



Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72016

Entry Year 2024

Acreage: 1,284

County Oscoda

Management Area: AuSable Outwash

Stand Examiner: Trevor Kubitskey

Legal Description:

Elmer Township. T28N R02E Sections 13, 23, 24 & 25.

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:

The soils are Grayling and Graycalm sands. There is some Emmet loamy sand in section 13. The area is rolling hills to the north with a wide valley to the south. The entire Compartment consists of very well-drained to excessively-drained upland soils.

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

Ownership is about 50% state and private in sections 13 & 24, with the majority of state ownership in sections 23 & 25. There has been no new developments within the compartment. Land use within the compartment is mostly recreational use, but there are scattered active gas well locations throughout the compartment.

Unique Natural Features:

The Pine Barrens Frost Pocket is in the adjacent compartment to the south.

Archeological, Historical, and Cultural Features:

Evidence of historical occupation is found within the Compartment.

Special Management Designations or Considerations:

The Pine Barrens Frost Pocket borders the compartment to the south.

Watershed and Fisheries Considerations:

There are no established river systems or creeks within the compartment.

Wildlife Habitat Considerations:

Despite no managed wildlife openings within the compartment, the mixture of young aspen, mature oak and various beneficial wildlife shrubs provide good cover as well as good browsing opportunities for game and non-game species. Deer, Turkey and Grouse are the most prevalent game species within the compartment.

Mineral Resource and Development Concerns and/or Restrictions

No known potential exists for commercial metallic mineral production in this part of the state. The nearest known active sand/gravel pits are more than three miles to the southeast and east. There appears to be good potential for sand & gravel within the compartment, but surface mining could be inhibited by oil & gas infrastructure. The compartment is within the Antrim Shale gas play, and the entire area is within Antrim unitized production areas. All State-owned mineral rights in the compartment are currently leased and held by production. It is unlikely that any additional Antrim wells will be drilled in the area in the near future. The State does not own all the mineral rights within the compartment. Because the mineral estate is the dominant estate, the surface owner must provide the owner of the mineral rights reasonable access to the surface for mineral exploration and development.

Vehicle Access:

Mt. Tom Road, Hill Road, Oak Lake Road, and Penn Road are good county roads that provide general access to the compartment. Once within the compartment, there is a large, well established network of forest roads that traverse throughout the compartment.

Survey Needs:

Roughly half of the compartment has been surveyed and has established and accepted corners. The remaining survey needs have been documented and may be resolved through survey requests. There is a need for further surveying in the SW 1/4 of Section 13.

Recreational Facilities and Opportunities:

This compartment provides a diverse range of recreational opportunities from ORV riding to upland bird hunting. The Hunt Creek Motorcycle Trail, Mio ORV Trail/Route and Snowmobile Trail LP 4_9 traverse throughout the compartment. With good access into the compartment and having a diverse range of forest cover types, it provides good habitat for a variety of game and non-game species.

Fire Protection:

There are very few high volatile cover types within the compartment. Jack Pine makes up a very small component, with deciduous species such as aspen, oak and hardwoods dominating. If there is a need for fire protection, the well established road system within the compartment will provide for a quick response and good access.

Additional Compartment Information:

None.

The following reports from the Inventory are attached:

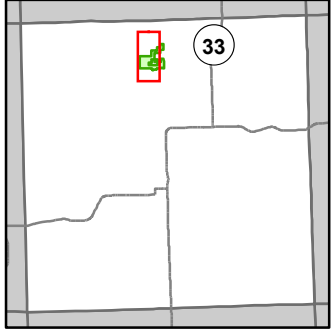
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

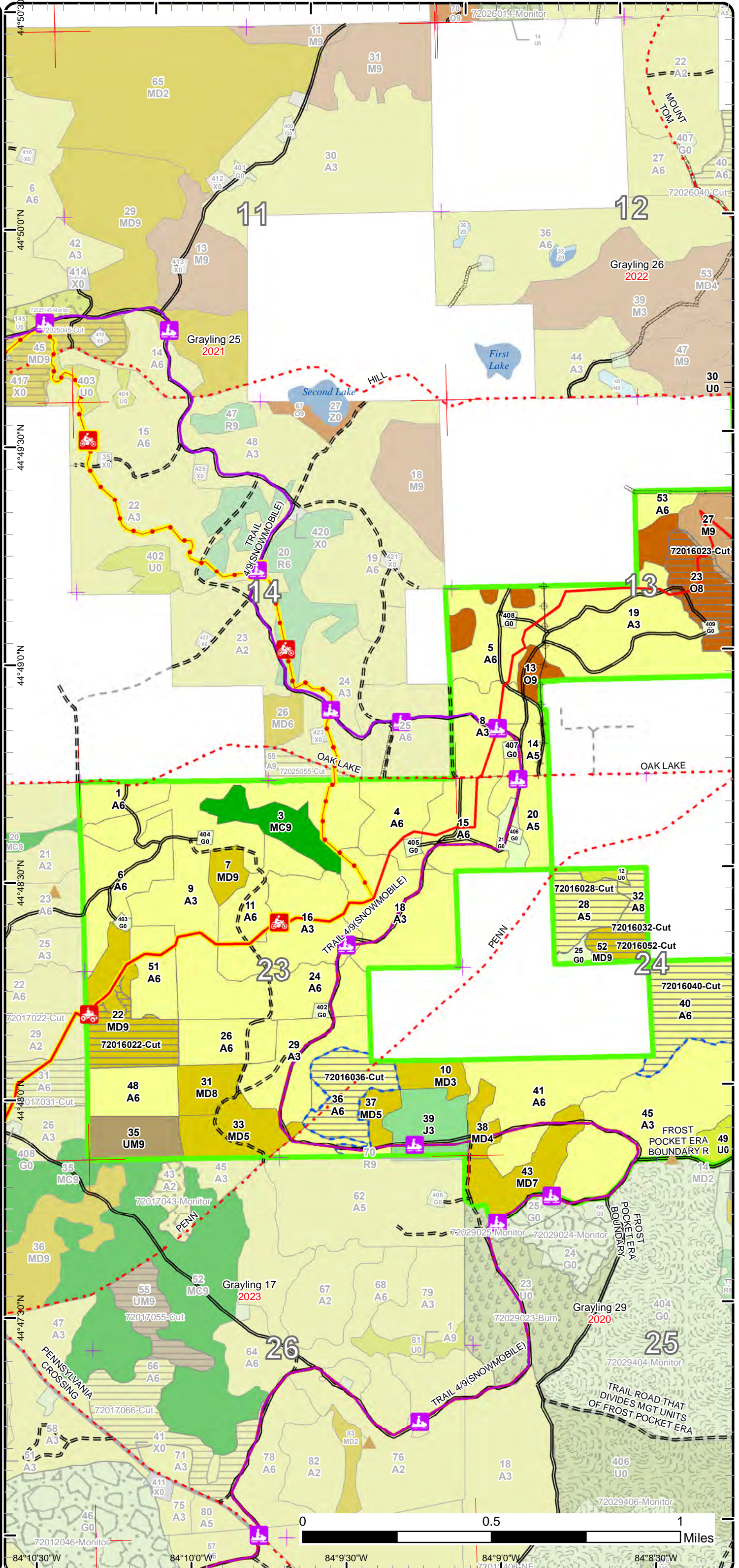
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 16
 T28N, R02E, Sec. 13, 23-25
 County: Oscoda
 Unit: Grayling
 Mgmt Area: AuSable Outwash
 YOE: 2024
 Acres: 1283.9 GIS Calculated
 Examiner: Trevor Kubitskey
 Map Revised: 12/27/2022
 Map Phase: Post-Review

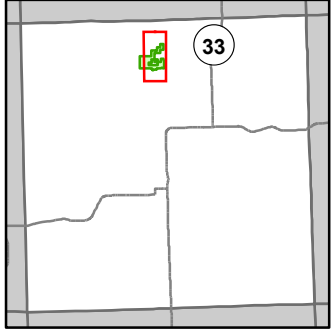


- Miris Corners
- Remonumented Section Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- County - Gravel Road
- Private - Dirt / Gravel Road
- Motorcycle Trails (DNR License)
- MCCCT Trails
- ORV Trails
- ORV Routes
- Snowmobile Trails
- ORV License & Trail Permit
- Designated ATV
- Designated ORV Route
- Designated Snowmobile Trails
- Michigan Cross Country Cycle Trail (MCCCT)
- Intermittent Stream
- Lake/Pond
- Lakes and Rivers
- Berms
- Pipeline
- Powerline
- Compartment Boundary
- Treatments with Site Conditions
- Clearcut (w/Reserves)
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees

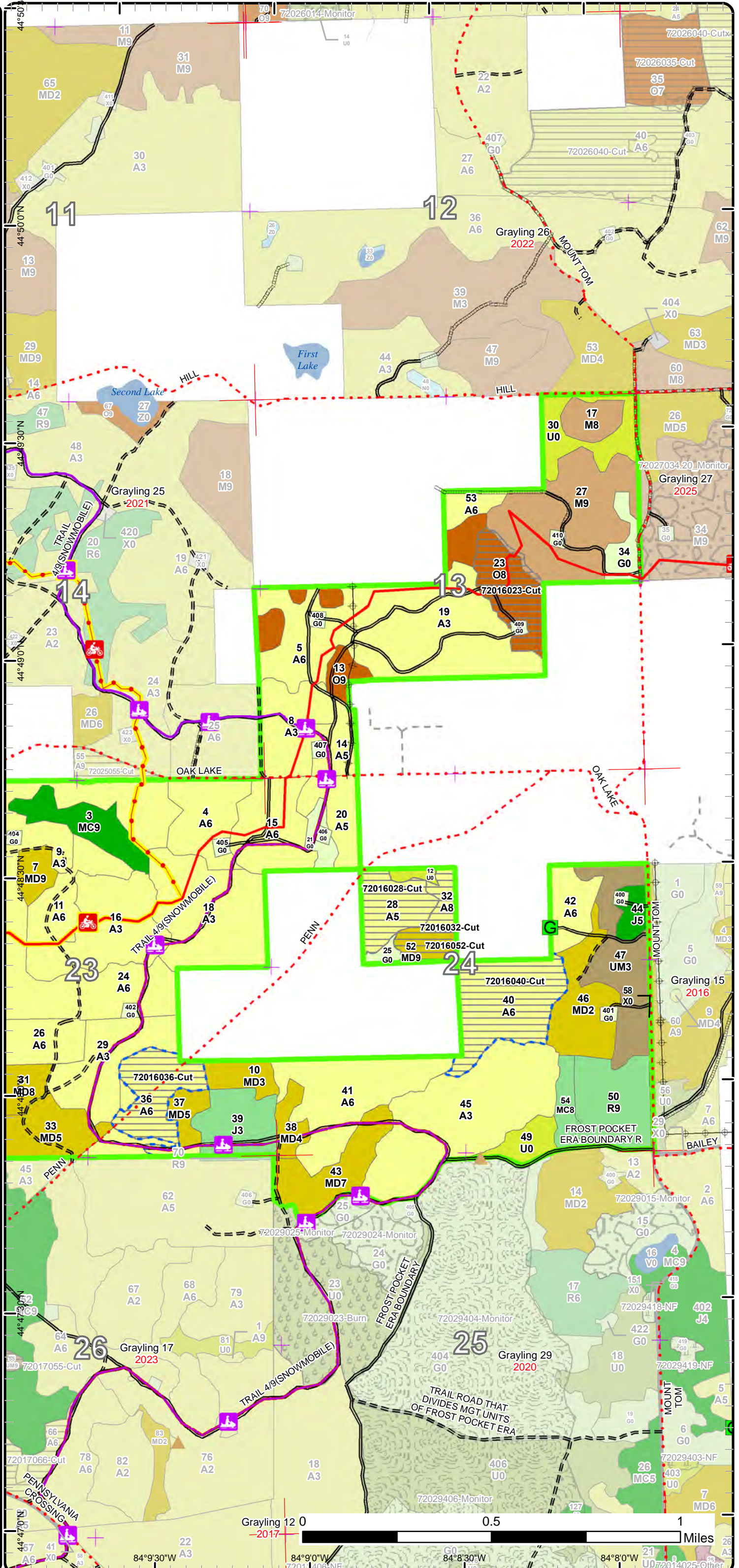


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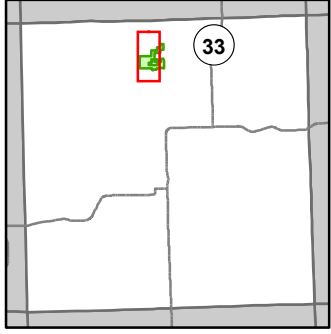


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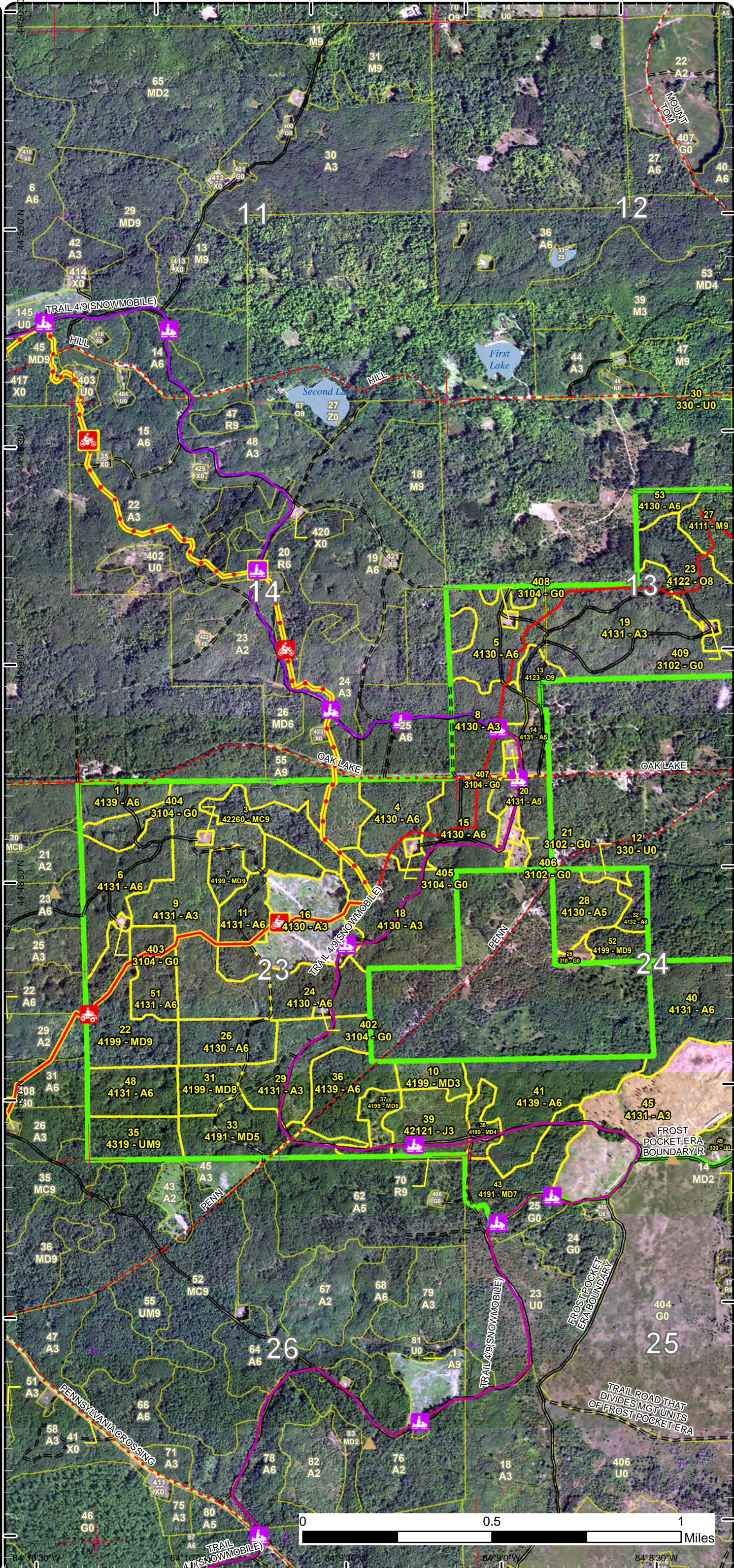


Stand Boundary Map

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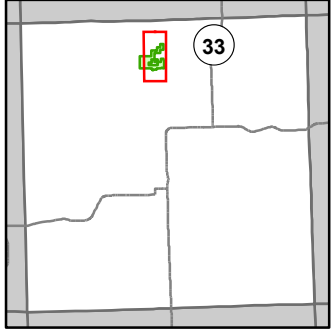


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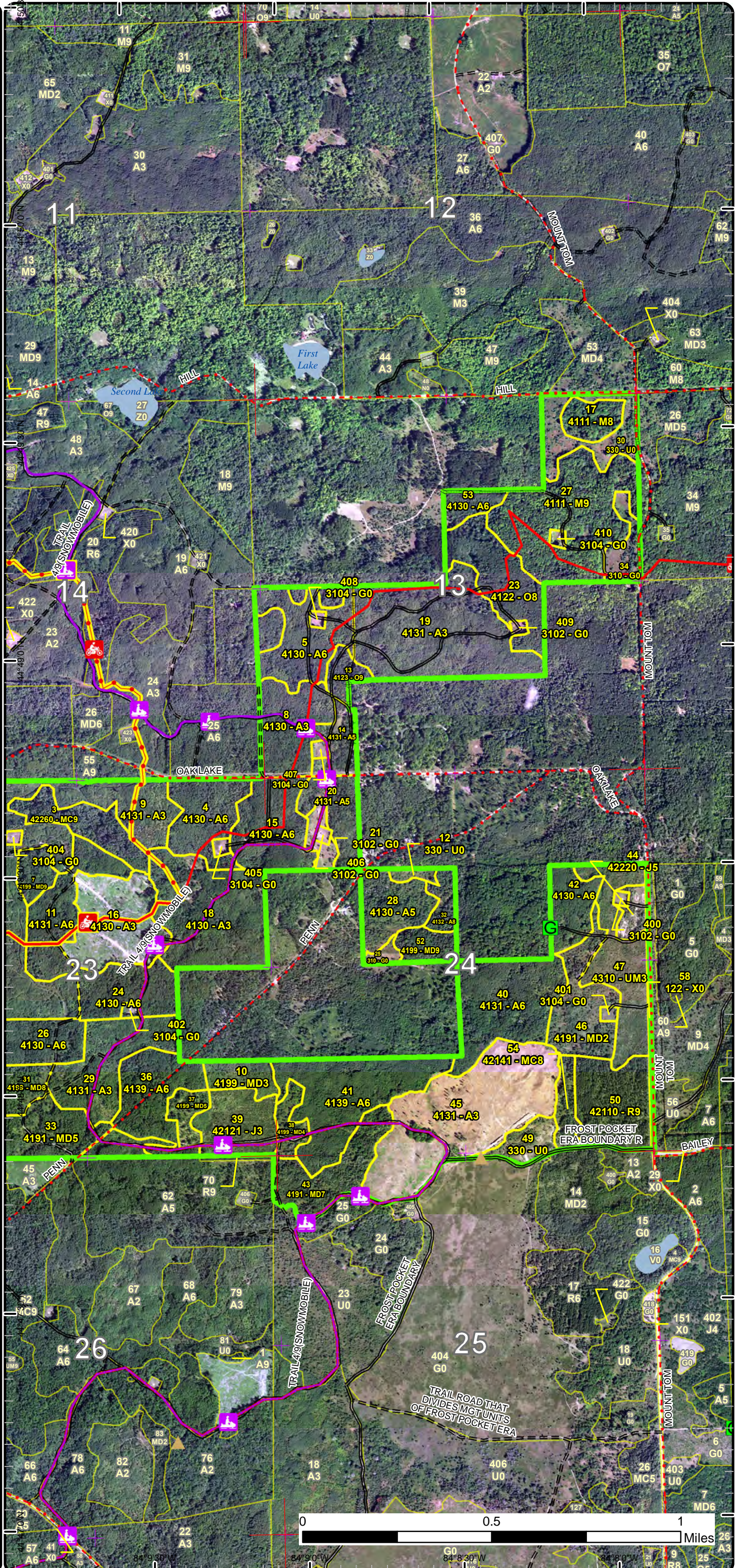


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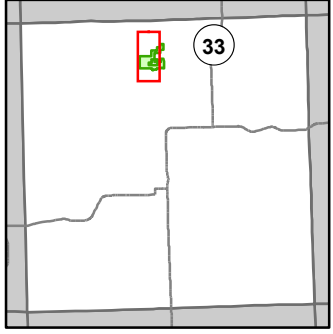


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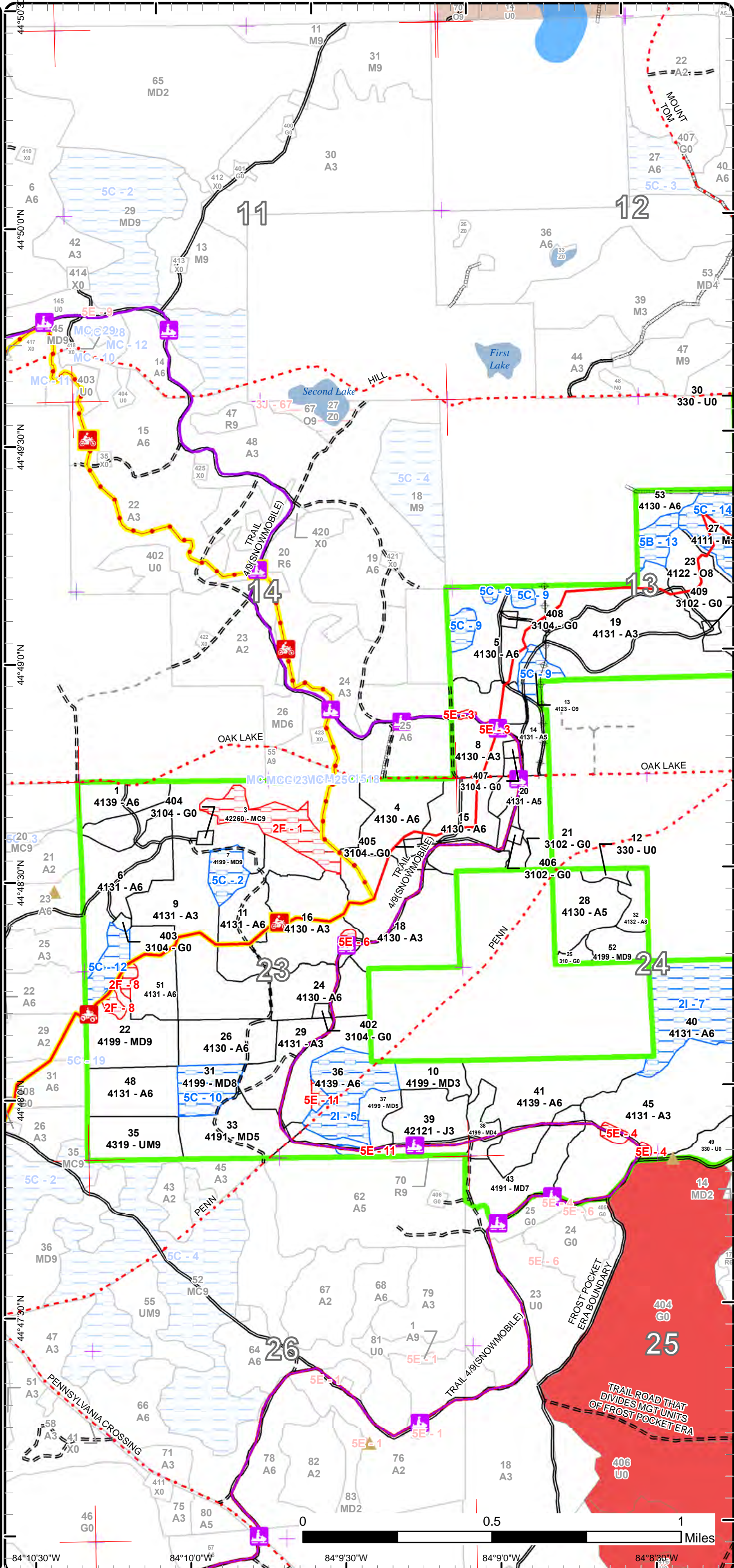


Special Conservation Areas

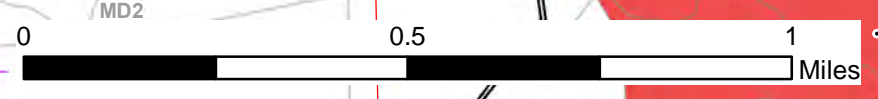
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- Compartment Boundary
- Available w/ Constraints
- 2I: Survey needed
- 5B: Maintain for regeneration purposes
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable
- 2F: Too steep
- 5E: Long-Term Retention
- Stand Boundaries
- Ecological Reference Areas
- High Priority Trout Stream Buffer
- Research, Development, and Military Lands



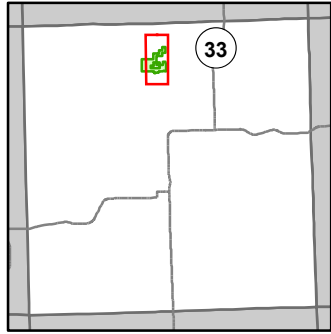
TRAIL ROAD THAT DIVIDES MGT UNITS OF FROST POCKET ERA



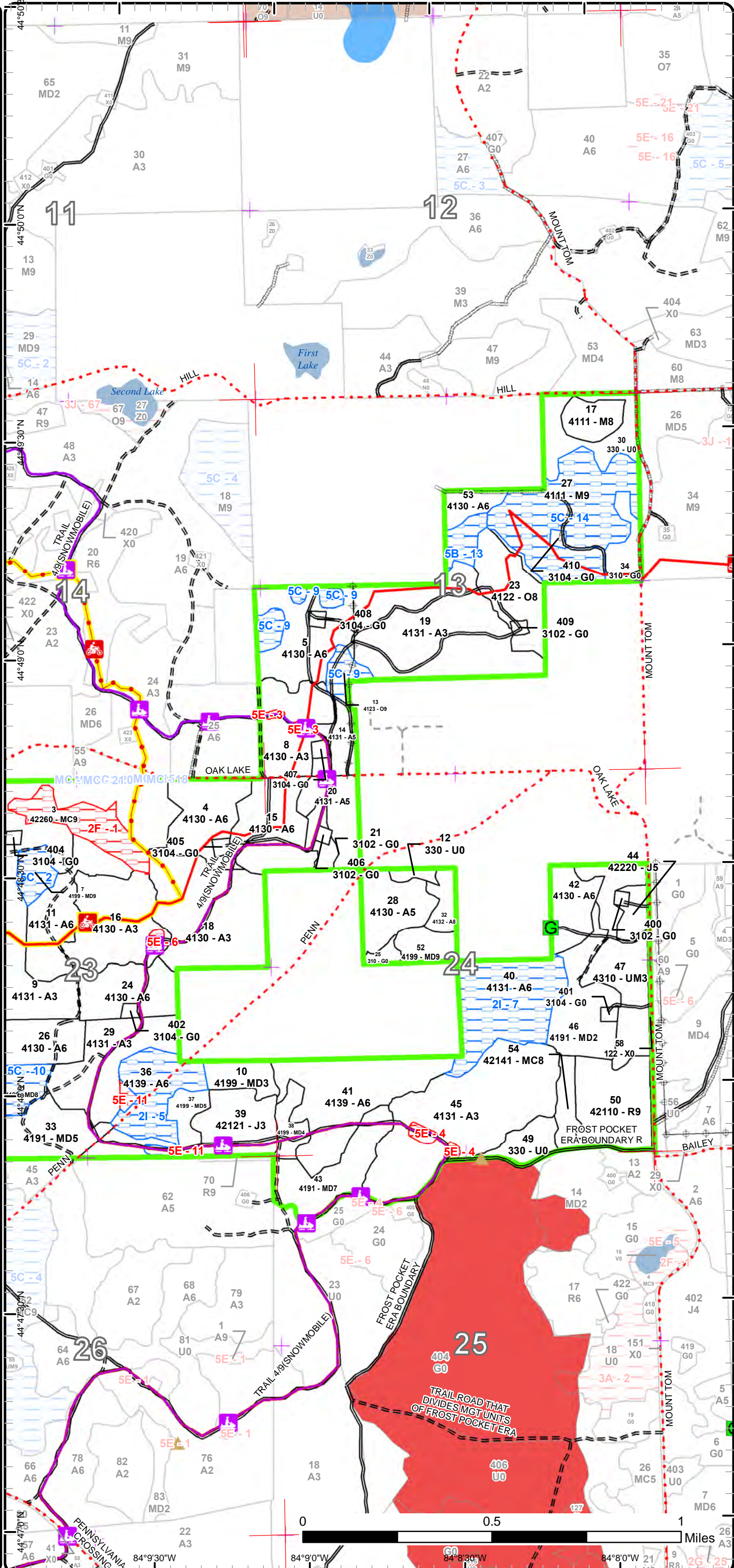
84°10'30"W 84°10'0"W 84°9'30"W 84°9'0"W 84°8'30"W

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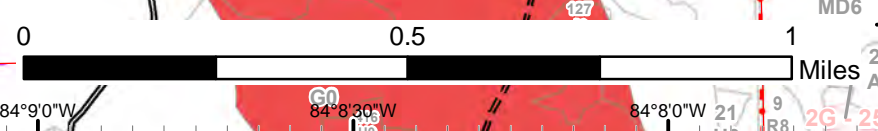
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TRAIL ROAD THAT DIVIDES MGT UNITS OF FROST POCKET ERA



Report 1 – Total Acres by Cover Type and Age Class

Grayling Mgt. Unit

Compartment 16 Year of Entry 2024

Trevor Kubitskey : 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	135	139	186	260	28	59	0	7	0	0	0	0	0	0	0	0	0	813
Herbaceous Openland	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Jack Pine	0	0	22	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	28
Low-Density Trees	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Mixed Upland Deciduous	0	0	36	15	24	25	0	0	0	64	0	0	0	0	0	0	0	0	163
Natural Mixed Pines	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	18
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	68	0	0	0	0	0	0	0	68
Oak	0	0	0	0	0	0	0	0	14	29	0	0	0	0	0	0	0	0	43
Planted Mixed Pines	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	9
Red Pine	0	0	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0	0	29
Upland Mixed Forest	0	0	33	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	51
Urban	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	63	135	230	201	284	53	65	38	44	78	97	0	0	0	0	0	0	0	1285



Report 2 – Treatment Summary

Grayling Mgt. Unit

Year of Entry: 2024

Acres of Harvest

Compartment 16

Total Compartment Acres: 1,284

Commercial Harvest - 81
 Harvests with Site Condition - 65
 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	91	0	0	0	0	0	0	0	0	91
Mixed Upland Deciduous	31	0	0	0	0	0	0	0	0	31
Oak	24	0	0	0	0	0	0	0	0	24
Total	146	0	0	0	0	0	0	0	0	146

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	146	0	0	0	0	0	0	0	0	146
Next Step	0	0	0	0	0	146	24	0	0	169
Total	146	0	0	0	0	146	24	0	0	315



Stand Name	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:

22	72016022-Cut	22.6	4199 - Other Mixed Upland Deciduous	Sawtimber Well	88	141-170	Harvest	Clearcut with Retention	4191 - Mixed Upland Deciduous with Conifer	Even-Aged	No
<p><u>Prescription Specs:</u> Final harvest all trees 2" DBH and up. 3-5% retention focusing on larger diameter pines or large crowned Oaks. Two large/steep depressions have been excluded from the treatment area. Exclude any other kettle holes from the treatment area. These areas may be utilized as retention if deemed sufficient during sale prep.</p> <p><u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Acceptable Regen:</u> Any combination of mixed deciduous species such as oak, red maple, aspen, birch, cherry that meet minimum stocking criteria. Expect some areas to have overall lower stocking levels. If regen levels are not desired, may have to try to expand clone from adjacent aspen stands.</p> <p><u>Other Comment:</u> Protect all legacy trees. Add rec trail protection specs and oak wilt specs. Run red line accordingly to accommodate equipment operability.</p> <p><u>Site Condition:</u></p> <p>Proposed Start Date: 10/1 /2023</p>											

23	72016023-Cut	23.6	4122 - Oak, Pine	Sawtimber Medium	92	111-140	Harvest	Clearcut with Retention	4191 - Mixed Upland Deciduous with Conifer	Even-Aged	No
<p><u>Prescription Specs:</u> Final harvest all trees 2" and up. 5-10% retention focusing around healthy oaks and mixed pine and/or pockets of advanced pine regen. Protect as much non-merchantable pine as possible during harvest operations. Run red line into stand 27 to incorporate some hardwood into the treatment. Treatment has already been adjusted to excluded the NW portion of the stand as it should be managed with the adjacent aspen.</p> <p><u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory); Other,</p> <p><u>Acceptable Regen:</u> Stand will regenerate towards a MD. Accept any combination of Aspen ,red/sugar maple, basswood, birch, cherry, and oak that meet minimum stocking criteria. Accept any amount of advanced or new red/white pine.</p> <p><u>Other Comment:</u> Add Oak Wilt specs, Rec trail protection specs into sale.</p> <p>**Use a different color scheme when setting up sale** There is old paint from previous sale prep and it was never cut. Some topography so run red line accordingly to accommodate equipment operability.</p> <p><u>Site Condition:</u></p> <p>Proposed Start Date: 10/1 /2023</p>											

28	72016028-Cut	19.2	4130 - Aspen	Poletimber Medium	51	81-110	Harvest	Clearcut with Retention	4133 - Aspen, Mixed Pine	Even-Aged	No
<p><u>Prescription Specs:</u> Final Harvest all trees 2" DBH and up. Minimum Retention. Leave all Red and White Pine. Place retention around large Oaks in the south. Add drumming log and wildlife shrub spec.</p> <p><u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Acceptable Regen:</u> Any combination of aspen, mixed deciduous and mixed pines that meet minimum stocking criteria. Expect some areas to have lower stocking and that is OK.</p> <p><u>Other Comment:</u> Based on corner location, there is legal access to this parcel. A road will have to be built into this stand from Penn Rd.</p> <p><u>Site Condition:</u></p> <p>Proposed Start Date: 10/1 /2023</p>											



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Treatment ID	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
32	72016032-Cut	6.7	4132 - Aspen, Jack Pine	Sawtimber Medium	72	51-80	Harvest	Clearcut	4133 - Aspen, Mixed Pine	Even-Aged	No
<p><u>Prescription Specs:</u> Final harvest all trees 2" DBH and up. No retention due to small stand size. DO NOT cut White Pine. Insert drumming log and wildlife shrub protection spec.</p> <p><u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Acceptable Regen:</u> Any component of aspen, mixed deciduous and mixed pine that meet minimum stocking criteria. Expect some areas of lower stocking and that is OK.</p> <p><u>Other Comment:</u> Legal access from Penn Rd.</p> <p><u>Site Condition:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>											
36	72016036-Cut	25.4	4139 - Aspen, Mixed Deciduous	Poletimber Well	49	111-140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	No
<p><u>Prescription Specs:</u> Final harvest all trees 2" DBH and up, standard retention. Do NOT cut White Pine. Retention has already been identified in the west and south portions of the treatment.</p> <p><u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Acceptable Regen:</u> Aspen with a minor component of mixed deciduous and pine.</p> <p><u>Other Comment:</u> Add snowmobile trail protection specs into sale along with Wildlife shrub and drumming log spec.</p> <p><u>Site Condition:</u> Survey Needed</p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>											
40	72016040-Cut	39.8	4131 - Aspen, Oak	Poletimber Well	50	141-170	Harvest	Clearcut with Retention	4131 - Aspen, Oak	Even-Aged	No
<p><u>Prescription Specs:</u> Final harvest 2" DBH and up. Standard retention. Focus retention around large healthy crowned Oak and/or areas of greater Oak establishment. Do not cut any pine. Add Oak wilt specs, drumming log and wildlife shrub specs into sale.</p> <p><u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Acceptable Regen:</u> Aspen with a component of Oak. Other mixed deciduous and mixed conifers are acceptable too. Due to composition and stocking in the stand, some areas may be less stocked and that is OK.</p> <p><u>Other Comment:</u> Survey corner needed in the NE and SW corner.</p> <p><u>Site Condition:</u> Survey Needed</p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>											
52	72016052-Cut	8.5	4199 - Other Mixed Upland Deciduous	Sawtimber Well	80	111-140	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	No
<p><u>Prescription Specs:</u> Final harvest 2" DBH and up. Leave a single island retention to protect the white pine and oak found within the center of the stand. This retention island may not exceed 5%.</p> <p><u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Acceptable Regen:</u> Aspen with a minor component of Oak, Red maple, birch, cherry and pine. Expect areas of lower stocking of oak.</p> <p><u>Other Comment:</u> All corners have been established and have been found.</p> <p><u>Site Condition:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2023</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

Total Treatment
Acreage Proposed: 145.8

Report 4 – Site Conditions

Grayling Mgt. Unit
Trevor Kubitskey : Examiner

Compartment: 16
Year of Entry: 2024

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions				
		With Condition	Not Available		2I	5B	5C	2F	5E
814	742	65	7	Aspen	65		0		7
29	29	0	0	Herbaceous Openland					
28	28	0	0	Jack Pine					
31	31	0	0	Low-Density Trees					
163	131	29	4	Mixed Upland Deciduous			29	4	
19	0	0	19	Natural Mixed Pines				19	
68	11	57	0	Northern Hardwood			57		
43	23	21	0	Oak		7	14		
9	9	0	0	Planted Mixed Pines					
29	29	0	0	Red Pine					
51	51	0	0	Upland Mixed Forest					
3	3	0	0	Urban					
1,286	1,085	171	29	Total Forested Acres	65	7	99	22	7
	84%	13%	2%	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	2F: Too steep	19	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Steep slopes.							
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Hold stand until adjacent aspen is ready. This stand provides good species diversity, mast and vertical structure that is surrounded by young aspen.							
3	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Grayling Mgt. Unit
Trevor Kubitskey : Examiner

Compartment: 16
Year of Entry: 2024

4	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Long Term Retention for Frost Pocket Aspen/Oak Sale							
5	Available	2I: Survey needed	25	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Survey Needed to establish corner in NE part of treatment.							
6	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Retention Island for Stand 16. Part of Frost Pocket Aspen/Oak Sale.							
7	Available	2I: Survey needed	40	5F: Evaluated for Forest Health Considerations	Unspecified	Unspecified	Unspecified
Comments: Northeast and southwest corner needs to be established. Possible Oak wilt found in southwest.							
8	Unavailable	2F: Too steep	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Steep kettle holes/depressions. Operations would be very difficult within these areas.							
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	13	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Keep stand for structural and species diversity.							

Report 4 – Site Conditions

Grayling Mgt. Unit

Trevor Kubitskey : Examiner

Compartment: 16

Year of Entry: 2024

11	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Retention for stand 36.</p>							
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Hold this portion of stand 22. Heavier pine component, less deciduous stocking levels. Would be more beneficial for regeneration purposes to treat with adjacent aspen stands to help increase clones within mixed pine. Also allows to retain some diversity of supercanopy pines as well as some large mast producing oaks in an area dominated by young aspen.</p>							
13	Available	5B: Maintain for regeneration purposes	7	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
<p>Comments: Hold to gain more volume in the sub-canopy. There is a good percentage of sugar maple saps that should be monitored for recruitment success. This portion should be managed with the adjacent aspen stands.</p>							
14	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	57	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Stand just meets silvicultural criteria with an overall BA of 112. Stand needs another 10 years to gain some volume on some of the smaller stems.</p>							

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
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
1	4139 - Aspen, Mixed Deciduous	Poletimber Well	13.7	31	51-80	N/A	Thick aspen stand that is just reaching merchantability. Overall pole with pockets of saps and logs. Composition is variable with areas heavier to oak, cherry, pine and red maple. Bigtooth dominates with the occasional clone of quaking aspen. Heavy conifer influence throughout. There is a small 1 acre mixed pine inclusion in the southwest that is on the cusp of meeting mapping standards. Larger diameter pines and oak left along Oak Lake Rd possibly for visual reasons. Stand is on a south facing aspect that slopes down into the pine inclusion.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Quaking Aspen	10	Pole/Sapling	5		Red Maple	High		5 - 10 feet	Sapling
Red Maple	15	Pole/Sapling	5		Black Cherry	Low		5 - 10 feet	Sapling
Black/Red (Hybrid) Oak	15	Sapling/Pole/Log	3		White Pine	Medium		Variable	Sapling
White Pine	8	Log/Pole	12		Serviceberry (Juneberry)	Low		5 - 10 feet	Tall Shrub
Bigtooth Aspen	45	Pole/Sapling	5	31					
Red Pine	7	Log/Pole	12						
3	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	18.5	79	141-170	N/A	Nice mixed pine stand within a valley. Majority of stand is a north facing slope with some very steep areas. Red pine were measured varying from 11" DBH up to 30" DBH. A few red pine are declining opening up canopy gaps. There isn't much development in the sub canopy besides thick red maple saplings and a lot of downed woody debris. Over mature aspen throughout. More gradual slopes in the east.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Quaking Aspen	20	Log/XLog	14		Red Maple	High		5 - 10 feet	Sapling
Bigtooth Aspen	5	Log/XLog	14		White Pine	Trace		< 5 feet	Seeding
Red Pine	25	XLog/Log	22		Black/Red (Hybrid) Oak	Low		5 - 10 feet	Sapling
Red Maple	5	Log/Pole	11		Hawthorn (spp.)	Low		5 - 10 feet	Tall Shrub
White Pine	45	Log/Pole/XLog	12	79	Black Cherry	Low		5 - 10 feet	Sapling
4	4130 - Aspen	Poletimber Well	23.8	38	81-110	N/A	Variable quality stand. Rolling terrain throughout which appears to influence quality and diameters. Southern portions near the gas well small poles, thick, brushy understory and moving into the west/north portions diameters and quality increase. Small depressions in the eastern areas have more scrubby aspen, oak with a denser understory. Red maple density increases moving north. ORV Trail runs through stand.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Northern Pin Oak	10	Pole/Log	8		Hawthorn (spp.)	Low		5 - 10 feet	Tall Shrub
Quaking Aspen	50	Pole/Log/Sap	6	38	Serviceberry (Juneberry)	Medium		10 - 20 feet	Tall Shrub
Bigtooth Aspen	20	Pole	7	38	Red Maple	Medium		5 - 10 feet	Sapling
Red Pine	1	Log	10		Black Cherry	Medium		5 - 10 feet	Sapling
White Pine	4	Log/Pole	10		Honeysuckle (spp.)	Trace		< 5 feet	Tall Shrub
Black Cherry	5	Pole	6		Northern Pin Oak	Medium		5 - 10 feet	Sapling
Red Maple	10	Sapling	4						
5	4130 - Aspen	Poletimber Well	29.1	38	81-110	N/A	Final harvested in 1984. Whole tree skid. Very little conifer component. Composition and quality is fairly consistent throughout with a few scattered pockets of lower quality quaking aspen. Some pockets of log bigtooth present.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Quaking Aspen	10	Pole	7		Sugar Maple	Medium		10 - 20 feet	Sapling
Red Maple	15	Pole	6		Ironwood	Low		5 - 10 feet	Sapling
Red Oak	5	Pole	6		Hawthorn (spp.)	Low		< 5 feet	Tall Shrub
Bigtooth Aspen	50	Pole	7	38	Red Oak	Low		5 - 10 feet	Sapling
White Pine	1	Pole	8		Witch Hazel	Low		5 - 10 feet	Tall Shrub
Red Pine	1	Pole	8						
Paper Birch	8	Pole/Sapling	5						
Black Cherry	10	Pole/Sapling	6						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
6	4131 - Aspen, Oak	Poletimber Well	32.5	35	81-110	N/A	Dominated by aspen. Intermixed oak, red maple and white pine. Oak present in clumps and single stems. Rolling topography within. Stand looks healthy, overall pole. Nice aspen logs in the south near the gas well. Scattered depressions within the stand.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen		50	Pole/Log	8	35	Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub
Black/Red (Hybrid) Oak		25	Pole/Sap/Log	7		Black/Red (Hybrid) Oak	Medium	Variable	Sapling
White Pine		5	Log/Pole	12		Hawthorn (spp.)	Low	< 5 feet	Tall Shrub
Red Maple		5	Pole	6		Red Maple	High	10 - 20 feet	Sapling
Quaking Aspen		15	Pole	7	35	White Pine	Low	10 - 20 feet	Sapling
7	4199 - Other Mixed Upland Deciduous	Sawtimber Well	7.5	81	111-140	N/A	Nice pocket of mature timber in between young aspen stands. Good quality oak within this stand along with fairly healthy aspen and red maple. Canopy is somewhat closer to 75% due to some mortality pockets of birch and quaking aspen. Decent Oak establishment in sub-canopy.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Paper Birch		10	Log/Pole	10		Red Maple	Medium	5 - 10 feet	Sapling
Red Oak		30	Log/XLog/Pole	16	81	White Pine	Low	5 - 10 feet	Sapling
Bigtooth Aspen		30	Log	14		Black/Red (Hybrid) Oak	High	Variable	Sapling
White Pine		2	Log	11		Witch Hazel	Low	5 - 10 feet	Tall Shrub
Red Maple		28	Log/Pole	11					
8	4130 - Aspen	Sapling Well	26.0	5	Immature	N/A	Oak Lake Rd Harvest 72-053-15. Good regen throughout. Some areas have better stocking of oak. Snowmobile and motorcycle trail runs through stand. Scattered Red Pine and Oak logs left.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Oak		10	Pole/Sapling	5		Black Cherry	Low	< 5 feet	Sapling
Red Maple		28	Sapling	1	5	Witch Hazel	Low	5 - 10 feet	Tall Shrub
Red Pine		2	Log	10					
Bigtooth Aspen		60	Sapling	1	5				
9	4131 - Aspen, Oak	Sapling Well	100.3	16	Immature	N/A	Stand harvested in 2006. Very large, fairly consistent aspen stand with patches of pure oak intermixed in. Due to rolling terrain, there are some pockets of quaking aspen found in some depressions and valleys. The northern strip contains a large south facing slope with mostly oak clumps and some scattered. The finger that extends to the west runs through a valley and contains a larger density of conifers compared to the rest of the stand.. The rest of the stand (central to the south) is rolling with thick aspen throughout. Not as well stocked in the north as it is in the rest of the stand. Majority of stand is sapling size with scattered poles intermixed.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Paper Birch		5	Sapling	3		Red Maple	Low	5 - 10 feet	Sapling
Red Maple		10	Sapling	3		Black/Red (Hybrid) Oak	Medium	5 - 10 feet	Sapling
Quaking Aspen		10	Sapling	3		Black Cherry	Medium	5 - 10 feet	Sapling
Bigtooth Aspen		50	Sapling/Pole	3	16	Hawthorn (spp.)	Low	< 5 feet	Tall Shrub
Black/Red (Hybrid) Oak		25	Sapling	3					
10	4199 - Other Mixed Upland Deciduous	Sapling Well	9.6	16	Immature	N/A	Harvested in 2006 with stand 39 to the south. Was originally going to be planted to jack pine but was left to naturally regenerate. Mix of deciduous species with a minor conifer component. Very thick stand.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
White Pine		1	Pole	4		Quaking Aspen	Low	< 5 feet	Sapling
Jack Pine		10	Sapling	3		Red Maple	Low	< 5 feet	Sapling
Black Cherry		8	Sapling	2	16	Hawthorn (spp.)	Medium	< 5 feet	Tall Shrub
Red Pine		1	Pole	5		Black Cherry	Medium	5 - 10 feet	Sapling
Red Maple		10	Sapling/Pole	3		Black/Red (Hybrid) Oak	Medium	< 5 feet	Sapling
Quaking Aspen		35	Sapling	3					
Black/Red (Hybrid) Oak		35	Sapling/Pole	3	16				



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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11	4131 - Aspen, Oak	Poletimber Well	26.5	36	81-110	N/A	Quality increases moving north. Larger diameters found in the norther portion. Aspen is variable. Oak size classes are also variable with a good density of oak saps within the 10-20 ft range in the sub-canopy. Old notes mention to let aspen fall out and let oak come up underneath. The southern portion is beginning to do this. Poorer quality quaking is giving way to oak.																																																																
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12	330 - Low-Density Trees	Nonstocked	2.6	0	Unspecified	No	Small, upland brush stand. Separated out of adjacent stand due to composition and overall stocking. There isn't enough merchantable species within this stand to call it apart of stand 28.														
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13	4123 - Red Oak	Sawtimber Well	14.3	86	111-140	N/A	Multi-polygon stand that was essentially thinned in 1984 removing all aspen, red maple, birch, and cherry. The understory composition varies from polygon. The far west, and two northern portions have very little understory development besides red maple saplings and witch hazel and are dominated with oak in the overstory. The southern polygon appears to have a lower site quality with poorer quality hybrid oak with more of a Mixed deciduous cover type. This polygon also has a higher density of hawthorn and sub-canopy oak development.																																													
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14	4131 - Aspen, Oak	Poletimber Medium	10.4	38	51-80	N/A	No records of timber sale. Appears to have been harvested around the same time as stand 5 to the north. Higher oak canopy density moving north. Very scrubby, brushy stand appearance with variable merchantability. Oak and pine establishment and recruitment fairly good in areas of lower canopy cover. Aspen looks ok. If aspen starts to fall out, it will give way to the oak underneath. pole sized aspen stand. somewhat patchy. quality is fair. snowmobile trail passes through stand. do nothing, should hold for another ten pretty easily.																																																																				
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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15	4130 - Aspen	Poletimber Well	28.4	38	81-110	N/A	Overall nice aspen stand. Scattered pockets of quaking aspen in lower quality areas. Stand is healthy. Fairly consistent stand with majority true pole sized and pockets of logs. ORV trail and Snowmobile trail run through stand. Thick red maple understory. some topography in the sw corner.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Bigtooth Aspen		50	Pole/Log	9	38	Serviceberry (Juneberry)		Medium	5 - 10 feet	Tall Shrub	
Paper Birch		5	Pole	8		Red Maple		High	10 - 20 feet	Sapling	
White Pine		4	Log/Pole/XLog	12		White Pine		Low	5 - 10 feet	Sapling	
Red Maple		15	Pole	7		Black/Red (Hybrid) Oak		Medium	Variable	Sapling	
Red Pine		1	Log	15		Paper Birch		Low	10 - 20 feet	Sapling	
Black/Red (Hybrid) Oak		15	Pole/Log	8		Hawthorn (spp.)		Low	5 - 10 feet	Tall Shrub	
Quaking Aspen		10	Pole/Log	8	38						

16	4130 - Aspen	Sapling Well	34.6	6	Immature	N/A	Harvested as part of Frost Pocket Aspen/Oak sale in 2016. Aspen regenerating very well. Pockets of 'better' Oak regen. There are some scattered clones of quaking aspen. Passed regen check 11/9/21. Small pocket in NE uncut due to topography.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Maple		10	Sapling	1		Witch Hazel		Low	< 5 feet	Tall Shrub	
Bigtooth Aspen		65	Sapling	1	6	Black/Red (Hybrid) Oak		Medium	< 5 feet	Seeding	
Black/Red (Hybrid) Oak		15	Sapling	1		Red Maple		Low	< 5 feet	Sapling	
Quaking Aspen		5	Sapling	1		White Pine		Low	< 5 feet	Seeding	
Black Cherry		4	Sapling	1							
White Pine		1	Log	12							

17	4111 - S.Maple, Hard Mast Association	Sawtimber Medium	9.9	96	81-110	N/A	Nice inclusion of hardwood. Steep terrain in the northern portion of the stand. Old homestead, pastureland appearance. Open grown sugar maple throughout with overmature basswood. Does have nice sugar maple regeneration underneath.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Paper Birch		5	Log	12		Black Cherry		Low	5 - 10 feet	Sapling	
Bigtooth Aspen		10	Pole/Log	8		White Pine		Low	Variable	Sapling	
Beech		5	Log	10		Green Ash		Medium	10 - 20 feet	Sapling	
Sugar Maple		40	Log/XLog/Pole	14	96	Sugar Maple		Medium	10 - 20 feet	Sapling	
Red Oak		5	Log	10		Ironwood		Medium	5 - 10 feet	Sapling	
White Pine		5	XLog	20							
Basswood		30	Log/XLog	15							

18	4130 - Aspen	Sapling Well	51.0	28	Immature	N/A	Harvested in 1994. Very hilly with ridges, valleys and some kettle holes. Very diverse stand. Better quality, larger diameters on the ridges, with most quaking aspen found in the valleys and some slopes. Scattered Red Pine Logs. Does contain a small scramble area in the western portion along the ORV trail. Thick understory. Nice healthy stand. Higher conifer component in NW. Majority of stand is just reaching merchantability, some scattered pockets of true poles.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Quaking Aspen		10	Pole/Sapling	5		White Pine		Low	Variable	Sapling	
Red Pine		2	Log/Pole/XLog	10		Black Cherry		High	5 - 10 feet	Sapling	
Black Cherry		5	Sapling/Pole	4		Serviceberry (Juneberry)		Medium	5 - 10 feet	Tall Shrub	
American Elm		1	Pole	7		Hawthorn (spp.)		Medium	< 5 feet	Tall Shrub	
Red Maple		10	Sapling/Pole	4		Red Pine		Trace	< 5 feet	Sapling	
Black/Red (Hybrid) Oak		10	Sapling/Pole	4		Black/Red (Hybrid) Oak		High	5 - 10 feet	Sapling	
White Pine		2	Pole/Log/Sap	9							
Bigtooth Aspen		60	Pole/Sapling	5	28						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
19	4131 - Aspen, Oak	Sapling Well	67.1	28	1-50	N/A	Cut in 1994. Old imagery (1998 DOQ) shows sale boundary very well. Stand has pockets of poles, but overall walking through, it isn't consistently a pole size stand. Oak established very well. Some pockets of poorer quality quaking aspen. Rolling topo with ridges and valleys. Rec trail runs through stand. Areas of lower aspen stocking yields a greater density of oak. Scattered large diameter red pines in the northern portion of the stand.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Black Cherry		5	Sapling/Pole	4		Red Maple		Medium	5 - 10 feet	Sapling
Quaking Aspen		5	Sapling/Pole	4	28	Black/Red (Hybrid) Oak		Low	< 5 feet	Seeding
Red Maple		5	Sapling/Pole	4		Black/Red (Hybrid) Oak		High	10 - 20 feet	Sapling
White Pine		5	Pole/Sap/Log	6		Hawthorn (spp.)		Low	< 5 feet	Tall Shrub
Red Pine		5	Log/Pole/XLog	13		Serviceberry (Juneberry)		Low	5 - 10 feet	Tall Shrub
Paper Birch		5	Pole/Sapling	5		Witch Hazel		Low	5 - 10 feet	Tall Shrub
Black/Red (Hybrid) Oak		20	Sapling/Pole	4		White Pine		Low	< 5 feet	Seeding
Bigtooth Aspen		50	Pole/Sapling	5	28					
20	4131 - Aspen, Oak	Poletimber Medium	15.8	34	51-80	N/A	Mixed aspen stand. Composition and diameters vary. Northern portions contain smaller poles/saps with denser oak stocking in the NE. Moving south aspen diameters increase to some scattered small logs in the far south. Good overall oak establishment throughout. Scattered canopy gaps with mostly cherry, oak and pine saplings. Very dense hawthorn throughout.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Northern Pin Oak		30	Pole/Sap/Log	7		White Pine		Low	5 - 10 feet	Sapling
Jack Pine		5	Pole	8		Northern Pin Oak		Medium	5 - 10 feet	Sapling
Black Cherry		10	Pole/Sapling	6		Black Cherry		Medium	Variable	Sapling
Quaking Aspen		50	Pole/Sapling	7	34	Serviceberry (Juneberry)		Low	10 - 20 feet	Tall Shrub
White Pine		5	Log	10		Hawthorn (spp.)		Medium	Variable	Tall Shrub
						Red Maple		Low	10 - 20 feet	Sapling
21	3102 - Grass	Nonstocked	5.6		Unspecified	No	Scattered pine, cherry, oak and various wildlife shrubs scattered in pockets. Sedge and knap weed.			
Sub-Canopy Species		Density	Avg. Height	Size						
Red Pine		Low	>20 feet	Log						
Black Cherry		Medium	10 - 20 feet	Tall Shrub						
Northern Pin Oak		Low	5 - 10 feet	Tall Shrub						
22	4199 - Other Mixed Upland Deciduous	Sawtimber Well	35.0	88	141-170	N/A	Nice mixed stand. Variable composition varying from scattered pine pockets, to upland ridges with nice log/XLog oak with intermixed red maple and overmature aspen. Hilly terrain with depressions throughout. Ridges and valleys present with changing site quality. Moving south and east Red Oak transitions into more of a black/red hybrid (quality decreases) and more declining aspen. Very nice pine with legacy trees present. Subcanopy development is non existent unless within a canopy gap. ORV trail runs through stand. Birch is falling out of stand, and aspen is soon behind. Old fire scars on stumps, stand possibly established by fire. Previous SI is 58.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Oak		30	Log/XLog	15	88	American Elm		Trace	>20 feet	Pole
Paper Birch		5	Log/Pole	11		White Pine		Low	Variable	Sapling
Bigtooth Aspen		30	Log/XLog	14		Black Cherry		Medium	5 - 10 feet	Sapling
White Pine		10	Log/XLog	16		Hawthorn (spp.)		Low	5 - 10 feet	Tall Shrub
Sugar Maple		1	Pole	9		Red Oak		Low	< 5 feet	Seeding
Red Pine		4	XLog/Log	18		Serviceberry (Juneberry)		Medium	5 - 10 feet	Tall Shrub
Black/Red (Hybrid) Oak		5	Log/Pole	13						
Red Maple		15	Log	12						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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23 4122 - Oak, Pine Sawtimber Medium 29.0 92 111-140 N/A This was originally under contract 72-53-15 but was not cut. It was harvested in 1995 removing everything but pine and oak. Very good quality oak stand. Highly diverse understory but not much development besides white pine and red maple. The white pine development in the understory is very significant varying in size. Small pockets of oak were observed to have minor decline; stocking levels in these pockets were very high along with smaller diameters so I would assume competition was too high. Legacy trees scattered throughout with rolling topo and scattered hemlock inclusions.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
White Pine	25	Log/XLog/Pole	16		Red Oak	Low	10 - 20 feet	Sapling
Red Pine	10	Log/XLog	15		Hemlock	Low	>20 feet	Pole
Red Maple	5	Log	10		Red Oak	Low	< 5 feet	Seeding
Red Oak	60	Log/Pole/XLog	14	92	White Pine	High	Variable	Sapling
					Ironwood	Low	5 - 10 feet	Sapling
					Red Pine	Low	5 - 10 feet	Sapling
					Sugar Maple	Low	10 - 20 feet	Sapling
					Witch Hazel	Medium	5 - 10 feet	Tall Shrub
					Striped Maple	Low	10 - 20 feet	Sapling
					White Pine	Medium	< 5 feet	Seeding
					Red Maple	High	10 - 20 feet	Sapling
					Beech	Low	5 - 10 feet	Sapling

24 4130 - Aspen Poletimber Well 22.0 38 81-110 N/A Harvested in 1984. Somewhat variable in quality and stocking. Moving east quality and stocking increases. Some pockets in the west have poor quality quaking aspen that appear to be stunted or already in decline. Oak is mostly stump sprout origin with some scattered single stems present. Larger diameter Oak logs in the east. Scattered aspen logs.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Black/Red (Hybrid) Oak	15	Pole/Log	8		Black Cherry	Low	5 - 10 feet	Sapling
Bigtooth Aspen	51	Pole	7	38	Serviceberry (Juneberry)	Medium	10 - 20 feet	Tall Shrub
Quaking Aspen	10	Pole	6	38	Witch Hazel	Low	5 - 10 feet	Tall Shrub
Red Maple	20	Sapling	4		Black/Red (Hybrid) Oak	Medium	Variable	Sapling
White Pine	2	Pole	8					
Red Pine	2	Pole	8					

25 310 - Herbaceous Openland Nonstocked 2.5 0 Unspecified No Upland brush/low density tree stand. Not managed.

Sub-Canopy Species	Density	Avg. Height	Size
Quaking Aspen	Low	10 - 20 feet	Sapling
Jack Pine	Low	>20 feet	Pole
Black Cherry	Low	10 - 20 feet	Tall Shrub

26 4130 - Aspen Poletimber Well 19.5 38 81-110 N/A Size and quality variable. Eastern portions contain lower quality quaking, with central portions dominated by better quality bigtooth. Oak establishment in the canopy increases in the western portions giving way to thickets of hawthorn underneath.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen	40	Pole	7	38	Black Cherry	Low	5 - 10 feet	Sapling
Red Maple	15	Pole	6		Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub
Black Cherry	10	Pole/Sapling	5		Northern Pin Oak	Low	Variable	Sapling
Quaking Aspen	20	Pole	7		Witch Hazel	Medium	5 - 10 feet	Tall Shrub
Northern Pin Oak	15	Pole/Sapling	6		Hawthorn (spp.)	High	5 - 10 feet	Tall Shrub



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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27	4111 - S.Maple, Hard Mast Association	Sawtimber Well	57.8	96	111-140	N/A	Thinned in 1997 removing all aspen and birch. Various hardwood species (red/sugar maple, basswood, beech, ash) were thinned. Overall really good quality maple and oak. Most basswood is becoming over mature and starting to show signs of decline. The majority of the standing beech is healthy with no signs of scale but there are pockets of infected beech within the stand. Cankers are present on some of the sugar maple. There are areas of intermediate/co-dominant large pole/small log sugar maple within the canopy with areas of sub canopy maple saplings starting to show signs of stagnation with flattening out leaders. Scattered pine inclusions along with hemlock in the eastern portions. Hilly terrain that appears very rocky. Northern areas show signs of old pastureland with large open grown sugar maple. These areas are were the most maple seedlings are found. Scattered birch clones along northern edge. Oak very healthy. Edges along roads and pine inclusions have significant sugar maple establishment.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Beech		8	Log/Pole	10		Green Ash		Medium	Variable	Sapling	
Basswood		20	Log	16		Autumn Olive		Trace	5 - 10 feet	Tall Shrub	
Sugar Maple		55	Log/Pole/XLog	12	96	Sugar Maple		Trace	10 - 20 feet	Sapling	
Red Oak		10	XLog/Log/Pole	20		Red Oak		Trace	< 5 feet	Seeding	
Paper Birch		3	Pole	7		Sugar Maple		Low	< 5 feet	Seeding	
Hemlock		2	Pole	7		Ironwood		Low	5 - 10 feet	Sapling	
Red Pine		1	XLog	21		Beech		Full	5 - 10 feet	Sapling	
White Pine		1	Log/XLog/Pole	16		White Pine		Low	Variable	Sapling	

28	4130 - Aspen	Poletimber Medium	19.2	51	81-110	N/A	Variable declining aspen stand. Somewhat difficult to type out due to variability. Heavy, brushy understory in the northern portion containing mostly young conifer and oak saplings. Canopy cover increases in the central portion where aspen stocking is higher as well as some nice Log Oak/red maple. Towards the south and east, the stocking decreases again moving into a more upland brush appearance with scattered clones of aspen. Northern portion is in a valley with a gradual slope upwards moving south. Age from dominant aspen averaged to 50 years old.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Maple		5	Pole/Log	9		Black/Red (Hybrid) Oak		Medium	5 - 10 feet	Sapling	
Red Pine		5	Pole	7		Black Cherry		Low	5 - 10 feet	Sapling	
White Pine		5	Log/Pole	12		Hawthorn (spp.)		Low	5 - 10 feet	Tall Shrub	
Black/Red (Hybrid) Oak		10	Pole/Log	8		Quaking Aspen		Low	5 - 10 feet	Sapling	
Quaking Aspen		70	Pole/Log/Sap	8	51	Red Maple		Medium	5 - 10 feet	Sapling	
Black Cherry		5	Pole	6		Red Pine		Low	5 - 10 feet	Sapling	
						White Pine		Medium	Variable	Sapling	

29	4131 - Aspen, Oak	Sapling Well	38.6	16	Immature	N/A	Stand harvested in 2006 - Raccoon Red Pine. Parent stand was a mature Red Pine stand that was left to convert. Scattered areas of advanced Oak and Aspen regen. Variable composition throughout with small natural jack pine inclusion in the south east. Currently it appears that the oak is keeping up with the aspen in the canopy in some areas. There is a small inclusion in the far south along the snowmobile trail that was left from the 2006 harvest. There are no notes that mention if it was Long Term Retention or not. Snowmobile trail runs through stand.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Black Cherry		5	Sapling	3		Black Cherry		Medium	5 - 10 feet	Sapling	
Red Pine		2	Log	12		Serviceberry (Juneberry)		Low	5 - 10 feet	Tall Shrub	
Jack Pine		10	Sapling	4		White Pine		Low	5 - 10 feet	Sapling	
Red Maple		5	Sapling	3		Black/Red (Hybrid) Oak		High	Variable	Sapling	
Bigtooth Aspen		35	Sapling/Pole	4	16	Red Pine		Low	< 5 feet	Sapling	
Quaking Aspen		10	Sapling	3	16	Witch Hazel		Low	5 - 10 feet	Tall Shrub	
Black/Red (Hybrid) Oak		33	Sapling/Pole	4							

30	330 - Low-Density Trees	Nonstocked	18.5	0	Unspecified	No	Possible old homestead site. Rolling terrain with thickets of pine and intermixed deciduous species. Could be an MD4 or a non-forested stand.
Sub-Canopy Species		Density	Avg. Height	Size			
Hawthorn (spp.)		Low	5 - 10 feet	Tall Shrub			
Red Oak		Low	>20 feet	Pole			
Apple (spp.)		Low	>20 feet	Sapling			
Smooth Sumac		Medium	5 - 10 feet	Tall Shrub			
Sugar Maple		Low	10 - 20 feet	Sapling			
Black Walnut		Low	>20 feet	Log			
White Pine		Medium	5 - 10 feet	Sapling			
White Pine		Medium	>20 feet	Pole			



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
31	4199 - Other Mixed Upland Deciduous	Sawtimber Medium	12.5	81	111-140	N/A	Site quality appears to decrease moving west to east. Good quality log. Aspen and oak are doing ok with some minor mortality noted. Bigtooth transitions into quaking moving east towards the road. The canopy cover decreases dramatically to the east as well where mortality in the overstory aspen is higher. Better sub-canopy development in the east. Clean sub-canopy in the west. Heavy deer browse on red maple and oak in sub canopy.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Paper Birch		10	Log/Pole	12		Red Maple		Medium	5 - 10 feet	Sapling	
Quaking Aspen		10	Log	13		Black/Red (Hybrid) Oak		Medium	< 5 feet	Seeding	
Red Pine		5	Log	16		White Pine		Medium	5 - 10 feet	Sapling	
Black/Red (Hybrid) Oak		30	Log/XLog	15	81	Aspen (spp.)		Low	5 - 10 feet	Sapling	
Bigtooth Aspen		20	Log	14							
White Pine		5	Log	16							
Red Maple		20	Log/Pole	11							
32	4132 - Aspen, Jack Pine	Sawtimber Medium	6.8	72	51-80	N/A	Over mature jack pine and aspen. Thick understory and blowdown present. Mixed sub-canopy of red maple and oak in the north.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Jack Pine		35	Log/XLog	13	76	Quaking Aspen		Low	10 - 20 feet	Sapling	
Quaking Aspen		60	Log/Pole	12	72	White Pine		Low	5 - 10 feet	Sapling	
White Pine		5	Pole	8		Jack Pine		Low	10 - 20 feet	Sapling	
						Red Maple		Medium	5 - 10 feet	Sapling	
						Hawthorn (spp.)		High	5 - 10 feet	Tall Shrub	
						Black/Red (Hybrid) Oak		Medium	5 - 10 feet	Sapling	
33	4191 - Mixed Upland Deciduous with Conifer	Poletimber Medium	23.9	37	81-110	N/A	Harvested in 1986. Fair quality mixed stand with pockets of aspen, oak and maple, along with scattered upland brush openings with cherry and pine. Jack and red pine inclusion in the east along the snowmobile trail. Stand is merchantable.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Black Cherry		10	Pole/Sapling	6		Jack Pine		Low	10 - 20 feet	Sapling	
Quaking Aspen		10	Pole	6		Smooth Sumac		Low	5 - 10 feet	Tall Shrub	
Red Maple		15	Pole	7		White Pine		Medium	Variable	Sapling	
Black/Red (Hybrid) Oak		20	Pole	7		Hawthorn (spp.)		Medium	5 - 10 feet	Tall Shrub	
Bigtooth Aspen		25	Pole	7	37	Serviceberry (Juneberry)		Low	5 - 10 feet	Tall Shrub	
Jack Pine		15	Pole	7		Black/Red (Hybrid) Oak		Medium	5 - 10 feet	Sapling	
34	310 - Herbaceous Openland	Nonstocked	9.3	0	Unspecified	No	Small aspen inclusion in the far south along ORV trail. Mostly grassy opening with scattered deciduous trees intermixed in a thick white pine grove in the SE corner. Appears to have history of ORV damage due to guard rails along road.				
Sub-Canopy Species		Density	Avg. Height	Size							
White Pine		Medium	>20 feet	Pole							
Sugar Maple		Low	5 - 10 feet	Sapling							
Apple (spp.)		Trace	10 - 20 feet	Pole							



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
35	4319 - Mixed Upland Forest	Sawtimber Well	18.1	76	111-140	N/A	Difficult stand to describe. Some very nice quality pockets of oak, maple, pine and aspen transitioning into pockets of mortality with very thick, brushy understory. Most of the mortality is in dead jack pine. Very nice Red Pine throughout. Sub-Canopy density is highly variable. The oak is mostly higher quality Black/Red, doesn't appear to be true Red Oak. Rolling topography with scattered kettle holes. Continuation of stand 52 to the south but with a higher deciduous component.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	15	Log/XLog/Pole	15		White Pine	Trace		< 5 feet	Seeding
Black/Red (Hybrid) Oak	20	Log/Pole	13		White Pine	Low		10 - 20 feet	Sapling
Red Maple	15	Log/Pole	11		Black/Red (Hybrid) Oak	Medium		10 - 20 feet	Sapling
Paper Birch	5	Log	10		Serviceberry (Juneberry)	Low		5 - 10 feet	Tall Shrub
Bigtooth Aspen	15	Log	12		Red Maple	Medium		Variable	Sapling
White Pine	30	Log/Pole	12	76					
36	4139 - Aspen, Mixed Deciduous	Poletimber Well	27.8	49	111-140	N/A		Overall nice quality stand. Fairly consistent throughout with a small clone of quaking aspen with intermixed standing dead jack pine. Southern portions have smaller diameters. There is a small planted red pine inclusion in the west portion of the stand.	
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density			Avg. Height
Bigtooth Aspen	50	Pole/Log	9	49	Red Maple	Low	5 - 10 feet		Sapling
White Pine	5	Log/XLog/Pole	14		Witch Hazel	Low	5 - 10 feet		Tall Shrub
Red Pine	5	Log	11		Red Pine	Trace	< 5 feet		Seeding
Black/Red (Hybrid) Oak	5	Pole/Log	8		White Pine	Low	5 - 10 feet		Sapling
Quaking Aspen	5	Pole/Log	9		Black/Red (Hybrid) Oak	Low	5 - 10 feet		Sapling
Red Maple	30	Log/Pole	10		Serviceberry (Juneberry)	Medium	10 - 20 feet		Tall Shrub
37	4199 - Other Mixed Upland Deciduous	Poletimber Medium	7.2	28	1-50	N/A	Harvested in 1994 with stand 38 and 41 to the east. Variable composition with some scattered log oak in the west. Very brushy stand. Oak multi-stemmed, all stump sprout origin.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density			Avg. Height
Jack Pine	10	Pole/Sapling	7		Jack Pine	Low		5 - 10 feet	Sapling
White Pine	5	Pole	6		Serviceberry (Juneberry)	Low		5 - 10 feet	Tall Shrub
Black Cherry	35	Pole/Sapling	6	28	Red Pine	Trace		< 5 feet	Sapling
Black/Red (Hybrid) Oak	35	Pole/Sapling	6	28	Hawthorn (spp.)	Medium		5 - 10 feet	Tall Shrub
Quaking Aspen	15	Pole/Sapling	5	28	Quaking Aspen	Low		5 - 10 feet	Sapling
					White Pine	Low		5 - 10 feet	Sapling
38	4199 - Other Mixed Upland Deciduous	Poletimber Poor	7.6	28	1-50	N/A		Stand harvested in 1994 along with stand 41 and 37. Mostly dominated by cherry brush, and oak pockets. Scattered aspen stems along with some log Oak, RP and aspen on the edges. Could be managed as an opening.	
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density			Avg. Height
Black/Red (Hybrid) Oak	32	Pole/Sapling	6		Hawthorn (spp.)	Low	< 5 feet		Tall Shrub
Black Cherry	32	Pole/Sapling	5	28	Black Cherry	Low	< 5 feet		Sapling
Quaking Aspen	32	Sapling/Pole	4		Black/Red (Hybrid) Oak	Low	< 5 feet		Seeding
Red Pine	2	Log	16						
White Pine	2	Log	12						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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39 42121 - Planted Jack Pine, Mixed Deciduous Sapling Well 21.7 14 Immature N/A Harvested in 2006, trenched in 2007 and planted in 2008. Areas of jack pine mortality that have filled in with aspen, oak and cherry.

Canopy Species	% Cover	Size Class	DBH	Age
Northern Pin Oak	15	Sapling	2	16
Jack Pine	60	Sapling	2	14
Quaking Aspen	15	Sapling	2	16
Black Cherry	10	Sapling	2	

40 4131 - Aspen, Oak Poletimber Well 39.8 50 141-170 N/A Majority of the stand is nice quality oak and aspen. Rolling terrain which yields some fair quality quaking aspen and red maple in valleys. Nice oak component throughout, but transitions into an oak dominated canopy in the south. West portions contain good quality small log/large pole Oak. Far southwest corner contains a large oak mortality pocket.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen	35	Pole/Log	9	50	Serviceberry (Juneberry)	Medium	5 - 10 feet	Tall Shrub
Quaking Aspen	5	Pole/Log	8		White Pine	Low	10 - 20 feet	Sapling
White Pine	2	Log/Pole	10		Witch Hazel	Low	5 - 10 feet	Tall Shrub
Paper Birch	5	Pole	7		Hawthorn (spp.)	Low	5 - 10 feet	Tall Shrub
Red Maple	23	Log	10	50	Black/Red (Hybrid) Oak	Medium	Variable	Sapling
Black/Red (Hybrid) Oak	30	Log/Pole/XLog	14	80	Red Maple	Medium	5 - 10 feet	Sapling

41 4139 - Aspen, Mixed Deciduous Poletimber Well 45.4 28 51-80 N/A Harvested in 1994. Overall rolling terrain. Quaking aspen clones in the 'lower' valleys. Scattered oak pockets. Pretty consistent poles with with portions that are just reaching pole size. Snowmobile trails runs through stand.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Black Cherry	10	Sapling/Pole	4		Black/Red (Hybrid) Oak	Medium	5 - 10 feet	Sapling
Red Maple	15	Pole/Sapling	5	28	Red Maple	Medium	5 - 10 feet	Sapling
Black/Red (Hybrid) Oak	15	Pole/Sapling	5		Witch Hazel	Low	5 - 10 feet	Tall Shrub
Quaking Aspen	15	Pole/Sapling	5	28	Hawthorn (spp.)	Low	< 5 feet	Tall Shrub
Bigtooth Aspen	40	Pole	6	28	Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub
Jack Pine	5	Sapling/Pole	4					

42 4130 - Aspen Poletimber Well 14.9 28 1-50 N/A Stand harvested in 1994. Good overall regeneration. Oak dominates some areas in the canopy. Thick hawthorn throughout. Small valley runs SW to NE with some lower quality stems.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	15	Pole/Sapling	5		Witch Hazel	Low	5 - 10 feet	Tall Shrub
Black/Red (Hybrid) Oak	15	Sapling/Pole	4		Hawthorn (spp.)	High	5 - 10 feet	Tall Shrub
Black Cherry	10	Pole/Sapling	5		Black Cherry	Low	5 - 10 feet	Sapling
Bigtooth Aspen	60	Pole/Sapling	5	28	Red Maple	Medium	5 - 10 feet	Sapling
					Black/Red (Hybrid) Oak	Medium	5 - 10 feet	Sapling
					Red Pine	Trace	< 5 feet	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
43	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Poor	24.9	48	51-80	N/A	Interesting stand. Portions contain Log oak, aspen and jack pine with the majority of the stand a mixed oak and cherry sapling stand. Oak appears to have established well throughout with stems recruiting well into canopy gaps. It appears that most of the stand had aspen that reached mortality and fell over giving way to oak and cherry brush underneath. May be a good example of what happens if an aspen stand is left. Overstory oak is ok, with the remaining aspen in decline. Good wildlife stand with thick brush understory throughout. O7, A7, O3. ~55 sq ft.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Northern Pin Oak	25	Log/XLog	15		Quaking Aspen	Low		5 - 10 feet	Sapling
Black Cherry	25	Pole	8		Black Cherry	Medium		5 - 10 feet	Sapling
Quaking Aspen	25	Log/Pole	10	48	Serviceberry (Juneberry)	Medium		10 - 20 feet	Tall Shrub
Red Maple	5	Pole/Log	9		Hawthorn (spp.)	Medium		5 - 10 feet	Tall Shrub
Jack Pine	20	Log	12		White Pine	Low		< 5 feet	Seeding
					Red Maple	Medium		5 - 10 feet	Sapling
					Northern Pin Oak	Medium		>20 feet	Pole
44	42220 - Natural Jack Pine	Poletimber Medium	5.8	54	1-50	N/A	Could not find any history on this stand. Looking at old imagery, it appears that it was very similar to the parent stand of stand 47. Lots of berm and holes within the stand. Could have been used for oil and gas development in the past or a scramble area.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Jack Pine	90	Pole/Log	8	54	Northern Pin Oak	Low		5 - 10 feet	Sapling
Quaking Aspen	10	Pole	6		Black Cherry	Low		5 - 10 feet	Tall Shrub
					Jack Pine	Low		5 - 10 feet	Sapling
					Red Pine	Trace		< 5 feet	Sapling
					Quaking Aspen	Medium		5 - 10 feet	Sapling
45	4131 - Aspen, Oak	Sapling Well	73.9	6	Immature	N/A	Stand was part of Frost Pocket Aspen/Oak Sale. Harvest completed September 2016. Canopy cover closer to 75% due to some areas of lower stocking. Oak is regenerating well through mostly stump sprouts, with some scattered single stems present. Higher oak densities in patches. Browse present throughout. Some minor topography. Scattered residual Red Pine. Oak within retention islands healthy. Snowmobile trail runs through stand.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Black/Red (Hybrid) Oak	35	Sapling	1		Black/Red (Hybrid) Oak	Medium		< 5 feet	Seeding
Red Maple	5	Sapling	1		Black Cherry	Low		< 5 feet	Sapling
Black Cherry	4	Sapling	1		Red Pine	Trace		< 5 feet	Sapling
Red Pine	1	Log	15		Witch Hazel	Low		< 5 feet	Tall Shrub
Bigtooth Aspen	55	Sapling	1	6					
46	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	25.7	15	1-50	N/A	Old notes indicate stand was harvested in 2007. Appears that the pine was protected during harvest. Diameters and stocking highly variable. Scattered pockets of aspen clones along with oak pockets. Few scattered log aspen found throughout. Brushy cherry clumps fairly consistent throughout. Rolling terrain.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Jack Pine	20	Pole	7		Hawthorn (spp.)	Medium		< 5 feet	Tall Shrub
Black Cherry	35	Pole/Sapling	5	15	Serviceberry (Juneberry)	Low		5 - 10 feet	Tall Shrub
Quaking Aspen	35	Sapling/Pole	4		Black Cherry	Medium		5 - 10 feet	Sapling
47	4310 - Pine, Oak Mix	Sapling Well	32.7	10	Immature	N/A	Stand harvest in 2007, trenched in 2008, initially planted in 2009 and replanted in 2012. Jack pine stocking is variable. Areas where there is low jack pine stocking, oak, aspen and cherry are dominating. Very heavy deciduous stocking in the far north.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Northern Pin Oak	25	Sapling	2	15	Northern Pin Oak	Low		< 5 feet	Sapling
Jack Pine	55	Sapling	2	10	Red Pine	Trace		< 5 feet	Sapling
Black Cherry	10	Sapling	2	15	Hawthorn (spp.)	Low		< 5 feet	Tall Shrub
Quaking Aspen	10	Sapling	2	15	Serviceberry (Juneberry)	Low		5 - 10 feet	Sapling
					White Pine	Trace	< 5 feet	Sapling	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
48	4131 - Aspen, Oak	Poletimber Well	20.0	38	51-80	N/A	Overall small pole sized stand. Similar to the surrounding aspen stand. Dominated by bigtooth with scattered pockets of quaking aspen, red maple, cherry and oak. Rolling terrain. Quality and size is variable. Larger diameters to the east as well as higher stocking of red maple. Due to the rolling terrain, there are quite a few depressions that are found throughout. These areas have a upland brush appearance mimicking small wildlife openings.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Quaking Aspen		10	Pole/Sapling	6		Red Maple		High	5 - 10 feet	Sapling
Red Maple		10	Pole	6		White Pine		Low	Variable	Sapling
Bigtooth Aspen		50	Pole/Sap/Log	6	38	Black/Red (Hybrid) Oak		Medium	5 - 10 feet	Sapling
Black/Red (Hybrid) Oak		20	Pole/Sap/Log	6		Hawthorn (spp.)		High	Variable	Tall Shrub
Black Cherry		5	Pole/Sapling	5						
White Pine		5	Pole	6						
49	330 - Low-Density Trees	Nonstocked	9.6	0	Unspecified	No		Brushy, somewhat vegetated opening adjacent to the Frost Pocket Prescribed Burn unit. Appears to have had old ORV damage or other uses. Area looks somewhat degraded.		
Sub-Canopy Species		Density	Avg. Height	Size						
Jack Pine		Low	10 - 20 feet	Sapling						
Black Cherry		Low	5 - 10 feet	Tall Shrub						
Northern Pin Oak		Low	5 - 10 feet	Sapling						
Quaking Aspen		Low	10 - 20 feet	Pole						
50	42110 - Planted Red Pine	Sawtimber Well	29.0	60	111-140	N/A	Thinned in 2006. Crown ratios variable throughout along with stocking and diameters. South half of the plantation is patchy with areas of thick jack pine saplings with intermixed red pine poles. Quality is fair with the better quality in the north.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Pine		90	Log/Pole	12	60	Northern Pin Oak		Medium	5 - 10 feet	Sapling
Jack Pine		10	Pole	6		Red Maple		Low	5 - 10 feet	Sapling
						Hawthorn (spp.)		Low	< 5 feet	Tall Shrub
						Jack Pine		Medium	Variable	Sapling
51	4131 - Aspen, Oak	Poletimber Well	18.6	38	51-80	N/A	Cutting records mention 1984 harvest.. Originally merged with stand 22 to the west. Brushy stand. Oak established well. Rolling terrain throughout stand. Diameters variable. Stand is just reaching merchantability. Compared to other stands of similar age, stand seems to have smaller diameters.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Black/Red (Hybrid) Oak		30	Pole/Sapling	6	38	Serviceberry (Juneberry)		Low	5 - 10 feet	Tall Shrub
Quaking Aspen		25	Pole/Sapling	5		Hawthorn (spp.)		Low	< 5 feet	Tall Shrub
Red Maple		15	Sapling/Pole	4		Black Cherry		Medium	5 - 10 feet	Sapling
Bigtooth Aspen		30	Pole/Sapling	6	38	Red Maple		Medium	5 - 10 feet	Sapling
52	4199 - Other Mixed Upland Deciduous	Sawtimber Well	8.5	80	111-140	N/A	Nice oak logs throughout. Aspen and red maple in pockets and edges. Small valley in the eastern central portion moving down into stand 32. Some over mature aspen in the east portion. Heavier oak saps in the east where canopy cover is less dense.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Maple		25	Log/Pole	10		Serviceberry (Juneberry)		Low	10 - 20 feet	Tall Shrub
Bigtooth Aspen		25	Log/Pole	10		Red Maple		Low	10 - 20 feet	Sapling
Black/Red (Hybrid) Oak		40	Log	12	80	Hawthorn (spp.)		Trace	< 5 feet	Tall Shrub
Black Cherry		8	Pole/Log	9		White Pine		Low	< 5 feet	Sapling
White Pine		2	XLog	26		Black/Red (Hybrid) Oak		Medium	5 - 10 feet	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																							
53	4130 - Aspen	Poletimber Well	7.4	28	1-50	N/A	Broken out of stand 23 to the south based on composition and characteristics. This portion was harvested in 1994 along with the aspen to the south (stand 19). Scattered overstory pines and the occasional large crowned oak but is dominated by aspen. Overall just reaching pole size class. Aspen looks healthy. Pipeline ROW runs along the northern edge. Some minor topography with some small kettle holes.																																																																							
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54	42141 - Planted Mixed Pine, Mixed Deciduous	Sawtimber Medium	8.8	60	111-140	N/A	Jack pine appears to be in rows (or what is remaining of the rows). Could not find planting information on the pine but would guess that red pine may have not been planted here due to large kettle holes throughout the stand. Mostly jack pine in the upland and quaking aspen with a nice white pine understory in the depressions. Scrubby appearance.																																																																							
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58	122 - Road/Parking Lot	Nonstocked	3.2	0	Unspecified	No	County road ROW. Mt Tom Rd																																																																							
400	3102 - Grass	Nonstocked	0.9	0	Unspecified		Gas Well Delta Oil Co Inc, State Elmer, B4-24 Permit #49317																																																																							
401	3104 - Degraded	Nonstocked	1.1		Unspecified		Gas Well. Delta Oil Co Inc, State Elmer, C4-24. Permit #49316																																																																							
402	3104 - Degraded	Nonstocked	1.1		Unspecified		Gas Well Delta Oil Co Inc, State Elmer, C3-23 Permit #50591																																																																							
403	3104 - Degraded	Nonstocked	1.0		Unspecified		Gas well. Riverside Energy Michigan LLC, State Elmer, B1-23 Permit #56565																																																																							
404	3104 - Degraded	Nonstocked	1.0		Unspecified		Gas Well. Riverside Energy Michigan LLC, State Elmer A2-23. Permit # 56166																																																																							
405	3104 - Degraded	Nonstocked	1.2		Unspecified		Riverside Energy Michigan LLC, State Elmer 1-23 Permit #48433																																																																							



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
406	3102 - Grass	Nonstocked	1.0		Unspecified		Delta Oil Co Inc, State Elmer A1-24 Permit #49319
407	3104 - Degraded	Nonstocked	1.3		Unspecified		Riverside Energy Michigan LLC, State Elmer, D1-13 Permit #57344
408	3104 - Degraded	Nonstocked	1.1		Unspecified		Riverside Energy Michigan LLC, State Elmer 12-13 Permit #48429
409	3102 - Grass	Nonstocked	1.0		Unspecified		Riverside Energy MI LLC, State Elmer 10-13 Permit #48430
410	3104 - Degraded	Nonstocked	1.1		Unspecified		GAS well, producing Breitburn, USA Elmer Clinton B4-13 Permit # 56018