



Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72025

Entry Year 2021

Acreage: 2,018

County Oscoda

Management Area: AuSable Outwash

Revision Date: 2019-07-24

Stand Examiner: Colton Behrmann

Legal Description:

Elmer Township T28N, R02E, Sections 3, 10, 11, 14, and 15

Identified Planning Goals:

To maintain forest health, productivity, sustainability, species diversification, and structural diversity throughout the compartment while providing for multiple use and visual management.

Soil and topography:

Topography consists of rolling hills with areas of steep slope. Soil types are a mixture of Graycalm, Emmet, and Grayling sands. Soils and terrain present erosion concerns throughout the compartment.

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

This compartment is found within a large block of public ownership. Private parcels are found along the borders of the compartment.

Unique Natural Features:

There is potential for dry prairie plants in grassy openings such as Hill's thistle, rough fescue, Alleghany plum, and Pale Agoseris. Other plant species known to occur in the area are the ram's head lady slipper, lime stone oak fern, and round leaved orchids. There is potential for several animals of concern in this compartment: Kirtland's warbler, prairie warbler, bald eagle, wood turtle, Blanding's turtle, Massasauga rattlesnake, secretive locust, dusted skipper, grizzled skipper, and the red-legged spittle bug.

Archeological, Historical, and Cultural Features:

None known at this time.

Special Management Designations or Considerations:

None at this time.

Watershed and Fisheries Considerations:

Second Lake can be found in sections 11 and 14.

Wildlife Habitat Considerations:

Try to expand the aspen component where possible. During timber harvesting, make efforts to improve snag habitat and down woody debris. Also, try to leave some high stumps for feeding perches and drumming.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of an end moraine of medium-textured till and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 600 and 800 feet. Beneath the glacial drift is the Coldwater Shale. There is not a current economic use for the Coldwater Shale. The nearest active sand/gravel pit is located three miles to the north, but sand & gravel potential appears to be very good within the compartment. The compartment lies within the Antrim Shale gas play. The entire compartment is currently under leased and the mineral rights are held by production. No other known oil & gas potential exists in this area. There is no known metallic mineral potential in this part of the state.

Vehicle Access:

Access through out the compartment is excellent by way of numerous county, forest roads and trails, and gas pipeline right-of-ways. County roads in the compartment are Oak Lake, Second Lake, Hill, and Granholm Roads.

Survey Needs:

Potential for a survey exists for stand 28. Corners were not confirmed during inventory.

Recreational Facilities and Opportunities:

Part of the Muskrat Lake Snowmobile trail 4/9 and the Hunt Creek MCCCT Trail are located within the compartment.

Dispersed recreation occurs throughout the area.

Fire Protection:

The current road system is adequate, timber conversion is not needed. Topography will prove to be equipment limiting.

Additional Compartment Information:

The following reports from the Inventory are attached:

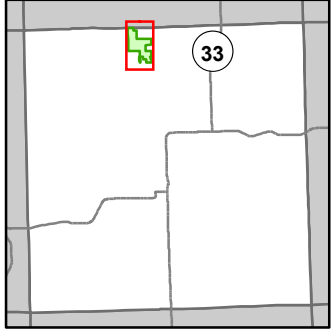
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

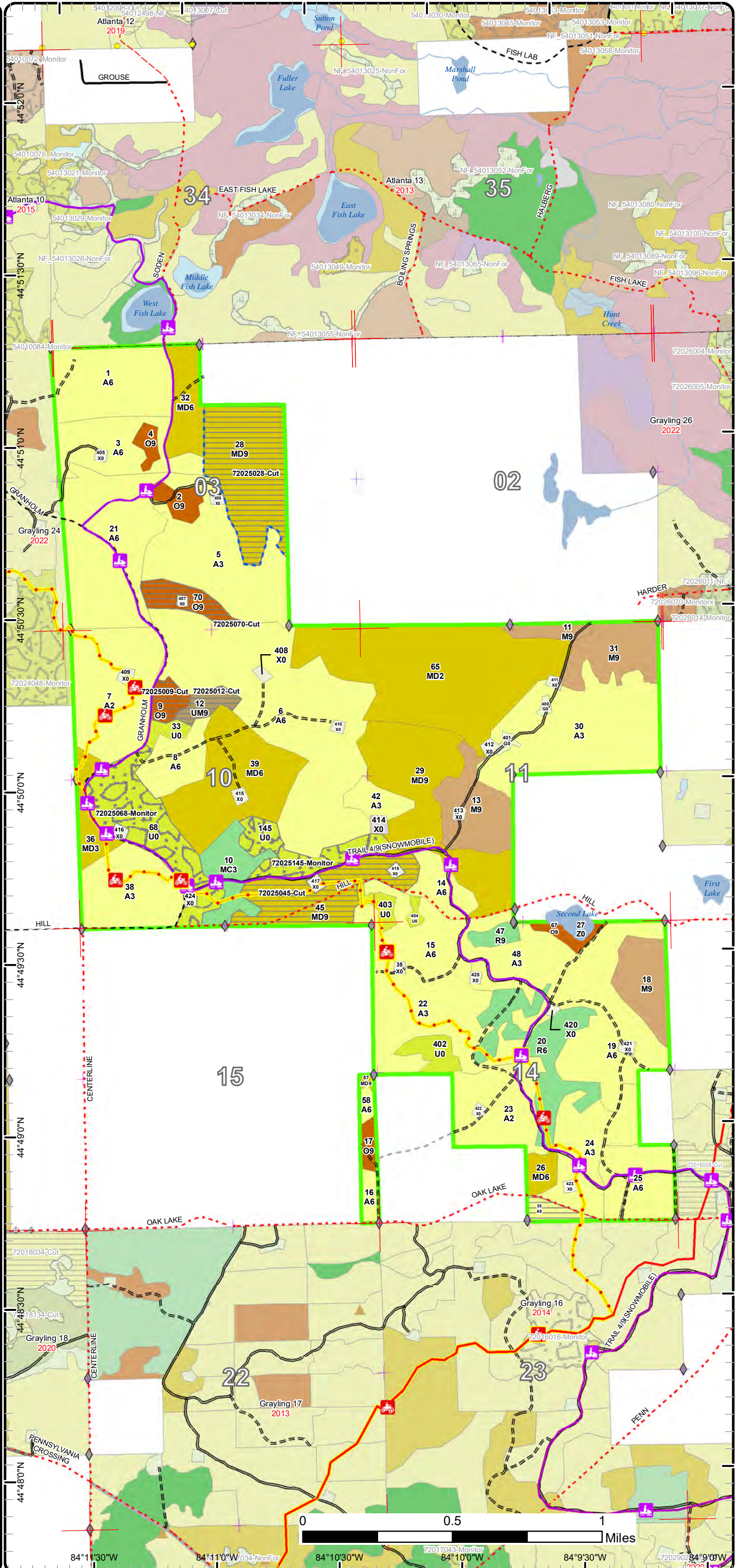
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 25
 T28N, R02E, Sec. 3, 10-11, 14-15
 County: Oscoda
 Unit: Grayling
 Mgmt Area: AuSable Outwash
 YOE: 2021
 Acres: 2,018 GIS Calculated
 Examiner: Colton Behrmann
 Map Revised: 11/27/2019
 Map Phase: Post-Review

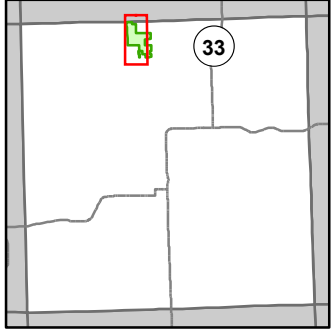


- Miris Corners
- + Remonumented Section Corners
- ◆ Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- - - DNR - Forest Access Route
- - - Federal / State - Dirt / Gravel Road
- - - County - Gravel Road
- - - Private - Dirt / Gravel Road
- 🏍️ Motorcycle Trails (DNR License)
- 🏍️ MCCCT Trails
- 🏍️ Snowmobile Trails
- ➡️ ORV License & Trail Permit
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- - - Designated ORV Route
- Designated Snowmobile Trails
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- Lake/Pond
- Perennial River
- Lakes and Rivers
- ▲ Berms
- Pipeline
- Powerline
- Compartment Boundary
- Treatments with Site Conditions
- Clearcut (w/Reserves)
- Regeneration Survey
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 430 - Upland Mixed Forest
- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 790 - Other Bare/Sparsely Vegetated

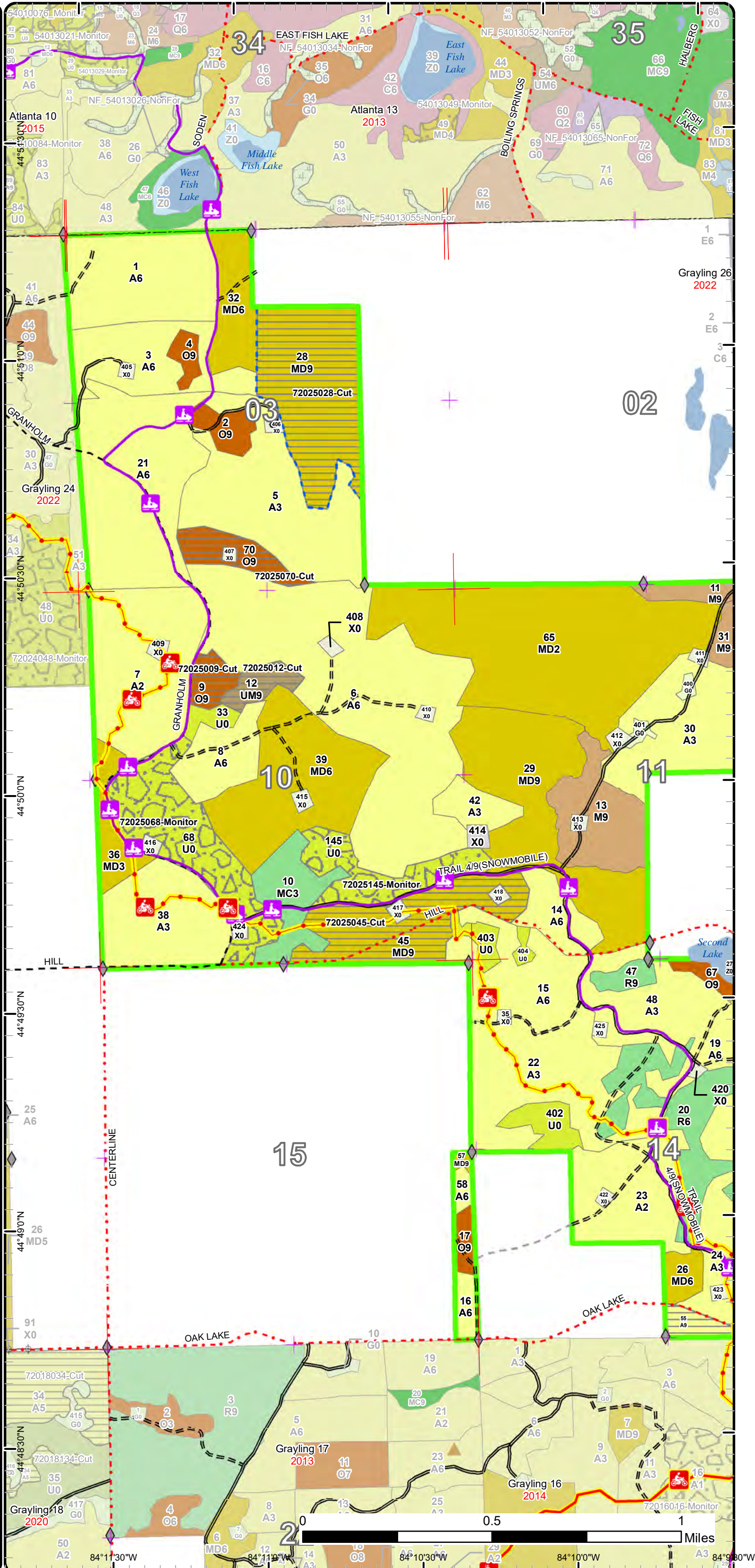


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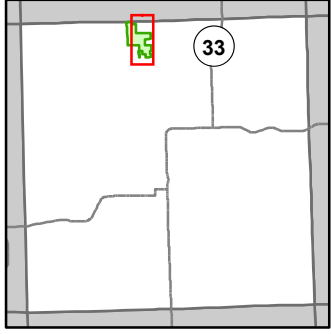


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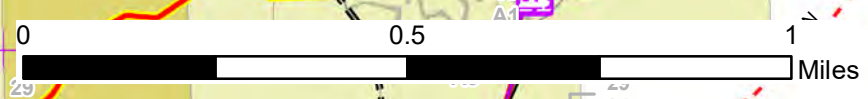
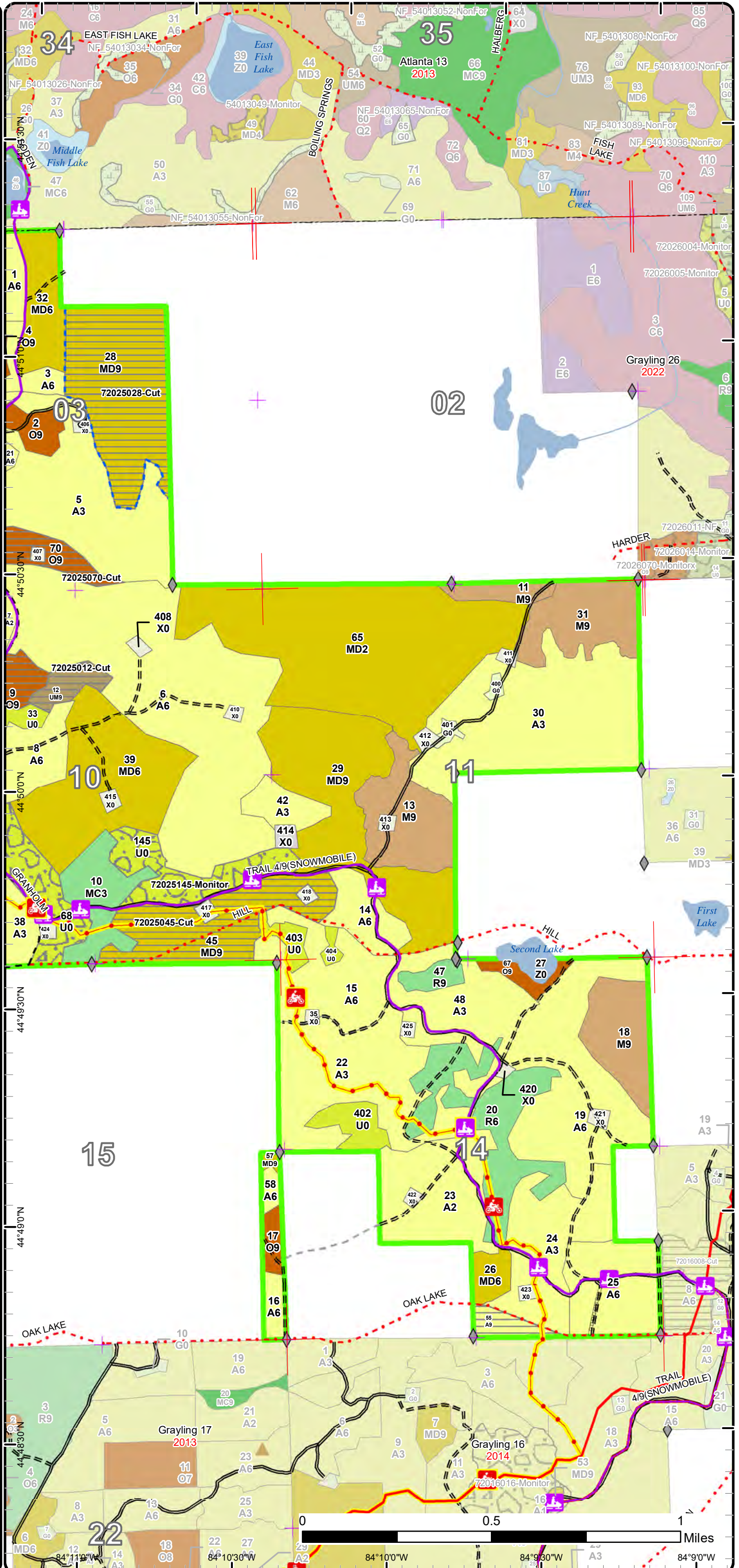


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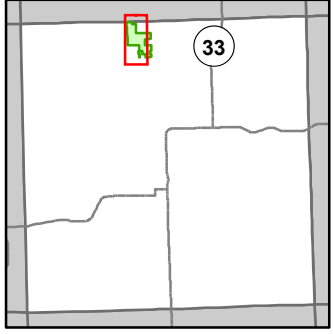
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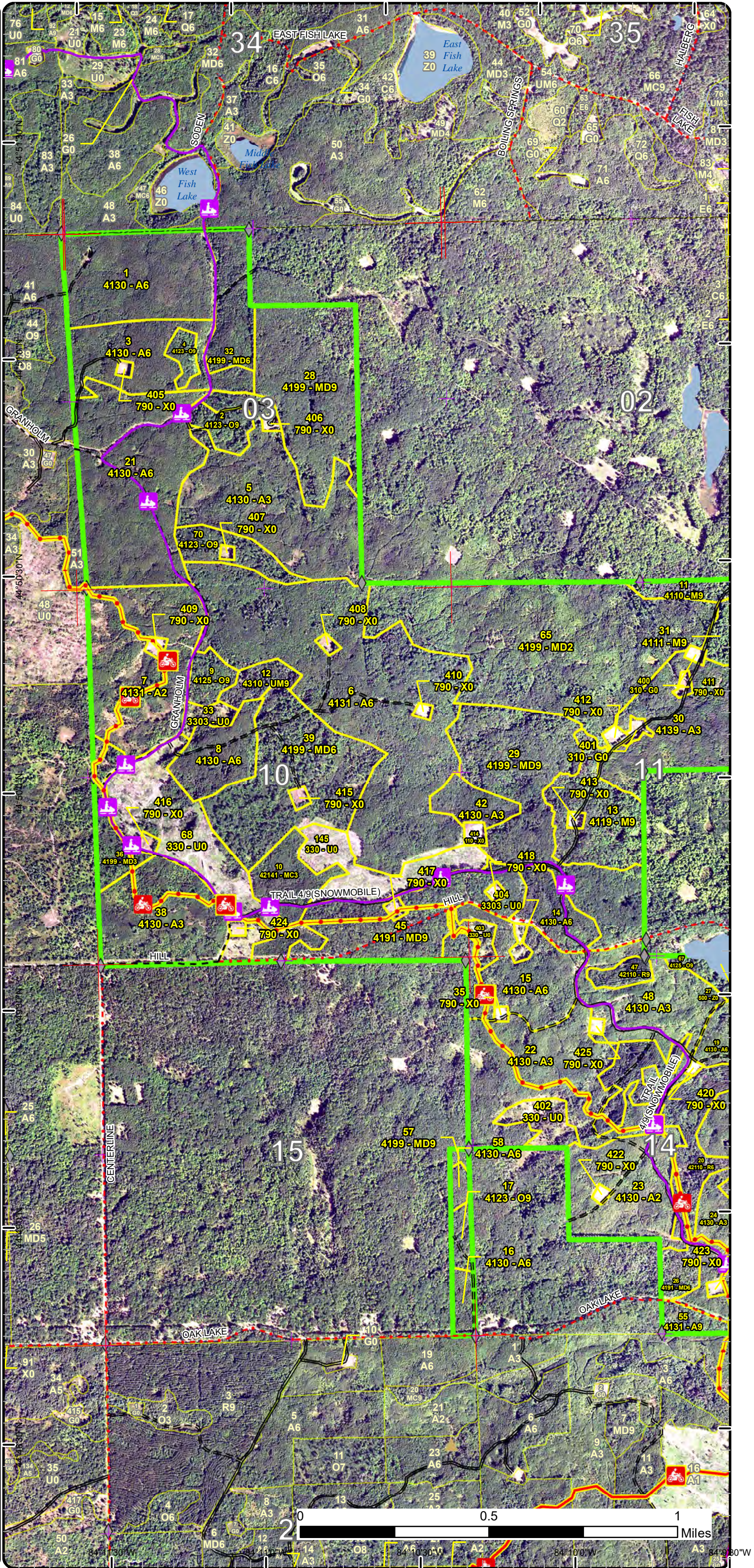
84°11'0"W 84°10'30"W 84°10'0"W 84°9'30"W 84°9'0"W
 44°49'30"N 44°49'0"N

Stand Boundary Map

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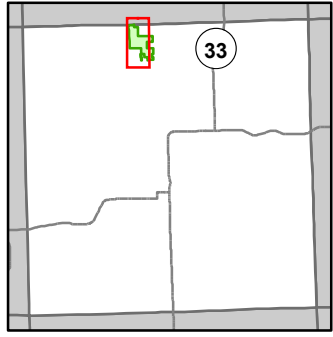


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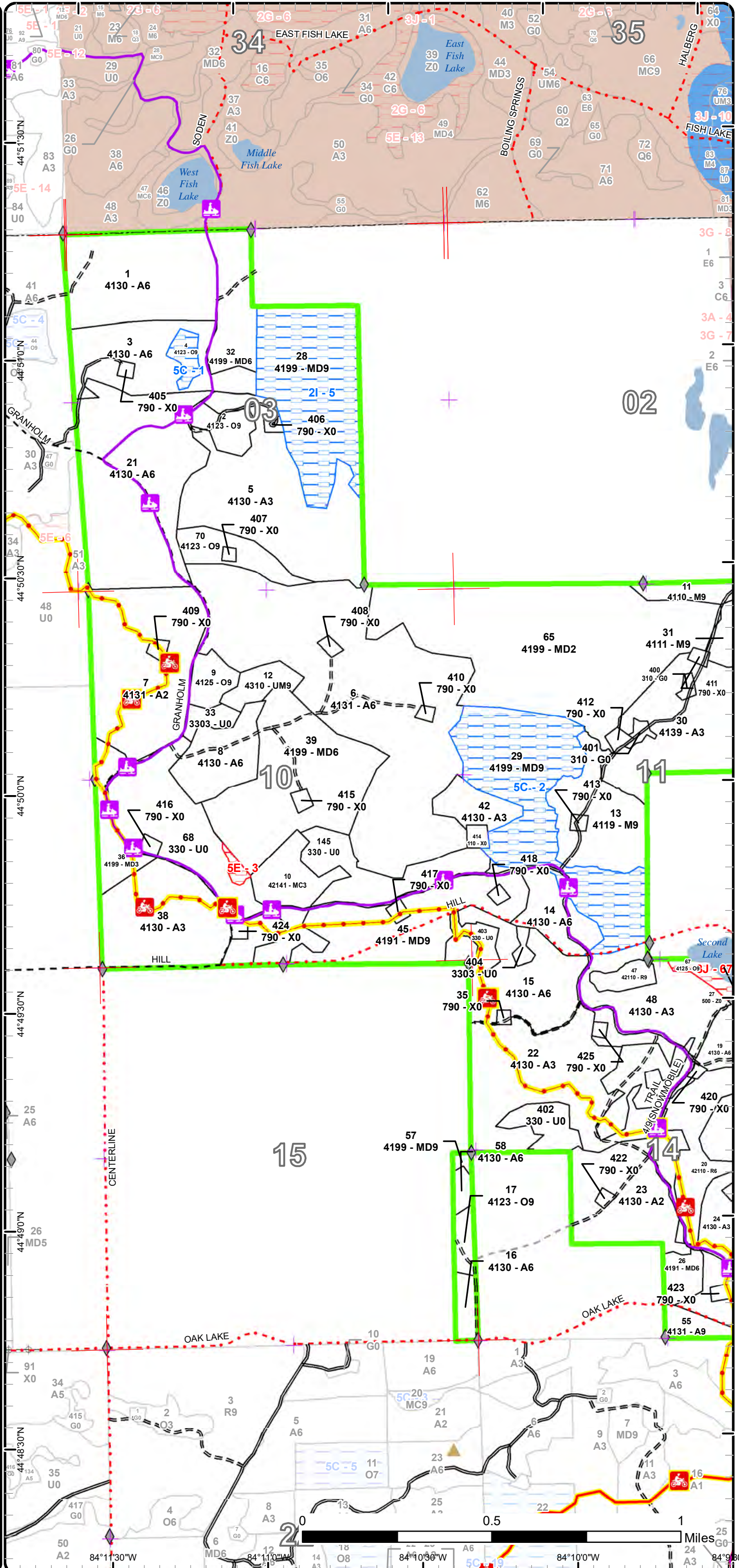


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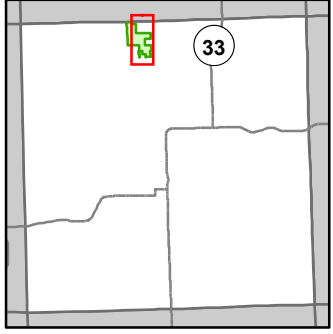


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- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 2I: Survey needed
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Cold Water Streams
- High Priority Trout Stream Buffer
- Research, Development, and Military Lands

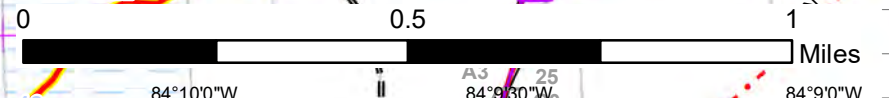
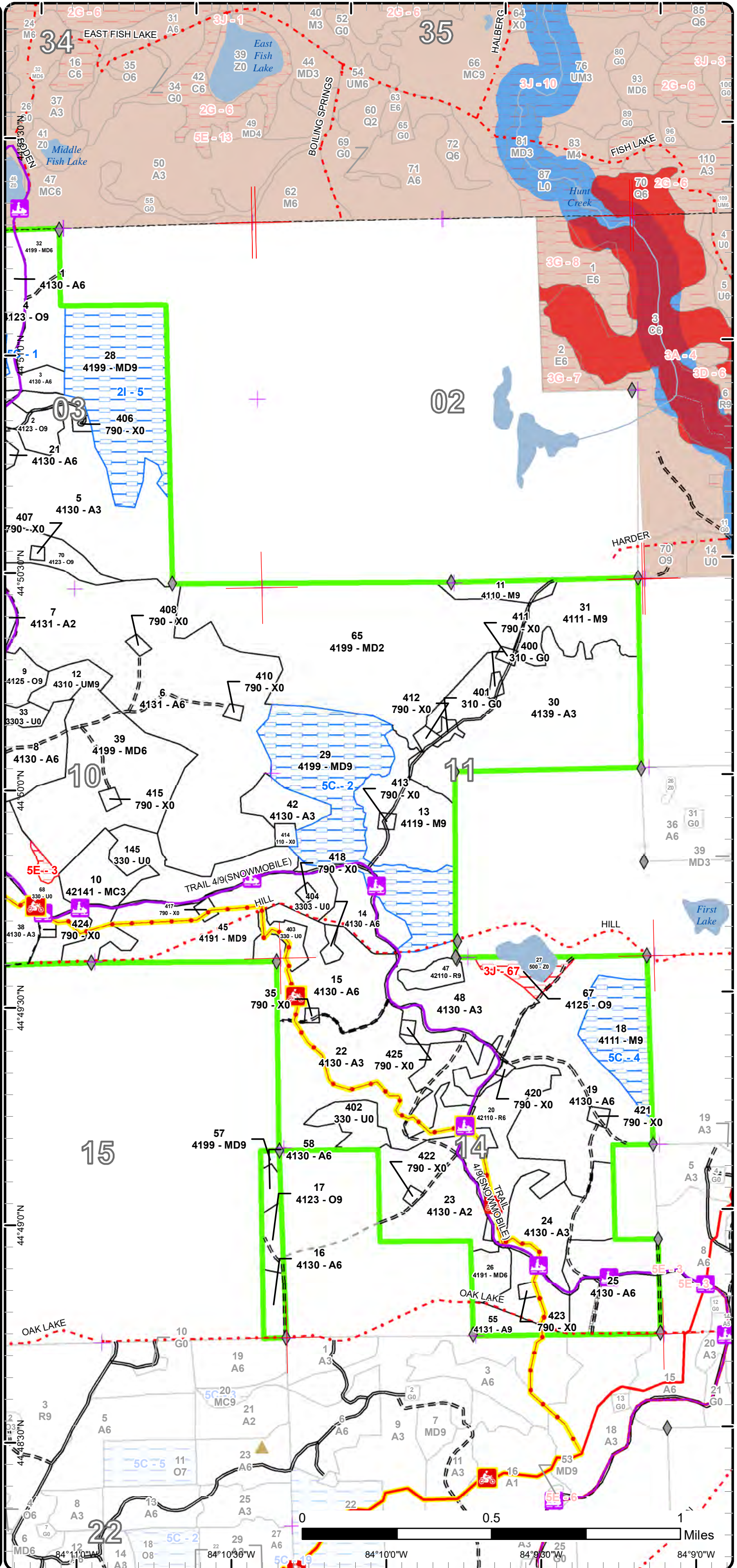


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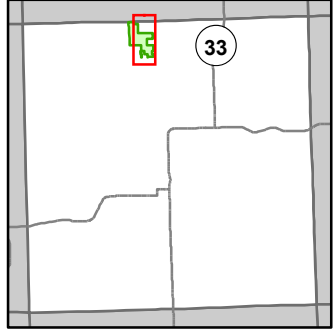
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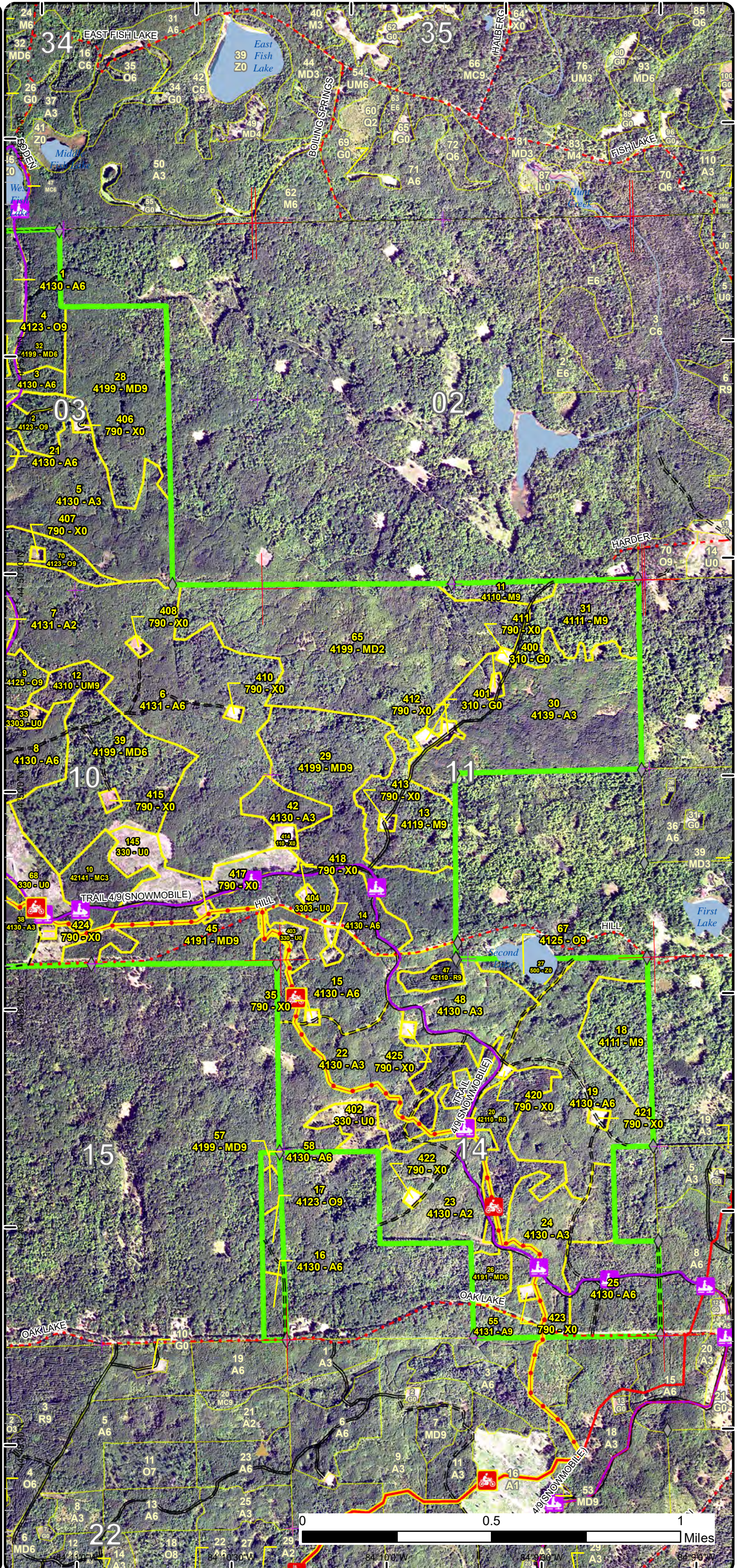
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Report 1 – Total Acres by Cover Type and Age Class

Grayling Mgt. Unit

Compartment 25

Year of Entry 2021

Colton Behrmann : 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	0	347	371	336	76	0	8	0	0	0	0	0	0	0	0	0	0	1137
Bare/Sparsely Vegetated	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Herbaceous Openland	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Low-Density Trees	112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	111
Mixed Upland Deciduous	0	0	239	0	25	9	0	0	0	140	72	0	0	0	0	0	0	0	485
Northern Hardwood	0	0	0	0	0	0	0	0	30	81	0	0	0	0	0	0	0	0	111
Oak	0	0	0	0	0	0	0	0	0	22	30	0	0	0	0	0	0	0	52
Planted Mixed Pines	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Red Pine	0	0	0	0	0	0	55	0	0	0	0	0	0	0	0	0	0	0	55
Upland Mixed Forest	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9
Urban	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Water	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	144	0	586	398	361	85	55	17	0	30	243	102	0	0	0	0	0	0	2019



Report 2 – Treatment Summary

Grayling Mgt. Unit

Year of Entry: 2021

Acres of Harvest

Compartment 25

Total Compartment Acres: 2,018

Commercial Harvest - 94
 Harvests with Site Condition - 72
 Next Step Harvest - 0
 Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	8	0	0	0	0	0	0	0	0	8
Mixed Upland Deciduous	125	0	0	0	0	0	0	0	0	125
Oak	24	0	0	0	0	0	0	0	0	24
Upland Mixed Forest	9	0	0	0	0	0	0	0	0	9
Total	165	0	0	0	0	0	0	0	0	165

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	165	0	0	0	0	0	86	0	0	252
Next Step	0	66	33	0	0	33	198	33	0	362
Total	165	66	33	0	0	33	285	33	0	614



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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Approved Treatments:

9	72025009-Cut	8.9	4125 - Black, N. Pin Oak	Sawtimber Well	99	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	No
<p><u>Prescription</u> Final harvest all trees 2 inches and greater in diameter. No retention due to stand size and to aid in site preparation. Add low stump spec. <u>Specs:</u> Add trail spec.</p> <p><u>Next Step</u> Pesticide, Skidder - Site Prep; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial <u>Treatments:</u> Regen(3yr); SitePrep, Roller Chopping; Other, Pre-Commercial Thinning - Hand</p> <p><u>Acceptable</u> Fully stocked red pine plantation. <u>Regen:</u></p> <p><u>Other</u> <u>Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2020</p>											
12	72025012-Cut	9.0	4310 - Pine, Oak Mix	Sawtimber Well	69	111-140	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	No
<p><u>Prescription</u> Final harvest all trees 2 inches and greater in diameter. No retention due to stand size and to aid in site prep. Add low stump spec. <u>Specs:</u></p> <p><u>Next Step</u> Pesticide, Skidder - Site Prep; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial <u>Treatments:</u> Regen(3yr); SitePrep, Roller Chopping; Other, Pre-Commercial Thinning - Hand</p> <p><u>Acceptable</u> Fully stocked red pine plantation. <u>Regen:</u></p> <p><u>Other</u> <u>Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2020</p>											
28	72025028-Cut	71.9	4199 - Other Mixed Upland Deciduous	Sawtimber Well	100	111-140	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	No
<p><u>Prescription</u> Final harvest all trees 2 inches and greater in diameter. Follow standard retention guidelines. Focus retention around white and red pine in the eastern half of stand. Protect wildlife shrub species where possible. <u>Specs:</u></p> <p><u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u></p> <p><u>Acceptable</u> Natural regenerated stand of aspen with mixed hardwoods meeting minimum stocking standards. <u>Regen:</u></p> <p><u>Other</u> <u>Comment:</u></p> <p><u>Site Condition</u> Survey Needed</p> <p><u>Proposed Start Date:</u> 10/1 /2020</p>											



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
45 72025045-Cut	53.0	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	99	111-140	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	No
<p><u>Prescription Specs:</u> Final harvest all trees 2 inches and greater in diameter. Follow standard retention guidelines. Add trail spec. Protect wildlife shrub species where possible.</p> <p><u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Acceptable Regen:</u> Naturally regenerated stand with mixed deciduous and a small component of conifer species meeting minimum stocking levels.</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2020</p>										
55 72025055-Cut	7.7	4131 - Aspen, Oak	Sawtimber Well	66	81-110	Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Even-Aged	No
<p><u>Prescription Specs:</u> Final harvest all trees 2 inches and greater in diameter. No retention due to small stand size and slope operability. Restrict to shortwood operation due to slope.</p> <p><u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Acceptable Regen:</u> Naturally regenerated stand with aspen and a mix of deciduous and conifer species meeting acceptable stocking levels.</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2020</p>										
68 72025068-Monitor	57.3	330 - Low-Density Trees	Nonstocked	0	Unspecified	Monitoring	Natural Regen (Intermediate)	412 - Oak Types	Even-Aged	No
<p><u>Prescription Specs:</u></p> <p><u>Next Step Treatments:</u></p> <p><u>Acceptable Regen:</u> A moderate to fully stocked stand of natural regeneration containing an oak component along with aspen.</p> <p><u>Other Comment:</u> Percent to Treat = 100%</p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 5 /1 /2022</p>										
70 72025070-Cut	14.9	4123 - Red Oak	Sawtimber Well	105	141-170	Harvest	Clearcut with Retention	4211 - Planted Red Pine	Even-Aged	No
<p><u>Prescription Specs:</u> Final harvest all trees 2 inches and greater in diameter. Follow standard retention guidelines. Add low stump spec to aid in site prep.</p> <p><u>Next Step Treatments:</u> Pesticide, Skidder - Site Prep; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr); SitePrep, Roller Chopping; Other, Pre-Commercial Thinning - Hand</p> <p><u>Acceptable Regen:</u> Fully stocked red pine plantation.</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2020</p>										



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
145 72025145-Monitor	29.0	330 - Low-Density Trees	Nonstocked	0	Unspecified	Monitoring	Natural Regen (Intermediate)	412 - Oak Types	Even-Aged	No
<p><u>Prescription</u></p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u> Management objective is oak, but will accept a mixed moderately stocked stand of aspen, pine and mixed hardwoods with an oak component.</p> <p><u>Other Comment:</u> Percent to Treat = 100%</p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 5 /1 /2022</p>										

Total Treatment Acreage Proposed: 251.7

Report 4 – Site Conditions

Grayling Mgt. Unit
Colton Behrmann : Examiner

Compartment: 25
Year of Entry: 2021

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions			
		With Condition	Not Available		2I	5C	3J	5E
1136	1136	0	0	Aspen				
24	24	0	0	Bare/Sparsely Vegetated				
3	3	0	0	Herbaceous Openland				
111	109	0	2	Low-Density Trees				2
485	328	158	0	Mixed Upland Deciduous	72	86		0
111	81	30	0	Northern Hardwood		30		
52	39	5	7	Oak		5	7	
27	27	0	0	Planted Mixed Pines				
55	55	0	0	Red Pine				
9	9	0	0	Upland Mixed Forest				
2	2	0	0	Urban				
3	3	0	0	Water			0	
2,018	1,816	193	9	Total Forested Acres	72	121	7	2
	90%	10%	0%	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	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Delay treatment and treat with Stand 3 (aspen stand) in the future.							
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	86	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Good quality red oak stand. Hold stand till next year of entry and reassess. Aspen regeneration vigor will decline, helping with future oak regeneration competition. Consider prescribing stand once adjacent stand 13 is up for re-entry.							

Report 4 – Site Conditions

Grayling Mgt. Unit
Colton Behrmann : Examiner

Compartment: 25
Year of Entry: 2021

3	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	30	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Current average BA = 112. Hold stand until BA is closer to 120.							
5	Available	2I: Survey needed	72	Unspecified	Unspecified	Unspecified	Unspecified
Comments: NW and NE Corners not found during Inventory process. Survey request submitted September 2019.							
67	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	Unspecified	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
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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	Research and Military Areas	These areas provide facilities and lands specifically dedicated for research, or other purposes. They include the 5,847 acre Forest Fire Experiment Station, the 12,000 acre Houghton Lake Wildlife Research Area, the Beaver Islands Archipelago Wildlife Research Area (that includes most of Garden Island, all of High and Hog Islands, all state owned land on Beaver, South Fox and North Fox Islands), the Cusino Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research Station, the 125 acre Wyman Nursery, and over 144,000 acres of Military Lands.
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	4130 - Aspen	Poletimber Well	60.5	34	111-140	N/A	Pole-sized aspen stand with a very similar composition to Stand 3 (stand to the south). OPIC - FMD: Will be an A6 next YOE. Birch, red maple, oak and other mixed hdwds present. Found evidence of bear hunting within stand.																																								
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2	4123 - Red Oak	Sawtimber Well	9.7	105	81-110	N/A	Mature oak stand with varying understory regeneration. The eastern end contains more maple and aspen regeneration, and also has a lower basal area. Stand is on the lower end of the 75-100% canopy cover. OPIC - FMD: This small stand serves as a retention area. Very nice looking oak. Oak seedling present but majority are under 1 foot tall. Some birch is present, rolling topo, decent shrub component in understory. Aspen removed from stand in 1985. Old SI used																																								
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3	4130 - Aspen	Poletimber Well	41.4	44	111-140	N/A	Good quality aspen stand that is pole-sized, with some log trees. Diameter can vary depending where you are at in the stand. Recommend to hold 10, and cut with stand 4 to help regeneration. OPIC - FMD: Pockets of bigger timber mixed with A3. Quality and size varies. Plenty of red maple in stand but it is not yet merchantable.																																								
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4	4123 - Red Oak	Sawtimber Well	5.4	100	111-140	N/A	Mature oak stand with some decay in the tops. Pole-sized red maple is filling in the canopy. Should treat when adjacent aspen stand is cut. OPIC - FMD: Stand sits on a ridge. A good looking stand w/ good quality oak. Treat with surrounding aspen stand in the future. Potential erosion concerns with terrain.																																								
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5	4130 - Aspen	Sapling Well	82.0	19	Immature	N/A	A patchy aspen stand. The canopy cover is closer to 75%. There are open pockets of cherry brush, as well as clumps of pole-sized white pine. OPIC - FMD: Salvaged under contract #036-99-01, Central Salvage block (wind event 99). Completed spring/summer of 2000. Tons of cherry and shrubs. The eyes pick up mostly on the aspen and birch. Maple, ash, oak, and mixed pine also present. The regen is patchy - A3 mixed with poorer stocked areas and upland brush type areas. There will most likely be opportunity to type out different stands in the future. Old SI used.																																								
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																											
6	4131 - Aspen, Oak	Poletimber Well	175.3	34	111-140	N/A	Overall a well stocked young aspen stand with a good mix of both oak and red maple. Oak component is heavier once you walk into the stand. Both red pine and white pine log/xlog trees are found throughout the stand. Continue to hold as the stand matures.																																											
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7	4131 - Aspen, Oak	Sapling Medium	72.4	17	Immature	N/A	Aspen stand with open patches where cherry and scrub oak are more common. There is a good mix of oak and red maple through the stand, although most of the oak saplings are shorter than the aspen. Mixed pine is also present in lower numbers.																																											
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8	4130 - Aspen	Poletimber Well	24.1	43	141-170	N/A	Average quality aspen stand with smaller diameter pole-sized timber in the eastern end. There are a few kettle holes that would need buffered when the stand is harvested.																																											
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9	4125 - Black, N. Pin Oak	Sawtimber Well	8.9	99	81-110	N/A	Mature oak stand that is continuing to decline. Red maple and white pine are filling canopy gaps, with a diverse understory also starting to regenerate. Oak seedlings are being browsed heavily by deer.																																											
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10	42141 - Planted Mixed Pine, Mixed Deciduous	Sapling Well	26.6	24	Immature	N/A	Patchy red pine plantation that is being heavily outcompeted by aspen and jack pine in areas. Some pockets of pure aspen. Oak, red maple and cherry are also common. Overall poor quality red pine due to the other existing species overtopping in areas.																																											
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11	4110 - Sugar Maple Association	Sawtimber Well	9.1	99	81-110	N/A	Northern hardwoods stand with some oak mixed into the canopy. Any mature ash are now snags. Will feature the overstory as the coverytype due to unfavorable conditions in the understory, and high canopy cover. Understory has thick ironwood, with some sugar maple and beech mixed in. Any oak saplings are being heavily browsed.OPIC - FMD: Portions of the stand salvaged after the 99 wind event. Will feature the understory as cover type. Oak in the overstory in the southwest, more northern hdwds in the north and east. Areas of thick ironwood regen. Mixed hdwds and aspen in understory. Ash, beech, basswood, birch also present.																																																						
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12	4310 - Pine, Oak Mix	Sawtimber Well	9.0	69	111-140	N/A	A unique natural red pine stand along a narrow ridge and valley. There is a heavy mixture of oak in the overstory, as well as red maple filling in any gaps. Mixed pine, red maple and oak are all in the understory, but the oak is being heavily browsed by deer. OPIC - FMD: A valley of natural red pine. A handful of relic pine present acting as a seed source. Some white pine also present.																																																						
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13	4119 - Mixed Northern Hardwoods	Sawtimber Well	37.3	99	81-110	N/A	Mixed northern hardwoods stand. Understory consists of beech, sugar maple and ironwood. The southeast corner contains a larger component of beech in the overstory and understory. There are multiple kettle holes holding water. Immature ash can be found near drainages leading to kettle holes. Northern Hardwood thinning in was completed in 2016, the sale number 72-047-2011-01.OPIC - FMD: Thin leaving a residual between 70 and 80. Some areas better stocked than others. There are a few seasonally wet areas found along the bottom of the hilly terrain. Stand transitions into an oak type on top of the hill. Give operations within stand quite a bit of weight when marking to avoid residual damage. Majority of terrain is hilly. Tree length operations should not be allowed. This treatment is intended to improve the current timber while providing oportunities for regen to establish in newly created openings. Understory is poorly stocked with beech, ironwood, and sugar maple. Some striped maple present in stand.																																																						
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14	4130 - Aspen	Poletimber Well	18.3	31	81-110	N/A	Aspen stand that follows a couple of ridges running North/South. Aspen is still smaller diameter, while oak and red maple are larger (10-12" DBH). The stand is still recruiting pole-sized timber into the overstory. OPIC - FMD: Hilly, some of the bottom areas are wet. Pockets with pine, oak and maple also present. Aspen has a smaller diameter in the east. Hawthorne present. Year of origin is assuming that this stand was harvested along with stand 15.																																																						
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15	4130 - Aspen	Poletimber Well	43.2	36	81-110	N/A	Aspen stand with rolling topography. The basal area is patchy in areas where cherry is more common. Red maple stump sprouts are in the southeastern hill, with red pine log trees along the eastern border. Some areas contain smaller diameter aspen (6 inch DBH). Stand is heavily used by deer, with browse occurring throughout the stand. Overall a poorer quality aspen stand. OPIC - FMD: Hilly. Still some unmerchatable aspen throughout. Areas of A3/A4. Red pine present but not consistent. White pine starting to appear in the understory.																																									
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16	4130 - Aspen	Poletimber Well	6.6	42	111-140	N/A	Aspen stand with a mix of red maple and some mixed pine. Overall the aspen is doing well and could be held if needed. Would be ideal to prescribe along with stands 17, 58 & 57. OPIC - FMD: Good looking stand. Narrow. Birch and mixed pine also present. An old foundation has been dumped in southern portion of the stand along the powerline. Looks like a small garden has started in the ROW.																																									
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17	4123 - Red Oak	Sawtimber Well	5.9	96	141-170	N/A	A mature good quality oak stand with red maple as well. Look at previous comments on road. OPIC - FMD: Narrow. Good quality oak present. Treat when adjacent aspen stands are ready to be treated. An oil and gas easement has recently been created through the stand. The easement requires a gate. A good shrub component in understory. Old SI used.																																									
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18	4111 - S.Maple, Hard Mast Association	Sawtimber Well	29.8	89	111-140	N/A	Northern hardwoods without the basswood component. There are pockets of beech in the northeastern portion of the stand. Ash was seen in low spots, but are mostly all snags now. Overall the stand is moderate to poor form. split tops, cat faces and blowdown can all be found. OPIC - FMD: Above average quality for the unit. The good quality trees are outstanding. The poorer quality trees exceed in there area as well (cat faces, broken tops, poor form). Seasonal wet areas found throughout. These areas contain a smaller diameter component of ash, elm and maple. Understory is patchy with areas of maple and others of beech and iron wood. Old SI used																																									
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19	4130 - Aspen	Poletimber Well	84.6	22	141-170	N/A	Immature aspen stand that is growing well. Some areas are heavier to the oak and birch component, with traces of red pine saplings. OPIC - FMD: About 25' tall. Birch and mixed hdwd present. Old SI used.																																									
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																														
20	42110 - Planted Red Pine	Poletimber Well	48.9	55	141-170	N/A	<p>Red pine stand with very dense understory. The oak that has not passed browse height is being hit hard. The rows are not straight, and the stand contains many pockets of good aspen regeneration. There is single tree mortality throughout the stand, with signs of heavier porkey damage in areas. Overall a rough looking red pine plantation.</p> <p>OPIC - FMD: Hilly with variable quality. Fairly limby and areas of porkey pine damage present. There are open pockets filled with aspen and mixed hwdws. Portions of this stand were not treated during the last prescription. Some wind damage in stand. (old comments) 3rd row thinned - Timber sale 72-045-03-01, Second Lake Red Pine. Contract held by Bisballe Forest Products, managed by Highland Timber and cut by a third party. Cut in December 2006.</p>																																														
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21	4130 - Aspen	Poletimber Well	94.9	28	Immature	N/A	<p>Large well stocked aspen stand. Very good mix of hardwoods throughout. White pine is found in both the understory and overstory. OPIC - FMD: Great looking stand. Plenty of birch and mixed hwdws. About 25' tall. Seasonal wet areas found within stand. The old skid trails are still drivable in some areas. Old SI used.</p>																																														
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22	4130 - Aspen	Sapling Well	74.2	26	Immature	N/A	<p>Immature aspen stand with a small component of oak and red maple stump sprouts. There are some areas of larger pole-sized aspen, and also pockets of cherry brush. OPIC - FMD: In transition. Some trees are merchantable already. Old SI used.</p>																																														
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23	4130 - Aspen	Sapling Medium	49.2	14	Immature	N/A	<p>Immature aspen stand with oak, maple, mixed pine and cherry as well. The stand is patchy in places, but is slowly filling in. Expect the aspen to outcompete some of the oak as the stand matures.</p> <p>OPIC - FMD: Areas of A3. Stand is patchy with openings and u-types. Stand is primarily aspen and cherry brush but, some red maple and oak also present. Some mixed pine is also starting to establish itself. Old SI used. (Old comment.) Timber sale 72-008-02-01 Second Lake Aspen. Cut in 2004 by Shawn Muma Forest Products. 0808/2005</p>																																														
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24	4130 - Aspen	Sapling Well	49.6	14	Immature	N/A	<p>Immature aspen stand that is filling in well. There currently is oak, red maple and cherry mixed in, but the aspen will continue to outcompete some of the oak and red maple competition.</p> <p>OPIC - FMD: 6 -8' tall. Red maple, oak, and cherry mixed in. The shorter stems that can be reached by the deer are getting hit pretty hard by browse. Timber sale 72-008-02-01 (Second Lake Aspen). Cut in 2004 by Shawn Muma Forest Products.</p>																																														
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25	4130 - Aspen	Poletimber Well	38.8	34	111-140	N/A	Aspen stand with mixture of both oak and red maple. Aspen overall is doing well, with pockets of poorer quality timber and a mix of cherry. Southeast corner of stand contains the scrubby oak, cherry and aspen regeneration. Look at next YOE.																																																			
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26	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	8.6	42	81-110	N/A	In the past it was a jack pine dominated canopy. As the stand ages the composition is switching to a red maple canopy, with some jack pine and larger aspen still hanging on. Expect the red maple component to continue to grow and gain canopy cover. The stand gradually slopes down and away from Oak Lake Rd, but should not restrict harvest in the future. Continue to hold as the maple grows.																																																			
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27	500 - Water	Nonstocked	2.7			No	OPIC - FMD: SECOND LAKE																																																			
28	4199 - Other Mixed Upland Deciduous	Sawtimber Well	71.9	100	111-140	N/A	Mixed stand of good quality oak and aspen. There is a small component of sugar maple in the pole class throughout the stand. The eastern side of the stand contains more of a mixed hardwoods. OPIC - FMD: Wet areas in the stand. Hilly. Excellent quality oak and aspen. Some pocket with poorer quality timber but, overall quality is high. Mixed sawlog pine here and there. Better quality northern hwdws in the northern portions of the stand. Hold treatment for 10.																																																			
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29	4199 - Other Mixed Upland Deciduous	Sawtimber Well	85.8	99	111-140	N/A	Better quality oak stand with aspen showing up in pockets. Red maple is common in both the overstory, and pole-sized. There are a few large red pine than can be found towards the northeastern side of the stand than run North/South. Can confirm it is like walking on a giant golf ball. There are kettle holes in the stand that would be limited to harvest. Directly East of stand 414 there is a large kettle hole that holds water. OPIC - FMD: Very steep hills with narrow ridges (like walking on a giant golf ball). Great looking oak. The aspen is in pockets. Erosion and equipment limitations are concerns. Wet areas at the bottoms of the hills.																																																			
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																	
30	4139 - Aspen, Mixed Deciduous	Sapling Well	104.5	27	Immature	N/A	Immature aspen stand (20-25' tall) with a good mix of sugar maple, oak and birch. There is ash in the stand, but it is continuing to die out. Any oak below browse height is being hit hard by deer. The aspen DBH varies depending on location in the stand. OPIC - FMD: Stand is a mix of aspen and hdwds. Service berry shrubs are common throughout. Area where the hdwds are dominant. Ash present throughout. Some porky damage. Old SI used. (old comments) PVT. FENCE MAY BE SOUTH 1 CHAIN OF PROPER LINE																																	
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31	4111 - S.Maple, Hard Mast Association	Sawtimber Well	34.5	99	81-110	N/A	Northern hardwoods stand. The west end contains more sugar maple with larger pockets of ironwood in the understory. Larger oak starts to become more common in the central and eastern part. OPIC - FMD: Stand last thinned in 1991. Sm and PB dominant. Sugar maple and ironwood make up majority of understory. Some wind damage. Pockets of M3 created by wind events.																																	
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32	4199 - Other Mixed Upland Deciduous	Poletimber Well	25.2	34	81-110	N/A	Stand has a mix of aspen, red maple and some oak. Aspen and red maple are dominant. Same age as Stand 1 to the west, but has more of a hardwood component. OPIC - FMD: Rm, oak, aspen, ash. Decent looking oak stump sprouts present. Where there is aspen it is doing better than the rest of the species. A couple pockets of A4. Some hills.																																	
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33	3303 - Mixed Low Density Trees	Nonstocked	5.4	99		No	This stand is a large bowl that contains low quality timber in the areas where it has regenerated. There are a few pockets of aspen and jack pine, but do not expect them to fill in any more of the grassy opening. Patchy scrub oak and cherry can be found throughout the stand as well. OPIC - FMD: A big hole w/ scrub cherry, mixed pine and oak. Was typed out as a "G" in previous inventory. Used adjacent stand 68 for SI and origin.																																	
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35	790 - Other Bare/Sparsely Vegetated	Nonstocked	0.9			No	Riverside Energy LLC. OPIC - FMD: DTE Gas and Oil Co State Elmer A1-14. Knapp weed present.																																	
36	4199 - Other Mixed Upland Deciduous	Sapling Well	16.6	17	Immature	N/A	An immature mixed deciduous stand with scattered overstory oak left. Red maple is the most dominant species in the sapling layer, with a healthy mix of oak and aspen. Red and white pine can be found in the residual overstory and also trace individuals in the sapling layer. Overall the stand is filling in well and has a good mix of species. OPIC - FMD: Little oak regen found. Patchy aspen and red maple regen with cherry brush and open areas. Browse evident. Hilly stand. Some areas with good down woody debris. Timber sale cut in fall 2002 72-010-01-01. Old SI used. MCCCT Trail in stand, and it borders the snowmobile trail.																																	
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
38	4130 - Aspen	Sapling Well	51.6	17	Immature	N/A	Overall a very mixed stand with aspen being the dominant sapling type. Red maple, oak, beech, mixed pine and cherry are also recruiting in. Previous comments mention patches, that are now starting to fill in with jack pine, cherry and red maple. There are pockets of white pine and occasional red pine in the overstory. OPIC - FMD: My survey did not produce the residual oak stated in old OI. There are areas of A3 - patchy with open u-type areas. A small ammount of Stump sprout oak present(more than in stand 36). Trees were left along the cycle trail. Scattered pine. Hilly. Old SI used. Timber sale # 72-008-01-01 Hill Road Oak. Sale was cut by Georgia-Pacific in 2002.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Bigtooth Aspen		68	Sapling	3	17	White Pine		Low	5 - 10 feet	Sapling	
Northern Pin Oak		10	Sapling	2							
39	4199 - Other Mixed Upland Deciduous	Poletimber Well	73.6	17	Immature	N/A	The understory is now well stocked with aspen, red maple and some oak. Some areas are heavier to red maple saplings, mainly around higher canopy cover. Some of the oak will continue to recruit, but most has either been browsed or outcompeted by the red maple and aspen. OPIC - FMD: The objective of oak management will not succeed. It is currently pockets of A3 and M3. Some stumps sprout oak is present and will still be a component of the stand. Red and whit pine of various sizes found throughout. There is a big hole along the pipeline access that contains pine and open water seasonally. (old comments) Hilly stand. 30% crown cover cut to regenerate oak. May have to follow up with prescribed burn. Stand was closed June 2004. Will need to check regeneration next YOE.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Black/Red (Hybrid) Oak		30	Log	14		Hawthorn (spp.)		Low	5 - 10 feet	Tall Shrub	
Black/Red (Hybrid) Oak		10	Sapling	3		Witch Hazel		Medium	5 - 10 feet	Tall Shrub	
Red Maple		18	Sapling/Pole	4							
Bigtooth Aspen		35	Sapling	3	17						
42	4130 - Aspen	Sapling Well	12.3	26	Immature	N/A	Exactly how previous inventory notes explain. Immature aspen in a bowl, with jack pine and white pine at the bottom. More oak saplings can be found on the eastern end adjacent to stand 29. OPIC - FMD: Used old SI. Aspen in a bowl. 16 - 20' tall. Pine, misc hdwds and cherry present.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Bigtooth Aspen		86	Sapling	3	26	Witch Hazel		Low	5 - 10 feet	Tall Shrub	
						Hawthorn (spp.)		Trace	5 - 10 feet	Tall Shrub	
45	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	53.0	99	111-140	N/A	Poor quality oak stand with a large component of better quality bigtooth aspen and red maple. Quite a mixed understory, with heavy browse on any oak saplings that try to recruit. There is a valley in the western end of the stand that contains natural red pine. The oak is continuing to decline. OPIC - FMD: This stand has been split in two. This southern portion is being left as a visual buffer along hill road, the snowmobile trail, and the MCCCT trail. Very hilly. Some mixed pine starting to show up in the understory. See stand 145 for additional comments.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Pine		15	Log	13		Witch Hazel		Medium	5 - 10 feet	Tall Shrub	
Black/Red (Hybrid) Oak		39	Log	13	99	White Pine		Low	>20 feet	Sapling	
Red Maple		8	Pole/Log	9		Red Maple		Medium	>20 feet	Sapling	
Bigtooth Aspen		30	Log	12		Black/Red (Hybrid) Oak		Low	< 5 feet	Sapling	
						Beech		Low	5 - 10 feet	Sapling	
						Red Pine		Low	10 - 20 feet	Sapling	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
47	42110 - Planted Red Pine	Sawtimber Well	6.3	55	111-140	N/A	Area shows similar characteristics to Stand 20 (red pine plantation to the south). Red pine is moderate quality. Understory is thick with maple, and thick hawthorn in areas. OPIC - FMD: Areas of failed plantation. Hilly. Rows seem to wonder. Areas of A3 understory, other areas that are brushy.. (old comments) 3rd row thinned. Timber sale 72-045-03-01, Second Lake Red Pine. Cut in December 2006. Stand is now R6.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	97	Log	12	55	Red Maple	High		5 - 10 feet	Sapling
					Bigtooth Aspen	Low		10 - 20 feet	Sapling
					Beech	Low		5 - 10 feet	Sapling
					Black Cherry	Low		10 - 20 feet	Sapling
					Hawthorn (spp.)	Medium		5 - 10 feet	Tall Shrub
					Black/Red (Hybrid) Oak	Medium	< 5 feet	Sapling	
48	4130 - Aspen	Sapling Well	41.9	14	Immature	N/A	Dense immature aspen stand with a smaller amount of oak and red maple. Heavier aspen component than adjacent stand 19. There is beaver activity in the northern part of the stand. OPIC - FMD: Hilly, with patchy regen. Cherry, oak, red maple also present. Open u-type areas also. Majority of stem 5 - 10' tall. Timber sale 72-008-02-01 (Second Lake Aspen. Cut by Shawn Muma Forest Products in 2004.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Bigtooth Aspen	90	Sapling	3	14	Witch Hazel	Low		5 - 10 feet	Tall Shrub
Red Maple	8	Sapling	2		Hawthorn (spp.)	Low		5 - 10 feet	Tall Shrub
55	4131 - Aspen, Oak	Sawtimber Well	7.5	66	81-110	N/A	Mix of an aspen/oak stand on the western half, with oak and red maple dominant on the eastern half. Good quality oak, with large mature aspen. West side contains steeper slope heading down to stand 9 (young A3). Mature timber, but slope will play a factor in operability. OPIC - FMD: Looks like an oak stand from the road but, my plots picked up the aspen too. Majority of aspen is in the south 1/2. This stand is serving as a visual buffer for a big final harvest in the adjacent southern compartment.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	21	Pole/Log	8		White Pine	High		>20 feet	Sapling
Red Oak	30	Log	14	91	Red Maple	Medium		10 - 20 feet	Sapling
Bigtooth Aspen	45	Log	10	66	Beech	Low		5 - 10 feet	Sapling
					Hawthorn (spp.)	High		5 - 10 feet	Tall Shrub
					Northern Pin Oak	Low		>20 feet	Sapling
					Witch Hazel	High	5 - 10 feet	Tall Shrub	
57	4199 - Other Mixed Upland Deciduous	Sawtimber Well	1.5	96	111-140	N/A	Overall a good quality oak stand with red maple and aspen spread throughout. The stand is mature and should be prescribed with the adjacent stands to the south. OPIC - FMD: Did not visit in 2009. Narrow.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	25	Pole/Log	9		Witch Hazel	Medium		5 - 10 feet	Tall Shrub
Red Oak	57	Log	13	96	Beech	Low		5 - 10 feet	Sapling
Bigtooth Aspen	18	Log	13		Red Maple	Medium		>20 feet	Sapling
					Red Oak	Medium	5 - 10 feet	Sapling	
58	4130 - Aspen	Poletimber Well	3.5	42	111-140	N/A	Well stocked healthy aspen stand with a red maple component. Consider prescribing with adjacent stands. OPIC - FMD: Good looking stand. Narrow. Treat with adjacent oak stands in 10 yrs. Excellent understory mast shrubs.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	10	Pole	7		Witch Hazel	High		5 - 10 feet	Tall Shrub
Bigtooth Aspen	82	Pole	8	42	Beech	Low		5 - 10 feet	Sapling
Red Oak	8	Pole	8		Red Maple	Medium		>20 feet	Sapling
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																															
65	4199 - Other Mixed Upland Deciduous	Sapling Medium	149.3	19	Immature	N/A	Immature aspen with a larger mix of beech and sugar maple. Right now the stand is patchy (50-75% canopy cover), but may continue to fill in as the stand matures. More oak can be found on top of the ridges running East/West. Ash is also present, but continuing to die. OPIC - FMD: The eyes pick up on the aspen but mixed hdwds present. Several areas of brush or solid iron wood. A couple pockets with bigger timber. (old comments) Salvage area - tornado of 1999. Timber sale #038-99-02, East Salvage block. Completed the spring of 2000.																																																															
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67	4125 - Black, N. Pin Oak	Sawtimber Well	6.7	99	81-110	N/A	Mature oak ridge that runs along Second Lake shoreline. The understory contains quite a bit of hawthorn, mainly near the transition edge to stand 48. Could not get an accurate age on the oak. OPIC - FMD: Did not visit in 2009. No treatment zone along Second Lake																																																															
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68	330 - Low-Density Trees	Nonstocked	57.4	0	Unspecified	412 - Oak Types	Stand failed to pass the natural regeneration check. Aspen saplings are averaging about 6' tall, where present. The red maple height is not consistent, some has reached 6' while other sprouts cannot make it past 2'. The oak is heavily browsed and none were found over 3'. Sale was cut in winter of 2016. The sale # is 72-033-11-01. Sale well stocked aspen under 3 feet present. OPIC - FMD: Illegal fuel wood cutting throughout. Hilly! Mixed hdwds and pine also present. Stand is in decline. Recommend a final harvest w/ reserves. Treat north of the trails. Give a 100' buffer from the MCCCT trail and treat every thing to the north. Include the southern portion in the proposal and use it as retention. Leave a couple healthy trees scattered throughout the harvest area for vertical structure (favor oak or pine). The management objective is a moderate to fully stocked stand of natural regeneration containing an oak component along with aspen, mixed pine and northern hdwd species. Natural regeneration that meets minimum stocking with an oak component will be a success. Watch for erosion during operations. Excluded areas may impact over all sale acreage. (old comments) Hilly stand. Oak beginning to die, but should hold until 2011. (pre-review - leave shade trees around well sites to help combat invasive species spread.)																																																															



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																										
70	4123 - Red Oak	Sawtimber Well	14.9	105	141-170	N/A	Mature oak stand with aspen and maple mixed. Some white pine in the understory, mainly in the eastern side. OPIC - FMD: White pine starting to establish in the understory. Good looking oak. Leave this narrow oak ridge as is for now. Some fairly decent sugar maple and ash too. Some tornado damage. These areas are opened up. In the SE corner some trees were salvaged at the same time as stand 69 was cut under contract #036-99-01																																										
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145	330 - Low-Density Trees	Nonstocked	29.1	0	Unspecified	412 - Oak Types	Stand failed to pass the natural regeneration check. Aspen saplings are averaging about 6' tall, where present. The red maple height is not consistent, some has reached 6' while other sprouts cannot make it past 2'. The oak is heavily browsed and none were found over 3'. Stand was final harvested in winter of 2016. Sale number was 72-033-11-01. The stand has good aspen regeneration but does not meet 3 feet in height minimum to be counted yet. OPIC - FMD: Final harvest w/ reserves. Use islands totaling 1-3 acres as retention to address visual concerns along Snowmobile trail. Management objective is oak but, will accept a mixed moderately stocked stand of aspen, pine, and mixed hwdws containing an oak component. Majority of this stand is old stump sprout regen. NE corner of stand has jp and aspen. The aspen should respond well to the harvest, some natural jack pine reproduction is expected. Erosion potential fairly high.																																										
400	310 - Herbaceous Openland	Nonstocked	1.4			Managed Opening	OPIC - FMD: Small opening. Found an FTP for opening maintenance submitted by wildlife in the 80's.																																										
401	310 - Herbaceous Openland	Nonstocked	1.8			Managed Opening	OPIC - FMD: Small opening. Found an FTP for opening maintenance submitted by wildlife in the 80's.																																										
402	330 - Low-Density Trees	Nonstocked	11.3			No	A hilly opening with short and poor quality timber. There are several pockets of aspen spread out through the large opening with cherry mixed in. Heavy wildlife use. OPIC - FMD: Looks to be filling in with brush and saplings from the photos. Did not visit stand this YOE.																																										
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403	330 - Low-Density Trees	Nonstocked	6.0		Immature	No	Grassy bowl with young aspen surrounding. It is filling in on the perimeter with scrubby aspen and cherry. The bowl is close to the 25% canopy closer overall. There is heavy browse on any oak saplings. OPIC - FMD: Grassy area along ORV trail. Starting to fill in with u-types.																																										
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404	3303 - Mixed Low Density Trees	Nonstocked	2.2		Immature	No	Multiple clumps of scrubby aspen and mixed pine in a bowl. Cherry is sporadic in the stand. Overall it is on the higher end of 0-25% canopy cover. OPIC - FMD: Some aspen and mixed pine. Looks like a bit of knapp weed too. Some restoration efforts/stabilization efforts. Misc 10 BA or so.				
								Sub-Canopy Species	Density	Avg. Height	Size
								Quaking Aspen	Medium	>20 feet	Pole
								Red Pine	Low	>20 feet	Pole
								White Pine	Low	>20 feet	Pole
								Black Cherry	Low	10 - 20 feet	Sapling
Jack Pine	Low	>20 feet	Pole								
405	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.0			No	Breit Burn OPIC - FMD: Terra Energy St. Elmers 5-3HDL. Knapp weed present.				
406	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.2			No	Breit Burn Operating OPIC - FMD: Terra Energy State. Elmers C3-3HDL. New well, recently planted grass. 2 wells on site.				
407	790 - Other Bare/Sparsely Vegetated	Nonstocked	0.8		Immature	No	breit burn operations OPIC - FMD: Terra Energy State Elmers 14-3. Some knapp weed present -good grass areas too.				
408	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.3			No	OPIC - FMD: Atlas Gas and Oil Co State Elmer A3-10. Some knapp weed present				
409	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.6			No	riverside energy LLCOPIC - FMD: Atlas Gas and Oil Co State Elmer 4-10. Some knapp weed present. Cycle trail runs through pad.				
410	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.1			No	riverside energy LLCOPIC - FMD: Atlas Gas and Oil Co State Elmer 8-10. Some knapp weed present.				
411	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.2			No	breitburn operating LPOPIC - FMD: Terra Energy State Elmer 2-11HD. Majority of pad exposed soil.				
412	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.7			No	Riverside Energy LLC.OPIC - FMD: Terra Energy State Elmer 6-11. Looks OK.				
413	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.1			No	Riverside Energy LLC.OPIC - FMD: Terra Energy State Elmer 11-11.				
414	110 - Low Intensity Urban	Nonstocked	2.2			No	OPIC - FMD: Atlas gas and oil. Elmers Gluwall CPF. Knapp weed present.				
415	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.5			No	OPIC - FMD: Atlas Gas and Oil Co State Elmer 10-10. knapp weed well established.				
416	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.5			No	riverside energy LLCOPIC - FMD: well pad				
417	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.4			No	Riverside energy LLC.OPIC - FMD: Atlas Gas and Oil Co State Elmer 16-10. ORV Trail through pad				



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418	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.1			No	Riverside Energy LLC.OPIC - FMD: Atlas Gas and Oil Co State Elmer 13-11. Knapp weed present.
420	790 - Other Bare/Sparsely Vegetated	Nonstocked	0.8			No	OPIC - FMD: DTE Gas and Oil Co State Elmer B3-14. Knapp weed present.
421	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.5			No	Riverside Energy Michigan, LLC St. Elmer 8-14OPIC - FMD: Atlas Gas and Oil Co State Elmer 8-14.
422	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.0		Immature	No	OPIC - FMD: Atlas Gas and Oil Co State Elmer 11-14. Extensive knapp weed
423	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.1			No	OPIC - FMD: Atlas Gas and Oil Co State Elmer 15-14. Knapp weed
424	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.2			No	OPIC - FMD: Atlas Gas and Oil Co State Elmer D2-10. Better looking than some of the other wells.
425	790 - Other Bare/Sparsely Vegetated	Nonstocked	0.9			No	OPIC - FMD: Atlas Gas and Oil Co State Elmer 3-14. Full of knapp weed.