



# Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32247

Entry Year 2020

Acreage: 937

County Marquette

Management Area: Michigamme Reservoir

---

**Revision Date:** 2018-08-06

**Stand Examiner:** Jason Caron

**Legal Description:**

T45N-R29W, Section 18, T45N-R30W, Sections 6,10,14,16,20,22

**Identified Planning Goals:**

Several planning goals exist for this compartment. Recreation goals include maintaining a campground on Squaw Lake along with public access sites on Horseshoe Lake, Island Lake, and Twin Lake. A maintained canoe access site exists on Witbeck Rapids along the Michigamme River. Timber goals include maintaining and perpetuating the aspen cover type and managing the northern hardwood cover type to produce pulpwood and sawlogs. Within the aspen cover type it will be a goal to balance the age class distribution, the majority of the aspen within this compartment is within the 35 - 45 year old age class. This may lead to some aspen being harvested before it matures. Hardwood quality in this portion of the landscape is generally poor to medium.

**Soil and topography:**

Soils within this compartment are primarily composed of the Goodman-Sundog silt loams (GS) and the Goodman-Sundog-Waben complex (GSW) on the uplands, and to a lesser extent the Carbondale and Tawas soils (CT) and the Greenwood and Dawson soils (GD) in the lowlands, depressions and drainages. Topography is fairly level to hilly with scattered lakes and bogs.

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

Ownership is predominately private individuals with scattered State and Private Industry holdings. The area is developed with both homes and camps. There is some agricultural practice in the area as well. Primary land use is recreation with timber being secondary.

**Unique Natural Features:**

Pot hole depressions exist around the state ownership within the Horseshoe Lake area. Numerous lakes and ponds exist in and around this compartment as well.

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

None known.

**Special Management Designations or Considerations:**

MNFI will do a survey within stand 53 to see if a small hemlock grove within the stand meets old growth criteria.

**Watershed and Fisheries Considerations:**

Compartment is separated into multiple sections and locations including along the Michigamme River near Whitbeck Rapids, Island Lake, Twin Lake, Horseshoe Lake, Mud Lake, Squaw and Little Squaw Lakes, Lily Lake, and various lowland wet areas. A 100' plus 5' per 1% increase in slope buffer is recommended to protect these areas in accordance with Best Management Practices.

**Wildlife Habitat Considerations:**

Compartment 247 is found within the Michigamme Reservoir Management Area on a Disintegration Moraine. The dominant Natural Communities are mesic northern forests and poor conifer swamps. The management area provides multiple benefits to the public including forest products, dispersed recreational activities, and habitat for fish and wildlife species. Because of the amount of recreational use in this area, it is a priority to continue to provide multiple benefits in a sustainable manner while minimizing user conflicts.

Some of the most significant wildlife management issues in the management area are: deer wintering complex; mast (hard and soft); habitat fragmentation; course woody debris; early successional forest; mature forest; and retention or development of large living and dead standing trees (for cavities and nest trees for eagles and ospreys).

The following have been identified as featured species for the Michigamme Reservoir Management Area: black bear, pileated woodpecker, Northern goshawk, ruffed grouse, and white-tailed deer.

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

An active sand/gravel pit is located one mile to the southeast, in Sec 25, and there appears to be good sand & gravel potential within the compartment. Iron formations do underlie the compartment, but there has been limited exploration in this area. So, depth and quality of the iron formation in this area is not known. There is no history of mineral leasing within the compartment. There is no potential for economical oil and gas production in the UP.

### **Vehicle Access:**

Vehicle access within this compartment is good. M-95 and County Road 601 bisect the compartment as well as other small county roads.

### **Survey Needs:**

Surveys are needed for the treatments around stands 33, 36 and 67. A survey request has been submitted for these stands.

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

The Squaw Lake campground exists within this compartment. Public access sites exist on Twin Lake and Island Lake along with the canoe access site at Witbeck Rapids. Three campgrounds, South Horseshoe, North Horseshoe, and Witbeck Rapids, were developed and closed within this compartment.

### **Fire Protection:**

Timber types within this compartment and surrounding landscape are not prone to natural fires. However, it is a fairly urbanized area and has the potential for human caused fires. Access to the area for fire protection is good.

### **Additional Compartment Information:**

The following reports from the Inventory are attached:

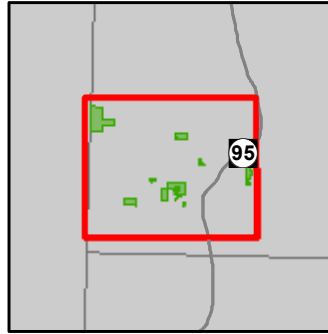
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

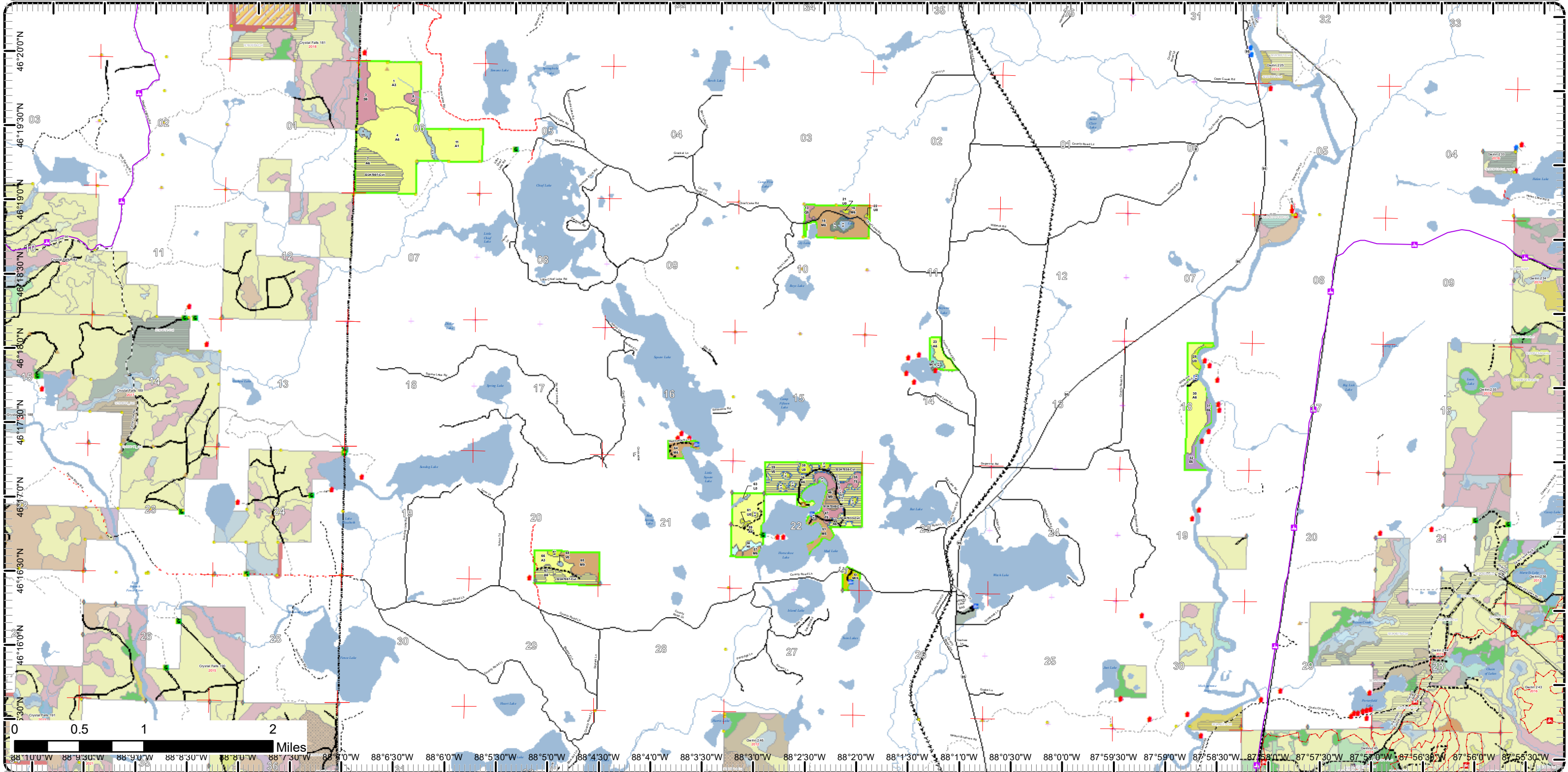
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Overview Map

Compartment: 247  
 T45N,R30W, Sec. 06, 10, 14, 16,  
 T45N,R30W, Sec. 18  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Michigamme  
 Reservoir  
 YOE: 2020  
 Acres: 937 GIS Calculated  
 Examiner: Jason Caron  
 Map Revised: 10/18/2018  
 Map Phase: Pre-Review

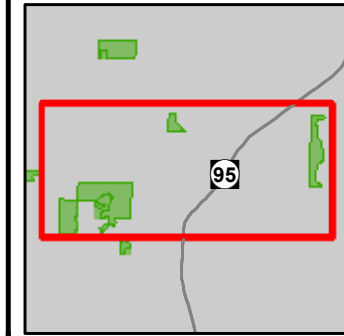


- |  |   |   |
|--|---|---|
| <ul style="list-style-type: none"> <li>— Miris Corners</li> <li>+ Remonumented Section Corners</li> <li>● Survey Grade Corners</li> <li>◆ Field Grade Corners</li> <li>--- Counties</li> <li>— DNR - Primary Forest Road</li> <li>— DNR - Secondary Forest Road</li> <li>— DNR - Forest Access Route</li> <li>— Federal / State Highway</li> <li>— Federal / State / County - Paved Road</li> <li>- - Federal / State - Dirt / Gravel Road</li> <li>- . . County - Gravel Road</li> <li>- - - County - Dirt Road (Seasonal)</li> <li>- - - Private - Dirt / Gravel Road</li> </ul> | <ul style="list-style-type: none"> <li>— Active Railroads</li> <li>✖ - Abandoned Railroads</li> <li>🏠 Cabin</li> <li>🚪 Gate</li> <li>🚤 Boating Access Site</li> <li>🏕 Campground</li> <li>🏠 Structures</li> <li>🌊 Intermittent Stream</li> <li>🌊 Island in Lake or River</li> <li>🌊 Lake/Pond</li> <li>🌊 Perennial River</li> <li>🌊 Lakes and Rivers All</li> <li>🟩 Compartment Boundary</li> </ul> | <ul style="list-style-type: none"> <li>🟩 Clearcut (w/Reserves)</li> <li>🟤 411 - Northern Hardwood</li> <li>🟨 413 - Aspen</li> <li>🟩 419 - Mixed Upland Deciduous</li> <li>🟩 423 - Other Upland Conifers</li> <li>🟩 429 - Mixed Upland Conifers</li> <li>🟪 611 - Lowland Deciduous Forest</li> <li>🟪 612 - Lowland Coniferous Forest</li> <li>🟩 122 - Roads/Parking Lot</li> <li>🟩 330 - Low Density Trees</li> <li>🟩 500 - Water</li> <li>🟩 622 - Lowland Shrub</li> <li>🟩 623 - Emergent Wetland</li> <li>🟩 Lakes</li> </ul> |
|--|---|---|

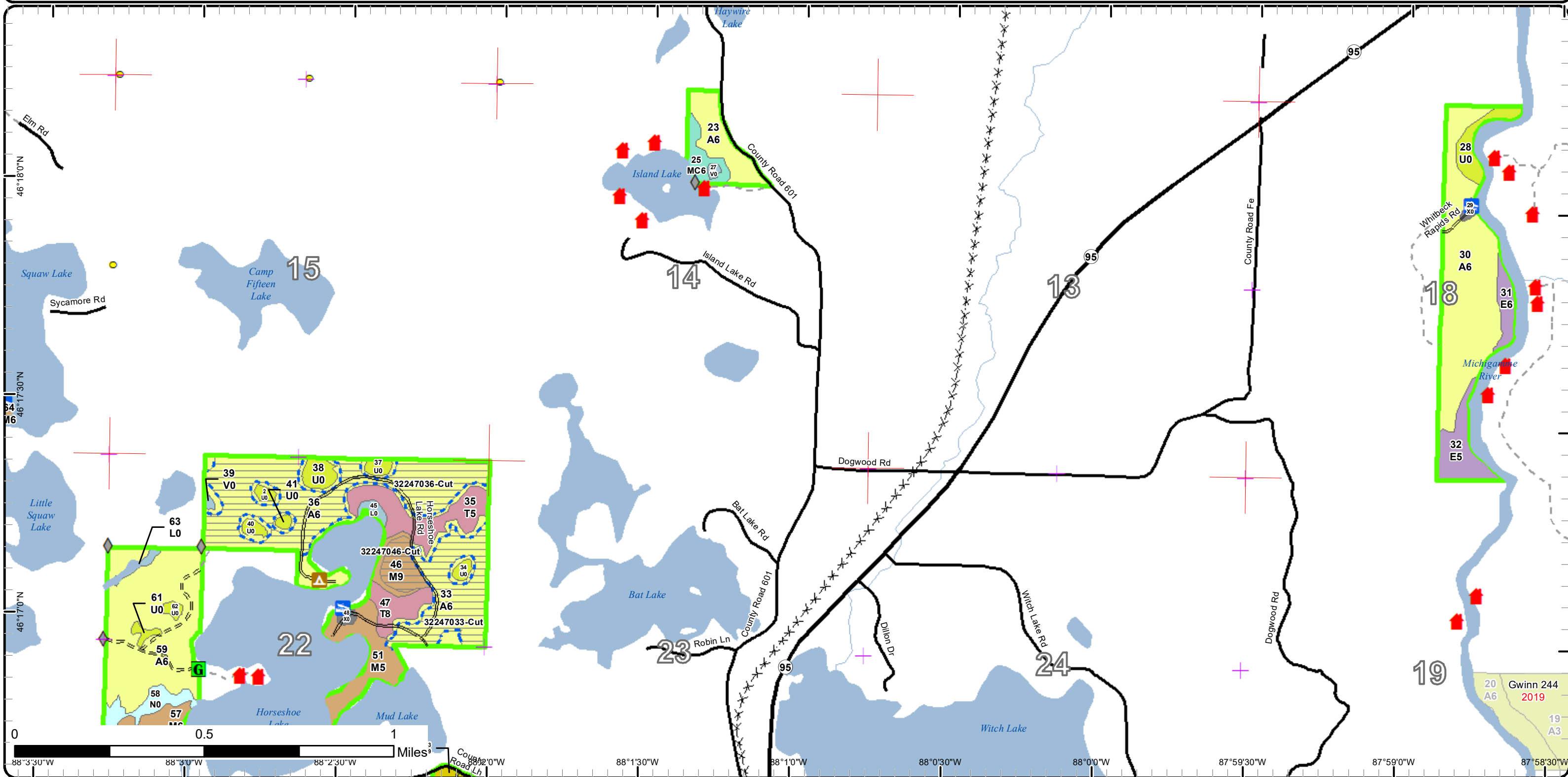


# Cover Type & Treatments Map

Compartment: 247  
 T45N,R30W, Sec. 14, 15, 22  
 T47N,R25W, Sec. 18  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Michigamme  
 Reservoir  
 YOE: 2020  
 Acres: 937 GIS Calculated  
 Examiner: Jason Caron  
 Map Revised: 10/18/2018  
 Map Phase: Pre-Review

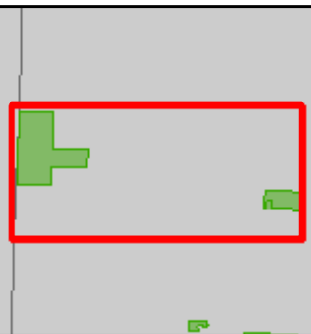


- |  |                                   |                                 |
|--|-----------------------------------|---------------------------------|
| — Miris Corners                          | Boating Access Site               | 612 - Lowland Coniferous Forest |
| + Remonumented Section Corners           | ▲ Campground                      | 122 - Roads/Parking Lot         |
| ● Survey Grade Corners                   | ▲ Structures                      | 330 - Low Density Trees         |
| ◆ Field Grade Corners                    | — Island in Lake or River         | 622 - Lowland Shrub             |
| --- Counties                             | — Lake/Pond                       | 623 - Emergent Wetland          |
| == DNR - Secondary Forest Road           | — Perennial River                 | Lakes                           |
| == DNR - Forest Access Route             | — Lakes and Rivers All            |                                 |
| == Federal / State Highway               | — Compartment Boundary            |                                 |
| == Federal / State / County - Paved Road | — Treatments with Site Conditions |                                 |
| --- Private - Dirt / Gravel Road         | — Clearcut (w/Reserves)           |                                 |
| × Abandoned Railroads                    | — 411 - Northern Hardwood         |                                 |
| ▲ Cabin                                  | — 413 - Aspen                     |                                 |
| ■ Gate                                   | — 429 - Mixed Upland Conifers     |                                 |
|  | — 611 - Lowland Deciduous Forest  |                                 |

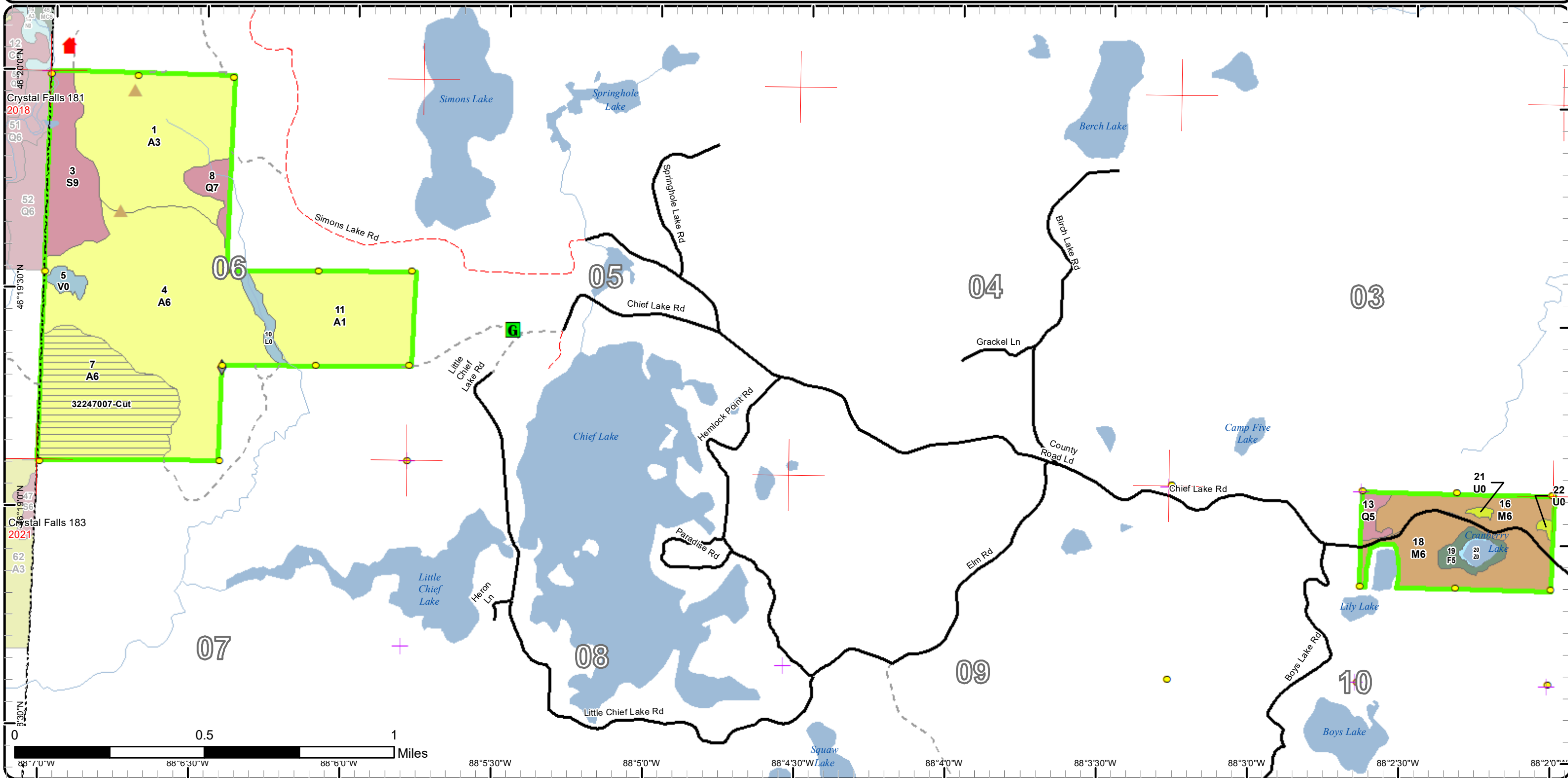


# Cover Type & Treatments Map

Compartment: 247  
 T45N,R30W, Sec. 06, 10  
 T47N,R25W, Sec. 18  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Michigamme  
 Reservoir  
 YOE: 2020  
 Acres: 937 GIS Calculated  
 Examiner: Jason Caron  
 Map Revised: 10/18/2018  
 Map Phase: Pre-Review

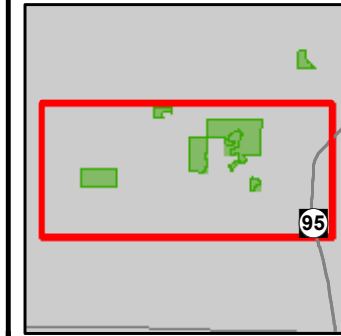


- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- ◆ Field Grade Corners
- Counties
- Federal / State / County - Paved Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Cabin
- ▲ Berms
- G Gate
- Structures
- Island in Lake or River
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Clearcut (w/Reserves)
- 411 - Northern Hardwood
- 413 - Aspen
- 423 - Other Upland Conifers
- 612 - Lowland Coniferous Forest
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- Lakes

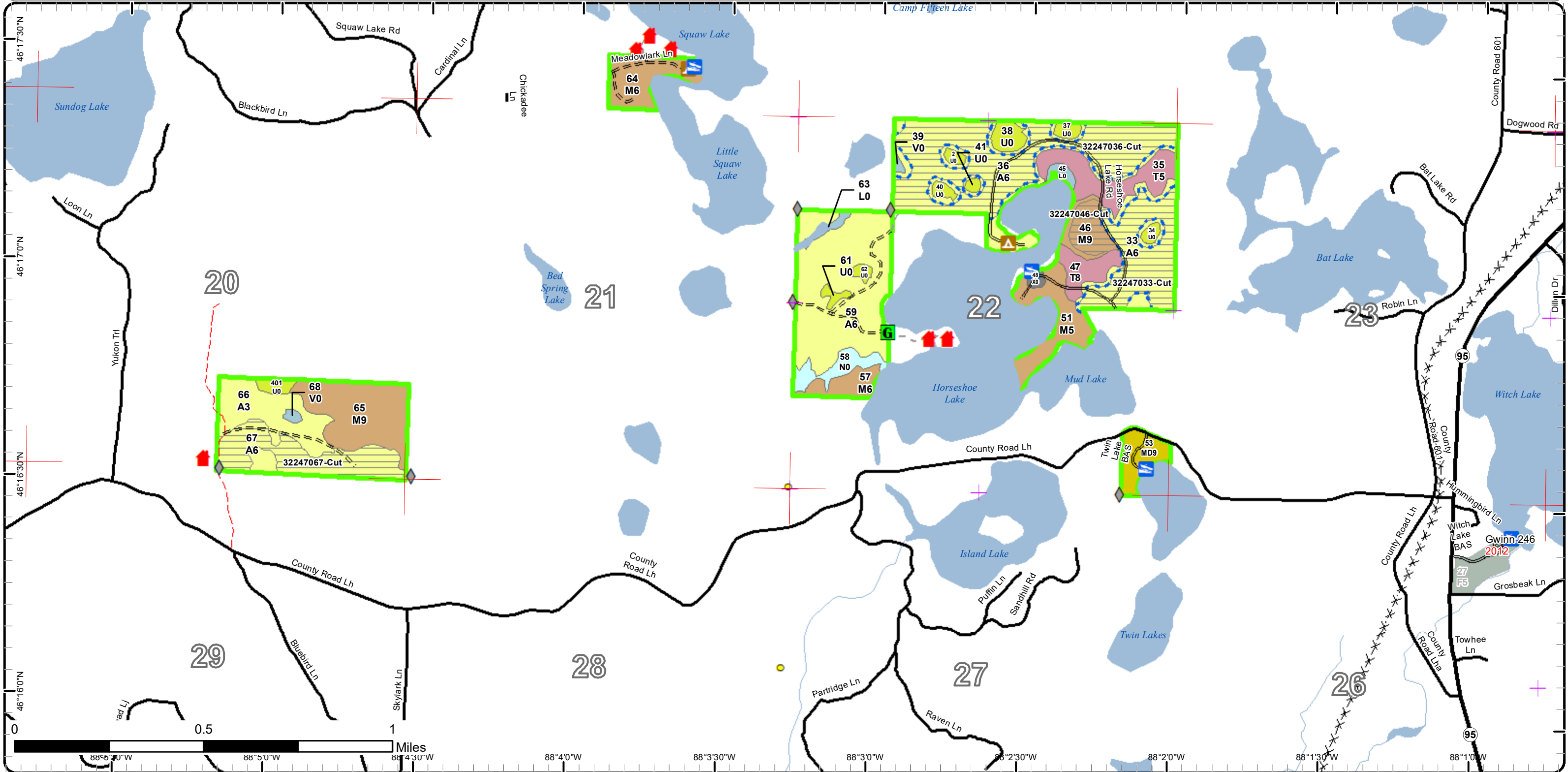


# Cover Type & Treatments Map

Compartment: 247  
 T45N,R30W, Sec. 20, 21, 22  
 T47N,R25W, Sec. 18  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Michigamme  
 Reservoir  
 YOE: 2020  
 Acres: 937 GIS Calculated  
 Examiner: Jason Caron  
 Map Revised: 10/18/2018  
 Map Phase: Pre-Review

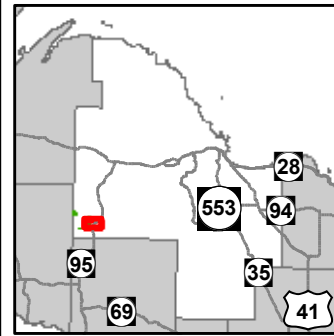


- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- ◆ Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State Highway
- Federal / State / County - Paved Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- x- Abandoned Railroads
- ▲ Cabin
- Gate
- Boating Access Site
- Campground
- ▲ Structures
- Island in Lake or River
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Treatments with Site Conditions
- Clearcut (w/Reserves)
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 612 - Lowland Coniferous Forest
- 122 - Roads/Parking Lot
- 330 - Low Density Trees
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes

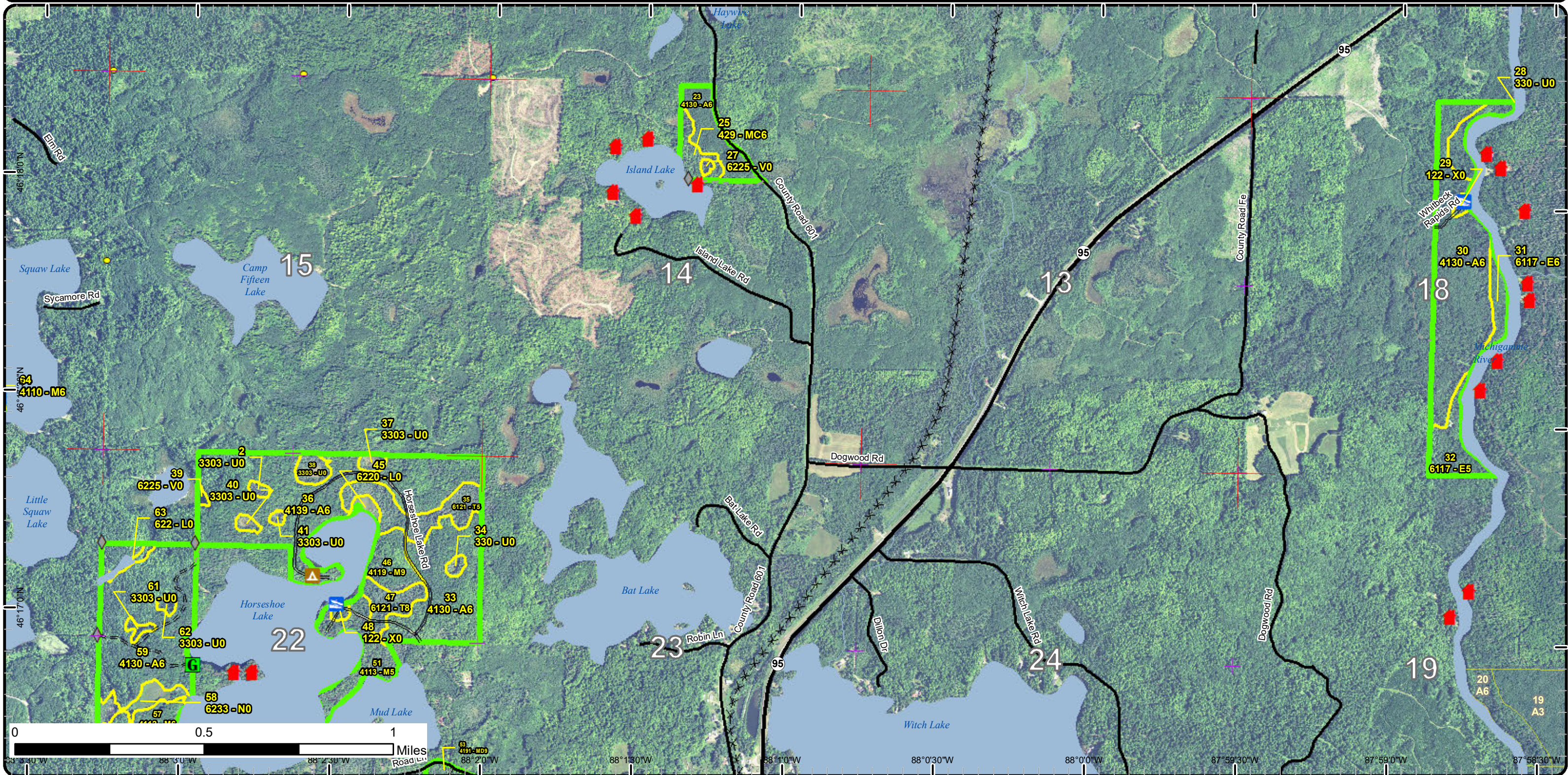


# Stand Boundary Map

Compartment: 247  
 T45N,R30W, Sec. 14, 15, 22  
 T47N,R25W, Sec. 18  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Michigamme Reservoir  
 YOE: 2020  
 Acres: 937 GIS Calculated  
 Examiner: Jason Caron  
 Map Revised: 8/24/2018  
 Map Phase: Web-Post

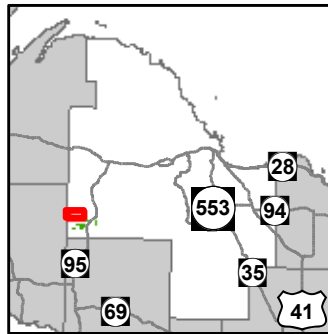


- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- ◆ Field Grade Corners
- ▭ Counties
- ▬ DNR - Secondary Forest Road
- ▬▬ DNR - Forest Access Route
- ▬▬▬ Federal / State Highway
- ▬▬▬ Federal / State / County - Paved Road
- - - Private - Dirt / Gravel Road
- ✖ Abandoned Railroads
- Cabin
- G Gate
- Boating Access Site
- ▲ Campground
- Structures
- Island in Lake or River
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- ▭ Compartment Boundary
- ▭ Stand Boundaries
- 122 - Roads/Parking Lot
- 330 - Low Density Trees
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 411 - Northern Hardwood
- 413 - Aspen
- 429 - Mixed Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

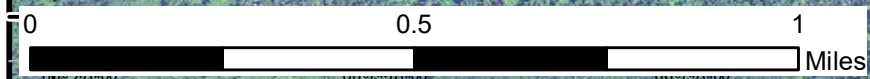
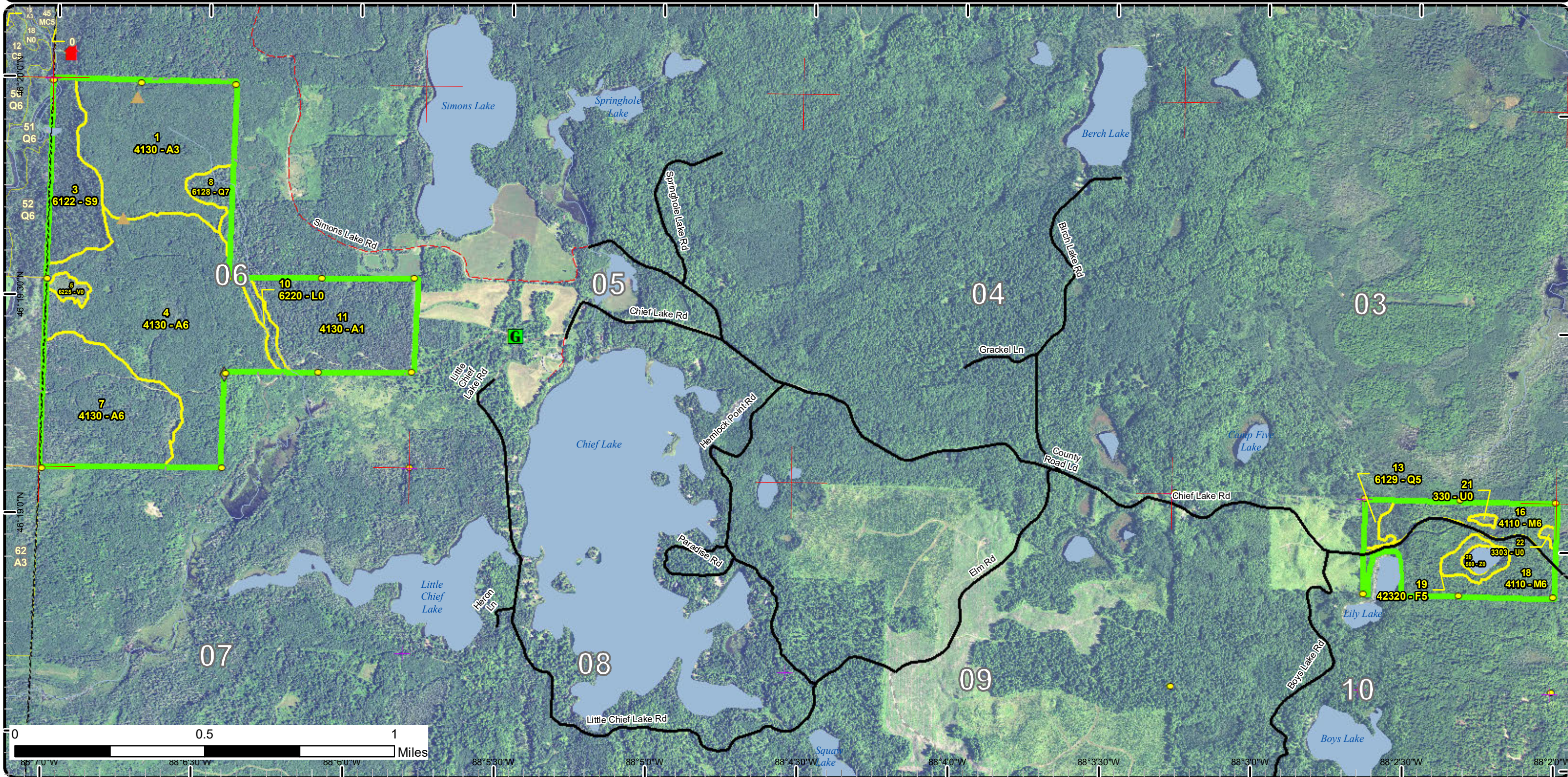


# Stand Boundary Map

Compartment: 247  
 T45N,R30W, Sec. 06, 10  
 T47N,R25W, Sec. 18  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Michigamme  
 Reservoir  
 YOE: 2020  
 Acres: 937 GIS Calculated  
 Examiner: Jason Caron  
 Map Revised: 8/24/2018  
 Map Phase: Web-Post



- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- ◆ Field Grade Corners
- Counties
- Federal / State / County - Paved Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Cabin
- ▲ Berms
- G Gate
- Structures
- Island in Lake or River
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Stand Boundaries
- 411 - Northern Hardwood
- 413 - Aspen
- 423 - Other Upland Conifers
- 612 - Lowland Coniferous Forest
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub

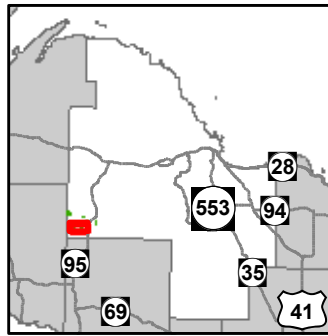


88° 7' 0" W
88° 6' 30" W
88° 6' 0" W
88° 5' 30" W
88° 5' 0" W
88° 4' 30" W
88° 4' 0" W
88° 3' 30" W
88° 3' 0" W
88° 2' 30" W
88° 2' 0" W

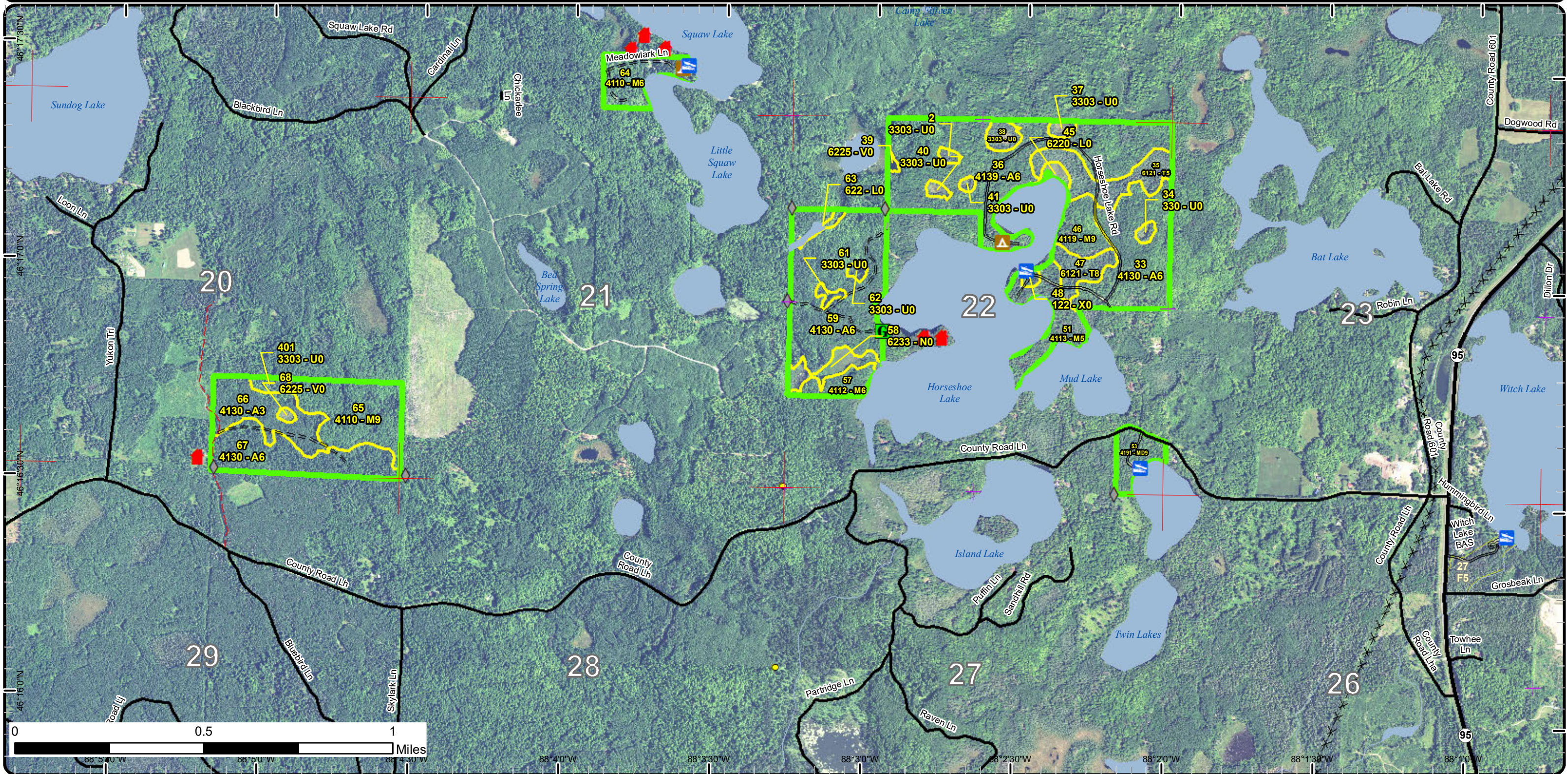


# Stand Boundary Map

Compartment: 247  
 T45N,R30W, Sec. 20, 21, 22  
 T47N,R25W, Sec. 18  
 County: Marquette  
 Unit: Gwin  
 Mgmt Area: Michigamme  
 Reservoir  
 YOE: 2020  
 Acres: 937 GIS Calculated  
 Examiner: Jason Caron  
 Map Revised: 8/24/2018  
 Map Phase: Web-Post

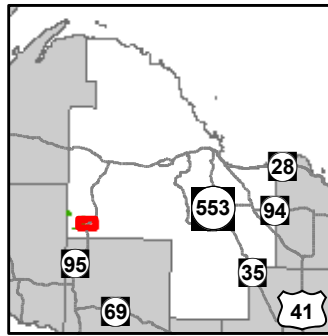


- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- ◆ Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State Highway
- Federal / State / County - Paved Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- ✕ Abandoned Railroads
- Cabin
- Gate
- Boating Access Site
- Campground
- ▲ Structures
- Island in Lake or River
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Stand Boundaries
- 122 - Roads/Parking Lot
- 330 - Low Density Trees
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 612 - Lowland Coniferous Forest

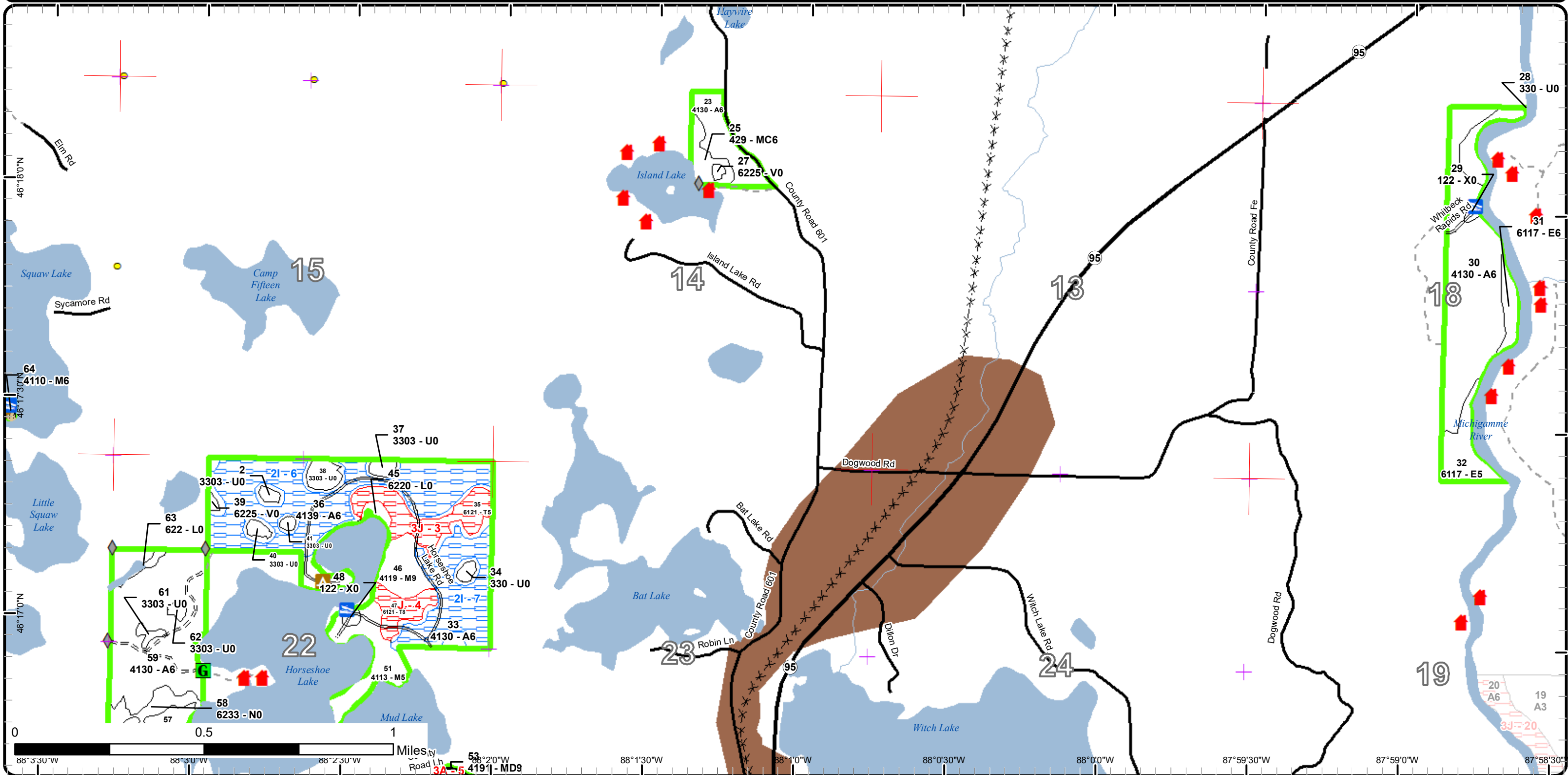


# Special Conservation Areas & Site Conditions Map

Compartment: 247  
 T45N,R30W, Sec. 14, 15, 22  
 T47N,R25W, Sec. 18  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Michigamme  
 Reservoir  
 YOE: 2020  
 Acres: 937 GIS Calculated  
 Examiner: Jason Caron  
 Map Revised: 8/24/2018  
 Map Phase: Web-Post

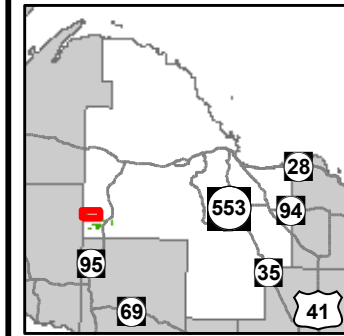


- |  |   |   |
|--|---|---|
| <ul style="list-style-type: none"> <li>— Miris Corners</li> <li>✦ Remonumented Section Corners</li> <li>● Survey Grade Corners</li> <li>◆ Field Grade Corners</li> <li>--- Counties</li> <li>== DNR - Secondary Forest Road</li> <li>== DNR - Forest Access Route</li> <li>== Federal / State Highway</li> <li>== Federal / State / County - Paved Road</li> <li>- - Private - Dirt / Gravel Road</li> <li>✖ Abandoned Railroads</li> <li>🏠 Cabin</li> <li>🚪 Gate</li> </ul> | <ul style="list-style-type: none"> <li>🚤 Boating Access Site</li> <li>🏕 Campground</li> <li>🏠 Structures</li> <li>— Island in Lake or River</li> <li>— Lake/Pond</li> <li>— Perennial River</li> <li>— Lakes and Rivers All</li> <li>🟩 Compartment Boundary</li> <li>🟦 Available w/ Constraints</li> <li>🔴 Unavailable</li> <li>2I: Survey needed</li> <li>3J: Water quality / BMPs (stream, river, or lake)</li> <li>📏 Stand Boundaries</li> </ul> | <ul style="list-style-type: none"> <li>🟩 SCA</li> <li>— Cold Water Streams</li> <li>— Cold Water Lakes</li> <li>🟤 Deer Winter Range</li> <li>🟫 State Forest Campground</li> </ul> |
|--|---|---|

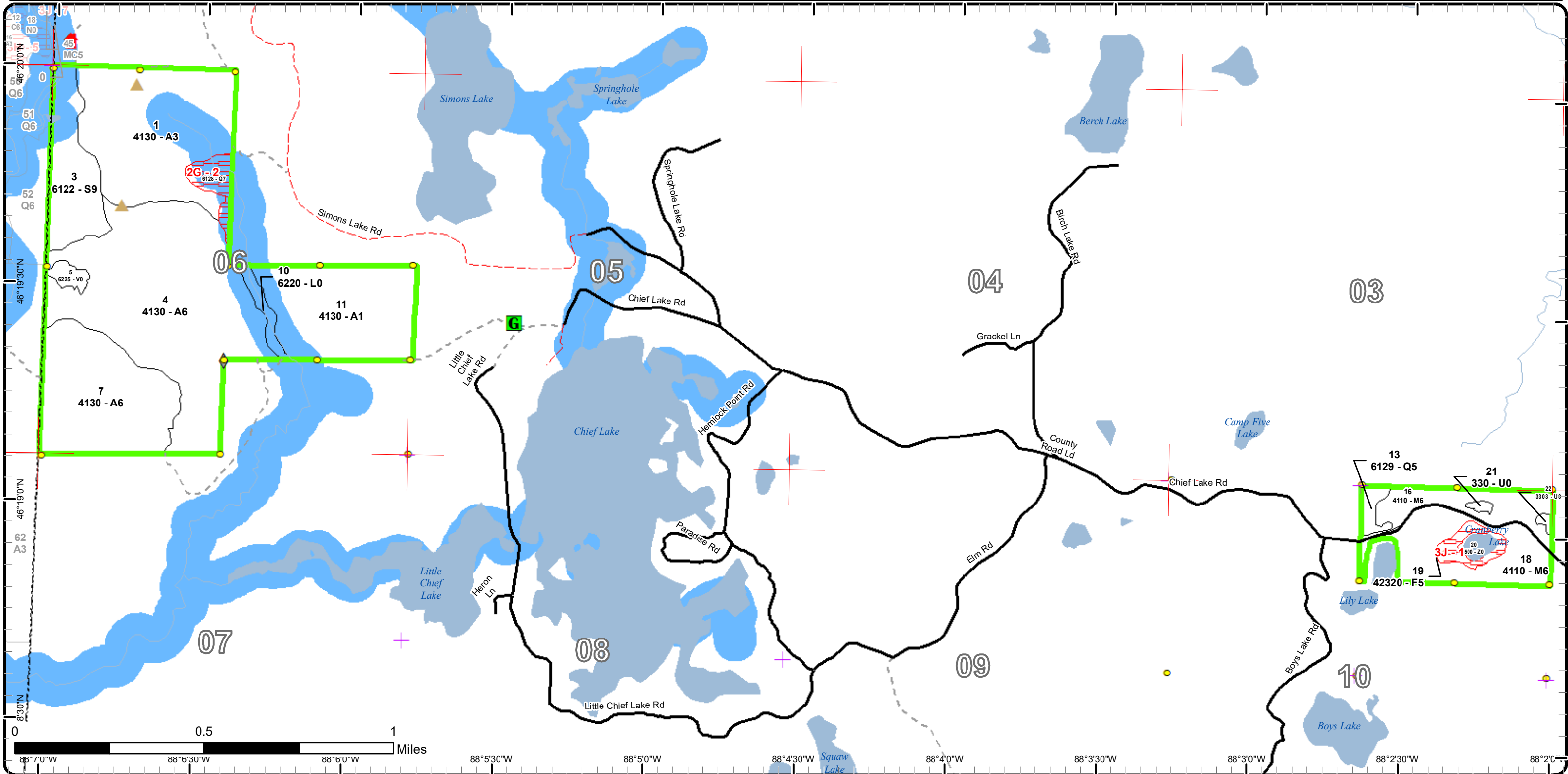


# Special Conservation Areas & Site Conditions Map

Compartment: 247  
 T45N,R30W, Sec. 06, 10  
 T47N,R25W, Sec. 18  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Michigamme  
 Reservoir  
 YOE: 2020  
 Acres: 937 GIS Calculated  
 Examiner: Jason Caron  
 Map Revised: 8/24/2018  
 Map Phase: Web-Post

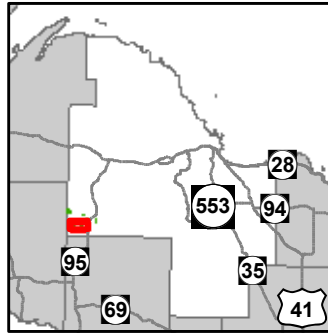


- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- ◆ Field Grade Corners
- Counties
- Federal / State / County - Paved Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Cabin
- ▲ Berms
- Gate
- Structures
- Island in Lake or River
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Unavailable
- 2G: Too wet (sensitive soils, does not include access issues)
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer

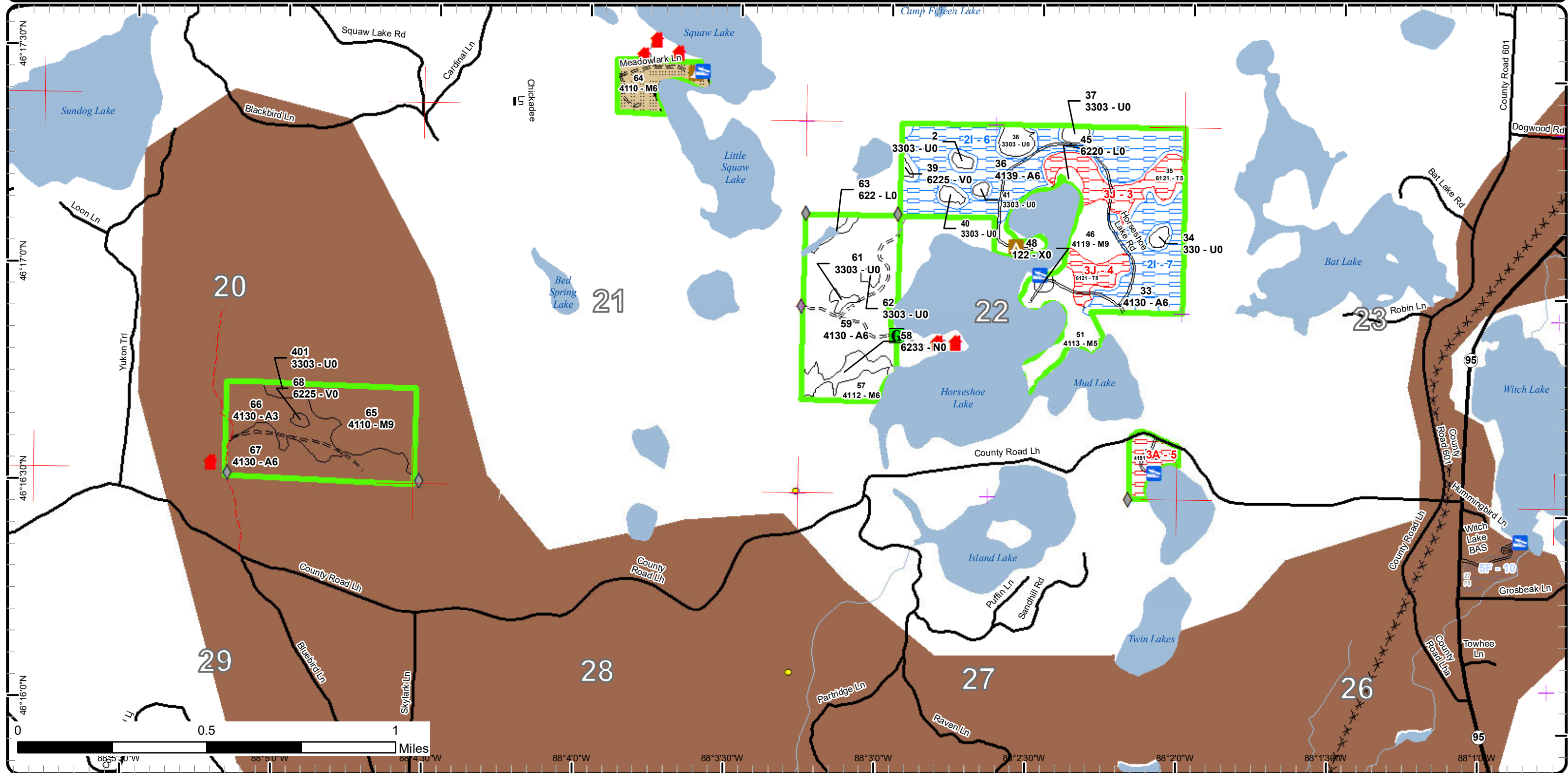


# Special Conservation Areas & Site Conditions Map

Compartment: 247  
 T45N,R30W, Sec. 20, 21, 22  
 T47N,R25W, Sec. 18  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Michigamme  
 Reservoir  
 YOE: 2020  
 Acres: 937 GIS Calculated  
 Examiner: Jason Caron  
 Map Revised: 8/24/2018  
 Map Phase: Web-Post



- Miris Corners
- Remonumented Section Corners
- Survey Grade Corners
- ◆ Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State Highway
- Federal / State / County - Paved Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- ✕ Abandoned Railroads
- 🏠 Cabin
- 🚪 Gate
- 🚤 Boating Access Site
- 🏕️ Campground
- 🏠 Structures
- 🏞️ Island in Lake or River
- 🌊 Lake/Pond
- 🌊 Perennial River
- 🌊 Lakes and Rivers All
- 🟩 Compartment Boundary
- 🟦 Available w/ Constraints
- 🔴 Unavailable
- 2! Survey needed
- 3A: Conservation Values incompatible with harvest at this time
- 3J: Water quality / BMPs (stream, river, or lake)
- 🏠 Stand Boundaries
- 🏠 SCA
- 🌊 Cold Water Streams
- 🌊 Cold Water Lakes
- 🌊 Deer Winter Range
- 🏠 State Forest Campground



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	61	0	118	249	180	28	0	0	0	0	0	0	0	0	0	0	0	636
Bog	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Low-Density Trees	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Lowland Conifers	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	12
Lowland Deciduous	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	18
Lowland Shrub	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Spruce/Fir	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	32
Marsh	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	10
Northern Hardwood	0	0	0	0	0	0	28	0	51	0	0	0	0	0	0	0	0	60	139
Tamarack	0	0	0	0	0	0	0	17	8	0	0	0	0	0	0	0	0	0	25
Upland Conifers	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Upland Spruce/Fir	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6
Urban	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Water	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
<b>Total</b>	<b>51</b>	<b>61</b>	<b>0</b>	<b>118</b>	<b>256</b>	<b>180</b>	<b>28</b>	<b>34</b>	<b>67</b>	<b>71</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>936</b>



## Report 2 – Treatment Summary

Gwinn Mgt. Unit

Year of Entry: 2020

Acres of Harvest

Compartment 247

Total Compartment Acres: 937

Commercial Harvest - 98  
 Harvests with Site Condition - 91  
 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	181	0	0	0	0	0	0	0	0	181
Northern Hardwood	8	0	0	0	0	0	0	0	0	8
<b>Total</b>	<b>189</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>189</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	189	0	0	0	0	0	0	0	0	189
Next Step	0	0	0	0	0	0	189	0	0	189
<b>Total</b>	<b>189</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>189</b>	<b>0</b>	<b>0</b>	<b>378</b>



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
7	32247007-Cut	65.5	4130 - Aspen	Poletimber Well	49	51-80	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Proposal

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

Prescription Clearcut with retention. Red line out a patch of mature timber to meet retention guidelines. Do not harvest under-represented species such as  
Specs: pine, hemlock, yellow birch, and oak.

Next Step Monitoring, Natural Regen (Re-Inventory)  
Treatments:

Acceptable aspen, fir, spruce, pine, maple, and birch.  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2019

33	32247033-Cut	29.8	4130 - Aspen	Poletimber Well	45	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Proposal
----	--------------	------	--------------	--------------------	----	--------	---------	----------------------------	-----------------------------	-----------	----------------

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

Prescription Clearcut with retention. Numerous low depressions within the stand will serve as retention pockets. Do not harvest under-represented species  
Specs: such as pine, hemlock, yellow birch, and oak.

Next Step Monitoring, Natural Regen (Re-Inventory)  
Treatments:

Acceptable Maple, aspen, birch, oak, pine, spruce, and fir.  
Regen:

Other Wildlife - Retention should include some large paper birch – pileated woodpecker  
Comment:

Proposed Start Date: 10/01/2019

36	32247036-Cut	60.8	4139 - Aspen, Mixed Deciduous	Poletimber Well	45	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Proposal
----	--------------	------	----------------------------------	--------------------	----	--------	---------	----------------------------	-----------------------------	-----------	----------------

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

Prescription Clearcut with retention. Numerous low depressions within the stand will serve as retention pockets. Do not harvest under-represented species  
Specs: such as pine, hemlock, yellow birch, and oak.

Next Step Monitoring, Natural Regen (Re-Inventory)  
Treatments:

Acceptable maple, aspen, fir, spruce, pine, oak, hemlock, and birch  
Regen:

Other Wildlife - Retention should include some large paper birch – pileated woodpecker also look for the opportunity to leave a few large Red Maple –  
Comment: cavity nesters and northern goshawk

Proposed Start Date: 10/01/2019

46	32247046-Cut	7.6	4119 - Mixed Northern Hardwoods	Sawtimber Well	60	81-110	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	Draft Proposal
----	--------------	-----	------------------------------------	-------------------	----	--------	---------	----------------------------	---	-----------	----------------

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

Prescription Clearcut with reserves. A steep hill exists around most of the stand. Do not harvest on this steep hill and red line this out for retention. Also,  
Specs: within this stand a patch of sugar maple exists which is better quality. In this patch green tree out some decent stems and retain 20-40 square feet of residual. Do not harvest under-represented trees such as pine, oak, hemlock, and yellow birch.

Next Step Monitoring, Natural Regen (Re-Inventory)  
Treatments:

Acceptable maple, oak, pine, aspen, fir, spruce, and birch.  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2019



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
67 32247067-Cut	25.1	4130 - Aspen	Poletimber Well	51	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Proposal

**Habitat Cut: No**

**Site Condition:**

Prescription Clearcut with retention. Do not harvest under-represented species such as pine, hemlock, yellow birch, and oak. Omitted a small hardwood patch from the harvest area on the south side of this stand - this will serve as retention for the stand.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, spruce, fir, birch, pine, oak, and maple.

Regen:

Other Wildlife - Add a winter cutting specification to this stand – Deer Wintering Complex

Comment:

Proposed Start Date: 10/01/2019

**Total Treatment  
Acreage Proposed: 188.8**



## Report 4 – Site Conditions

Gwinn Mgt. Unit  
Jason Caron : Examiner

Compartment: 247  
Year of Entry: 2020

### Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions			
		With Condition	Not Available		2I	2G	3A	3J
636	545	<b>91</b>	0	Aspen	<b>91</b>			
6	6	<b>0</b>	0	Bog				
24	24	<b>0</b>	0	Low-Density Trees				
13	4	<b>0</b>	8	Lowland Conifers		8		
18	18	<b>0</b>	0	Lowland Deciduous				
9	9	<b>0</b>	0	Lowland Shrub				
32	32	<b>0</b>	0	Lowland Spruce/Fir				
7	7	<b>0</b>	0	Marsh				
10	0	<b>0</b>	10	Mixed Upland Deciduous			10	
139	139	<b>0</b>	0	Northern Hardwood				
25	0	<b>0</b>	25	Tamarack				25
7	7	<b>0</b>	0	Upland Conifers				
6	0	<b>0</b>	6	Upland Spruce/Fir				6
2	2	<b>0</b>	0	Urban				
3	3	<b>0</b>	0	Water				
937	797	<b>91</b>	49	Total Forested Acres	<b>91</b>	8	10	31
	85%	<b>10%</b>	5%	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>3J: Water quality / BMPs (stream, river, or lake)</b>	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Wet stand that surrounds adjacent lake.							
2	Unavailable	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Stand contains a rim of higher ground surrounded by stagnant tamarack and black spruce. Do not manage.							

## Report 4 – Site Conditions

Gwinn Mgt. Unit  
Jason Caron : Examiner

Compartment: 247  
Year of Entry: 2020

3	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	17	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Stand drains into the lake or vice versa. Do not manage.							
4	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Stand is poorly stocked and very wet. Acts as a drain into the lake. Harvesting would affect the hydrology. Rutting would be a big concern as well, if managed.							
5	<b>Unavailable</b>	<b>3A: Conservation Values incompatible with harvest at this time</b>	10	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Part of the stand exhibits old growth characteristics. An MNFI survey has been scheduled to review this stand.							
6	<b>Available</b>	<b>2I: Survey needed</b>	61	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
7	<b>Available</b>	<b>2I: Survey needed</b>	30	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

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

---



## 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.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	Sapling Well	82.7	24	Immature	Stand consists of healthy fully stocked aspen. A few scattered balsam exist throughout the stand.
3	6122 - Black Spruce	Sawtimber Well	32.3	71	81-110	Lowland stand of cedar and spruce. Mature cedar exists in pockets throughout the stand. I noticed a few x-log sized cedar within the stand.
4	4130 - Aspen	Poletimber Well	135.3	38	1-50	Stand of healthy aspen. A few sub-merchantable conifer exist within the understory throughout the stand.
7	4130 - Aspen	Poletimber Well	65.5	49	51-80	Stand of decent quality aspen. Fir and balsam understory exists throughout the stand. Fir and balsam are merchantable and have very little budworm damage.
8	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Poor	8.2	89	51-80	Stand of both low ground and high ground. A pocket of heavy tag alder exists within the middle of the stand. A good stand for grouse this time of year.
11	4130 - Aspen	Sapling Poor	61.2	1	Immature	Stand was harvested in the fall of 2016. TS# 120-15. Tops were chipped due to a heavy slash load from the conifer that existed within the stand. I intended to have portions of this stand planted back to red pine but after looking at the great aspen regeneration in the summer of 2017 I decided it did not need further reforestation work.
13	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	4.4	80	1-50	Previous inventory has the year of origin of this stand as 1938. When walking through it, it appears some areas were cut in '38 and other areas were not. Stand consists of cedar, tamarack, and black spruce of low stocking. Heavy tag alder exists within the understory. Some older patches of tamarack and cedar exist.
16	4110 - Sugar Maple Association	Poletimber Well	22.9	84	51-80	Stand was selectively harvested in 2012: TS# 111-10. Stand consists of good quality hardwood. Yellow birch and red maple are scattered throughout the stand. Small pockets of raspberry exist underneath the canopy gaps. I did notice small patches of maple regeneration as well but it is heavily browsed. Ground is very hilly with depressions throughout the stand.
18	4110 - Sugar Maple Association	Poletimber Well	37.0	84	51-80	Stand was selectively harvested in 2012: TS# 111-10. Stand consists of good quality hardwood. Yellow birch and red maple are scattered throughout the stand. Small pockets of raspberry exist underneath the canopy gaps. I did notice small patches of maple regeneration as well but it is heavily browsed. Ground is very hilly with depressions throughout the stand.
19	42320 - Upland Spruce	Poletimber Medium	6.2	60	51-80	Stand of lowland black spruce and tamarack that surround the small pond.
23	4130 - Aspen	Poletimber Well	13.7	27	1-50	Stand consists of good quality aspen. Red maple and hazel exists within the understory. A dry swale exists within the stand as well.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	429 - Mixed Upland Conifers	Poletimber Well	6.6	30	1-50	Stand contains the Island Lake Public access site. Stand consists of mixed conifer and deciduous. Most of the stand is growing on a steep slope. Balsam and paper birch are in poor condition. Good quality red pine exists along the lake shore. Stand consists of more younger trees than old due to wind events and age. I opted to make the younger trees the parent stand as the older remnants will soon be gone.
30	4130 - Aspen	Poletimber Well	55.7	33	Immature	Stand of younger aspen that is in good condition.
31	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	6.1	74	81-110	Riparian corridor per previous inventory notes. Was not able to make it to this stand during inventory.
32	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	12.3	74	51-80	Riparian corridor per last inventory notes. I was not able to make it to this stand.
33	4130 - Aspen	Poletimber Well	36.5	45	81-110	Stand was harvested in 1973. Stand consists of aspen with red maple pockets. paper and yellow birch scattered throughout the stand as well. some sugar maple too. terrain is drastic. alot of hills and potholes. most of the maple is on the southern edge of the stand.
35	6121 - Tamarack	Poletimber Medium	16.7	74	1-50	Stand consists of low density tamarack with pockets of black spruce. Heavy tag alder and fir exist within the understory. Stand does contain a high water table.
36	4139 - Aspen, Mixed Deciduous	Poletimber Well	77.5	45	81-110	Stand consists of aspen with maple inclusions throughout. Aspen is poorer quality. Stand was hit with a windstorm in 2005. Topography is up and down with some large pothole type depressions within the stand. Stand does contain some areas of older aspen.
46	4119 - Mixed Northern Hardwoods	Sawtimber Well	10.4	60	81-110	Stand consists of pole sized red maple, a few sugar maple exist as well. Timber is poorer quality.
47	6121 - Tamarack	Sawtimber Medium	8.0	84	1-50	Stand of tamarack with some black spruce mixed in. Pockets of mature black spruce exist that are dead due to mistletoe damage. The black spruce that exists within the understory is infected with mistletoe as well. Timber gets more stagnant as you move west. Do not harvest. This stand is connected to horseshoe lake and contains too sensitive of soils to manage.
51	4113 - R.Maple, Conifer	Poletimber Medium	18.1	65	51-80	Stand consists of poor quality red maple with inclusions of hemlock on the southern end of the stand. Balsam fir has mostly fallen out of the stand due to budworm and wind damage. A few remnant paper birch exist as well. Stand will eventually convert over to a fir and maple mix.
53	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	9.6	120	171-200	Stand surrounds Twin Lake Public access site. A portion of the stand contains a patch of old growth hemlock. I was able to core a tree and came up with 100 years. The stand contains a mix of early successional species to the northeast. Most of the hemlock is on the western side of the stand.

S  
t  
a  
n  
d

Gwinn Mgt. Unit

## Report 7 – Forested Stands

Compartment: 247  
Year of Entry: 2020

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
<b>57</b>	4112 - Maple, Beech, Cherry Association	Poletimber Well	7.1	80	81-110	Stand of mostly red maple and paper birch. Paper birch is declining due to age.
<b>59</b>	4130 - Aspen	Poletimber Well	58.4	37	1-50	Stand of good quality aspen. Stand is still young and overall has smaller diameter trees. Ground is hilly throughout the stand. Balsam within the stand is in poor conditions due to budworm damage.
<b>64</b>	4110 - Sugar Maple Association	Poletimber Well	15.5	82	51-80	Stand contains Squaw Lake Campground and public access site. This stand contains decent quality hardwood. The basal area is around 90 square feet.
<b>65</b>	4110 - Sugar Maple Association	Sawtimber Well	28.4	80	81-110	A poor quality stand of hardwood. A fair amount of defect exists. Basal area averages 90 -100 square feet. Regeneration underneath consists of poor quality cherry and scattered white spruce. A few swales exist within the stand which contain fir, yellow birch and aspen.
<b>66</b>	4130 - Aspen	Sapling Well	21.1	24	Immature	Stand of young aspen. Quality appears to be decent.
<b>67</b>	4130 - Aspen	Poletimber Well	28.0	51	81-110	Stand consists of poorer quality aspen. Wind damage from 10+ years ago is still evident. Pockets of mature balsam also exist within the stand.



Stand	Cover Type	Acres	Managed Site	General Comments:
2	3303 - Mixed Low Density Trees	1.1	No	Lowland depression
5	6225 - Bog	3.6	No	
10	6220 - Alder/willow	4.9	No	
20	500 - Water	3.2	No	Small pond.
21	330 - Low-Density Trees	1.0	No	Lowland depression
22	3303 - Mixed Low Density Trees	1.0	No	Lowland depression
27	6225 - Bog	0.7	No	
28	330 - Low-Density Trees	7.1	No	Riparian corridor per last inventory notes.
29	122 - Road/Parking Lot	1.1	No	Witbeck Rapids Public Access Site.
34	330 - Low-Density Trees	1.3	No	Lowland depression that consists of poor quality black spruce. Black spruce has a lot of mistletoe damage.
37	3303 - Mixed Low Density Trees	1.8	No	Lowland depression
38	3303 - Mixed Low Density Trees	3.9	No	Lowland depression
39	6225 - Bog	0.7	No	Lowland depression
40	3303 - Mixed Low Density Trees	1.4	No	Lowland depression that contains a few trees.
41	3303 - Mixed Low Density Trees	0.8	No	Lowland depression
45	6220 - Alder/willow	2.1	No	Small wetland stand off of Horseshoe Lake.
48	122 - Road/Parking Lot	1.3	No	Horseshoe Lake Public access site.
58	6233 - Wet Meadow	6.9	No	





Stand	Cover Type	Acres	Managed Site	General Comments:
61	3303 - Mixed Low Density Trees	1.4	No	
62	3303 - Mixed Low Density Trees	1.1	No	Lowland depression
63	622 - Lowland Shrub	1.6	No	
68	6225 - Bog	0.9	No	
401	3303 - Mixed Low Density Trees	2.3	No	Mixed low density trees.