



Compartment Review Presentation

Baraga Forest Management Unit

Compartment 11003

Entry Year 2018

Acreage: 3,302

County Baraga

Management Area: Sturgeon Sloughs

Revision Date: 2016-05-12

Stand Examiner: Jason Mittlestat

Legal Description:

Baraga County
Baraga Township
T52N, R33W, Sections 4, 5, 6, 9, 10, 16, 17, 19, 20, and 21.
Houghton County
Portage Township
T52N, R34W, Sections 1, 12, and 14.

Identified Planning Goals:

To maintain a healthy sustainable forest with special consideration to wildlife and fisheries habitat.

Soil and topography:

A wide variety of soil types occur within this compartment. Majority of the upland soils are well drained on till plains (Munising and Abbaye are most common). The lowland areas consist mostly of Arnheim-Sturgeon Association (poorly drained soils on flood plains) Topography is rolling to hilly in the upland areas and level on the lowland.

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

Private ownership surrounds most of the compartment. Compartment 61 borders this compartment to the north. Some private land owners have harvested timber from their parcels, but the majority of the private owners use their land for recreational purposes. The land around Otter Lake is developed for recreational homes and camps. The better soils along the Sturgeon River are in farms.

Unique Natural Features:

Potential for osprey, eagle, great blue heron rookery, red-shouldered hawk, goshawk, moose, and gray wolf. Potential for wood turtle along riparian corridors. Potential for marsh birds: marsh wren, common moorhen, yellow rail, least bittern, American bittern, and black tern. Potential for satiny willow, Douglas hawthorn, veiny meadow-rue, narrow-leaved gentian, and Farwell's water-milfoil along riparian areas. Potential for American shore grass, lake-cress, Farwell's water-milfoil, alternate leaved water-milfoil, and starwort in lakes.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

BMP guidelines should be followed around Otter Lake and the Sturgeon River.

Watershed and Fisheries Considerations:

The Otter River is a cold water trout stream. There is a concern about bank erosion. The Sturgeon River is a warm water stream.

Wildlife Habitat Considerations:

Several stands in this compartment are managed as part of the Sturgeon River Sloughs Wildlife Area. The sturgeon River Sloughs is managed as a waterfowl production and stop-over area and for several species of furbearers; muskrat, mink, beaver. The Sturgeon River Sloughs provide hunters and trappers opportunities to pursue game species as well as hiking and bird watching opportunities.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of peat and muck, coarse-textured glacial till and postglacial alluvium. The glacial drift thickness varies between 10 and 50 feet. The Precambrian Jacobsville Sandstone subcrops below the glacial drift. The Jacobsville was previously used as a building stone and was quarried just to the south. The closest gravel pit is located in Section 2-R34W to the west, but there may be potential on the uplands. Abandoned copper mines are located twelve miles to the west. The Compartment has not been previously leased for metallic exploration. There is no economic oil and

gas production in the UP.

Vehicle Access:

Access into upland stands will have to be coordinated with adjacent landowners.

Survey Needs:

None identified at this time, will be addressed as needed in the future.

Recreational Facilities and Opportunities:

Snowmobile trail # 15 runs through compartment. Wildlife Division's Arnheim project provides waterfowl management and hunting.

Fire Protection:

This is not a fire prone area however historical fires have had ground fire associated with them. This area has poor access for fire equipment.

Additional Compartment Information:

The following reports from the Inventory are attached:

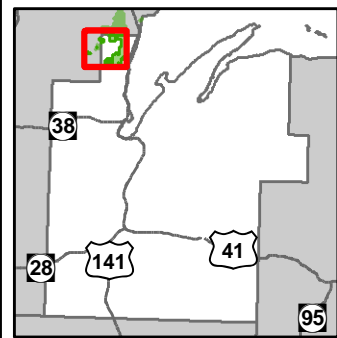
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

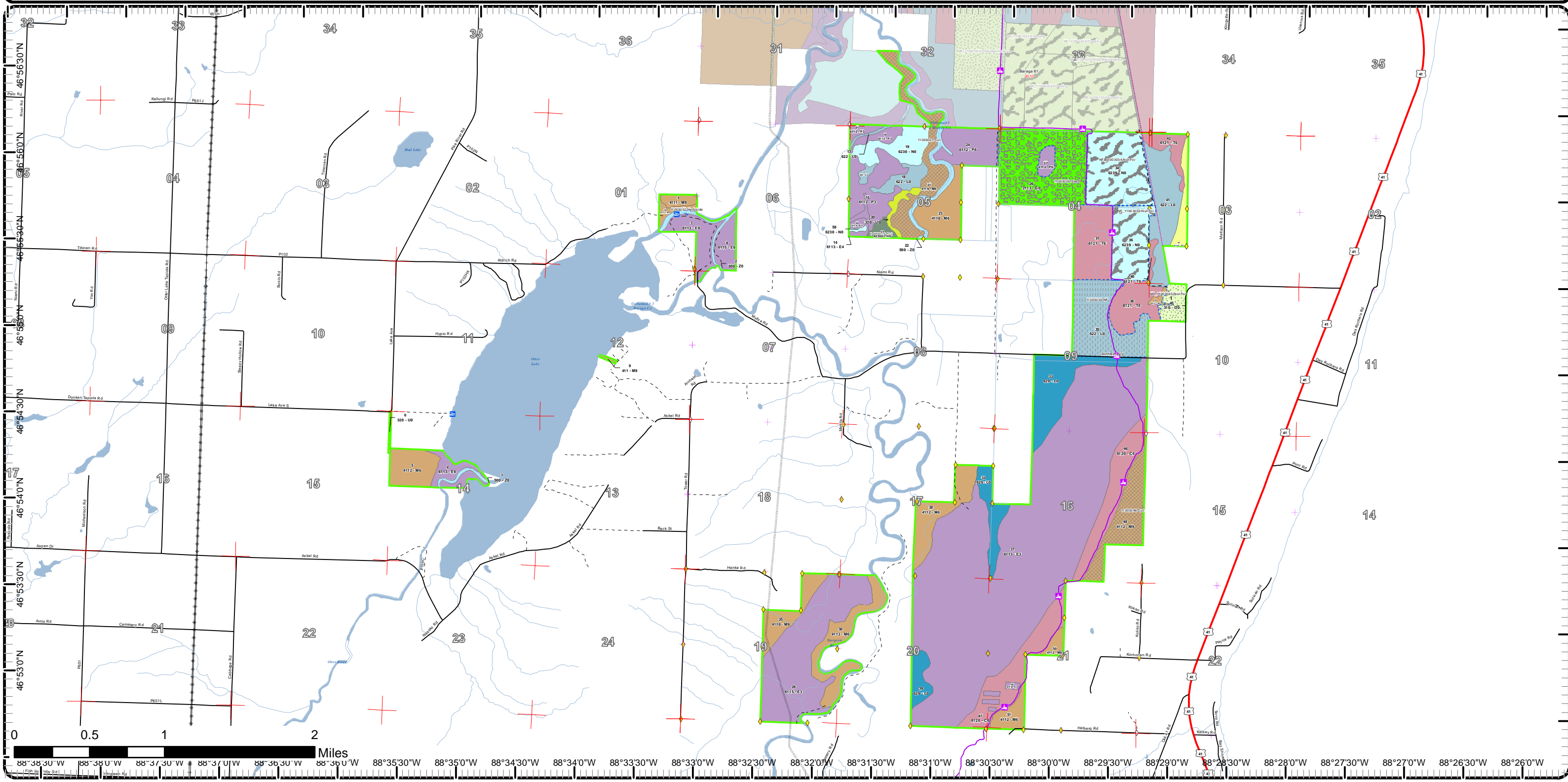
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

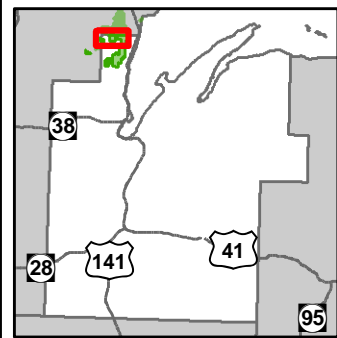
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 Examiner: Jason Mittlestat
 Map Revised: 8/17/2016
 Map Phase: Post Review



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- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
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- 🏠 Snowmobile Trails
- Designated Snowmobile Trails
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- - Poor Dirt Roads
- - - Trail (Non-Recreation)
- Rivers
- Pipeline
- ▭ Compartment Boundary
- ▭ Treatments with Site Conditions
- ▭ Selection (Group, Single Tree)
- ▭ Water Level Management
- ▭ Other Treatment - See Comments
- ▭ Seeding (tree species)
- ▭ Opening Maintenance
- ▭ Mowing
- ▭ Other Harvest - See Comments
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- ▭ 413 - Aspen Types
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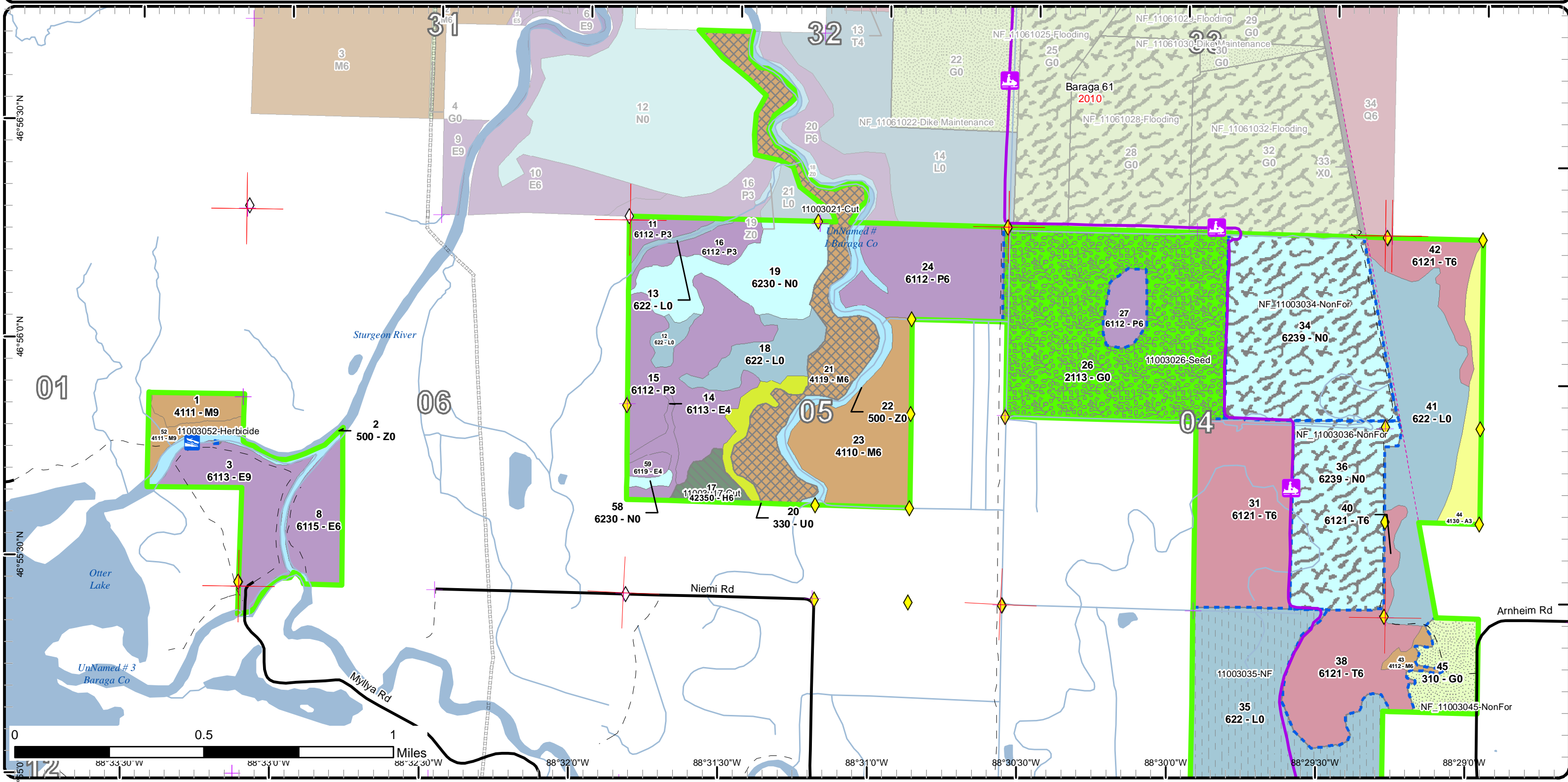


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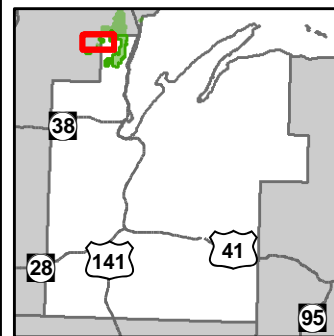
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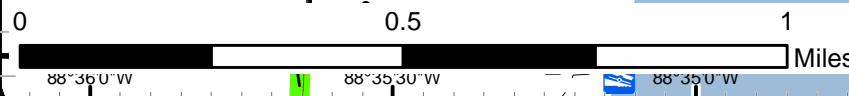
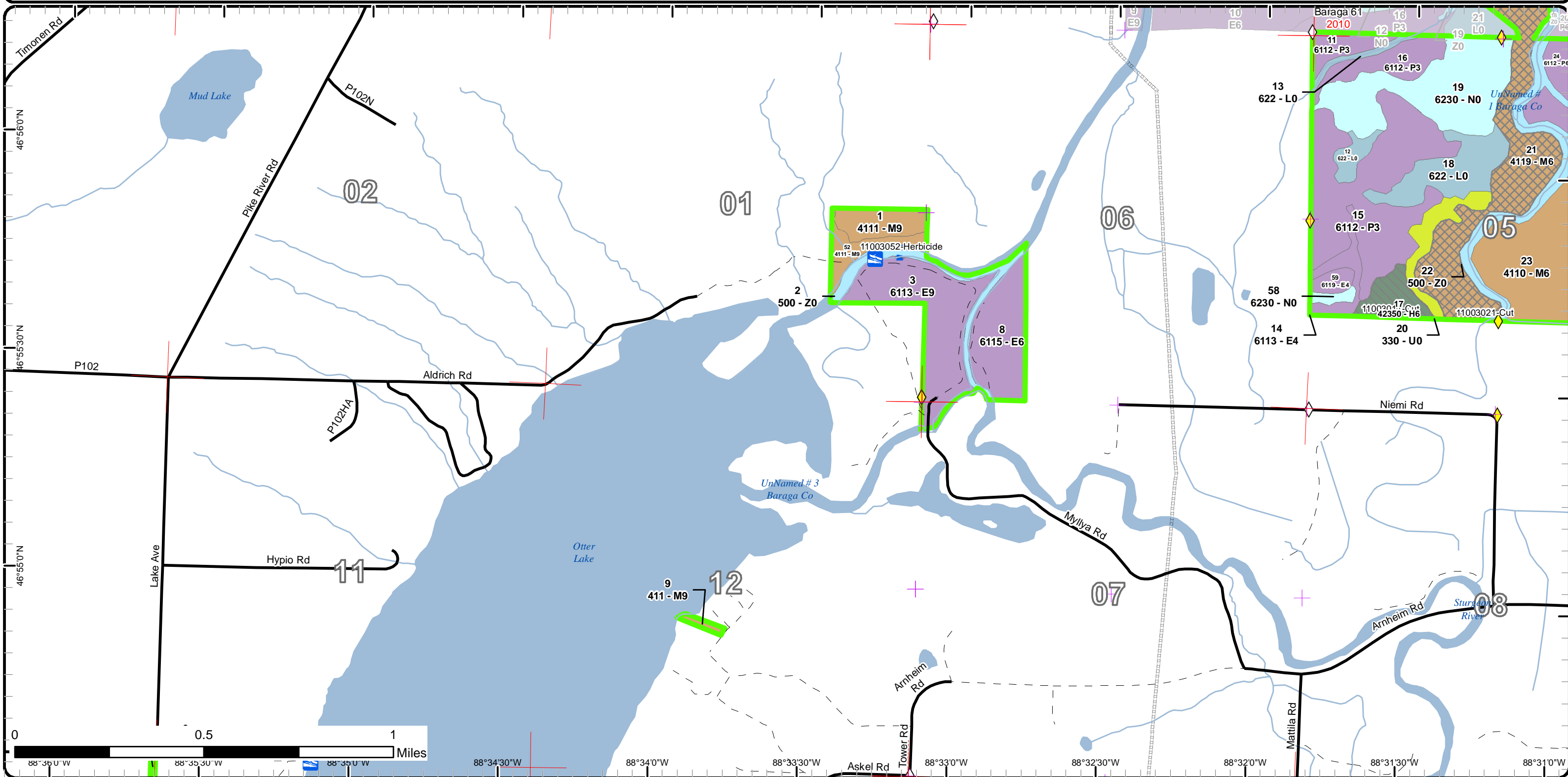


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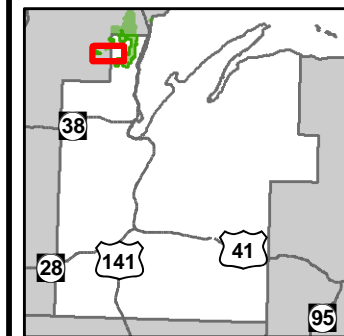
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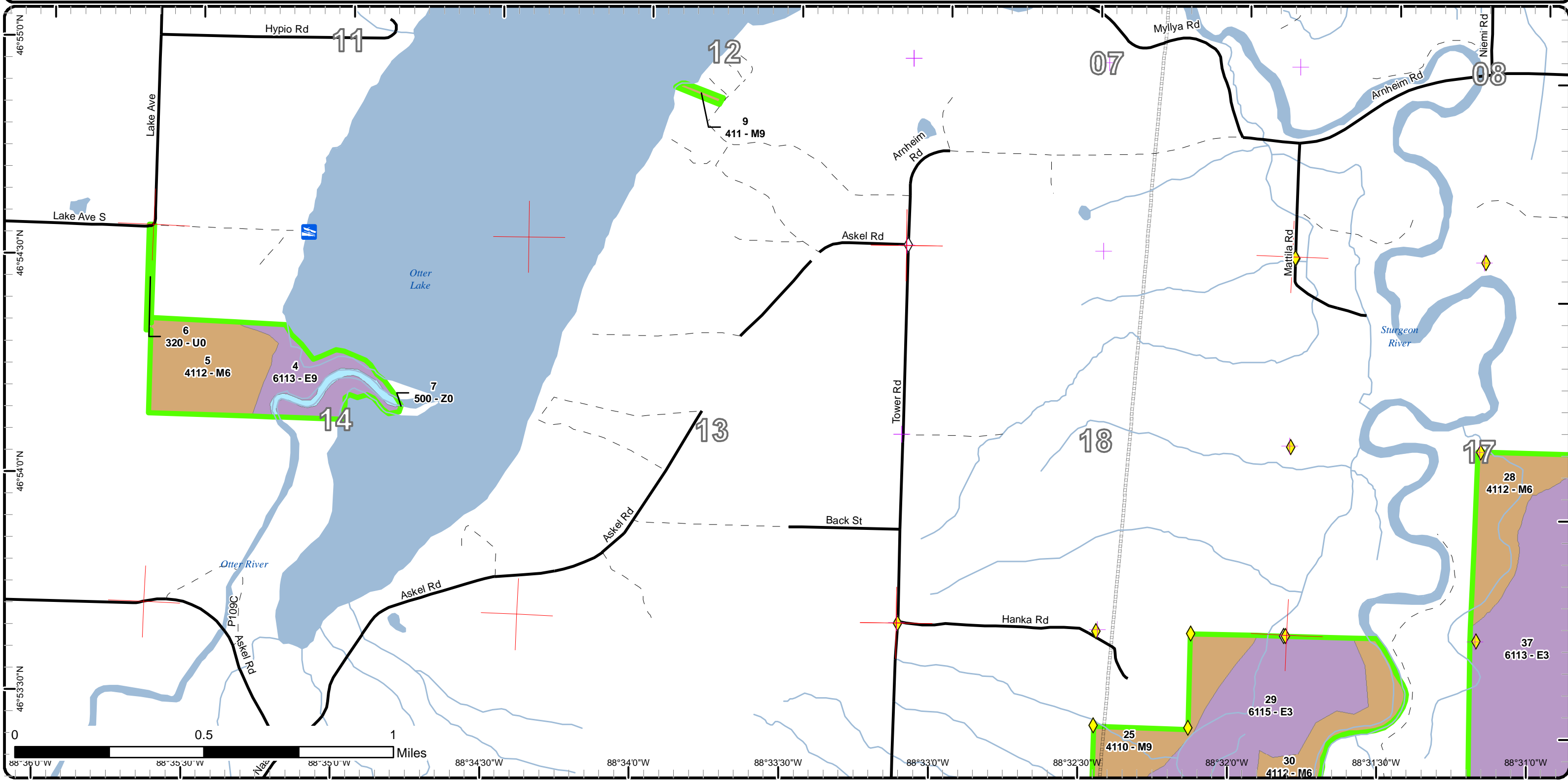
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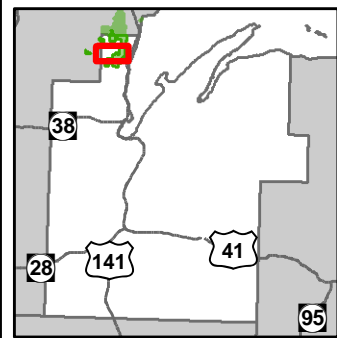


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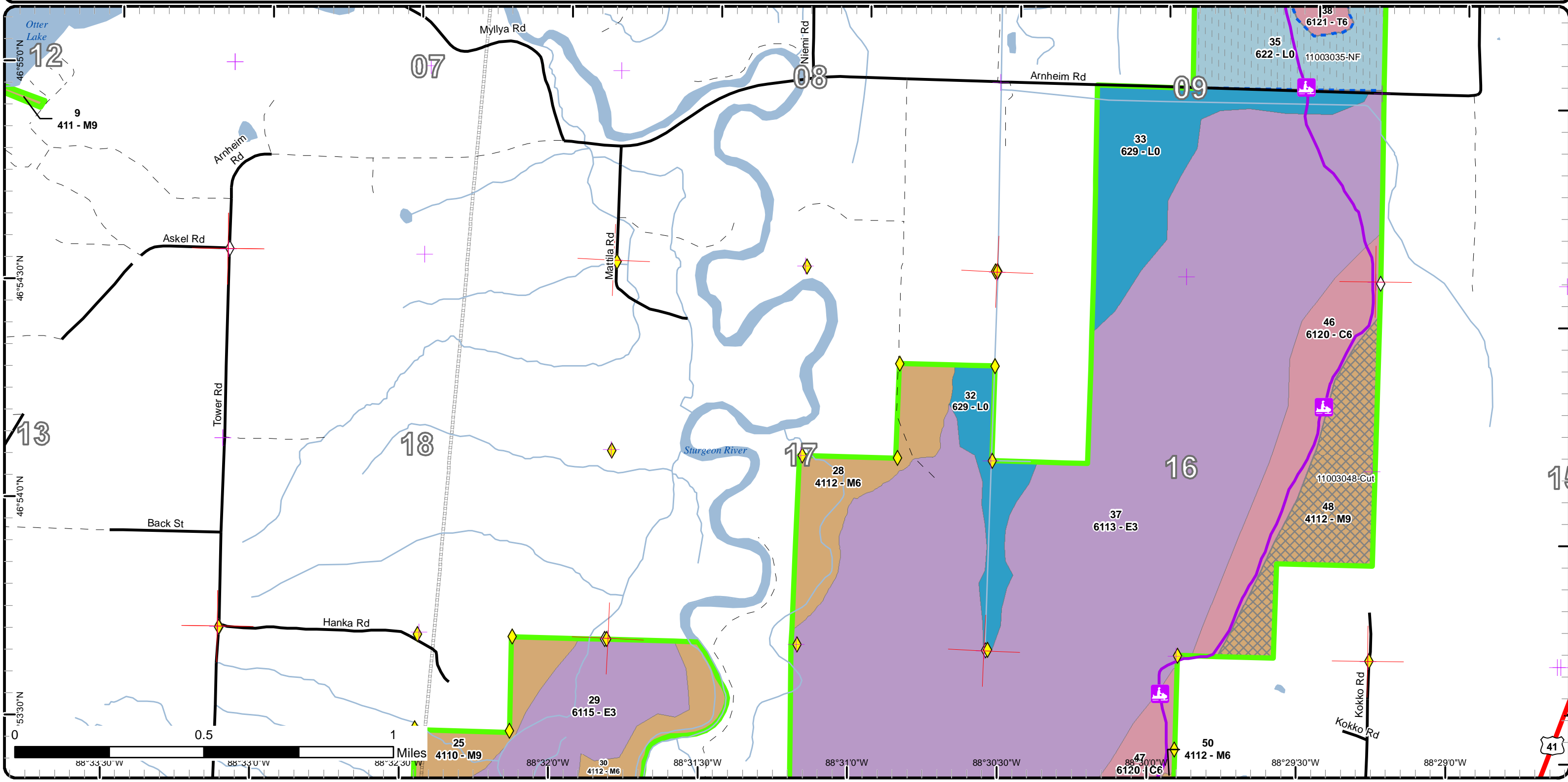


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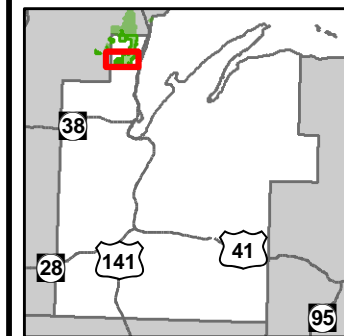


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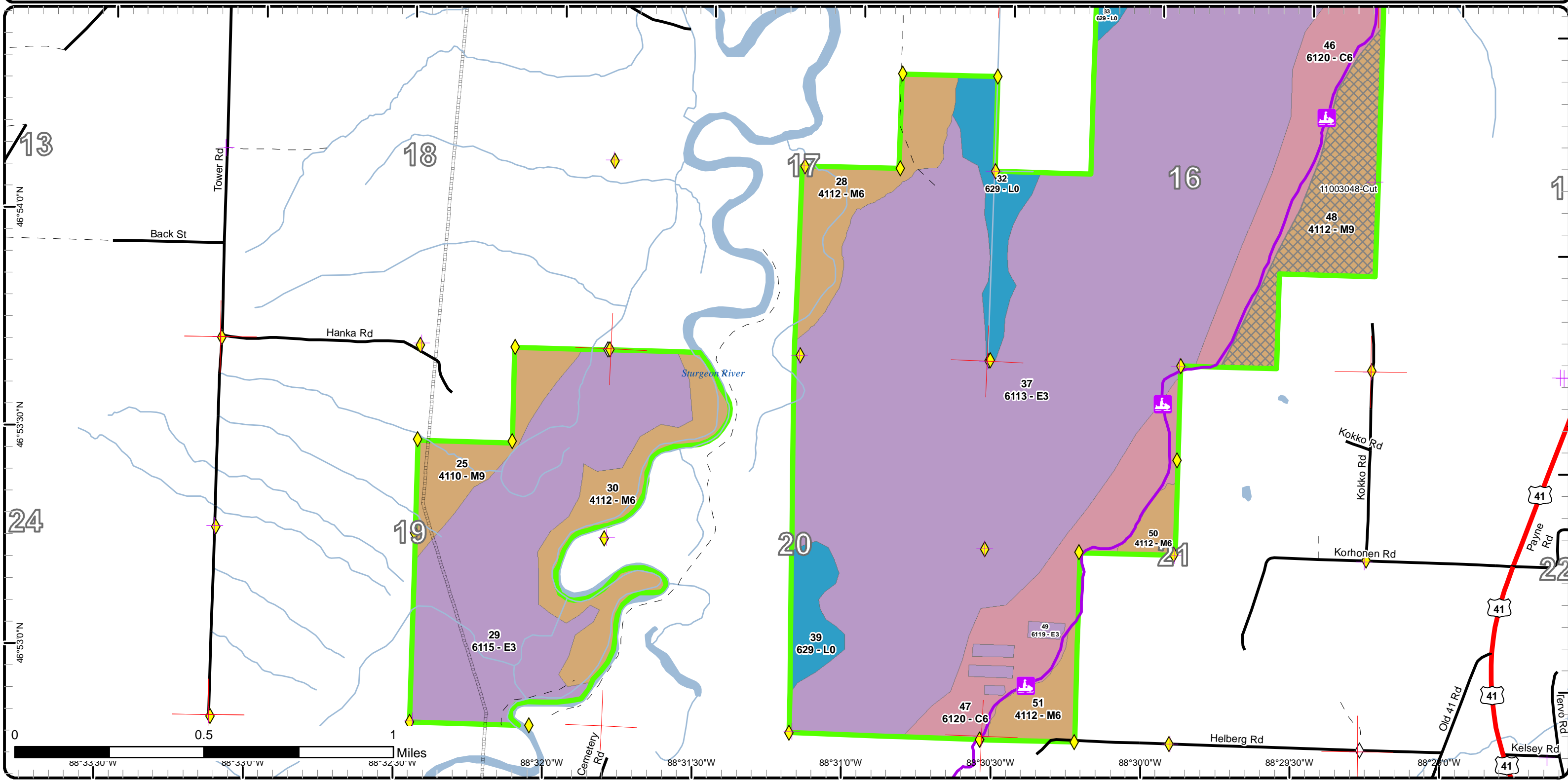


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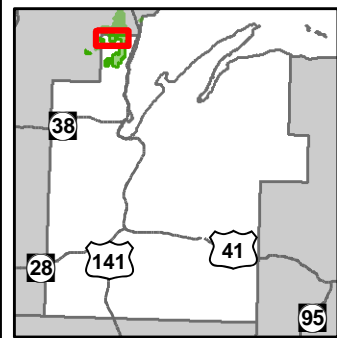
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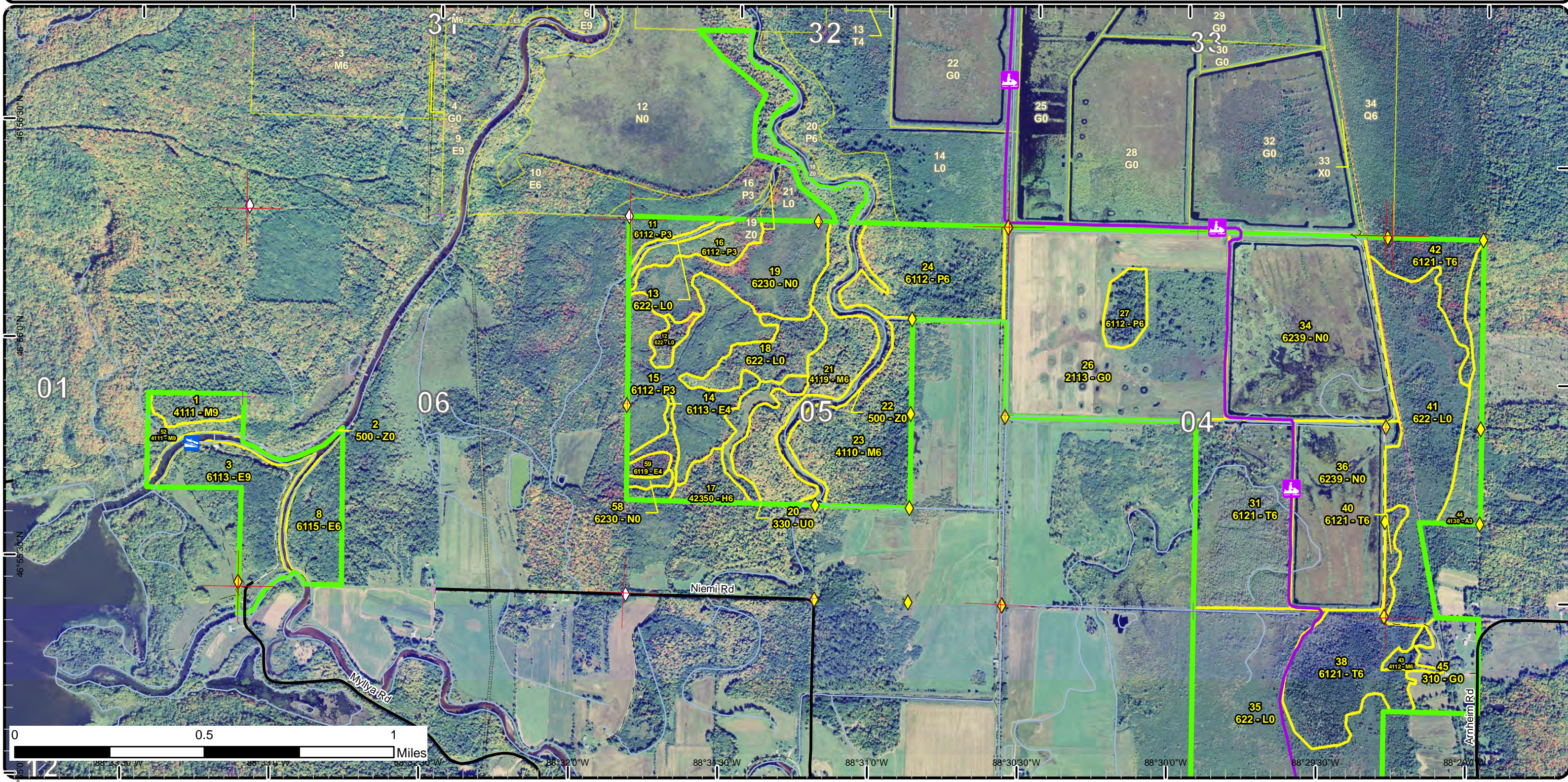


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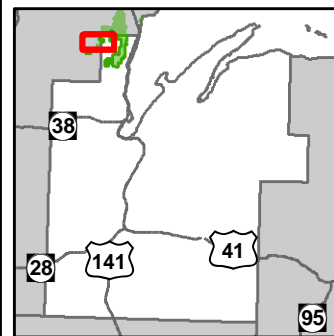
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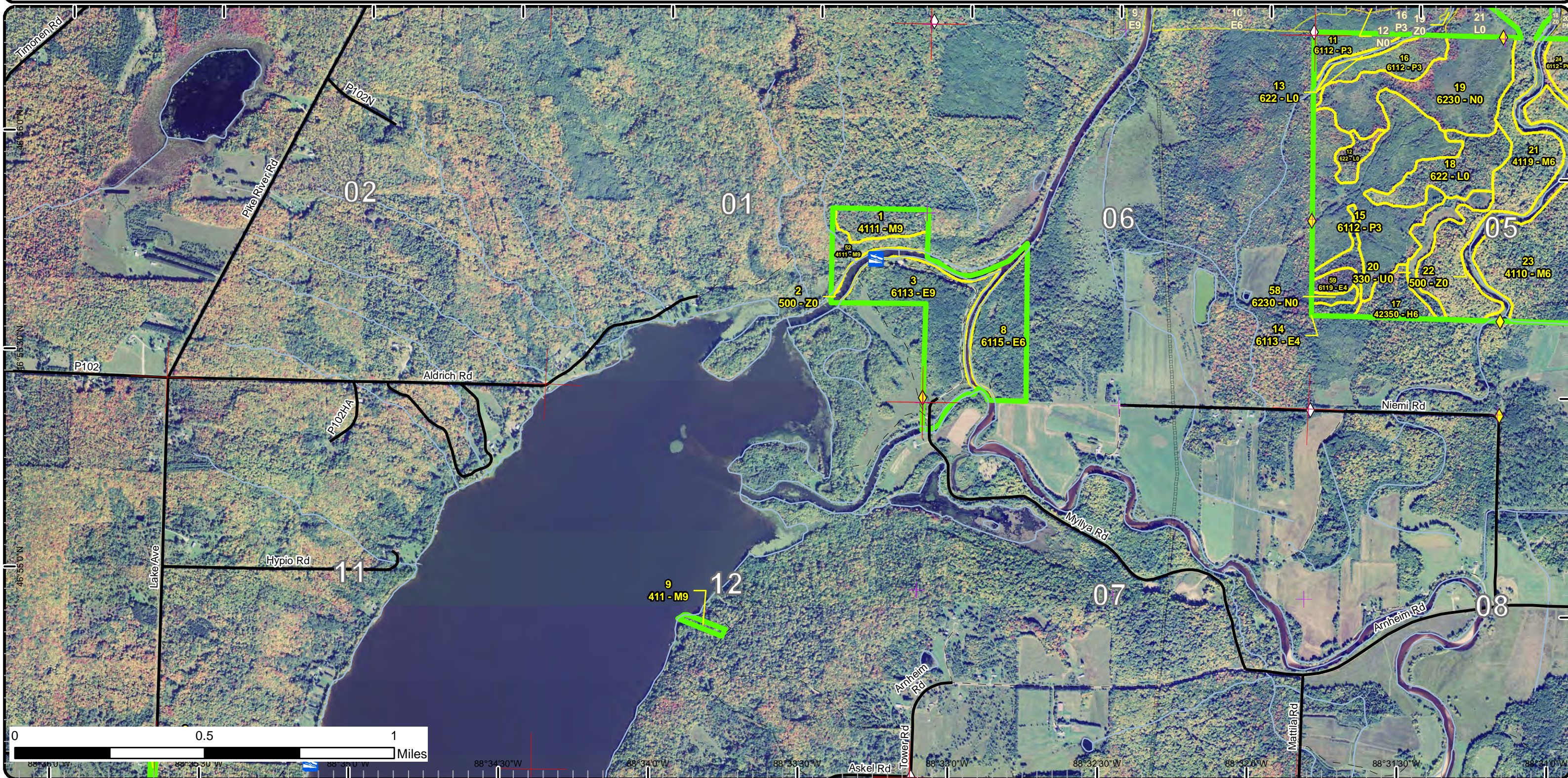


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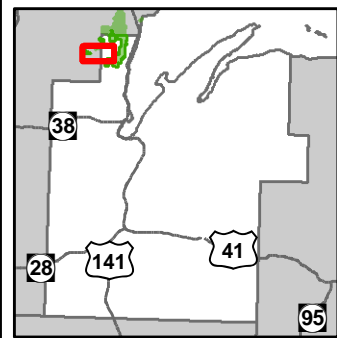
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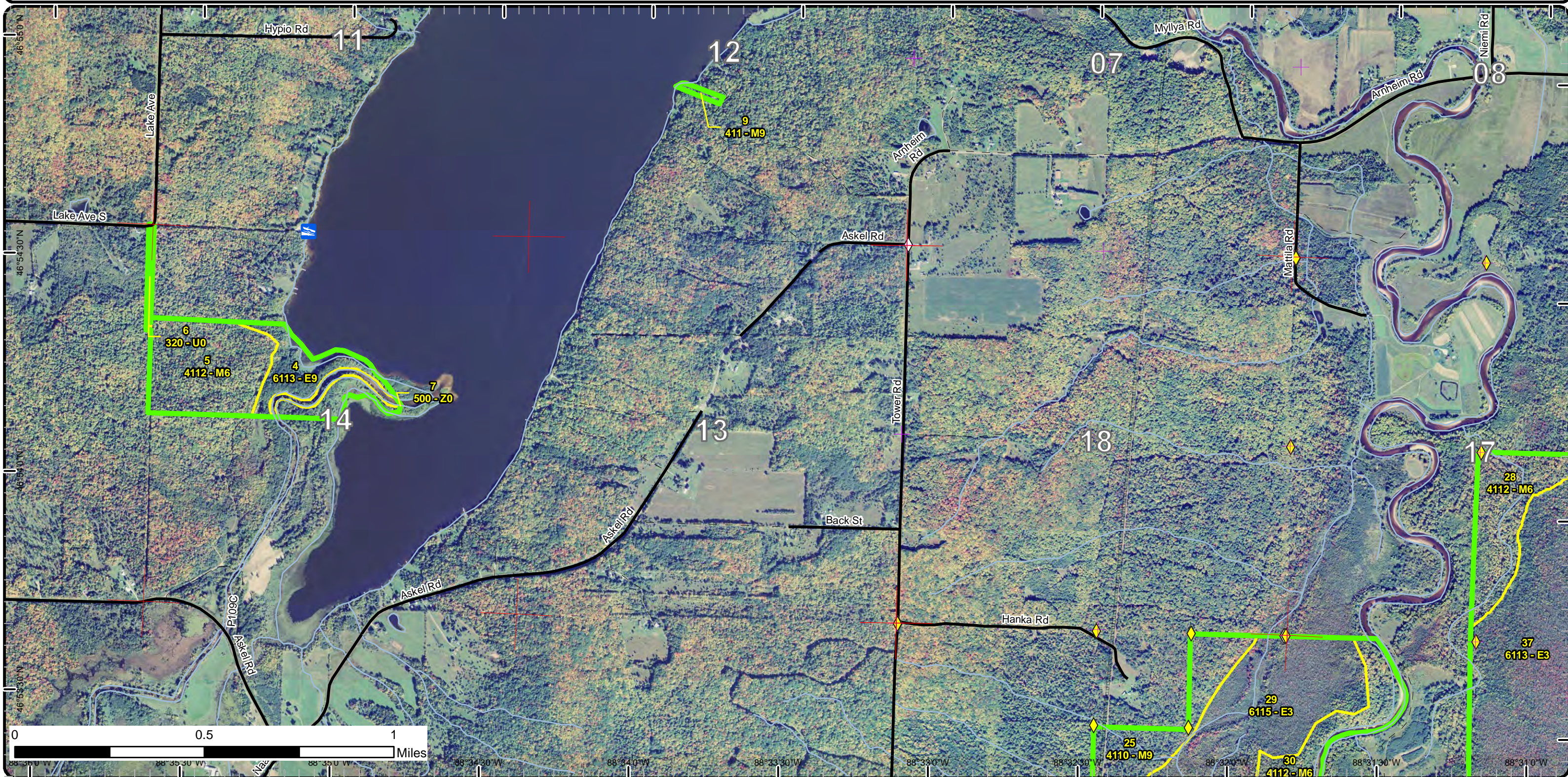


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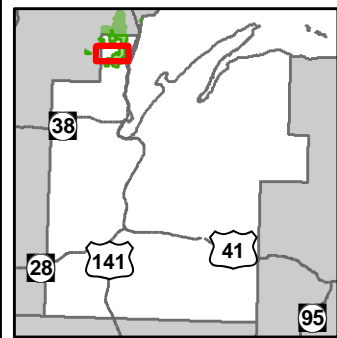
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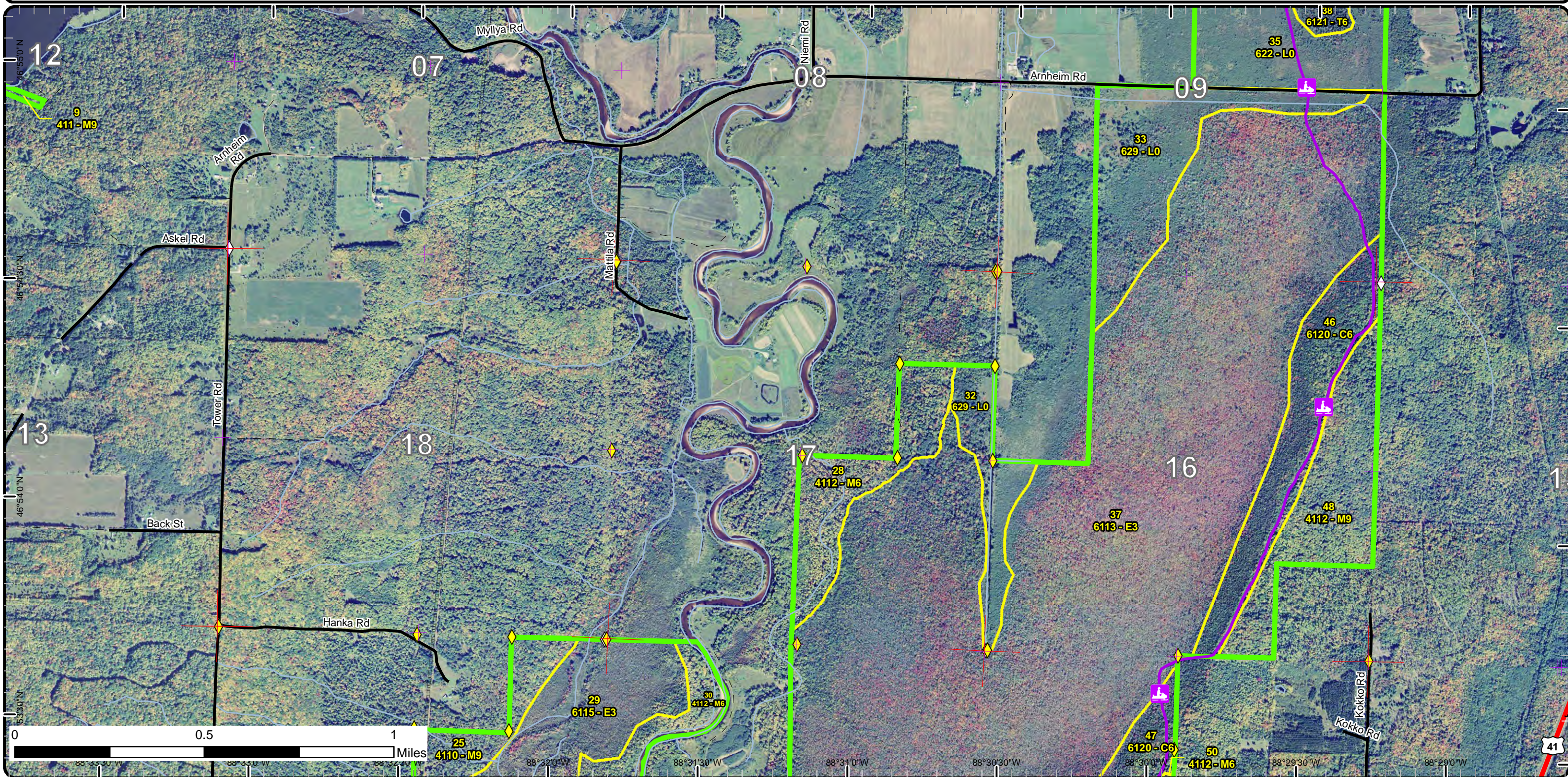


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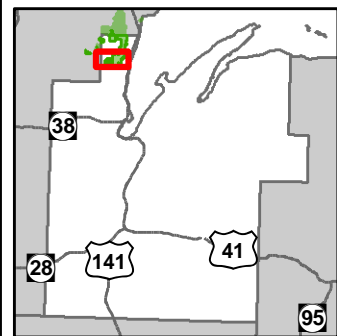


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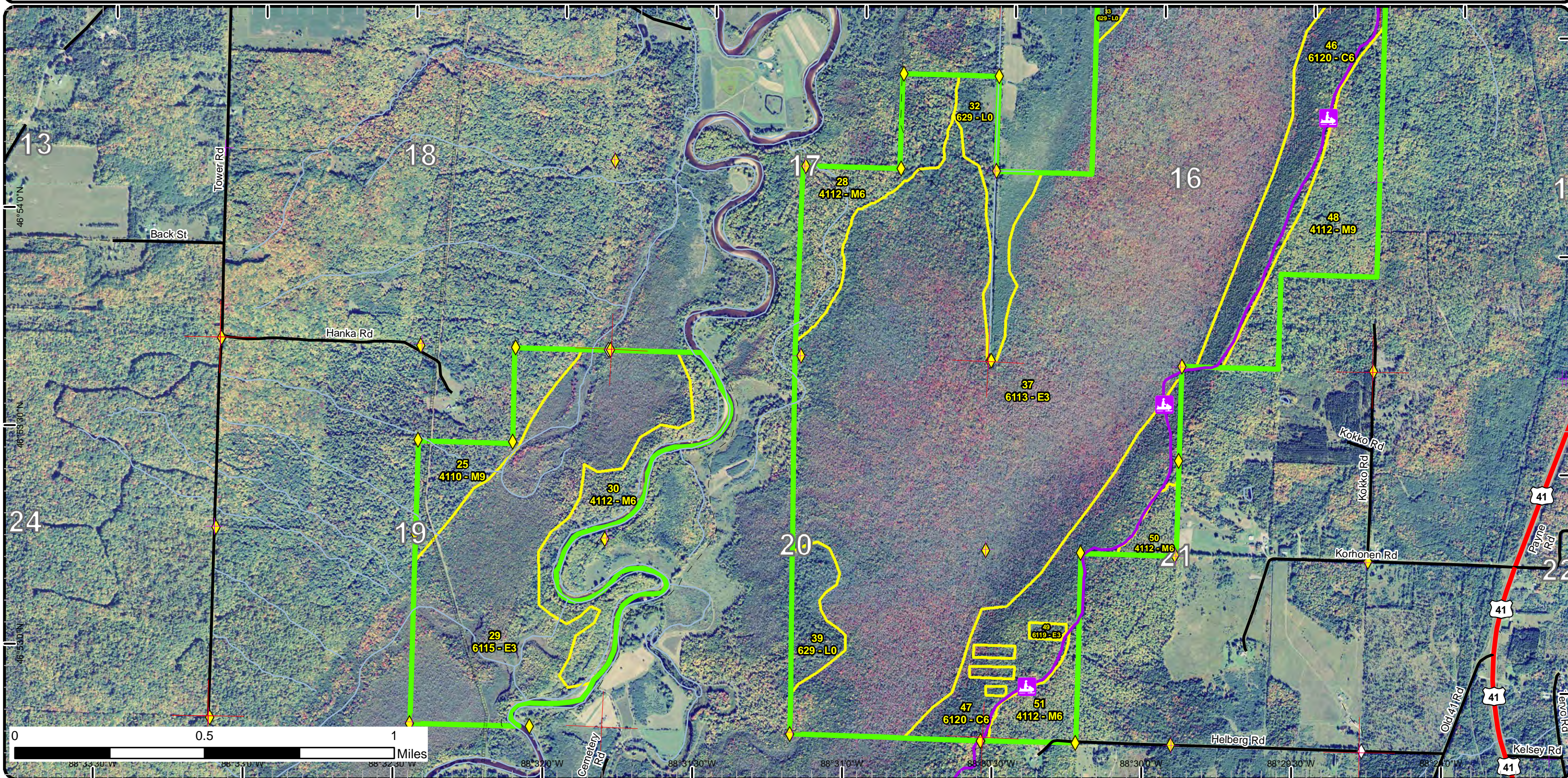


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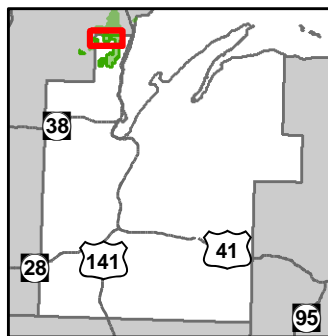


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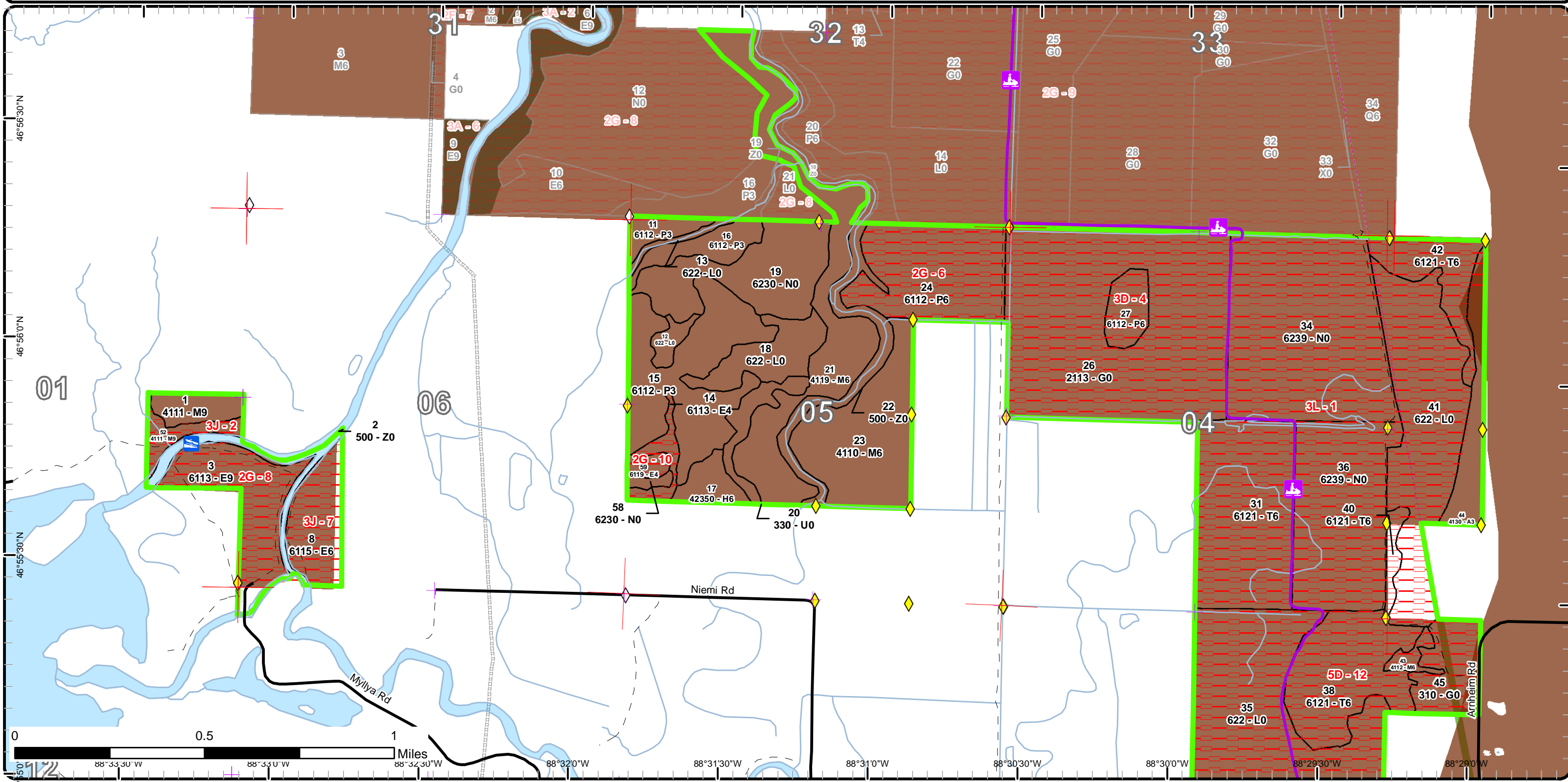


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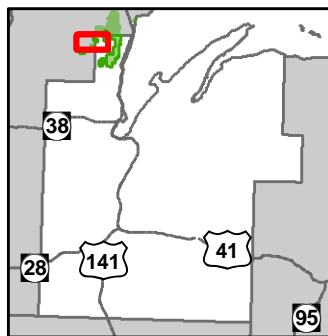


- | | |
|--------------------------------|---|
| — Miris Corners | — Unavailable |
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| ◆ Survey Grade GPS Corners | 3D: Recreational / Scenic values |
| ◇ Field Grade GPS Corners | 3J: Water quality / BMPs (stream, river, or lake) |
| ⊡ Boating Access Site | 3L: Other wildlife concerns |
| ⊡ Snowmobile Trails | 5D: Unproductive Forest Land |
| — Designated Snowmobile Trails | □ Stand Boundaries |
| — Paved Roads | — Cold Water Streams |
| - - - Poor Dirt Roads | — Cold Water Lakes |
| - - - Trail (Non-Recreation) | — Deer Winter Range |
| — Rivers | — Wildlife Management Areas |
| — Pipeline | — Rail-Trail Corridor |
| — Compartment Boundary | — Habitat Corridor |

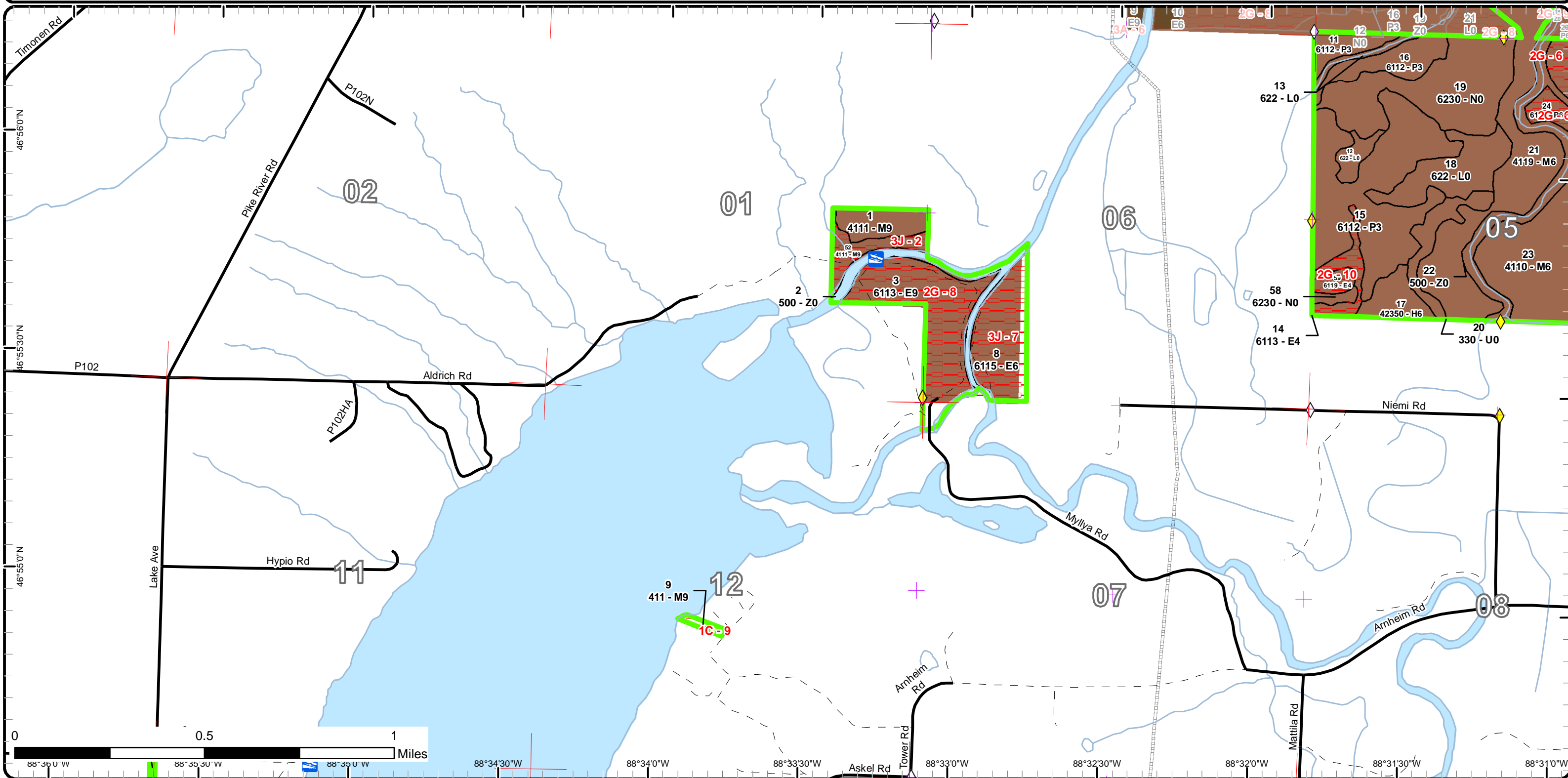


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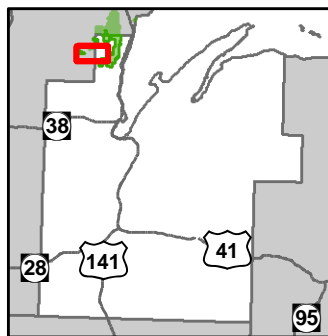


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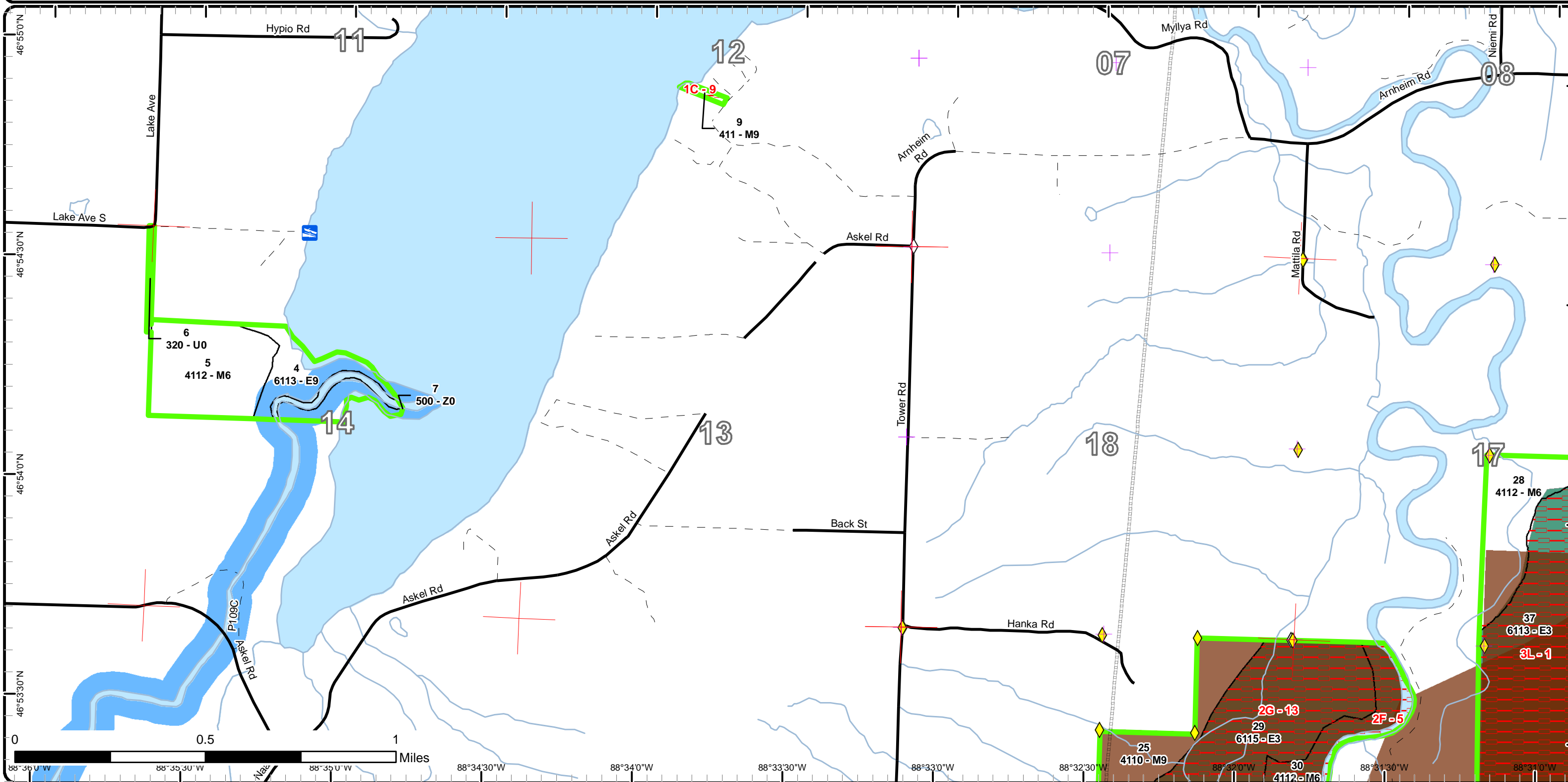


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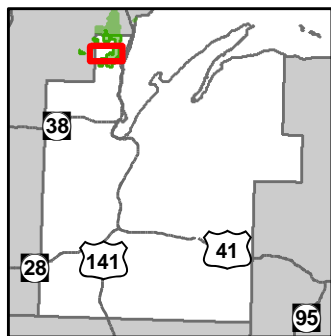


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- ▭ Wildlife Management Areas
- ▭ Habitat Corridor

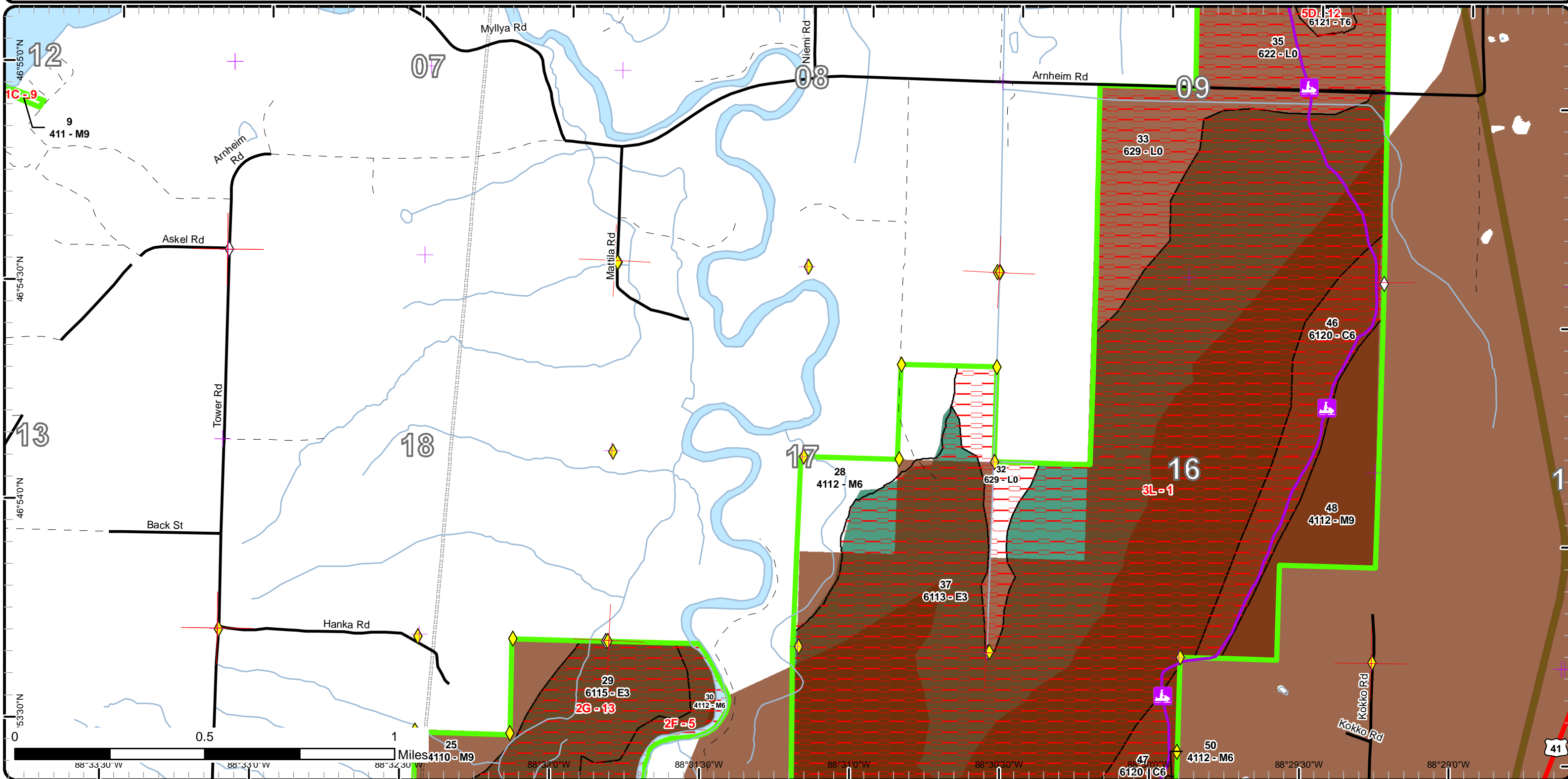


Special Conservation Areas & Site Conditions Map

Compartment: 3
 T52N, R34W, Sec: 01, 12, 14
 T52N, R33W, Sec:03-06, 9, 10,
 16, 17, 19-21
 County: Baraga
 Unit: Baraga
 Mgmt Area: Sturgeon Sloughs
 YOE: 2018
 Acres: 3302 GIS Calculated
 Examiner: Jason Mittlestat
 Map Revised: 8/17/2016
 Map Phase: Post Review

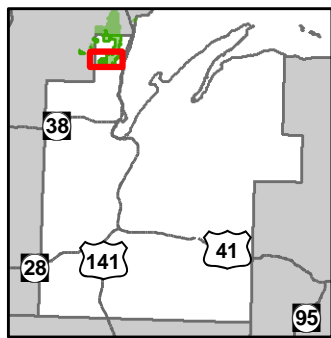


- Miris Corners
- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- 🚙 Snowmobile Trails
- Designated Snowmobile Trails
- Highway
- Paved Roads
- - Poor Dirt Roads
- Rivers
- Pipeline
- Compartment Boundary
- Unavailable
- 1C: Other dept or div proc/practices
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)
- 3L: Other wildlife concerns
- 5D: Unproductive Forest Land
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes
- Deer Winter Range
- Wildlife Management Areas
- Rail-Trail Corridor
- Habitat Corridor

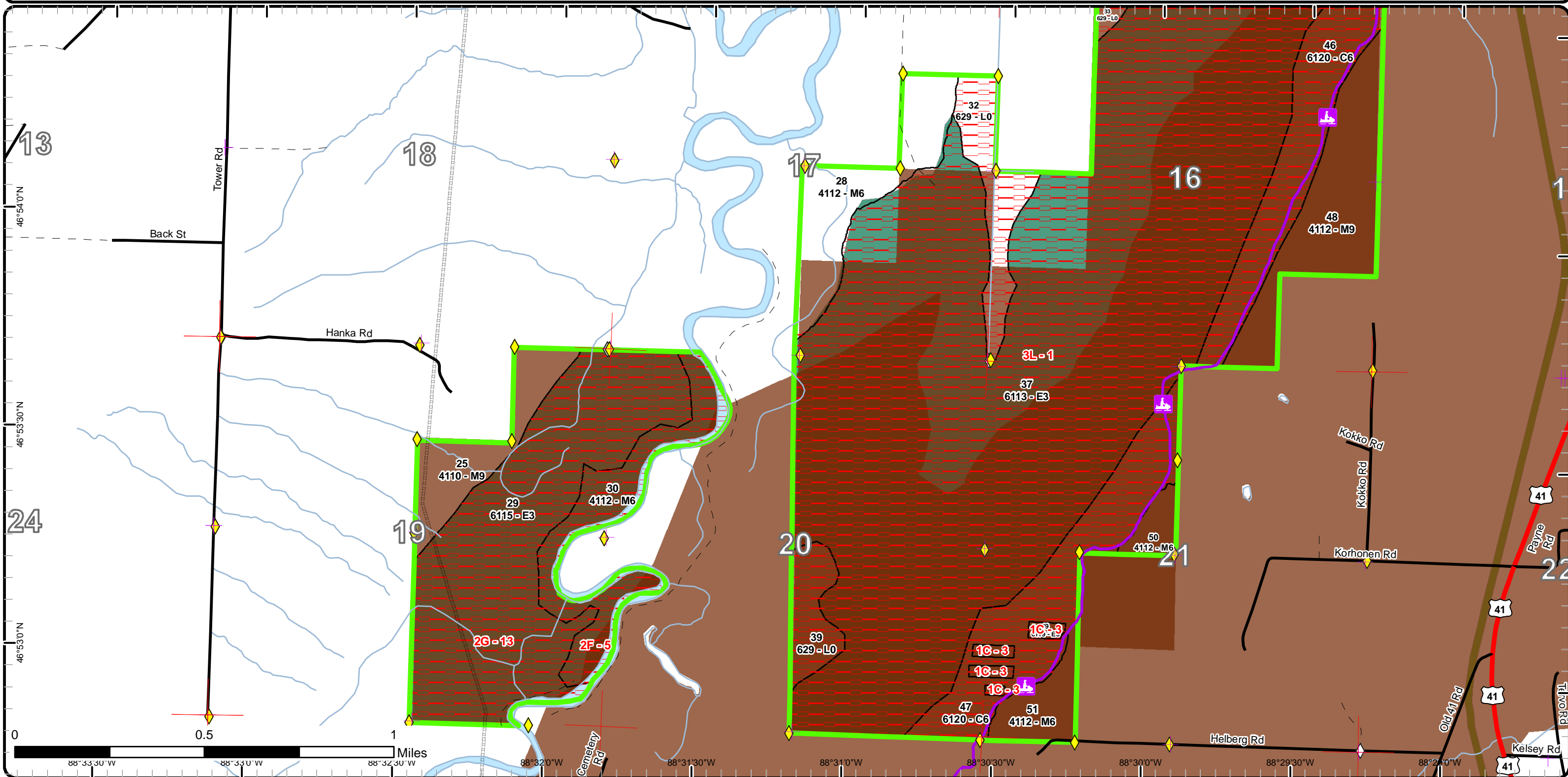


Special Conservation Areas & Site Conditions Map

Compartment: 3
 T52N, R34W, Sec: 01, 12, 14
 T52N, R33W, Sec: 03-06, 9, 10, 16, 17, 19-21
 County: Baraga
 Unit: Baraga
 Mgmt Area: Sturgeon Sloughs
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- Miris Corners
 - + Remonumented Section Corners
 - ◆ Survey Grade GPS Corners
 - ◇ Field Grade GPS Corners
 - ⬇ Snowmobile Trails
 - Designated Snowmobile Trails
 - Highway
 - Paved Roads
 - - Poor Dirt Roads
 - Rivers
 - Pipeline
 - Compartment Boundary
 - Unavailable
- 1C: Other dept or div proc/practices
 - 2F: Too steep
 - 2G: Too wet (sensitive soils, does not include access issues)
 - 3L: Other wildlife concerns
 - Stand Boundaries
 - Cold Water Streams
 - Cold Water Lakes
 - Deer Winter Range
 - Wildlife Management Areas
 - Rail-Trail Corridor
 - Habitat Corridor



Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	172	172
Cropland	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	174
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	10
Herbaceous Openland	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Low-Density Trees	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Lowland Aspen/Balsam Poplar	0	0	89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	162
Lowland Deciduous	0	0	1032	0	8	0	0	0	0	0	0	0	0	0	0	0	0	330	1370
Lowland Shrub	396	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	396
Marsh	258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	258
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	493	493
Tamarack	0	0	0	0	0	0	0	55	0	0	0	0	0	0	0	0	0	113	168
Upland Shrub	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Water	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
Total	904	23	1121	0	8	0	0	0	55	0	0	0	0	0	0	0	0	1192	3302



Report 2 – Treatment Summary

Baraga Mgt. Unit

Year of Entry: 2018

Acres of Harvest

Compartment 3
Total Compartment Acres: 3,302

Commercial Harvest - 161
Harvests with Site Condition - 0
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
Hemlock	0	0	0	0	0	0	0	11	11	
Northern Hardwood	0	151	0	0	0	0	0	0	0	151
Total	0	151	0	0	0	0	0	11	11	161

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	161	0	0	174	0	0	0	350	0	685
Next Step	0	0	0	0	0	335	0	0	0	335
Total	161	0	0	174	0	335	0	350	0	1021

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	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
17	11003017-Cut	10.5	42350 - Upland Hemlock	Poletimber Well	98	141-170	Harvest	Other - Specify	4312 - Hemlock, Mixed Deciduous	Two-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Remove all species except hemlock and cedar. Also, reserve all yellow birch over 18" DBH. Retain all red oak and white pine if present.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any combination of the original stand's over story species prior to harvest.

Regen:

Other BA's might vary greatly due to the amount of hemlock throughout the stand.

Comment:

Proposed Start Date: 10/01/2017

21	11003021-Cut	70.9	4119 - Mixed Northern Hardwoods	Poletimber Well	82	141-170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Selectively thin hardwoods to 70-90 square feet of basal area. Favor oak, hemlock, white pine and cedar where present. Oak should be released on

Specs: 3 sides to an average BA of 60 sqft. Where 30 sqft or more of hemlock occurs thin to less than 100 sqft of BA. Follow all guidelines set forth in "The Complete Marker".

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any combination of the original stand's over story species prior to harvest.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

26	11003026-Seed	174.2	2113 - Forage Crops	Nonstocked		Unspecified	Seeding	Machine Seed	212 - Non-tilled Herbaceous Agriculture		Draft Field Boundary
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Habitat Cut: No**Site Condition: Wildlife Concerns**

Prescription Planting of crops by share-crop farmer.

Specs:

Next Step Monitoring, Artificial Regen(1yr)

Treatments:

Acceptable Small grain crops.

Regen:

Other FTP # W-11-266 (2015)

Comment:

Proposed Start Date: 10/01/2017

35	11003035-NF	118.0	622 - Lowland Shrub	Nonstocked		Unspecified	NonForestMgt	Brush Cutting	6220 - Alder/willow		Draft Field Boundary
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Habitat Cut: No**Site Condition: Wildlife Concerns**

Prescription Every 2 years mow in winter 25 acres over 10 year period. Buffer snowmobile trail enough to prevent chips from being thrown onto the trail.

Specs:

Next Step

Treatments:

Acceptable tag alder/ willow/ hazel

Regen:

Other Regenerate high stem density shrubs for American woodcock.

Comment:

Proposed Start Date: 10/01/2017



Stand Name	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
48	11003048-Cut	79.8	4112 - Maple, Beech, Cherry Association	Sawtimber Well	73	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Selectively thin hardwoods to 70-90 square feet of basal area. Favor oak, hemlock, white pine and cedar where present. Oak should be released on 3 sides to an average BA of 60 sqft. Where 30 sqft or more of hemlock occurs thin to less than 100 sqft of BA. Follow all guidelines set forth in "The Complete Marker".

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any combination of the original stand's over story species prior to harvest.

Regen:

Other Wld: Stand is in a deer wintering area and harvesting should be limited to winter to provide tops to feed on.

Comment:

Proposed Start Date: 10/01/2017

52	11003052-Herbicide	0.2	4111 - S.Maple, Hard Mast Association	Sawtimber Well	93	81-110	Other	Other	31021 - Cool Season Grass		Draft Field Boundary
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Habitat Cut: No**Site Condition: Too Wet**

Prescription Herbicide both sides of impoundment.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

34	NF_11003034-NonFor	127.2	6239 - Mixed Emergent Wetland	Nonstocked	Unspecified	NonForestMgt	Water Level Management	6239 - Mixed Emergent Wetland			Draft Field Boundary
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Habitat Cut: No**Site Condition: Wildlife Concerns**

Prescription Retain precipitation; pump water into Unit 7 from the permanent pump station located to the N, as needed. Plan prescribed burn to reduce shrub component and improve habitat for waterfowl once in 10 year period.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Maintain in a flooded condition, except during a scheduled drawdown. Be the water source for flooding Unit 8 to the south. Old next step comments: Drawdown in spring and summer of 2008; mow or manually cut invading woody vegetation; disc operable ground; seed Japanese millet in about half of the disced areas or areas left bare by the drawdown; leave the other half of the disced areas or areas left bare by the drawdown for growth of moist soil plants from existing seedbank sources or from seeds distributed by birds; then reflood by September 30, 2008.

Proposed Start Date: 10/01/2017

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	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
36	NF_11003036-NonFor	79.5	6239 - Mixed Emergent Wetland	Nonstocked		Unspecified	NonForestMgt	Water Level Management	6239 - Mixed Emergent Wetland		Draft Field Boundary

Habitat Cut: No**Site Condition: Wildlife Concerns**

Prescription Retain precipitation. Pump water from Unit 7 into Unit 8 with a portable pump, as needed.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Comment: Maintain in flooded condition, except during scheduled drawdown. Plan prescribed burn to reduce shrub component and improve habitat for waterfowl once in 10 year period. Old next step comments: Drawdown in spring and summer of 2009. Mow or manually cut invading woody vegetation. Disc operable ground. Seed Japanese millet in about half of the disced areas and areas left bare by the drawdown. Leave the other half of the disced areas and areas left bare by the drawdown for growth of moist soil plants from seedbank sources or from seeds dispersed by birds and mammals. Then reflood by September 30, 2009.

Proposed Start Date: 10/01/2017

45	NF_11003045-NonFor	24.8	310 - Herbaceous Openland	Nonstocked		Unspecified	NonForestMgt	Mowing	3105 - Mixed Upland Herbaceous		Draft Field Boundary
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Habitat Cut: No**Site Condition: Wildlife Concerns**

Prescription Mow grass and forbs near buildings and in equipment depot areas with walk-behind, riding, or tractor-drawn mowers, as needed. Mow fields W of the railroad track annually in late summer .

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Comment: Maintain grounds near 3 buildings and adjacent, outside equipment depot areas in a presentable and utilitarian condition.

Proposed Start Date: 10/01/2017

**Total Treatment
Acreage Proposed: 685.1**

Report 4 – Site Conditions

Baraga Mgt. Unit
Jason Mittlestat : Examiner

Compartment: 3
Year of Entry: 2018

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions							
		With Condition	Not Available		1C	2F	2G	3D	3J	3L	5D	
23	20	0	3	Aspen							3	
172	0	0	171	Cedar							171	
174	0	0	174	Cropland							174	
10	10	0	0	Hemlock								
25	0	0	25	Herbaceous Openland							25	
11	11	0	0	Low-Density Trees								
162	89	0	73	Lowland Aspen/Balsam Poplar			60	13				
1370	33	0	1336	Lowland Deciduous	8		270		28		1,031	
396	32	0	364	Lowland Shrub							364	
258	52	0	207	Marsh							207	
492	409	0	83	Northern Hardwood	1	67			9	6		
168	0	0	168	Tamarack							113	55
2	2	0	0	Upland Shrub								
38	38	0	0	Water								
3,302	698		2,604	Total Forested Acres	9	67	330	13	37		2,093	55
	21%		79%	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	Dominant Site Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable		3L: Other wildlife concerns	2,094	Unspecified	Unspecified	Unspecified	Unspecified
Comments: WLD does not want to harvest due to deer yard.								
2	Unavailable		3J: Water quality / BMPs (stream, river, or lake)	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:								

Report 4 – Site Conditions

Baraga Mgt. Unit

Compartment: 3

Jason Mittlestat : Examiner

Year of Entry: 2018

3	Unavailable	1C: Other dept or div proc/practices	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	3D: Recreational / Scenic values	13	3L: Other wildlife concerns	Unspecified	Unspecified	Unspecified
Comments: Might cut in future. WLD wants this stand for wildlife cover in the field.							
5	Unavailable	2F: Too steep	67	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	61	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)	Unspecified	Unspecified	Unspecified
Comments: If feasible try to get a bridge (40-50') to access this stand when re-entering stand 23 to the south. We are not able to freeze the dikes in Arnheim due to not wanting to drive frost into the dams.							
7	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	28	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	41	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Baraga Mgt. Unit
Jason Mittlestat : Examiner

Compartment: 3
Year of Entry: 2018

9	Unavailable	1C: Other dept or div proc/practices	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: up for disposal							
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Bottomland hdwds and aspen.							
12	Unavailable	5D: Unproductive Forest Land	55	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments:							
13	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	218	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							



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
	Habitat Areas or Corridors	Habitat Corridor	Proposed SCA	285
Comments Arnhem Tamarack Complex.				
Arnhem Tamarack Complex.	Habitat Areas or Corridors	Habitat Corridor	Proposed SCA	285
Comments Arnhem Tamarack Complex.				
Arnhem Tamarack Complex.	Habitat Areas or Corridors	Habitat Corridor	Proposed SCA	1032
Comments Arnhem Tamarack Complex.				
Sturgeon River wildlife travel corridor.	Habitat Areas or Corridors	Habitat Corridor	Proposed SCA	91
Comments Sturgeon River wildlife travel corridor.				
Tama	Habitat Areas or Corridors	Habitat Corridor	Proposed SCA	1032
Comments Arnhem Tamarack Complex.				

**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 Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
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	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.
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.

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Baraga Mgt. Unit

Report 7 – Forested Stands

Compartment: 3
Year of Entry: 2018

Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4111 - S.Maple, Hard Mast Association	Sawtimber Well	11.4	93	81-110	Access may be an issue. lots of drains in stand. stand is on a hillside across from public access site. Cut as Weir Hdwd 11-015-08-01
6113 - Lowland Maple	Sawtimber Well	43.0	94	111-140	Wet. Flooded timber. Lots of black and green ash regeneration.
6113 - Lowland Maple	Sawtimber Well	29.7	99	141-170	Wet River Bottom. Otter River.
4112 - Maple, Beech, Cherry Association	Poletimber Well	47.9	99	81-110	Stand was thinned in 2009. Otter Hdwd 11-019-08-01. Area was deleted by the map shop in 2016 and data was lost.
6115 - Lowland Ash	Poletimber Well	27.6	55	141-170	Wet river bottom. lots of small dbh elm
411 - Northern Hardwood	Sawtimber Well	1.4	99	Unspecified	Gov Lot that is up for disposal.
6112 - Lowland Aspen	Sapling Well	8.0	18	Unspecified	Wolf Dog Aspen. 1998 sale.
6113 - Lowland Maple	Poletimber Poor	8.0	61	1-50	Wet Ground.
6112 - Lowland Aspen	Sapling Well	67.1	18	Unspecified	Wolf Dog Aspen. 1998 sale.
6112 - Lowland Aspen	Sapling Well	14.0	18	Unspecified	Wolf Dog Aspen. 1998 sale.
42350 - Upland Hemlock	Poletimber Well	10.5	98	141-170	11-005-98-01 "Ray's Camp Hardwoods".
4119 - Mixed Northern Hardwoods	Poletimber Well	73.7	82	141-170	thinned 11-005-98-01 "Ray's Camp Hardwoods"
4110 - Sugar Maple Association	Poletimber Well	61.0	86	81-110	
6112 - Lowland Aspen	Poletimber Well	60.6	81	81-110	Some aspen cut out in past. extremely wet, let convert to lowland hardwoods. Aspen that is remaining is in poor condition. If feasible try to get a bridge to access this stand when re-entering stand 23 to the south. We are not able to freeze the dikes in Arnheim due to not wanting to drive frost into the dams.
4110 - Sugar Maple Association	Sawtimber Well	41.1	88	81-110	Hanka Hdwd 11-001-08-01
6112 - Lowland Aspen	Poletimber Well	12.7	61	51-80	Wet Ground.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	4112 - Maple, Beech, Cherry Association	Poletimber Well	59.7	87	81-110	use stand 50 & 51 for stocking info. stand previously stand condition 8 but taken out at compartment review 12/7/06 and prescribed for selection harvest. Was harvested as Bennick Hdwd 11-021-08-01
29	6115 - Lowland Ash	Sapling Well	217.8	58	1-50	previously stand condition 8, now an SCA. bottom land hardwoods and wildlife corridor.
30	4112 - Maple, Beech, Cherry Association	Poletimber Well	67.0	96	111-140	Previously stand condition 8, now an SCA. wildlife corridor. river corridor/BMP issues. Stand has very poor/ no access and is also a corridor to the Otter River. would need considerable road work and once it is adequately buffered there would be little left to harvest.
31	6121 - Tamarack	Poletimber Well	81.7	64	51-80	Wet site - within the Surgeon river sloughs. The tamarack is showing decline.
37	6113 - Lowland Maple	Sapling Well	1,031.7	10	1-50	previously stand condition 8, now an SCA. wildlife migration route. maintain current snowmobile trail route through stand. Previously was a tamarack stand. The tamarack has all but died out.
38	6121 - Tamarack	Poletimber Well	55.2	78	51-80	Very wet. Tamarack more prevalent on the fringe. Non-productive forest land.
40	6121 - Tamarack	Poletimber Well	5.9	64	1-50	Very Wet. Small stand on the edge of a dike road of the sturgeon river floodings.
42	6121 - Tamarack	Poletimber Well	25.5	57	51-80	Very wet. Part of the Surgeon River Slough flooding.
43	4112 - Maple, Beech, Cherry Association	Poletimber Well	4.6	76	51-80	Small stand in ditches separating fields.
44	4130 - Aspen	Sapling Well	23.0	8	1-50	C3 Aspen 11-003-08-01
46	6120 - Lowland Cedar	Poletimber Well	79.4	95	171-200	Snowmobile trail runs through the stand.
47	6120 - Lowland Cedar	Poletimber Well	92.1	95	171-200	
48	4112 - Maple, Beech, Cherry Association	Sawtimber Well	79.8	73	111-140	11-017-98-01 "Neon Lights Hardwoods", heavy deer browse.
49	6119 - Mixed Lowland Deciduous Forest	Sapling Well	7.9	33	Unspecified	Test cut in the 80's. Seems to be regenerating well. Some nice cedar coming up.

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Baraga Mgt. Unit

Report 7 – Forested Stands

Compartment: 3
Year of Entry: 2018



Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4112 - Maple, Beech, Cherry Association	Poletimber Well	11.6	88	81-110	Helberg Hdwd 11-017-08-01
4112 - Maple, Beech, Cherry Association	Poletimber Well	24.2	83	81-110	Helberg Hdwd 11-017-08-01
4111 - S.Maple, Hard Mast Association	Sawtimber Well	9.2	93	81-110	Lots of drains in stand. Stand is on a hillside across from public access site. BMP issues.
6119 - Mixed Lowland Deciduous Forest	Poletimber Poor	3.8	61	1-50	Very Wet.



Stand	Cover Type	Acres	Managed Site	General Comments:
2	500 - Water	11.7	No	
6	320 - Upland Shrub	2.3	No	Easement along power line ROW to access state land.
7	500 - Water	5.5	No	Otter River
12	622 - Lowland Shrub	5.3	No	Heavy Tag Alder.
13	622 - Lowland Shrub	3.2	No	
18	622 - Lowland Shrub	23.3	No	Heavy Tag Alder with a few black scattered black ash. Old beaver flooding.
19	6230 - Cattail	49.4	No	Marsh
20	330 - Low-Density Trees	11.3	No	Scattered ash with tag alder. Wet.
22	500 - Water	20.8	No	
26	2113 - Forage Crops	174.2	Yes	
32	629 - Mixed non-forested wetland	38.5	No	previously stand condition 8, now an SCA
33	629 - Mixed non-forested wetland	93.0	No	previously stand condition 8, now an SCA
34	6239 - Mixed Emergent Wetland	127.2	Yes	
35	622 - Lowland Shrub	118.0	No	
36	6239 - Mixed Emergent Wetland	79.6	Yes	
39	629 - Mixed non-forested wetland	24.1	No	previously stand condition 8, now an SCA.
41	622 - Lowland Shrub	90.2	No	
45	310 - Herbaceous Openland	24.8	Yes	Grassy opening around WLD barns.



Stand	Cover Type	Acres	Managed Site	General Comments:
58	6230 - Cattail	2.2	No	