



# Compartment Review Presentation

## Traverse City Forest Management Unit

Compartment 61171

Entry Year 2019

Acreage: 2,877

County Kalkaska

Management Area: Williamsburg Moraine

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**Revision Date:** 2017-06-12

**Stand Examiner:** Katie Armstrong

### Legal Description:

T28N R7W: Section 19

T28N R8W: Section 24 (Seven Bridges)

T28N R8W: Sections 7, 10, 17 - 21, 28 - 33 (Skegemog Lake Wildlife Area)

### Identified Planning Goals:

Management of this compartment is guided by multiple plans including the State Forest Management Plan, the Northern Lower Peninsula Regional Forest Management Plan, the Statewide Wildlife Action Plan, and management plans for the Skegemog Lake Wildlife Area and Seven Bridges Natural Area. DNR staff are also preparing an Ecological Reference Area plan for Skegemog Wildlife Area.

According to the management area plan for the Williamsburg Moraine Management Area, vegetation management will provide various forest products; maintain or enhance wildlife habitat; protect areas of unique character and threatened, endangered, and special concern species; and provide for forest-based recreational uses. Timber management objectives for this 10-year planning period include improving the age-class structure of aspen, regenerating oak, continuing management of upland hardwood communities and red pine through selection or restart harvests. Wildlife habitat management objectives include increasing the structural complexity of upland hardwood communities for forest interior species; perpetuating early-successional communities for species dependent on young forests; providing hunting and other wildlife-related recreation opportunities; maintaining soft and hard mast sources including oak; and preserving the biodiversity value of the Skegemog High Conservation Value Area. Expected management challenges within this 10-year planning period include: increased recreational pressure, especially on established trails; increased oil and gas development; introduced pests and diseases, especially beech bark disease and emerald ash borer; an increased need to regenerate oak and red pine; and the decreased dominance of pure oak types to mixed oak/pine types.

As a High Conservation Value Area, Skegemog Lake Wildlife Area shall be managed for low impact recreation including hunting, fishing, hiking and cross country skiing. Commercial timber harvest is permitted as a tool to facilitate wildlife habitat management.

### Soil and topography:

Much of the compartment, especially the Skegemog swamp and the Rapid River corridor, are on very poorly drained mucks. There are some upland areas on somewhat poorly drained or well-drained sand. Much of the compartment is flat lowland, but there are some steep hills within the eastern blocks.

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

Even though separated from each other, the three blocks of state land within this compartment are relatively contiguous themselves. There is scattered residential development around each area. The village of Rapid City is within a mile of SLWA. Approximately 41 acres of SLWA on the northwest side of the lake are part of Antrim County.

### Unique Natural Features:

SLWA contains several rare species and natural communities as identified by the Michigan Natural Features Inventory (MNFI): Rich Conifer Swamp and Northern Fen natural communities, and Element Observances for common loon, bald eagle, osprey, merlin, caspian tern, spotted turtle, wood turtle, and eastern Massasauga rattlesnake.

### Archeological, Historical, and Cultural Features:

There are multiple archeological concerns in this compartment, including an old logging camp within the Skegemog swamp and an old water-powered mill site and homestead at Seven Bridges. The database identifies multiple sites in Sections 17, 18, and 32.

### Special Management Designations or Considerations:

This compartment is comprised of multiple units: Skegemog Lake Wildlife Area (SLWA), Seven Bridges Natural Area

(~314 acres) and an isolated section of undesignated state land (120 acres) in Rapid River Township. SLWA is a High Conservation Value Area, dedicated by the Natural Resources Commission in 1979. The Rich Conifer Swamp natural community within SLWA (as identified by MNFI) is an Ecological Reference Area and Forest Habitat Core Interior. The part of SLWA north and west of the old railroad grade is a Dedicated Habitat Area for the Eastern Massasauga Rattlesnake. Seven Bridges is a Special Conservation Area and non-dedicated Natural Area. SLWA and Seven Bridges are managed in cooperation with the Grand Traverse Regional Land Conservancy. There is also an active "friends group" for SLWA which conduct many volunteer activities to improve recreational opportunities and resource integrity.

### **Watershed and Fisheries Considerations:**

The Skegemog Lake Wildlife Area contains significant lake shoreline as well as several tributaries including Desmond Creek, Barker Creek and unnamed streams. All of these are Designated Trout Streams and support cold water fisheries such as brook, brown and rainbow trout. The wetlands along the lake edge provide important fish spawning and nursery habitat.

The Seven Bridges area contains approximately 6,300' of Rapid River frontage. The Rapid River is a Designated Trout Stream.

### **Wildlife Habitat Considerations:**

Compartment 171 is comprised of two units separated by 3 miles. They differ in land forms, habitat, and species composition, but are compatible in management objectives. Most of this compartment surrounds the east half of Lake Skegemog, and is flat lake plain with very poorly drained muck and peat soils. The landscape gradates into flat lake plain with sand to loamy sand soils, northeast to the Rapid River, and follows the river valley upstream to the Seven Bridges Area where it joins a narrow outwash channel with poorly drained muck soils. Upslope from the Rapid River Valley, steep, broken moraine ridges with well drained sandy loam soils predominate. Wildlife habitat gradates similarly across this landscape. Floating mats of peat lining parts of the southeast shoreline of Lake Skegemog succeed inland to a low mixed conifer swamp and, and continue upland into white pine plantations, aspen stands, and small openings. Habitat in the Seven Bridges Area centers on the cedar dominated floodplain of the Rapid River, bordered by steep moraines with mature northern hardwoods predominating. A small red pine plantation and three small openings are the most ecologically altered parts of this area.

Wildlife priorities in this compartment focus on managing the mix of wetland and upland cover types to promote a variety of aquatic and semi-aquatic vertebrate species. Beaver, mink, muskrat, raccoon, American bittern, great blue heron, and a variety of waterfowl species use Lake Skegemog and the Rapid River Valley. Bald eagle, osprey, common loon, spotted turtle, and eastern massasauga are five State threatened or Special Concern species found in this compartment. The interspersed of forested and non-forested stands along a broad hydrological continuum creates a diversity of ecological niches for plants and animals to fill. This mix enhances the value of this compartment as a winter yarding area for white-tailed deer. Black bear, coyote, bobcat, porcupine, black-capped chickadee, raven, and great-horned owl commonly use these deer yards.

The aspen stands and non-forested openings in the adjacent uplands provide opportunities to manage for species preferring periodic removal of shade intolerant cover types. Clearcutting aspen to create a matrix of smaller stands of differing ages creates optimal habitat for ruffed grouse and can address their habitat needs throughout their life cycle. Younger stands provide cover for drumming and raising broods while older stands provide buds and catkins for food in the winter and spring, respectively. Leaving fruiting shrubs and coarse woody debris in a form suitable for drumming logs further increases the value of managed aspen stands to ruffed grouse and other species using this cover type. Woodcock prefer areas that are similar to grouse, but with a higher water table. Male woodcock use openings in the spring to advertise their presence in a courtship display, and the moist soils allow woodcock to forage for earthworms throughout the summer. This compartment contains poorly drained soils and is well suited to nesting and rearing broods. The mix of openings and aspen stands in the more upland portions of this compartment provides favored habitat for white-tailed deer, downy woodpecker, sharp-shinned hawk, wild turkey, and spotted salamander.

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

There is no known metallic mineral potential in this region. An active sand and gravel pit is located in Section 33, and there is additional potential within the compartment on the uplands. The compartment is located at the northern margin of the Niagaran reef trend, and there has not been any production from the Niagaran within the compartment to date; potential may be low. The east half of the township has been developed for Antrim Shale gas. There is additional Antrim potential within the compartment. State mineral rights are currently leased where Antrim production is occurring. All leases have expired in areas which were previously leased as part of the Collingwood lease play (west side of the compartment).

### **Vehicle Access:**

There is no vehicular access to the Skegemog Lake Wildlife Area other than designated parking areas. There is a private road easement through the Seven Bridges on the north side of the Rapid River. Otherwise, there is no vehicular access other than the designated parking area on Valley Road. Access to the "Three Ponds" area is ensured by legal easement (Kalkaska R.O.D. Liber 94, Page 627).

**Survey Needs:**

No survey needs at this time. Necessary corners appear to be in place but not all have been found in the ground.

**Recreational Facilities and Opportunities:**

This compartment includes roughly 5 miles of hiking pathways. Two pathways are located in this area, both of which go to viewing platforms over Lake

Skegemog. Motorized recreation, camping and open fires are prohibited in SLWA by Director's Order. For the Seven Bridges trails, there is a short pathway off the parking lot which crosses four bridges over the Rapid River. Recreational trails (both development and maintenance) are contingent upon criteria found in the management plans for these areas. (T.M.N. 11/13/16)

There is a Boating Access Site to the Torch River off of Aarwood Trail and Skegemog Lake off of Baggs Road (Grand Traverse County).

**Fire Protection:**

Fire protection is provided by the Michigan DNR Kalkaska Field Office and Rapid City Fire Department. Due to the cover types in the compartment, fire danger is relatively low, but some areas have more public interface than others, which could increase potential.

**Additional Compartment Information:**

There is an abandoned cabin off of Dundas Road that should be demolished and removed.

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

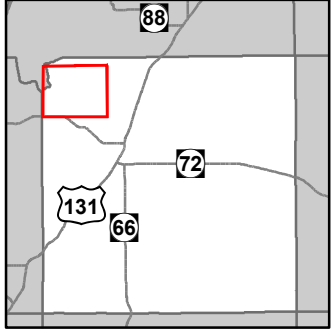
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

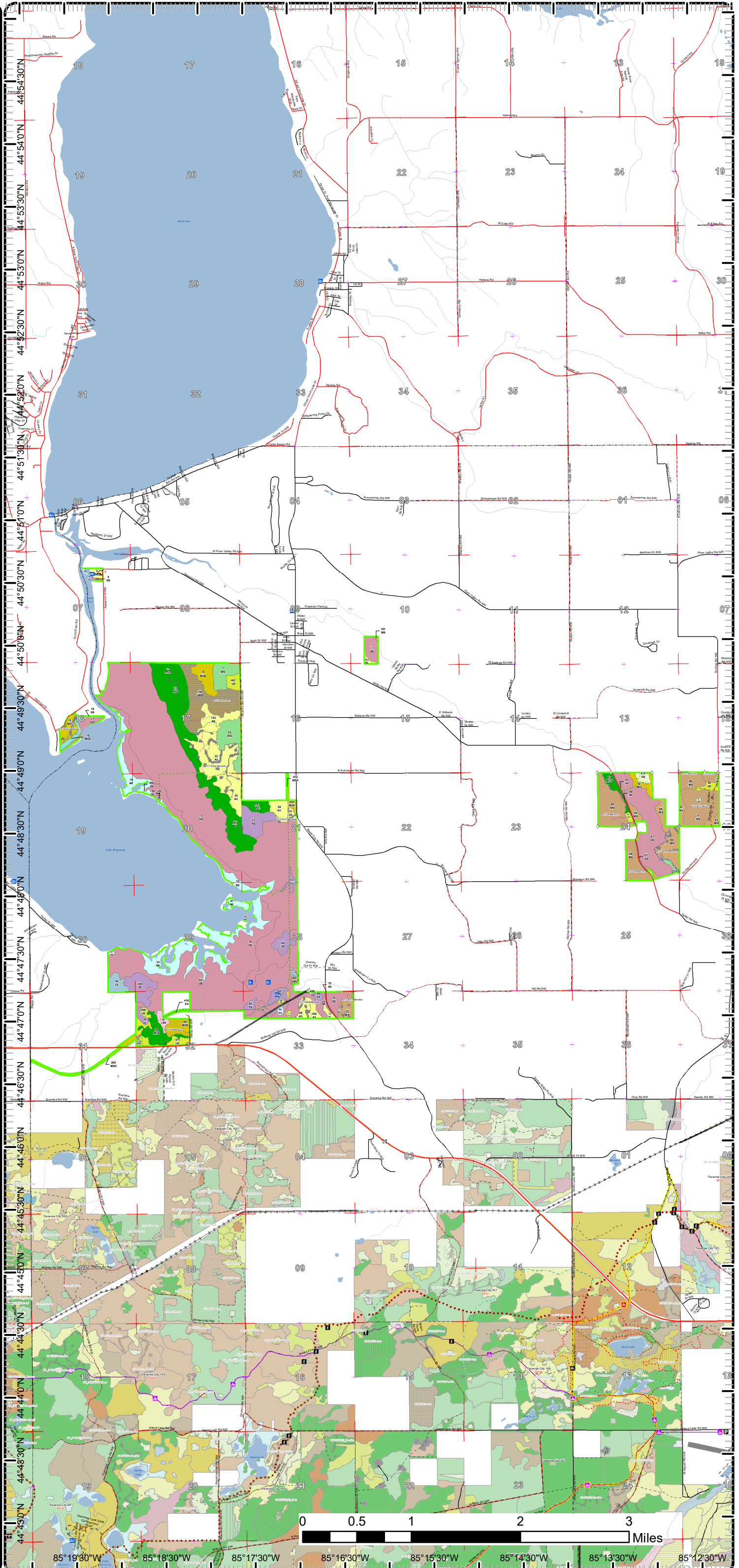
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatment Map

Compartment: 171  
 T27N R06W Sec. 6,7 T27NR07W  
 Sec. 1,12  
 County: Kalkaska  
 Unit: Traverse City  
 Mgmt Area: Williamsburg Moraine  
 YOE: 2019  
 Acres: 2877.2 GIS Calculated  
 Examiner: Katie Armstrong  
 Map Revised: 8/7/2017  
 Map Phase: Post-Review



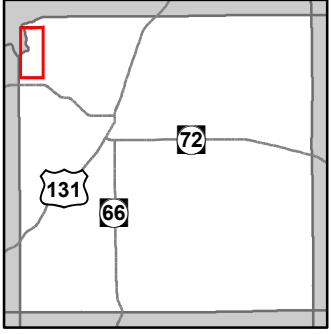
- Miris Corners
- + Remonumented Section Corners
- ◇ Field Grade GPS Corners
- ▭ Counties
- Dams
- Boating Access Site
- ⋯ Designated Hiking Trails
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- County Poor Dirt Roads
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- Closed
- Streams
- Lakes and Rivers All
- Pipeline
- Non-Designated Recreational Trail
- ▭ Compartment Boundary
- ▭ Treatments with Site Conditions
- ▭ Clearcut (w/Reserves)
- ▭ Regeneration Survey
- ▭ Thinning (Crown, Low, Systematic)
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
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- 310 - Herbaceous Openland
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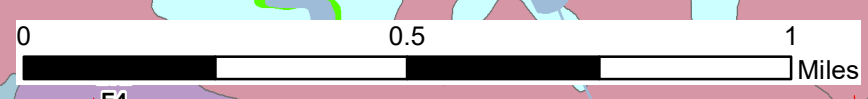
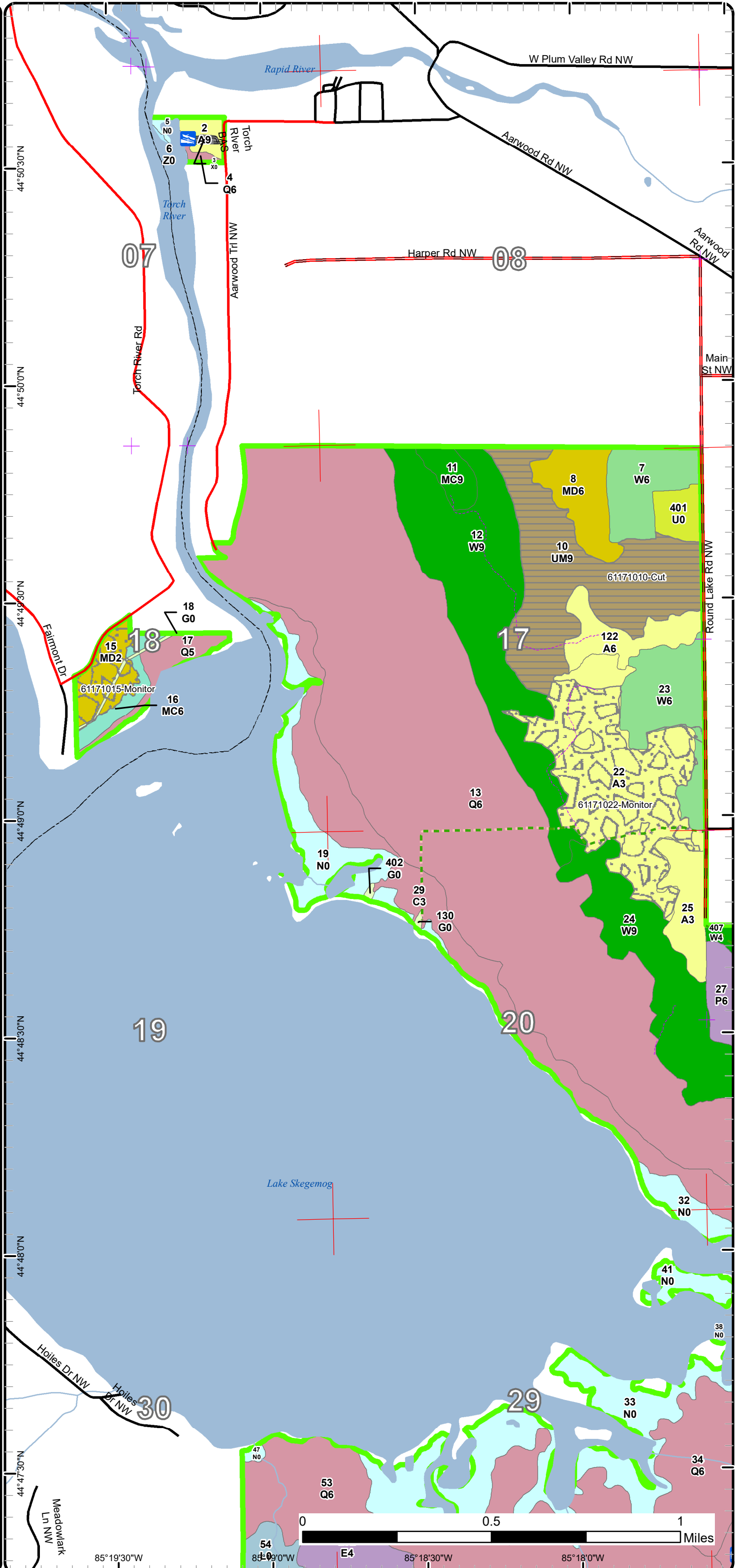
85°19'30"W 85°18'30"W 85°17'30"W 85°16'30"W 85°15'30"W 85°14'30"W 85°13'30"W 85°12'30"W

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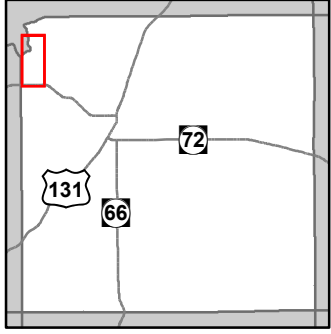
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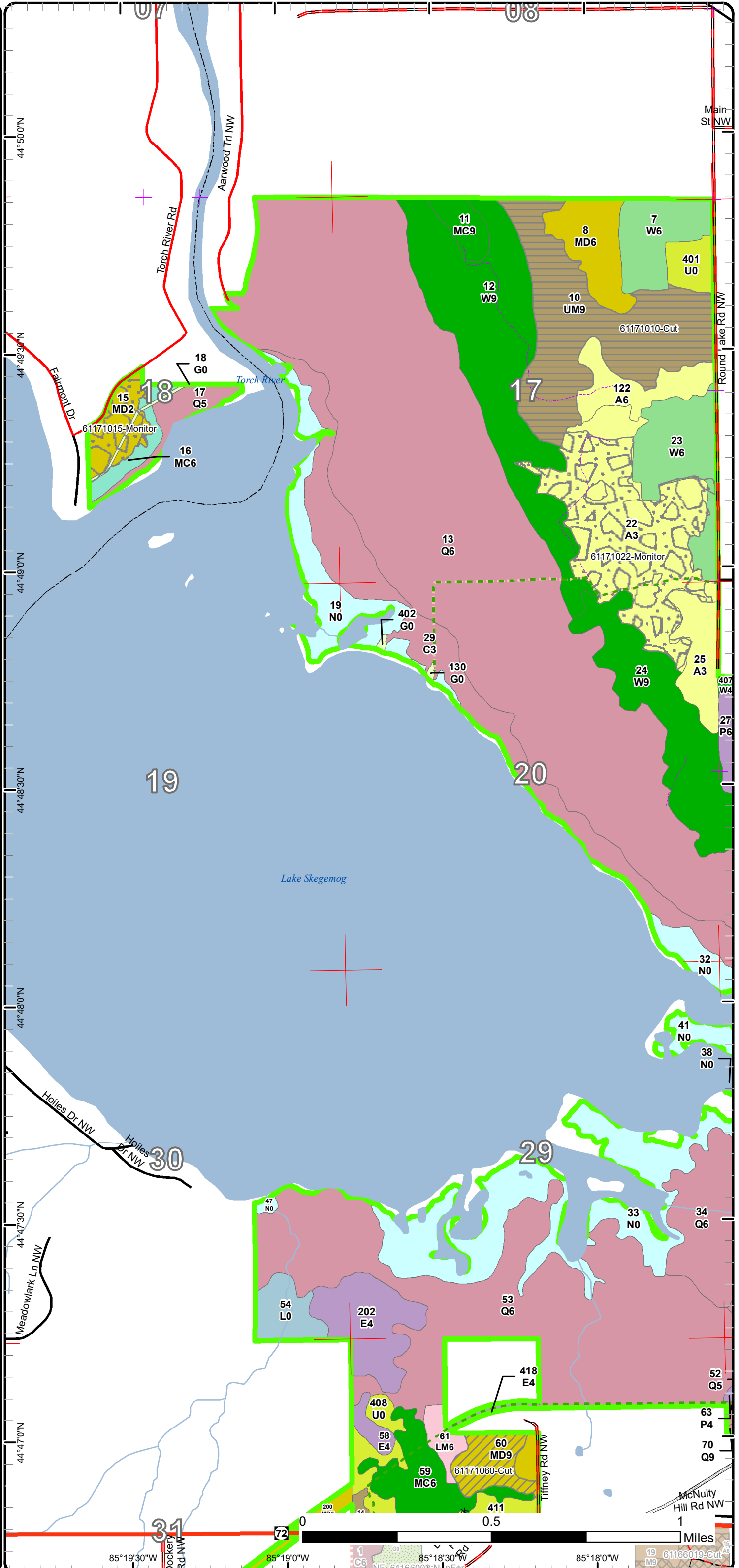
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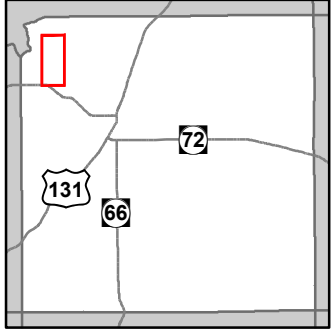


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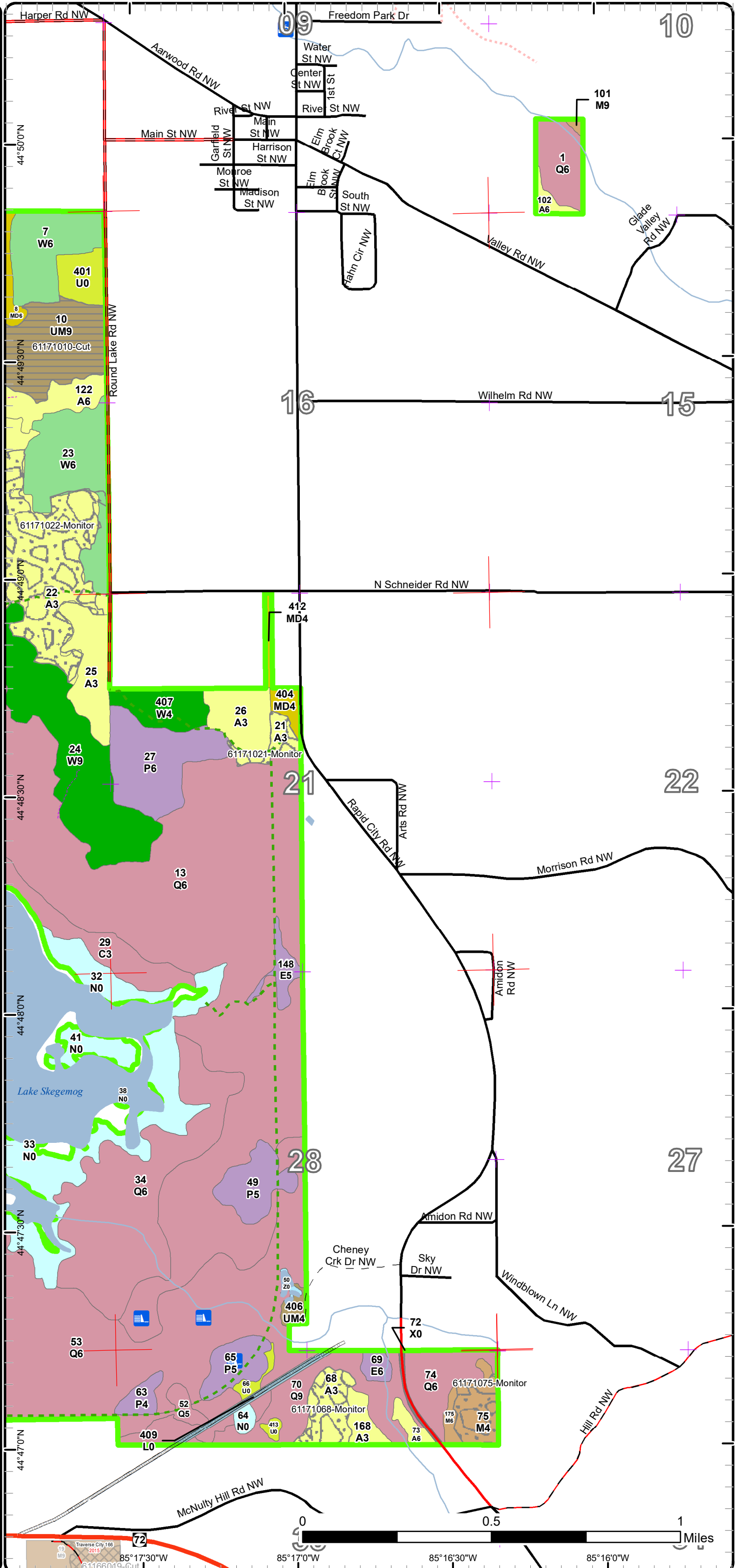


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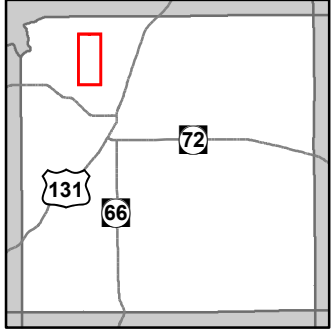


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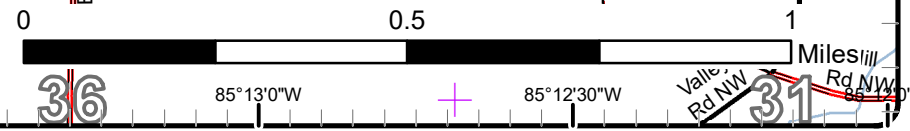
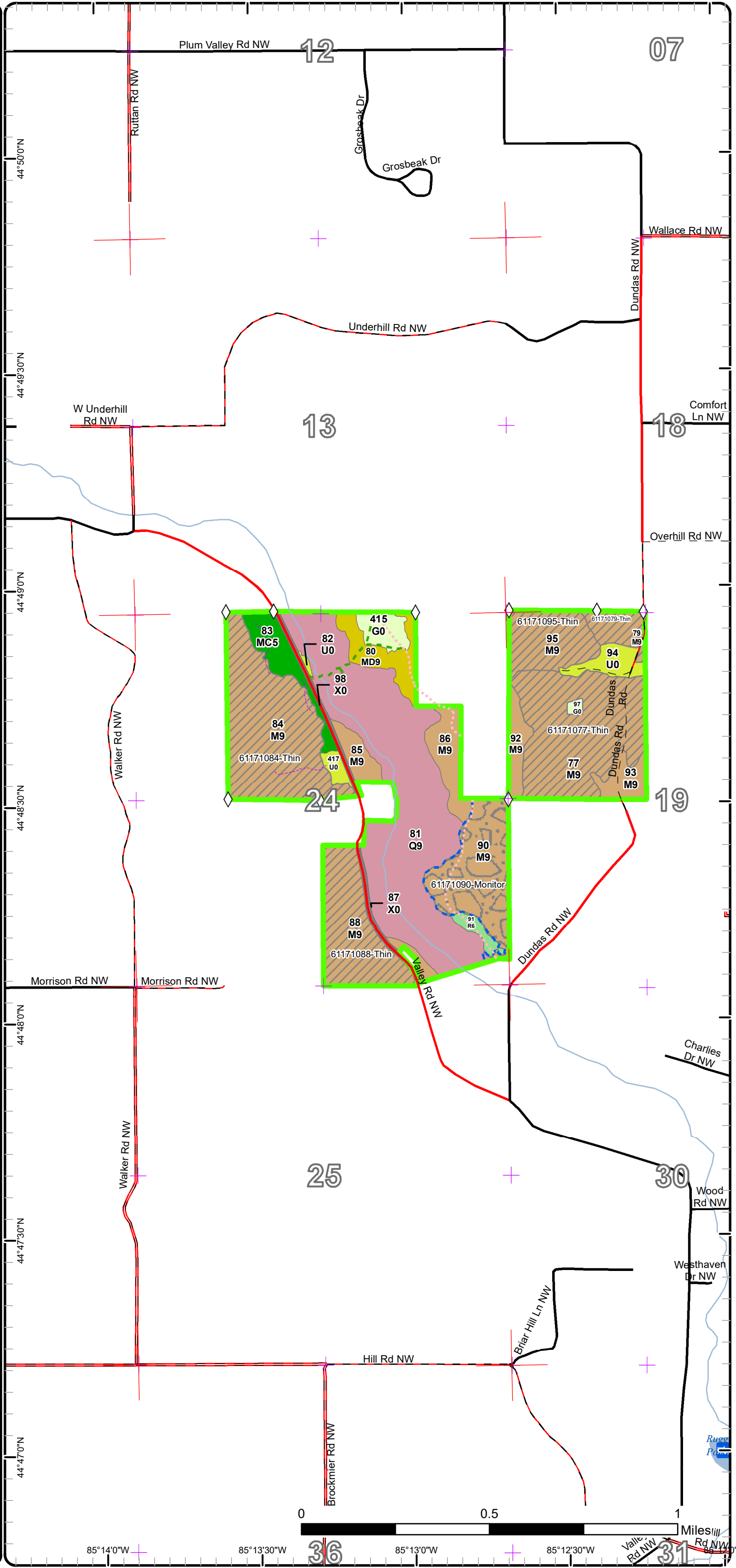


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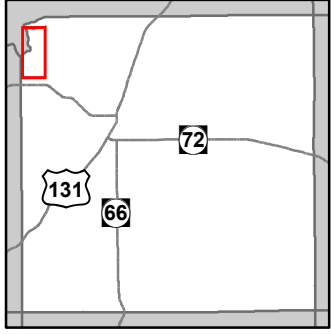
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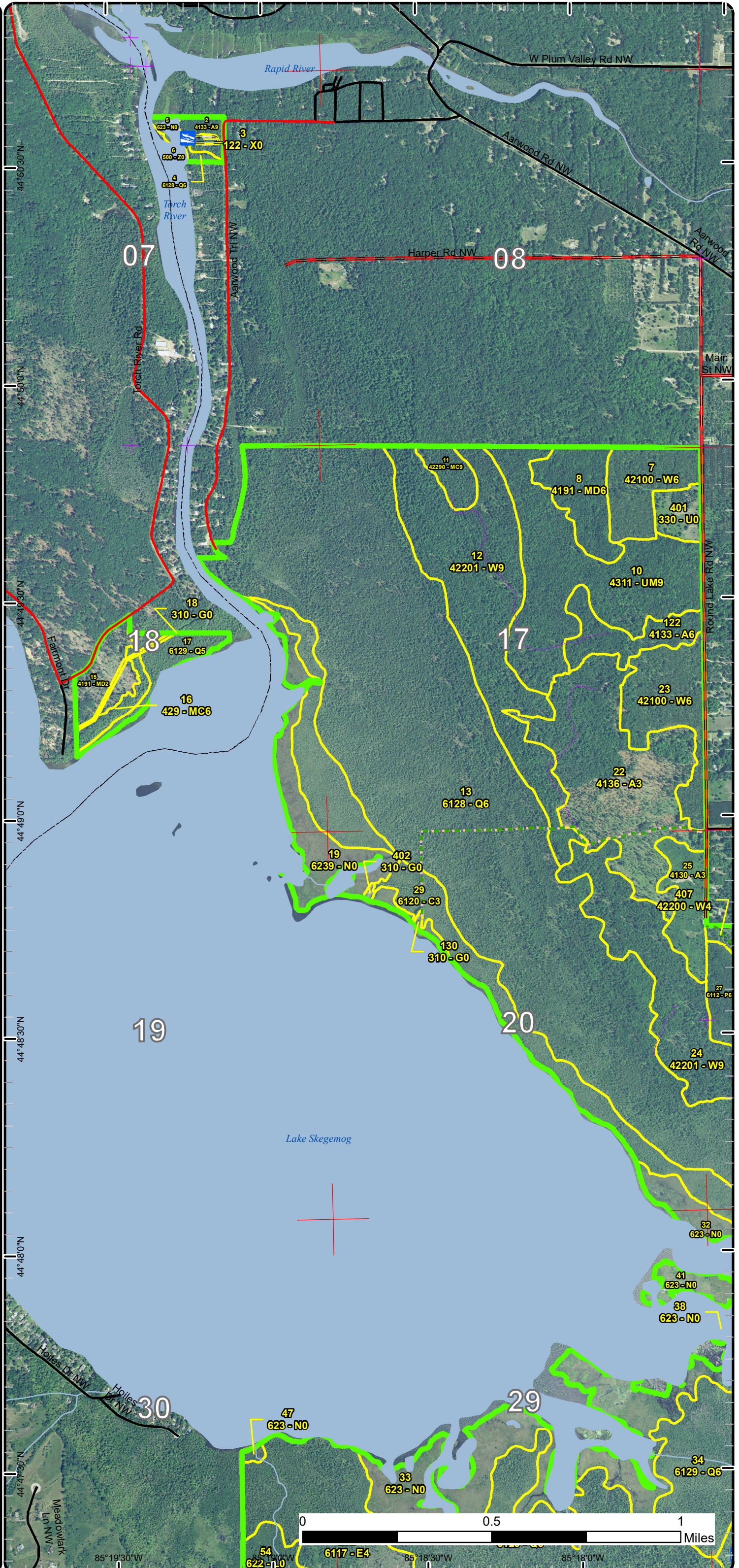


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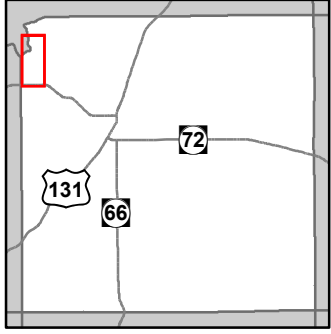


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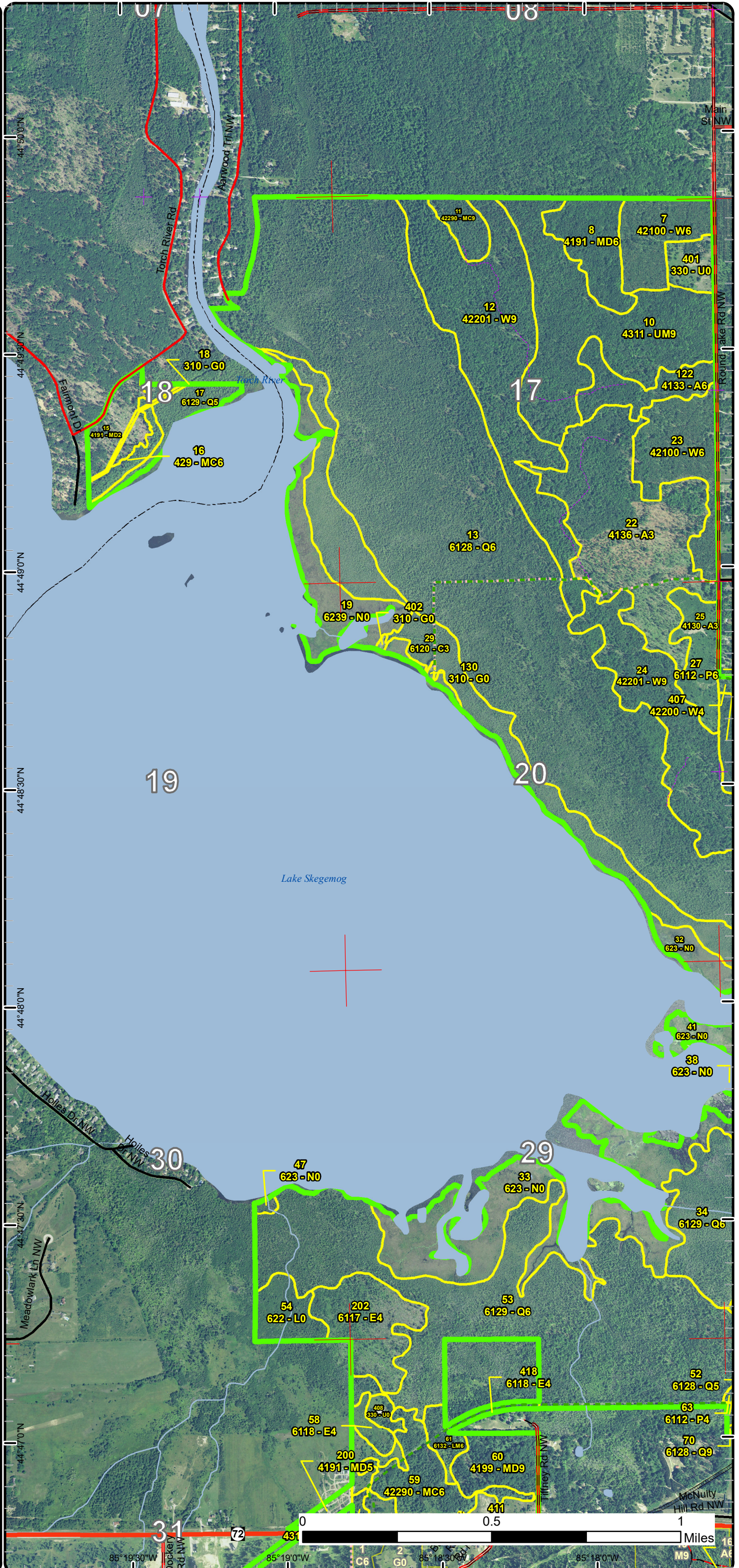


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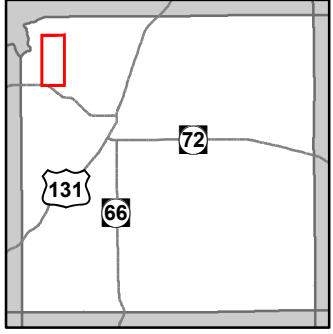
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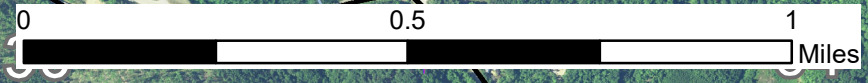
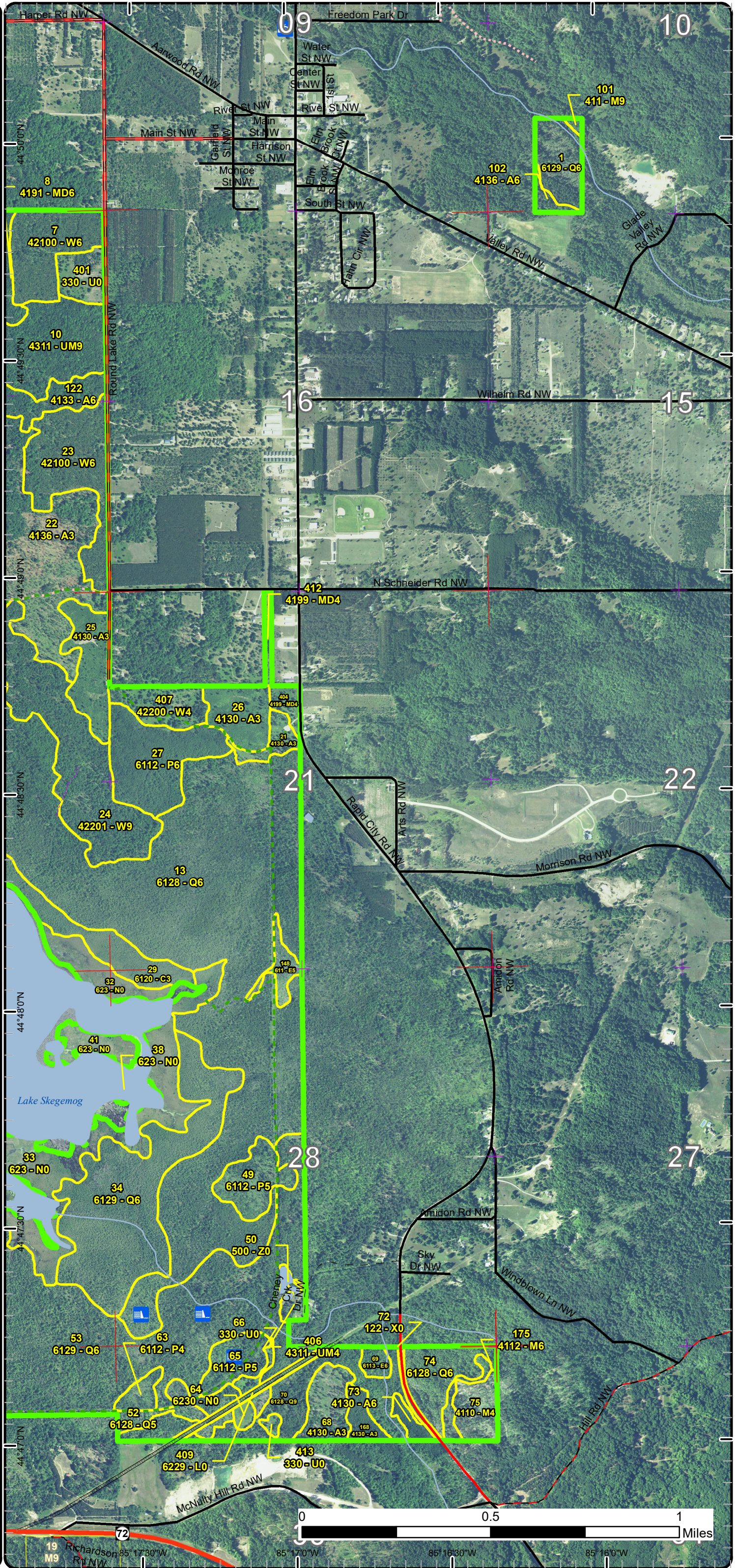
85° 19' 30" W 85° 19' 0" W 85° 18' 30" W 85° 18' 0" W

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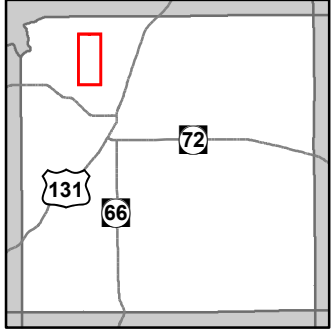
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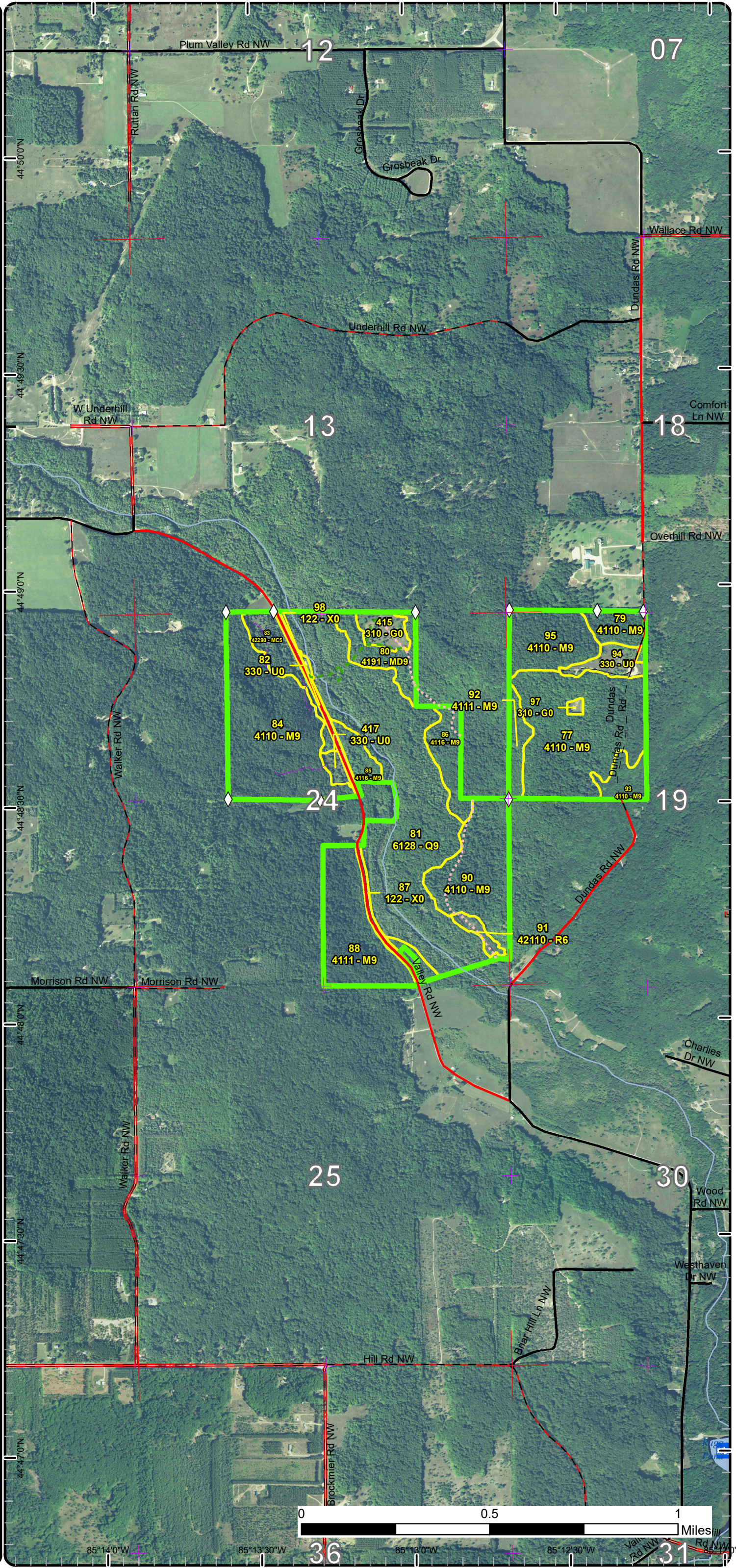
19 Richardson Hill Rd NW 85° 17' 30" W 85° 17' 0" W 85° 16' 30" W 85° 16' 0" W

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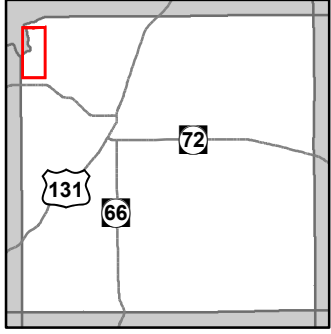


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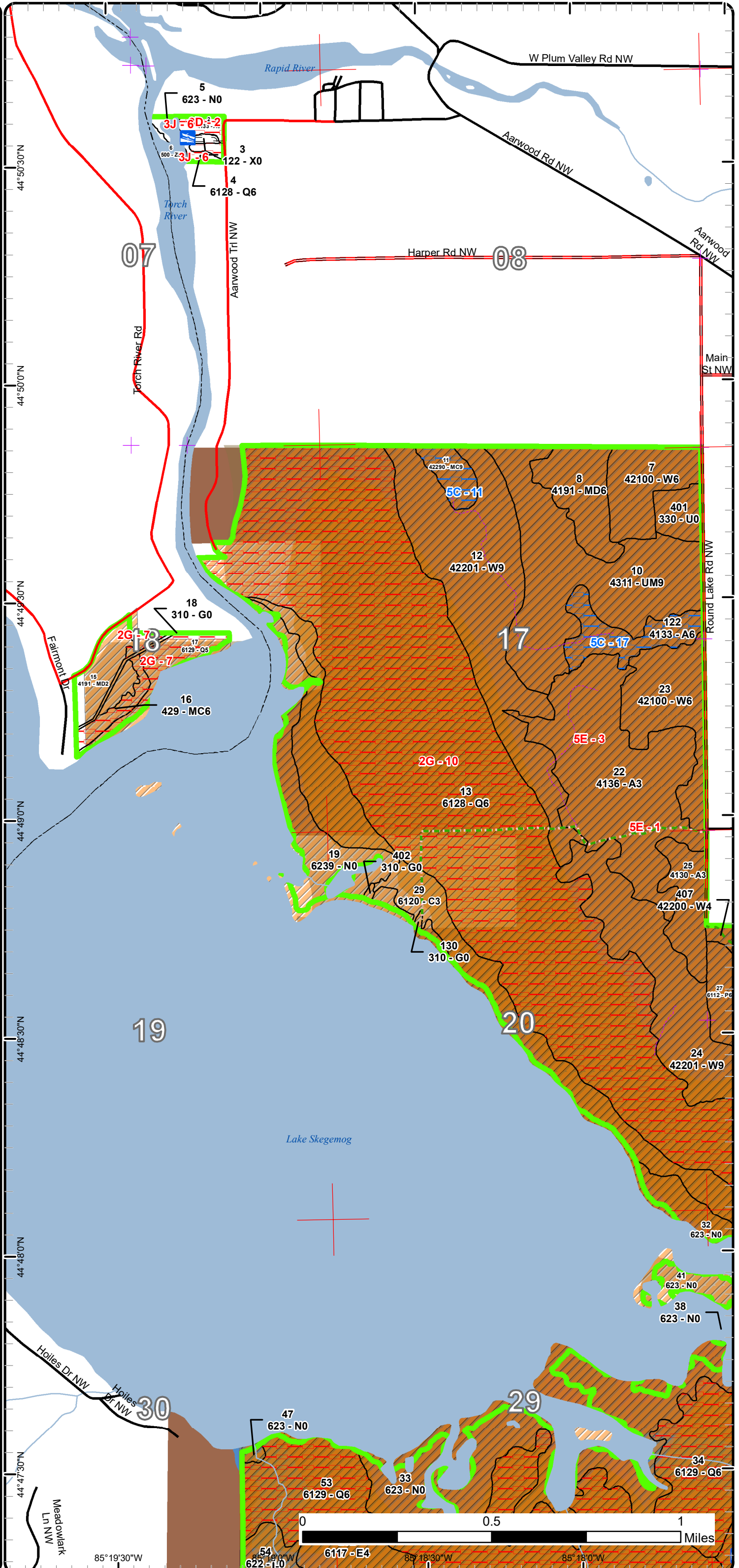


# Special Conservation Areas & Site Conditions Map

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 T27N R06W Sec. 6,7 T27NR07W  
 Sec. 1,12  
 County: Kalkaska  
 Unit: Traverse City  
 Mgmt Area: Williamsburg Moraine  
 YOE: 2019  
 Acres: 2877.2 GIS Calculated  
 Examiner: Katie Armstrong  
 Map Revised: 8/7/2017  
 Map Phase: Post-Review

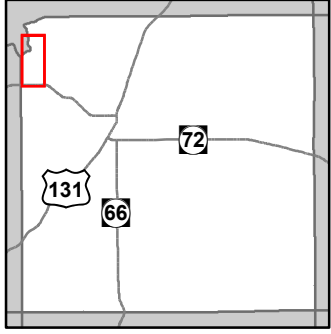


- Miris Corners
- + Remonumented Section Corners
- Counties
- Boating Access Site
- Designated Hiking Trails
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- - - Closed
- Streams
- Lakes and Rivers All
- - - Non-Designated Recreational Trail
- Compartment Boundary
- Available w/ Constraints
- - - Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2G: Too wet (sensitive soils, does not include access issues)
- 3D: Recreational / Scenic values
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Eastern Massasauga Managed Land
- Forest Habitat Core Interior
- Dedicated Management Areas
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Wildlife Management Areas

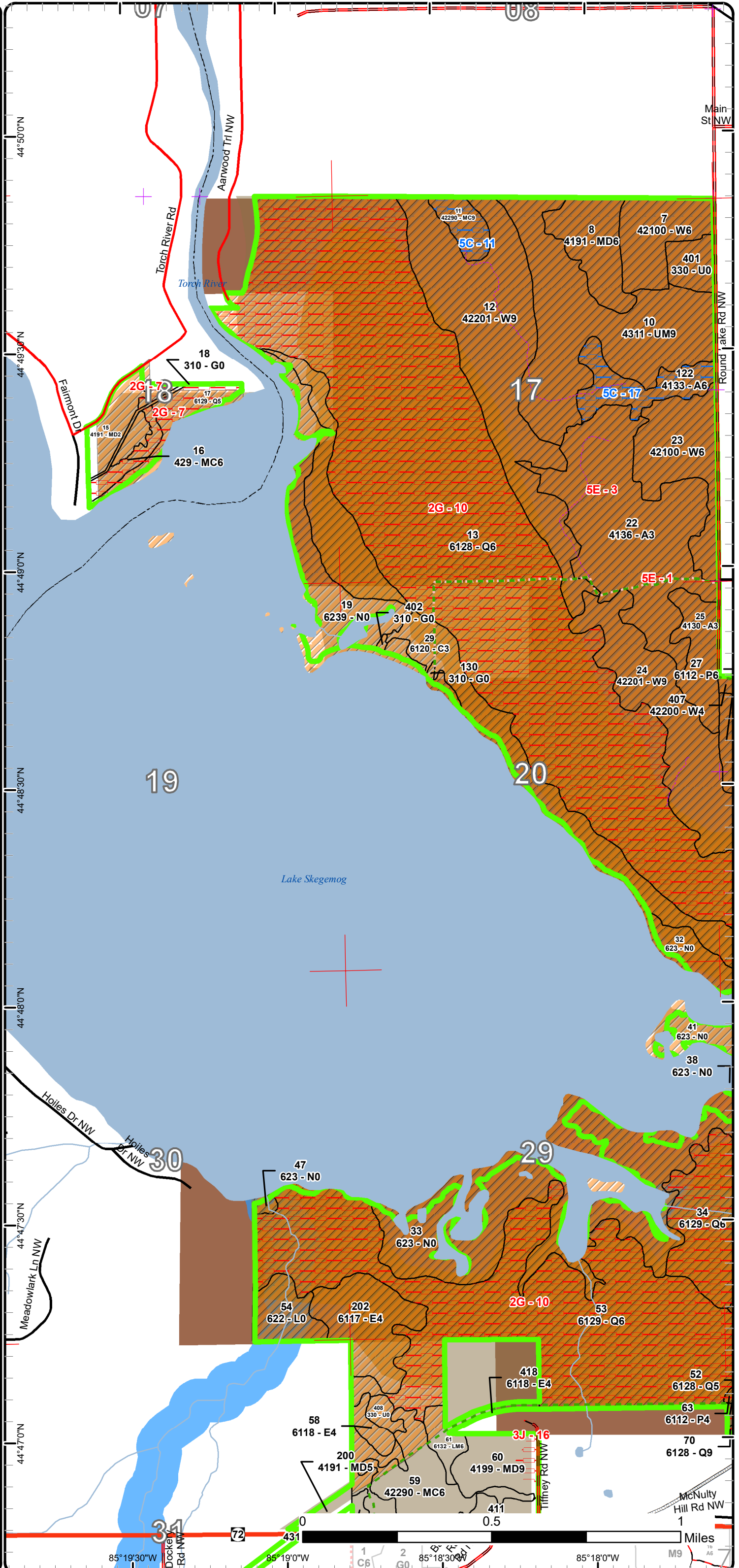


# Special Conservation Areas & Site Conditions Map

Compartment: 171  
 T27N R06W Sec. 6,7 T27NR07W  
 Sec. 1,12  
 County: Kalkaska  
 Unit: Traverse City  
 Mgmt Area: Williamsburg Moraine  
 YOE: 2019  
 Acres: 2877.2 GIS Calculated  
 Examiner: Katie Armstrong  
 Map Revised: 8/7/2017  
 Map Phase: Post-Review

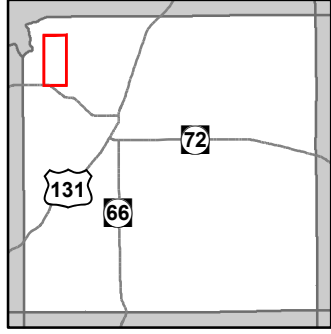


- Miris Corners
  - + Remonumented Section Corners
  - Counties
  - Designated Hiking Trails
  - Highway
  - County Paved Roads
  - Paved Roads
  - County Gravel Roads
  - County Poor Dirt Roads
  - Poor Dirt Roads
  - Closed
  - Streams
  - Lakes and Rivers All
  - Pipeline
  - Non-Designated Recreational Trail
  - Compartment Boundary
  - Available w/ Constraints
  - Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality  
 2G: Too wet (sensitive soils, does not include access issues)  
 3J: Water quality / BMPs (stream, river, or lake)  
 5E: Long-Term Retention
- Stand Boundaries
  - Eastern Massasauga Managed Land
  - Forest Habitat Core Interior
  - Dedicated Management Areas
  - Cold Water Streams
  - Cold Water Lakes
  - High Priority Trout Stream Buffer
  - Wildlife Management Areas

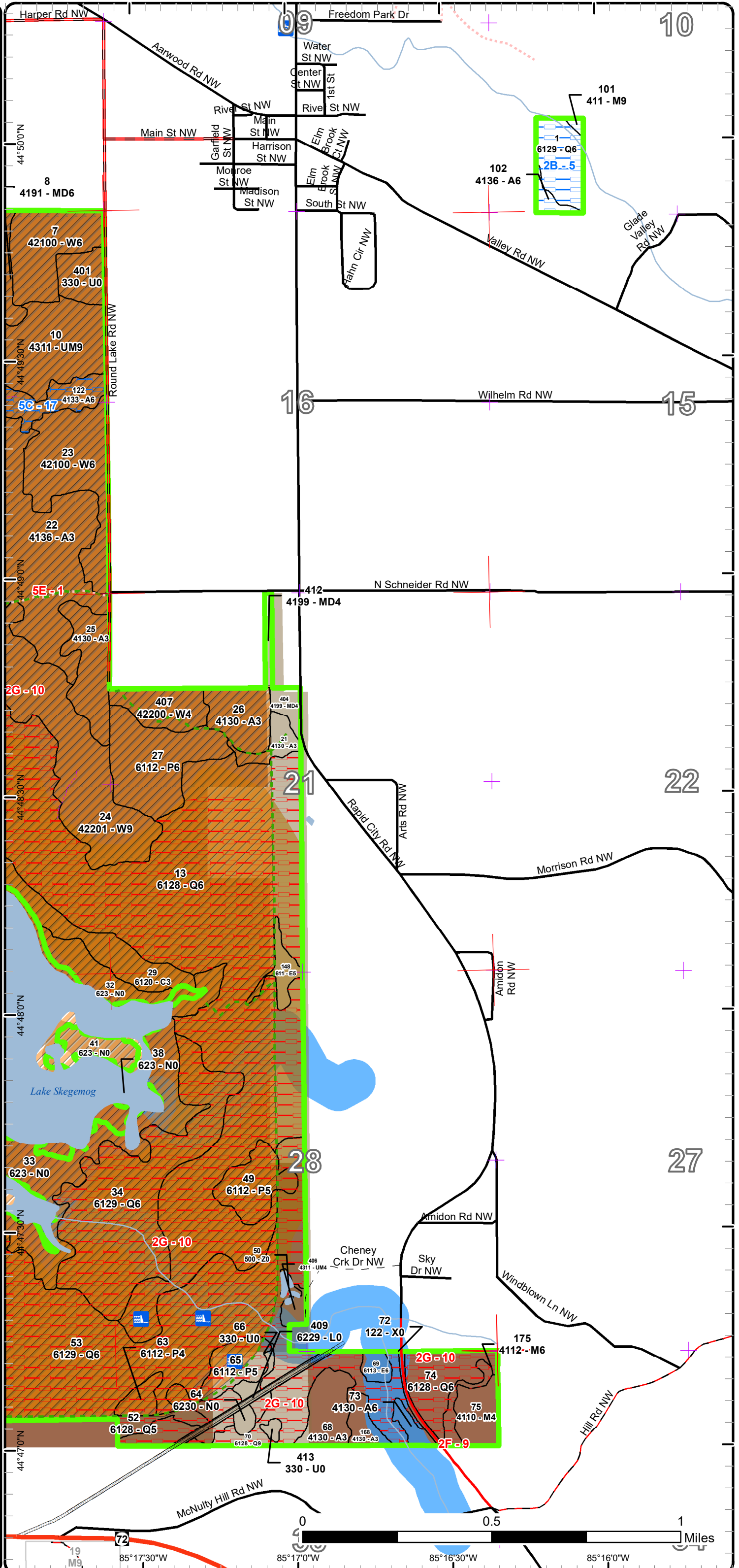


# Special Conservation Areas & Site Conditions Map

Compartment: 171  
 T27N R06W Sec. 6,7 T27NR07W  
 Sec. 1,12  
 County: Kalkaska  
 Unit: Traverse City  
 Mgmt Area: Williamsburg Moraine  
 YOE: 2019  
 Acres: 2877.2 GIS Calculated  
 Examiner: Katie Armstrong  
 Map Revised: 8/7/2017  
 Map Phase: Post-Review

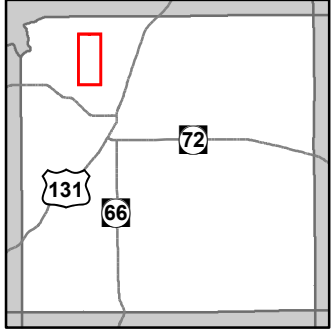


- Miris Corners
- + Remonumented Section Corners
- Counties
- Dams
- Boating Access Site
- Designated Hiking Trails
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- - - Closed
- Streams
- Lakes and Rivers All
- Pipeline
- - - Non-Designated Recreational Trail
- Compartment Boundary
- Available w/ Constraints
- - - Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)
- 5E: Long-Term Retention
- Stand Boundaries
- Eastern Massasauga Managed Land
- Forest Habitat Core Interior
- Dedicated Management Areas
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Wildlife Management Areas

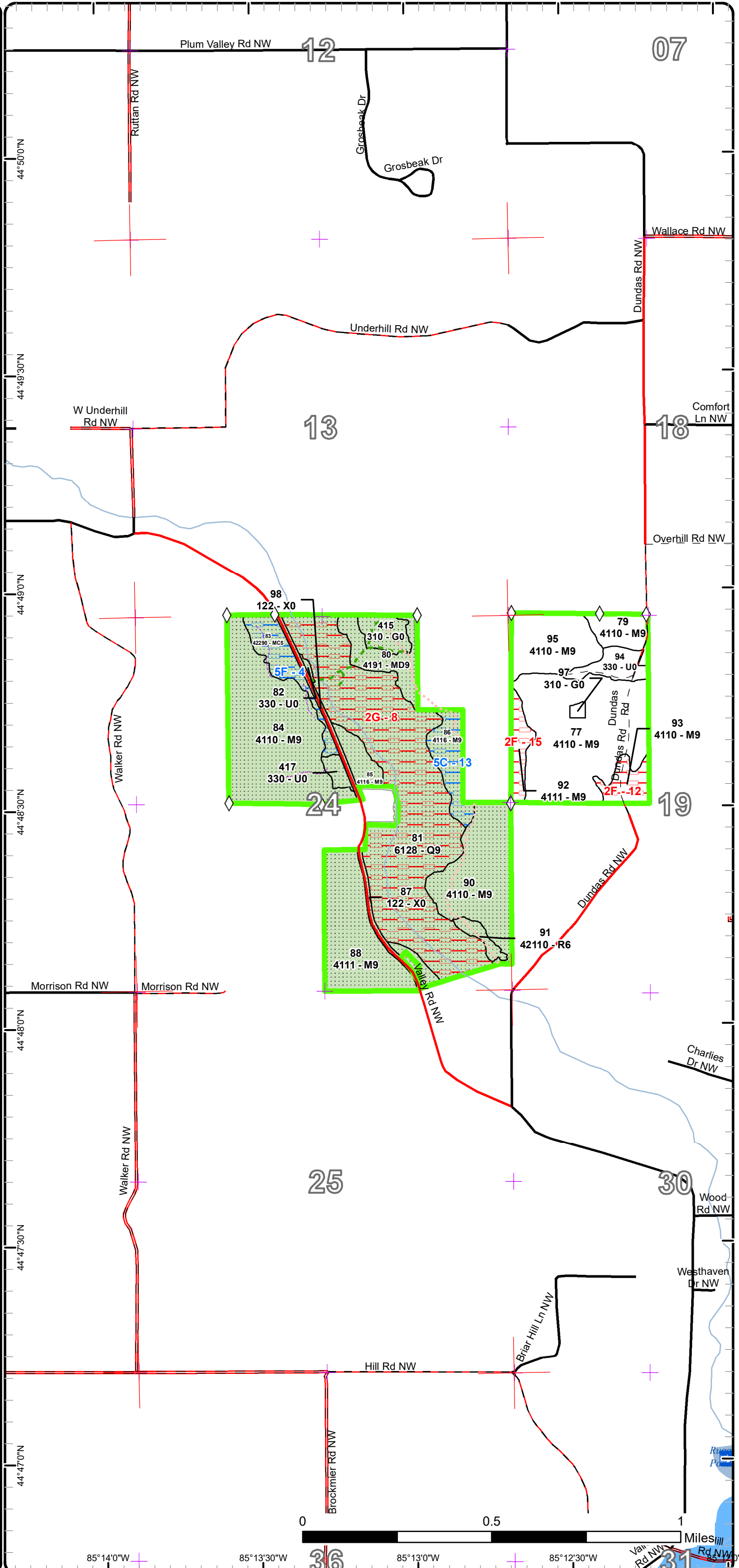


# Special Conservation Areas & Site Conditions Map

Compartment: 171  
 T27N R06W Sec. 6,7 T27NR07W  
 Sec. 1,12  
 County: Kalkaska  
 Unit: Traverse City  
 Mgmt Area: Williamsburg Moraine  
 YOE: 2019  
 Acres: 2877.2 GIS Calculated  
 Examiner: Katie Armstrong  
 Map Revised: 8/7/2017  
 Map Phase: Post-Review



- Miris Corners
- + Remonumented Section Corners
- ◇ Field Grade GPS Corners
- Counties
- Designated Hiking Trails
- County Paved Roads
- Paved Roads
- County Gravel Roads
- County Poor Dirt Roads
- - Poor Dirt Roads
- - - Closed
- Streams
- Lakes and Rivers All
- - - Non-Designated Recreational Trail
- Compartment Boundary
- SCA Proposed
- Available w/ Constraints
- - - Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Recreational/Scenic Value Area





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

Traverse City Mgt. Unit

Compartment 171 Year of Entry 2019

Katie Armstrong : 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	159	0	10	0	0	21	3	0	6	0	0	0	0	0	0	0	0	199
Cedar	0	0	0	0	0	0	0	91	0	0	0	0	0	0	0	0	0	0	91
Herbaceous Openland	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Low-Density Trees	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
Lowland Aspen/Balsam Poplar	0	0	0	35	0	5	0	29	0	0	0	0	0	0	0	0	0	0	69
Lowland Conifers	0	0	0	0	0	0	0	0	777	424	13	16	14	114	0	0	0	0	1356
Lowland Deciduous	0	0	0	0	5	3	0	41	0	0	0	0	0	0	0	0	0	4	53
Lowland Mixed Forest	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7
Lowland Shrub	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Marsh	199	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	199
Mixed Upland Deciduous	0	17	0	0	0	13	29	21	0	0	0	0	0	21	0	0	0	0	101
Natural Mixed Pines	0	0	0	0	0	0	0	42	0	10	0	0	0	0	0	0	0	0	52
Northern Hardwood	0	0	0	0	0	0	0	0	16	7	0	1	0	0	0	0	0	254	278
Red Pine	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9
Upland Mixed Forest	0	0	0	0	0	0	5	0	96	0	0	0	0	0	0	0	0	0	101
Urban	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Water	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
White Pine	0	0	0	0	0	0	82	0	0	69	109	0	0	0	0	0	0	0	260
<b>Total</b>	<b>297</b>	<b>176</b>	<b>0</b>	<b>45</b>	<b>5</b>	<b>21</b>	<b>137</b>	<b>230</b>	<b>896</b>	<b>516</b>	<b>122</b>	<b>17</b>	<b>23</b>	<b>135</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>258</b>	<b>2876</b>



## Report 2 – Treatment Summary

Traverse City Mgt. Unit  
Year of Entry: 2019

Compartment 171  
Total Compartment Acres: 2,877

### Acres of Harvest

Commercial Harvest - 298  
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	Overshory Removal	Salvage	Other	Total Acres
<b>Total</b>	0	0	0	0	0	0	0	0	0	

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
<b>Current</b>	298	0	0	0	0	0	175	0	0	<b>473</b>
<b>Next Step</b>	0	0	0	0	0	0	113	0	0	<b>113</b>
<b>Total</b>	<b>298</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>288</b>	<b>0</b>	<b>0</b>	<b>586</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
10	61171010-Cut	96.1	4311 - Pine, Aspen Mix	Sawtimber Well	70	111-140	Harvest	Clearcut with Retention	4133 - Aspen, Mixed Pine	Even-Aged	Draft Field Boundary

**Habitat Cut: No Site Condition:**

Prescription Cut all trees > 2" except for scattered and/or clumpy retention. Retention should try to maintain species diversity within stand (e.g. save some older pine, oak and uncommon species) as well as leave uncut patches to minimize visual impact especially around trails (patch retention). Protect advanced regeneration.

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

Acceptable Aspen, white pine, red pine, red maple, oak.  
Regen:

Other Use appropriate sale specifications to protect unofficial recreational trails. Restrict timing of sale operations to protect eastern massasauga rattlesnake; cut only in dry summer or frozen winter (preferred).

Proposed Start Date: 10/01/2018

15	61171015-Monitor	17.6	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	1	1-50	Monitoring	Natural Regen (Re-Inventory)	413 - Aspen	Even-Aged	Draft Field Boundary
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**Habitat Cut: No Site Condition:**

Prescription stand should fill in nicely to a mix of oak, pine, maple and aspen.  
Specs:

Next Step  
Treatments:

Acceptable any mix of maple, oak, aspen or pine.  
Regen:

Other Percent to Treat = 100%  
Comment:

Proposed Start Date: 05/24/2017

21	61171021-Monitor	6.3	4130 - Aspen	Sapling Well	2	Immature	Monitoring	Natural Regen (Re-Inventory)	413 - Aspen	Even-Aged	Draft Field Boundary
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**Habitat Cut: No Site Condition:**

Prescription expect very good regen  
Specs:

Next Step  
Treatments:

Acceptable any mix of aspen, maple oak or pine. expect good aspen regen  
Regen:

Other Percent to Treat = 100%  
Comment:

Proposed Start Date: 05/24/2017

22	61171022-Monitor	91.1	4136 - Aspen, Mixed Conifer	Sapling Well	1	Immature	Monitoring	Natural Regen (Re-Inventory)	413 - Aspen	Even-Aged	Draft Field Boundary
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**Habitat Cut: No Site Condition:**

Prescription expect excellent aspen regen  
Specs:

Next Step  
Treatments:

Acceptable any mix of aspen, maple oak or pine. expect very good aspen regen for the most part. thick areas may get shaded out and convert to pine which is ok as well.  
Regen:

Other Percent to Treat = 100%  
Comment:

Proposed Start Date: 05/24/2017



Stand Name	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
60	61171060-Cut	16.7	4199 - Other Mixed Upland Deciduous	Sawtimber Well	120	141-170	Harvest	Crown Thinning	4199 - Other Mixed Upland Deciduous	Uneven-Aged	Draft Field Boundary

**Habitat Cut: No**

**Site Condition:**

Prescription Remove aspen, salvaging blowdown if it's merchantable. Mark to cut hardwoods, favoring smaller diameters and vigorous trees. Residual BA will be variable. Stream buffer has been removed from treatment area but distances should be verified in field.  
Specs:

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

Acceptable Maple, aspen, basswood, birch, hemlock, white pine.  
Regen:

Other Access will be a challenge -- consider working through private land to north or skidding west through opening to existing access onto M72. Restrict  
Comment: timing of sale operations to protect eastern massasauga rattlesnake; cut only in dry summer or frozen winter (preferred).

Proposed Start Date: 10/01/2017

68	61171068-Monitor	13.4	4130 - Aspen	Sapling Well	2	1-50	Monitoring	Natural Regen (Re-Inventory)	413 - Aspen	Even-Aged	Draft Field Boundary
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**Habitat Cut: No**

**Site Condition:**

Prescription expect site to fully regenerate, wont need to look at until next entry cycle.  
Specs:

Next Step  
Treatments:

Acceptable expect good aspen regen. mixed oak and hardwood of any species is ok.  
Regen:

Other Percent to Treat = 100%  
Comment:

Proposed Start Date: 05/24/2017

75	61171075-Monitor	11.5	4110 - Sugar Maple Association	Poletimber Poor	75	51-80	Monitoring	Natural Regen (Re-Inventory)	4119 - Mixed Northern Hardwoods	Even-Aged	Draft Field Boundary
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**Habitat Cut: No**

**Site Condition:**

Prescription access gained through private in 2014.. stand thinned... then 8/2/2015 wind even blew almost everything over:-/ saved standing healthy and took rest.  
Specs: should regen to a mix of northern hardwoods

Next Step  
Treatments:

Acceptable any mix of oak, maple, or other hardwood species. stand got hit pretty hard by wind storm in 2015 so hoping to have some intolerant species mixed in  
Regen: as well. should result in a good mix of regen.

Other Percent to Treat = 100%  
Comment:

Proposed Start Date: 05/24/2017

77	61171077-Thin	61.2	4110 - Sugar Maple Association	Sawtimber Well	120	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	Draft Field Boundary
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**Habitat Cut: No**

**Site Condition:**

Prescription Thin to average residual BA of 70 sf/acre, focusing on removing ash, beech, trees with defect, and high risk trees. Try to create some regen gaps, especially where desirable maple or oak exists. Ironwood in understory will be a concern. Expand treatment into adjacent stands 92 and 93 if slopes allow.  
Specs:

Next Step  
Treatments:

Acceptable  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2018



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
79	61171079-Thin	8.7	4110 - Sugar Maple Association	Sawtimber Well	120	81-110	Harvest	Crown Thinning	411 - Northern Hardwood	Uneven-Aged	Draft Field Boundary

**Habitat Cut: No**

**Site Condition:**

Prescription Thin to average residual BA of 70 sf/acre, focusing on removing ash, beech, trees with defect, and high risk trees. Try to create some regen gaps, especially where desirable maple or oak exists. Ironwood in understory will be a concern.

Next Step  
Treatments:

Acceptable  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2018

84	61171084-Thin	60.0	4110 - Sugar Maple Association	Sawtimber Well	120	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Uneven-Aged	Draft Field Boundary
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**Habitat Cut: No**

**Site Condition:**

Prescription Thin stand to approximately 70 sf/acre. Focus on removing high risk and defect trees. Remove all aspen and beech, except for a few scattered wildlife trees. May need to leave higher BA on some of the steepest slopes.

Next Step  
Treatments:

Acceptable  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2018

88	61171088-Thin	34.1	4111 - S.Maple, Hard Mast Association	Sawtimber Well	120	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Uneven-Aged	Draft Field Boundary
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**Habitat Cut: No**

**Site Condition:**

Prescription Thin stand to approximately 70 sf/acre. Focus on removing high risk and defect trees. Remove all aspen and beech, except for a few scattered wildlife trees.

Next Step  
Treatments:

Acceptable  
Regen:

Other Need to find corners.  
Comment:

Proposed Start Date: 10/01/2018

90	61171090-Monitor	35.4	4110 - Sugar Maple Association	Sawtimber Well	80	81-110	Monitoring	Natural Regen (Re-Inventory)	4119 - Mixed Northern Hardwoods	Uneven-Aged	Draft Field Boundary
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**Habitat Cut: No**

**Site Condition: Too Wet**

Prescription  
Specs:

Next Step  
Treatments:

Acceptable maple, aspen, cherry, basswood  
Regen:

Other Percent to Treat = 100%  
Comment:

Proposed Start Date: 12/21/2015



S  
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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
95 61171095-Thin	21.3	4110 - Sugar Maple Association	Sawtimber Well	120	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Uneven-Aged	Draft Field Boundary

**Habitat Cut: No**

**Site Condition:**

Prescription Thin to average residual BA of 70 sf/acre, focusing on removing ash, beech, trees with defect, and high risk trees. Try to create some regen gaps, especially where desirable maple or oak exists. Ironwood in understory will be a concern.

Next Step  
Treatments:

Acceptable  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2018

**Total Treatment  
Acreage Proposed: 473.4**

## Report 4 – Site Conditions

Traverse City Mgt. Unit  
Katie Armstrong : Examiner

Compartment: 171  
Year of Entry: 2019

### Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions								
		With Condition	Not Available		2B	5C	5F	2F	2G	3D	3J	5E	
199	167	24	7	Aspen	3	21					5	1	2
91	91	0	0	Cedar									
11	11	0	0	Herbaceous Openland									
50	50	0	0	Low-Density Trees									
69	35	0	34	Lowland Aspen/Balsam Poplar					34				
1357	20	16	1321	Lowland Conifers	16				1,319	1	1		
53	53	0	0	Lowland Deciduous									
7	7	0	0	Lowland Mixed Forest									
21	21	0	0	Lowland Shrub									
199	199	0	0	Marsh									
100	96	0	4	Mixed Upland Deciduous					0		4		
53	31	22	0	Natural Mixed Pines		10	12						
278	245	13	20	Northern Hardwood	1	12		20					
3	3	0	0	Red Pine									
9	0	0	9	Upland Conifers					9				
102	102	0	0	Upland Mixed Forest		0							
11	11	0	0	Urban									
5	5	0	0	Water									
260	260	0	0	White Pine									
2,879	1,408	76	1,395	Total Forested Acres	20	44	12	20	1,363	6	5	2	
	49%	3%	48%	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	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

Report 4 – Site Conditions

Traverse City Mgt. Unit  
Katie Armstrong : Examiner

Compartment: 171  
Year of Entry: 2019

2	Unavailable	3D: Recreational / Scenic values	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Torch River Boating Access Site.							
3	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
4	Available	5F: Evaluated for Forest Health Considerations	11	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
5	Available	2B: Unknown if access through adjacent landowner(s) is possible	20	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Parcel is landlocked. Would also have BMP concerns and/or may be too wet.							
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Torch River boating access site.							
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	23	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							



## Report 4 – Site Conditions

Traverse City Mgt. Unit  
Katie Armstrong : Examiner

Compartment: 171  
Year of Entry: 2019

8	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	114	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Seven Bridges - undesignated natural area.							
9	<b>Unavailable</b>	<b>2F: Too steep</b>	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
10	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	1,226	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
11	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	10	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
12	<b>Unavailable</b>	<b>2F: Too steep</b>	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Steep slopes. Probably not manageable since bottom of slope is on private land.							
13	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	12	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Part of Seven Bridges Natural Area. Unsure if State has legal access through private property.							

Report 4 – Site Conditions

Traverse City Mgt. Unit  
Katie Armstrong : Examiner

Compartment: 171  
Year of Entry: 2019

15	Unavailable	2F: Too steep	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Steep slope. Probably not manageable since the bottom is on private land.							
16	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
17	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	21	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							



**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
				1
Comments				
				3
Comments				
				4
Comments				
				2
Comments				
				41
Comments				
				15
Comments				
				124
Comments				
				2
Comments				
				11
Comments				
				1
Comments				
				1
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
				16
Comments				
				2
Comments				
				2
Comments				
				2
Comments				
				1
Comments				
				3
Comments				
				8
Comments				
				1
Comments				
				4
Comments				
				1
Comments				
				11
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
				1
<b>Comments</b>				
				4
<b>Comments</b>				
				5
<b>Comments</b>				
				21
<b>Comments</b>				
				1
<b>Comments</b>				
				7
<b>Comments</b>				
				3
<b>Comments</b>				



**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	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.
HCVA	Dedicated Management Areas	Such areas are dedicated by the DNR Director for specific management uses through the promulgation of rules, as governed by Part 5, Department of Natural Resources, of the NREPA (MCL 324.502(2) and 324.504). Section 38 of the Administrative Procedures Act (MCL 24.238) provides for public requests for the promulgation of rules. This is an active program, with one proposed site currently under review by the DNR.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	16.0	100	Unspecified	Land-locked. Rapid River runs through stand.
2	4133 - Aspen, Mixed Pine	Sawtimber Well	5.6	80	111-140	Adjacent to Boating Access Site. High visibility but some aspen is dying. Very heavy white pine understory.
4	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	1.6	90	51-80	Heavy understory. Adjacent to Torch River and near Boating Access Site.
7	42100 - Planted White Pine	Poletimber Well	27.6	56	111-140	Planted 1959 and replanted 1961 (R-649). 39% mortality as of 1966. Mediocre quality, fair amount of white pine weevil/defect. Stand was row thinned in 2011: 'Skegemog White Pine' 61-017-09-01.
8	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	26.4	53	111-140	Variable stand, gradual transition to more pine to the west. Unusual proportion of white oak. Less white pine in understory than stand to the south. Could cut or hold.
10	4311 - Pine, Aspen Mix	Sawtimber Well	96.1	70	111-140	Variable stand. BAs: 110, 90, 200, 120, 170, 150. Aspen/pine dominance varies with pine increasing as you go west. Heavy white pine understory. Some larger red pine with old fire scars. Consider treating part now and part later to accommodate recreational use in this area.
11	42290 - Natural Mixed Pine	Sawtimber Well	10.1	80	171-200	Higher proportion of red pine than surrounding stand. Gradual transition. Heavy blowdown in NW corner. Understory is patchy, but generally less than surrounding stands.
12	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	109.4	90	111-140	Mostly upland with wetter west edge. Variable pine density with scattered aspen. Pine is tall with scattered blowdown. Some 2-4" red maple in understory. Hummocky ground but probably manageable.
13	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	737.2	75	81-110	Variable, dense stand. Edge call does not capture canopy variability. Probably C6 in many places. Hummocky ground. Wetter toward the lake and higher ground towards east edge. Scattered blowdown.
14	4311 - Pine, Aspen Mix	Poletimber Medium	2.3	50	51-80	Hodge podge, small stand at edge of opening. Likely trespass. Scotch pine.
15	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	16.8	1	1-50	Stand was heavily damaged in windstorm, August 2015. Salvaged as part of Torch River Salvage, 61-157-15-01, cut winter 2015-16. Removed all aspen and marked to cut: red maple, red oak, red pine, white pine, and white oak. Some additional damage since salvage. Some nice oak. Aspen has regenerated well but is patchy. Heavy slash. Includes gravel pathway to North Shore platform on Skegemog Lake.
16	429 - Mixed Upland Conifers	Poletimber Well	9.3	114	141-170	Variable stand with good diversity. Scattered blowdown. Clump of older red pine on north end near private.
17	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	13.6	115	1-50	Wet and hummocky ground with sphagnum. Patchy canopy.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	4130 - Aspen	Sapling Well	6.5	2	Immature	Stand had received heavy wind damage in August 2015. Cut by J&S Logging in fall 2015 as Skegemog Stand 21 Salvage, 61-154-15-02. Removed all aspen, red maple and storm-damaged trees. Should come back to mix of aspen, red maple and white pine. Wet at southern edge. Includes parking lot and start of hiking trail.
22	4136 - Aspen, Mixed Conifer	Sapling Well	101.7	1	Immature	Salvaged after wind storm in August 2015, Skegemog Aspen Salvage, 61-152-16-01. Canopy hard to describe because salvage cutting was so patchy. Some areas are very open A3 and others have more white pine, balsam fir and deciduous canopy. Aspen has regenerated well. Heavy slash.
23	42100 - Planted White Pine	Poletimber Well	39.1	56	81-110	Planted 1959 and replanted 1961 (R-650). 44% mortality as of 1966. Mostly white pine with a few rows of red on the west side. Row thinned in 2011 as part of Skegemog White Pine, 61-017-09-01. West edge not thinned where trees are smaller.
24	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	69.2	80	141-170	Balsam fir is understory dominant. Heavy blowdown in places - maybe not all recent. Ground would be mostly manageable. Old fire scarred pine and stumps.
25	4130 - Aspen	Sapling Well	20.8	5	Immature	Skegemog Aspen Salvage, 61-016-09-01, cut 2012 by Mid Michigan. Excellent aspen regeneration, 5-10' tall. Scattered overstory white pine.
26	4130 - Aspen	Sapling Well	16.0	5	Immature	Cut by Mid Michigan in 2012 as Skegemog Aspen, 61-016-09-01.
27	6112 - Lowland Aspen	Poletimber Well	35.1	28	1-50	Round Lake Road, 61-004-89-01. Cut 1989. Just starting to reach pole size and there are still lots of areas with smaller stems. Southern 2/3 is pretty wet. Heavy balsam in understory of southern part of stand.
29	6120 - Lowland Cedar	Sapling Well	91.2	60	1-50	Dense, wet stand. Borderline pole stand in some areas.
34	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	87.1	80	Unspecified	
49	6112 - Lowland Aspen	Poletimber Medium	16.4	62	Unspecified	Small pocket with more deciduous than surrounding stand. Most of it blew over in 2015 storm.
52	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	10.5	90	1-50	Very wet with some dead cedar and ash. Hydrology probably influenced by old grade and powerline r-o-w.
53	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	317.4	80	81-110	
58	6118 - Lowland Deciduous with Cedar	Poletimber Poor	5.4	30	1-50	Very wet with scattered trees.





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
59	42290 - Natural Mixed Pine	Poletimber Well	30.3	60	81-110	Variable stand still strongly influenced by earlier private ownership. Some planted pines with scattered autumn olive, scotch pine, old fruit trees. Smaller white pine and less dense on west side. Some wet pockets.
60	4199 - Other Mixed Upland Deciduous	Sawtimber Well	20.7	120	141-170	Some of the largest aspen I've ever seen mixed with some large hard maple. High levels of defect on the maple. Moderate blowdown from August 2015 storm in western third of stand. Rolling hills. Stream runs along east edge. Hemlock and conifer concentrated along north and east edges. Ash looks less dead than in other areas. Small opening in northern part.
61	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	7.3	70	111-140	Small, variable stand with some blowdown. Trace of upland HW species in understory. Stream flows through southern part. More cedar and hemlock on south end.
63	6112 - Lowland Aspen	Poletimber Poor	5.2	40	1-50	Very wet. Heavy blowdown from August 2015 storm. Used to have more ash.
65	6112 - Lowland Aspen	Poletimber Medium	12.4	60	Unspecified	Small pocket of upland white pine at southeast corner. Used to have some black ash. Heavy storm damage from August 2015.
68	4130 - Aspen	Sapling Well	13.9	2	1-50	Heavy wind damage from storm in August 2015. Cut fall 2015 by J & S Logging, Skegemog Gravel Pit Salvage. Removed all aspen, red maple and storm-damaged trees. Good aspen regeneration but other species will take more time. Good quality oak but not much of it. More hardwood in southern third of stand. Heavy slash. Hilly. Bisected by old road. Accessed through gravel pit and across road commission property.
69	6113 - Lowland Maple	Poletimber Well	3.7	60	51-80	Used to have ash in canopy and lots of ash is still trying to grow. Unusual proportion of yellow birch. Moderate to heavy slash/blowdown. Ground may be wetter than it looks.
70	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	39.3	75	51-80	Sprawling variable stand, but generally unified by multiple seeps from hillsides which create numerous streams and drainages generally flowing south to north. Parts are C6, Q9, E6, with some hardwood and hemlock too. Desmond Creek runs through the eastern part. Small pocket of hardwoods and some nice oak SW of stand 413. Some nice cedar and hemlock pockets.
73	4130 - Aspen	Poletimber Well	3.7	28	Immature	Round Lake Road, 61-004-89-01. Cut 1989. Just becoming a pole stand. Hilly. Access through county property?
74	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	19.2	80	81-110	Hills and ridges that generally slope towards the north with numerous seeps and stream channels. Some very nice hemlock on the ridges. Scattered blowdown from August 2015 storm.
75	4110 - Sugar Maple Association	Poletimber Poor	11.5	75	51-80	Salvage sale from August 2015 storm. Wet Ash Hills Salvage, 61-129-16-03. Accessed from adjacent sale on private property. Very hilly. Heavy slash.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
77	4110 - Sugar Maple Association	Sawtimber Well	61.2	120	111-140	Thinned in 2002, Dundas Road Hardwood, 61-015-00-01. Notes mention leaving trees on hilly areas. A little more canopy diversity than hardwood stands to the north. Fair amount of blowdown and defect. Some areas of nice maple poles. Thick understory. BAs: 140, 120, 110, 130, 130, 130.
79	4110 - Sugar Maple Association	Sawtimber Well	9.1	120	81-110	Thinned in 2002, Dundas Road Hardwood, 61-015-00-01. Generally lower BAs and smaller diameter trees than stand to the west. Heavier ironwood and beech in the understory. Pipeline along east edge: Riverside Energy, 989-705-7665.
80	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	13.1	45	51-80	Part of Seven Bridges Natural Area. Hiking trail runs through stand. Transitional stand with a wide variety of upland and lowland species. Relatively dense understory. Some manageable aspen in the NE corner but not enough to chase.
81	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	114.1	120	Unspecified	Part of Seven Bridges Natural Area. Hiking trail in the northern part of this stand. Rapid River flows through this swamp, sometimes in multiple channels. Variable canopy, some parts are dense cedar, especially closer to the river, and others are more of a Q or even E type.
83	42290 - Natural Mixed Pine	Poletimber Medium	12.3	63	1-50	Hodge podge stand still defined by its previous private ownership. Some planted white pine, spruce. Overhead powerline parallel to Rapid City Road.
84	4110 - Sugar Maple Association	Sawtimber Well	61.5	120	111-140	Some steep slopes but has been managed in the past. Network of old skid trails/roads. BAs: 120, 90, 170, 100, 100, 150. Some hemlock in the valleys. Smaller trees/lesser quality on the flats and to the north.
85	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	6.6	80	81-110	Part of Seven Bridges Natural Area. Some parts have more aspen and others are more hardwood. Variable BAs: 80, 80, 170. Heavy blowdown in southern third of stand. Thick hemlock under red maple along eastern edge. Old railroad grade running parallel to Valley Road. Property to south owned by GTRLC.
86	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	12.4	100	111-140	Areas of heavy blowdown. Mostly upland but wetter along western edge. Some nice cherry. Part of Seven Bridges. Accessed through private - need to confirm legal access.
88	4111 - S.Maple, Hard Mast Association	Sawtimber Well	36.8	120	111-140	Some steep slopes but has been managed in the past. Network of old skid trails. BAs: 120, 70, 120, 120. Powerline run through SE corner.
90	4110 - Sugar Maple Association	Sawtimber Well	35.4	80	81-110	Stand was thinned in 2014 'Slope and Dope Hwds' 61-087-09-01. Access is off Dundas Rd via an easement through the private property. Some steep terrain in the eastern 1/3 of the stand.
91	42110 - Planted Red Pine	Poletimber Well	3.4	60	81-110	SC: Stand was thinned in 2014, cut 2 leave 3 pattern, 'Slope and Dope Hwds' 61-087-09-01. Access is off Dundas Rd. We have an easement through private property. Wind has damaged some of the residual. We should see if we can get someone to clean up the damaged trees.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
92	4111 - S.Maple, Hard Mast Association	Sawtimber Well	7.5	120	111-140	Steep slope with bottom on private land. Most likely inoperable. More oak and beech on this western aspect. Some hemlock in the draws.
93	4110 - Sugar Maple Association	Sawtimber Well	8.0	120	111-140	Steep slopes that are most likely inoperable since the bottom of the slopes are on private property.
95	4110 - Sugar Maple Association	Sawtimber Well	22.0	120	111-140	Thinned in 2002, Dundas Road Hardwood, 61-015-00-01. Some very large diameter trees with thick ironwood and beech in the understory. Fair amount of defect and high risk trees. Some nice maple regen at edges of opening in south-central part of stand. BAs: 120, 130, 90, 120, 170.
101	411 - Northern Hardwood	Sawtimber Well	0.9	100	141-170	Isolated upland north of Rapid River. Part of landlocked parcel.
102	4136 - Aspen, Mixed Conifer	Poletimber Well	3.2	60	111-140	Part of landlocked parcel.
122	4133 - Aspen, Mixed Pine	Poletimber Well	21.4	53	Unspecified	Scattered blowdown. Part of stand 22 that was not salvaged. Could cut or hold.
148	611 - Lowland Deciduous Forest	Poletimber Medium	6.3	60	1-50	
168	4130 - Aspen	Sapling Well	6.3	28	Unspecified	Round Lake Aspen, 61-004-89-01. Cut 1989. Just turning into a pole stand. Hilly. Steep drop to Desmond Creek on east side.
175	4112 - Maple, Beech, Cherry Association	Poletimber Well	4.3	70	111-140	Part of adjacent hardwood stand that is too hilly to cut. Some nice quality oak.
200	4191 - Mixed Upland Deciduous with Conifer	Poletimber Medium	15.8	60	51-80	old railroad right-of-way. Barker Creek Nursery trespass north of M72 needs to be investigated.
202	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Poor	34.7	60	Unspecified	Area of very heavy wind damage from August 2015 storm. Digitized from aerial imagery. Surprising amount of ash still standing, maybe because it was leafless.
404	4199 - Other Mixed Upland Deciduous	Poletimber Poor	4.6	60	1-50	
406	4311 - Pine, Aspen Mix	Poletimber Poor	3.3	53	1-50	Three Ponds area. Used to have 2 structures which were demolished. Property corners need investigation. Beaver activity.
407	42200 - Natural White Pine	Poletimber Poor	15.0	50	1-50	Mostly open with scattered trees and small clump of denser pine at east end. Has unofficial recreational trail and old grade.
412	4199 - Other Mixed Upland Deciduous	Poletimber Poor	3.0	53	1-50	railroad right-of-way.

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Traverse City Mgt. Unit

### Report 7 – Forested Stands

Compartment: 171  
Year of Entry: 2019



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	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
<b>418</b>	6118 - Lowland Deciduous with Cedar	Poletimber Poor	3.1	45	1-50	Old railroad right-of-way. Open in middle with trees growing on side slopes. Private land to north and south. Surprising amount of hard maple regeneration.

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Stand	Cover Type	Acres	Managed Site	General Comments:
3	122 - Road/Parking Lot	1.1	No	Parking area for Torch River Boating Access Site. Maintained by PRD.
5	623 - Emergent Wetland	2.5	No	Wet area adjacent to Torch River. Some open water, cattails, and scattered small cedar.
6	500 - Water	3.7	No	Torch River, adjacent to DNR boat launch.
18	310 - Herbaceous Openland	1.7	No	Abandoned powerline corridor. Wet at north end.
19	6239 - Mixed Emergent Wetland	41.4	No	Scattered small cedar.
32	623 - Emergent Wetland	15.1	No	
33	623 - Emergent Wetland	123.9	No	
38	623 - Emergent Wetland	1.7	No	
41	623 - Emergent Wetland	11.0	No	
47	623 - Emergent Wetland	1.4	No	
50	500 - Water	1.3	No	"Three Ponds"
54	622 - Lowland Shrub	15.6	No	Multiple stream channels. Emergent wetland on west side (?) and more trees on east side.
64	6230 - Cattail	2.2	No	Has multiple stream channels.
66	330 - Low-Density Trees	2.4	No	Small upland pocket. Scattered white pine and quaking aspen.
72	122 - Road/Parking Lot	2.3	No	Rapid City Road.
82	330 - Low-Density Trees	0.5	No	Parking area and trailhead for Seven Bridges Natural Area.
87	122 - Road/Parking Lot	3.0	No	Valley Road.
94	330 - Low-Density Trees	7.7	No	Grassy opening with scattered trees. Pipeline at east end. Scattered white pine and juniper. Some good maple regen at edges, especially western end.



Stand	Cover Type	Acres	Managed Site	General Comments:
97	310 - Herbaceous Openland	1.0	No	Active gas well. Riverside Energy, 989-705-7665. Pipeline running out to the north.
98	122 - Road/Parking Lot	4.3	No	Valley Road.
130	310 - Herbaceous Openland	0.5	No	
401	330 - Low-Density Trees	10.6	No	Old opening with scattered trees. Some scotch pine. Might have an old foundation. Old dump site.
402	310 - Herbaceous Openland	0.5	No	
408	330 - Low-Density Trees	3.9	No	Abandoned well? Old gravel pit and small pond. Seeps. Seasonally wet in NW corner. Clumps of open grown white pine and aspen. Autumn olive.
409	6229 - Mixed lowland shrub	5.0	No	Overhead powerline. Mostly wet with multiple stream crossings and seeps.
411	330 - Low-Density Trees	20.5	No	Sprawling three-part opening along M72. Western part is former homesite and has kiosk and trail access to trail on old railroad grade. Scattered trees including a clump of black locust, scotch pine, and aspen. Areas of trespass from Barker Creek Nursery. Eastern part has more grass and is hilly. Part is north of RR grade: grassy with scattered open-grown white pines.
413	330 - Low-Density Trees	1.4	No	Mostly scattered white pine with red maple and aspen at the edges. Two old apple trees.
415	310 - Herbaceous Openland	7.3	No	Part of Seven Bridges Natural Area. Hiking trail goes through this opening. Old building site with unplugged water well. Scattered white pines, spruce, black cherry, red maple and apple trees.
417	330 - Low-Density Trees	2.8	No	Scattered white pine and spruce. Some ash and apple trees.