



Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 52030

Entry Year 2017

Acreage: 1,067

County Otsego

Management Area: Grayling Outwash

Revision Date: 2015-05-12

Stand Examiner: Zack Crew

Legal Description:

T30N, R04W, Sections 23, 24, 25, and 36

Identified Planning Goals:

To provide for the protection, integrated management and responsible use of a healthy, productive and undiminished forest resource base for the social, recreational, environmental and economic benefit of the State of Michigan.

Soil and topography:

This compartment is mostly flat with limited changes in topography. Dominant soil types are rapidly drained Rubicon and Kalkaska Sands. These are fairly dry sandy soils formed on outwash plains.

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

The area is a mix of State and private ownerships with subdivisions and scattered 10 acre and 40 acre parcels. The presence of lakes has promoted a recreational setting and most of the shorelines in the area are private except for the Lake Manuka Boating Access. Gas development is very common throughout the area.

Unique Natural Features:

Several small kettle lakes occur adjacent to and within the compartment boundaries.

Archeological, Historical, and Cultural Features:

None

Special Management Designations or Considerations:

Potential for goshawk, red shouldered hawk, eagle, and osprey. Potential for loons on the lakes.

Watershed and Fisheries Considerations:

This compartment contains Thomas Lake, Lake Wequos, Pants Lake, and Manuka Lake. These lakes are shallow lakes supporting warmwater fish communities. The prescribed management actions are appropriate for protection for these lakes.

Wildlife Habitat Considerations:

We will be harvesting stands 55, 28, and 3 which increase early successional habitat benefiting deer, grouse, wild turkey and woodcock. An upland shrub stand is prescribed to be maintained and supplemented with hard and soft mast plantings benefiting deer, grouse, wild turkey, and woodcock.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 800 and 1,000 feet. The Mississippian Coldwater and Sunbury shales and Devonian Berea Sandstone and Bedford Shale subcrop below the glacial drift. There are some gravel pits in the vicinity and potential is good on the uplands. Most of the compartment appears to be developed for Antrim Shale gas production and is located at the northern margin of the Niagaran reef trend. The majority of State minerals in the compartment are currently under lease.

Vehicle Access:

This compartment is easily accessible from the numerous county roads throughout the area as well as gas well roads.

Survey Needs:

None

Recreational Facilities and Opportunities:

Manuka Lake and the Manuka Lake Boating Access site.

Fire Protection:

Wildfire response for this compartment is covered out of the Gaylord Field Office. Most of the forest types in this compartment are not conducive to large scale wildfire events.

Additional Compartment Information:

The following reports from the Inventory are attached:

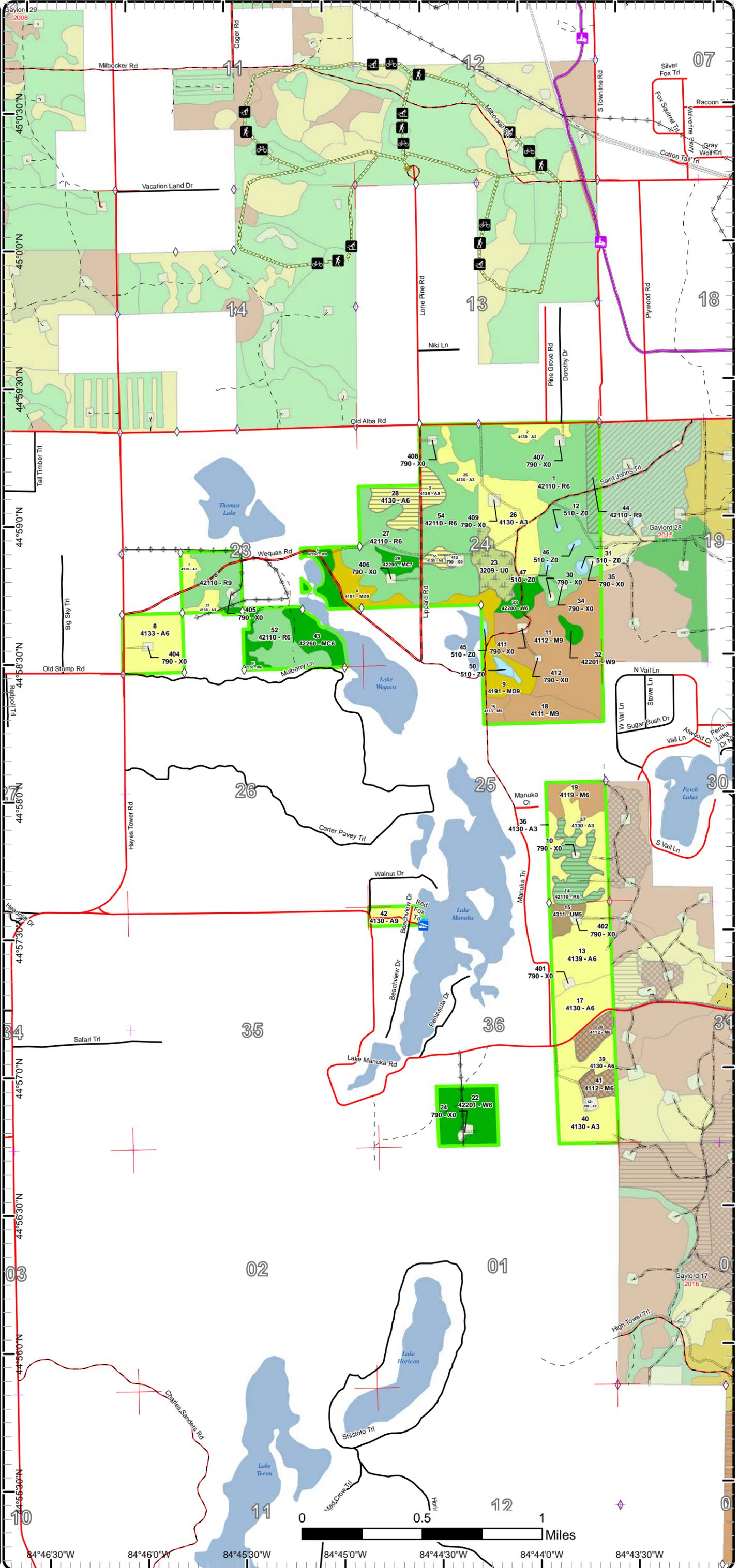
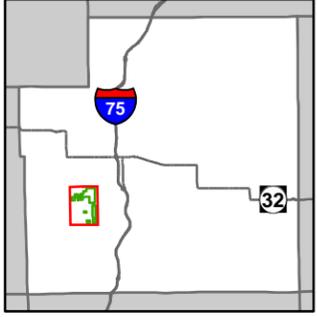
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

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

Cover Type & Treatments

Compartment: 30
 T30N,R04W, Sec. 23-26, 35, 36
 County: Otsego
 Unit: Gaylord
 Mgmt Area: Grayling Outwash
 YOE: 2017
 Acres: 1066.9299 GIS Calculated
 Examiner: Zach Crew
 Map Revised: 5/19/2015
 Map Phase: Pre-Review



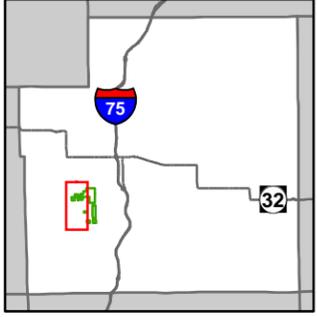
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- ◇ Field Grade GPS Corners
- Miris Corners
- County Paved Roads
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- County Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- 🚤 Boating Access Site
- 🎣 Fishing Access Site
- 🌟 Trailhead
- 🚲 Bike Trails
- 🚶 Hiking Trails
- 🏂 Ski Trails
- 🚙 Snowmobile Trails
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- Bicycle/Dirt Bike Trails
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- Rivers
- Lakes
- Pipeline
- Powerline
- Treatments**
- ▨ Selection (Group, Single Tree)
- ▨ Clearcut (w/Reserves)
- ▨ Other Treatment - See Comments
- ▨ Thinning (Crown, Low, Systematic)
- Forest Covertype**
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Fores
- Non-Forest Covertype**
- 320 - Upland Shrub
- 500 - Water
- 790 - Other Bare/Sparsely Vegetated

0 0.5 1 Miles

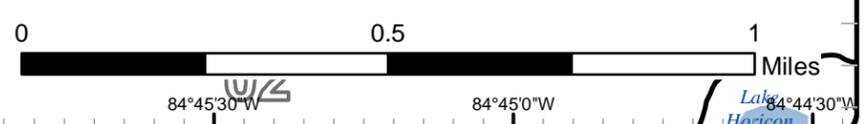
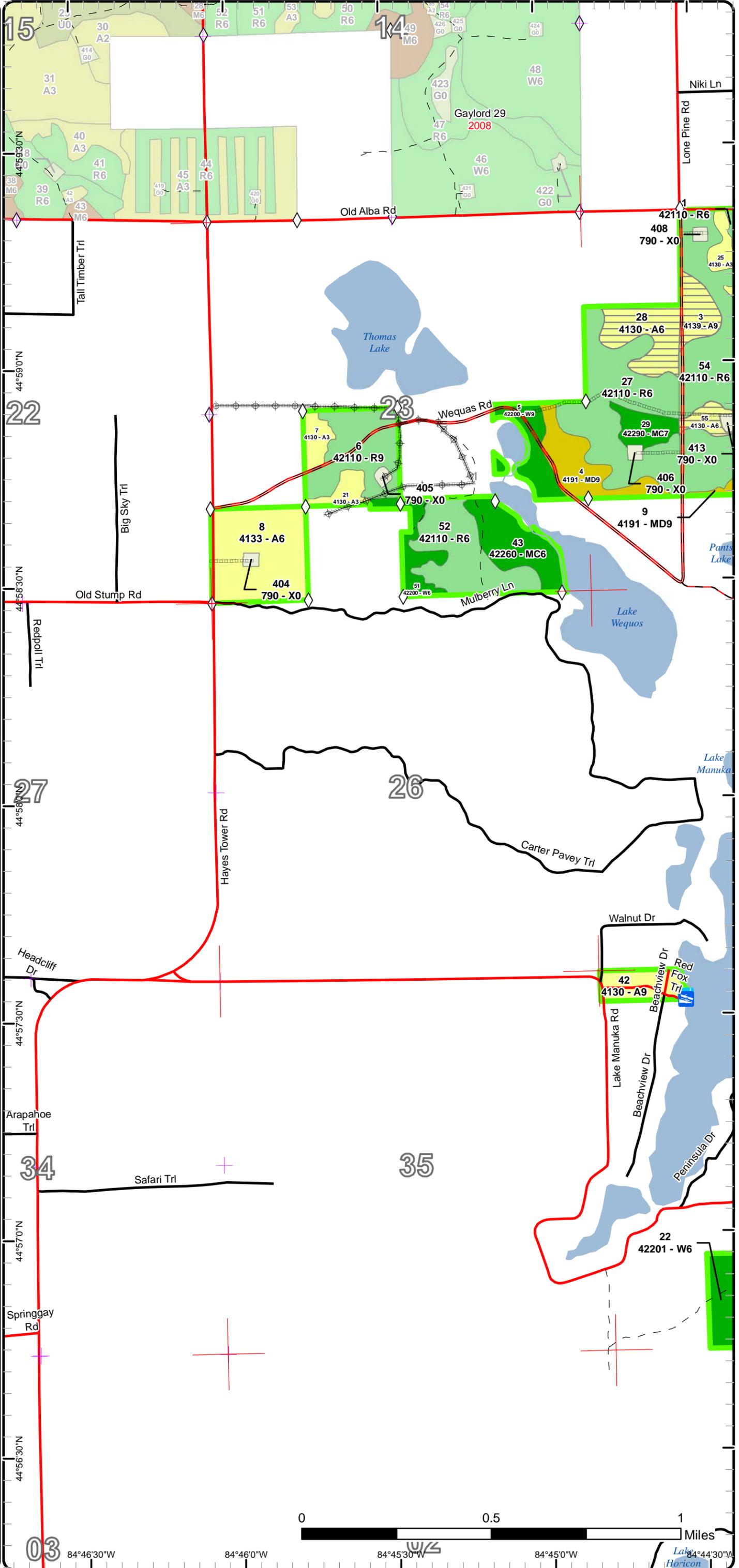
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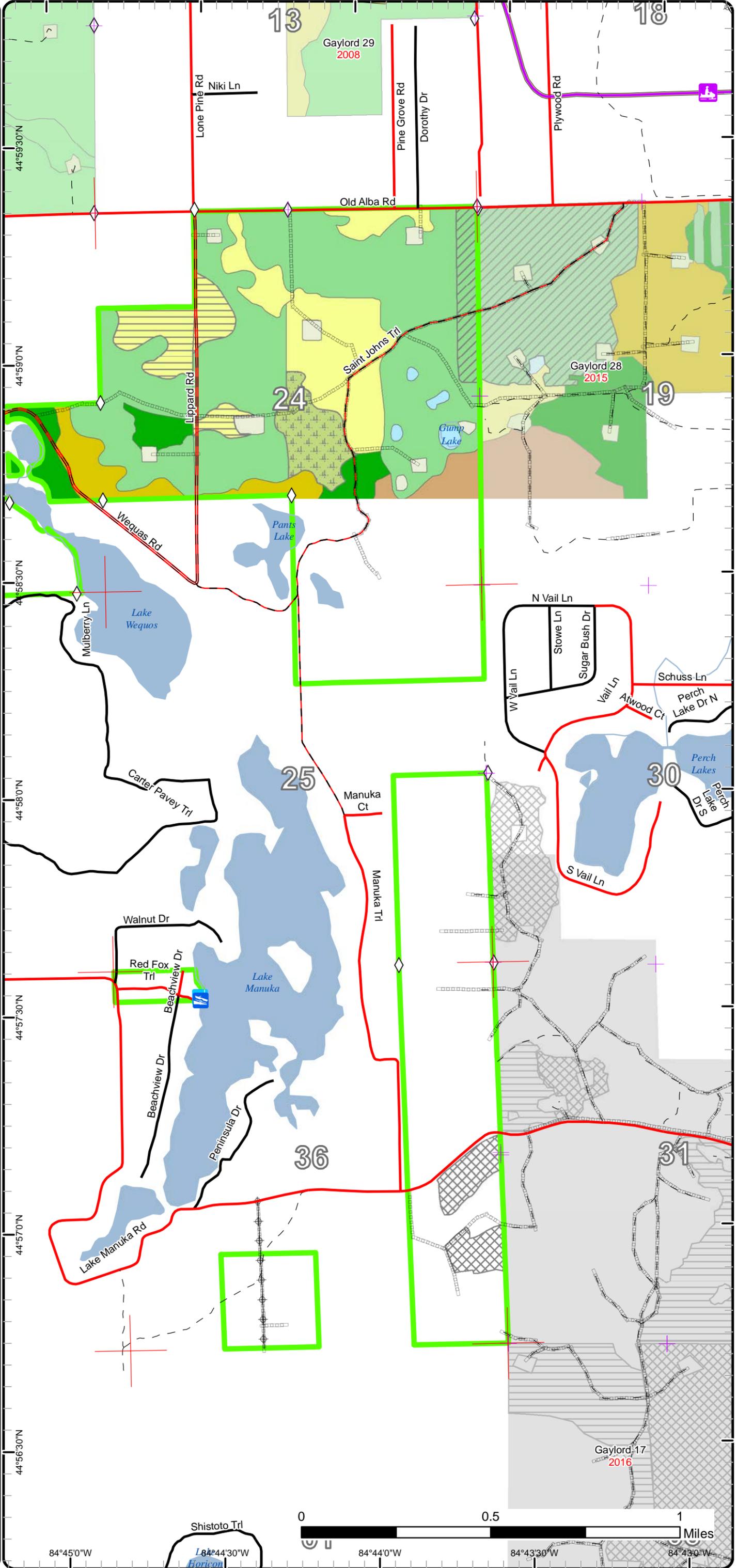
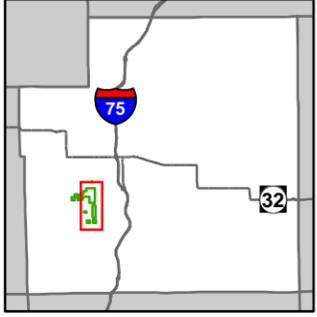
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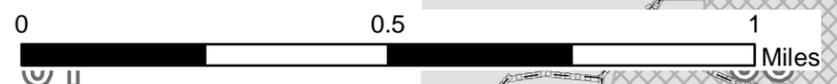
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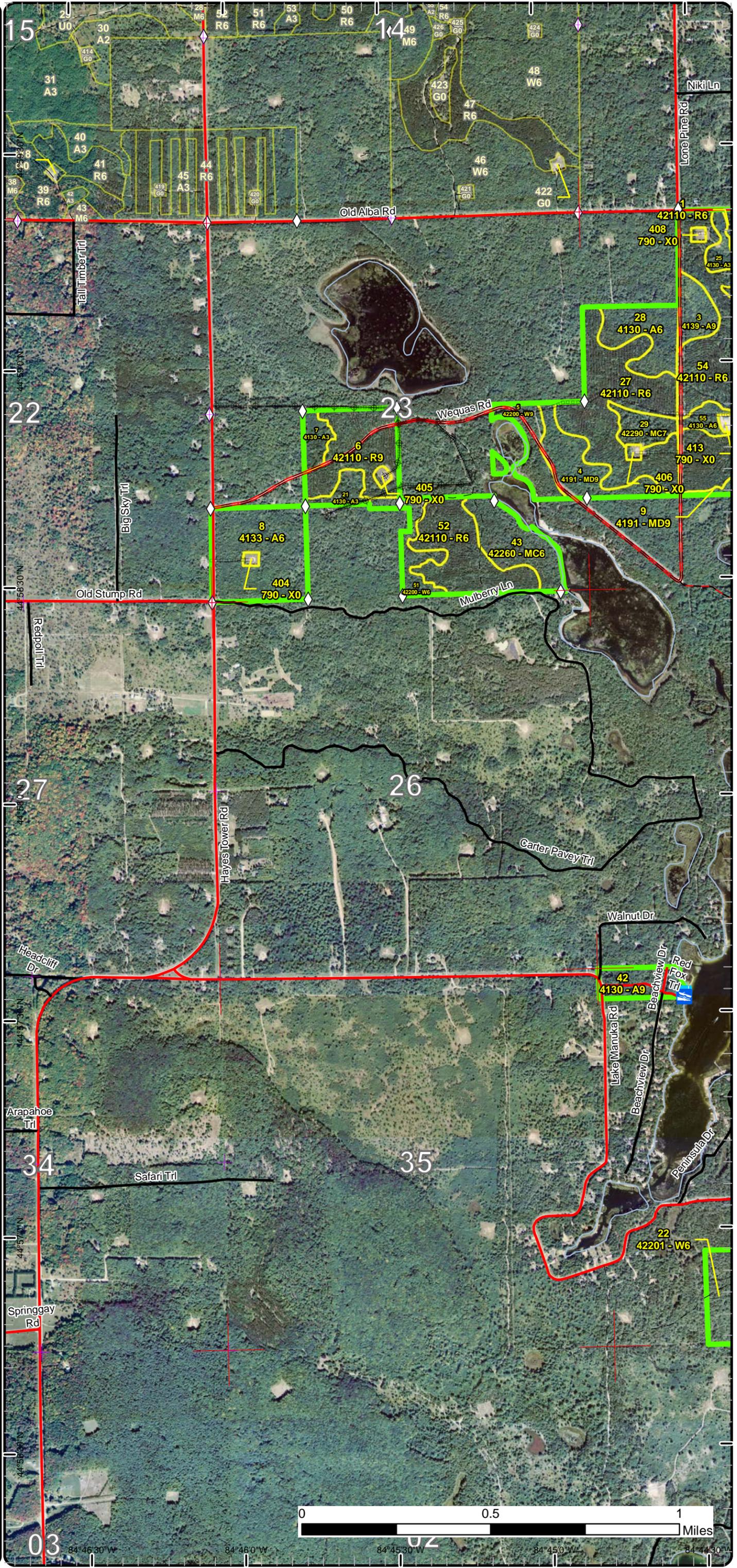
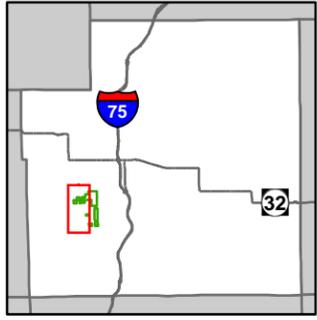
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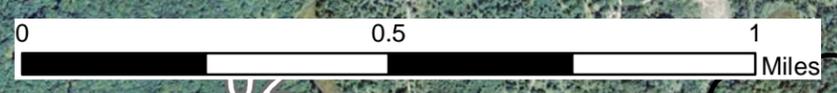
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Stand Boundary Map

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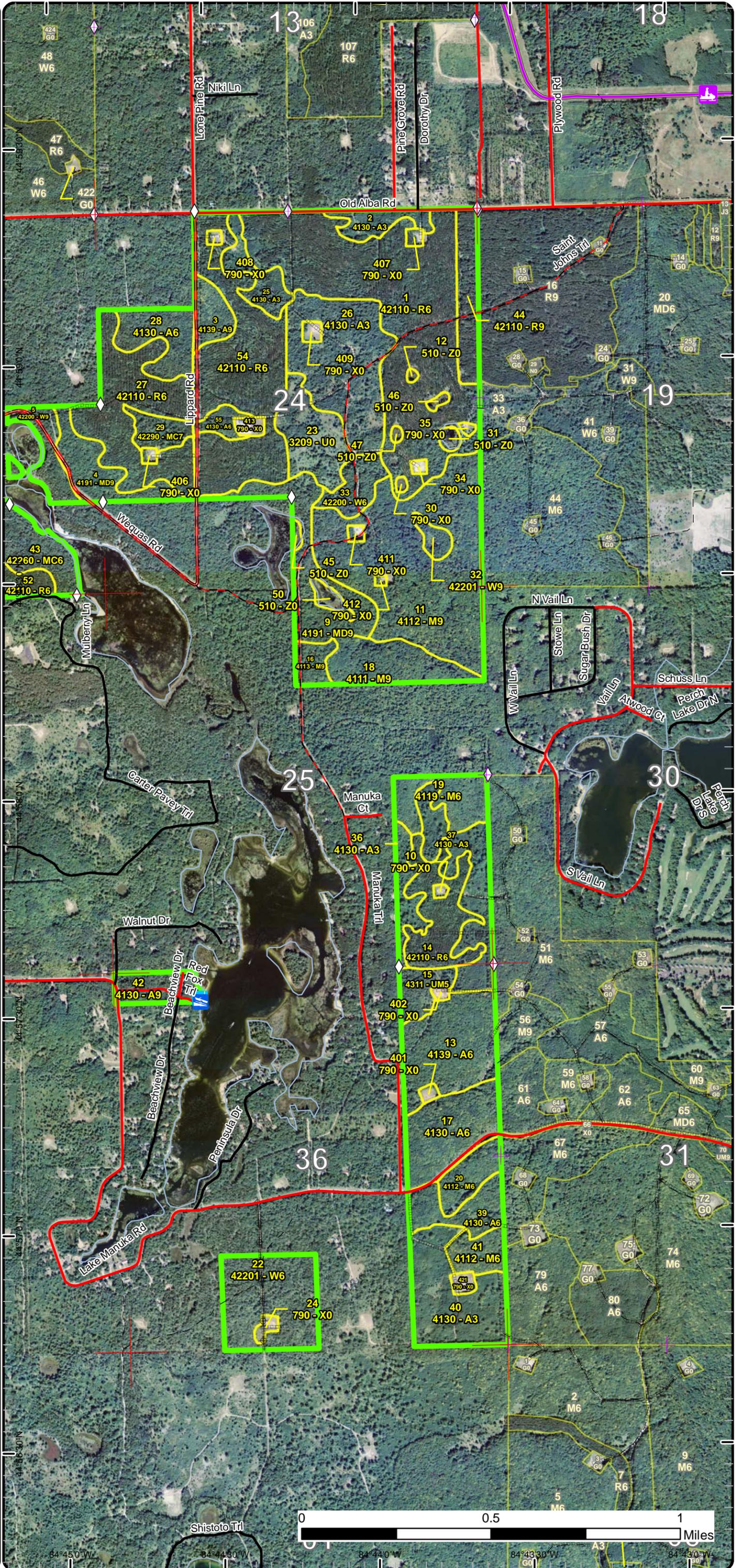
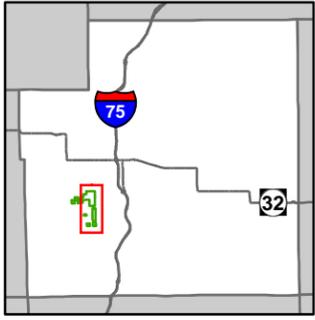
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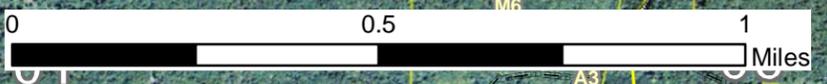
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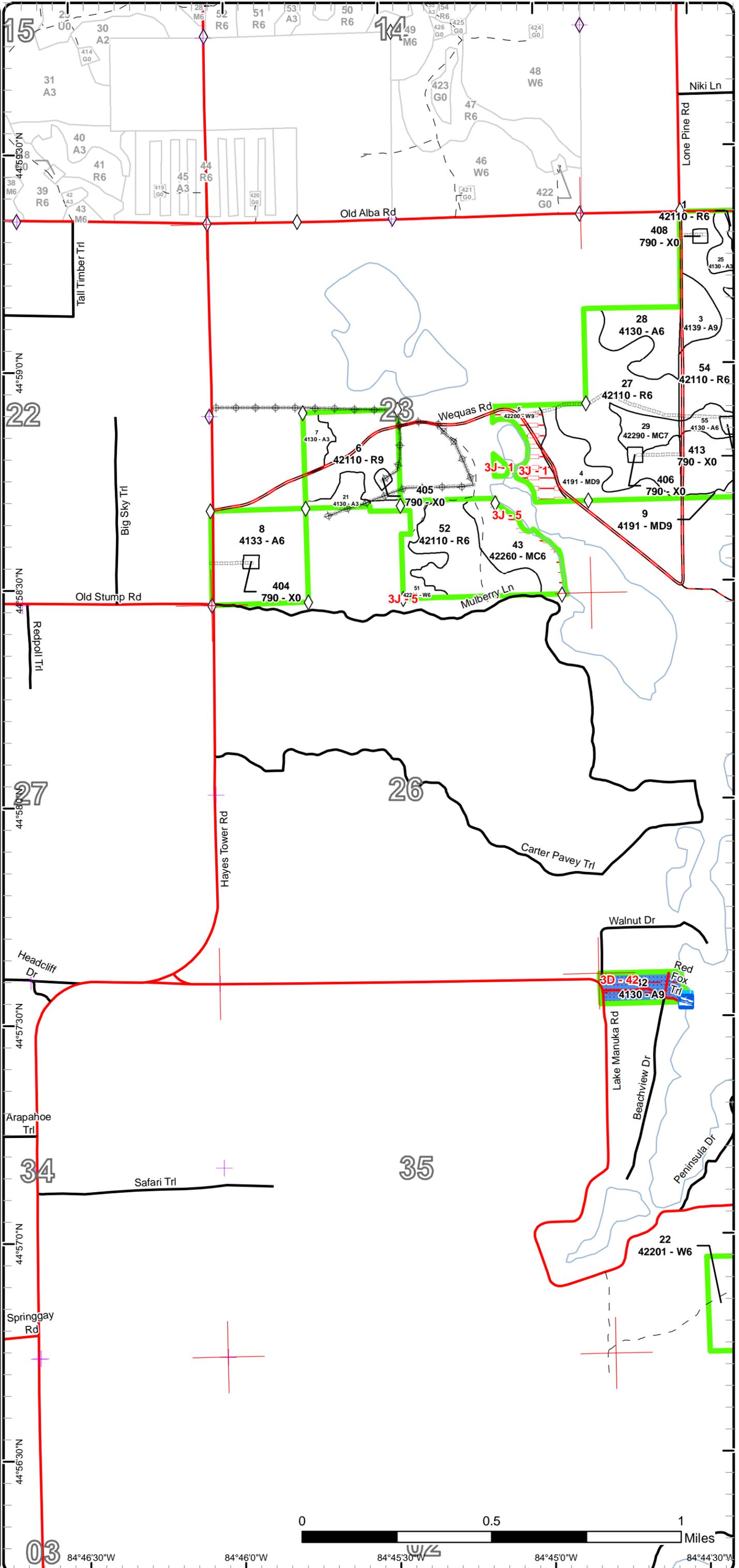
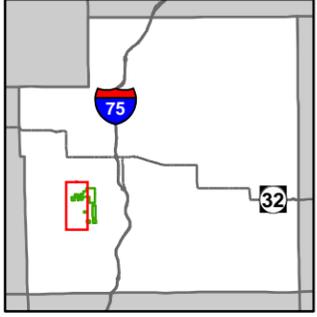
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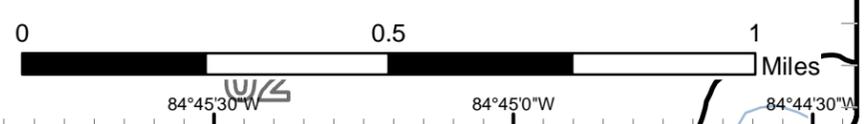
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Special Conservation Areas & Site Conditions Map

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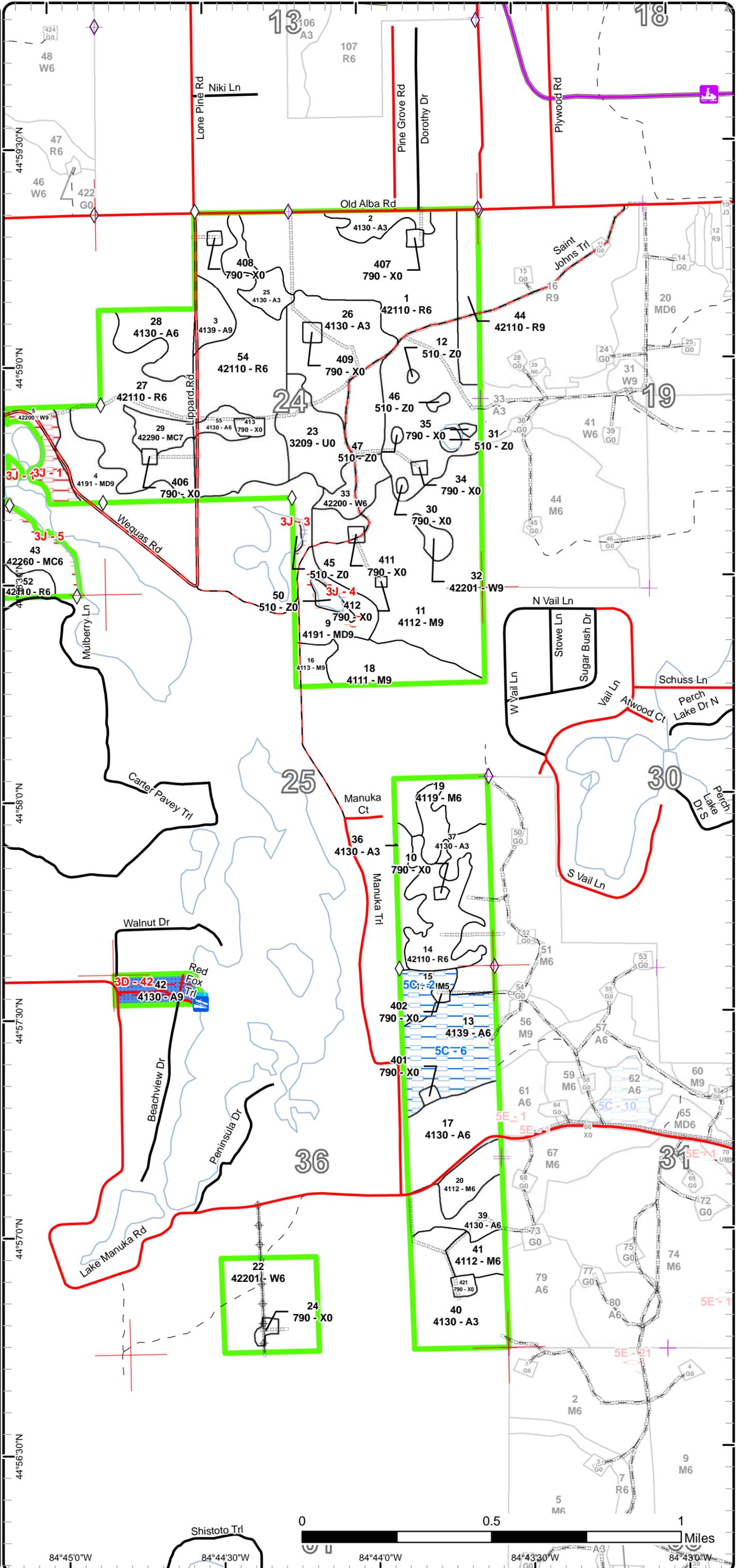
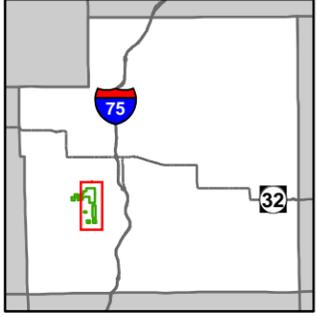


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- Stand Boundaries
- SCA**
- Reco...**
- ⊡ SCA
- Site Condition
- Unavailable
- Unavailable Factors
- 3D: Recreational / Scenic values
- 3J: Water quality / BMPs (stream, river, or lake)
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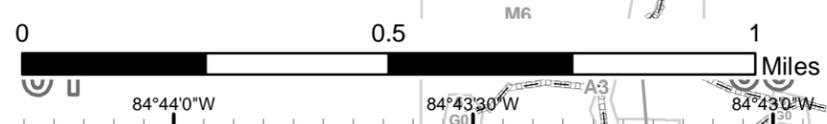


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- Stand Boundaries
- SCA**
- Reco...**
- ▨ SCA
- Site Condition**
- Available w/ Constraints
- Unavailable
- Available Factors W/ Constraints**
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable Factors**
- 3D: Recreational / Scenic values
- 3J: Water quality / BMPs (stream, river, or lake)
- Special Conservation Areas**
- 🚤 Boat Access Site



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	102	61	69	34	5	38	21	0	0	0	0	0	0	0	0	0	330
Bare/Sparsely Vegetated	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	50	0	0	0	0	0	0	0	0	0	50
Natural Mixed Pines	0	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	29
Northern Hardwood	0	0	0	0	0	0	7	29	133	0	0	0	0	0	0	0	0	0	169
Red Pine	0	0	0	0	0	0	334	17	0	0	0	0	0	0	0	0	0	0	351
Upland Mixed Forest	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9
Upland Shrub	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Water	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
White Pine	0	0	0	0	0	0	11	4	63	0	0	0	0	0	0	0	0	0	78
Total	51	0	102	61	69	34	386	97	267	0	1067								



Report 2 – Treatment Summary

Gaylord Mgt. Unit

Year of Entry: 2017

Acres of Harvest

Compartment 30

Total Compartment Acres: 1,067

Commercial Harvest - 97
 Harvests with Site Condition - 0
 Next Step Harvest - 0
 Habitat Cut - 23

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	33	0	0	0	0	0	0	0	0	33
Northern Hardwood	0	21	0	0	0	0	0	0	0	21
Red Pine	26	0	0	0	0	17	0	0	0	43
Total	59	21	0	0	0	17	0	0	0	97

Proposed and Next Step Treatments by Harvest Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	97	0	0	0	0	0	0	23		120
Next Step	0	26	26	0	0	26	54	0	0	132
Total	97	26	26	0	0	26	54	0	23	252



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
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3	52030003-Cut	9.5	4139 - Aspen, Mixed Deciduous	Sawtimber Well	71	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No**Site Condition: None**Prescription Final Harvest stand, no retention due to stand size.Specs:Next StepTreatments:Acceptable Any mix of deciduous species that results in a well stocked aspen stand.Regen:Other Old next step comments:Comment:Proposed Start Date: 10/1 /2016

14	52030014-Cut	25.9	42110 - Planted Red Pine	Poletimber Well	53	141- 170	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No**Site Condition: None**Prescription Clearcut stand, focus retention around the fingers in the stand.Specs:Next Step 1 - SitePrep, Trenching; 2 - Planting, Initial Plant; 3 - Pesticide, AerialTreatments:Acceptable A fully stocked red pine plantationRegen:Other Old next step comments:Comment:Proposed Start Date: 10/1 /2016

20	52030020-Cut	11.6	4112 - Maple, Beech, Cherry Association	Poletimber Well	64	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
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Habitat Cut: No**Site Condition: None**Prescription Mark stand to 80 BA, remove all beech except leave 1-2 per acre for hard mast production. Do not cut aspen.Specs:Next StepTreatments:Acceptable A mix of deciduous species that resembles the composition of the overstory.Regen:Other Old next step comments:Comment:Proposed Start Date: 10/1 /2016

23	52030023-NF	23.0	3209 - Upland Shrub (OI)	Nonstocked		Unspec ified	NonForestMgt	Other - Specify	320 - Upland Shrub		Proposal
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Habitat Cut: Yes**Site Condition: None**Prescription Brush, mow, plant, burn and/or herbicide to maintain opening. Planting of hard and soft mast.Specs:Next StepTreatments:AcceptableRegen:Other Old next step comments:Comment:Proposed Start Date: 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
28	52030028-Cut	18.3	4130 - Aspen	Poletimber Well	44	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal

Habitat Cut: No **Site Condition: None**

Prescription Final harvest stand, leave retention in the SE corner focusing on pine and along the north private boundary.

Specs:

Next Step

Treatments:

Acceptable Any mix of deciduous species that results in a well stocked aspen dominated stand.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

41	52030041-Cut	9.8	4112 - Maple, Beech, Cherry Association	Poletimber Well	71	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
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Habitat Cut: No **Site Condition: None**

Prescription Mark stand to 80 BA, remove all beech except for 1 - 2 per acre to be left as mast production. Do not cut aspen.

Specs:

Next Step

Treatments:

Acceptable A mix of deciduous species that resemble the composition of the overstory.

Regen:

Other Stand will probably need to be set up as a small fuelwood black to make it commercially viable. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

44	52030044-Cut	17.0	42110 - Planted Red Pine	Sawtimber Well	63	141- 170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No **Site Condition: None**

Prescription Treat in conjunction with stand 16 in compartment 28. Thin stand to 120 BA, some areas of walkthrough occur throughout the stand.

Specs:

Next Step

Treatments:

Acceptable No regen concerns as the prescribed treatment is a thinning.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

55	52030055-Cut	4.9	4130 - Aspen	Poletimber Well	51	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No **Site Condition: None**

Prescription Final harvest stand, leave all white pine.

Specs:

Next Step

Treatments:

Acceptable Any mix of deciduous species that results in a well stocked aspen stand.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

**Total Treatment
Acreage Proposed: 120.0**

Report 5 – Site Conditions

Gaylord Mgt. Unit
Zach Crew : Examiner

Compartment: 30
Year of Entry: 2017

Availability for Management

Total Acres	Acres		Dominant Site Conditions	3D	3J	5C
	Available	Not Available				
329	280	50	Aspen	12		38
20	20	0	Bare/Sparsely Vegetated			
50	45	5	Mixed Upland Deciduous		5	
29	25	4	Natural Mixed Pines		4	
169	169	0	Northern Hardwood			
351	351	0	Red Pine			
9	0	9	Upland Mixed Forest			9
23	23	0	Upland Shrub			
8	8	0	Water			
78	65	13	White Pine		13	
1,067	986	81	Total Forested Acres	12	22	47
	92%	8%	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)	13	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
Comments:							
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 5 – Site Conditions

Gaylord Mgt. Unit
Zach Crew : Examiner

Compartment: 30
Year of Entry: 2017

4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	38	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
42	Unavailable	3D: Recreational / Scenic values	12	3D: Recreational / Scenic values	3G: Other Influence zones - See comments	Unspecified	Unspecified
Comments:							



Report 6 – 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
Lake Manuka Access Site	Concentrated Recreation Area	Boat Access Site	Proposed SCA	11
Comments				
Added SCA for boating access site.				



Report 7 – 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
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	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42110 - Planted Red Pine	Poletimber Well	128.5	54	141-170	Red Pine 3rd row thinning completed in 2008, all aspen cut out of stand, white pine was left.
2	4130 - Aspen	Sapling Well	9.3	25	Immature	Stand cut in 1990, good looking regen.
3	4139 - Aspen, Mixed Deciduous	Sawtimber Well	9.5	71	81-110	OPIIC - FMD: 2005: Some mature aspen at south end. Mediocre quality. Beech and maple often in clumps. Reconsider a thinning in 10 years.
4	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	19.0	71	81-110	Mixed stand with Red Oak, white pine, red maple, white birch. Aspen does not appear to be regenerating in this stand from species select done 30-34 years ago.
5	42200 - Natural White Pine	Sawtimber Well	13.3	75	81-110	Natural white & red pine stand on the shores of Wequas Lake & adjacent to Wequas Lake Road. Hold due to slope from road down to the lake shore makes logging not feasible.
6	42110 - Planted Red Pine	Sawtimber Well	27.2	54	111-140	Stand thinned last YOE. Some areas planting not as successful due to competing red maple and aspen.
7	4130 - Aspen	Sapling Well	5.9	16	Immature	Aspen harvested in 1999. Some residual red pine poles left in stand & on the perimeter.
8	4133 - Aspen, Mixed Pine	Poletimber Well	39.2	37	1-50	Aspen stand regenerating from 1978 harvest. Limby, open grown white pine scattered throughout.
9	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	30.7	76	81-110	Paper Birch is ready to be harvested and regenerated. Nice white pine regen in pockets scattered throughout the stand, some trace hemlock regen as well.
11	4112 - Maple, Beech, Cherry Association	Sawtimber Well	100.4	70	81-110	Thinned previous YOE, trees responding well to treatment. BBD present but not prevalent yet. Paper Birch starting to become over mature.
13	4139 - Aspen, Mixed Deciduous	Poletimber Well	38.1	64	81-110	Mixed stand, some nice looking stems, looks like the aspen/paper birch/red maple was cut out the same time as stand 17. Filling in with white pine, some scattered Red Oak in the overstory.
14	42110 - Planted Red Pine	Poletimber Well	25.9	53	141-170	Stand thinned 2008. Skid rows were marked out and all aspen/hardwood in the rows was removed. Good response to thinning, stand should be held for another 10 years, but could be thinned now if necessary.
15	4311 - Pine, Aspen Mix	Poletimber Medium	9.1	67	51-80	Aspen cut out of stand 43 years ago, poor quality quaking aspen. Nw corner of stand small 1 acres patch of sawlog sized white pine with some Red Oak/Red Maple/Red Pine. Pockets of sapling sized QA



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
16	4113 - R.Maple, Conifer	Sawtimber Well	6.7	57	51-80	All aspen and birch cut out of stand in 2005. This has resulted in zero birch regen, and the aspen regen is being crowded out by the over story that was left.
17	4130 - Aspen	Poletimber Well	29.7	36	1-50	Aspen cut 36 years ago, developing nicely.
18	4111 - S.Maple, Hard Mast Association	Sawtimber Well	22.9	73	81-110	Thinned in 1997. Lots of sugar maple regen on the east side of the stand. Oak is located in the west side of the stand. It looks like they just cut everything around the oak to try and promote acorn reproduction, this has not worked.
19	4119 - Mixed Northern Hardwoods	Poletimber Well	17.3	64	81-110	Decadent quaking aspen, beech brush is heavy in spots.
20	4112 - Maple, Beech, Cherry Association	Poletimber Well	11.6	64	81-110	Thinning done in stand in 1980. Some nice aspen stems, high visibility due to stand being adjacent to lake manuka road. Good candidate for a fuelwood sale.
21	4130 - Aspen	Sapling Well	5.6	16	Immature	Aspen harvested in 1999. Some residual red pine poles left in stand & on the perimeter.
22	42201 - Natural White Pine, Mixed Deciduous	Poletimber Well	38.2	77	51-80	White pine stand with intermixed aspen. Aspen ranges in size due to past cutting with the majority of it being 1 to 2 stick pulpwood.
25	4130 - Aspen	Sapling Well	12.0	17	Immature	Stand cut in 1998, is regenerating nicely, a few scattered limby white pine appear to have been left when the stand was cut.
26	4130 - Aspen	Sapling Well	51.5	25	Immature	Inconsistent stocking. Scattered merchantable white pine (limby). Some red maple and upland brush present. Trace amount of oak as well.
27	42110 - Planted Red Pine	Poletimber Well	50.0	54	111-140	3rd row thinned last YOE, some additional trees removed as well to allow loggers access down rows. Looks good. Pockets of Aspen and Red Maple in the overstory as well.
28	4130 - Aspen	Poletimber Well	18.3	44	51-80	44 year old aspen stand, poor quality in places but over all a decent stand.
29	42290 - Natural Mixed Pine	Sawtimber Poor	8.2	58	1-50	All aspen, red maple, and white was cut out in 2008, enough oak and pine were left to constitute a 2 aged stand.
32	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	4.2	65	81-110	Small low bowl in hardwood stand dominated by white pine with some scattered oak.
33	42200 - Natural White Pine	Poletimber Well	11.4	76	81-110	OPIC - FMD: 2005: White pine of all ages is present. Some maple and hemlock in the understory. Stocking is a little erratic and could use thinning in places. Good candidate to leave for diversity.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
36	4130 - Aspen	Sapling Well	10.0	16	Immature	Excellent growth of aspen regeneration with some stump sprout hardwood. White pine, red pine, and any oak was left scattered during this harvest completed in 1999.
37	4130 - Aspen	Sapling Well	31.2	16	Immature	Excellent growth of aspen regeneration with some stump sprout hardwood. White pine, red pine, and any oak was left scattered during this harvest completed in 1999.
39	4130 - Aspen	Poletimber Well	15.8	44	81-110	Aspen cut out of stand in 1971. Stand could be cut now or it could be held for 10 years.
40	4130 - Aspen	Sapling Well	37.2	16	Immature	Aspen cut in 1999, good stocked aspen regen, some overstory oak left.
41	4112 - Maple, Beech, Cherry Association	Poletimber Well	9.8	71	81-110	OPIC - FMD: Small hardwood polestand with lower stand density that does not need to be thinned presently.
42	4130 - Aspen	Sawtimber Well	11.5	72	81-110	Public Access site to Lake Manuka. Coded as unavailable due to recreation and scenic values.
43	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	20.8	57	81-110	Some planted RP rows cross into this stand. Aspen exhibits poor quality and form. Visual aspect of stand due to it being right along the lake.
44	42110 - Planted Red Pine	Sawtimber Well	17.0	63	141-170	Manage with stand 16 in the adjacent compartment
51	42200 - Natural White Pine	Poletimber Well	11.0	57	1-50	Mixed white pine - oak stand with no treatment currently. Old cabin on state land established in 1953 with electric to cabin from the north. Cabin in north part of stand is in trespass as discovered during a past survey.
52	42110 - Planted Red Pine	Poletimber Well	29.8	54	141-170	Stand planted in 1961, then re-planted in 1964. South half of stand is denser R6 with distinct rows. White pine more predominant in the north east. Also some trace QA, RO, RM in the northeast that are part of the canopy. Thinned last YOE.
54	42110 - Planted Red Pine	Poletimber Well	72.8	54	111-140	Red pine thinning completed in 2008. Definitely patches of stand where Red Pine stocking was below levels before the thinning but mostly stand looks good.
55	4130 - Aspen	Poletimber Well	4.9	51	81-110	Includes some logs. Scattered wolfy white pine.



Stand	Cover Type	Acres	Managed Site	General Comments:
10	790 - Other Bare/Sparsely Vegetate	0.7	No	Gas well site
12	510- Water (OI)	0.5	No	OPIC - FMD: SMALL KETTLE PONDS SCATTERED THROUGHOUT E1/2 SEC.24&INTO SEC.25
23	3209 - Upland Shrub (OI)	23.0	Yes	OPIC - FMD: 2005: Aspen and white pine is encroaching.
24	790 - Other Bare/Sparsely Vegetate	1.8	No	Gaswell Pad
30	790 - Other Bare/Sparsely Vegetate	0.7	No	Small kettle pond
31	510- Water (OI)	1.9	No	GUMP LAKE IN NESE SEC.24
34	790 - Other Bare/Sparsely Vegetate	0.9	No	Gas well site
35	790 - Other Bare/Sparsely Vegetate	0.7	No	Gas well site
45	510- Water (OI)	1.0	No	PART OF PANTS LAKE
46	510- Water (OI)	1.0	No	SMALL KETTLE PONDS
47	510- Water (OI)	0.7	No	SMALL KETTLE PONDS SCATTERED THROUGHOUT
50	510- Water (OI)	3.3	No	Small kettle lake
401	790 - Other Bare/Sparsely Vegetate	1.2	No	GAS WELL SITE WITH PUMP JACK.
402	790 - Other Bare/Sparsely Vegetate	1.1	No	GAS WELL SITE WITH PUMP JACK.
404	790 - Other Bare/Sparsely Vegetate	0.9	No	GAS WELL SITE WITH PUMP JACK.
405	790 - Other Bare/Sparsely Vegetate	1.1	No	GAS WELL SITE WITH PUMP JACK.
406	790 - Other Bare/Sparsely Vegetate	1.0	No	GAS WELL SITE WITH PUMP JACK.
407	790 - Other Bare/Sparsely Vegetate	1.3	No	GAS WELL SITE WITH PUMP JACK.



Stand	Cover Type	Acres	Managed Site	General Comments:
408	790 - Other Bare/Sparsely Vegetate	0.9	No	GAS WELL SITE WITH PUMP JACK.
409	790 - Other Bare/Sparsely Vegetate	1.7	No	GAS WELL SITE WITH PUMP JACK.
411	790 - Other Bare/Sparsely Vegetate	1.1	No	GAS WELL SITE WITH PUMP JACK.
412	790 - Other Bare/Sparsely Vegetate	0.5	No	GAS WELL SITE WITH PUMP JACK.
413	790 - Other Bare/Sparsely Vegetate	2.3	No	Gas facility.
421	790 - Other Bare/Sparsely Vegetate	2.2	No	GAS WELL SITE WITH PUMP JACK.