



# Compartment Review Presentation

Gladwin Forest Management Unit

Compartment 73020

Entry Year 2018

Acreage: 1,284

County Clare

Management Area: Upper Muskegon

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**Revision Date:** 2016-06-13

**Stand Examiner:** Tim Gallagher

**Legal Description:**

T19N - R03W Sections 30 & 31

T19N - R04W Sections 24, 25 & 36

**Identified Planning Goals:**

Vegetation management in the Upper Muskegon management area (MA) will provide forest products; maintain or enhance wildlife habitat; protect areas of unique threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year period will focus on harvesting older jack pine and balancing age class distributions of oak, aspen and red pine. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests for hunting and other wildlife-related recreation. Expected trends within this 10-year planning period are the need to manage exotic species (especially Phragmites and glossy buckthorn), the need to continue to manage cover types for a balanced age-class distribution and an expected increase in recreation pressure.

**Soil and topography:**

The area varies from well drained Grayling sands in the outwash plains to poorly drained mucky Lupton-Markey soils as you enter the Mostetler Creek Floodplain. The terrain varies from nearly level to gently rolling hills to the short steep banks that lead down to the floodplain of Mostetler Creek.

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

The state land in this compartment is spread out over 5 sections, the state and private lands are intermixed resulting in miles of private property lines. The state land occurs in large contiguous blocks. Private holdings are mostly comprised of large (40 acres or greater) forested single holdings with absentee landowners. There are numerous permanent residences scattered through out the entire compartment as well. The town of Dodge City is located directly adjacent to the compartment. The location of this town concentrates use on the state land.

**Unique Natural Features:**

This area has a variety of rare species that could be or are present including; Secretive Locust, Eastern Box Turtle, Bald Eagle, Osprey, Great Blue Heron, Wood Turtle, Woodland Vole and Blanding's Turtle.

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

None known.

**Special Management Designations or Considerations:**

Continue to manage aspen and oak stands to maintain a variety of age classes to enhance deer and grouse habitat.

**Watershed and Fisheries Considerations:**

Mostetler Creek should be treated as a cold water fishery as it is a designated trout stream from M-61 south and is part of the Tobacco River watershed. Mostetler Creek is in a valley and has a natural buffer of lowland brush, lowland timber types and marsh directly adjacent to its banks the river corridor should be considered sensitive wetland. The headwaters to Mostetler Creek are within State Land within section 24.

**Wildlife Habitat Considerations:**

Wildlife Habitat Considerations: Compartment #20. Both upland and lowland systems are present, making it suitable for a number of wildlife species. This area is heavily utilized by out-of-County grouse and woodcock hunters and remains a very popular location for archers and firearm deer hunters. Game species likely to be present in this compartment include black bear, bobcat, raccoon, coyote, wild turkey, ruffed grouse and white-tailed deer. Many bird species stand to benefit from the juxtaposition of lowland and upland habitats present in the compartment. These species include gray catbird, redbay vireo, white-breasted nuthatch, tufted titmouse, black-capped chickadees, eastern kingbirds and northern flicker. The compartment is easily accessible to hunters via Rogers Road and Mostetler Road.

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

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift are the Pennsylvanian Saginaw and Grand River Formations. The Saginaw Formation is used for clay/shale in other areas of the State. A gravel pit is located in Section 26 and there is potential on the uplands. This area has had limited oil and gas development. None of the compartment is currently leased.

## **Vehicle Access:**

Access to most of the compartment is good via the county road system and state two tracks that are in place. There are access limitations to State Land in section 24. All the State Land within section 24 (T19N – R4W) is landlocked by private.

## **Survey Needs:**

None needed for current prescribed treatments.

## **Recreational Facilities and Opportunities:**

No official facilities. The area receives moderate hunting pressure most of which is deer hunters. Light fishing pressure occurs on Mostetler Creek. Moderate dispersed camping occurs mainly during the firearm deer hunting season. A private campground is located directly adjacent to the compartment.

## **Fire Protection:**

A potential fire control problem exists due to the heavy rural /urban interface within this compartment.

## **Additional Compartment Information:**

In September of 2015, both Hamilton and Hayes Townships were involved in an Adopt-A-Forest clean-up within the compartment. Volunteers spent a total of 26 hours removing approximately 20 cubic yards of trash, 43 tires, and approximately 1.5 cubic yards of scrap metal from the area.

Currently there is 280 acres of state forest land within section 24 (T19N - R4W) that is land locked by private property. FRD staff is currently exploring access and management options for this 280 acres.

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

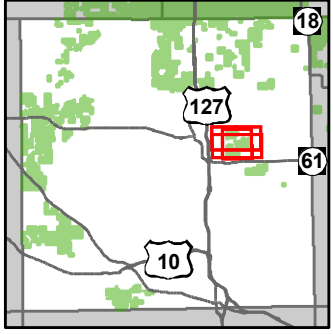
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

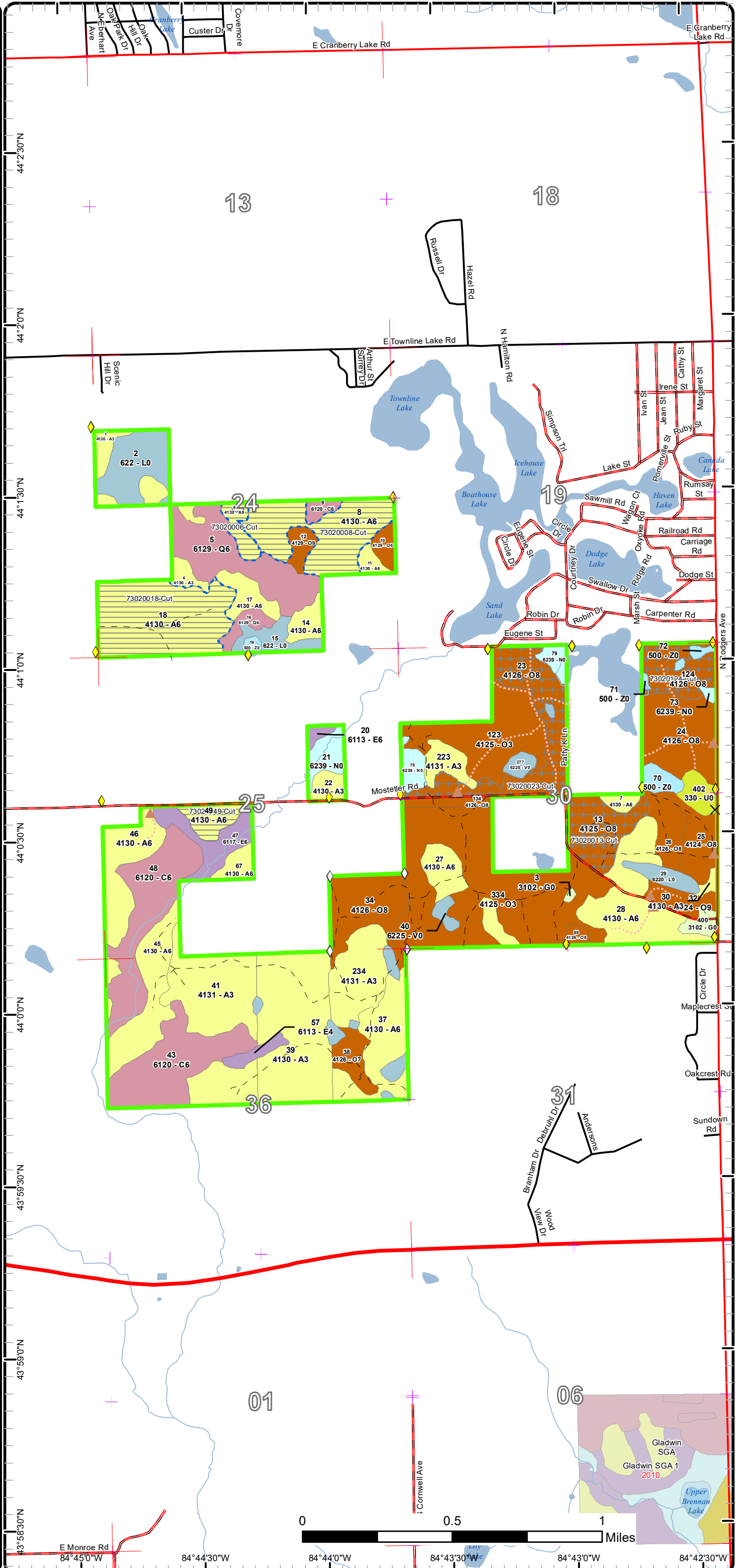
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map

Compartment: 20  
 T19N - R03W Sec. 30,31  
 County: Clare  
 Unit: Gladwin  
 Mgmt Area: Upper Muskegon  
 YOE: 2018  
 Acres: 1284 GIS Calculated  
 Examiner: Tim Gallagher  
 Map Revised: 6/10/2016  
 Map Phase: Web-Post



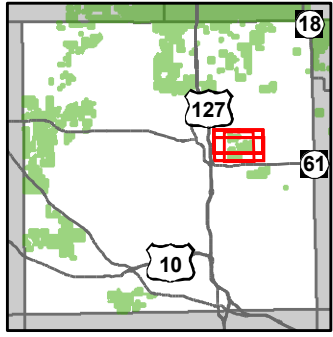
- Miris Corners
- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- X Gate
- ▲ Berms
- County Paved Roads
- Paved Roads
- County Gravel Roads
- - Poor Dirt Roads
- - Closed Roads
- Rivers
- Compartment Boundary
- Treatments with Site Conditions
- Clearcut (w/Reserves)
- Harvest, Overstory Removal
- 412 - Oak Types
- 413 - Aspen Types
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes



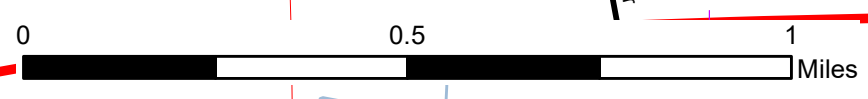
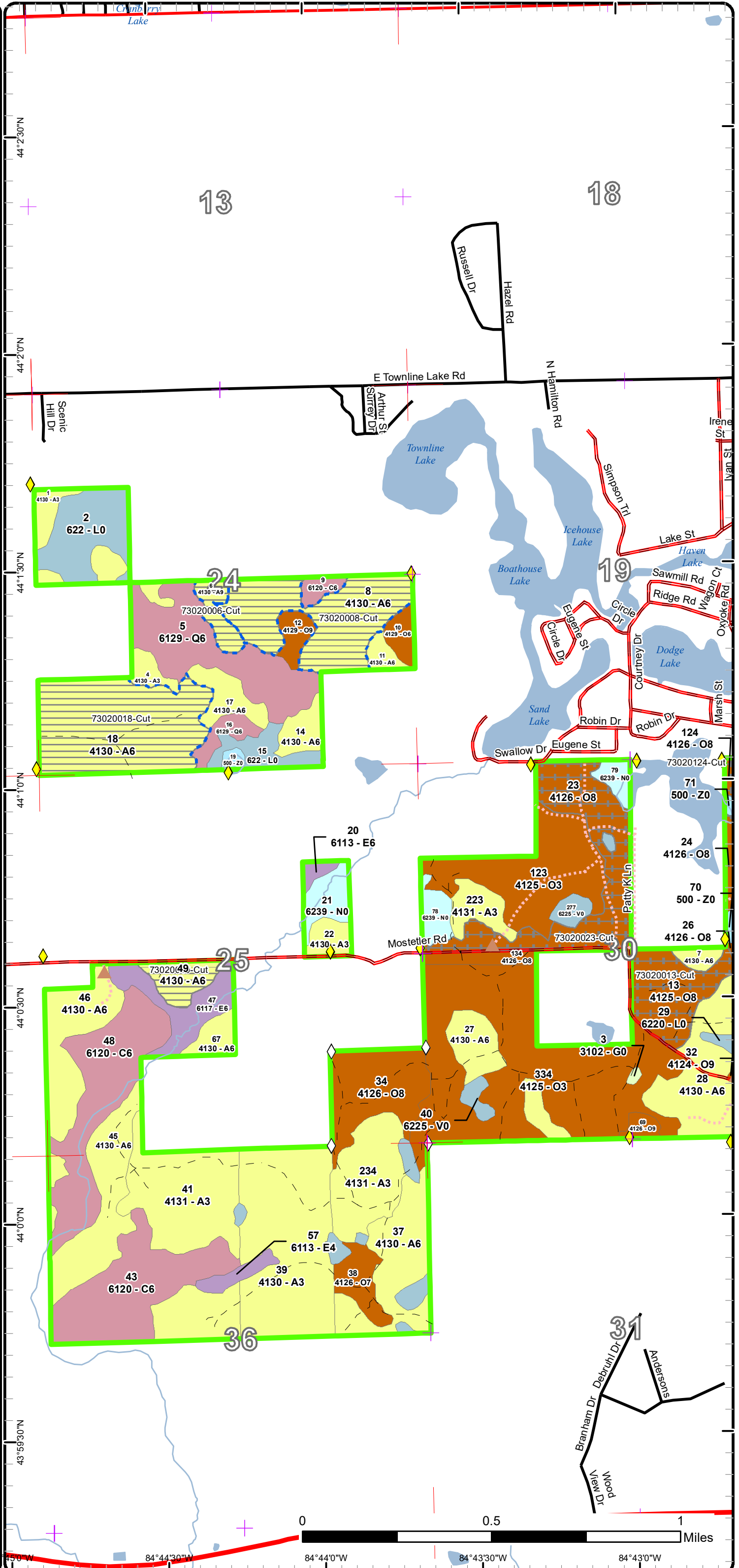
43°58'30"N 84°45'0"W 84°44'30"W 84°44'0"W 84°43'30"W 84°43'0"W 84°42'30"W  
 E Monroe Rd Cornwell Ave

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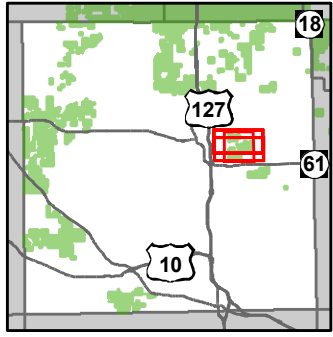


84°44'30"W 84°44'0"W 84°43'30"W 84°43'0"W

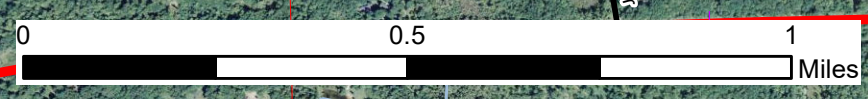
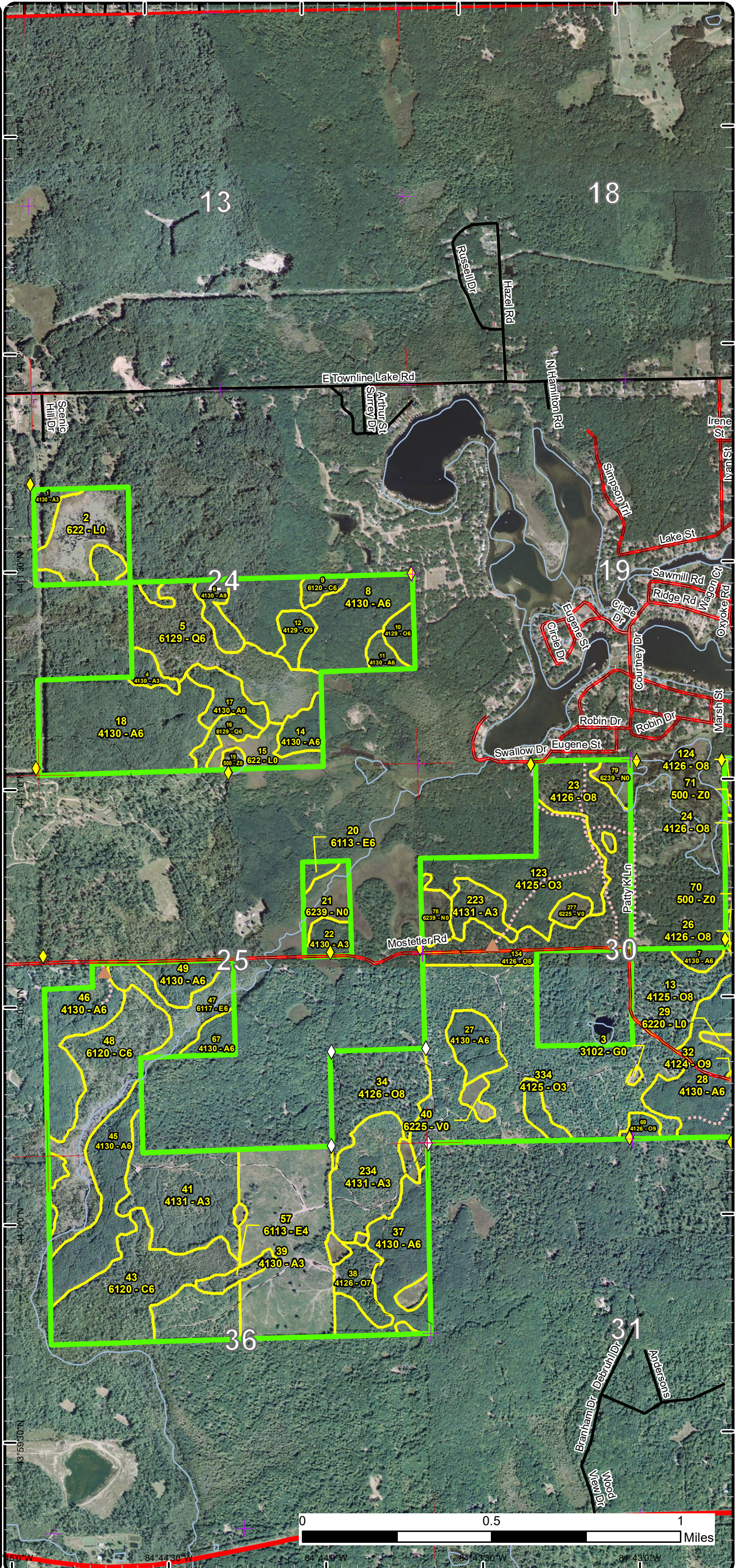


# Stand Boundary Map

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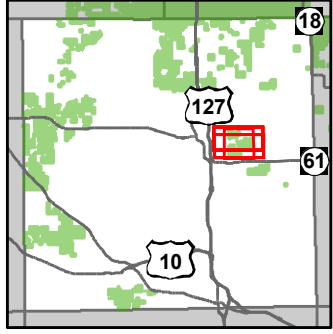


— 84° 43' 50" W    84° 44' 30" W    84° 43' 30" W    84° 43' 10" W

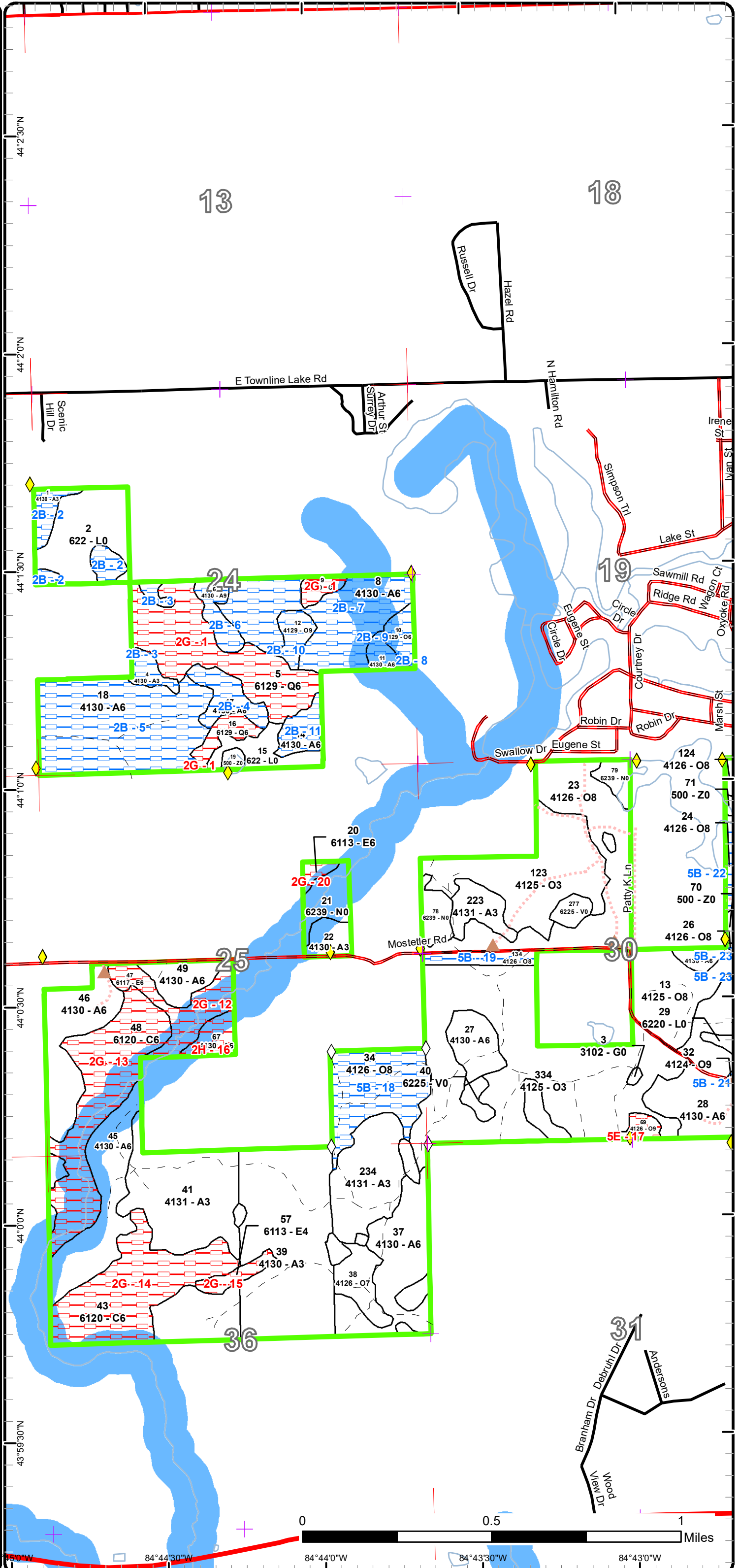


# Special Conservation Areas & Site Conditions Map

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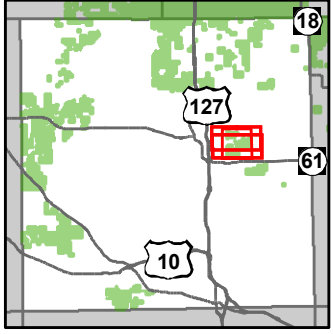
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- Rivers
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 2B: Unknown if access through adjacent landowner(s) is possible
- 5B: Maintain for regeneration purposes
- 2G: Too wet (sensitive soils, does not include access issues)
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 5E: Long-Term Retention
- Stand Boundaries
- Special Conservation Areas
- Cold Water Streams
- High Priority Trout Stream Buffer



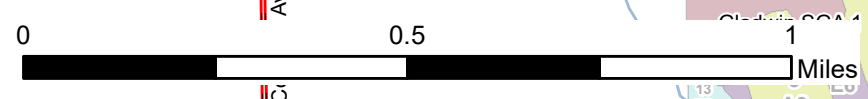
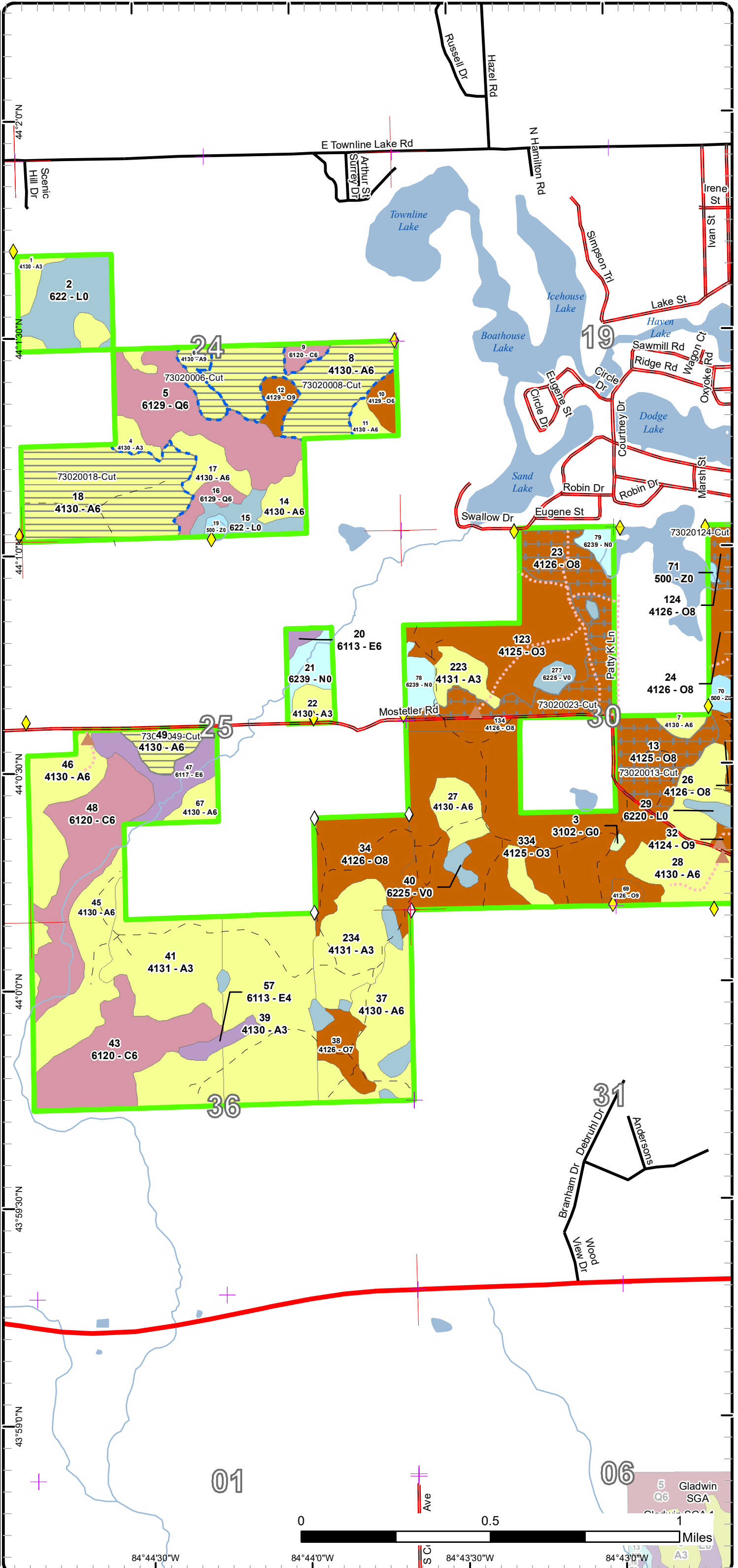
84°50'W 84°44'30"W 84°44'0"W 84°43'30"W 84°43'0"W

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84°44'30"W      84°44'0"W      84°43'30"W      84°43'0"W

5 Gladwin  
 Q6 SGA  
 A3 LU

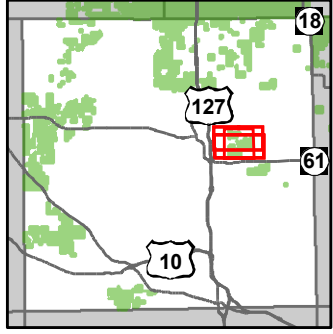




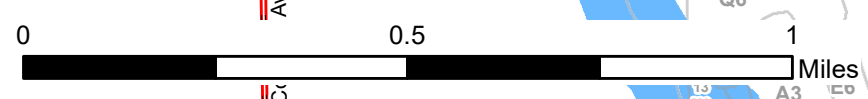
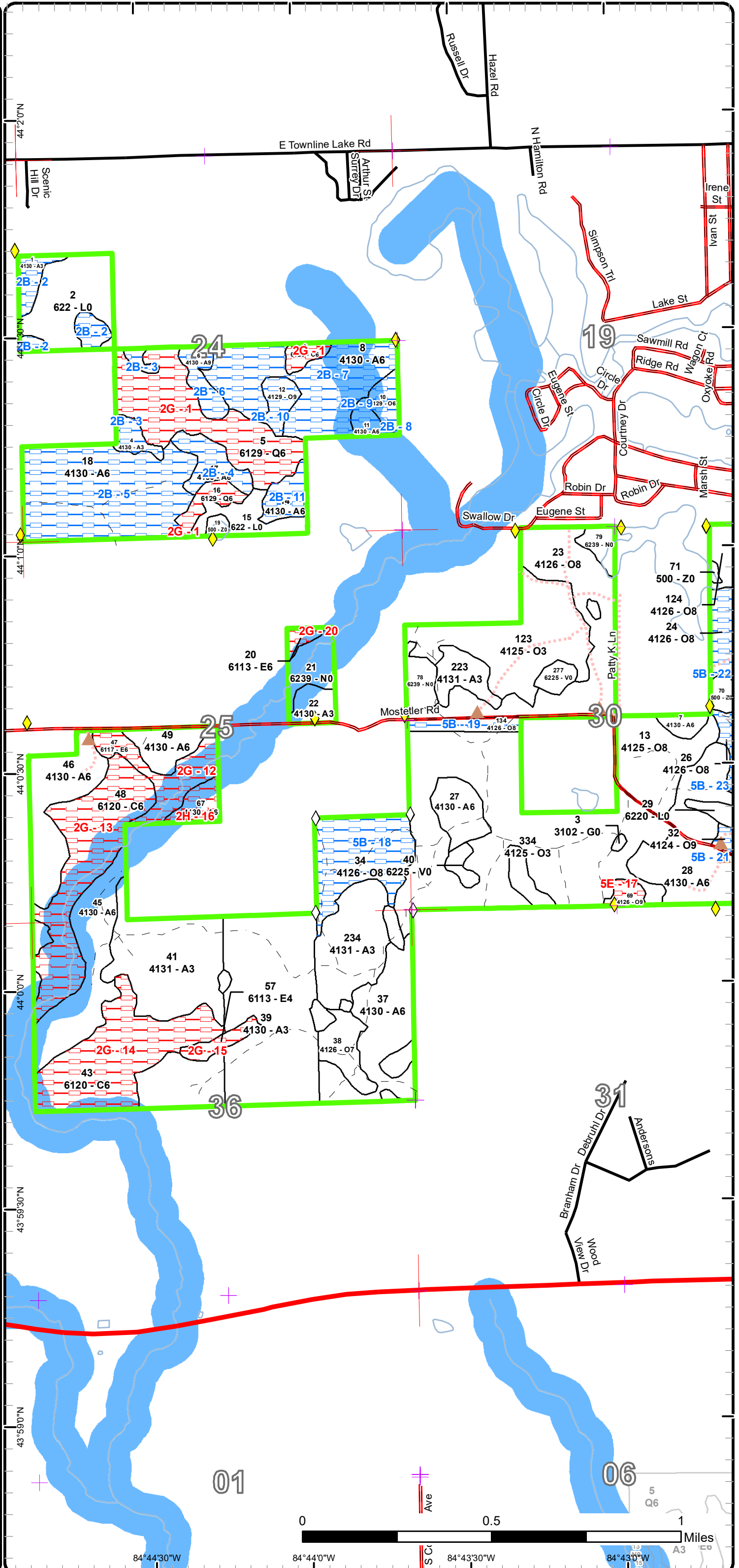


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# Report 1 – Total Acres by Cover Type and Age Class

Gladwin Mgt. Unit

Compartment 20

Year of Entry 2018

Tim Gallagher : Examiner



## Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	75	117	223	0	129	0	0	0	8	0	0	0	0	0	0	0	0	552
Bog	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	107	0	0	0	0	0	107
Herbaceous Openland	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Low-Density Trees	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	47	0	7	0	0	0	0	0	54
Lowland Deciduous	0	0	0	0	0	0	0	0	3	24	0	0	0	0	0	0	0	0	27
Lowland Shrub	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
Marsh	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Oak	0	0	172	0	0	6	0	0	28	162	46	0	0	0	0	0	0	11	425
Water	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
<b>Total</b>	<b>119</b>	<b>75</b>	<b>289</b>	<b>223</b>	<b>0</b>	<b>135</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>173</b>	<b>117</b>	<b>0</b>	<b>114</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>1284</b>





## Report 2 – Treatment Summary

Gladwin Mgt. Unit

Year of Entry: 2018

Acres of Harvest

Compartment 20

Total Compartment Acres: 1,284

Commercial Harvest - 114  
 Harvests with Site Condition - 126  
 Next Step Harvest - 0  
 Habitat Cut - 0

### Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	137	0	0	0	0	0	0	0	0	137
Oak	0	0	0	0	0	0	103	0	0	103
<b>Total</b>	<b>137</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>103</b>	<b>0</b>	<b>0</b>	<b>241</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	241	0	0	0	0	0	0	0	0	241
Next Step	0	0	0	0	0	0	241	0	0	241
<b>Total</b>	<b>241</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>241</b>	<b>0</b>	<b>0</b>	<b>481</b>





Stand Name	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
6	73020006-Cut	8.0	4130 - Aspen	Sawtimber Well	89	111-140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition: Unknown Access</b>								
<u>Prescription Specs:</u> Clearcut with reserves 2" spec, manage for natural regeneration. A mix of aspen, red maple and mixed hardwood regeneration is expected. Focus retention along wet ground and mark to leave trees individually and in small groups focus on leaving wind firm trees, mast producing trees, special aesthetic trees, den trees and or course woody debris trees.											
<u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Acceptable Regen:</u> A mix of aspen, red maple and mixed hardwood regeneration is expected.											
<u>Other Comment:</u> Only access is across private property.											
<u>Proposed Start Date:</u> 10/01/2017											
8	73020008-Cut	50.6	4130 - Aspen	Poetimber Well	45	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition: Unknown Access</b>								
<u>Prescription Specs:</u> Clearcut with reserves 2" spec, manage for natural regeneration. A mix of aspen, red maple and mixed hardwood regeneration is expected. Focus retention along wet ground and mark to leave trees individually and in small groups focus on leaving wind firm trees, mast producing trees, special aesthetic trees, den trees and or course woody debris trees.											
<u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Acceptable Regen:</u> A mix of aspen, red maple and mixed hardwood regeneration is expected.											
<u>Other Comment:</u> Only access is across private property.											
<u>Proposed Start Date:</u> 10/01/2017											
13	73020013-Cut	28.1	4125 - Black, N. Pin Oak	Sawtimber Medium	79	1-50	Harvest	Overstory Removal	4126 - White, Black, N. Pin Oak	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription Specs:</u> Overstory removal with reserves releasing oak regeneration that is in place. Leave all red and white pine. 4" DBH spec. To meet retention guidelines mark to leave scattered oak trees in small groups and individually. Target leaving wind firm trees, mast producing trees, special aesthetic trees, den trees and possible future den trees and or course woody debris trees.											
<u>Next Step Treatments:</u> Monitoring, Natural Regen (Intermediate)											
<u>Acceptable Regen:</u> Releasing established oak regeneration, mixed with natural aspen and red maple regeneration are acceptable.											
<u>Other Comment:</u> Address visual concerns along Mosteller Road. If possible leave scattered slash on hill side above Mosteller Road to discourage hill climb activities.											
<u>Proposed Start Date:</u> 10/01/2017											
18	73020018-Cut	67.5	4130 - Aspen	Poetimber Well	45	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition: Unknown Access</b>								
<u>Prescription Specs:</u> Clearcut with reserves 2" spec, manage for natural regeneration. A mix of aspen, red maple and mixed hardwood regeneration is expected. Focus retention along wet ground and mark to leave trees individually and in small groups focus on leaving wind firm trees, mast producing trees, special aesthetic trees, den trees and or course woody debris trees.											
<u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Acceptable Regen:</u> A mix of aspen, red maple and mixed hardwood regeneration is expected.											
<u>Other Comment:</u> Only access is across private property.											
<u>Proposed Start Date:</u> 10/01/2017											





S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
23	73020023-Cut	51.7	4126 - White, Black, N. Pin Oak	Sawtimber Medium	89	1-50	Harvest	Overstory Removal	4126 - White, Black, N. Pin Oak	Even-Aged	Proposal

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

Prescription Overstory removal with reserves releasing oak regeneration that is in place. Leave all red and white pine. 4" DBH spec on the oak, 2" DBH spec on all other hardwood species. To meet retention guidelines mark to leave scattered oak trees in small groups and individually. Target leaving wind firm trees, mast producing trees, special aesthetic trees, den trees and possible future den trees and or course woody debris trees. Also buffer the adjacent bog stands and marsh stands. (20' - 60' buffer)

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Releasing established oak regeneration, mixed with natural aspen and red maple regeneration are acceptable.

Regen:

Other Address visual concerns at south end of stand along Mosteller Road and at north end of stand along subdivision.

Comment:

Proposed Start Date: 10/01/2017

49	73020049-Cut	10.9	4130 - Aspen	Poetimber Well	45	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Clearcut with reserves 2" spec, manage for natural regeneration. A mix of aspen, red maple and mixed hardwood is expected. Focus retention around wet ground to the south.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventary)

Treatments:

Acceptable A mix of natural regeneration, aspen, red maple and mixed hardwood.

Regen:

Other Harvest on dry or frozen ground due to lower wet soil conditions.

Comment:

Proposed Start Date: 10/01/2017

124	73020124-Cut	23.7	4126 - White, Black, N. Pin Oak	Sawtimber Medium	89	1-50	Harvest	Overstory Removal	4126 - White, Black, N. Pin Oak	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Overstory removal with reserves releasing oak regeneration that is in place. Leave all red and white pine. 4" DBH spec. To meet retention guidelines mark to leave scattered oak trees in small groups and individually. Target leaving wind firm trees, mast producing trees, special aesthetic trees, den trees and possible future den trees and or course woody debris trees.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Releasing oak understory that is in place.

Regen:

Other Address visual concerns along Rogers Ave. Focus leaving retention trees around scattered Z and N types.

Comment:

Proposed Start Date: 10/01/2017

**Total Treatment  
Acreage Proposed: 240.6**



## Report 4 – Site Conditions

Gladwin Mgt. Unit  
Tim Gallagher : Examiner

Compartment: 20  
Year of Entry: 2018

### Availability for Management

Total Acres	Acres Available	Acres Avail			Dominant Site Conditions				
		With Condition	Not Available		2B	5B	2G	2H	5E
553	377	<b>169</b>	7	Aspen	<b>169</b>			7	
19	19	<b>0</b>	0	Bog					
107	0	<b>0</b>	107	Cedar			107		
7	7	<b>0</b>	0	Herbaceous Openland					
9	9	<b>0</b>	0	Low-Density Trees					
54	0	<b>0</b>	54	Lowland Conifers			54		
27	0	<b>0</b>	27	Lowland Deciduous			27		
48	48	<b>0</b>	0	Lowland Shrub					
24	24	<b>0</b>	0	Marsh					
425	287	<b>135</b>	4	Oak	<b>13</b>	<b>123</b>			4
12	12	<b>0</b>	0	Water					
1,284	781	<b>304</b>	199	Total Forested Acres	<b>182</b>	<b>123</b>	189	7	4
	61%	<b>24%</b>	15%	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	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	58	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Headwaters area of Mostetler Creek. Very wet soils. Landlocked by private. Only access is across private land. Too wet for commercial harvest.							
2	Available	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Land locked by private. Only access is across private land.							



## Report 4 – Site Conditions

Gladwin Mgt. Unit  
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Compartment: 20  
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3	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	7	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Land locked by private. Only access is across private land.							
4	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	11	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Land locked by private. Only access is across private land.							
5	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	68	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Land locked by private. Only access is across private land.							
6	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Land locked by private. Only access is across private land.							
7	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	51	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Land locked by private. Only access is across private land.							
8	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Land locked by private. Only access is across private land.							



## Report 4 – Site Conditions

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Tim Gallagher : Examiner

Compartment: 20  
Year of Entry: 2018

9	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Land locked by private. Only access is across private land.							
10	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	7	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Land locked by private. Only access is across private land.							
11	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
12	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	19	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Very wet soils. Too wet for commercial harvest.							
13	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	52	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Very wet stand with E type inclusions. In the Mostetler Creek floodplain. Heavy beaver activity, large areas of the creek bottom lands are being flooded and the timber (Cedar) is standing dead in these flooded areas. Ash is all dying/dead. No commercial treatment, too wet.							



## Report 4 – Site Conditions

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14	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	51	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Very wet stand. No commercial treatment, to wet.							
15	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Very wet stand. Standing water, lowland brush, bogs. No commercial harvest possible, to wet.							
16	<b>Unavailable</b>	<b>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</b>	7	2B: Unknown if access through adjacent landowner(s) is possible	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified
<b>Comments:</b> Habitat Cut 1990. Access for commercial harvest could only be across private land.							
17	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	4	5C: Delay treatment for age/size class diversity or exceptional site quality	3L: Other wildlife concerns	Unspecified	Unspecified
<b>Comments:</b> Small stand of mature oak that was left when surrounding oak stand was clearcut in 2000. Leave stand for diversity in an area that has been managed by clearcutting over the last several rotations.							
18	<b>Available</b>	<b>5B: Maintain for regeneration purposes</b>	33	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Shelterwood harvest 2011/2012 Springwood Oaks 73-002-09-01. Residual was marked down to 46 sq.ft. O3 understory (4' - 10' tall) is not as established in this stand as some of the other oak stands. Hold 10 years. Aspen and red maple regen is in isolated small pockets. Understory is dominated by oak seedlings and oak stump sprouts.							

## Report 4 – Site Conditions

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19	<b>Available</b>	<b>5B: Maintain for regeneration purposes</b>	7	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> All aspen, red maple and some oak cut in 2002. Shelterwood harvest 2011/2012 Springwood Oaks 73-002-09-01, crown closure was reduced down to 40% - 60%. Residual 40 sq.ft. Stand is a buffer between Mostetler Road and a large clearcut to the south. Very high visual impact with this stand. Hold 10 years, harvesting stand north of road this year of entry.</p>							
20	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	3	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Very wet soils. Landlocked by private. Only access is across private land. Too wet for commercial harvest.</p>							
21	<b>Available</b>	<b>5B: Maintain for regeneration purposes</b>	10	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Hold and evaluate next rotation allowing the oak understory to become more established.</p>							
22	<b>Available</b>	<b>5B: Maintain for regeneration purposes</b>	41	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Hold and evaluate next rotation allowing the oak understory to become more established. Harvesting the stand to the north this YOY. Highly visible stand along Rogers Ave.</p>							
23	<b>Available</b>	<b>5B: Maintain for regeneration purposes</b>	15	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Hold and evaluate next rotation allowing the oak understory to become more established.</p>							



**Report 4 – Site Conditions**

**Gladwin Mgt. Unit**  
**Tim Gallagher : Examiner**

**Compartment: 20**  
**Year of Entry: 2018**

24	<b>Available</b>	<b>5B: Maintain for regeneration purposes</b>	17	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
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**Comments:**  
Selection harvest 2011/2012 Springwood Oaks 73-002-09-01. Residual 60 sq.ft. Leaving the overstory in place for one more rotation would benefit the understory.

Mgt. Unit

Compartment: #Type!

Year of Entry:



## Report 5 – PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

\* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
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Comments

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**Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS**

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

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

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	Sapling Well	12.2	21	Immature	Clear cut with private access 1995. Access issues, landlocked by private.
4	4130 - Aspen	Sapling Well	7.1	21	Immature	Clearcut with private access 1995. Access issues, landlocked by private.
5	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	47.3	95	111-140	Dense mixed conifer / hardwood swamp. Headwaters area of Mostetler Creek. Stand varies from areas of pure conifers to conifer / hardwood pockets and areas of L understory. Very wet soils. Landlocked by private.
6	4130 - Aspen	Sawtimber Well	8.0	89	111-140	WLD was to habitat cut last YOE and arrange access. As far as I can tell no habitat cut took place. Landlocked by private.
7	4130 - Aspen	Poletimber Well	3.9	25	81-110	Clearcut 1990. A few scattered low wet pockets however, stand is mostly upland.
8	4130 - Aspen	Poletimber Well	50.6	45	81-110	Clearcut 1971. Very nice aspen stand. Landlocked by private.
9	6120 - Lowland Cedar	Poletimber Well	4.1	110	111-140	Landlocked by private.
10	4129 - Mixed Oak	Poletimber Well	6.0	45	1-50	Clearcut 1971. Mix of oak, red maple and cherry. Landlocked by private.
11	4130 - Aspen	Poletimber Well	4.3	26	Immature	Habitat cut 1990. Wet site A3/L. Landlocked by private.
12	4129 - Mixed Oak	Sawtimber Well	6.5	86	111-140	Prescribed for shelterwood-seed 20 years ago but not harvest. Landlocked by private.
13	4125 - Black, N. Pin Oak	Sawtimber Medium	28.1	79	1-50	Partial harvest 2002, all maple, aspen and marked oak cut. Shelterwood harvest 2012, 40 sq.ft. oak saw logs left. Fully stocked oak understory is in place with pockets of red maple and aspen regen as well. Understory is dominated by oak saplings and stump sprouts. Understory is the result of past partial
14	4130 - Aspen	Poletimber Well	8.3	26	Immature	Habitat cut 1990. Land locked by private. Only access is across private land.
16	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	6.6	110	141-170	Landlocked by private.
17	4130 - Aspen	Poletimber Well	11.0	25	Immature	Clearcut 1991. Landlocked by private.
18	4130 - Aspen	Poletimber Well	67.5	45	81-110	Clearcut 1971. Very nice aspen stand. Landlocked by private.
20	6113 - Lowland Maple	Poletimber Well	2.8	89	51-80	Very wet mucky stand. In floodplain of Mostetler Creek. Landlocked by Mostetler Creek and private.





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	4130 - Aspen	Sapling Well	7.0	16	Immature	Clearcut 2000. Very nice aspen regen.
23	4126 - White, Black, N. Pin Oak	Sawtimber Medium	51.7	89	1-50	Shelterwood harvest 2011/2012 Springwood Oaks 73-002-09-01. Very high visual impact with this stand. Residual 39 sq.ft. A mix of hardwood regeneration is in place.
24	4126 - White, Black, N. Pin Oak	Sawtimber Medium	40.7	89	51-80	Shelterwood harvest 2011/2012 Springwood Oaks 73-002-09-01. Residual 60 sq.ft. Decent quality oak. A mix of hardwood regeneration is in place, leaving the overstory in place for one more rotation would benefit the understory. Very high visual impact with this stand. Dense Mr3/Mr4 understory in many areas of the stand. Scattered mature red pine and aspen. What aspen is left is falling apart and making snags. Semi steep bank above Z type at south end of stand.
25	4124 - Red with White Oak	Sawtimber Medium	17.0	92	51-80	Selection harvest 2011/2012 Springwood Oaks 73-002-09-01. Residual 60 sq.ft. Semi steep bank at north end of stand above Z type. Good quality oak. A mix of hardwood regeneration is in place, leaving the overstory in place for one more rotation would benefit the understory.
26	4126 - White, Black, N. Pin Oak	Sawtimber Medium	14.9	92	51-80	Shelterwood harvest 2011/2012 Springwood Oaks 73-002-09-01. Residual 60 sq.ft. Semi steep bank at north end of stand above Z type. Decent quality oak. A mix of hardwood regeneration is in place, leaving the overstory in place for one more rotation would benefit the understory.
27	4130 - Aspen	Poletimber Well	18.3	25	81-110	Clearcut 1990. A few scattered low wet pockets however, stand is mostly upland.
28	4130 - Aspen	Poletimber Well	48.8	25	81-110	Clearcut 1990. A few scattered low wet pockets however, stand is mostly upland.
30	4130 - Aspen	Sapling Well	2.3	16	Immature	Clearcut 2000.
32	4124 - Red with White Oak	Sawtimber Well	10.3	92	51-80	Selection harvest 2011/2012 Springwood Oaks 73-002-09-01. Residual 70 sq.ft. Decent quality red oak. Fully stocked understory, red maple stump sprouts 10' - 15' tall, oak stump sprouts and seed source 3' - 10' tall. Hold and evaluate next rotation allowing the oak understory to become more established.
34	4126 - White, Black, N. Pin Oak	Sawtimber Medium	33.1	89	1-50	Shelterwood harvest 2011/2012 Springwood Oaks 73-002-09-01. Residual was marked down to 46 sq.ft. O3 understory (4' - 10' tall) is not as established in this stand as some of the other oak stands. Hold 10 years. Aspen and red maple regen is in isolated small pockets. Understory is dominated by oak seedlings and oak stump sprouts.
37	4130 - Aspen	Poletimber Well	35.0	25	Immature	Clearcut 1991. Moving along nice.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
38	4126 - White, Black, N. Pin Oak	Sawtimber Poor	11.4	92	1-50	Semi open stand, scattered mature oak, aspen and red maple. Filling in with O3/O4. Leave alone for diversity and wildlife. Coded as U in the past. Possible to code stand for understory. Manage for understory.
39	4130 - Aspen	Sapling Well	75.5	3	Immature	Final harvest 2013, un-cut islands left. Last 80 Aspen. 73-017-09-01. Stand is regenerating well. Rolling hills and valleys. Listed as undivided interest, LOTS review indicates state has full ownership with varying tax status.
41	4131 - Aspen, Oak	Sapling Well	65.7	14	Immature	Clearcut 2002. Nice mix of natural regeneration. A3/A3-O3-Mr2.
43	6120 - Lowland Cedar	Poletimber Well	50.8	110	141-170	Very wet stand. Variable stand, pockets of mixed hardwood swamp mainly around edges. No commercial treatment, to wet.
45	4130 - Aspen	Poletimber Well	34.6	25	Immature	Clearcut 1991. Moving along nice. Some beaver activity along creek.
46	4130 - Aspen	Poletimber Well	32.8	25	Immature	Clearcut 1991. Moving along nice.
47	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	19.3	95	51-80	Very wet stand with cedar inclusions and pockets of dead standing trees. In the Mostetler Creek floodplain. Beaver activity. Ash is all dying/dead. No commercial treatment, to wet.
48	6120 - Lowland Cedar	Poletimber Well	52.3	110	141-170	Very wet stand with E type inclusions. In the Mostetler Creek floodplain. Heavy beaver activity, large areas of the creek bottom lands are being flooded and the timber (Cedar) is standing dead in these flooded areas. Ash is all dying/dead. No commercial treatment, to wet. Old railroad grade within stand running north and south.
49	4130 - Aspen	Poletimber Well	10.9	45	81-110	Clearcut 1971. Decent aspen could harvest now. Wetter site. Harvest on dry or frozen ground only.
57	6113 - Lowland Maple	Poletimber Poor	5.4	91	1-50	Very wet stand. Standing water, lowland brush, bogs. No commercial harvest possible, to wet.
67	4130 - Aspen	Poletimber Well	7.1	26	Immature	Habitat Cut 1990. Access for commercial harvest could only be across private land.
69	4126 - White, Black, N. Pin Oak	Sawtimber Well	3.7	92	81-110	Small stand of mature oak that was left when surrounding oak stand was clearcut in 2000. Leave stand for diversity in an area that has been managed by clearcutting over the last several rotations.
123	4125 - Black, N. Pin Oak	Sapling Well	49.0	14	Immature	Clearcut in 2002. Patty Cake 73-019-00-02. Nice mix of natural regeneration O3/O3-A1-Mr1. Small inclusion of O9 that was left uncut in 2002 located at very northwest corner of stand.





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
<b>124</b>	4126 - White, Black, N. Pin Oak	Sawtimber Medium	23.7	89	1-50	Shelterwood harvest 2011/2012 Springwood Oaks 73-002-09-01. Residual 42 sq.ft. (All maple and aspen removed in 2002) Decent quality oak. Very high visual impact with this stand. Decent O3 understory. Could remove overstory now. Of all the oak stands in the area this is the first choice for removing overstory.
<b>134</b>	4126 - White, Black, N. Pin Oak	Sawtimber Medium	6.7	89	1-50	All aspen, red maple and some oak cut in 2002. Shelterwood harvest 2011/2012 Springwood Oaks 73-002-09-01, crown closure was reduced down to 40% - 60%. Residual 40 sq.ft. Stand is a buffer between Mostetler Road and a large clearcut to the south. Very high visual impact with this stand. Hold 10 years, harvesting stand north of road this year of entry.
<b>223</b>	4131 - Aspen, Oak	Sapling Well	10.6	16	Immature	Clearcut in 2000. Nice mix of natural regeneration A3/A3-O1-W1. Includes narrow O6 buffer left uncut along N type.
<b>234</b>	4131 - Aspen, Oak	Sapling Well	31.2	14	Immature	Clearcut 2002. Pockets of spotty aspen regen. These areas are filling in with oak and red maple.
<b>334</b>	4125 - Black, N. Pin Oak	Sapling Well	122.7	14	Immature	Clearcut 2002 all oak less than 6" were left. Decent mix of natural regen. O3/O3-A1-Mr1.



Stand	Cover Type	Acres	Managed Site	General Comments:
2	622 - Lowland Shrub	28.1	No	Landlocked by private.
3	3102 - Grass	0.8	No	Sandy/grass bowl.
15	622 - Lowland Shrub	11.6	No	Beaver flooding within Mostetler Creek floodplain. Landlocked by private.
19	500 - Water	1.9	No	Beaver pond. Landlocked by private.
21	6239 - Mixed Emergent Wetland	10.2	No	Mostetler creek bi-sects stand. Within the creek floodplain.
29	6220 - Alder/willow	7.9	No	Tag alder.
40	6225 - Bog	13.7	No	Several small non contiguous blueberry leather leaf bogs.
70	500 - Water	6.3	No	
71	500 - Water	0.8	No	Part of a bigger water body on private.
72	500 - Water	2.6	No	
73	6239 - Mixed Emergent Wetland	1.4	No	
78	6239 - Mixed Emergent Wetland	7.2	No	Cattails, reed grass, marsh grass & standing water.
79	6239 - Mixed Emergent Wetland	5.2	No	Cattails, marsh grass & water. Part of a lake on private.
277	6225 - Bog	5.1	No	Blueberry leather leaf bog.
400	3102 - Grass	5.9	No	Starting to fill in with hardwood.
402	330 - Low-Density Trees	8.9		Old Hamilton twp. transfer station. Planted to spruce 2009 - FTP C73-840. Scattered pockets of mature trees.