



Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32281

Entry Year 2021

Acreage: 1,131

County Marquette

Management Area: Dead Horse Moraines

Revision Date: 2019-07-25

Stand Examiner: Eric Brolin

Legal Description:

T46N - R24W, Sections 13, 23, 25, 31, 32, 34

Identified Planning Goals:

Maintain healthy northern hardwood stands while promoting diversity.

Soil and topography:

Uplands are sandy loam to loam soils with rolling to hilly topography. The lowlands are level and have soils consisting of various organics.

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

This compartment consists of six separate state parcels ownerships ranging in size. Surrounding ownerships are mostly non-industrial private forest land. Primary land use is forest production and general forest recreation.

Unique Natural Features:

The bulk of this compartment consists of higher quality northern hardwoods. Big Trout, Sporely, and Silver Lakes are managed trout fisheries and are bordered by State land in this tract. Cold water trout streams and rivers being the Sheen Creek, East and West Branches of the Chocolay and the Chocolay River occur in this compartment.

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations:

Two public access/boat launch sites, one each on Sporely and Big Trout Lakes are heavily used by the public.

Watershed and Fisheries Considerations:

Fisheries Values: Excellent

Fisheries Concerns: The Chocolay River, East Branch Chocolay River, Silver Lead Creek, Sheen Creek, Silver Lake, Big Trout Lake, and Sporley Lake all intercept with this compartment. All of these lakes are stocked with trout and all of the streams are managed designated trout streams. The proposed treatments appear to already have the appropriate buffers assigned to them. Of note, Fisheries Division has worked with the stand examiner for improving an access route to Silver Lake in stands 27 and 30. If needed, a Forest Treatment Proposal will be prepared if project meets requirements of Forest Certification intrusive activities. The southern region of the western section of this compartment borders Sporley Lake. 100' plus 5' per 1% increase in slope; buffers are recommended to protect Sporely Lake shoreline areas in accordance with Best Management Practices.

Wildlife Habitat Considerations:

Compartment 281 is found within the Dead Horse Moraines Management Area; on Ground Moraines in southeastern Marquette, southwestern Alger, and northwestern Delta Counties. The dominant Natural Communities are poor conifer swamps, mesic northern forests, and dry northern forests. Major forest cover types include Northern Hardwood, Aspen, and Mixed Lowland Conifer. This management area contains a large proportion of hardwood forest which regenerates well partly due to the heavier snow cover and lower deer numbers than the southern portion of this Management Area. The most significant wildlife management issues in the management area are: mast (hard and soft); mature forest (upland deciduous, especially aspen and mixed forest with little understory); coarse woody debris, early successional forest, and deer wintering complexes.

The following have been identified as featured species for the Dead Horse Moraines Management Area: black bear, pileated woodpecker, ruffed grouse, and white-tailed deer.

Mineral Resource and Development Concerns and/or Restrictions

Sections 13, 23, 25, 31-32, & 34, T46N-R24W, Marquette County

No active sand/gravel production is occurring within four miles of the compartment, but there appears to be some potential within the compartment. Abandoned iron mines occur six miles to the southwest. State mineral rights in Section 31 were previously leased for metallic mineral exploration and a mineral test well was drilled prior to that. There does not appear to be iron ore potential within the compartment, but there may be potential for other metallic minerals. There is no known potential for economic hydrocarbon production in the UP. The state does not own all mineral rights within the compartment. Because the mineral estate is the dominant estate, reasonable access to the surface must be provided to private owners if they choose to explore or develop their mineral rights.

Vehicle Access:

Is generally good to and around this compartment with a few exceptions involving crossing private property and terrain limitations.

Survey Needs:

Corners needed

Recreational Facilities and Opportunities:

The Lakes are well developed with access sites. Passive recreational use is heavy in this area.

Fire Protection:

Low to moderate risk for wildfire potential. Steep, difficult terrain in areas and some access through private.

Additional Compartment Information:

The following reports from the Inventory are attached:

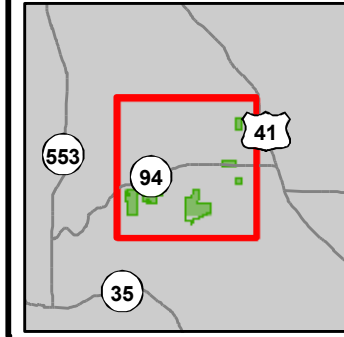
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

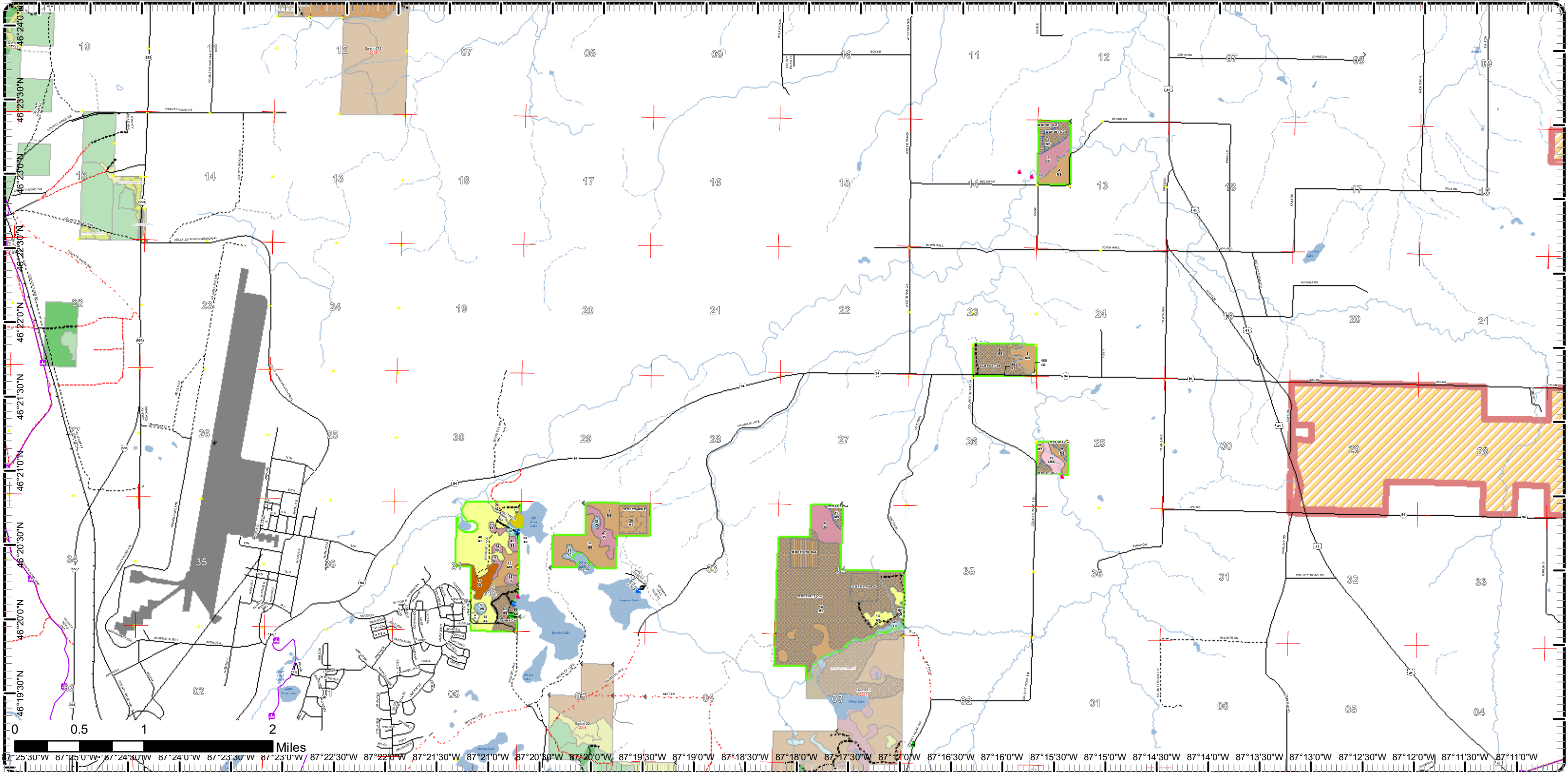
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Overview Map

Compartment: 281
 T46N,R24W, Sec. 13, 23, 25, 31-34
 County: Marquette
 Unit: Gwinn
 Mgmt Area: Dead Horse Moraines
 YOE: 2021
 Acres: 1,131 GIS Calculated
 Examiner: Eric Brolin
 Map Revised: 8/19/2019
 Map Phase: Web-Post

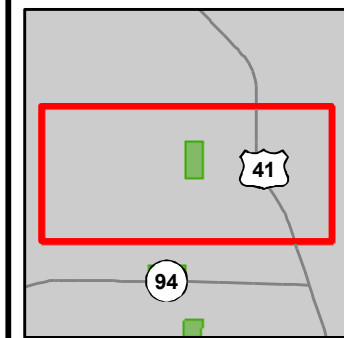


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|--|---|---|---|
| <ul style="list-style-type: none"> — Miris Corners — Remonumented Section Corners ● Survey Grade Corners ◆ Field Grade Corners --- Counties — DNR - Primary Forest Road — DNR - Secondary Forest Road — DNR - Forest Access Route — Federal / State Highway — Federal / State / County - Paved Road — Federal / State - Dirt / Gravel Road - - - County - Gravel Road - - - County - Dirt Road (Seasonal) — Private - Paved Road | <ul style="list-style-type: none"> — Private - Dirt / Gravel Road □ Unspecified Structure ▲ Berms ■ Gate ■ Boating Access Site ■ Sign ■ Structures — Intermittent Stream — Lake/Pond — Perennial River ■ Lakes and Rivers All ■ Compartment Boundary ■ Treatments with Site Conditions ■ Selection (Group, Single Tree) | <ul style="list-style-type: none"> ■ Clearcut (w/Reserves) ■ Shelter Wood (w/Reserves) ■ Site Prep ■ 411 - Northern Hardwood ■ 412 - Oak Types ■ 413 - Aspen ■ 419 - Mixed Upland Deciduous ■ 429 - Mixed Upland Conifers ■ 612 - Lowland Coniferous Forest ■ 613 - Lowland Mixed Forest ■ 122 - Roads/Parking Lot ■ 310 - Herbaceous Openland ■ 500 - Water ■ 622 - Lowland Shrub ■ 710 - Sand/Soil | <ul style="list-style-type: none"> ■ 790 - Other Bare/Sparingly Vegetated ■ Lakes |
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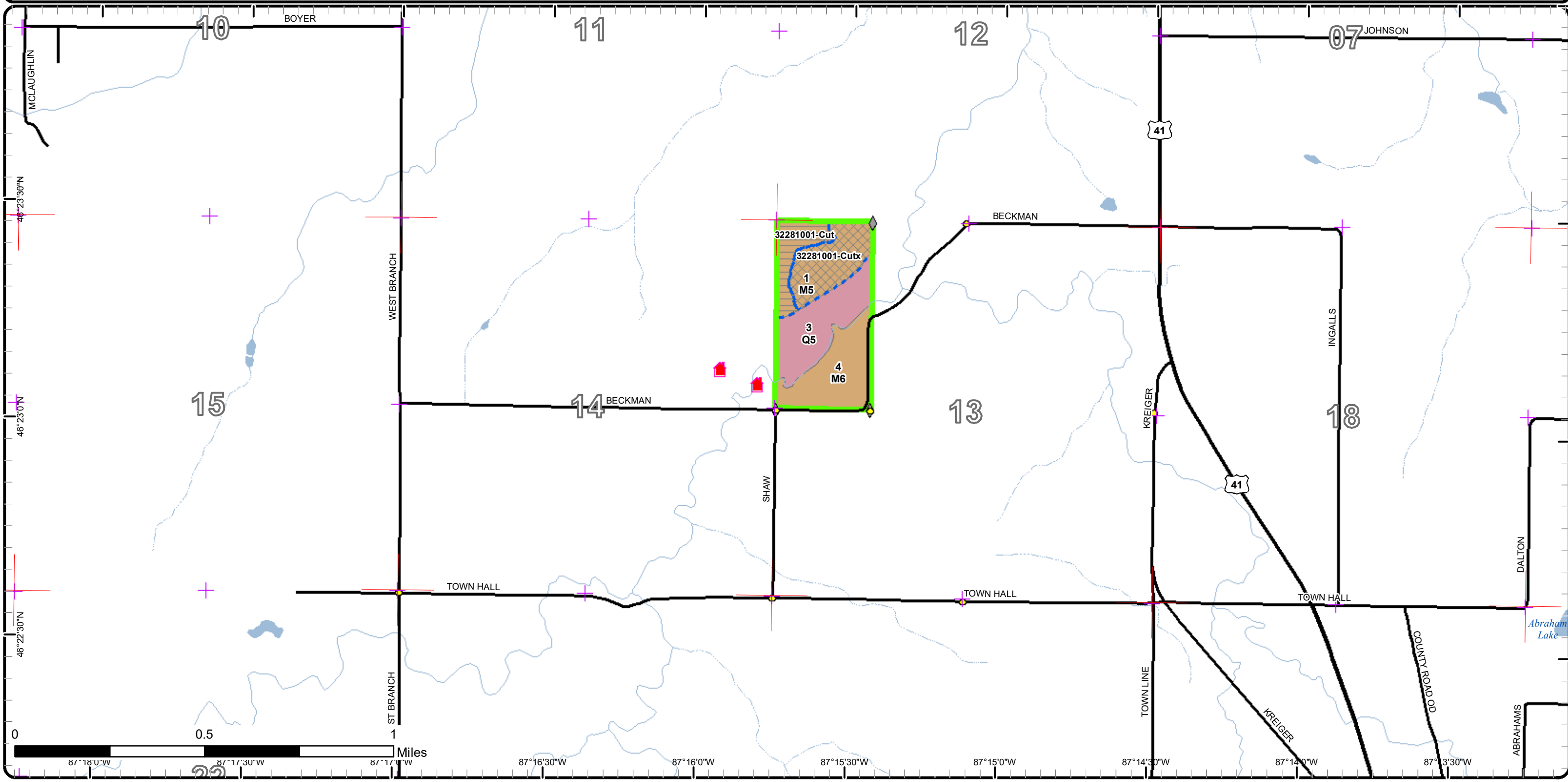


Cover Type & Treatments Map

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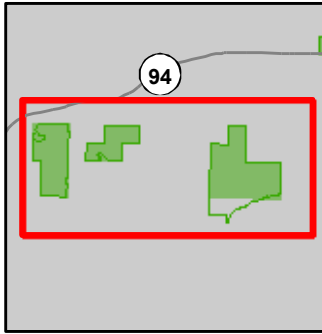


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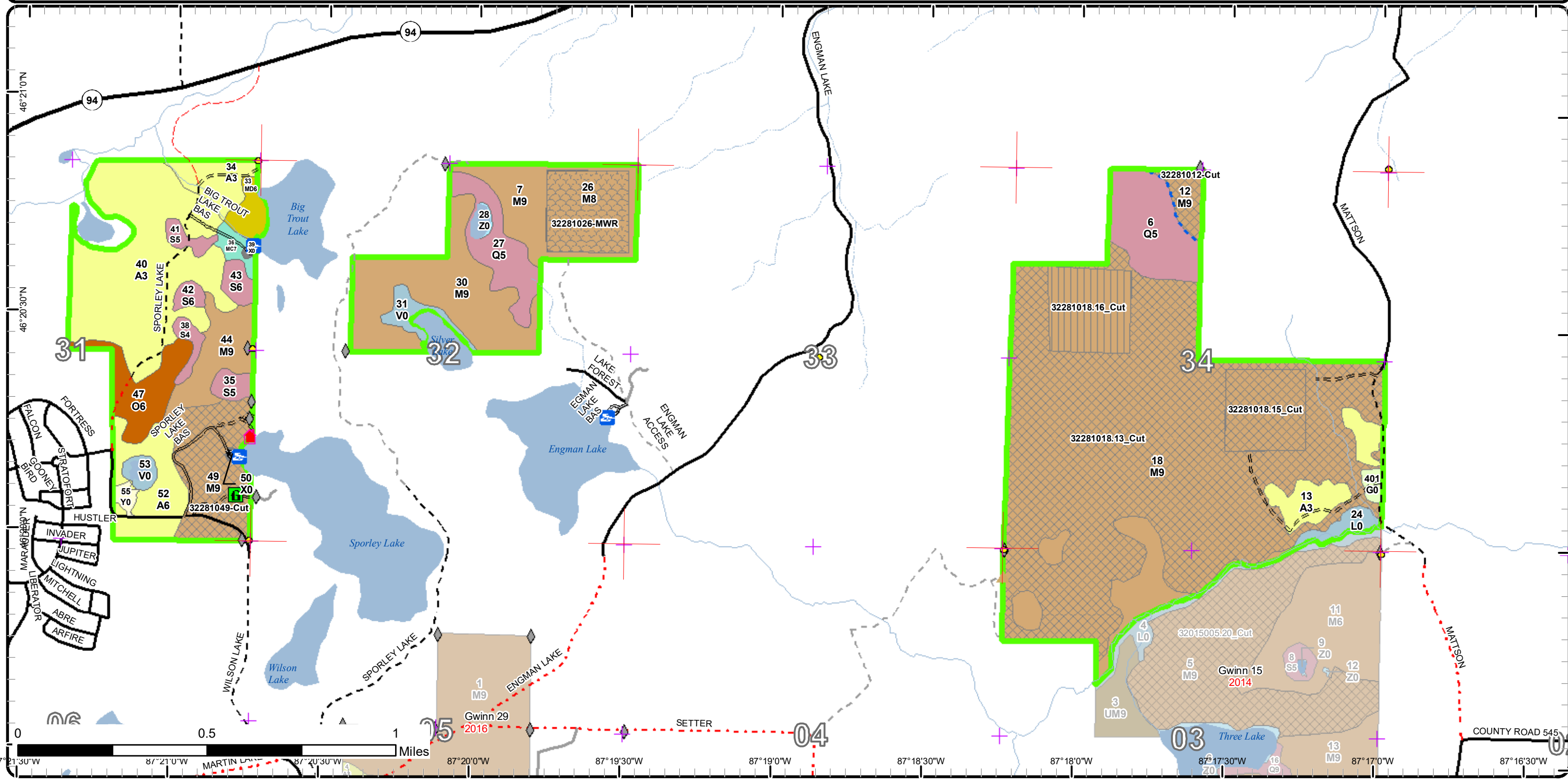


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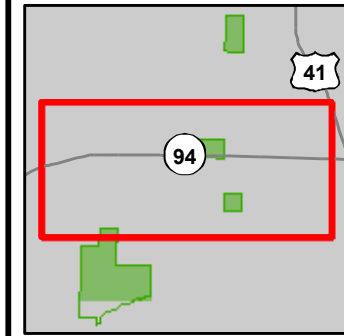


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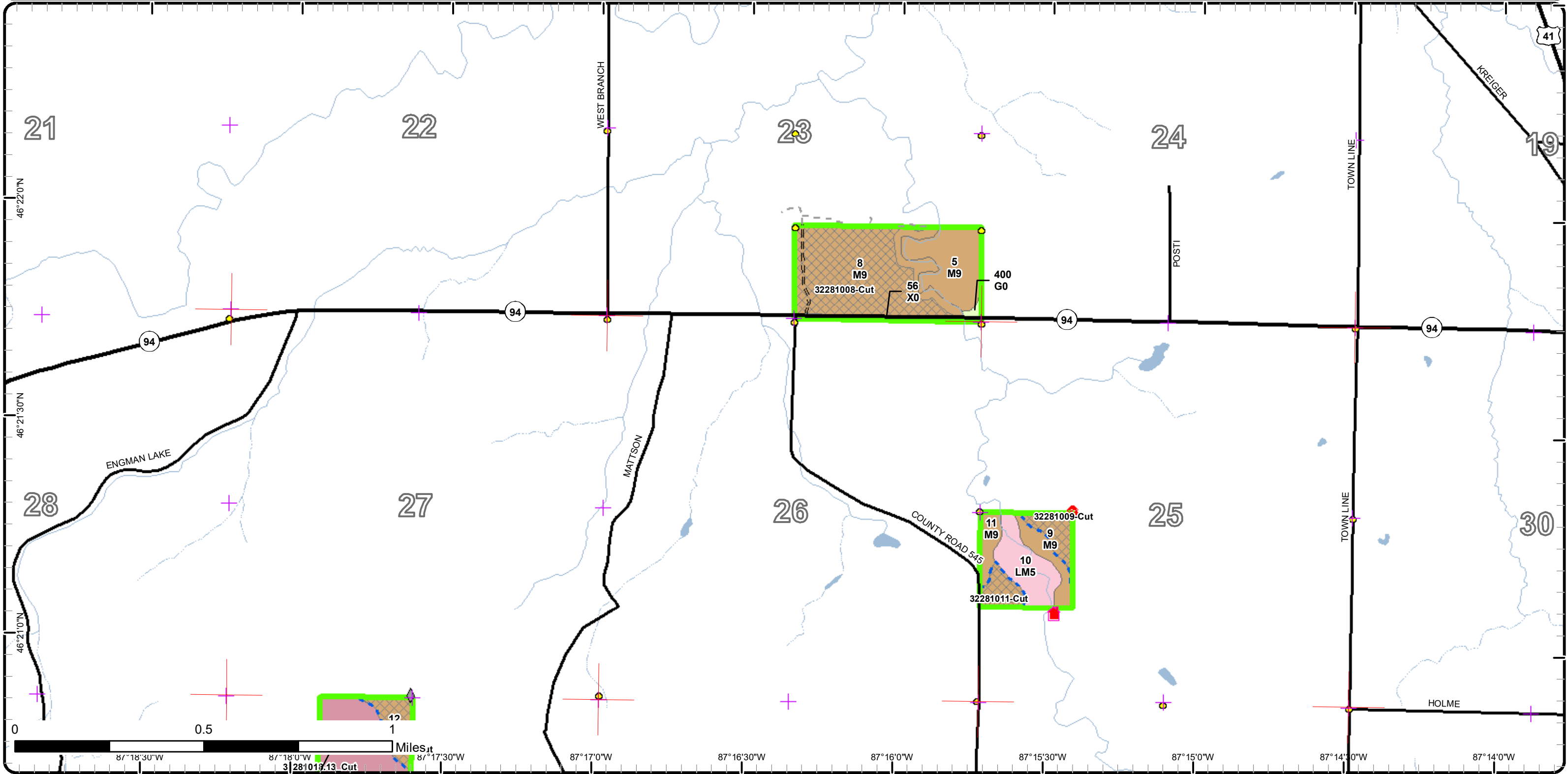


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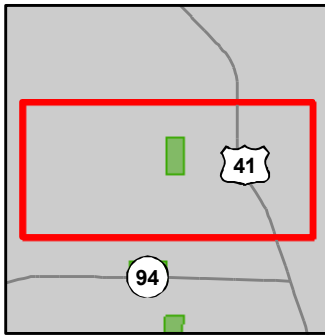


Stand Boundary Map

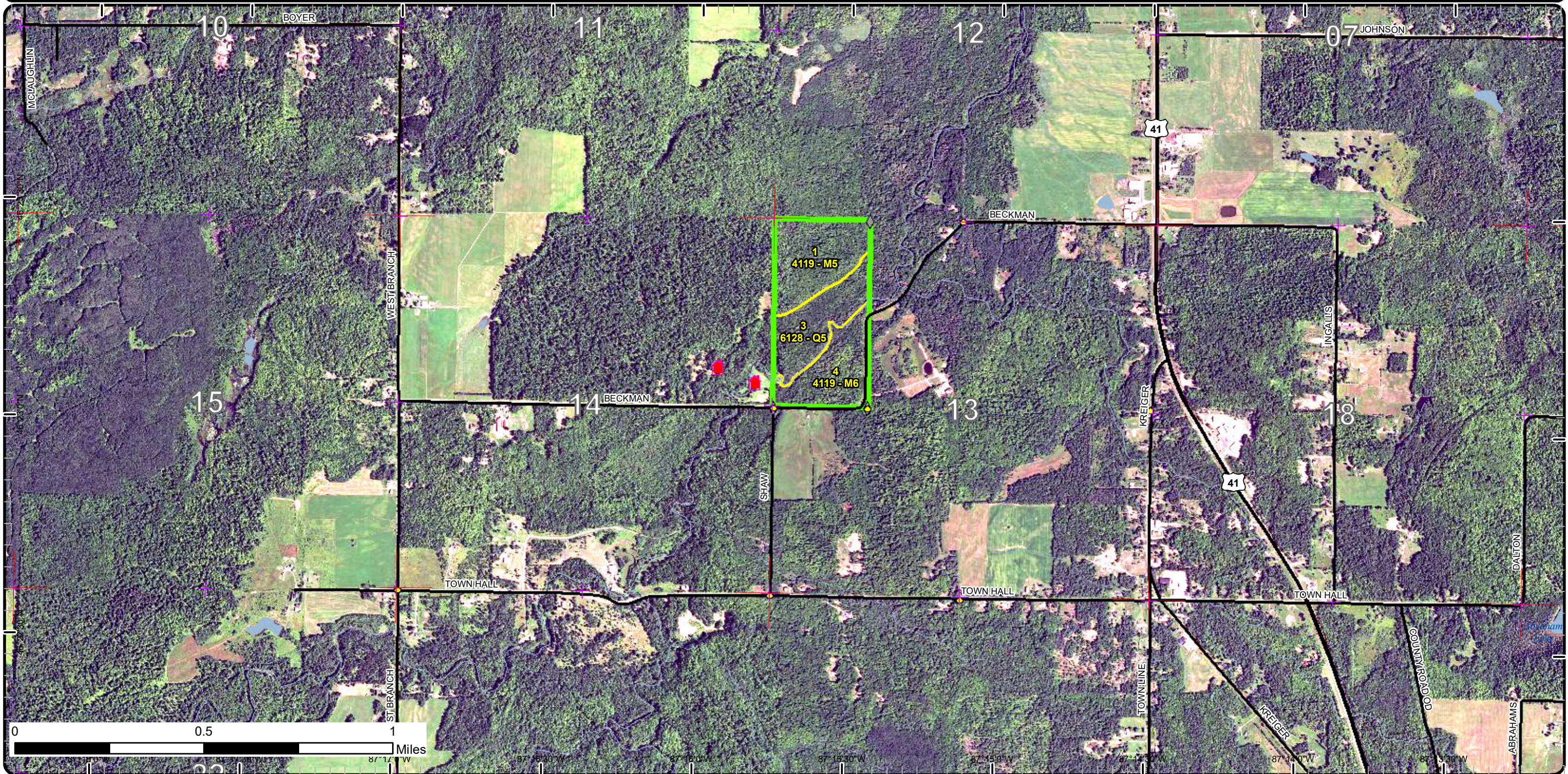
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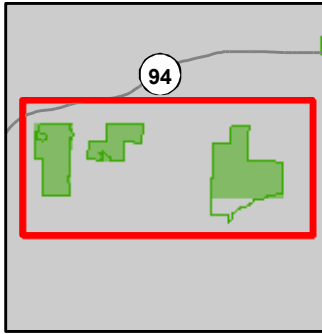


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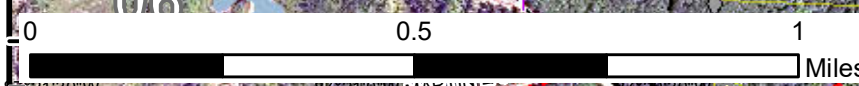
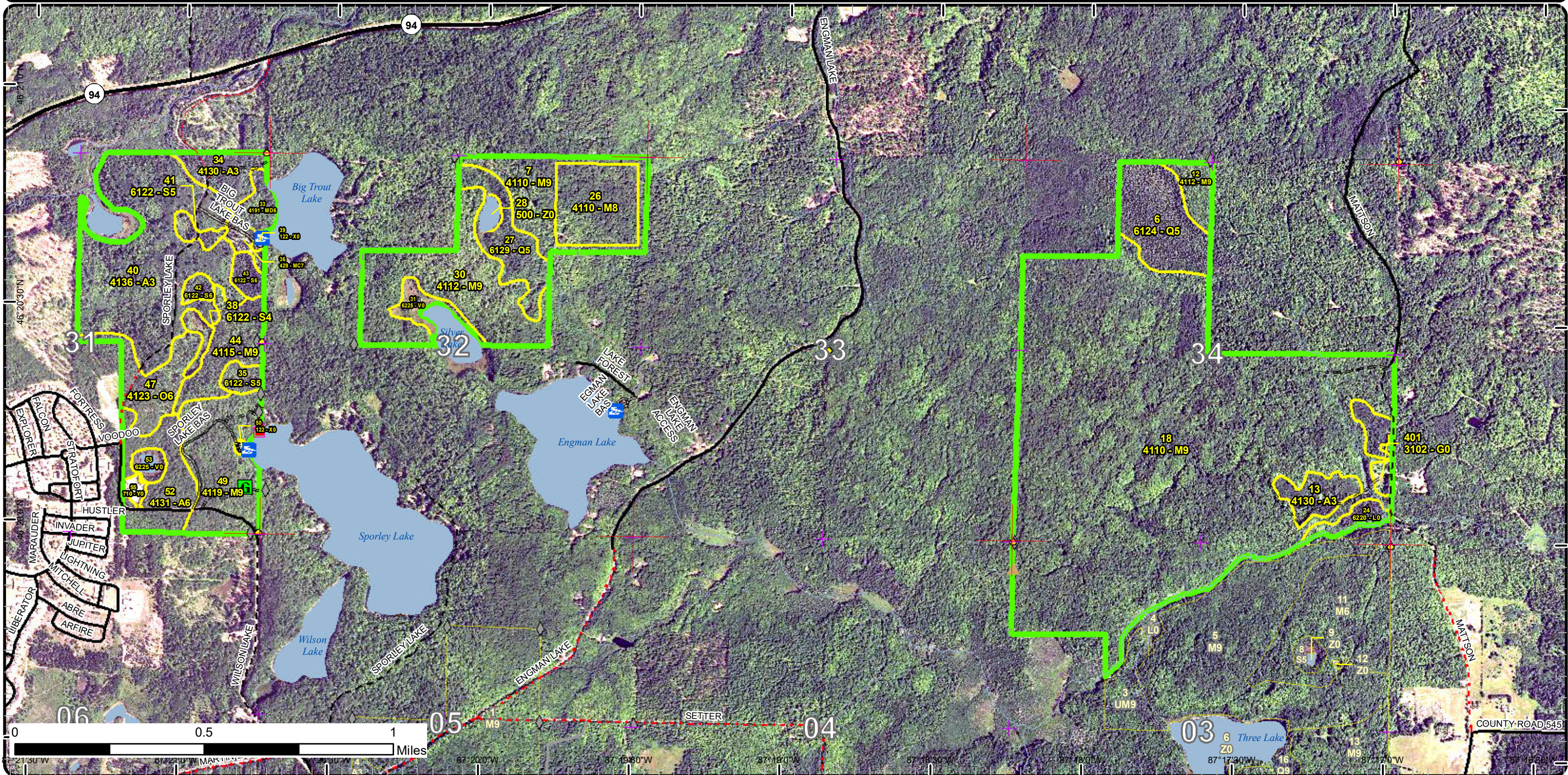
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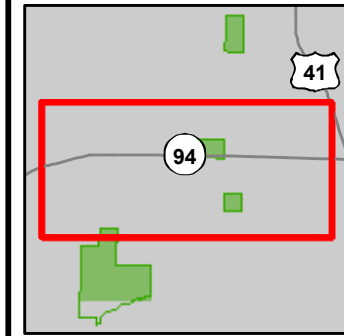
06 05 04 03 02 01
 21°30'W 87°20'W 87°19'30"W 87°19'00"W 87°18'30"W 87°18'00"W
 46°21'0"N 46°20'30"N 46°20'0"N 45°59'30"N 45°59'0"N 45°58'30"N

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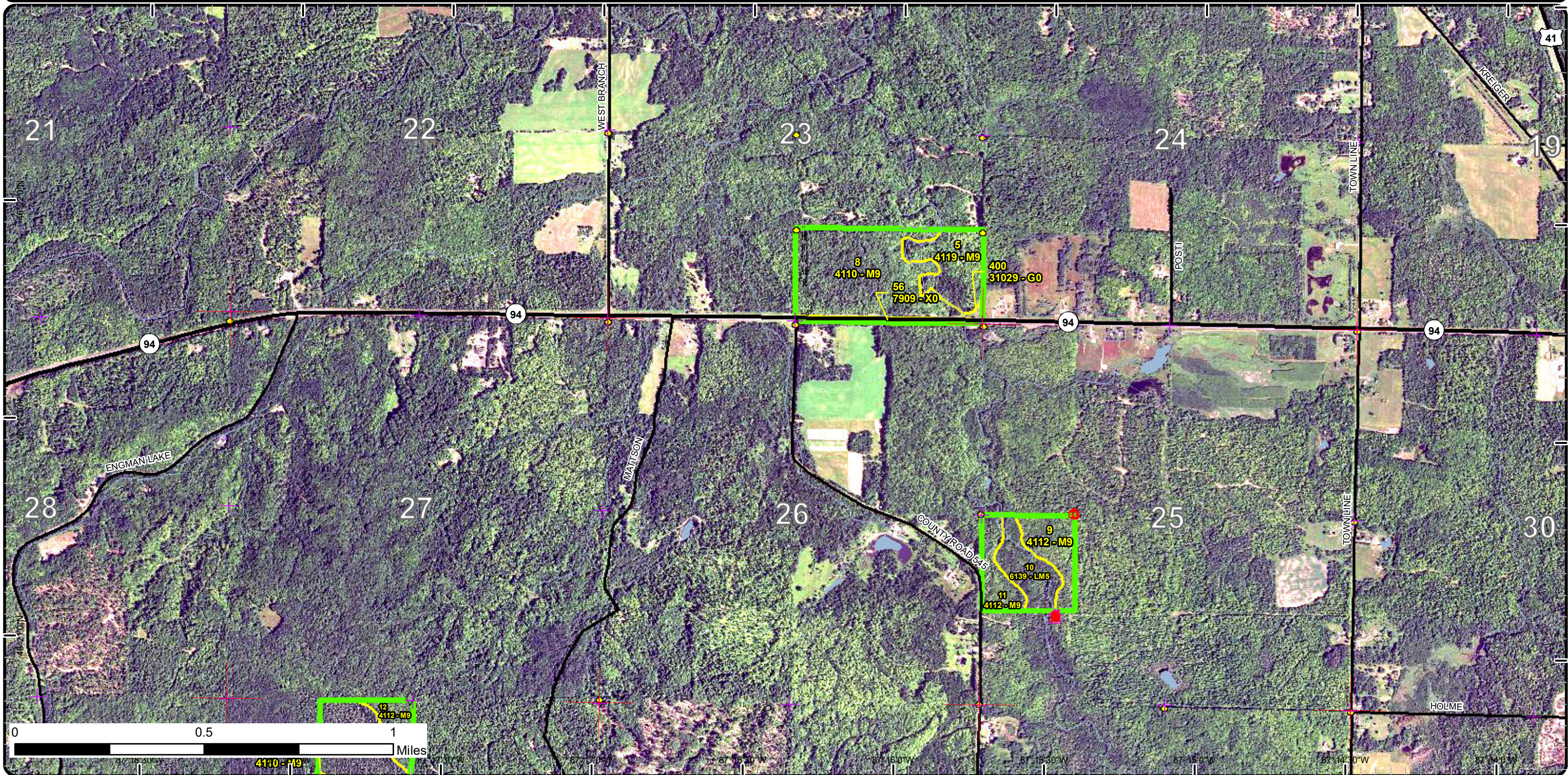
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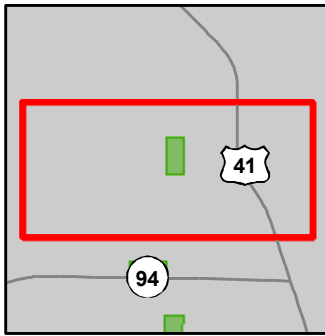


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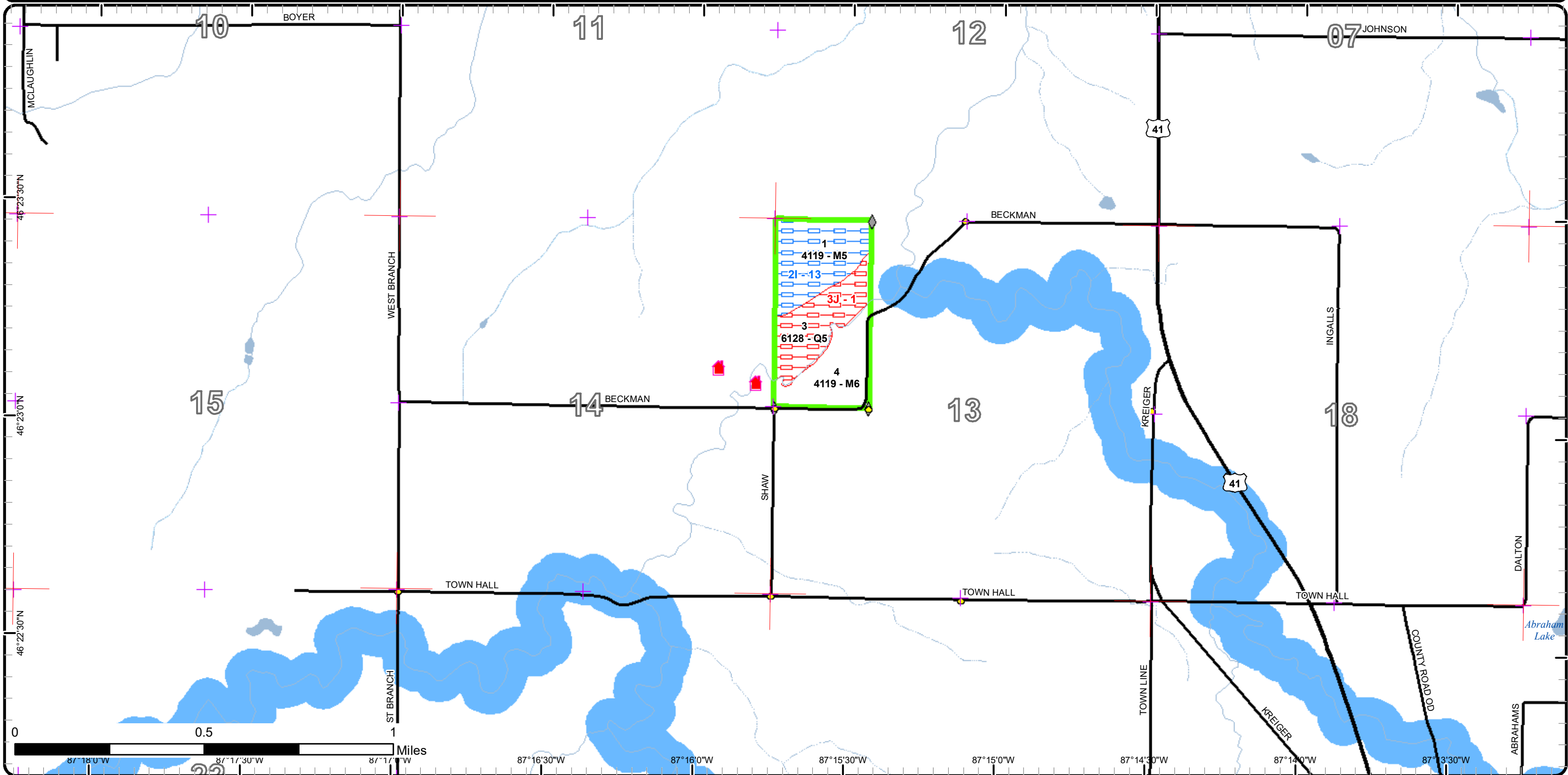


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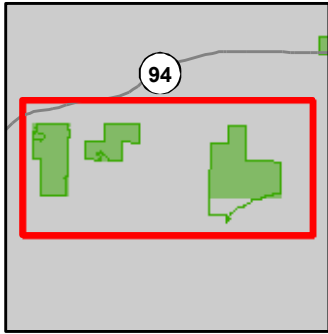


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- 3J: Water quality / BMPs (stream, river, or lake)
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- Cold Water Streams
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- High Priority Trout Stream Buffer

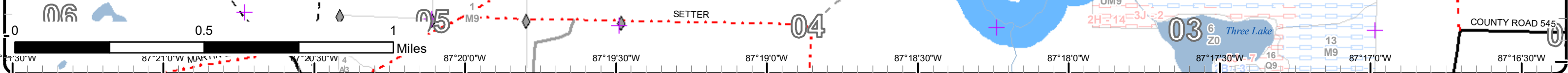
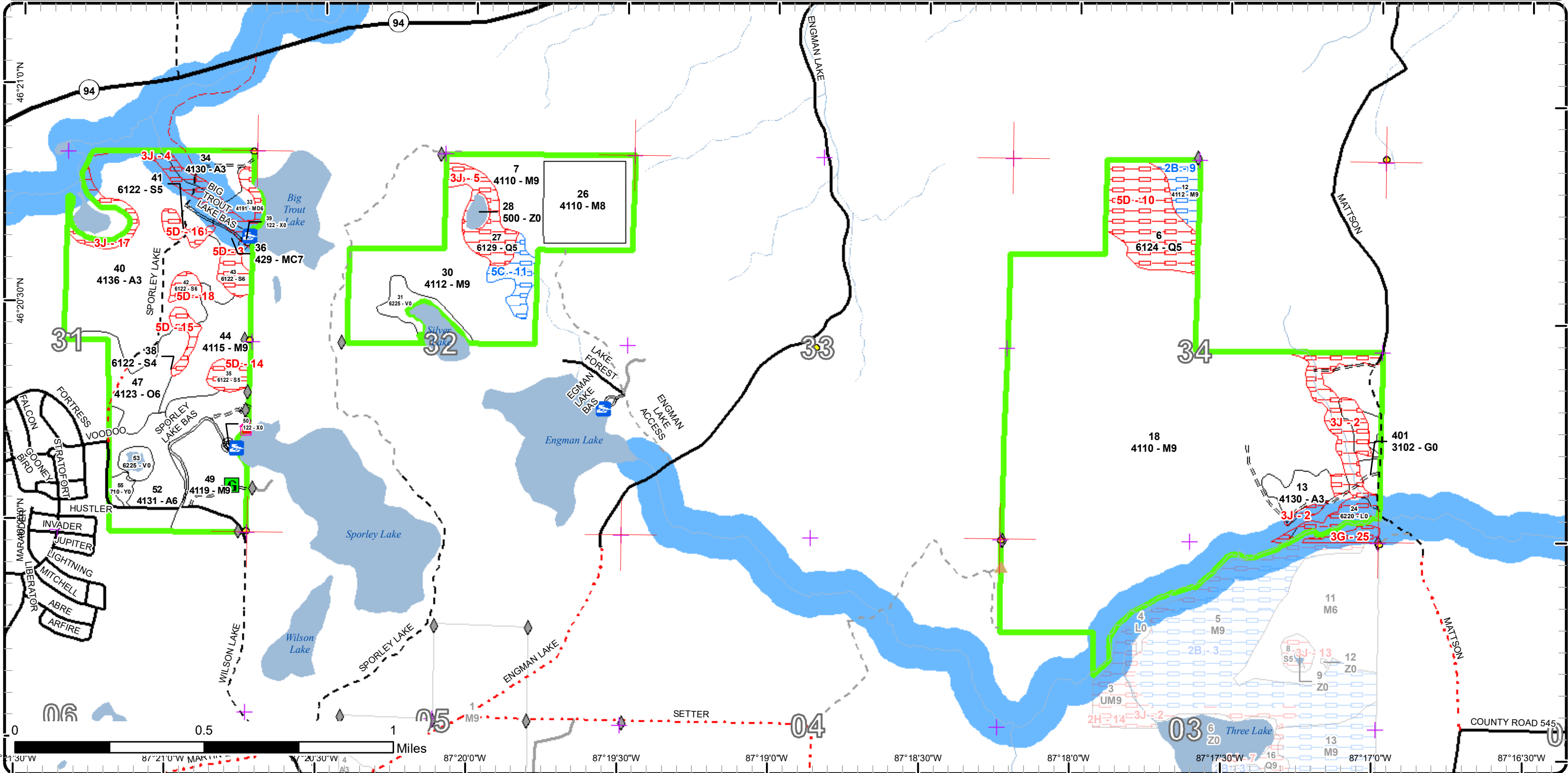


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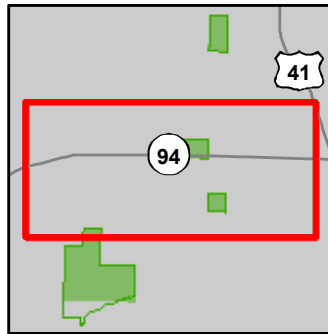


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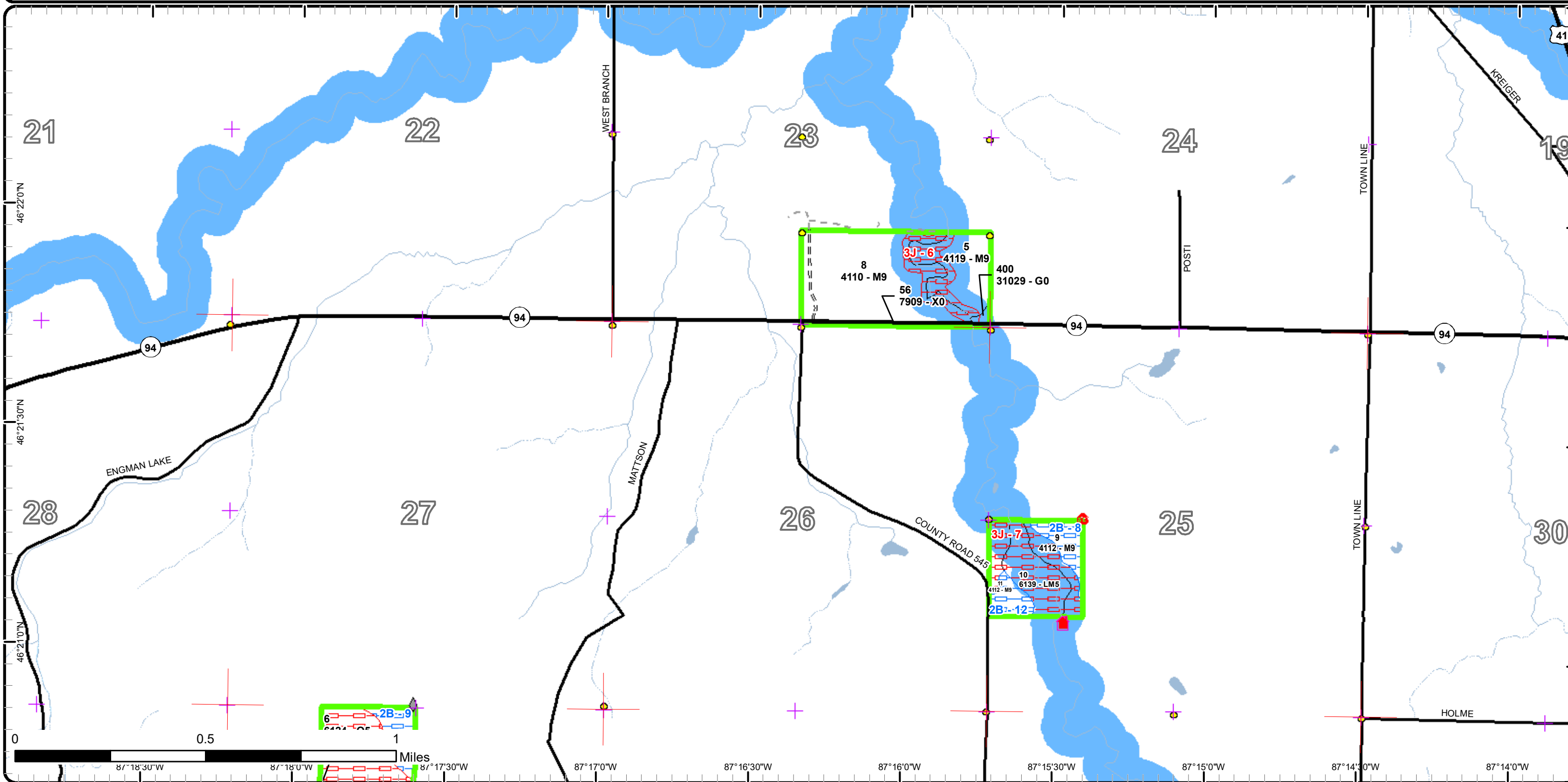


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Report 1 – Total Acres by Cover Type and Age Class



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	0	116	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	156
Bare/Sparsely Vegetated	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Bog	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Herbaceous Openland	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Lowland Conifers	0	0	0	0	0	0	0	0	0	58	22	0	0	0	0	0	0	0	80
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	15
Lowland Shrub	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	21
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	8
Northern Hardwood	0	0	0	0	0	0	0	0	0	111	663	0	0	0	0	0	0	20	794
Oak	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	21
Sand, Soil	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
Urban	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Water	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	32	0	116	40	0	0	21	0	8	205	685	5	0	0	0	0	0	20	1132



Report 2 – Treatment Summary

Gwinn Mgt. Unit

Year of Entry: 2021

Acres of Harvest

Compartment 281

Total Compartment Acres: 1,131

Commercial Harvest - 505
 Harvests with Site Condition - 52
 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
Northern Hardwood		11	516	0	0	31	0	0	0	0	558
	Total	11	516	0	0	31	0	0	0	0	558

Proposed and Next Step Treatments by Method

		Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current		558	30	0	0	0	0	0	0	0	588
Next Step		0	60	0	0	0	90	588	0	0	738
	Total	558	90	0	0	0	90	588	0	0	1325



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
1	32281001-Cut	11.1	4119 - Mixed Northern Hardwoods	Poletimber Medium	80	111- 140	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Two-Aged	Proposal

Habitat Cut: No Site Condition: Survey Needed

Prescription Harvest to a 2" spec. to promote lowland hardwood, spruce/fir, and hemlock regeneration. Leave cedar, hemlock, white pine, and yellow birch.
Specs:

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

Acceptable maple, fir, hemlock, pine
Regen:

Other Private access from southwest. Harvest during frozen conditions only.
Comment:

Proposed Start Date: 6 /27/2019

1	32281001- Cutx	19.3	4119 - Mixed Northern Hardwoods	Poletimber Medium	80	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
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Habitat Cut: No Site Condition: Survey Needed

Prescription Mark stand to 70-90 BA. Focus on improving overall quality. Remove all merchantable spruce/fir. Leave some large future snag trees for wildlife.
Specs: Leave cedar, hemlock, and yellow birch. Favor species diversity and different age classes while marking.

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

Acceptable northern hardwood
Regen:

Other Blowdown patches from 2002 have sapling regen and marking will be thin if any is done at all. Thin dense maple areas to prescription. Do not
Comment: push line over slope along the south edge. Some corners needed.

Proposed Start Date: 10/1 /2020

8	32281008-Cut	46.9	4110 - Sugar Maple Association	Sawtimber Well	90	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
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Habitat Cut: No Site Condition:

Prescription Mark stand to 70-90 BA. Focus on improving overall quality. Remove all merchantable spruce/fir. Leave some large future snag trees for wildlife.
Specs: Leave cedar, hemlock, white spruce, aspen, and yellow birch. Favor species diversity, especially black cherry, and different age classes while marking.

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

Acceptable northern hardwood
Regen:

Other Some ravines along the east border can be harvested, take time with line to capture acreage. Access to center road will cross private.
Comment:

Proposed Start Date: 10/1 /2020

9	32281009-Cut	7.0	4112 - Maple, Beech, Cherry Association	Sawtimber Well	85	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
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Habitat Cut: No Site Condition: Unknown Access

Prescription Mark stand to 70-90 BA. Focus on improving overall quality. Remove all merchantable spruce/fir. Leave some large future snag trees for wildlife.
Specs: Leave cedar, hemlock, and aspen if present. Favor species diversity, especially black cherry and yellow birch, and different age classes while marking.

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

Acceptable northern hardwood
Regen:

Other Access through private from north.
Comment:

Proposed Start Date: 10/1 /2020



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
11	32281011-Cut	5.9	4112 - Maple, Beech, Cherry Association	Sawtimber Well	80	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
Habitat Cut: No			Site Condition: Unknown Access								
<u>Prescription</u> Mark stand to 70-90 BA. Focus on improving overall quality. Remove all merchantable spruce/fir. Leave some large future snag trees for wildlife.											
<u>Specs:</u> Leave cedar, hemlock, aspen, black cherry, and yellow birch. Favor species diversity especially basswood and different age classes while marking.											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> northern hardwood											
<u>Regen:</u>											
<u>Other</u> Drainage along road impassable during non-frozen seasons without timber mats. Consider access from private along the south border.											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/1 /2020											
12	32281012-Cut	9.0	4112 - Maple, Beech, Cherry Association	Sawtimber Well	82	141- 170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
Habitat Cut: No			Site Condition: Unknown Access								
<u>Prescription</u> Mark stand to 70-90 BA. Create canopy gaps to establish regeneration. Remove all merchantable spruce/fir. Leave some large future snag trees											
<u>Specs:</u> for wildlife. Leave cedar, hemlock, and oak. Favor diversity while marking especially black cherry and yellow birch.											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> northern hardwood											
<u>Regen:</u>											
<u>Other</u> Access is through private property.											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/1 /2020											
18	32281018.13_ Cut	355.4	4110 - Sugar Maple Association	Sawtimber Well	90	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Mark stand to 70-90 BA. Focus on removing larger diameter, poorer quality trees first to create 60' canopy gaps for regeneration. Buffer Sheen											
<u>Specs:</u> Creek and tributaries. Exclude vernal areas, potholes, and areas with inoperable terrain or do not mark within inoperable terrain. Remove all merchantable spruce/fir and aspen. Leave some large future snag trees for wildlife. Leave cedar, hemlock, and white pine. Favor species diversity, especially basswood and black cherry, and different age classes while marking. Look for opportunities to save fork crowned and large diameter Big Tooth Aspen											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> northern hardwood											
<u>Regen:</u>											
<u>Other</u> Access will require a temporary bridge for stream crossing from the northeast. Extensive linework includes blue line, buffers, vernal exclusions,											
<u>Comment:</u> terrain, etc. The treatment line has been updated for approximate observed exclusions, many more will exist within.											
<u>Proposed Start Date:</u> 10/1 /2020											
18	32281018.15_ Cut	29.2	4110 - Sugar Maple Association	Sawtimber Well	90	111- 140	Harvest	Group Selection	411 - Northern Hardwood	Uneven- Aged	Field Boundary
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Large group selection and patch cuts. Harvest openings will range from 0.25 -1.0 acre in size and comprise 30% of the stand.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Intermediate); Pesticide, Skidder - Site Prep; SitePrep, Scarification											
<u>Treatments:</u>											
<u>Acceptable</u> A diverse mix of northern hardwood species.											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/1 /2016											



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
18	32281018.16_ Cut	30.8	4110 - Sugar Maple Association	Sawtimber Well	90	111- 140	Harvest	Shelterwood	411 - Northern Hardwood	Even-Aged	Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Shelterwood. The target of first harvest is to retain 50% canopy cover (~ 50 ft2 ac-1) of seedbearing-sized trees of good form and of diverse, desirable species. Final overstory removal timing is flexible and is anticipated to occur approximately ten years after the first harvest.

Specs:

Next Step Monitoring, Natural Regen (Intermediate); SitePrep, Scarification; Pesticide, Skidder - Site Prep

Treatments:

Acceptable A diverse mix of northern hardwood species.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2016

26	32281026- MWR	30.0	4110 - Sugar Maple Association	Sawtimber Medium	90	81-110	SitePrep	Scarification	411 - Northern Hardwood	Uneven- Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Scarifying the forest floor (no tree tops).

Specs:

Next Step Monitoring, Natural Regen (Intermediate); Pesticide, Skidder - Site Prep

Treatments:

Acceptable A diverse mix of northern hardwood species.

Regen:

Other

Percent to treat = 42%

Comment:

Proposed Start Date: 10/1 /2019

49	32281049-Cut	43.0	4119 - Mixed Northern Hardwoods	Sawtimber Well	90	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Mark stand to 70-90 BA. Focus on removing larger diameter, poorer quality trees first to create 60' canopy gaps for regeneration. Buffer lake accordingly with slope. Remove all merchantable spruce/fir. Leave some large future snag trees for wildlife. Leave cedar, hemlock, white pine. Favor species diversity, especially forked crown aspen and red oak, and different age classes while marking.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable northern hardwood, oak

Regen:

Other

Keep steep terrain in mind while marking.

Comment:

Proposed Start Date: 10/1 /2020

**Total Treatment
Acreage Proposed: 587.6**

Report 4 – Site Conditions

Gwinn Mgt. Unit
Eric Brolin : Examiner

Compartment: 281
Year of Entry: 2021

Availability for Management

Total Acres	Acres Available	Acres Avail		Acres Not Available	Dominant Site Conditions						
		With Condition			2B	2I	5C	3J	5D	ed	
155	134	0		21	Aspen				21		0
4	4	0		0	Bare/Sparsely Vegetated						
12	12	0		0	Bog						
4	4	0		0	Herbaceous Openland				0		
80	0	8		72	Lowland Conifers			8	39	33	
15	0	0		15	Lowland Mixed Forest				15		
6	0	0		6	Lowland Shrub				6		
21	0	0		21	Lowland Spruce/Fir					21	
8	3	0		5	Mixed Upland Deciduous				5		
794	699	53		42	Northern Hardwood	22	30		42		
21	21	0		0	Oak						
2	2	0		0	Sand, Soil						
5	3	0		1	Upland Conifers				1		
2	1	0		0	Urban				0		
2	2	0		0	Water						
1,131	885	61		184	Total Forested Acres	22	30	8	130	54	0
	78%	5%		16%	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	3J: Water quality / BMPs (stream, river, or lake)	25	2F: Too steep	Unspecified	Unspecified	Unspecified
Comments: River buffer, slope, and soft ground.							
2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	30	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Trout stream buffer, 300' for aspen / 100' for hardwoods.							

Report 4 – Site Conditions

Gwinn Mgt. Unit
Eric Brolin : Examiner

Compartment: 281
Year of Entry: 2021

3	Unavailable	5D: Unproductive Forest Land	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Bog							
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Too wet, floating bog.							
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	26	2F: Too steep	Unspecified	Unspecified	Unspecified
Comments: River buffer with mucky soils and steep slopes along transitions.							
8	Available	2B: Unknown if access through adjacent landowner(s) is possible	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Access through private. Have not spoke to landowner.							

Report 4 – Site Conditions

Gwinn Mgt. Unit
Eric Brolin : Examiner

Compartment: 281
Year of Entry: 2021

9	Available	2B: Unknown if access through adjacent landowner(s) is possible	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Access through private from the southeast.							
10	Unavailable	5D: Unproductive Forest Land	33	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Sparse, stunted lowland conifers with veins of alder.							
11	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Wet but harvestable when harvesting adjacent stands in the future.							
12	Available	2B: Unknown if access through adjacent landowner(s) is possible	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments: With slope along road and a muck drainage that runs parallel to it, access may have to be through private from the property along the south border.							
13	Available	2I: Survey needed	30	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Some corners needed. Private access should be allowed from the landowner along the west.							
14	Unavailable	5D: Unproductive Forest Land	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Bog							

Report 4 – Site Conditions

Gwinn Mgt. Unit
Eric Brolin : Examiner

Compartment: 281
Year of Entry: 2021

15	Unavailable	5D: Unproductive Forest Land	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Bog							
16	Unavailable	5D: Unproductive Forest Land	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Bog							
17	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
18	Unavailable	5D: Unproductive Forest Land	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Bog							
21	Unspecified	Unspecified	0				
Comments:							
25	Unavailable	3G: Other Influence zones - See comments	4	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							

Mgt. Unit

Compartment: #Type!

Year of Entry:



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

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				



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.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																						
1	4119 - Mixed Northern Hardwoods	Poletimber Medium	30.4	80	111-140	N/A	<p>Access through private from the southwest. A vein of smaller diameter sugar maple logs/poles along the center with more red maple poles along the edges. The west and northwest portion of this stand is more dense to falling apart fir, hemlock, and very poor quality red maple with dying tops and poorly drained flat ground. This area should be managed even-aged. A steeper drop borders the south edge and heads down into lower wet ground with a more sparse canopy. A blowdown event in 2002 created numerous canopy gaps across the sugar maple portion. Average canopy cover is probably less than 75% but patches of timber have very high BA and should be thinned. BA plots were taken in areas not affected by blowdown, 100 170 130 90 Average of 125 BA in these areas.</p> <p>OPIC - FMD: Need access across private land. Pockets of blow down from the storm of 7/21/02.</p>																																						
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3	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	24.7	83	51-80	N/A	<p>Steep slope across entire north edge of this stand. Sparse trees with dense fir saplings/poles.</p> <p>OPIC - FMD: SCA = Riparian area that buffers the Chocoday River. Generally an upland F type mixed with numerous seeps that feed the Chocoday River. Some Q inclusions especially along river and streamlets. Also contains some hemlock pockets.</p>																																						
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4	4119 - Mixed Northern Hardwoods	Poletimber Well	25.0	80	51-80	N/A	<p>120 40 60 10 more of an open canopy with dent maple sapling in under story. most black cherry is dead or rapidly declining. a good number of him hemlock sapling 10 to 15 feet tall is found in the under story. humorous shallow Levine's leaving to the river have soft bottom ground.OPIC - FMD: CUT FALL 92 PERMIT #22-91. Lots of blow down from the storm of 7/21/02.</p>																																						
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5	4119 - Mixed Northern Hardwoods	Sawtimber Well	20.4	75	81-110	N/A	<p>Hardwood stand with small log to pole sized trees. Steep rolling terrain in north and along the river. Patchy from dense to light BA. Maple regen is found within open gaps. Fir more abundant on the west facing slope along the river. More conifer and large white spruce along rivers edge. 100 120 50 80 Average of 90 BA.OPIC - FMD: THINNED IN 93 PERMIT #26-91 ALL ASPEN CUT OUT</p>																																						
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Sugar Maple	Medium	10 - 20 feet	Sapling																																										
6	6124 - Lowland Spruce-Fir	Poletimber Medium	33.2	82	51-80	N/A	<p>Sparse lowland conifers. Shorter, stunted trees. This is an unproductive stand.</p>																																						
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7	4110 - Sugar Maple Association	Sawtimber Well	29.6	90	81-110	N/A	Hardwood stand dense to sugar maple. MWR unit within, gap cut 1/4 acre - 1 acre. Some moderate to better quality trees with a lot of poor quality logs and poles mixed in. There is still a lot of room for canopies to grow with openings and canopy gaps that have dense maple regeneration underneath. Rolling terrain with some steeper ravines across the stand. 130 100 110 80 50 120 80 Average of 95 BA.OPIC - FMD: Selectively harvested in 2004: TS#120-01-01. Some portions of this stand have received TSI treatments historically.																																
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8	4110 - Sugar Maple Association	Sawtimber Well	53.7	90	111-140	N/A	Dense to sugar maple. Decent quality maple. Gentle terrain except on the east border along the river which has steep ravines/drainages. Most of the road in the center of this stand is grown in thick with maple saplings. 110 180 130 130 Average of 140 BA.OPIC - FMD: THINNED IN 93 PERMIT #26-91. Stocking is high in patches-thin next entry. Thirty foot wide strip along the north edge clearcut by adjacent land owner and is M3.																																
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9	4112 - Maple, Beech, Cherry Association	Sawtimber Well	13.9	85	111-140	N/A	Access from north through private property. With slopes to the river there will be only about 7 harvestable acres in this stand. Did not look at stand but photos and lack of past management suggests it is due for a thinning. OPIC - FMD: Permission to access this stand across the neighbor's property should be able to be obtained.																																
10	6139 - Mixed Lowland Forest	Poletimber Medium	14.6	85	81-110	N/A	Lowland drainage along the river with very mucky ground. Mixed conifer and hardwoods with black ash. Terrain going up to hardwoods on both sides. OPIC - FMD: SCA = Riparian buffer zone along the chocolate river. Upland and lowland with numerous seeps and drainages that feed the Chocolate River.																																
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11	4112 - Maple, Beech, Cherry Association	Sawtimber Well	11.1	80	111-140	N/A	Moderate to poor quality hardwood stand. A lot of the black cherry has died out creating canopy gaps. More sugar maple in the south half with rolling terrain. North half is a steep hillside running the length along the lowland area and would be inoperable. Patchy canopy in areas, could let grow until next YOE. 140 150 80 90 Average of 115 BA. OPIC - FMD: Private land ownership has changed-may be able to get permission to use road. A significant portion of this stand is inoperable due to land form. Retain all cedar, hemlock, and white pine.																																
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12	4112 - Maple, Beech, Cherry Association	Sawtimber Well	9.0	82	141-170	N/A	Hardwood stand transitioning from more red maple along the lowland to more sugar maple upland. Scattered log size trees are dominant with dense poles mixed in. More fir saplings found along the southwest border, otherwise fairly open understory. 180 150 170 170 Average of 170 BA. OPIC - FMD: May be able to get access to stand from adjacent landowner who has a road up to the property line.																																
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13	4130 - Aspen	Sapling Well	18.0	16	Immature	N/A	Smaller aspen sapling stand with scattered remnant hardwood that was left. Maple saplings are abundant more around the edges of this stand.																																
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18	4110 - Sugar Maple Association	Sawtimber Well	443.9	90	111-140	N/A	The east half has smaller average diameter trees and a bit lighter BA but is still ready for a thinning. Large sugar maple logs and dense suppressed, defected poles mixed in, especially in the west half. Very high BA in the west half with difficult, steep terrain. Numerous ravines across the stand are seasonally wet. Some ravines have seepages on the bottom with organic muck. Small patches of aspen are found within ranging from 1/4 acres clones to a small 4 acre patch, 40 years old. Patches of aspen have dense maple sapling within and will convert to mainly hardwoods if cut. Two MWR units are along the north edge of this stand. 120 170 160 150 110 120 140 120 140 150 140 110 Average of 135 BA across the entire stand. South, stand 2 in compartment 15 - 140 120 150 140 Average of 140 BA. OPIC - FMD: SWNW, W1/2SW, SESW cut in 1979-1980: TS# 6-77A.																																
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24	6220 - Alder/willow	Nonstocked	6.4	0		No	OPIC - FMD: Sheen Creek floodplains. Stand contains N, L, U, and minor patches of various other forest types. Portions of area are flooded by beaver.																																
26	4110 - Sugar Maple Association	Sawtimber Medium	29.8	90	81-110	N/A	Hardwood stand dense to sugar maple. Some moderate to better quality trees with a lot of poor quality logs and poles mixed in. Rolling terrain with some steeper ravines across the stand. There were 18 patch cuts (1/4 Acre - 1 Acre) within cut in November, 2017 as an MWR sale.																																
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27	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	22.4	90	81-110	N/A	Lowland bog area surrounded by lowland drainage. Sparse conifers around the waters edge with dense hemlock around the outer stand edges. Maple in the south finger may be included in future timber sales.																																
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28	500 - Water	Nonstocked	2.3			No																																	



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30	4112 - Maple, Beech, Cherry Association	Sawtimber Well	62.5	90	81-110	N/A	Hardwood stand dense to sugar maple. Smaller diameters in south half. Some moderate to better quality trees with a lot of poor quality logs and poles mixed in. There is still a lot of room for canopies to grow with openings and canopy gaps that have dense maple regeneration underneath. Rolling difficult terrain with some old skid trails following ridge tops. 130 100 110 80 50 120 80 Average of 95 BA.																																	
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31	6225 - Bog	Nonstocked	7.6			No	Bog flat with a couple of timber island patches. OPIC - FMD: SCA = Riparian area around Silver Lake which is managed as a brook trout fishery. There are two upland softwood islands comprising roughly an acre in this type and quite a bit of hemlock and spruce-fir around the perimeter.																																	
33	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	7.6	70	111-140	N/A	Paper birch logs and red maple poles with scattered large white spruce. Birch is on the verge of decline, stand should be regenerated now or left to convert to more of a spruce/fir stand along the lake.																																	
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34	4130 - Aspen	Sapling Well	13.6	25	Immature	N/A	Aspen sapling stand. Dense fir in the east tip and scattered white pine within. Uncut retention area borders the stream along the west edge of this stand.																																	
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35	6122 - Black Spruce	Poletimber Medium	4.8	84	81-110	N/A	Nice black spruce around the edges of a smaller center portion that is stunted with small diameter trees.																																	
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36	429 - Mixed Upland Conifers	Sawtimber Poor	4.7	100	1-50	N/A	Large scattered white pine with fir and cedar poles. some red maple stump sprouts 10' tall.																																	
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																									
38	6122 - Black Spruce	Poletimber Poor	4.1	84	81-110	N/A	Sparse drainage hole with scattered lowland species.																									
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39	122 - Road/Parking Lot	Nonstocked	0.9	0		No	Boat landing area. OPIC - FMD: Low quality red maple along shore of Big Trout Lake. Adjacent to a DNR public boat launch.																									
40	4136 - Aspen, Mixed Conifer	Sapling Well	97.8	17	Immature	N/A	Retention includes very steep terrain along the south and west border and along lakes and streams. Steep terrain and poor access across most of the stand with no maintained access trails coming off of the main state road. OPIC - FMD: Harvested in 2002: TS#121-01-01. Contains smaller Q and P inclusions.																									
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41	6122 - Black Spruce	Poletimber Medium	4.0	84	81-110	N/A	Nice black spruce in the east half. The west half is more of an open bog area with stunted trees.																									
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42	6122 - Black Spruce	Poletimber Well	3.2	84	81-110	N/A	Small black spruce patch. Water hole in the middle.																									
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43	6122 - Black Spruce	Poletimber Well	5.2	84	81-110	N/A	Nice black spruce around the edges of a smaller center portion that is stunted with small diameter trees. OPIC - FMD: Black spruce around the edges and boggy in the center.																									
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44	4115 - Y.Birch, Hemlock NH	Sawtimber Well	21.8	80	81-110	N/A	Diverse stand with moderate quality red maple. Scattered remnant trees within. Better quality is found in areas with higher terrain. OPIC - FMD: Harvested in 2013: TS# 118-11-01. Stand ranges widely in quality and composition with white birch inclusions. Conduct individual tree selection in quality areas and larger group selections (up to 2 acre patch cuts) to encourage oak and white birch regeneration.																									
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47	4123 - Red Oak	Poletimber Well	21.1	54	81-110	N/A	Oak stand with very steep terrain in the north and an impassible ravine along the east edge. Some small oak saplings but mainly red maple regen in areas. Any remaining paper birch has nearly all died out. 110 70 80 70 110 90 Average of 90 BA. OPIC - FMD: Harvested in 2013: TS# 118-11-01. Maintain a BA of 80 to 90 sq. ft.. Retain all white birch.																				
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49	4119 - Mixed Northern Hardwoods	Sawtimber Well	43.0	90	111-140	N/A	Steeper rolling knobs with good quality sugar maple and red oak logs. Some areas dense to oak, some areas dense to maple. Patchy sugar maple regen succeeding in spots. 160 120 140 Average of 140 BA. OPIC - FMD: Cut by the County of Marquette in 1994.																				
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50	122 - Road/Parking Lot	Nonstocked	0.7			No	Boat landing. OPIC - FMD: Sporely Lake public access site.																				
52	4131 - Aspen, Oak	Poletimber Well	25.9	25	51-80	N/A	Small log sized red oak on areas with dense bigtooth sapling/poles growing in any open canopy areas. OPIC - FMD: Cut by the County of Marquette in 1994. All oak was left, so there is an oak overstory in portions of this stand.																				
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53	6225 - Bog	Nonstocked	4.2			No	Bog																				
55	710 - Sand, Soil	Nonstocked	2.4			No	Sand pit. OPIC - FMD: Sand pit developed by the Marquette County Road Commission. Per direction from compartment review, recreation specialist is to look into reclamation needs.																				
56	7909 - Nonstocked (OI)	Nonstocked	4.0			No	OPIC - FMD: M-94 highway.																				
400	31029 - Grass (OI)	Nonstocked	1.0			No	OPIC - FMD: OI Stand Year Origin was																				
401	3102 - Grass	Nonstocked	2.9			No	Grass opening growing in around edges.																				