	5 - 10 feet
Red Maple	30	Sapling	6	40					
Paper Birch	3	Sapling	5	40					
Red Oak	2	Seedling	8	40					
Quaking Aspen	30	Seedling	8	40					
25	310 - Herbaceous Openland	None	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	Poletimber Poor	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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Northern Pin Oak	15		8		Michigan Holly	Medium		5 - 10 feet	5 - 10 feet
Red Maple	75		8	62	Phragmites (spp.)	Medium		Not Applicable	Not Applicable
Swamp White Oak	10		8		Cattail spp.	High		Not Applicable	Not Applicable
					Tag Alder	Medium	5 - 10 feet	5 - 10 feet	
27	6113 - Lowland Maple	Poletimber Poor	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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
American Elm	5	Sapling	7		Phragmites (spp.)	Medium		Not Applicable	Not Applicable
Paper Birch	10	Sapling	6		Tag Alder	Medium		5 - 10 feet	5 - 10 feet
Swamp White Oak	15		8		Michigan Holly	Medium		5 - 10 feet	5 - 10 feet
Red Maple	60		8	84	Cattail spp.	Low		Not Applicable	Not Applicable
Northern Pin Oak	10		8						
28	4139 - Aspen, Mixed Deciduous	Poletimber Medium	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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	30	Pole	4	34	Paper Birch	Low		5 - 10 feet	5 - 10 feet
Bigtooth Aspen	20	Sapling	6	34	Swamp White Oak	Low		5 - 10 feet	5 - 10 feet
Quaking Aspen	35	Sapling	5	34	Michigan Holly	Low		5 - 10 feet	5 - 10 feet
Northern Pin Oak	5	Pole	4	34					
Paper Birch	10	Pole	4	34					

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.																																																						
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>White Oak</td><td>10</td><td>Pole</td><td>4</td><td>37</td></tr><tr><td>Swamp White Oak</td><td>30</td><td>Pole</td><td>4</td><td>37</td></tr><tr><td>Paper Birch</td><td>50</td><td>Log</td><td>3</td><td>37</td></tr><tr><td>Northern Pin Oak</td><td>10</td><td>Sapling</td><td>5</td><td>37</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		White Oak	10	Pole	4	37	Swamp White Oak	30	Pole	4	37	Paper Birch	50	Log	3	37	Northern Pin Oak	10	Sapling	5	37	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Swamp White Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>White Oak</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Oak</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Paper Birch</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Paper Birch</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Swamp White Oak	Low	5 - 10 feet	5 - 10 feet	White Oak	Medium	10 - 20 feet	10 - 20 feet	Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet	Red Oak	Medium	10 - 20 feet	10 - 20 feet	Paper Birch	Low	5 - 10 feet	5 - 10 feet	Paper Birch	Medium	5 - 10 feet	5 - 10 feet		
Canopy Species	% Cover	Size Class	DBH	Age																																																									
White Oak	10	Pole	4	37																																																									
Swamp White Oak	30	Pole	4	37																																																									
Paper Birch	50	Log	3	37																																																									
Northern Pin Oak	10	Sapling	5	37																																																									
Sub-Canopy Species	Density	Avg. Height	Size																																																										
Swamp White Oak	Low	5 - 10 feet	5 - 10 feet																																																										
White Oak	Medium	10 - 20 feet	10 - 20 feet																																																										
Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet																																																										
Red Oak	Medium	10 - 20 feet	10 - 20 feet																																																										
Paper Birch	Low	5 - 10 feet	5 - 10 feet																																																										
Paper Birch	Medium	5 - 10 feet	5 - 10 feet																																																										
30	6113 - Lowland Maple	Sawtimber Medium	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.																																																						
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>73</td><td></td><td>12</td><td>105</td></tr><tr><td>Quaking Aspen</td><td>5</td><td></td><td>14</td><td></td></tr><tr><td>Cottonwood</td><td>2</td><td></td><td>18</td><td>105</td></tr><tr><td>Swamp White Oak</td><td>20</td><td></td><td>17</td><td>105</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	73		12	105	Quaking Aspen	5		14		Cottonwood	2		18	105	Swamp White Oak	20		17	105	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Flowering Dogwood</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Green Ash</td><td>Low</td><td>Variable</td><td>Variable</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Flowering Dogwood	Low	5 - 10 feet	5 - 10 feet	Red Maple	Medium	>20 feet	>20 feet	Green Ash	Low	Variable	Variable	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet										
Canopy Species	% Cover	Size Class	DBH	Age																																																									
Red Maple	73		12	105																																																									
Quaking Aspen	5		14																																																										
Cottonwood	2		18	105																																																									
Swamp White Oak	20		17	105																																																									
Sub-Canopy Species	Density	Avg. Height	Size																																																										
Flowering Dogwood	Low	5 - 10 feet	5 - 10 feet																																																										
Red Maple	Medium	>20 feet	>20 feet																																																										
Green Ash	Low	Variable	Variable																																																										
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																										
31	4130 - Aspen	Sapling Well	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.																																																						
<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>Pole</td><td>4</td><td>26</td></tr><tr><td>Bigtooth Aspen</td><td>45</td><td>Pole</td><td>4</td><td>26</td></tr><tr><td>Swamp White Oak</td><td>3</td><td></td><td>3</td><td>26</td></tr><tr><td>Green Ash</td><td>2</td><td>Log</td><td>2</td><td>26</td></tr><tr><td>Red Maple</td><td>20</td><td>Log</td><td>3</td><td>26</td></tr><tr><td>Northern Pin Oak</td><td>10</td><td>Pole</td><td>4</td><td>26</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Quaking Aspen	20	Pole	4	26	Bigtooth Aspen	45	Pole	4	26	Swamp White Oak	3		3	26	Green Ash	2	Log	2	26	Red Maple	20	Log	3	26	Northern Pin Oak	10	Pole	4	26	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Swamp White Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Maple</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Swamp White Oak	Low	5 - 10 feet	5 - 10 feet	Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet	Michigan Holly	Low	5 - 10 feet	5 - 10 feet	Red Maple	Low	5 - 10 feet	5 - 10 feet
Canopy Species	% Cover	Size Class	DBH	Age																																																									
Quaking Aspen	20	Pole	4	26																																																									
Bigtooth Aspen	45	Pole	4	26																																																									
Swamp White Oak	3		3	26																																																									
Green Ash	2	Log	2	26																																																									
Red Maple	20	Log	3	26																																																									
Northern Pin Oak	10	Pole	4	26																																																									
Sub-Canopy Species	Density	Avg. Height	Size																																																										
Swamp White Oak	Low	5 - 10 feet	5 - 10 feet																																																										
Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet																																																										
Michigan Holly	Low	5 - 10 feet	5 - 10 feet																																																										
Red Maple	Low	5 - 10 feet	5 - 10 feet																																																										
32	6230 - Cattail	None	0.9			No	No phragmites at this time.																																																						
		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Cattail spp.</td><td>Full</td><td>Not Applicable</td><td>Not Applicable</td></tr></table>				Sub-Canopy Species		Density	Avg. Height	Size	Cattail spp.	Full	Not Applicable	Not Applicable																																															
Sub-Canopy Species	Density	Avg. Height	Size																																																										
Cattail spp.	Full	Not Applicable	Not Applicable																																																										
33	6113 - Lowland Maple	Poletimber Well	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.																																																						
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>70</td><td></td><td>9</td><td>70</td></tr><tr><td>Blackgum</td><td>5</td><td>Seedling</td><td>8</td><td></td></tr><tr><td>Quaking Aspen</td><td>15</td><td></td><td>10</td><td>70</td></tr><tr><td>Paper Birch</td><td>10</td><td>Seedling</td><td>8</td><td>70</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	70		9	70	Blackgum	5	Seedling	8		Quaking Aspen	15		10	70	Paper Birch	10	Seedling	8	70	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Medium	10 - 20 feet	10 - 20 feet	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																		
Canopy Species	% Cover	Size Class	DBH	Age																																																									
Red Maple	70		9	70																																																									
Blackgum	5	Seedling	8																																																										
Quaking Aspen	15		10	70																																																									
Paper Birch	10	Seedling	8	70																																																									
Sub-Canopy Species	Density	Avg. Height	Size																																																										
Red Maple	Medium	10 - 20 feet	10 - 20 feet																																																										
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																										

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																				
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.																																																				
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Northern Pin Oak</td><td>10</td><td></td><td>8</td><td></td></tr><tr><td>Quaking Aspen</td><td>25</td><td>Sapling</td><td>6</td><td>26</td></tr><tr><td>Red Maple</td><td>40</td><td>Sapling</td><td>5</td><td>26</td></tr><tr><td>Paper Birch</td><td>5</td><td>Log</td><td>3</td><td>26</td></tr><tr><td>Bigtooth Aspen</td><td>20</td><td>Sapling</td><td>5</td><td>26</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Northern Pin Oak	10		8		Quaking Aspen	25	Sapling	6	26	Red Maple	40	Sapling	5	26	Paper Birch	5	Log	3	26	Bigtooth Aspen	20	Sapling	5	26	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Michigan Holly</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>< 5 feet</td><td>< 5 feet</td></tr><tr><td>Red Maple</td><td>Low</td><td>< 5 feet</td><td>< 5 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Michigan Holly	Low	5 - 10 feet	5 - 10 feet	Northern Pin Oak	Low	< 5 feet	< 5 feet	Red Maple	Low	< 5 feet	< 5 feet									
Canopy Species	% Cover	Size Class	DBH	Age																																																							
Northern Pin Oak	10		8																																																								
Quaking Aspen	25	Sapling	6	26																																																							
Red Maple	40	Sapling	5	26																																																							
Paper Birch	5	Log	3	26																																																							
Bigtooth Aspen	20	Sapling	5	26																																																							
Sub-Canopy Species	Density	Avg. Height	Size																																																								
Michigan Holly	Low	5 - 10 feet	5 - 10 feet																																																								
Northern Pin Oak	Low	< 5 feet	< 5 feet																																																								
Red Maple	Low	< 5 feet	< 5 feet																																																								
35	6113 - Lowland Maple	Sawtimber Well	10.4	95	111-140	N/A	2027 YOE Inventory: Split out area closest to Magrudder. 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 Magrudder Rd. but only marginal overall.																																																				
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Northern Pin Oak</td><td>7</td><td></td><td>12</td><td></td></tr><tr><td>Red Maple</td><td>72</td><td></td><td>11</td><td>95</td></tr><tr><td>Quaking Aspen</td><td>10</td><td></td><td>14</td><td>95</td></tr><tr><td>Paper Birch</td><td>2</td><td></td><td>10</td><td></td></tr><tr><td>Swamp White Oak</td><td>4</td><td></td><td>14</td><td></td></tr><tr><td>Red Oak</td><td>5</td><td></td><td>16</td><td></td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Northern Pin Oak	7		12		Red Maple	72		11	95	Quaking Aspen	10		14	95	Paper Birch	2		10		Swamp White Oak	4		14		Red Oak	5		16		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Paper Birch</td><td>Low</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>Variable</td><td>Variable</td></tr><tr><td>Black Cherry</td><td>Low</td><td>Variable</td><td>Variable</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Paper Birch	Low	>20 feet	>20 feet	Red Maple	Medium	>20 feet	>20 feet	Northern Pin Oak	Low	Variable	Variable	Black Cherry	Low	Variable	Variable
Canopy Species	% Cover	Size Class	DBH	Age																																																							
Northern Pin Oak	7		12																																																								
Red Maple	72		11	95																																																							
Quaking Aspen	10		14	95																																																							
Paper Birch	2		10																																																								
Swamp White Oak	4		14																																																								
Red Oak	5		16																																																								
Sub-Canopy Species	Density	Avg. Height	Size																																																								
Paper Birch	Low	>20 feet	>20 feet																																																								
Red Maple	Medium	>20 feet	>20 feet																																																								
Northern Pin Oak	Low	Variable	Variable																																																								
Black Cherry	Low	Variable	Variable																																																								
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.																																																				
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Northern Pin Oak</td><td>10</td><td></td><td>7</td><td>35</td></tr><tr><td>Quaking Aspen</td><td>20</td><td>Sapling</td><td>6</td><td>35</td></tr><tr><td>Paper Birch</td><td>15</td><td>Log</td><td>4</td><td>35</td></tr><tr><td>Bigtooth Aspen</td><td>40</td><td>Sapling</td><td>6</td><td>35</td></tr><tr><td>Red Maple</td><td>15</td><td></td><td>6</td><td>35</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Northern Pin Oak	10		7	35	Quaking Aspen	20	Sapling	6	35	Paper Birch	15	Log	4	35	Bigtooth Aspen	40	Sapling	6	35	Red Maple	15		6	35	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Black Cherry</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Serviceberry (Juneberry)</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Low	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	Serviceberry (Juneberry)	Medium	5 - 10 feet	5 - 10 feet					
Canopy Species	% Cover	Size Class	DBH	Age																																																							
Northern Pin Oak	10		7	35																																																							
Quaking Aspen	20	Sapling	6	35																																																							
Paper Birch	15	Log	4	35																																																							
Bigtooth Aspen	40	Sapling	6	35																																																							
Red Maple	15		6	35																																																							
Sub-Canopy Species	Density	Avg. Height	Size																																																								
Red Maple	Low	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																																																								
Serviceberry (Juneberry)	Medium	5 - 10 feet	5 - 10 feet																																																								
37	4130 - Aspen	Poletimber Well	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 Magrudder Rd. The main soil type is Pipestone.																																																				
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Bigtooth Aspen</td><td>35</td><td>Sapling</td><td>6</td><td>35</td></tr><tr><td>Northern Pin Oak</td><td>5</td><td>Sapling</td><td>6</td><td>35</td></tr><tr><td>Quaking Aspen</td><td>30</td><td>Sapling</td><td>6</td><td>35</td></tr><tr><td>Red Maple</td><td>20</td><td>Sapling</td><td>5</td><td>35</td></tr><tr><td>Paper Birch</td><td>10</td><td>Pole</td><td>4</td><td>35</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Bigtooth Aspen	35	Sapling	6	35	Northern Pin Oak	5	Sapling	6	35	Quaking Aspen	30	Sapling	6	35	Red Maple	20	Sapling	5	35	Paper Birch	10	Pole	4	35	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Serviceberry (Juneberry)</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Serviceberry (Juneberry)	Low	5 - 10 feet	5 - 10 feet	Michigan Holly	Low	5 - 10 feet	5 - 10 feet													
Canopy Species	% Cover	Size Class	DBH	Age																																																							
Bigtooth Aspen	35	Sapling	6	35																																																							
Northern Pin Oak	5	Sapling	6	35																																																							
Quaking Aspen	30	Sapling	6	35																																																							
Red Maple	20	Sapling	5	35																																																							
Paper Birch	10	Pole	4	35																																																							
Sub-Canopy Species	Density	Avg. Height	Size																																																								
Serviceberry (Juneberry)	Low	5 - 10 feet	5 - 10 feet																																																								
Michigan Holly	Low	5 - 10 feet	5 - 10 feet																																																								
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.																																																				
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>78</td><td></td><td>11</td><td>82</td></tr><tr><td>Quaking Aspen</td><td>10</td><td></td><td>14</td><td>82</td></tr><tr><td>Northern Pin Oak</td><td>4</td><td></td><td>11</td><td></td></tr><tr><td>Swamp White Oak</td><td>8</td><td></td><td>12</td><td>82</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	78		11	82	Quaking Aspen	10		14	82	Northern Pin Oak	4		11		Swamp White Oak	8		12	82	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Michigan Holly</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Green Ash</td><td>Low</td><td>>20 feet</td><td>>20 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Medium	>20 feet	>20 feet	Michigan Holly	Low	5 - 10 feet	5 - 10 feet	Green Ash	Low	>20 feet	>20 feet														
Canopy Species	% Cover	Size Class	DBH	Age																																																							
Red Maple	78		11	82																																																							
Quaking Aspen	10		14	82																																																							
Northern Pin Oak	4		11																																																								
Swamp White Oak	8		12	82																																																							
Sub-Canopy Species	Density	Avg. Height	Size																																																								
Red Maple	Medium	>20 feet	>20 feet																																																								
Michigan Holly	Low	5 - 10 feet	5 - 10 feet																																																								
Green Ash	Low	>20 feet	>20 feet																																																								

Stand	Level 4 Cover Type	Size	Density	Acres	Stand Age	BA Range	Managed Site	General Comments					
39	6220 - Alder/Willow	None	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.					
									Sub-Canopy Species	Density	Avg. Height	Size	
									Willow spp.	High	10 - 20 feet	10 - 20 feet	
									Tag Alder	Medium	5 - 10 feet	5 - 10 feet	
									Green Ash	Low	>20 feet	>20 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.					
									Canopy Species	% Cover	Size Class	DBH	Age
									Red Maple	75		8	92
									Quaking Aspen	5	Seedling	8	
									Northern Pin Oak	15		10	92
Bigtooth Aspen	2		12	92									
Swamp White Oak	3		9										
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.					
									Canopy Species	% Cover	Size Class	DBH	Age
									Bigtooth Aspen	25	Sapling	6	35
									Red Maple	15	Sapling	5	35
									Northern Pin Oak	10		7	35
Quaking Aspen	30	Sapling	5	35									
Paper Birch	15	Log	4	35									
Swamp White Oak	5	Sapling	5										
42	6113 - Lowland Maple	Sawtimber	Well	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					
									Canopy Species	% Cover	Size Class	DBH	Age
									Red Maple	75		10	80
									Quaking Aspen	5		13	80
									Swamp White Oak	20		15	105
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					
									Canopy Species	% Cover	Size Class	DBH	Age
									Northern Pin Oak	5	Seedling	7	
									American Elm	5	Sapling	6	
									Red Maple	65	Sapling	7	44
Paper Birch	5	Sapling	5										
Quaking Aspen	10	Sapling	6										
Swamp White Oak	10	Sapling	6										

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.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Maple		60		10	87	Alternate-leaved Dogwood		Medium	5 - 10 feet	5 - 10 feet
Swamp White Oak		30		12		Red Maple		Medium	>20 feet	>20 feet
Quaking Aspen		10		12	87	Green Ash		Medium	>20 feet	>20 feet
						Michigan Holly		Medium	5 - 10 feet	5 - 10 feet
						Tag Alder		Low	5 - 10 feet	5 - 10 feet
45	6223 - Inundated Shrub Swamp	None	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.			
						Sub-Canopy Species		Density	Avg. Height	Size
						Tag Alder		Medium	5 - 10 feet	5 - 10 feet
						Cattail spp.		High	Not Applicable	Not Applicable
						Michigan Holly		Medium	5 - 10 feet	5 - 10 feet
						Phragmites (spp.)	Medium	Not Applicable	Not Applicable	
46	6113 - Lowland Maple	Sawtimber Well	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.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Northern Pin Oak		25		12		Red Maple		Medium	>20 feet	>20 feet
Red Maple		70		11	65					
Swamp White Oak		5		14	92					
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.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Maple		5		10		Red Maple		Low	5 - 10 feet	5 - 10 feet
Northern Pin Oak		95		11	74	Black Cherry		Low	5 - 10 feet	5 - 10 feet
						Northern Pin Oak		Medium	5 - 10 feet	5 - 10 feet
						Serviceberry (Juneberry)	Low	10 - 20 feet	10 - 20 feet	
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.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Northern Pin Oak		7		8	62	Swamp White Oak		Medium	10 - 20 feet	10 - 20 feet
Red Maple		35		8	62	Michigan Holly		High	5 - 10 feet	5 - 10 feet
Swamp White Oak		48		9	62	Tag Alder		High	5 - 10 feet	5 - 10 feet
Quaking Aspen		10		9						

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.																														
<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>57</td><td>Log</td><td>1</td><td>4</td></tr><tr><td>Red Maple</td><td>5</td><td>Log</td><td>1</td><td>4</td></tr><tr><td>Northern Pin Oak</td><td>3</td><td>Log</td><td>1</td><td>4</td></tr><tr><td>Bigtooth Aspen</td><td>35</td><td>Log</td><td>1</td><td>4</td></tr></table>								Canopy Species	% Cover	Size Class	DBH	Age	Quaking Aspen	57	Log	1	4	Red Maple	5	Log	1	4	Northern Pin Oak	3	Log	1	4	Bigtooth Aspen	35	Log	1	4					
Canopy Species	% Cover	Size Class	DBH	Age																																	
Quaking Aspen	57	Log	1	4																																	
Red Maple	5	Log	1	4																																	
Northern Pin Oak	3	Log	1	4																																	
Bigtooth Aspen	35	Log	1	4																																	
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.																														
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>75</td><td></td><td>12</td><td>83</td></tr><tr><td>Quaking Aspen</td><td>5</td><td></td><td>14</td><td></td></tr><tr><td>Swamp White Oak</td><td>10</td><td></td><td>10</td><td>83</td></tr><tr><td>Northern Pin Oak</td><td>5</td><td></td><td>12</td><td></td></tr><tr><td>Paper Birch</td><td>5</td><td></td><td>9</td><td></td></tr></table>								Canopy Species	% Cover	Size Class	DBH	Age	Red Maple	75		12	83	Quaking Aspen	5		14		Swamp White Oak	10		10	83	Northern Pin Oak	5		12		Paper Birch	5		9	
Canopy Species	% Cover	Size Class	DBH	Age																																	
Red Maple	75		12	83																																	
Quaking Aspen	5		14																																		
Swamp White Oak	10		10	83																																	
Northern Pin Oak	5		12																																		
Paper Birch	5		9																																		
<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Tag Alder</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>High</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Green Ash</td><td>Low</td><td>>20 feet</td><td>>20 feet</td></tr></table>								Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Medium	>20 feet	>20 feet	Tag Alder	Medium	5 - 10 feet	5 - 10 feet	Michigan Holly	High	5 - 10 feet	5 - 10 feet	Green Ash	Low	>20 feet	>20 feet										
Sub-Canopy Species	Density	Avg. Height	Size																																		
Red Maple	Medium	>20 feet	>20 feet																																		
Tag Alder	Medium	5 - 10 feet	5 - 10 feet																																		
Michigan Holly	High	5 - 10 feet	5 - 10 feet																																		
Green Ash	Low	>20 feet	>20 feet																																		
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.																														
<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>40</td><td>Log</td><td>1</td><td>5</td></tr><tr><td>Northern Pin Oak</td><td>7</td><td>Log</td><td>1</td><td>5</td></tr><tr><td>Bigtooth Aspen</td><td>40</td><td>Log</td><td>1</td><td>5</td></tr><tr><td>Red Maple</td><td>13</td><td>Log</td><td>1</td><td>5</td></tr></table>								Canopy Species	% Cover	Size Class	DBH	Age	Quaking Aspen	40	Log	1	5	Northern Pin Oak	7	Log	1	5	Bigtooth Aspen	40	Log	1	5	Red Maple	13	Log	1	5					
Canopy Species	% Cover	Size Class	DBH	Age																																	
Quaking Aspen	40	Log	1	5																																	
Northern Pin Oak	7	Log	1	5																																	
Bigtooth Aspen	40	Log	1	5																																	
Red Maple	13	Log	1	5																																	

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																				
52	611 - Lowland Deciduous Forest	Unspecified	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	Sawtimber Well	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.																																																				
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Swamp White Oak</td><td>25</td><td></td><td>18</td><td>105</td></tr><tr><td>Red Maple</td><td>55</td><td></td><td>12</td><td>105</td></tr><tr><td>Northern Pin Oak</td><td>10</td><td></td><td>12</td><td>105</td></tr><tr><td>Quaking Aspen</td><td>10</td><td></td><td>12</td><td></td></tr></table>			Canopy Species	% Cover	Size Class	DBH	Age	Swamp White Oak	25		18	105	Red Maple	55		12	105	Northern Pin Oak	10		12	105	Quaking Aspen	10		12		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Nannyberry</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Green Ash</td><td>Low</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Swamp White Oak</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr></table>			Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Medium	>20 feet	>20 feet	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Nannyberry	Low	5 - 10 feet	5 - 10 feet	Green Ash	Low	>20 feet	>20 feet	Swamp White Oak	Medium	>20 feet	>20 feet					
Canopy Species	% Cover	Size Class	DBH	Age																																																							
Swamp White Oak	25		18	105																																																							
Red Maple	55		12	105																																																							
Northern Pin Oak	10		12	105																																																							
Quaking Aspen	10		12																																																								
Sub-Canopy Species	Density	Avg. Height	Size																																																								
Red Maple	Medium	>20 feet	>20 feet																																																								
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																								
Nannyberry	Low	5 - 10 feet	5 - 10 feet																																																								
Green Ash	Low	>20 feet	>20 feet																																																								
Swamp White Oak	Medium	>20 feet	>20 feet																																																								
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 Magruder 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.																																																				
<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>Log</td><td>1</td><td>5</td></tr><tr><td>Red Maple</td><td>15</td><td>Log</td><td>1</td><td>5</td></tr><tr><td>Bigtooth Aspen</td><td>40</td><td>Log</td><td>1</td><td>5</td></tr><tr><td>Northern Pin Oak</td><td>25</td><td>Log</td><td>1</td><td>5</td></tr></table>			Canopy Species	% Cover	Size Class	DBH	Age	Quaking Aspen	20	Log	1	5	Red Maple	15	Log	1	5	Bigtooth Aspen	40	Log	1	5	Northern Pin Oak	25	Log	1	5																																
Canopy Species	% Cover	Size Class	DBH	Age																																																							
Quaking Aspen	20	Log	1	5																																																							
Red Maple	15	Log	1	5																																																							
Bigtooth Aspen	40	Log	1	5																																																							
Northern Pin Oak	25	Log	1	5																																																							
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.																																																				
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Bigtooth Aspen</td><td>10</td><td></td><td>7</td><td>34</td></tr><tr><td>Paper Birch</td><td>10</td><td>Sapling</td><td>5</td><td>34</td></tr><tr><td>Quaking Aspen</td><td>35</td><td>Sapling</td><td>6</td><td>34</td></tr><tr><td>Northern Pin Oak</td><td>5</td><td>Sapling</td><td>7</td><td>34</td></tr><tr><td>Red Maple</td><td>40</td><td>Sapling</td><td>5</td><td>34</td></tr></table>			Canopy Species	% Cover	Size Class	DBH	Age	Bigtooth Aspen	10		7	34	Paper Birch	10	Sapling	5	34	Quaking Aspen	35	Sapling	6	34	Northern Pin Oak	5	Sapling	7	34	Red Maple	40	Sapling	5	34	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Tag Alder</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Alternate-leaved Dogwood</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Maple</td><td>Medium</td><td>Variable</td><td>Variable</td></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>			Sub-Canopy Species	Density	Avg. Height	Size	Tag Alder	Low	5 - 10 feet	5 - 10 feet	Alternate-leaved Dogwood	Low	5 - 10 feet	5 - 10 feet	Red Maple	Medium	Variable	Variable	Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet	Michigan Holly	Low	5 - 10 feet	5 - 10 feet
Canopy Species	% Cover	Size Class	DBH	Age																																																							
Bigtooth Aspen	10		7	34																																																							
Paper Birch	10	Sapling	5	34																																																							
Quaking Aspen	35	Sapling	6	34																																																							
Northern Pin Oak	5	Sapling	7	34																																																							
Red Maple	40	Sapling	5	34																																																							
Sub-Canopy Species	Density	Avg. Height	Size																																																								
Tag Alder	Low	5 - 10 feet	5 - 10 feet																																																								
Alternate-leaved Dogwood	Low	5 - 10 feet	5 - 10 feet																																																								
Red Maple	Medium	Variable	Variable																																																								
Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet																																																								
Michigan Holly	Low	5 - 10 feet	5 - 10 feet																																																								

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 Magrudder 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					
Red Maple		5	Log	1	5					
Bigtooth Aspen		55	Log	1	5					
Northern Pin Oak		15	Log	1	5					
Quaking Aspen		25	Log	1	5					
57	6113 - Lowland Maple	Sawtimber Well	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	Sub-Canopy Species		Density	Avg. Height	Size
Red Maple		65		10	84	Red Oak		Low	10 - 20 feet	10 - 20 feet
Red Oak		10		15		Black Cherry		Low	10 - 20 feet	10 - 20 feet
Quaking Aspen		15		12	84	Red Maple		High	>20 feet	>20 feet
Paper Birch		5	Seedling	8						
Black Cherry		3	Seedling	8						
Blackgum		2	Seedling	8						
58	6113 - Lowland Maple	Poletimber 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					
Red Maple		70		7	52					
Quaking Aspen		5		7						
Swamp White Oak		15		6						
Northern Pin Oak		5	Sapling	7						
Paper Birch		5	Sapling	5						
59	611 - Lowland Deciduous Forest	Unspecified	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 Magrudder 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						
Northern Pin Oak		Low	5 - 10 feet	5 - 10 feet						
Quaking Aspen		Low	5 - 10 feet	5 - 10 feet						
Quaking Aspen		Low	< 5 feet	< 5 feet						
Bigtooth Aspen		Medium	< 5 feet	< 5 feet						
Red Maple		Medium	10 - 20 feet	10 - 20 feet						
Paper Birch		Low	< 5 feet	< 5 feet						
Northern Pin Oak		Medium	< 5 feet	< 5 feet						
Bigtooth Aspen		Low	5 - 10 feet	5 - 10 feet						
Red Maple		Low	5 - 10 feet	5 - 10 feet						

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
60	6113 - Lowland Maple	Sawtimber Medium	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.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Maple		60		12	102	Swamp White Oak		Low	10 - 20 feet	10 - 20 feet	
Swamp White Oak		20		15	102	Tag Alder		Low	5 - 10 feet	5 - 10 feet	
Red Oak		20		15	102	Red Oak		Low	10 - 20 feet	10 - 20 feet	
						Michigan Holly		Medium	5 - 10 feet	5 - 10 feet	
						Black/Red (Hybrid) Oak		Low	< 5 feet	< 5 feet	
						Alternate-leaved Dogwood		Low	5 - 10 feet	5 - 10 feet	
						Green Ash		Low	< 5 feet	< 5 feet	
						Bigtooth Aspen		Low	< 5 feet	< 5 feet	
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.			
Canopy Species		% Cover	Size Class	DBH	Age						
Quaking Aspen		30	Sapling	5	35						
Bigtooth Aspen		50	Sapling	6	35						
Red Maple		5	Sapling	5	35						
Paper Birch		5	Pole	4	35						
Northern Pin Oak		10		8							
62	4131 - Aspen, Oak	Sapling Poor	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.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Quaking Aspen		10	Log	1	4	Black/Red (Hybrid) Oak		Medium	< 5 feet	< 5 feet	
Northern Pin Oak		20	Log	1	4	Red Maple		Medium	< 5 feet	< 5 feet	
Red Maple		30	Log	1	4	Quaking Aspen		Low	< 5 feet	< 5 feet	
Bigtooth Aspen		40	Log	1	4	Bigtooth Aspen		Low	< 5 feet	< 5 feet	
63	6230 - Cattail	None	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.			
						Sub-Canopy Species			Density	Avg. Height	Size
						Swamp White Oak			Medium	10 - 20 feet	10 - 20 feet
						Cattail spp.			Full	Not Applicable	Not Applicable
						Paper Birch			Low	10 - 20 feet	10 - 20 feet
						Red Maple	Medium		10 - 20 feet	10 - 20 feet	
						Willow spp.	Medium		5 - 10 feet	5 - 10 feet	
						Michigan Holly	Medium		5 - 10 feet	5 - 10 feet	
						Quaking Aspen	Low		10 - 20 feet	10 - 20 feet	
						Phragmites (exotic)	Medium		Not Applicable	Not Applicable	

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
Paper Birch	5	Sapling	5	35	Red Maple	Low		5 - 10 feet	5 - 10 feet
Red Maple	10	Sapling	6	35	Northern Pin Oak	Medium		5 - 10 feet	5 - 10 feet
Northern Pin Oak	20		8	35					
Bigtooth Aspen	65	Sapling	6	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
Red Maple	60		11	58	Red Maple	Medium		10 - 20 feet	10 - 20 feet
Quaking Aspen	10		12	58	Black Cherry	Low		10 - 20 feet	10 - 20 feet
Northern Pin Oak	20		12	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
Red Maple	25		8	44	Serviceberry (Juneberry)	Low		5 - 10 feet	5 - 10 feet
Northern Pin Oak	70		9	63	Black Cherry	Low		>20 feet	>20 feet
Quaking Aspen	5		11	63	Northern Pin Oak	Medium		>20 feet	>20 feet
					Michigan Holly	Medium		5 - 10 feet	5 - 10 feet
					Witch Hazel	Low	5 - 10 feet	5 - 10 feet	
					Red Maple	Medium	>20 feet	>20 feet	
67	6230 - Cattail	None	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.		
					Sub-Canopy Species	Density		Avg. Height	Size
					Cattail spp.	Full		Not Applicable	Not Applicable
					Red Osier Dogwood	Medium	5 - 10 feet	5 - 10 feet	
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 traditionally 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					
Swamp White Oak	10		8						
Quaking Aspen	30		10	44					

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
69	6113 - Lowland Maple	Poletimber Poor	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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	80		8	87	Red Maple	Low		5 - 10 feet	5 - 10 feet
Swamp White Oak	5	Seedling	8		Tag Alder	High		5 - 10 feet	5 - 10 feet
Paper Birch	15	Seedling	8	87	Michigan Holly	High		5 - 10 feet	5 - 10 feet
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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Black/Red (Hybrid) Oak	30		9	60	Red Maple	Medium		10 - 20 feet	10 - 20 feet
Bigtooth Aspen	5		8	25	Northern Pin Oak	Medium		10 - 20 feet	10 - 20 feet
Red Maple	30		7		Witch Hazel	Low		5 - 10 feet	5 - 10 feet
Northern Pin Oak	35		9	60	Serviceberry (Juneberry)	Low		10 - 20 feet	10 - 20 feet
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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	5	Sapling	5	26	Black/Red (Hybrid) Oak	Low		5 - 10 feet	5 - 10 feet
Quaking Aspen	20	Sapling	5	26					
Black/Red (Hybrid) Oak	20		8						
White Oak	5		8						
Bigtooth Aspen	50	Sapling	5	26					
72	6113 - Lowland Maple	Sawtimber Well	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		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	65		10	80	Red Maple	Medium		>20 feet	>20 feet
Swamp White Oak	15		12	80	Red Oak	Low		Variable	Variable
Quaking Aspen	10		12	80	Red Osier Dogwood	Medium		5 - 10 feet	5 - 10 feet
Northern Pin Oak	10		10		Green Ash	Low		>20 feet	>20 feet
73	6230 - Cattail	None	15.6			No	Cattail marsh with alder throughout. North finger is primarily lowland brush with willow dominant.		
					Sub-Canopy Species	Density		Avg. Height	Size
					Cattail spp.	Full		Not Applicable	Not Applicable
					Tag Alder	Medium		5 - 10 feet	5 - 10 feet
					Willow spp.	Medium		10 - 20 feet	10 - 20 feet
					Paper Birch	Low		10 - 20 feet	10 - 20 feet

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
74	6220 - Alder/Willow	None	29.6			No	This stand is an L-Type of willow and tag alder with marsh grass and areas of cattails. There are swamp hardwood island in the stand but they do not have enough canopy closure to make this stand an E4. The main soil type is Kinross.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
79	4199 - Other Mixed Upland Deciduous	Sawtimber 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
Paper Birch	2		10	65	Red Maple	Medium		>20 feet	>20 feet
White Oak	13		16	107	Alternate-leaved Dogwood	Low		5 - 10 feet	5 - 10 feet
Red Oak	20		12	65	Red Oak	Low		Variable	Variable
Bigtooth Aspen	20		13	65	Serviceberry (Juneberry)	Medium		10 - 20 feet	10 - 20 feet
Red Maple	45		10	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
Paper Birch	75	Seedling	6	35	Willow spp.	Low		5 - 10 feet	5 - 10 feet
Green Ash	5	Log	4	35	Red Osier Dogwood	Low		5 - 10 feet	5 - 10 feet
Quaking Aspen	20	Seedling	8	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	Poletimber Well	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	Swamp White Oak	Medium		10 - 20 feet	10 - 20 feet
Quaking Aspen	15		12		Michigan Holly	Medium		5 - 10 feet	5 - 10 feet
Swamp White Oak	30		9	70	Red Maple	Medium		10 - 20 feet	10 - 20 feet
82	3102 - Grass	None	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	Serviceberry (Juneberry)	Low		5 - 10 feet	5 - 10 feet
Red Oak	15	Seedling	8	55	Red Maple	Low		5 - 10 feet	5 - 10 feet
Bigtooth Aspen	75	Seedling	8	55	White Oak	Low		10 - 20 feet	10 - 20 feet
84	6230 - Cattail	None	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	
					Cattail spp.	High	Not Applicable	Not Applicable	
					Tag Alder	Medium	5 - 10 feet	5 - 10 feet	
					Red Maple	Low	>20 feet	>20 feet	
					Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	
					Paper Birch	Low	>20 feet	>20 feet	

DUERRG

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
90	6113 - Lowland Maple	Sawtimber Medium	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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	90		12	105	Michigan Holly	Low		5 - 10 feet	5 - 10 feet
Swamp White Oak	5		11		Green Ash	Low		>20 feet	>20 feet
Quaking Aspen	5		12		Red Maple	Medium		>20 feet	>20 feet
					Swamp White Oak	Low		Variable	Variable
91	6113 - Lowland Maple	Poletimber Well	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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Blackgum	10		9		Red Osier Dogwood	Low		5 - 10 feet	5 - 10 feet
Quaking Aspen	15		12	95	Red Maple	Medium		10 - 20 feet	10 - 20 feet
Paper Birch	5	Seedling	8		Michigan Holly	Low		5 - 10 feet	5 - 10 feet
Red Oak	5		9	60					
Red Maple	65		9	60					
92	4131 - Aspen, Oak	Sapling Poor	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 boards the west side. Overall, the stand is upland. The main soil type is Pipestone.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Bigtooth Aspen	35	Log	1	4	Bigtooth Aspen	Low		< 5 feet	< 5 feet
Red Maple	20	Log	1	4	Black/Red (Hybrid) Oak	Medium		< 5 feet	< 5 feet
Northern Pin Oak	35	Log	1	4	Red Maple	Medium		< 5 feet	< 5 feet
Quaking Aspen	10	Log	1	4					
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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	72		9	75	Red Maple	High		>20 feet	>20 feet
Northern Pin Oak	15		10		Northern Pin Oak	Low		>20 feet	>20 feet
Quaking Aspen	8		14	75	Alternate-leaved Dogwood	Medium		5 - 10 feet	5 - 10 feet
Black/Red (Hybrid) Oak	3		14		Tag Alder	Low		5 - 10 feet	5 - 10 feet
White Oak	2		16						
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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Swamp White Oak	3		15		Red Maple	Medium		>20 feet	>20 feet
Northern Pin Oak	40		9	77	Swamp White Oak	Medium		10 - 20 feet	10 - 20 feet
Quaking Aspen	7		11	77	Northern Pin Oak	Low		10 - 20 feet	10 - 20 feet
Red Maple	50		9	77					

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																						
95	6113 - Lowland Maple	Sawtimber 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.																																																						
<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>5</td><td></td><td>14</td><td>65</td></tr><tr><td>Red Maple</td><td>70</td><td></td><td>12</td><td>65</td></tr><tr><td>Swamp White Oak</td><td>15</td><td></td><td>14</td><td>107</td></tr><tr><td>Red Oak</td><td>5</td><td></td><td>12</td><td></td></tr><tr><td>Paper Birch</td><td>5</td><td></td><td>10</td><td>65</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age	Quaking Aspen	5		14	65	Red Maple	70		12	65	Swamp White Oak	15		14	107	Red Oak	5		12		Paper Birch	5		10	65	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Oak</td><td>Low</td><td>Variable</td><td>Variable</td></tr><tr><td>Michigan Holly</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Alternate-leaved Dogwood</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Green Ash</td><td>Medium</td><td>Variable</td><td>Variable</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Oak	Low	Variable	Variable	Michigan Holly	Low	5 - 10 feet	5 - 10 feet	Alternate-leaved Dogwood	Low	5 - 10 feet	5 - 10 feet	Red Maple	Medium	>20 feet	>20 feet	Green Ash	Medium	Variable	Variable				
Canopy Species	% Cover	Size Class	DBH	Age																																																									
Quaking Aspen	5		14	65																																																									
Red Maple	70		12	65																																																									
Swamp White Oak	15		14	107																																																									
Red Oak	5		12																																																										
Paper Birch	5		10	65																																																									
Sub-Canopy Species	Density	Avg. Height	Size																																																										
Red Oak	Low	Variable	Variable																																																										
Michigan Holly	Low	5 - 10 feet	5 - 10 feet																																																										
Alternate-leaved Dogwood	Low	5 - 10 feet	5 - 10 feet																																																										
Red Maple	Medium	>20 feet	>20 feet																																																										
Green Ash	Medium	Variable	Variable																																																										
96	629 - Mixed non-forested Wetland	None	1.7			No	This stand is a low drainage which flows into Turkey Creek. The main soil is Wixom.																																																						
		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Cattail spp.</td><td>Full</td><td>Not Applicable</td><td>Not Applicable</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Cattail spp.	Full	Not Applicable	Not Applicable																																																		
Sub-Canopy Species	Density	Avg. Height	Size																																																										
Cattail spp.	Full	Not Applicable	Not Applicable																																																										
97	6222 - Shrub-Carr	None	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.																																																						
		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Tag Alder</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>High</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Cattail spp.</td><td>Medium</td><td>Not Applicable</td><td>Not Applicable</td></tr><tr><td>Willow spp.</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Maple</td><td>High</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Swamp White Oak</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Tag Alder	Medium	5 - 10 feet	5 - 10 feet	Michigan Holly	High	5 - 10 feet	5 - 10 feet	Cattail spp.	Medium	Not Applicable	Not Applicable	Willow spp.	Low	5 - 10 feet	5 - 10 feet	Red Maple	High	>20 feet	>20 feet	Swamp White Oak	Medium	>20 feet	>20 feet																														
Sub-Canopy Species	Density	Avg. Height	Size																																																										
Tag Alder	Medium	5 - 10 feet	5 - 10 feet																																																										
Michigan Holly	High	5 - 10 feet	5 - 10 feet																																																										
Cattail spp.	Medium	Not Applicable	Not Applicable																																																										
Willow spp.	Low	5 - 10 feet	5 - 10 feet																																																										
Red Maple	High	>20 feet	>20 feet																																																										
Swamp White Oak	Medium	>20 feet	>20 feet																																																										
98	6230 - Cattail	None	18.3			No	This is a cattail marsh.																																																						
		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Cattail spp.</td><td>Full</td><td>Not Applicable</td><td>Not Applicable</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Cattail spp.	Full	Not Applicable	Not Applicable																																																		
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.																																																						
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Black/Red (Hybrid) Oak</td><td>5</td><td></td><td>12</td><td></td></tr><tr><td>Quaking Aspen</td><td>15</td><td></td><td>11</td><td>80</td></tr><tr><td>Red Maple</td><td>65</td><td></td><td>11</td><td>80</td></tr><tr><td>Swamp White Oak</td><td>10</td><td></td><td>12</td><td></td></tr><tr><td>Paper Birch</td><td>5</td><td></td><td>9</td><td></td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age	Black/Red (Hybrid) Oak	5		12		Quaking Aspen	15		11	80	Red Maple	65		11	80	Swamp White Oak	10		12		Paper Birch	5		9		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Tag Alder</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Swamp White Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Willow spp.</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Black/Red (Hybrid) Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Medium	>20 feet	>20 feet	Tag Alder	Medium	5 - 10 feet	5 - 10 feet	Swamp White Oak	Low	5 - 10 feet	5 - 10 feet	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Willow spp.	Medium	10 - 20 feet	10 - 20 feet	Black/Red (Hybrid) Oak	Low	5 - 10 feet	5 - 10 feet
Canopy Species	% Cover	Size Class	DBH	Age																																																									
Black/Red (Hybrid) Oak	5		12																																																										
Quaking Aspen	15		11	80																																																									
Red Maple	65		11	80																																																									
Swamp White Oak	10		12																																																										
Paper Birch	5		9																																																										
Sub-Canopy Species	Density	Avg. Height	Size																																																										
Red Maple	Medium	>20 feet	>20 feet																																																										
Tag Alder	Medium	5 - 10 feet	5 - 10 feet																																																										
Swamp White Oak	Low	5 - 10 feet	5 - 10 feet																																																										
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																										
Willow spp.	Medium	10 - 20 feet	10 - 20 feet																																																										
Black/Red (Hybrid) Oak	Low	5 - 10 feet	5 - 10 feet																																																										
100	6222 - Shrub-Carr	None	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.																																																						
		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Quaking Aspen</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Red Maple</td><td>Low</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Michigan Holly</td><td>High</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Tag Alder</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Quaking Aspen	Medium	>20 feet	>20 feet	Red Maple	Low	>20 feet	>20 feet	Michigan Holly	High	5 - 10 feet	5 - 10 feet	Tag Alder	Low	5 - 10 feet	5 - 10 feet																																						
Sub-Canopy Species	Density	Avg. Height	Size																																																										
Quaking Aspen	Medium	>20 feet	>20 feet																																																										
Red Maple	Low	>20 feet	>20 feet																																																										
Michigan Holly	High	5 - 10 feet	5 - 10 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.																																																		
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Swamp White Oak</td><td>10</td><td></td><td>12</td><td></td></tr><tr><td>Paper Birch</td><td>10</td><td></td><td>8</td><td>65</td></tr><tr><td>Bigtooth Aspen</td><td>5</td><td></td><td>14</td><td>95</td></tr><tr><td>Red Maple</td><td>50</td><td></td><td>10</td><td>65</td></tr><tr><td>Quaking Aspen</td><td>20</td><td></td><td>12</td><td>95</td></tr><tr><td>Northern Pin Oak</td><td>5</td><td></td><td>10</td><td>65</td></tr></table>			Canopy Species	% Cover	Size Class	DBH		Age	Swamp White Oak	10		12		Paper Birch	10		8	65	Bigtooth Aspen	5		14	95	Red Maple	50		10	65	Quaking Aspen	20		12	95	Northern Pin Oak	5		10	65	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>High</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Green Ash</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Elm (Spp.)</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr></table>			Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	High	>20 feet	>20 feet	Green Ash	Medium	>20 feet	>20 feet	Elm (Spp.)	Low	10 - 20 feet	10 - 20 feet
Canopy Species	% Cover	Size Class	DBH	Age																																																					
Swamp White Oak	10		12																																																						
Paper Birch	10		8	65																																																					
Bigtooth Aspen	5		14	95																																																					
Red Maple	50		10	65																																																					
Quaking Aspen	20		12	95																																																					
Northern Pin Oak	5		10	65																																																					
Sub-Canopy Species	Density	Avg. Height	Size																																																						
Red Maple	High	>20 feet	>20 feet																																																						
Green Ash	Medium	>20 feet	>20 feet																																																						
Elm (Spp.)	Low	10 - 20 feet	10 - 20 feet																																																						
102	3301 - Low Density Deciduous Trees	None	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.																																																		
			<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Quaking Aspen</td><td>Low</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Bigtooth Aspen</td><td>High</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>White Oak</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr></table>			Sub-Canopy Species		Density	Avg. Height	Size	Quaking Aspen	Low	>20 feet	>20 feet	Bigtooth Aspen	High	>20 feet	>20 feet	White Oak	Medium	10 - 20 feet	10 - 20 feet																																			
Sub-Canopy Species	Density	Avg. Height	Size																																																						
Quaking Aspen	Low	>20 feet	>20 feet																																																						
Bigtooth Aspen	High	>20 feet	>20 feet																																																						
White Oak	Medium	10 - 20 feet	10 - 20 feet																																																						
103	6223 - Inundated Shrub Swamp	None	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.																																																		
			<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Tag Alder</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Phragmites (spp.)</td><td>Medium</td><td>Not Applicable</td><td>Not Applicable</td></tr><tr><td>Cattail spp.</td><td>High</td><td>Not Applicable</td><td>Not Applicable</td></tr></table>			Sub-Canopy Species		Density	Avg. Height	Size	Tag Alder	Medium	5 - 10 feet	5 - 10 feet	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Phragmites (spp.)	Medium	Not Applicable	Not Applicable	Cattail spp.	High	Not Applicable	Not Applicable																															
Sub-Canopy Species	Density	Avg. Height	Size																																																						
Tag Alder	Medium	5 - 10 feet	5 - 10 feet																																																						
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																						
Phragmites (spp.)	Medium	Not Applicable	Not Applicable																																																						
Cattail spp.	High	Not Applicable	Not Applicable																																																						
104	6220 - Alder/Willow	None	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	None	2.4			No	Dominated by lowland grasses with a perimeter of lowland brush and hardwood.																																																		
			<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Willow spp.</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Tag Alder</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>			Sub-Canopy Species		Density	Avg. Height	Size	Red Maple	Medium	>20 feet	>20 feet	Willow spp.	Low	5 - 10 feet	5 - 10 feet	Tag Alder	Medium	5 - 10 feet	5 - 10 feet																																			
Sub-Canopy Species	Density	Avg. Height	Size																																																						
Red Maple	Medium	>20 feet	>20 feet																																																						
Willow spp.	Low	5 - 10 feet	5 - 10 feet																																																						
Tag Alder	Medium	5 - 10 feet	5 - 10 feet																																																						
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	Poletimber 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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Bigtooth Aspen	45	Sapling	6	35	Red Maple	Low		5 - 10 feet	5 - 10 feet
Swamp White Oak	5	Log	3		Michigan Holly	Medium		5 - 10 feet	5 - 10 feet
Red Maple	25	Sapling	5	35	Swamp White Oak	Low		5 - 10 feet	5 - 10 feet
Paper Birch	25	Pole	4	35					
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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Quaking Aspen	15	Sapling	7	35	Tag Alder	Low		5 - 10 feet	5 - 10 feet
Bigtooth Aspen	20	Sapling	7	35	Michigan Holly	Low		5 - 10 feet	5 - 10 feet
Red Maple	30	Sapling	5	35	Willow spp.	Low		5 - 10 feet	5 - 10 feet
Paper Birch	35	Pole	4	35	Red Maple	Low		5 - 10 feet	5 - 10 feet
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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Bigtooth Aspen	25	Sapling	6	35	Red Maple	Medium		>20 feet	>20 feet
Swamp White Oak	5		12	82	Musclewood/Hornbeam	Low		10 - 20 feet	10 - 20 feet
Northern Pin Oak	5		9		Northern Pin Oak	Low		10 - 20 feet	10 - 20 feet
Quaking Aspen	20	Sapling	6	35					
Red Maple	45		8	35					
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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Northern Pin Oak	10		7	34	Tag Alder	Low		5 - 10 feet	5 - 10 feet
Red Maple	25	Sapling	6	34	Northern Pin Oak	Low		5 - 10 feet	5 - 10 feet
Bigtooth Aspen	40	Seedling	6	34	Red Maple	Low		10 - 20 feet	10 - 20 feet
Quaking Aspen	25	Sapling	6	34					
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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Bigtooth Aspen	30	Seedling	7	35	Red Maple	Medium		5 - 10 feet	5 - 10 feet
Red Maple	40	Sapling	6	35	Paper Birch	Low		>20 feet	>20 feet
Northern Pin Oak	10		7	35	Northern Pin Oak	Low		< 5 feet	< 5 feet
Quaking Aspen	20	Seedling	6	35	Swamp White Oak	Low		10 - 20 feet	10 - 20 feet
112	6220 - Alder/Willow	None	1.7			No	2017 YOE Inventory: This stand is an L-Type that has swamp hardwood around the edges, especially at the east end.		
					Sub-Canopy Species	Density		Avg. Height	Size
					Tag Alder	High		5 - 10 feet	5 - 10 feet
					Willow spp.	Medium		5 - 10 feet	5 - 10 feet

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.																																			
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>30</td><td></td><td>10</td><td></td></tr><tr><td>Swamp White Oak</td><td>65</td><td></td><td>14</td><td>105</td></tr><tr><td>Quaking Aspen</td><td>5</td><td></td><td>10</td><td></td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	30		10		Swamp White Oak	65		14	105	Quaking Aspen	5		10		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Swamp White Oak</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Green Ash</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Medium	>20 feet	>20 feet	Swamp White Oak	Medium	>20 feet	>20 feet	Green Ash	Low	10 - 20 feet	10 - 20 feet
Canopy Species	% Cover	Size Class	DBH	Age																																						
Red Maple	30		10																																							
Swamp White Oak	65		14	105																																						
Quaking Aspen	5		10																																							
Sub-Canopy Species	Density	Avg. Height	Size																																							
Red Maple	Medium	>20 feet	>20 feet																																							
Swamp White Oak	Medium	>20 feet	>20 feet																																							
Green Ash	Low	10 - 20 feet	10 - 20 feet																																							
114	6223 - Inundated Shrub Swamp	None	3.8			No	The stand is in a depression and has the edges of lowland brush going to marsh grass.																																			
		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Osier Dogwood</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Paper Birch</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Blueberry/Bilberry/Cranberry</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Quaking Aspen</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>						Sub-Canopy Species	Density	Avg. Height	Size	Red Osier Dogwood	Medium	5 - 10 feet	5 - 10 feet	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Paper Birch	Low	5 - 10 feet	5 - 10 feet	Blueberry/Bilberry/Cranberry	Medium	5 - 10 feet	5 - 10 feet	Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet	Quaking Aspen	Low	5 - 10 feet	5 - 10 feet							
Sub-Canopy Species	Density	Avg. Height	Size																																							
Red Osier Dogwood	Medium	5 - 10 feet	5 - 10 feet																																							
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																							
Paper Birch	Low	5 - 10 feet	5 - 10 feet																																							
Blueberry/Bilberry/Cranberry	Medium	5 - 10 feet	5 - 10 feet																																							
Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet																																							
Quaking Aspen	Low	5 - 10 feet	5 - 10 feet																																							
115	622 - Lowland Shrub	None	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.																																			
		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Paper Birch</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Red Maple</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Red Osier Dogwood</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>High</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>						Sub-Canopy Species	Density	Avg. Height	Size	Northern Pin Oak	Low	10 - 20 feet	10 - 20 feet	Paper Birch	Low	10 - 20 feet	10 - 20 feet	Red Maple	Medium	10 - 20 feet	10 - 20 feet	Red Osier Dogwood	Medium	5 - 10 feet	5 - 10 feet	Michigan Holly	High	5 - 10 feet	5 - 10 feet											
Sub-Canopy Species	Density	Avg. Height	Size																																							
Northern Pin Oak	Low	10 - 20 feet	10 - 20 feet																																							
Paper Birch	Low	10 - 20 feet	10 - 20 feet																																							
Red Maple	Medium	10 - 20 feet	10 - 20 feet																																							
Red Osier Dogwood	Medium	5 - 10 feet	5 - 10 feet																																							
Michigan Holly	High	5 - 10 feet	5 - 10 feet																																							
116	6222 - Shrub-Carr	None	1.4			No	Cattails with pockets of lowland brush and a lowland hardwood perimeter. The main soil types are Kingsville and Pipestone.																																			
		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Cattail spp.</td><td>Medium</td><td>Not Applicable</td><td>Not Applicable</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Osier Dogwood</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Maple</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Green Ash</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Paper Birch</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr></table>						Sub-Canopy Species	Density	Avg. Height	Size	Cattail spp.	Medium	Not Applicable	Not Applicable	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Red Osier Dogwood	Low	5 - 10 feet	5 - 10 feet	Red Maple	Medium	10 - 20 feet	10 - 20 feet	Green Ash	Low	10 - 20 feet	10 - 20 feet	Paper Birch	Low	10 - 20 feet	10 - 20 feet							
Sub-Canopy Species	Density	Avg. Height	Size																																							
Cattail spp.	Medium	Not Applicable	Not Applicable																																							
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																							
Red Osier Dogwood	Low	5 - 10 feet	5 - 10 feet																																							
Red Maple	Medium	10 - 20 feet	10 - 20 feet																																							
Green Ash	Low	10 - 20 feet	10 - 20 feet																																							
Paper Birch	Low	10 - 20 feet	10 - 20 feet																																							

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																							
117	6112 - Lowland Aspen	Sapling Well	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.																																																																							
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Sugar Maple</td><td>2</td><td>Seedling</td><td>8</td><td>55</td></tr><tr><td>Bigtooth Aspen</td><td>15</td><td>Pole</td><td>3</td><td>14</td></tr><tr><td>White Oak</td><td>3</td><td></td><td>10</td><td></td></tr><tr><td>Red Oak</td><td>10</td><td></td><td>8</td><td>55</td></tr><tr><td>Quaking Aspen</td><td>35</td><td>Pole</td><td>3</td><td>14</td></tr><tr><td>Paper Birch</td><td>10</td><td>Pole</td><td>3</td><td>14</td></tr><tr><td>Red Maple</td><td>18</td><td></td><td>4</td><td>14</td></tr><tr><td>Blackgum</td><td>2</td><td>Pole</td><td>4</td><td></td></tr><tr><td>Swamp White Oak</td><td>5</td><td></td><td>9</td><td></td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Sugar Maple	2	Seedling	8	55	Bigtooth Aspen	15	Pole	3	14	White Oak	3		10		Red Oak	10		8	55	Quaking Aspen	35	Pole	3	14	Paper Birch	10	Pole	3	14	Red Maple	18		4	14	Blackgum	2	Pole	4		Swamp White Oak	5		9		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>White Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Swamp White Oak</td><td>Low</td><td>< 5 feet</td><td>< 5 feet</td></tr><tr><td>Red Maple</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Oak</td><td>Low</td><td>< 5 feet</td><td>< 5 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	White Oak	Low	5 - 10 feet	5 - 10 feet	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Swamp White Oak	Low	< 5 feet	< 5 feet	Red Maple	Low	5 - 10 feet	5 - 10 feet	Red Oak	Low	< 5 feet	< 5 feet
Canopy Species	% Cover	Size Class	DBH	Age																																																																										
Sugar Maple	2	Seedling	8	55																																																																										
Bigtooth Aspen	15	Pole	3	14																																																																										
White Oak	3		10																																																																											
Red Oak	10		8	55																																																																										
Quaking Aspen	35	Pole	3	14																																																																										
Paper Birch	10	Pole	3	14																																																																										
Red Maple	18		4	14																																																																										
Blackgum	2	Pole	4																																																																											
Swamp White Oak	5		9																																																																											
Sub-Canopy Species	Density	Avg. Height	Size																																																																											
White Oak	Low	5 - 10 feet	5 - 10 feet																																																																											
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																																											
Swamp White Oak	Low	< 5 feet	< 5 feet																																																																											
Red Maple	Low	5 - 10 feet	5 - 10 feet																																																																											
Red Oak	Low	< 5 feet	< 5 feet																																																																											
118	6230 - Cattail	None	5.5			No	2018 YOE Inventory: This cattail marsh has islands and edges of swamp hardwoods.																																																																							
		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Cattail spp.</td><td>Full</td><td>Not Applicable</td><td>Not Applicable</td></tr><tr><td>Paper Birch</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Swamp White Oak</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Red Maple</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Northern Pin Oak</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height		Size	Cattail spp.	Full	Not Applicable	Not Applicable	Paper Birch	Low	10 - 20 feet	10 - 20 feet	Swamp White Oak	Medium	10 - 20 feet	10 - 20 feet	Red Maple	Medium	10 - 20 feet	10 - 20 feet	Northern Pin Oak	Medium	10 - 20 feet	10 - 20 feet																																																		
Sub-Canopy Species	Density	Avg. Height	Size																																																																											
Cattail spp.	Full	Not Applicable	Not Applicable																																																																											
Paper Birch	Low	10 - 20 feet	10 - 20 feet																																																																											
Swamp White Oak	Medium	10 - 20 feet	10 - 20 feet																																																																											
Red Maple	Medium	10 - 20 feet	10 - 20 feet																																																																											
Northern Pin Oak	Medium	10 - 20 feet	10 - 20 feet																																																																											
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.																																																																							
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Bigtooth Aspen</td><td>15</td><td>Sapling</td><td>5</td><td>23</td></tr><tr><td>Red Maple</td><td>55</td><td>Pole</td><td>4</td><td>23</td></tr><tr><td>Quaking Aspen</td><td>5</td><td>Sapling</td><td>5</td><td>23</td></tr><tr><td>Northern Pin Oak</td><td>5</td><td>Sapling</td><td>5</td><td>37</td></tr><tr><td>Paper Birch</td><td>10</td><td>Log</td><td>2</td><td>23</td></tr><tr><td>White Oak</td><td>10</td><td>Sapling</td><td>5</td><td>37</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Bigtooth Aspen	15	Sapling	5	23	Red Maple	55	Pole	4	23	Quaking Aspen	5	Sapling	5	23	Northern Pin Oak	5	Sapling	5	37	Paper Birch	10	Log	2	23	White Oak	10	Sapling	5	37	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>White Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Paper Birch</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	White Oak	Low	5 - 10 feet	5 - 10 feet	Paper Birch	Low	5 - 10 feet	5 - 10 feet	Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet																							
Canopy Species	% Cover	Size Class	DBH	Age																																																																										
Bigtooth Aspen	15	Sapling	5	23																																																																										
Red Maple	55	Pole	4	23																																																																										
Quaking Aspen	5	Sapling	5	23																																																																										
Northern Pin Oak	5	Sapling	5	37																																																																										
Paper Birch	10	Log	2	23																																																																										
White Oak	10	Sapling	5	37																																																																										
Sub-Canopy Species	Density	Avg. Height	Size																																																																											
White Oak	Low	5 - 10 feet	5 - 10 feet																																																																											
Paper Birch	Low	5 - 10 feet	5 - 10 feet																																																																											
Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet																																																																											
120	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	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.																																																																							
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>45</td><td>Sapling</td><td>6</td><td>36</td></tr><tr><td>Quaking Aspen</td><td>35</td><td>Seedling</td><td>8</td><td>43</td></tr><tr><td>Willow spp.</td><td>5</td><td>Pole</td><td>4</td><td>43</td></tr><tr><td>Swamp White Oak</td><td>15</td><td>Sapling</td><td>5</td><td>43</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	45	Sapling	6	36	Quaking Aspen	35	Seedling	8	43	Willow spp.	5	Pole	4	43	Swamp White Oak	15	Sapling	5	43	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Swamp White Oak</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Tag Alder</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Willow spp.</td><td>High</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Medium	10 - 20 feet	10 - 20 feet	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Swamp White Oak	Low	10 - 20 feet	10 - 20 feet	Tag Alder	Medium	5 - 10 feet	5 - 10 feet	Willow spp.	High	10 - 20 feet	10 - 20 feet																									
Canopy Species	% Cover	Size Class	DBH	Age																																																																										
Red Maple	45	Sapling	6	36																																																																										
Quaking Aspen	35	Seedling	8	43																																																																										
Willow spp.	5	Pole	4	43																																																																										
Swamp White Oak	15	Sapling	5	43																																																																										
Sub-Canopy Species	Density	Avg. Height	Size																																																																											
Red Maple	Medium	10 - 20 feet	10 - 20 feet																																																																											
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																																											
Swamp White Oak	Low	10 - 20 feet	10 - 20 feet																																																																											
Tag Alder	Medium	5 - 10 feet	5 - 10 feet																																																																											
Willow spp.	High	10 - 20 feet	10 - 20 feet																																																																											

Stand	Level 4 Cover Type	Size	Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																										
121	6113 - Lowland Maple	Poletimber	Poor	8.4	52	1-50	N/A	2027 YOE Inventory: New stand. Sparse lowland hardwood transition from upland to cattail.																																																										
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Northern Pin Oak</td><td>10</td><td>Sapling</td><td>7</td><td></td></tr><tr><td>Paper Birch</td><td>10</td><td>Sapling</td><td>5</td><td></td></tr><tr><td>Swamp White Oak</td><td>15</td><td></td><td>7</td><td></td></tr><tr><td>Red Maple</td><td>65</td><td></td><td>7</td><td>52</td></tr></table>				Canopy Species	% Cover	Size Class	DBH	Age	Northern Pin Oak	10	Sapling	7		Paper Birch	10	Sapling	5		Swamp White Oak	15		7		Red Maple	65		7	52	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Phragmites (spp.)</td><td>Medium</td><td>Not Applicable</td><td>Not Applicable</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Cattail spp.</td><td>High</td><td>Not Applicable</td><td>Not Applicable</td></tr><tr><td>Tag Alder</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Phragmites (spp.)	Medium	Not Applicable	Not Applicable	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Cattail spp.	High	Not Applicable	Not Applicable	Tag Alder	Medium	5 - 10 feet	5 - 10 feet														
Canopy Species	% Cover	Size Class	DBH	Age																																																														
Northern Pin Oak	10	Sapling	7																																																															
Paper Birch	10	Sapling	5																																																															
Swamp White Oak	15		7																																																															
Red Maple	65		7	52																																																														
Sub-Canopy Species	Density	Avg. Height	Size																																																															
Phragmites (spp.)	Medium	Not Applicable	Not Applicable																																																															
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																															
Cattail spp.	High	Not Applicable	Not Applicable																																																															
Tag Alder	Medium	5 - 10 feet	5 - 10 feet																																																															
122	310 - Herbaceous Openland	None		1.1				Larger oil and gas reclamation opening. Appears to be a lot of knapweed. permit 4499 well plugged no date																																																										
123	6113 - Lowland Maple	Sawtimber	Poor	15.3	100	1-50	N/A	2017 YOE Inventory: Very wet stand with ground cover including graceful sedge, buttonbush, iris, sensitive fern, and royal fern. Most of the stand is forested wetlands. Canopy is declining quickly due to a significant loss of ash and declining maple. Some areas are succeeding with lowland hardwood while others are converting to non-forested wetland. Some of the ash appears to have been cut for research. The main soil type is Kingsville.																																																										
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>90</td><td></td><td>10</td><td>100</td></tr><tr><td>Swamp White Oak</td><td>10</td><td></td><td>12</td><td>100</td></tr></table>				Canopy Species	% Cover	Size Class	DBH	Age	Red Maple	90		10	100	Swamp White Oak	10		12	100	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Buttonbush</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>High</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Swamp White Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Green Ash</td><td>Low</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Tag Alder</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Buttonbush	Medium	5 - 10 feet	5 - 10 feet	Michigan Holly	High	5 - 10 feet	5 - 10 feet	Swamp White Oak	Low	5 - 10 feet	5 - 10 feet	Red Maple	Medium	>20 feet	>20 feet	Green Ash	Low	>20 feet	>20 feet	Tag Alder	Low	5 - 10 feet	5 - 10 feet																
Canopy Species	% Cover	Size Class	DBH	Age																																																														
Red Maple	90		10	100																																																														
Swamp White Oak	10		12	100																																																														
Sub-Canopy Species	Density	Avg. Height	Size																																																															
Buttonbush	Medium	5 - 10 feet	5 - 10 feet																																																															
Michigan Holly	High	5 - 10 feet	5 - 10 feet																																																															
Swamp White Oak	Low	5 - 10 feet	5 - 10 feet																																																															
Red Maple	Medium	>20 feet	>20 feet																																																															
Green Ash	Low	>20 feet	>20 feet																																																															
Tag Alder	Low	5 - 10 feet	5 - 10 feet																																																															
124	3301 - Low Density Deciduous Trees	None		2.8			No	Stand cut with 110 but did not regenerate well enough to be called a forested stand.																																																										
				<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Bigtooth Aspen</td><td>High</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>>20 feet</td><td>>20 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Bigtooth Aspen	High	>20 feet	>20 feet	Northern Pin Oak	Low	>20 feet	>20 feet																																															
Sub-Canopy Species	Density	Avg. Height	Size																																																															
Bigtooth Aspen	High	>20 feet	>20 feet																																																															
Northern Pin Oak	Low	>20 feet	>20 feet																																																															
125	6119 - Mixed Lowland Deciduous Forest	Poletimber	Poor	9.9	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.																																																										
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>45</td><td>Sapling</td><td>6</td><td>36</td></tr><tr><td>Willow spp.</td><td>5</td><td>Pole</td><td>4</td><td>43</td></tr><tr><td>Swamp White Oak</td><td>15</td><td>Sapling</td><td>5</td><td>43</td></tr><tr><td>Quaking Aspen</td><td>35</td><td>Seedling</td><td>8</td><td>43</td></tr></table>				Canopy Species	% Cover	Size Class	DBH	Age	Red Maple	45	Sapling	6	36	Willow spp.	5	Pole	4	43	Swamp White Oak	15	Sapling	5	43	Quaking Aspen	35	Seedling	8	43	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Swamp White Oak</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Willow spp.</td><td>High</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Red Maple</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Tag Alder</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Swamp White Oak	Low	10 - 20 feet	10 - 20 feet	Willow spp.	High	10 - 20 feet	10 - 20 feet	Red Maple	Medium	10 - 20 feet	10 - 20 feet	Tag Alder	Medium	5 - 10 feet	5 - 10 feet										
Canopy Species	% Cover	Size Class	DBH	Age																																																														
Red Maple	45	Sapling	6	36																																																														
Willow spp.	5	Pole	4	43																																																														
Swamp White Oak	15	Sapling	5	43																																																														
Quaking Aspen	35	Seedling	8	43																																																														
Sub-Canopy Species	Density	Avg. Height	Size																																																															
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																															
Swamp White Oak	Low	10 - 20 feet	10 - 20 feet																																																															
Willow spp.	High	10 - 20 feet	10 - 20 feet																																																															
Red Maple	Medium	10 - 20 feet	10 - 20 feet																																																															
Tag Alder	Medium	5 - 10 feet	5 - 10 feet																																																															
126	6113 - Lowland Maple	Sawtimber	Well	35.4	78	81-110	N/A	2027 YOE Inventory: Good density of sap/pole maple and oak in the understory. BA is too low to thin.2022 Sale Closure: West portion of this stand was split off after harvest was closed.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.																																																										
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>75</td><td></td><td>12</td><td>78</td></tr><tr><td>Bigtooth Aspen</td><td>5</td><td></td><td>14</td><td>85</td></tr><tr><td>Quaking Aspen</td><td>5</td><td></td><td>14</td><td>85</td></tr><tr><td>Swamp White Oak</td><td>10</td><td></td><td>15</td><td></td></tr><tr><td>Red Oak</td><td>5</td><td></td><td>10</td><td>78</td></tr></table>				Canopy Species	% Cover	Size Class	DBH	Age	Red Maple	75		12	78	Bigtooth Aspen	5		14	85	Quaking Aspen	5		14	85	Swamp White Oak	10		15		Red Oak	5		10	78	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Swamp White Oak</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Green Ash</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Musclewood/Hornbeam</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Red Maple</td><td>High</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Paper Birch</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Swamp White Oak	Low	10 - 20 feet	10 - 20 feet	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Green Ash	Low	5 - 10 feet	5 - 10 feet	Musclewood/Hornbeam	Low	10 - 20 feet	10 - 20 feet	Red Maple	High	>20 feet	>20 feet	Paper Birch	Low	10 - 20 feet	10 - 20 feet	
Canopy Species	% Cover	Size Class	DBH	Age																																																														
Red Maple	75		12	78																																																														
Bigtooth Aspen	5		14	85																																																														
Quaking Aspen	5		14	85																																																														
Swamp White Oak	10		15																																																															
Red Oak	5		10	78																																																														
Sub-Canopy Species	Density	Avg. Height	Size																																																															
Swamp White Oak	Low	10 - 20 feet	10 - 20 feet																																																															
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																															
Green Ash	Low	5 - 10 feet	5 - 10 feet																																																															
Musclewood/Hornbeam	Low	10 - 20 feet	10 - 20 feet																																																															
Red Maple	High	>20 feet	>20 feet																																																															
Paper Birch	Low	10 - 20 feet	10 - 20 feet																																																															

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																														
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.																																																														
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>20</td><td>Sapling</td><td>6</td><td>41</td></tr><tr><td>Bigtooth Aspen</td><td>10</td><td>Seedling</td><td>8</td><td>41</td></tr><tr><td>Swamp White Oak</td><td>10</td><td>Sapling</td><td>5</td><td>41</td></tr><tr><td>Northern Pin Oak</td><td>10</td><td></td><td>8</td><td>41</td></tr><tr><td>Quaking Aspen</td><td>35</td><td>Seedling</td><td>8</td><td>41</td></tr><tr><td>Paper Birch</td><td>15</td><td>Sapling</td><td>5</td><td>41</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	20	Sapling	6	41	Bigtooth Aspen	10	Seedling	8	41	Swamp White Oak	10	Sapling	5	41	Northern Pin Oak	10		8	41	Quaking Aspen	35	Seedling	8	41	Paper Birch	15	Sapling	5	41	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Tag Alder</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Medium	10 - 20 feet	10 - 20 feet	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Tag Alder	Medium	5 - 10 feet	5 - 10 feet												
Canopy Species	% Cover	Size Class	DBH	Age																																																																	
Red Maple	20	Sapling	6	41																																																																	
Bigtooth Aspen	10	Seedling	8	41																																																																	
Swamp White Oak	10	Sapling	5	41																																																																	
Northern Pin Oak	10		8	41																																																																	
Quaking Aspen	35	Seedling	8	41																																																																	
Paper Birch	15	Sapling	5	41																																																																	
Sub-Canopy Species	Density	Avg. Height	Size																																																																		
Red Maple	Medium	10 - 20 feet	10 - 20 feet																																																																		
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																																		
Tag Alder	Medium	5 - 10 feet	5 - 10 feet																																																																		
128	622 - Lowland Shrub	None	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.																																																														
		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Flowering Dogwood</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species		Density	Avg. Height	Size	Flowering Dogwood	Medium	5 - 10 feet	5 - 10 feet																																																							
Sub-Canopy Species	Density	Avg. Height	Size																																																																		
Flowering Dogwood	Medium	5 - 10 feet	5 - 10 feet																																																																		
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.																																																														
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Paper Birch</td><td>5</td><td>Seedling</td><td>8</td><td></td></tr><tr><td>Black/Red (Hybrid) Oak</td><td>35</td><td></td><td>9</td><td>65</td></tr><tr><td>Swamp White Oak</td><td>50</td><td></td><td>9</td><td>65</td></tr><tr><td>Quaking Aspen</td><td>10</td><td></td><td>9</td><td>65</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Paper Birch	5	Seedling	8		Black/Red (Hybrid) Oak	35		9	65	Swamp White Oak	50		9	65	Quaking Aspen	10		9	65	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Swamp White Oak</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Black/Red (Hybrid) Oak</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Swamp White Oak	Medium	10 - 20 feet	10 - 20 feet	Black/Red (Hybrid) Oak	Low	10 - 20 feet	10 - 20 feet	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																						
Canopy Species	% Cover	Size Class	DBH	Age																																																																	
Paper Birch	5	Seedling	8																																																																		
Black/Red (Hybrid) Oak	35		9	65																																																																	
Swamp White Oak	50		9	65																																																																	
Quaking Aspen	10		9	65																																																																	
Sub-Canopy Species	Density	Avg. Height	Size																																																																		
Swamp White Oak	Medium	10 - 20 feet	10 - 20 feet																																																																		
Black/Red (Hybrid) Oak	Low	10 - 20 feet	10 - 20 feet																																																																		
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																																		
130	3301 - Low Density Deciduous Trees	None	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.																																																														
		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Bigtooth Aspen</td><td>Low</td><td>< 5 feet</td><td>< 5 feet</td></tr></table>				Sub-Canopy Species		Density	Avg. Height	Size	Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet	Bigtooth Aspen	Low	< 5 feet	< 5 feet																																																			
Sub-Canopy Species	Density	Avg. Height	Size																																																																		
Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet																																																																		
Bigtooth Aspen	Low	< 5 feet	< 5 feet																																																																		
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.																																																														
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Paper Birch</td><td>10</td><td>Log</td><td>3</td><td></td></tr><tr><td>Swamp White Oak</td><td>20</td><td>Pole</td><td>4</td><td>30</td></tr><tr><td>Bigtooth Aspen</td><td>10</td><td>Sapling</td><td>6</td><td>30</td></tr><tr><td>Quaking Aspen</td><td>25</td><td>Sapling</td><td>5</td><td>30</td></tr><tr><td>Northern Pin Oak</td><td>5</td><td>Sapling</td><td>5</td><td></td></tr><tr><td>Red Maple</td><td>30</td><td>Pole</td><td>4</td><td>30</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Paper Birch	10	Log	3		Swamp White Oak	20	Pole	4	30	Bigtooth Aspen	10	Sapling	6	30	Quaking Aspen	25	Sapling	5	30	Northern Pin Oak	5	Sapling	5		Red Maple	30	Pole	4	30	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Osier Dogwood</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Tag Alder</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Paper Birch</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>High</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Swamp White Oak</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Maple</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Red Osier Dogwood	Medium	5 - 10 feet	5 - 10 feet	Tag Alder	Medium	5 - 10 feet	5 - 10 feet	Paper Birch	Low	5 - 10 feet	5 - 10 feet	Michigan Holly	High	5 - 10 feet	5 - 10 feet	Swamp White Oak	Medium	5 - 10 feet	5 - 10 feet	Red Maple	Medium	5 - 10 feet	5 - 10 feet
Canopy Species	% Cover	Size Class	DBH	Age																																																																	
Paper Birch	10	Log	3																																																																		
Swamp White Oak	20	Pole	4	30																																																																	
Bigtooth Aspen	10	Sapling	6	30																																																																	
Quaking Aspen	25	Sapling	5	30																																																																	
Northern Pin Oak	5	Sapling	5																																																																		
Red Maple	30	Pole	4	30																																																																	
Sub-Canopy Species	Density	Avg. Height	Size																																																																		
Red Osier Dogwood	Medium	5 - 10 feet	5 - 10 feet																																																																		
Tag Alder	Medium	5 - 10 feet	5 - 10 feet																																																																		
Paper Birch	Low	5 - 10 feet	5 - 10 feet																																																																		
Michigan Holly	High	5 - 10 feet	5 - 10 feet																																																																		
Swamp White Oak	Medium	5 - 10 feet	5 - 10 feet																																																																		
Red Maple	Medium	5 - 10 feet	5 - 10 feet																																																																		
132	110 - Low Intensity Urban	None	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.																																																														

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
133	6224 - Treed Bog	None	5.9			No	Blueberry bog with scattered paper birch and maple. The main soil type is Kinross.
134	6230 - Cattail	None	41.3			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.
135	6113 - Lowland Maple	Sawtimber Medium	8.3	87	51-80	N/A	2027 YOE Inventory: Stand canopy is still sparse. Understory trees slowly filling in canopy. Understory brush has increased. 2017 YOE Inventory: Stand is very wet and hummocky. The stands canopy closure dropped because of the dead ash component. Canopy gaps should fill in with non-ash sub-canopy species. Sub-canopy is above lowland brush and shouldn't be an issue. The main soil type is Kingsville.
136	3301 - Low Density Deciduous Trees	None	1.3			No	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 portion of the sale did not regenerate to meet stocking requirements. Pipestone and Kingsville.
137	4131 - Aspen, Oak	Poletimber Well	14.5	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 has scattered pockets of aspen separated by variable density maple and oak. Barely an aspen coverytype. 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.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																							
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.																																																							
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Swamp White Oak</td><td>5</td><td></td><td>10</td><td></td></tr><tr><td>Red Maple</td><td>50</td><td></td><td>6</td><td>45</td></tr><tr><td>White Oak</td><td>15</td><td></td><td>8</td><td></td></tr><tr><td>Bigtooth Aspen</td><td>20</td><td></td><td>14</td><td>85</td></tr><tr><td>Northern Pin Oak</td><td>5</td><td></td><td>8</td><td></td></tr><tr><td>Paper Birch</td><td>5</td><td></td><td>5</td><td></td></tr></table>						Canopy Species		% Cover	Size Class	DBH	Age	Swamp White Oak	5		10		Red Maple	50		6	45	White Oak	15		8		Bigtooth Aspen	20		14	85	Northern Pin Oak	5		8		Paper Birch	5		5		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Paper Birch</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Red Maple</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>White Oak</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Paper Birch	Low	10 - 20 feet	10 - 20 feet	Red Maple	Low	5 - 10 feet	5 - 10 feet	White Oak	Low	10 - 20 feet	10 - 20 feet			
Canopy Species	% Cover	Size Class	DBH	Age																																																										
Swamp White Oak	5		10																																																											
Red Maple	50		6	45																																																										
White Oak	15		8																																																											
Bigtooth Aspen	20		14	85																																																										
Northern Pin Oak	5		8																																																											
Paper Birch	5		5																																																											
Sub-Canopy Species	Density	Avg. Height	Size																																																											
Paper Birch	Low	10 - 20 feet	10 - 20 feet																																																											
Red Maple	Low	5 - 10 feet	5 - 10 feet																																																											
White Oak	Low	10 - 20 feet	10 - 20 feet																																																											
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>65</td><td>Sapling</td><td>7</td><td>62</td></tr><tr><td>Quaking Aspen</td><td>10</td><td>Seedling</td><td>8</td><td>42</td></tr><tr><td>Paper Birch</td><td>3</td><td>Sapling</td><td>6</td><td></td></tr><tr><td>Swamp White Oak</td><td>12</td><td></td><td>8</td><td></td></tr><tr><td>Northern Pin Oak</td><td>10</td><td></td><td>8</td><td></td></tr></table>						Canopy Species	% Cover	Size Class	DBH	Age	Red Maple	65	Sapling	7	62	Quaking Aspen	10	Seedling	8	42	Paper Birch	3	Sapling	6		Swamp White Oak	12		8		Northern Pin Oak	10		8		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Red Maple</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Northern Pin Oak	Low	10 - 20 feet	10 - 20 feet	Red Maple	Medium	10 - 20 feet	10 - 20 feet									
Canopy Species	% Cover	Size Class	DBH	Age																																																										
Red Maple	65	Sapling	7	62																																																										
Quaking Aspen	10	Seedling	8	42																																																										
Paper Birch	3	Sapling	6																																																											
Swamp White Oak	12		8																																																											
Northern Pin Oak	10		8																																																											
Sub-Canopy Species	Density	Avg. Height	Size																																																											
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																											
Northern Pin Oak	Low	10 - 20 feet	10 - 20 feet																																																											
Red Maple	Medium	10 - 20 feet	10 - 20 feet																																																											
140	629 - Mixed non-forested Wetland	None	1.4			No																																																								
141	6113 - Lowland Maple	Sawtimber Medium	5.2	69	81-110	N/A	2027 YOE Inventory: Wet stand that has converted from aspen/hardwood to lowland hardwood.2017 YOE Inventory: Aspen has died out of this stand for the most part. Stand has converted to maple/oak. Mostly low ground w/ non-forested swales dominated by lowland shrubs. One upland ridge in the north. South has least canopy closure. The main soil type is Pipestone.																																																							
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>65</td><td></td><td>11</td><td>69</td></tr><tr><td>Quaking Aspen</td><td>5</td><td></td><td>13</td><td></td></tr><tr><td>Northern Pin Oak</td><td>30</td><td></td><td>11</td><td>69</td></tr></table>						Canopy Species		% Cover	Size Class	DBH	Age	Red Maple	65		11	69	Quaking Aspen	5		13		Northern Pin Oak	30		11	69	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Alternate-leaved Dogwood</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Maple</td><td>High</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Northern Pin Oak</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Alternate-leaved Dogwood	Medium	5 - 10 feet	5 - 10 feet	Red Maple	High	>20 feet	>20 feet	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Northern Pin Oak	Medium	10 - 20 feet	10 - 20 feet														
Canopy Species	% Cover	Size Class	DBH	Age																																																										
Red Maple	65		11	69																																																										
Quaking Aspen	5		13																																																											
Northern Pin Oak	30		11	69																																																										
Sub-Canopy Species	Density	Avg. Height	Size																																																											
Alternate-leaved Dogwood	Medium	5 - 10 feet	5 - 10 feet																																																											
Red Maple	High	>20 feet	>20 feet																																																											
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																											
Northern Pin Oak	Medium	10 - 20 feet	10 - 20 feet																																																											
142	6112 - Lowland Aspen	Poletimber Well	14.0	34	81-110	N/A	2027 YOE Inventory: Switched to lowland based off imagery and field observations.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.																																																							
<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>35</td><td>Sapling</td><td>7</td><td>34</td></tr><tr><td>Red Maple</td><td>40</td><td>Sapling</td><td>7</td><td>34</td></tr><tr><td>Paper Birch</td><td>10</td><td>Sapling</td><td>5</td><td>34</td></tr><tr><td>Northern Pin Oak</td><td>5</td><td></td><td>7</td><td>34</td></tr><tr><td>Bigtooth Aspen</td><td>10</td><td>Sapling</td><td>7</td><td>34</td></tr></table>						Canopy Species		% Cover	Size Class	DBH	Age	Quaking Aspen	35	Sapling	7	34	Red Maple	40	Sapling	7	34	Paper Birch	10	Sapling	5	34	Northern Pin Oak	5		7	34	Bigtooth Aspen	10	Sapling	7	34	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Medium</td><td>Variable</td><td>Variable</td></tr><tr><td>Tag Alder</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Alternate-leaved Dogwood</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Medium	Variable	Variable	Tag Alder	Low	5 - 10 feet	5 - 10 feet	Alternate-leaved Dogwood	Low	5 - 10 feet	5 - 10 feet	Michigan Holly	Low	5 - 10 feet	5 - 10 feet	Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet
Canopy Species	% Cover	Size Class	DBH	Age																																																										
Quaking Aspen	35	Sapling	7	34																																																										
Red Maple	40	Sapling	7	34																																																										
Paper Birch	10	Sapling	5	34																																																										
Northern Pin Oak	5		7	34																																																										
Bigtooth Aspen	10	Sapling	7	34																																																										
Sub-Canopy Species	Density	Avg. Height	Size																																																											
Red Maple	Medium	Variable	Variable																																																											
Tag Alder	Low	5 - 10 feet	5 - 10 feet																																																											
Alternate-leaved Dogwood	Low	5 - 10 feet	5 - 10 feet																																																											
Michigan Holly	Low	5 - 10 feet	5 - 10 feet																																																											
Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet																																																											
143	122 - Road/Parking Lot	None	12.5			No	Bradford Rd.																																																							

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.																																													
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Swamp White Oak</td><td>10</td><td></td><td>14</td><td></td><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Red Maple</td><td>25</td><td></td><td>10</td><td></td><td>Northern Pin Oak</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Quaking Aspen</td><td>10</td><td></td><td>14</td><td>72</td><td>Swamp White Oak</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Northern Pin Oak</td><td>55</td><td></td><td>12</td><td>72</td><td></td><td></td><td></td><td></td></tr></table>									Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	Swamp White Oak	10		14		Red Maple	Medium	>20 feet	>20 feet	Red Maple	25		10		Northern Pin Oak	Medium	>20 feet	>20 feet	Quaking Aspen	10		14	72	Swamp White Oak	Low	10 - 20 feet	10 - 20 feet	Northern Pin Oak	55		12	72				
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size																																													
Swamp White Oak	10		14		Red Maple	Medium	>20 feet	>20 feet																																													
Red Maple	25		10		Northern Pin Oak	Medium	>20 feet	>20 feet																																													
Quaking Aspen	10		14	72	Swamp White Oak	Low	10 - 20 feet	10 - 20 feet																																													
Northern Pin Oak	55		12	72																																																	
145	3102 - Grass	None	1.1					2027 YOE Inventory: Grass opening. Oil and gas created.																																													
146	611 - Lowland Deciduous Forest	Unspecifed	11.4	3				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.																																													
<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>< 5 feet</td><td>< 5 feet</td></tr><tr><td>Quaking Aspen</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Maple</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>									Sub-Canopy Species	Density	Avg. Height	Size	Northern Pin Oak	Low	< 5 feet	< 5 feet	Quaking Aspen	Low	5 - 10 feet	5 - 10 feet	Red Maple	Low	5 - 10 feet	5 - 10 feet																													
Sub-Canopy Species	Density	Avg. Height	Size																																																		
Northern Pin Oak	Low	< 5 feet	< 5 feet																																																		
Quaking Aspen	Low	5 - 10 feet	5 - 10 feet																																																		
Red Maple	Low	5 - 10 feet	5 - 10 feet																																																		
147	6220 - Alder/Willow	None	13.3			No		2027 YOE Inventory: Tag alder and willow over marsh grass.																																													
<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Paper Birch</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Red Maple</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Swamp White Oak</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Alder</td><td>High</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Quaking Aspen</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Willow spp.</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>									Sub-Canopy Species	Density	Avg. Height	Size	Paper Birch	Low	10 - 20 feet	10 - 20 feet	Red Maple	Low	10 - 20 feet	10 - 20 feet	Swamp White Oak	Low	10 - 20 feet	10 - 20 feet	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Alder	High	5 - 10 feet	5 - 10 feet	Quaking Aspen	Low	10 - 20 feet	10 - 20 feet	Willow spp.	Medium	5 - 10 feet	5 - 10 feet													
Sub-Canopy Species	Density	Avg. Height	Size																																																		
Paper Birch	Low	10 - 20 feet	10 - 20 feet																																																		
Red Maple	Low	10 - 20 feet	10 - 20 feet																																																		
Swamp White Oak	Low	10 - 20 feet	10 - 20 feet																																																		
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																		
Alder	High	5 - 10 feet	5 - 10 feet																																																		
Quaking Aspen	Low	10 - 20 feet	10 - 20 feet																																																		
Willow spp.	Medium	5 - 10 feet	5 - 10 feet																																																		
148	4131 - Aspen, Oak	Poletimber Well	10.0	34	51-80	N/A		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.																																													
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Quaking Aspen</td><td>5</td><td>Sapling</td><td>6</td><td>34</td><td>Serviceberry (Juneberry)</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Maple</td><td>10</td><td>Sapling</td><td>5</td><td>34</td><td>Red Maple</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Bigtooth Aspen</td><td>60</td><td>Seedling</td><td>7</td><td>34</td><td>Northern Pin Oak</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Northern Pin Oak</td><td>25</td><td>Sapling</td><td>7</td><td>34</td><td></td><td></td><td></td><td></td></tr></table>									Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	Quaking Aspen	5	Sapling	6	34	Serviceberry (Juneberry)	Low	5 - 10 feet	5 - 10 feet	Red Maple	10	Sapling	5	34	Red Maple	Low	5 - 10 feet	5 - 10 feet	Bigtooth Aspen	60	Seedling	7	34	Northern Pin Oak	Medium	5 - 10 feet	5 - 10 feet	Northern Pin Oak	25	Sapling	7	34				
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size																																													
Quaking Aspen	5	Sapling	6	34	Serviceberry (Juneberry)	Low	5 - 10 feet	5 - 10 feet																																													
Red Maple	10	Sapling	5	34	Red Maple	Low	5 - 10 feet	5 - 10 feet																																													
Bigtooth Aspen	60	Seedling	7	34	Northern Pin Oak	Medium	5 - 10 feet	5 - 10 feet																																													
Northern Pin Oak	25	Sapling	7	34																																																	

Stand	Level 4 Cover Type	Size Density			Acres	Stand Age	BA Range	Managed Site	General Comments																																																							
149	6119 - Mixed Lowland Deciduous Forest	Poletimber Poor			18.6	34	1-50	N/A	2027 YOE Inventory: Former stand split into two. This portion is very wet. Regeneration from 1992 harvest is sparse but slowly filling in. Stand is not aspen dominated.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.																																																							
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Paper Birch</td><td>25</td><td>Sapling</td><td>5</td><td>34</td></tr><tr><td>Quaking Aspen</td><td>15</td><td>Seedling</td><td>7</td><td>34</td></tr><tr><td>Swamp White Oak</td><td>15</td><td>Pole</td><td>4</td><td>34</td></tr><tr><td>Northern Pin Oak</td><td>10</td><td>Pole</td><td>4</td><td>34</td></tr><tr><td>Red Maple</td><td>25</td><td>Sapling</td><td>5</td><td>34</td></tr><tr><td>Bigtooth Aspen</td><td>10</td><td>Seedling</td><td>7</td><td>34</td></tr></table>					Canopy Species	% Cover	Size Class	DBH		Age	Paper Birch	25	Sapling	5	34	Quaking Aspen	15	Seedling	7	34	Swamp White Oak	15	Pole	4	34	Northern Pin Oak	10	Pole	4	34	Red Maple	25	Sapling	5	34	Bigtooth Aspen	10	Seedling	7	34	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Maple</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Paper Birch</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Tag Alder</td><td>High</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Red Maple	Low	5 - 10 feet	5 - 10 feet	Paper Birch	Low	5 - 10 feet	5 - 10 feet	Tag Alder	High	10 - 20 feet	10 - 20 feet
Canopy Species	% Cover	Size Class	DBH	Age																																																												
Paper Birch	25	Sapling	5	34																																																												
Quaking Aspen	15	Seedling	7	34																																																												
Swamp White Oak	15	Pole	4	34																																																												
Northern Pin Oak	10	Pole	4	34																																																												
Red Maple	25	Sapling	5	34																																																												
Bigtooth Aspen	10	Seedling	7	34																																																												
Sub-Canopy Species	Density	Avg. Height	Size																																																													
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																													
Red Maple	Low	5 - 10 feet	5 - 10 feet																																																													
Paper Birch	Low	5 - 10 feet	5 - 10 feet																																																													
Tag Alder	High	10 - 20 feet	10 - 20 feet																																																													
150	6112 - Lowland Aspen	Poletimber Medium			20.8	34	51-80	N/A	2027 YOE Inventory: Sparse stand with canopy closure closer to 50% than 75%. Risk of regeneration failure if clearcut.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 lowland portion of the parent stand which partially converted to lowland brush.																																																							
<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>40</td><td></td><td>6</td><td>34</td></tr><tr><td>Swamp White Oak</td><td>10</td><td>Sapling</td><td>5</td><td></td></tr><tr><td>Red Maple</td><td>40</td><td>Sapling</td><td>5</td><td>34</td></tr><tr><td>Paper Birch</td><td>10</td><td>Sapling</td><td>5</td><td>34</td></tr></table>					Canopy Species	% Cover	Size Class	DBH		Age	Quaking Aspen	40		6	34	Swamp White Oak	10	Sapling	5		Red Maple	40	Sapling	5	34	Paper Birch	10	Sapling	5	34	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Willow spp.</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Tag Alder</td><td>High</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Cattail spp.</td><td>Low</td><td>Not Applicable</td><td>Not Applicable</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Willow spp.	Low	5 - 10 feet	5 - 10 feet	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Tag Alder	High	5 - 10 feet	5 - 10 feet	Cattail spp.	Low	Not Applicable	Not Applicable										
Canopy Species	% Cover	Size Class	DBH	Age																																																												
Quaking Aspen	40		6	34																																																												
Swamp White Oak	10	Sapling	5																																																													
Red Maple	40	Sapling	5	34																																																												
Paper Birch	10	Sapling	5	34																																																												
Sub-Canopy Species	Density	Avg. Height	Size																																																													
Willow spp.	Low	5 - 10 feet	5 - 10 feet																																																													
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																													
Tag Alder	High	5 - 10 feet	5 - 10 feet																																																													
Cattail spp.	Low	Not Applicable	Not Applicable																																																													
151	310 - Herbaceous Openland	None			2.0				2016 YOE Inventory: This is a maintained overhead powerline.																																																							
152	4131 - Aspen, Oak	Poletimber Medium			26.0	35	51-80	N/A	2018 YOE Inventory: Harvested under contract # 73-019-90-01 MacGruder Road Sale and 73-049-90-01 Lost Hipchain Sale. Cut all species 2" and up. Stand is mainly on a ridge, which slopes down to wetter ground. The stand is a matrix of open grassy areas and areas that are very dense. Aspen was considered over mature at time of harvest. The main soil types are Pipestone/Kingsville/Covert.																																																							
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Northern Pin Oak</td><td>20</td><td>Sapling</td><td>7</td><td></td></tr><tr><td>Paper Birch</td><td>5</td><td>Pole</td><td>4</td><td>35</td></tr><tr><td>Bigtooth Aspen</td><td>40</td><td>Sapling</td><td>5</td><td>35</td></tr><tr><td>Quaking Aspen</td><td>20</td><td>Sapling</td><td>5</td><td>35</td></tr><tr><td>Red Maple</td><td>15</td><td>Sapling</td><td>5</td><td>35</td></tr></table>					Canopy Species	% Cover	Size Class	DBH		Age	Northern Pin Oak	20	Sapling	7		Paper Birch	5	Pole	4	35	Bigtooth Aspen	40	Sapling	5	35	Quaking Aspen	20	Sapling	5	35	Red Maple	15	Sapling	5	35	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Low</td><td>Variable</td><td>Variable</td></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Low	Variable	Variable	Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet													
Canopy Species	% Cover	Size Class	DBH	Age																																																												
Northern Pin Oak	20	Sapling	7																																																													
Paper Birch	5	Pole	4	35																																																												
Bigtooth Aspen	40	Sapling	5	35																																																												
Quaking Aspen	20	Sapling	5	35																																																												
Red Maple	15	Sapling	5	35																																																												
Sub-Canopy Species	Density	Avg. Height	Size																																																													
Red Maple	Low	Variable	Variable																																																													
Northern Pin Oak	Low	5 - 10 feet	5 - 10 feet																																																													
153	623 - Emergent Wetland	None			2.8			No	Lowland grasses with dispersed willow and lowland hardwood perimeter. The main soil type is Kingsville																																																							
					<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Swamp White Oak</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Willow spp.</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>					Sub-Canopy Species	Density	Avg. Height	Size	Swamp White Oak	Medium	>20 feet	>20 feet	Red Maple	Medium	>20 feet	>20 feet	Willow spp.	Medium	5 - 10 feet	5 - 10 feet																																							
Sub-Canopy Species	Density	Avg. Height	Size																																																													
Swamp White Oak	Medium	>20 feet	>20 feet																																																													
Red Maple	Medium	>20 feet	>20 feet																																																													
Willow spp.	Medium	5 - 10 feet	5 - 10 feet																																																													
154	4199 - Other Mixed Upland Deciduous	Unspecified			8.9	3	Immature		2027 YOE Inventory: Regeneration is filling in but should continue to be monitored due to height being below 5 feet.Sale Closure: New stand. Harvested during the summer of 2022 under contract Magruder Mix. Clear-cut 2 inches and up. Stand mostly sits on a side slope transition between upland and 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.																																																							
					<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Bigtooth Aspen</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Northern Pin Oak</td><td>Medium</td><td>< 5 feet</td><td>< 5 feet</td></tr></table>					Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Low	5 - 10 feet	5 - 10 feet	Bigtooth Aspen	Low	5 - 10 feet	5 - 10 feet	Northern Pin Oak	Medium	< 5 feet	< 5 feet																																							
Sub-Canopy Species	Density	Avg. Height	Size																																																													
Red Maple	Low	5 - 10 feet	5 - 10 feet																																																													
Bigtooth Aspen	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
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.
156	4199 - Other Mixed Upland Deciduous	Unspecified	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 covertype 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.
157	413 - Aspen	Unspecified	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.
158	6230 - Cattail	None	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.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																		
160	4131 - Aspen, Oak	Sawtimber Well	24.7	87	81-110	N/A	2027 YOE Inventory: Variable density stand. North portion is sparse, poor quality aspen over medium density sapling maple and oak. Southern portions have better stocking with pockets of aspen separated by oak and maple. Total aspen canopy cover is around 40% and loosing vigor with natural succession occurring. Several oil wells within the stand boundary. SE corner blocked by low wet ground.																																																		
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>30</td><td></td><td>9</td><td>87</td></tr><tr><td>Bigtooth Aspen</td><td>40</td><td></td><td>12</td><td>87</td></tr><tr><td>White Oak</td><td>5</td><td></td><td>12</td><td></td></tr><tr><td>Paper Birch</td><td>5</td><td>Seedling</td><td>8</td><td></td></tr><tr><td>Black/Red (Hybrid) Oak</td><td>20</td><td></td><td>9</td><td></td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	30		9	87	Bigtooth Aspen	40		12	87	White Oak	5		12		Paper Birch	5	Seedling	8		Black/Red (Hybrid) Oak	20		9		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Serviceberry (Juneberry)</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Black/Red (Hybrid) Oak</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Serviceberry (Juneberry)	Low	10 - 20 feet	10 - 20 feet	Black/Red (Hybrid) Oak	Medium	>20 feet	>20 feet	Red Maple	Medium	>20 feet	>20 feet					
Canopy Species	% Cover	Size Class	DBH	Age																																																					
Red Maple	30		9	87																																																					
Bigtooth Aspen	40		12	87																																																					
White Oak	5		12																																																						
Paper Birch	5	Seedling	8																																																						
Black/Red (Hybrid) Oak	20		9																																																						
Sub-Canopy Species	Density	Avg. Height	Size																																																						
Serviceberry (Juneberry)	Low	10 - 20 feet	10 - 20 feet																																																						
Black/Red (Hybrid) Oak	Medium	>20 feet	>20 feet																																																						
Red Maple	Medium	>20 feet	>20 feet																																																						
161	3102 - Grass	None	1.0				2020 Well Site Inventory: Well site permit 1966 Plugged 11/22/1946 Chevron Recalculation																																																		
162	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	6.8	41	81-110	N/A	2027 YOE Inventory: New stand. Formerly part of a larger aspen stand. Aspen does not make up 40% of canopy closure. Western portions of the stand are fairly wet and dominated by maple saplings.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.																																																		
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>40</td><td>Sapling</td><td>6</td><td>41</td></tr><tr><td>Quaking Aspen</td><td>25</td><td>Seedling</td><td>8</td><td>41</td></tr><tr><td>Swamp White Oak</td><td>10</td><td>Sapling</td><td>5</td><td>41</td></tr><tr><td>Paper Birch</td><td>15</td><td>Sapling</td><td>5</td><td>41</td></tr><tr><td>Northern Pin Oak</td><td>5</td><td></td><td>8</td><td>41</td></tr><tr><td>Bigtooth Aspen</td><td>5</td><td>Seedling</td><td>8</td><td>41</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	40	Sapling	6	41	Quaking Aspen	25	Seedling	8	41	Swamp White Oak	10	Sapling	5	41	Paper Birch	15	Sapling	5	41	Northern Pin Oak	5		8	41	Bigtooth Aspen	5	Seedling	8	41	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Red Maple</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Tag Alder</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	Red Maple	Medium	10 - 20 feet	10 - 20 feet	Tag Alder	Medium	5 - 10 feet	5 - 10 feet
Canopy Species	% Cover	Size Class	DBH	Age																																																					
Red Maple	40	Sapling	6	41																																																					
Quaking Aspen	25	Seedling	8	41																																																					
Swamp White Oak	10	Sapling	5	41																																																					
Paper Birch	15	Sapling	5	41																																																					
Northern Pin Oak	5		8	41																																																					
Bigtooth Aspen	5	Seedling	8	41																																																					
Sub-Canopy Species	Density	Avg. Height	Size																																																						
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																						
Red Maple	Medium	10 - 20 feet	10 - 20 feet																																																						
Tag Alder	Medium	5 - 10 feet	5 - 10 feet																																																						
163	4139 - Aspen, Mixed Deciduous	Poletimber Medium	20.5	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 poorly stocked aspen with dense maple saplings and oak pockets. Regenerating aspen in this stand will be difficult. Non-forested wet pockets located in the stand.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.																																																		
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Paper Birch</td><td>5</td><td>Seedling</td><td>6</td><td>41</td></tr><tr><td>Red Maple</td><td>45</td><td></td><td>6</td><td>41</td></tr><tr><td>Quaking Aspen</td><td>20</td><td>Seedling</td><td>9</td><td>41</td></tr><tr><td>Bigtooth Aspen</td><td>20</td><td></td><td>9</td><td>41</td></tr><tr><td>Red Oak</td><td>10</td><td></td><td>9</td><td>41</td></tr></table>		Canopy Species	% Cover	Size Class	DBH	Age		Paper Birch	5	Seedling	6	41	Red Maple	45		6	41	Quaking Aspen	20	Seedling	9	41	Bigtooth Aspen	20		9	41	Red Oak	10		9	41	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Michigan Holly</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Nannyberry</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Tag Alder</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Low	10 - 20 feet	10 - 20 feet	Michigan Holly	Low	5 - 10 feet	5 - 10 feet	Nannyberry	Low	5 - 10 feet	5 - 10 feet	Tag Alder	Low	5 - 10 feet	5 - 10 feet	
Canopy Species	% Cover	Size Class	DBH	Age																																																					
Paper Birch	5	Seedling	6	41																																																					
Red Maple	45		6	41																																																					
Quaking Aspen	20	Seedling	9	41																																																					
Bigtooth Aspen	20		9	41																																																					
Red Oak	10		9	41																																																					
Sub-Canopy Species	Density	Avg. Height	Size																																																						
Red Maple	Low	10 - 20 feet	10 - 20 feet																																																						
Michigan Holly	Low	5 - 10 feet	5 - 10 feet																																																						
Nannyberry	Low	5 - 10 feet	5 - 10 feet																																																						
Tag Alder	Low	5 - 10 feet	5 - 10 feet																																																						
164	3102 - Grass	None	1.0				2020 Comments: well site permit plugged 05/26/1967																																																		
165	6223 - Inundated Shrub Swamp	None	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.																																																		
				<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Cattail spp.</td><td>High</td><td>Not Applicable</td><td>Not Applicable</td></tr><tr><td>Tag Alder</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Phragmites (spp.)</td><td>Medium</td><td>Not Applicable</td><td>Not Applicable</td></tr><tr><td>Michigan Holly</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Cattail spp.	High	Not Applicable	Not Applicable	Tag Alder	Medium	5 - 10 feet	5 - 10 feet	Phragmites (spp.)	Medium	Not Applicable	Not Applicable	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																														
Sub-Canopy Species	Density	Avg. Height	Size																																																						
Cattail spp.	High	Not Applicable	Not Applicable																																																						
Tag Alder	Medium	5 - 10 feet	5 - 10 feet																																																						
Phragmites (spp.)	Medium	Not Applicable	Not Applicable																																																						
Michigan Holly	Medium	5 - 10 feet	5 - 10 feet																																																						

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																			
166	3102 - Grass	None	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 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.																																			
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Black/Red (Hybrid) Oak</td><td>15</td><td>Log</td><td>1</td><td></td></tr><tr><td>Red Maple</td><td>5</td><td>Log</td><td>1</td><td>5</td></tr><tr><td>Quaking Aspen</td><td>15</td><td>Log</td><td>1</td><td>5</td></tr><tr><td>Bigtooth Aspen</td><td>65</td><td>Log</td><td>1</td><td>5</td></tr></table>								Canopy Species	% Cover	Size Class	DBH	Age	Black/Red (Hybrid) Oak	15	Log	1		Red Maple	5	Log	1	5	Quaking Aspen	15	Log	1	5	Bigtooth Aspen	65	Log	1	5										
Canopy Species	% Cover	Size Class	DBH	Age																																						
Black/Red (Hybrid) Oak	15	Log	1																																							
Red Maple	5	Log	1	5																																						
Quaking Aspen	15	Log	1	5																																						
Bigtooth Aspen	65	Log	1	5																																						
168	6113 - Lowland Maple	Poletimber 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 Magrudder Rd. but only marginal overall.																																			
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>68</td><td></td><td>9</td><td>65</td></tr><tr><td>Quaking Aspen</td><td>15</td><td></td><td>14</td><td>95</td></tr><tr><td>Paper Birch</td><td>2</td><td></td><td>10</td><td></td></tr><tr><td>Northern Pin Oak</td><td>10</td><td></td><td>10</td><td></td></tr><tr><td>Swamp White Oak</td><td>5</td><td></td><td>12</td><td></td></tr></table>								Canopy Species	% Cover	Size Class	DBH	Age	Red Maple	68		9	65	Quaking Aspen	15		14	95	Paper Birch	2		10		Northern Pin Oak	10		10		Swamp White Oak	5		12						
Canopy Species	% Cover	Size Class	DBH	Age																																						
Red Maple	68		9	65																																						
Quaking Aspen	15		14	95																																						
Paper Birch	2		10																																							
Northern Pin Oak	10		10																																							
Swamp White Oak	5		12																																							
<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Black Cherry</td><td>Low</td><td>Variable</td><td>Variable</td></tr><tr><td>Northern Pin Oak</td><td>Low</td><td>Variable</td><td>Variable</td></tr><tr><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Paper Birch</td><td>Low</td><td>>20 feet</td><td>>20 feet</td></tr></table>							Sub-Canopy Species	Density	Avg. Height	Size	Black Cherry	Low	Variable	Variable	Northern Pin Oak	Low	Variable	Variable	Red Maple	Medium	>20 feet	>20 feet	Paper Birch	Low	>20 feet	>20 feet																
Sub-Canopy Species	Density	Avg. Height	Size																																							
Black Cherry	Low	Variable	Variable																																							
Northern Pin Oak	Low	Variable	Variable																																							
Red Maple	Medium	>20 feet	>20 feet																																							
Paper Birch	Low	>20 feet	>20 feet																																							
169	6112 - Lowland Aspen	Poletimber Well	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.																																			
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Bigtooth Aspen</td><td>20</td><td>Seedling</td><td>9</td><td>41</td></tr><tr><td>Paper Birch</td><td>5</td><td>Seedling</td><td>6</td><td>41</td></tr><tr><td>Swamp White Oak</td><td>10</td><td>Sapling</td><td>6</td><td></td></tr><tr><td>Red Oak</td><td>5</td><td></td><td>8</td><td>41</td></tr><tr><td>Red Maple</td><td>20</td><td></td><td>6</td><td>41</td></tr><tr><td>Quaking Aspen</td><td>40</td><td></td><td>9</td><td>41</td></tr></table>								Canopy Species	% Cover	Size Class	DBH	Age	Bigtooth Aspen	20	Seedling	9	41	Paper Birch	5	Seedling	6	41	Swamp White Oak	10	Sapling	6		Red Oak	5		8	41	Red Maple	20		6	41	Quaking Aspen	40		9	41
Canopy Species	% Cover	Size Class	DBH	Age																																						
Bigtooth Aspen	20	Seedling	9	41																																						
Paper Birch	5	Seedling	6	41																																						
Swamp White Oak	10	Sapling	6																																							
Red Oak	5		8	41																																						
Red Maple	20		6	41																																						
Quaking Aspen	40		9	41																																						
<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Red Maple</td><td>Medium</td><td>>20 feet</td><td>>20 feet</td></tr><tr><td>Tag Alder</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Michigan Holly</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Nannyberry</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>							Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Medium	>20 feet	>20 feet	Tag Alder	Low	5 - 10 feet	5 - 10 feet	Michigan Holly	Low	5 - 10 feet	5 - 10 feet	Nannyberry	Low	5 - 10 feet	5 - 10 feet																
Sub-Canopy Species	Density	Avg. Height	Size																																							
Red Maple	Medium	>20 feet	>20 feet																																							
Tag Alder	Low	5 - 10 feet	5 - 10 feet																																							
Michigan Holly	Low	5 - 10 feet	5 - 10 feet																																							
Nannyberry	Low	5 - 10 feet	5 - 10 feet																																							

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
170	6119 - Mixed Lowland Deciduous Forest	Poletimber Medium	7.5	34	51-80	N/A	2027 YOE Inventory: New stand. Switched to lowland based off recent imagery. Sparse portion former aspen stand. Aspen is not the dominant species on this site. Regeneration risk if clearcut.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 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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	40	Sapling	5	34	Michigan Holly	Low		5 - 10 feet	5 - 10 feet
Bigtooth Aspen	5	Sapling	7	34	Red Maple	Medium		Variable	Variable
Quaking Aspen	30	Sapling	6	34	Tag Alder	Low		5 - 10 feet	5 - 10 feet
Northern Pin Oak	10	Sapling	7	34	Alternate-leaved Dogwood	Low		5 - 10 feet	5 - 10 feet
Paper Birch	15	Sapling	5	34	Northern Pin Oak	Low		5 - 10 feet	5 - 10 feet
171	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	24.4	41	81-110	N/A	2027 YOE Inventory: New stand. Split out from former larger aspen stand. This portion is lowland with a minimal aspen component.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Paper Birch	25	Sapling	5	41	Tag Alder	Medium	5 - 10 feet	5 - 10 feet	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.
Red Maple	45	Sapling	6	41	Red Maple	Medium	10 - 20 feet	10 - 20 feet	
Swamp White Oak	10	Sapling	5	41	Michigan Holly	Medium	5 - 10 feet	5 - 10 feet	
Northern Pin Oak	5		8	41					
Quaking Aspen	15	Seedling	8	41					
172	6112 - Lowland Aspen	Poletimber Well	29.3	41	81-110	N/A	2027 YOE Inventory: New stand. Formerly part of a larger aspen stand. Hydrology is a mix of lowland pockets and drainages seperated by slightly upland knobs. Aspen is evenly distributed across the stand except for the westest pockets.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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Swamp White Oak	5	Sapling	5	41	Tag Alder	Medium		5 - 10 feet	5 - 10 feet
Red Maple	15	Sapling	6	41	Michigan Holly	Medium		5 - 10 feet	5 - 10 feet
Paper Birch	15	Sapling	5	41	Red Maple	Medium		10 - 20 feet	10 - 20 feet
Quaking Aspen	30	Seedling	8	41					
Bigtooth Aspen	20	Seedling	8	41					
Red Oak	5		8	41					
Northern Pin Oak	10		8	41					
173	6119 - Mixed Lowland Deciduous Forest	Poletimber Medium	5.8	41	1-50	N/A	2027 YOE Inventory: New stand. Formerly part of a larger aspen stand. Low density trees over brush. Scattered pockets of aspen. Stand will fill in over time.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.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Quaking Aspen	35	Seedling	8	41	Red Maple	Medium		10 - 20 feet	10 - 20 feet
Red Maple	25	Sapling	6	41	Tag Alder	Medium		5 - 10 feet	5 - 10 feet
Paper Birch	15	Sapling	5	41	Michigan Holly	Medium		5 - 10 feet	5 - 10 feet
Northern Pin Oak	10		8	41					
Swamp White Oak	15	Sapling	5	41					

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
174	4199 - Other Mixed Upland Deciduous	Unspecified	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.