



Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 52147

Entry Year 2025

Acreage: 1,502

County Cheboygan

Management Area: Wolverine Moraines

Stand Examiner: Tricia St. Pierre

Legal Description:

T33N R03W Sec 20

T33N R03W Sec 29

T33N R03W Sec 32: NE1/4, SE1/4NW1/4

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 and its inhabitants.

Soil and topography:

Topography is generally rolling, though hilly and steep in some areas. The stream corridor sits in a flat valley with sloping terrain to either side.

Within this compartment there are steep and broken morainal ridges with well drained loamy sand. A broad, flat outwash plain with well-drained loamy sand and a narrow outwash channel with very poorly drained peat and muck support the West Branch of the Sturgeon River.

The majority of the soils within this compartment are various sands (81.1%) with a less significant addition of Tawas Peat (12.2%) and even less Emmet Sandy Loam (6.7%). Sands are dominated by Kalkaska Sand (55.6%) and Blue Lake Loamy Sand (13.7%) with smaller contributions from Cheboygan Loamy Sand, Mancelona Sand, Rubicon Sand, and Riggsville Loamy Sand (<12% total). The sands are somewhat excessively drained with the potential for surface runoff and erosion affected by the degree of slope. Most sands form moraines while the peat occupies the outwash plain.

Emmet Sandy Loam is largely confined to the northwest corner of this compartment and supports some of the better quality hardwood, typing out as AFOCa in the Kotar classification. Mancelona Sand also types out as AFOCa. Rubicon Sand and Riggsville Loamy Sand classify as PARVCo and PARVVb/AFO types. The remaining sands dominate this compartment, typing out as AFO/AFOCa while Tawas Peat is unclassified lowland.

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

The north, west, and east boundaries of this compartment are adjacent to other state forest land. The southern boundary abuts private property. The compartment is entire; one block of state forest land. Private property to the south is dappled seasonal, permanent, and recreational property. There is an attempted development of a private campground.

Unique Natural Features:

There is a presence of elm throughout most hardwood stands within this compartment, most of which are healthy and vigorous. The northeast half of section 20 has many seeps along its easterly slopes that should be considered and avoided during any management activities. There was a resident population of elk in the 2012-2013 winter, not observed in the 2022-2023 except for a few transient tracks.

The West Branch of the Sturgeon River is a rather unique feature wending through a glacial outwash channel within this compartment.

Potential for *Geum fragarioides* (Barren Strawberry) in section 32.

Archeological, Historical, and Cultural Features:

There are known concerns in the compartment. All proposed management activities have taken these concerns into consideration.

Special Management Designations or Considerations:

As there are no documented MNFI occurrences within this compartment, there are no recommended SCAs or HVCAs to address.

Red-shouldered, Bald eagle, Northern goshawk, Common loon observations nearby; potential for occurrences within this compartment. Potential for woodland vole, wood turtle, and eastern massasauga. Potential for ram's head lady's-slipper, limestone oak fern, round-leaved orchis, and calypso orchid in cedar swamps.

Watershed and Fisheries Considerations:

T33N R03W Sec. 20, 29, 32

This compartment is in the Sturgeon River watershed, and contains a portion of the West Branch Sturgeon River. A minimum no-clear cut buffer of 300' should be maintained adjacent to this stream. No treatments are planned near this waterbody, so Fisheries has no concerns at this time.

Wildlife Habitat Considerations:

This compartment consists of mostly upland habitat with a small component of lowland habitat associated with the West Branch of the Sturgeon River. The lowland area supports a variety of species including black bear, white-tailed deer, furbearers and various amphibians. The majority of the upland habitat is hardwoods with a few pockets of aspen. A portion of the aspen was treated in 2015 YOE to provide age-class diversity and early successional habitat that benefits white-tailed deer, ruffed grouse, American woodcock, and various song birds.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and coarse-textured glacial till. The glacial drift thickness varies between 400 and 800 feet. The Devonian Antrim Shale subcrops below the glacial drift. The Antrim is used for cement products. Gravel pits are located in Section 32 and the uplands appear to have good potential. The Antrim Shale gas play has expanded to include Section 32. The Compartment is leased for oil and gas development for the Collingwood Formation.

Vehicle Access:

Perry Road, Wilderness Road, and Real Water Road are the primary access roads for this compartment. There exist unnamed spurs and a dirtbike trail allowing motorized access to more remote areas of the compartment. The terrain would make further road development difficult.

Survey Needs:

There are no pressing survey needs at this time.

Recreational Facilities and Opportunities:

Snowmobile Trail 765 runs across this compartment. The MCCCT Tomahawk C Loop dirtbike trail runs through the compartment, merging with Wilderness Road for a bit. The NWSW of Sec 20 presents some maintenance issues with restored RDRs being ignored and misused, although the main disturbance is in Section 19.

Fire Protection:

Fire danger is moderately low in these predominately hardwood forests, although fire suppression would be difficult given the terrain. The West Branch of the Sturgeon River dissects the SE1/4 of Sec 29 with channels to the north and south, creating a potential fire break. A bridge in section 28 provides access to the river for drafting if needed.

Additional Compartment Information:

The following reports from the Inventory are attached:

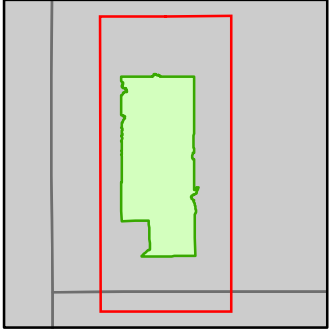
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

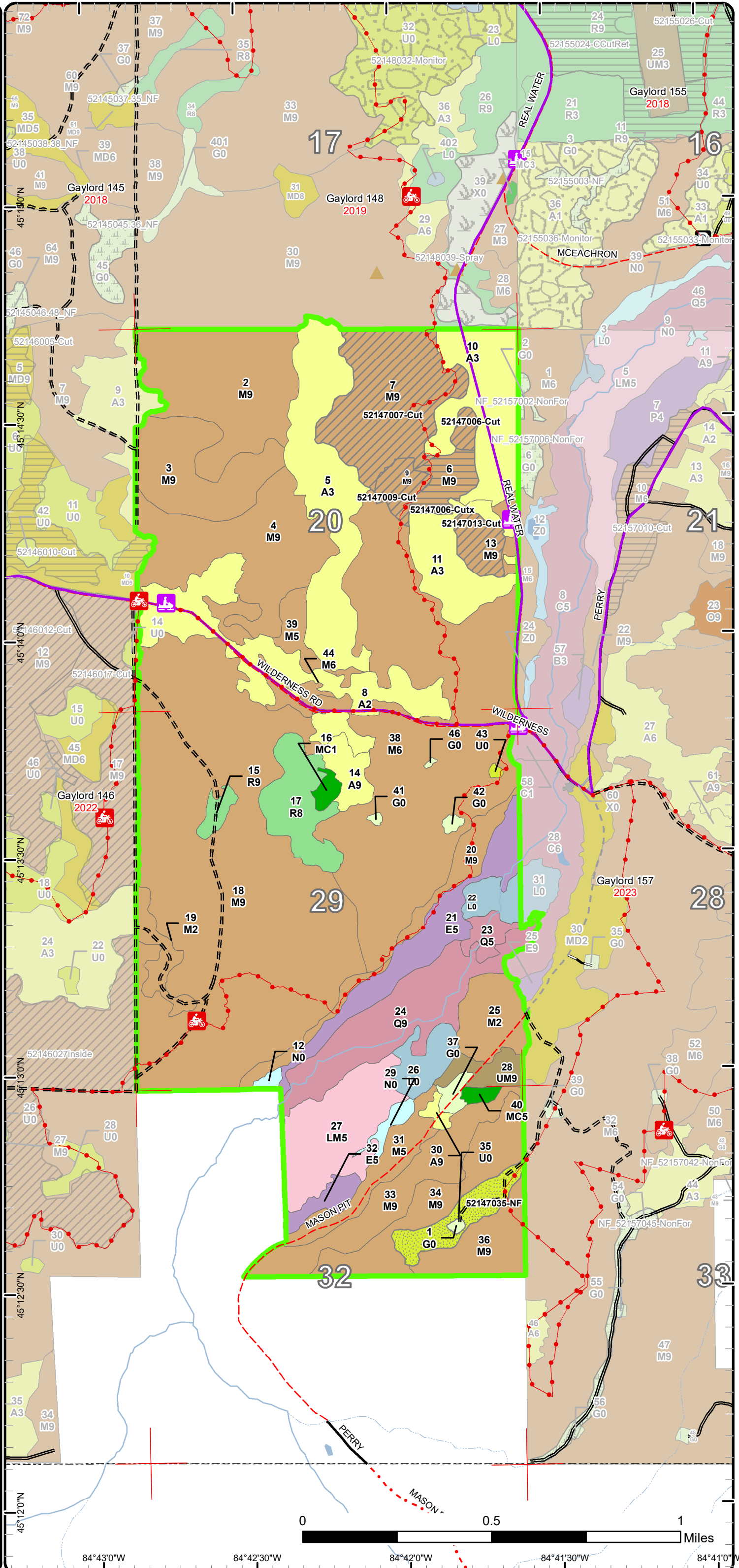
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 147
 T33N, R03W, Sec. 20, 29, 32
 County: Cheboygan
 Unit: Gaylord
 Mgmt Area: Wolverine Moraines
 YOE: 2025
 Acres: 1501.6 GIS Calculated
 Examiner: Tricia St. Pierre
 Map Revised: 10/16/2023
 Map Phase: Post-Maps

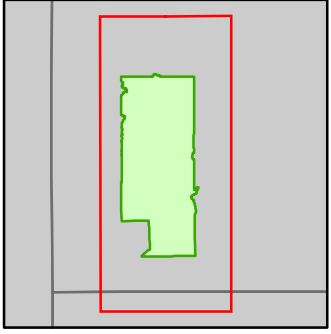


- Miris Corners
- Counties
- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Motorcycle Trails (DNR License)
- Snowmobile Trails
- ORV License & Trail Permit
- Designated Snowmobile Trails
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Berms
- Parking Lot
- Compartment Boundary
- Clearcut (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Mowing
- 411 - Northern Hardwood
- 413 - Aspen
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 622 - Lowland Shrub
- 623 - Emergent Wetland

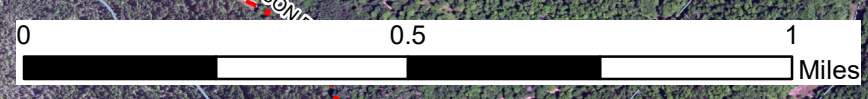
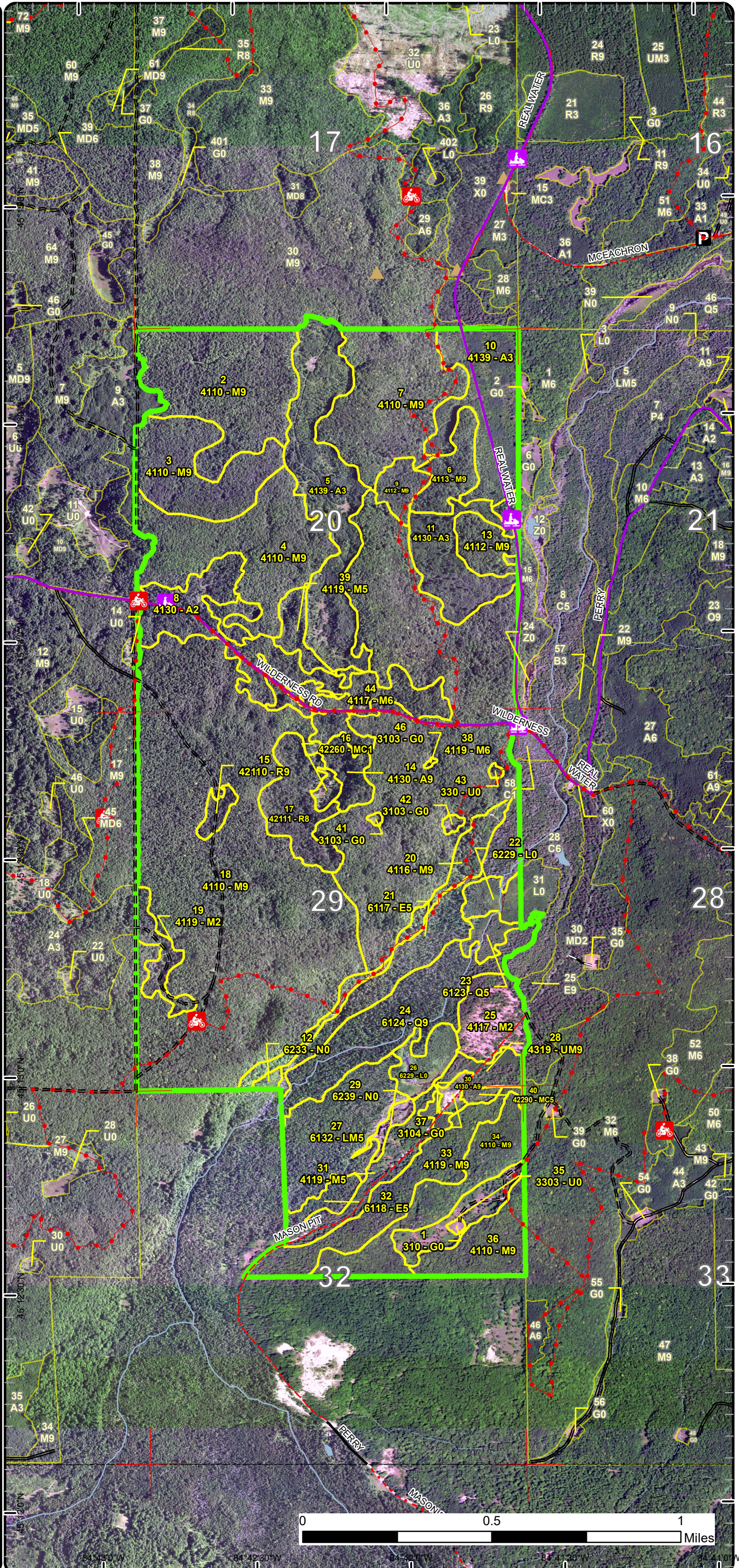


Stand Boundary Map

Compartment: 147
 T33N, R03W, Sec. 20, 29, 32
 County: Cheboygan
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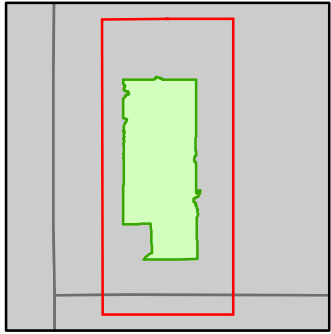
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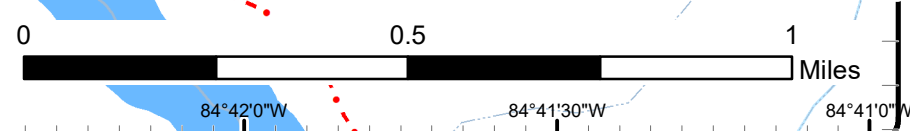
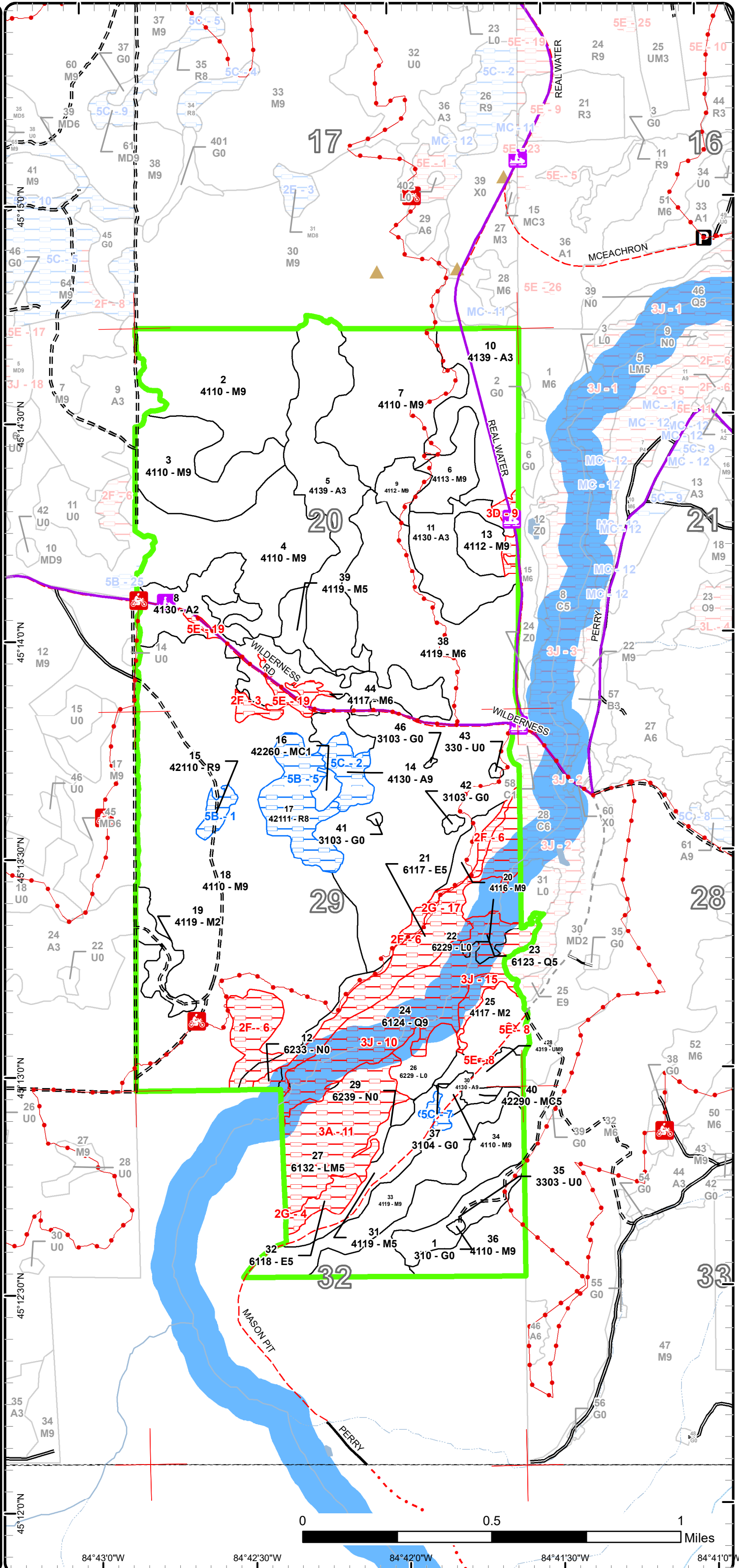
84° 43' 0" W 84° 42' 30" W 84° 42' 0" W 84° 41' 30" W 84° 41' 0" W

Special Conservation Areas

Compartment: 147
 T33N, R03W, Sec. 20, 29, 32
 County: Cheboygan
 Unit: Gaylord
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- Miris Corners
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- Designated Snowmobile Trails
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Berms
- Parking Lot
- Compartment Boundary
- Available w/ Constraints
- 5B: Maintain for regeneration purposes
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)
- 3A: Conservation Values incompatible with harvest at this time
- 3D: Recreational / Scenic values
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Cold Water Streams
- High Priority Trout Stream Buffer





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	63	117	31	0	0	3	0	0	11	0	0	0	0	0	0	0	0	225
Herbaceous Openland	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Low-Density Trees	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Lowland Conifers	0	0	0	0	0	0	0	7	0	56	0	0	0	0	0	0	0	0	63
Lowland Deciduous	0	0	0	0	0	0	0	37	0	8	0	0	0	0	0	0	0	0	44
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	47	0	0	0	0	0	0	47
Lowland Shrub	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Marsh	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Natural Mixed Pines	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Northern Hardwood	0	23	0	0	0	12	0	106	138	735	10	0	0	0	0	0	0	0	1024
Red Pine	0	0	0	0	0	0	0	0	0	0	33	0	0	0	0	0	0	0	33
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10
Total	54	86	117	34	3	12	3	150	138	810	53	47	0	0	0	0	0	0	1505



Report 2 – Treatment Summary

Gaylord Mgt. Unit

Compartment 147

Year of Entry: 2025

Acres of Harvest

Total Compartment Acres: 1,502

Commercial Harvest - 102
 Harvests with Site Condition - 0
 Next Step Harvest - 0
 Habitat Cut - 0

Cover Type by Harvest Method

		Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Northern Hardwood		13	0	0	0	0	90	0	0	0	102
	Total	13	0	0	0	0	90	0	0	0	102

Proposed and Next Step Treatments by Method

		Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current		102	0	0	0	0	0	0	0	17	119
Next Step		0	0	0	0	0	13	0	0	0	13
	Total	102	0	0	0	0	13	0	0	17	132



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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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Proposed Treatments:

6	52147006-Cut	3.8	4113 - R.Maple, Conifer	Sawtimber Well	76	81-110	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	No
<p><u>Prescription</u> Thin stand to 80BA, harvesting red and sugar maple only, protecting lesser represented species such as basswood, yellow birch, elm, cherry, and conifer. Sign and protect recreational trails.</p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u></p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2024</p>											
6	52147006-Cutx	12.7	4113 - R.Maple, Conifer	Sawtimber Well	76	81-110	Harvest	Clearcut	411 - Northern Hardwood	Two-Aged	No
<p><u>Prescription</u> Final harvest retaining underrepresented species including yellow birch, black cherry, and elm. Mark to leave 30 BA of pine as available, a mix of red and white. Sign and protect recreational trails.</p> <p><u>Specs:</u></p> <p><u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u> Acceptable regeneration will meet minimum stocking standards for hardwood not dominated by beech.</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2024</p>											
7	52147007-Cut	65.2	4110 - Sugar Maple Association	Sawtimber Well	68	81-110	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	No
<p><u>Prescription</u> Thin to 80 BA, not harvesting any conifer or underrepresented species such as elm, yellow birch, and black cherry. Try to maintain basswood as at least one third of the residual volume, preferring to mark sugar maple over basswood.</p> <p><u>Specs:</u> Provide skid trails up slopes following BMPs but avoid marking within steep draws or along steep slopes. Sign and protect recreational trails.</p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u></p> <p><u>Other Comment:</u> Avoid maple-ization. Areas with dense beech may be marked or beech may be spec-ed out.</p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2024</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
9 52147009-Cut	9.5	4112 - Maple, Beech, Cherry Association	Sawtimber Well	90	81-110	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	No
<p><u>Prescription</u> Thin stand to 80BA, harvesting red and sugar maple only, protecting lesser represented species such as basswood, elm, cherry, and conifer.</p> <p><u>Specs:</u> Sign and protect recreational trails.</p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable</u></p> <p><u>Regen:</u></p> <p><u>Other</u></p> <p><u>Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2024</p>										
13 52147013-Cut	11.1	4112 - Maple, Beech, Cherry Association	Sawtimber Well	77	111-140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	No
<p><u>Prescription</u> Thin stand to 80BA focusing marking on sugar maple, red maple, and beech. Do not mark any underrepresented trees such as basswood, red/white pine, elm, or yellow birch. Sign and protect recreational trails.</p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable</u></p> <p><u>Regen:</u></p> <p><u>Other</u> TSI</p> <p><u>Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2024</p>										
35 52147035-NF	16.9	3303 - Mixed Low Density Trees	Nonstocked		Unspec ified	NonForestMgt	Mowing	330 - Low-Density Trees		No
<p><u>Prescription</u> Periodic opening maintenance, as needed, that may include disking, fertilizing, liming, food plot seeding, mowing, brushing, tree and shrub planting, herbicide application, and removal of invasive species.</p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable</u> Maintenance of a non-forested stand</p> <p><u>Regen:</u></p> <p><u>Other</u></p> <p><u>Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2024</p>										

Total Treatment 119.2
Acreage Proposed:

Report 4 – Site Conditions

Gaylord Mgt. Unit

Compartment: 147

Tricia St. Pierre : Examiner

Year of Entry: 2025

Availability for Management

Total	Acres	Acres Avail	Acres
Acres	Available	<i>With Condition</i>	Not Available

Dominant Site Conditions

	Availability for Management			Dominant Site Conditions								
	Acres	Available	<i>With Condition</i>	5B	5C	2F	2G	3A	3D	3J	5E	
224	210	13	1	Aspen		13						1
7	7	0	0	Herbaceous Openland								
18	18	0	0	Low-Density Trees								
63	0	0	62	Lowland Conifers				0			62	
44	0	0	44	Lowland Deciduous				44			0	
47	0	0	47	Lowland Mixed Forest					47		0	
23	23	0	0	Lowland Shrub							0	
6	4	0	2	Marsh				2				
6	6	0	0	Natural Mixed Pines								
1023	978	0	45	Northern Hardwood			28	0		5	6	6
32	0	32	0	Red Pine	32							
10	10	0	0	Upland Mixed Forest							0	
1,502	1,255	45	201	Total Forested Acres	32	13	28	46	47	5	68	7
	84%	3%	13%	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	5B: Maintain for regeneration purposes	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments: 4.6 acre stand on way to converting to hardwood and growing out of merchantability.							
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Delay treatment. Impractical access, challenging terrain. Treat when adjacent hardwood stand is thinned. Holding stand to treat in 2035 with adjacent hardwood for practicality of access, increasing marketability and accessibility by treating with adjacent hardwood thinning.							

Report 4 – Site Conditions

Gaylord Mgt. Unit

Tricia St. Pierre : Examiner

Compartment: 147

Year of Entry: 2025

3	Unavailable	2F: Too steep	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Potholes; inappropriate to manage with heavy equipment.							
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	5A: Not able to obtain desirable regeneration	Unspecified	Unspecified	Unspecified
Comments: Very wet stand. Risk of spreading buckthorn with management. Hillside down into stand could be damaged by equipment. Herbivory pressure.							
5	Available	5B: Maintain for regeneration purposes	28	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
Comments: Very high density sugar maple subcanopy. Delay any treatment and allow subcanopy to develop, protecting the advanced sugar maple when red pine is treated. Operationally, it makes the most sense to access this stand when the adjacent stand 38 is treated.							
6	Unavailable	2F: Too steep	25	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Steep terrain, in some cases on the edge of a swamp with no potential for a hard landing.							
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Smaller diameter aspen, very small stand.							
8	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Gaylord Mgt. Unit
Tricia St. Pierre : Examiner

Compartment: 147
Year of Entry: 2025

9	Unavailable	3D: Recreational / Scenic values	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments: This area of the stand contains a campsite and steep slopes. High erosion risk, especially along Real Waters Road.							
10	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	62	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments: Very wet, very sensitive soils. West Branch of the Sturgeon River flows through this stand. 300' minimum intense management buffer.							
11	Unavailable	3A: Conservation Values incompatible with harvest at this time	47	5A: Not able to obtain desirable regeneration	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified
Comments: Challenging access, difficult to regenerate species. Light management from previous owner resulted in lowland shrubs; heavy browsing pressure within this stand. West branch of the Sturgeon to the north and tributaries to the south. Some flowing water on the edges of this stand. Saturated soils. North edge is within Sturgeon River SMZ.							
15	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Provides a 300-foot buffer from the West Branch of the Sturgeon River.							
17	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	38	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Saturated ground in most areas; occasional flowing water. Portions within Sturgeon River SMZ.							
19	Unavailable	5E: Long-Term Retention	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Long term retention for parent stand 8.							

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	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																													
1	310 - Herbaceous Openland	Nonstocked	0.8		Immature		Permit # 57118, api well # 21031571180000, Northstar Energy.																																																																													
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2	4110 - Sugar Maple Association	Sawtimber Well	73.2	87	81-110	N/A	Pothole Hardwood, completed 6/30/13. Trace ironwood, red pine, white pine, beech, and black cherry (just 1) in canopy. Rare basswood, elm, and red berried elder in subcanopy. Sharp lobed hepatica, helleborine, maiden hair fern present. Scattered white ash snags. Carbon plot present. Couple areas of very nice advanced sugar maple saplings on road edges in north. One alternate leaved dogwood (and one dead). Few red and white pine along eastern edge of stand. Stand contains a few Xlog elm, one measuring 26.8" dbh. Rubus decreased in the past decade from very high to low. White ash and ironwood increased in subcanopy abundance. Basswood stump sprouts have been heavily grazed.																																																																													
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3	4110 - Sugar Maple Association	Sawtimber Well	45.1	77	51-80	N/A	Thinned in 2019. Log ash, previously 8% of canopy (in 2012), wiped out by EAB (current 2022); scattered white ash snags. Trace elm, beech, bigtooth in canopy. <1% red and white pine combined in canopy. Couple XL SM >16". Handful of Log BTA on west and north edges.																																																																													
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4	4110 - Sugar Maple Association	Sawtimber Well	71.5	85	81-110	N/A	Completed thinning 11/2019 as part of Strong-Arm Aspen and Hwd, 52-136-14. A lot of ironwood regeneration; heavy browsing on basswood, sugar maple stump sprouts. Areas of high white ash saps, otherwise ironwood dominated. Trace red and white pine, quaking aspen, black cherry, and paper birch in canopy. Rare maple leaved viburnum, red berried elder, black cherry, honeysuckle in subcanopy. In general, canopy composition is 58% sugar maple, 35% basswood, and 7% other. Southwestern acreage is a southwest-facing slope containing more bigtooth aspen and red maple amongst sugar maple, ironwood, and trace white pine. East/southeast slope E/SE, somewhat hilly. Trace paper birch and red pine. Occasional XL SM in stand. One surviving beech pole.																																																																													
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
5	4139 - Aspen, Mixed Deciduous	Sapling Well	69.6	18	Immature	N/A	Regeneration is more consistent this entry than it was 10 years ago. Better species diversity and increased stratification in 10 years of additional growth; more aspen in the canopy, reduced the amount of sugar maple and ash. Few areas are understocked but pine seem to be establishing in many of these openings. Bracken is associated with more open areas occupied by red and white pine and cherry. Red pine volunteers more common in skid trails than elsewhere. Scattered residual pole/sap/log sugar maple, trace residual black cherry. Rare basswood, juniper, white spruce, balsam fir, serviceberry, and hazelnut in the subcanopy. Trace pin cherry, basswood, paper birch, and beech in canopy. Elm, Red Pine, and White Pine are residual "supercanopy". Central portion of southern third of stand occupied by jack pine and white pine. Trace oak to the southeast.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Pine	2	XLog/Log	18		Black Cherry	Low		Variable	Sapling
Black Cherry	15	Sapling/Pole	3		Red Pine	Trace		Variable	Sapling
Sugar Maple	10	Sapling/Pole	2	18	Ironwood	Medium		Variable	Sapling
Ironwood	10	Sapling	1		Sugar Maple	Medium		Variable	Sapling
American Elm	1	Sapling/Pole	3		Blackberry/Raspberry	Medium		< 5 feet	Tall Shrub
Quaking Aspen	30	Sapling/Pole	3	18	Bracken Fern	Trace		Unspecified	Non-Wood
Red Maple	3	Sapling/Pole	4		White Ash	Trace		Variable	Sapling
Balsam Poplar	2	Sapling	3		Jack Pine	Trace		Variable	Sapling
White Ash	1	Sapling/Pole	4		Beech	Low		Variable	Sapling
Jack Pine	1	Sapling/Pole	4		Honeysuckle (spp.)	Low		< 5 feet	Tall Shrub
Bigtooth Aspen	24	Sapling/Pole	3						
White Pine	1	Log	16						
6	4113 - R.Maple, Conifer	Sawtimber Well	16.5	76	81-110	N/A	Trace black cherry, bigtooth aspen, yellow birch, elm in canopy. Rare sugar maple (seedlings), balsam fir, elm in subcanopy. Dense red and white pine in south and center of stand, decreasing in density in the far north and east. Multistemmed red maple is prominent, except in the far north where stem quality improves (single stems), becoming pole red maple dominated with nice sugar maple and basswood.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Basswood	2	Log/Pole	12		Sugar Maple	Trace		>20 feet	Sapling
Red Maple	54	Log/Pole	10	76	Ironwood	Medium		Variable	Sapling
Red Pine	20	Log/XLog	16		Beech	Medium		Variable	Sapling
Quaking Aspen	2	Log/XLog	16		Black Cherry	Trace		< 5 feet	Sapling
White Pine	10	Log/Pole/XLog	14						
Sugar Maple	10	Pole/Log	8	68					
Beech	2	Log/Pole	12						
7	4110 - Sugar Maple Association	Sawtimber Well	65.2	68	81-110	N/A	Trace bigtooth, elm, ironwood, black cherry in canopy. Rare black cherry, striped maple, balsam fir in subcanopy. Smaller diameters in east half under and amongst pine. West and north portions of stand have larger diameters and higher BAs. Thinning would be slightly more of a TSI job. Southwest portion of stand contains much more beech and pretty bad beech brush. Increase in yellow birch and red maple.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Yellow Birch	1	Log/Pole	14		Sugar Maple	Low		>20 feet	Sapling
White Pine	3	Log/XLog	15		Beech	Medium		Variable	Sapling
Basswood	33	Log/Pole	12		White Ash	Trace		< 5 feet	Sapling
Red Pine	2	Log/XLog	16		White Pine	Trace		< 5 feet	Sapling
Quaking Aspen	1	Log/XLog	14		Ironwood	Medium		Variable	Sapling
Beech	5	Log/Pole	10						
Sugar Maple	50	Pole/Log	8	68					
Red Maple	5	Log/XLog/Pole	14	73					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
8	4130 - Aspen	Sapling Medium	63.3	3	Immature	N/A	Harvest complete 11/2019. Clearcut all but white pine and elm. Scattered residual saplings of various species, but mainly ironwood and some maple. Impressive browse on sugar maple, white ash, and basswood. Expect more stratification and subcanopy development in the next 10 years. Rare striped maple, gooseberry in subcanopy. Trace red oak in canopy.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Bigtooth Aspen		25	Sapling	1	3	Sugar Maple		Medium	< 5 feet	Sapling	
White Ash		2	Sapling	1		Maple Leaved Viburnum		Trace	< 5 feet	Tall Shrub	
Black Cherry		3	Sapling	1		Blackberry/Raspberry		High	5 - 10 feet	Tall Shrub	
Quaking Aspen		35	Sapling	1	3	Basswood		Low	< 5 feet	Sapling	
American Elm		5	Sapling/Pole	4							
Basswood		5	Sapling	1							
White Pine		10	Log/XLog/Pole	16							
Red Maple		5	Sapling	1							
Ironwood		5	Sapling	1							
Sugar Maple		5	Sapling	1							
9	4112 - Maple, Beech, Cherry Association	Sawtimber Well	9.5	90	81-110	N/A		Gentle easterly to flat slope. Trace bigtooth aspen, ironwood in canopy. Rare elm in subcanopy. Generally low stocking of beech in the subcanopy, though the north edge has dense beech.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species			Density	Avg. Height	Size
Basswood		5	Log/Pole	10		Black Cherry			Trace	< 5 feet	Seeding
Red Pine		2	Log	14		White Pine			Trace	< 5 feet	Sapling
White Pine		3	Log	14		Sugar Maple			Low	>20 feet	Sapling
Red Maple		70	Log/Pole	12	90	Beech			Low	Variable	Sapling
Beech		2	Pole/Log	8		Sugar Maple			Low	< 5 feet	Seeding
Black Cherry		1	Log/Pole	12		Ironwood			Medium	Variable	Sapling
American Elm		1	Log/Pole	10							
Sugar Maple		16	Pole/Log	8							
10	4139 - Aspen, Mixed Deciduous	Sapling Well	47.4	18	Unspecified	N/A	Few residual red pine, sugar maple, black cherry, balsam fir from parent stand. Trace white ash, red oak, elm, beech, and white pine in canopy. Scattered white and red pine saplings originating from clearcut. Rare elm, hazelnut, gooseberry, red pine in subcanopy. Deer very present. Clearcut in 2005.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species			Density	Avg. Height	Size
Jack Pine		8	Sapling	3		Black Cherry		Low	Variable	Sapling	
Ironwood		5	Sapling	2		Honeysuckle (spp.)		Trace	< 5 feet	Tall Shrub	
Bigtooth Aspen		10	Sapling/Pole	4		Beech		Low	Variable	Sapling	
Sugar Maple		15	Sapling	2		White Pine		Trace	Variable	Sapling	
Basswood		2	Sapling	3		Serviceberry (Juneberry)		Trace	10 - 20 feet	Sapling	
Balsam Fir		1	Sapling/Pole/Log	3		Witch Hazel		Trace	5 - 10 feet	Tall Shrub	
Red Maple		5	Sapling/Pole	3		Bracken Fern		Low	Unspecified	Non-Wood	
Quaking Aspen		46	Sapling/Pole	3	18	Blackberry/Raspberry		Low	< 5 feet	Tall Shrub	
Black Cherry		8	Sapling/Pole	3		Sugar Maple		Low	Variable	Sapling	
						Balsam Fir		Trace	Variable	Sapling	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
11	4130 - Aspen	Sapling Well	30.9	28	1-50	N/A	Aspen is overtaking hardwood in many areas, though sugar maple and cherry are still a decent component in areas with less aspen. Trace red oak, white pine (saps), white ash, elm, and balsam fir (log/pole residual) in canopy. Rare cherry, maple leaved viburnum, basswood in subcanopy. Straddling between an A3 and A6; a lot of submerchantable stems yet, but some pockets of small poles. Rather simple subcanopy. Raspberry has decreased significantly in the last decade as the stand matures. Draw in southeast has potential to be seasonally damp. Golden crowned kinglets present in November 2022. Cut in 1995. Residual BF and WP, poles and logs.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Pine	2	XLog/Log	20		White Pine	Trace		Variable	Sapling
Red Maple	6	Sapling/Pole	4		Ironwood	Low		Variable	Sapling
Ironwood	2	Sapling	2		Honeysuckle (spp.)	Trace		< 5 feet	Tall Shrub
Black Cherry	5	Pole/Sapling	6		Blackberry/Raspberry	Trace		< 5 feet	Tall Shrub
Bigtooth Aspen	38	Pole/Sapling	5	28	Sugar Maple	Low		Variable	Sapling
Pin Cherry	2	Pole/Sapling	5		Serviceberry (Juneberry)	Trace		Variable	Sapling
Quaking Aspen	35	Sapling/Pole	4	28	Beech	Trace		Variable	Sapling
Sugar Maple	9	Sapling/Pole	3		Bracken Fern	Trace		Unspecified	Non-Wood
Red Pine	1	Log/XLog	16		Hazelnut (Beaked)	Trace		< 5 feet	Tall Shrub
					Balsam Fir	Trace		Variable	Sapling
					Red Maple	Trace		< 5 feet	Sapling
12	6233 - Wet Meadow	Nonstocked	1.8	0	Unspecified	No		Beaver activity. Exotic phragmites in stand.	
Sub-Canopy Species	Density	Avg. Height	Size						
Northern White Cedar	Low	Variable	Sapling						
Tamarack	Trace	10 - 20 feet	Sapling						
Willow spp.	Trace	5 - 10 feet	Tall Shrub						
White Pine	Trace	Variable	Sapling						
Bulrush	High	Unspecified	Non-Wood						
Red Osier Dogwood	Trace	< 5 feet	Tall Shrub						
Phragmites (exotic)	Low	Unspecified	Non-Wood						
Cattail spp.	Trace	Unspecified	Non-Wood						
Balsam Fir	Trace	Variable	Sapling						
13	4112 - Maple, Beech, Cherry Association	Sawtimber Well	15.8	77	111-140	N/A	Terrain slopes down to the East with especially steep grade in the eastern-most quarter of the stand. Campsites in the northeast leg aside the main road. Northeast is heavier to sugar maple (vs red) with the majority of the pine volume located here. Dead elm. Beech scale present. Lower quality, multi-stemmed hardwood. Basswood is heavier in southeast and on steep slope. Balsam fir subcanopy is most prominent in the east. Red maple BA increases to the north. Dense beech and beech brush along the southwest edge of the stand. Trace elm, bigtooth, quaking aspen, yellow birch, and red pine in canopy. Rare red oak, honeysuckle, and serviceberry in subcanopy.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Sugar Maple	24	Pole/Log	8		Beech	Medium		Variable	Sapling
Red Maple	50	Log/Pole/XLog	10	77	Maple Leaved Viburnum	Trace		< 5 feet	Tall Shrub
Basswood	5	Log/Pole	10		Balsam Fir	Low		Variable	Sapling
Beech	15	Pole/Log	8		Ironwood	Low		Variable	Sapling
White Pine	5	XLog/Log	18		Striped Maple	Trace		< 5 feet	Sapling
Ironwood	1	Pole/Sapling	6		White Pine	Low		Variable	Sapling
					Black Cherry	Trace		< 5 feet	Seeding



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																		
14	4130 - Aspen	Sawtimber Well	10.6	86	111-140	N/A	South, southwest, and west-facing slopes (furthest south slopes have a northwest aspect, even). Hillside aspen with hardwood. Trace amounts of black cherry and basswood in canopy; trace red and white pine in northwest on edge of stand. Small transitional edge/overgrown opening in west-center, adjacent to stand 16. Dense advanced sugar maple regeneration in the northwest, sap/pole. Rare serviceberry, balsam fir, maple leaved viburnum, black cherry in subcanopy. (One white spruce sap.)																																																																		
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15	42110 - Planted Red Pine	Sawtimber Well	4.6	95	111-140	N/A	Trace red maple, white ash, elm in canopy. Rare honeysuckle, basswood, red oak, striped maple, apple (one pole in east) in subcanopy. Some midcanopy sapling ironwood, sugar maple, beech; most sugar maple saplings are less than five feet. Scattered jack pine snags. Red pine and white pine planted in the 1930s. Trace amounts of basswood, white ash, and black cherry are in the canopy. Very few regenerating elm are in the disturbed soil along the road.																																																																		
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16	42260 - Natural Pine, Mixed Deciduous	Sapling Poor	3.3	36	1-50	N/A	Non-forested opening converted to conifer/cherry. Sapling/pole jack and red pine with cherry and aspen. Trace elm, pin cherry; rare sugar maple, white pine in subcanopy. Trace scattered log jack pine.																																																																		
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17	42111 - Planted Red Pine, Mixed Deciduous	Sawtimber Medium	27.6	92	81-110	N/A	Jack pine has totally senesced in the past decade. Trace elm, yellow birch, paper birch, red maple, balsam poplar, and ironwood in canopy. Rare striped maple, common buckthorn, white spruce, red pine, and honeysuckle in subcanopy. Incredibly dense sugar maple saplings, generally above browse height, stock the subcanopy across most of this stand. South half of stand is red pine dominated. North half is maybe 20% red pine, the rest dominated by deteriorating aspen and cherry (jack pine snags). RP/WP/JP planted in 1931.																																																																		
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
18	4110 - Sugar Maple Association	Sawtimber Well	307.5	85	81-110	N/A	Trace black cherry, elm, paper birch, yellow birch, red maple, and ironwood in canopy. Rare elm, yew (just saw one on steep slope in southeast), white spruce, balsam fir (spruce and fir located in southeast, associated with red oak, red maple), honeysuckle, alternate leafed dogwood, and red berried elder (Sambucus and dogwood on road edges in disturbed soil) in subcanopy. Occasional white pine seedling near mature white pine. Bedstraw, leeks, helleborine present. Few overgrown non-forested openings present within stand; medium to high density saplings; raspberry, bracken fern subcanopy. Stand was thinned to 80 BA, completed in 2019 (52-136-14). Few pockets were skipped retaining higher BAs; some inoperable hillsides with higher BAs as well. Couple pockets dominated by red pine with sapling/pole hardwood underneath. White and red pine were planted throughout much of this stand in the 1930s. Terrain is variable, especially so in the southeast; some ground is inoperable because of steepness. Obvious deer and elk sign; old bear sign. There are some beautiful log and xl red oak in the southern and eastern portion of this stand concentrated on south facing slopes and along a ridge line east of the road and south of the dirtbike trail. Pre-harvest stand had minimal beech in subcanopy. Post-harvest stand has high stocking of beech saplings. Some surviving beech, BBD present. EAB got to all the canopy ash; saplings are present.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Pine	2	XLog/Log	18		Prickly Or Wild Gooseberry	Trace		< 5 feet	Tall Shrub
Red Pine	3	XLog/Log	18	95	Sugar Maple	Low		>20 feet	Sapling
Red Oak	3	XLog/Log/Pole	18		Beech	High		Variable	Sapling
Sugar Maple	56	Log/Pole/XLog	10	85	Maple Leaved Viburnum	Trace		< 5 feet	Tall Shrub
Basswood	28	Log/Pole/XLog	12		Striped Maple	Trace		5 - 10 feet	Sapling
Quaking Aspen	2	Log/XLog/Pole	12		Black Cherry	Low		< 5 feet	Sapling
Bigtooth Aspen	3	Log/XLog	16		Ironwood	High		Variable	Sapling
Beech	3	Log/XLog	16		Red Oak	Trace		< 5 feet	Seeding
					Sugar Maple	High		< 5 feet	Seeding
					Blackberry/Raspberry	Low		< 5 feet	Tall Shrub
					White Ash	Low		Variable	Sapling
					Basswood	Trace		Variable	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
19	4119 - Mixed Northern Hardwoods	Sapling Medium	12.0	46	1-50	N/A	A challenging stand to accurately represent. Stand is in limbo, transitioning from conifer to sugar maple association. The sapling layer is now the prominent canopy with "super"canopy red/white/jack pine and some mature hardwood (basswood and cherry, specifically). Trace pin cherry, red oak, beech, white ash, and paper birch in canopy. Rare hazelnut, balsam fir in subcanopy.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Pine	3	XLog/Log	18		Ironwood	Low		Variable	Sapling
Sugar Maple	47	Sapling/Pole	3	46	Beech	Low		Variable	Sapling
Quaking Aspen	5	Pole/Log	8		Black Cherry	Low		Variable	Sapling
Red Maple	2	Pole/Sapling	6		White Ash	Trace		Variable	Sapling
Ironwood	10	Sapling/Pole	4		Bracken Fern	Medium		Unspecified	Non-Wood
Jack Pine	10	Pole/Log/Sap	7	73	Blackberry/Raspberry	Medium		< 5 feet	Tall Shrub
Basswood	4	Log/Pole/XLog	14		Sugar Maple	Medium		Variable	Sapling
Black Cherry	15	Log/Pole/Sap	10						
Red Pine	2	Log/XLog	16						
American Elm	2	Pole/Sapling	6						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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20	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	21.2	89	51-80	N/A	Multi-stemmed, wolfy timber; low quality. Bracken fern on more exposed slopes. Trace red pine volunteers. More oak on toe of slope, especially in the south half of the stand. Basswood and beech are clumpy. BBD. Rare hazelnut and white spruce in the subcanopy. Southeast aspect, generally quite steep, dropping down into lowland. Multiple age classes and strata represented. Occasional paper birch and yellow birch, XL sugar maple and beech. Openings throughout stand with large white pine stumps.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
White Spruce	1	Log	14		Balsam Fir	Low		Variable	Sapling
Bigtooth Aspen	25	Log/Pole/XLog	14		Bracken Fern	Low		Unspecified	Non-Wood
Basswood	5	Log/Pole	12		Ironwood	Low		Variable	Sapling
Ironwood	2	Pole/Log/Sap	8		Red Oak	Trace		Variable	Sapling
Quaking Aspen	2	Log/Pole	14	91	Black Cherry	Low		< 5 feet	Sapling
Sugar Maple	27	Log/Pole/XLog	10	89	White Ash	Trace		< 5 feet	Sapling
Red Oak	3	Pole/Log/XLog	8		Sugar Maple	Low		< 5 feet	Seeding
Red Maple	25	Log/Pole/XLog	12		Maple Leaved Viburnum	Trace		< 5 feet	Tall Shrub
Balsam Fir	1	Pole/Log	8		White Pine	Trace		< 5 feet	Sapling
Beech	9	Log/Pole	10	53	Serviceberry (Juneberry)	Low		Variable	Tall Shrub
					Beech	Medium		Variable	Sapling
					Wintergreen	Trace		< 5 feet	Tall Shrub

21	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	36.5	68	51-80	N/A	Subcanopy alternates between dense alder and dense black ash. Rare hawthorn, bulrush, virgin's bower, sugar maple, black cherry, basswood, elm, beech, hazelnut, willow, and ironwood in subcanopy. Very active beaver in south portion of stand. Occasional black cherry on edge of west boundary. Trace beech is also along western edge. Stand densities, composition, and canopy closure are variable. Increased aspen as you travel south.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Northern White Cedar	2	Log	14		Tag Alder	Medium		10 - 20 feet	Tall Shrub
Balsam Fir	10	Pole/Log	8		Red Osier Dogwood	Trace		< 5 feet	Tall Shrub
Paper Birch	3	Pole/Log	8		White Spruce	Low		Variable	Sapling
Red Maple	30	Pole/Log	8	68	Serviceberry (Juneberry)	Trace		5 - 10 feet	Tall Shrub
Black Spruce	5	Log/Pole	10		Nannyberry	Trace		< 5 feet	Tall Shrub
Basswood	2	Pole/Log	8		Swamp Black Currant	Trace		< 5 feet	Tall Shrub
Yellow Birch	1	Pole/Log/Sap	7		Balsam Fir	Trace		Variable	Sapling
White Spruce	22	Log/XLog	16		Michigan Holly	Trace		5 - 10 feet	Tall Shrub
Quaking Aspen	20	Log/Pole/XLog	11		Black Ash	High		Variable	Sapling
American Elm	5	Pole/Sap/Log	6		Honeysuckle (spp.)	Trace		< 5 feet	Tall Shrub
					Common Buckthorn	Trace		5 - 10 feet	Tall Shrub



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments									
22	6229 - Mixed lowland shrub	Nonstocked	9.6		Unspecified	No	1ac larch sap/pole clump in northeast. Grassy opening in center of stand has dense fleabane, trace willow and alder. Rare virgin's bower, black cherry, elm, honeysuckle in stand.									
								Sub-Canopy Species	Density	Avg. Height	Size					
								Red Maple	Trace	Variable	Sapling					
								Black Ash	Trace	Variable	Sapling					
								Quaking Aspen	Trace	>20 feet	Pole					
								Red Osier Dogwood	Trace	< 5 feet	Tall Shrub					
								Willow spp.	Low	5 - 10 feet	Tall Shrub					
								Balsam Fir	Low	Variable	Sapling					
								American Highbush Cranberry	Trace	5 - 10 feet	Tall Shrub					
								Tamarack	Low	Variable	Sapling					
								Tag Alder	High	10 - 20 feet	Tall Shrub					
Ninebark	Trace	5 - 10 feet	Tall Shrub													
23	6123 - Lowland Fir	Poletimber Medium	7.0	69	1-50	N/A	East half is more forested, 60-70% canopy closure; balsam fir dominated with various conifer and deciduous species mixed in. Alder, willow, cherry, balsam fir subcanopy. West half is less forested, maybe 40% canopy closure; scattered trees with higher alder subcanopy. North opens up to include highbush cranberry, nanyberry, and holly. West Branch Sturgeon River goes through middle of stand. Very wet.									
								Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
								Paper Birch	2	Pole/Sap/Log	6		Black Cherry	Medium	Variable	Sapling
								Quaking Aspen	10	Log/Pole	12		Ninebark	Trace	< 5 feet	Tall Shrub
								Red Maple	2	Log/Pole	10		Black Spruce	Trace	Variable	Sapling
								Balsam Fir	67	Pole/Sap/Log	7	69	White Spruce	Trace	Variable	Sapling
								Black Spruce	5	Pole	8		Tag Alder	Medium	10 - 20 feet	Tall Shrub
								Northern White Cedar	2	Log/Pole	12	92	Michigan Holly	Trace	5 - 10 feet	Tall Shrub
								Black Cherry	10	Sapling/Pole	4		Willow spp.	Low	10 - 20 feet	Tall Shrub
								Tamarack	2	Pole/Log	8		Balsam Fir	Medium	Variable	Sapling
								24	6124 - Lowland Spruce-Fir	Sawtimber Well	55.5	87	51-80	N/A	Sturgeon River runs through this stand. Spruce dominated with relatively evenly scattered birch, red maple, and quaking aspen, 60-90% canopy closure. Some brooming in spruce. Far northeast is dominated by quaking aspen with a dense balsam fir subcanopy. Rare sugar maple, red oak, elm, hazelnut, white ash, elderberry, red osier dogwood, ninebark, michigan holly, common buckthorn, alder leafed buckthorn, and highbush cranberry in subcanopy. Active beaver. Lots of various mammal tracks. Couple pockets of dense sapling black ash with sap/pole (and scattered log) birch, red maple, spruce, and fir.	
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height									Size
American Elm	2	Pole/Sap/Log	6		Balsam Fir	Low	Variable									Sapling
Balsam Fir	15	Log/Pole/Sap	12		Black Cherry	Trace	Variable									Sapling
Black Spruce	25	Log/Pole	10	87	Black Ash	Medium	Variable									Sapling
White Spruce	25	Log/Pole/XLog	14	87	Beech	Trace	5 - 10 feet									Sapling
Northern White Cedar	1	Log/Pole	15		Blackberry/Raspberry	Trace	< 5 feet									Tall Shrub
Paper Birch	10	Log/Pole	12		Tag Alder	Low	5 - 10 feet									Tall Shrub
Quaking Aspen	10	Log/Pole	14		Swamp Gooseberry	Trace	< 5 feet									Tall Shrub
White Pine	1	XLog/Log/Pole	22		Honeysuckle (spp.)	Trace	< 5 feet									Tall Shrub
Red Maple	10	Log/Pole	10		Ironwood	Trace	Variable									Sapling
Tamarack	1	Log/Pole	10		White Spruce	Trace	Variable	Sapling								
					Black Spruce	Low	< 5 feet	Sapling								
					Blueberry/Bilberry/Cranberry	Low	< 5 feet	Tall Shrub								



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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25	4117 - Mixed N. Hardwood - Pine	Sapling Medium	22.6	6	1-50	N/A	Harvested in February 2016. Residual sapling (some graduating into pole) hardwood. Residual red pine plus retention island plus SMZ/fisheries buffer makes for a higher volume of red pine. Not terribly impressive regeneration, but could be desirable species under the snow. Rare hazelnut, elm.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Beech		5	Sapling	1		White Ash		Trace	< 5 feet	Sapling	
Ironwood		5	Sapling/Pole	1		Witch Hazel		Trace	5 - 10 feet	Tall Shrub	
Basswood		2	Sapling	1		Prickly Or Wild Gooseberry		Trace	< 5 feet	Tall Shrub	
Red Maple		25	Sapling/Pole	1	6	Red Pine		Trace	5 - 10 feet	Sapling	
Red Pine		20	Log/XLog/Pole	15	92	Beech		Medium	< 5 feet	Sapling	
Paper Birch		1	Pole/Sapling	6		Honeysuckle (spp.)		Trace	< 5 feet	Tall Shrub	
Balsam Fir		2	Pole/Sapling	6		Maple Leaved Viburnum		Trace	< 5 feet	Tall Shrub	
Quaking Aspen		2	Sapling	1		Blackberry/Raspberry		High	< 5 feet	Tall Shrub	
Black Cherry		33	Sapling	1	6	Striped Maple		Trace	Variable	Sapling	
Sugar Maple		5	Sapling/Pole	1							

26	6229 - Mixed lowland shrub	Nonstocked	13.3		Unspecified	No	
Sub-Canopy Species		Density	Avg. Height	Size			
Cattail spp.		Low		Non-Wood			
Balsam Fir		Low		Sapling			
Black Spruce		Low		Sapling			
Red Osier Dogwood		Low		Tall Shrub			
Alder		High		Tall Shrub			

27	6132 - Mixed Lowland Forest with Cedar	Poletimber Medium	46.7	100	81-110	N/A	Stand size increased by two-fold due to a land exchange, acquiring the west half of this stand. Acreage acquired has had light harvesting (for hunting habitat) resulting in lower densities and a patchwork of small openings dominated by elderberry, black ash, and/or alder. Far east edge has cedar mortality due to a rising water table, likely the influence of beavers. Areas with high stocking of black ash saplings. Common buckthorn is prolific in patches on the east edge as well. Cedar is clumpy for the most part with BAs ranging 90-150 within clumps; 0-50 amongst birch and red maple. Bittersweet nightshade (Solanum) is present in low densities. Trace black spruce and basswood in the canopy. Rare willow, elm, sugar maple, nannyberry, creeping snowberry, red osier dogwood, cedar, and beech in the subcanopy.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Paper Birch		35	Pole/Log/Sap	8	75	American Fly Honeysuckle		Trace	< 5 feet	Tall Shrub	
Balsam Fir		5	Pole/Sapling	6		Mountain Maple		Trace	< 5 feet	Sapling	
White Spruce		2	Log/XLog	16		Hazelnut (Beaked)		Trace	5 - 10 feet	Tall Shrub	
American Elm		3	Sapling/Pole	4		Black Spruce		Trace	< 5 feet	Sapling	
Red Maple		15	Pole/Log/Sap	7		Common Buckthorn		Low	Variable	Tall Shrub	
Northern White Cedar		40	Log/Pole/XLog	10	100	Michigan Holly		Trace	5 - 10 feet	Tall Shrub	
						Black Ash		Medium	Variable	Sapling	
						Swamp Red Currant		Trace	< 5 feet	Tall Shrub	
						Virgin's Bower		Low	5 - 10 feet	Vine	
						Black Cherry		Trace	Variable	Sapling	
						Balsam Fir		Low	Variable	Sapling	
						Red Maple		Trace	Variable	Sapling	
						Tag Alder		Low	10 - 20 feet	Tall Shrub	
						Elderberry		Medium	Variable	Tall Shrub	
						Blueberry/Bilberry/Cranberry		Trace	< 5 feet	Tall Shrub	
						Red Oak		Trace	< 5 feet	Seeding	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
28	4319 - Mixed Upland Forest	Sawtimber Well	10.1	92	51-80	N/A	1931 Red Pine and Jack Pine planted @ 800 tpa over 26 acres. Thinnings in 1984 and/or 1989. Canopy closure is 95% including hardwood midcanopy/canopy. Occasional cherry and elm (<4" dbh) along road. Jack Pine regen confined to south tip of western leg. Two distinct M3 pockets, otherwise it's two aged with hardwood regen mixing in with red pine canopy. Rare striped maple, gooseberry in subcanopy.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	10	Log/XLog	14		Black Cherry	Low		>20 feet	Sapling
Black Cherry	15	Sapling/Pole	4		Striped Maple	Low		Variable	Sapling
Basswood	5	Pole/Sap/Log	5		Blackberry/Raspberry	Trace		< 5 feet	Tall Shrub
Red Oak	1	Pole/Sap/Log	6		Red Oak	Trace		Variable	Sapling
Sugar Maple	5	Log/Pole	10		Red Maple	Low		Variable	Sapling
Ironwood	2	Sapling/Pole/Log	4		Maple Leaved Viburnum	Trace		< 5 feet	Tall Shrub
Paper Birch	20	Pole/Sap/Log	7	34	Beech	Medium		Variable	Sapling
Balsam Fir	2	Pole/Log	8		White Ash	Trace		Variable	Sapling
Red Pine	40	XLog/Log	18	92	Sugar Maple	Low		>20 feet	Sapling
					Balsam Fir	Low		Variable	Sapling
					Leatherwood	Trace		< 5 feet	Tall Shrub
					Ironwood	Low		Variable	Sapling
29	6239 - Mixed Emergent Wetland	Nonstocked	4.1			No		Standing dead cedar and balsam fir. High water. Inundated, pockets of standing water. Channels move through and around this stand. Evidence of beaver activity. Observed one clump of blue flag iris on west edge. Common buckthorn creeping in, especially from the west.	
Sub-Canopy Species	Density	Avg. Height	Size						
Willow spp.	Trace	5 - 10 feet	Tall Shrub						
Common Buckthorn	Trace	Variable	Tall Shrub						
Tag Alder	Low	Variable	Tall Shrub						
Northern White Cedar	Trace	>20 feet	Pole						
Cattail spp.	Trace	Unspecified	Non-Wood						
30	4130 - Aspen	Sawtimber Well	2.6	55	111-140	N/A	Aspen colonizing opening; staggered heights, ages, diameters. Smaller diameter stand east of road (P/S 7"). Cherry, sugar maple, and red pine present on the edges of the stand. Rare red pine, paper birch, red oak, white spruce in subcanopy.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Sugar Maple	1	Pole	6		White Ash	Trace		< 5 feet	Sapling
Bigtooth Aspen	98	Log/Pole/Sap	10	55	Ironwood	Trace		Variable	Sapling
Red Pine	1	Log	14		Maple Leaved Viburnum	Trace		< 5 feet	Tall Shrub
					Sugar Maple	Low		Variable	Sapling
					Red Maple	Trace		5 - 10 feet	Sapling
					Beech	Low		Variable	Sapling
					Balsam Fir	Medium		Variable	Sapling
					Balsam Fir	Low		Variable	Pole
					Honeysuckle (spp.)	Trace		< 5 feet	Tall Shrub



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
31	4119 - Mixed Northern Hardwoods	Poletimber Medium	20.7	73	51-80	N/A	Primarily upland but drops into lowland along northerly stand. Cherry concentrated along edges of more densely vegetated areas and road. Few elm on the edges too. Trace ironwood, basswood, red oak in canopy. Rare witch hazel and alternate-leaved dogwood in subcanopy. Areas with high stocking of hardwood regeneration. Age and structural diversity/variability making this stand multistoried.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Sugar Maple		10	Log/Pole	10		Balsam Fir		Medium	Variable	Sapling
Paper Birch		2	Pole/Sapling	6		Ironwood		Low	Variable	Sapling
Red Pine		2	Pole	8		White Spruce		Low	Variable	Sapling
Quaking Aspen		5	Log/Pole	10		White Ash		Trace	< 5 feet	Sapling
Balsam Fir		15	Pole/Log/Sap	8	51	Red Pine		Low	Variable	Sapling
White Spruce		5	Pole/Log	8		Common Buckthorn		Trace	5 - 10 feet	Tall Shrub
White Pine		1	Pole/Log	8		Black Cherry		Medium	Variable	Sapling
Red Maple		35	Log/Pole	10	73	Common Lilac		Trace	5 - 10 feet	Tall Shrub
Black Cherry		25	Pole/Log	8		Sugar Maple		Medium	Variable	Sapling
						Quaking Aspen		Trace	Variable	Sapling
						Serviceberry (Juneberry)		Low	Variable	Sapling
						White Pine		Low	Variable	Sapling
						Red Maple		Medium	Variable	Sapling
						Honeysuckle (spp.)		Trace	5 - 10 feet	Tall Shrub
						Hawthorn (spp.)		Trace	Variable	Tall Shrub
						Beech		Low	Variable	Sapling
						Bracken Fern		Low	Unspecified	Non-Wood
						Blackberry/Raspberry		Low	< 5 feet	Tall Shrub
32	6118 - Lowland Deciduous with Cedar	Poletimber Medium	7.6	88	81-110	N/A		Trace balsam fir, basswood, and black cherry in the canopy. Rare basswood and red osier dogwood in the subcanopy. Scattered dead black ash and elm. Browsing evident on ash saplings. Sugar maple saplings, hazelnut, and canopy black cherry (pole) increase in the east. Barberry present in west half of stand. Common buckthorn on perimeter.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Paper Birch		40	Pole/Log/Sap	8	88	Tag Alder	Trace		10 - 20 feet	Tall Shrub
American Elm		5	Pole/Sap/Log	7		Quaking Aspen	Trace		Variable	Sapling
Red Maple		15	Pole/Sap/Log	8		Black Cherry	Trace		Variable	Sapling
Yellow Birch		15	Pole/Sap/Log	8		Common Buckthorn	Trace		5 - 10 feet	Tall Shrub
White Spruce		5	Log/XLog	16		Sugar Maple	Low		Variable	Sapling
Northern White Cedar		20	Log/Pole/XLog	16		Michigan Holly	Trace		< 5 feet	Tall Shrub
						White Spruce	Low		Variable	Sapling
						Elderberry	Low		< 5 feet	Tall Shrub
						Mountain Maple	Low		Variable	Sapling
						Blackberry/Raspberry	Trace		< 5 feet	Tall Shrub
						Balsam Fir	Low		Variable	Sapling
						Japanese Barberry	Trace		< 5 feet	Tall Shrub
						Skunk Currant	Trace		< 5 feet	Tall Shrub
						Beech	Trace		Variable	Sapling
						Black Ash	Medium		Variable	Sapling
						Hazelnut (Beaked)	Low		5 - 10 feet	Tall Shrub
						Virgin's Bower	Low		Unspecified	Vine



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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33	4119 - Mixed Northern Hardwoods	Sawtimber Well	40.7	68	81-110	N/A	Trace elm, white pine, bigtooth aspen in canopy. Rare leatherwood, red oak, hemlock (one in south), and yew in subcanopy. Red maple is multi-stemmed. Some multi-stemmed sugar maple, beech, and birch. Stand sits on west-facing slope with a lot of undulations. Basswood and sugar maple dominate east stand boundaries, especially where slopes crest or flatten. Beech and paper birch are not uniform throughout the stand - beech is present mostly in the center of the stand, tapering a bit as you progress northeast and is not present in south portion of stand. Paper birch is mostly present in the northern most and western portion of stand.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Balsam Fir		8	Log/Pole	10		Maple Leaved Viburnum		Low	< 5 feet	Tall Shrub	
Sugar Maple		25	Log/Pole/XLog	10		Sugar Maple		Medium	< 5 feet	Seeding	
White Spruce		3	Log/Pole	14		Beech		Medium	Variable	Sapling	
Red Maple		40	Log/Pole/XLog	10	68	White Spruce		Trace	Variable	Sapling	
Ironwood		1	Pole/Sapling	6		Balsam Fir		Medium	Variable	Sapling	
Paper Birch		5	Log/Pole/XLog	10		Striped Maple		Trace	Variable	Sapling	
Basswood		6	Log/Pole	12	76	Quaking Aspen		Trace	< 5 feet	Sapling	
Beech		4	Pole/Log/Sap	7		Balsam Fir		Low	>20 feet	Pole	
Yellow Birch		3	Log/Pole	10		Ironwood		Medium	Variable	Sapling	
Black Cherry		2	Pole/Log	8		Sugar Maple		Low	>20 feet	Sapling	
Bigtooth Aspen		3	Log/Pole/XLog	14							

34	4110 - Sugar Maple Association	Sawtimber Well	38.1	89	51-80	N/A	Variable stand with uneven terrain (some steep slopes), varying densities, diameters, and species composition. Slope and flat acreage in south has larger timber, higher BAs. Trace amounts of hemlock (located in SW draw only), black cherry (most log-sized cherry is dead), occasional XL sugar maple, balsam fir, elm, ironwood, red maple, and white spruce in canopy. Rare honeysuckle, juneberry, prickly gooseberry, elm, and striped maple in subcanopy. Ash and beech have all but fallen out of the canopy from EAB and BBD, respectively. Browsing pressure on subcanopy. Maple leaved viburnum associated with BTA.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Paper Birch		1	Pole/Log	8		White Spruce		Trace	Variable	Sapling	
Basswood		48	Log/Pole/XLog	12	94	Beech		Medium	Variable	Sapling	
Sugar Maple		49	Log/Pole	12	89	Sugar Maple		Medium	< 5 feet	Seeding	
Bigtooth Aspen		1	Log/Pole/XLog	14		Balsam Fir		Trace	Variable	Sapling	
Beech		1	Log/Pole/XLog	10		Ironwood		High	Variable	Sapling	
						White Ash		Low	Variable	Sapling	
						Maple Leaved Viburnum		Trace	< 5 feet	Tall Shrub	
						Black Cherry		Trace	< 5 feet	Sapling	

35	3303 - Mixed Low Density Trees	Nonstocked	16.9		Unspecified	No	Rare hawthorn, basswood, white pine, white spruce within opening. Black cherry present in Pole/Sap/Log. Fleabane, field strawberry, goldenrod present. Pipeline under road. Clump in north end of mature aspen with black cherry (pole), subcanopy black cherry, balsam fir, sugar maple, ironwood, beech, red maple, white pine.
Sub-Canopy Species		Density	Avg. Height	Size			
Bracken Fern		Medium	Unspecified	Non-Wood			
Spotted Knapweed		High	Unspecified	Non-Wood			
Balsam Fir		Trace	Variable	Sapling			
Honeysuckle (spp.)		Medium	< 5 feet	Tall Shrub			
Red Pine		Trace	< 5 feet	Sapling			
Sugar Maple		Low	Variable	Sapling			
Black Cherry		Medium	>20 feet	Pole			
Quaking Aspen		Trace	>20 feet	Log			
Juniper		Trace	< 5 feet	Tall Shrub			
Blackberry/Raspberry		Medium	< 5 feet	Tall Shrub			



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
36	4110 - Sugar Maple Association	Sawtimber Well	24.8	71	81-110	N/A	Generally northwest to flat aspect. Bigtooth aspen mostly in northeast, trace in southeast. Trace elm, balsam fir, red maple, yellow birch, white ash, white spruce in canopy. Rare red oak, honeysuckle, striped maple, yew, basswood, elm, hazelnut in subcanopy. Dead ash and beech in canopy. Sharp lobed hepatica, helleborine, and partridgeberry present. Fairly certain there's a local population of Geum fragarioides (Barren Strawberry) in the west. Paper birch volumes most prominent on west edge.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Quaking Aspen		5	Log/Pole/XLog	14		White Spruce		Trace	Variable	Sapling	
Paper Birch		4	Pole/Log	8		Ironwood		High	Variable	Sapling	
Bigtooth Aspen		1	Log/XLog	16		Sugar Maple		High	< 5 feet	Seeding	
Sugar Maple		50	Pole/Log/XLog	8	71	Maple Leaved Viburnum		Trace	< 5 feet	Tall Shrub	
Ironwood		2	Pole/Sapling	6		Balsam Fir		Low	Variable	Sapling	
Basswood		38	Log/Pole	12		Black Cherry		Trace	< 5 feet	Sapling	
						Sugar Maple		Low	>20 feet	Sapling	
						Beech		Low	Variable	Sapling	
						White Ash		Low	< 5 feet	Sapling	
37	3104 - Degraded	Nonstocked	3.7	0	Unspecified	No		Cherry present in sap/pole/log; red pine pole/sap/log; jack pine pole/sap.			
Sub-Canopy Species		Density	Avg. Height	Size							
Honeysuckle (spp.)		Trace	< 5 feet	Tall Shrub							
Ironwood		Trace	Variable	Sapling							
Balsam Fir		Low	Variable	Sapling							
Common Lilac		Trace	5 - 10 feet	Tall Shrub							
Black Cherry		Low	Variable	Sapling							
Jack Pine		Trace	Variable	Pole							
Spotted Knapweed		High	Unspecified	Non-Wood							
Bracken Fern		Low	Unspecified	Non-Wood							
Red Pine		Low	Variable	Pole							
Blackberry/Raspberry		Low	< 5 feet	Tall Shrub							
Red Maple		Trace	Variable	Sapling							
38	4119 - Mixed Northern Hardwoods	Poletimber Well	216.8	85	81-110	N/A	A hilly stand with a few small plateaus. Upslope composition varies from downslope in most cases. Southeast quadrant is lesser quality, pole dominated. Southwest quad is more log dominated (still with a high volume of poles) and better quality. Northwest quad is again lesser quality, log red maple, beech, sugar maple, and aspen dominated. Northeast quad is thin-able but has challenging access, though the southern portion of this quadrant is lesser quality. BAs range 50-140, 94 ave. Trace red oak and elm in canopy. Rare honeysuckle, white pine, serviceberry, black cherry in subcanopy. Few paper birch and white ash snags. QA is declining. Ironwood and beech sapling densities are clumpy (high in areas, low in others).				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Bigtooth Aspen		10	Log/XLog/Pole	16		White Ash		Trace	< 5 feet	Sapling	
Red Maple		22	Log/Pole/XLog	11		Ironwood		Medium	Variable	Sapling	
Sugar Maple		30	Pole/Log/XLog	9	85	White Spruce		Trace	Variable	Sapling	
Yellow Birch		2	Log/Pole	12		Beech		Medium	Variable	Sapling	
Quaking Aspen		5	Log/Pole/XLog	12		Striped Maple		Trace	Variable	Sapling	
White Pine		2	XLog/Log/Pole	18		Sugar Maple		Low	>20 feet	Sapling	
Basswood		18	Log/Pole/XLog	11		Maple Leaved Viburnum		Trace	< 5 feet	Tall Shrub	
Ironwood		1	Pole/Sapling	6		Balsam Fir		Trace	Variable	Sapling	
Beech		10	Log/Pole	10							



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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39	4119 - Mixed Northern Hardwoods	Poletimber Medium	14.8	74	51-80	N/A	Potholes throughout the stand, generally non-forested. Hilly. Really nice sugar maple regeneration throughout forested portion; extremely desirable. Decent pole/log canopy, basswood and sugar maple dominated with scattered white pine. Trace white ash, paper birch, and red oak in canopy. Rare witch hazel, white spruce, and white pine in subcanopy.
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Canopy Species	% Cover	Size Class	DBH	Age
Quaking Aspen	5	Pole/Log	8	
Sugar Maple	35	Pole/Log/Sap	8	
Ironwood	4	Pole/Sapling	5	
American Elm	1	Pole/Sap/Log	6	
Basswood	37	Log/Pole	10	74
White Pine	10	Log/Pole	12	
Red Maple	2	Pole/Log	8	
Black Cherry	6	Pole/Log	8	

Sub-Canopy Species	Density	Avg. Height	Size
White Ash	Low	< 5 feet	Sapling
Sugar Maple	High	Variable	Sapling
Ironwood	Medium	Variable	Sapling
Serviceberry (Juneberry)	Trace	>20 feet	Sapling

40	42290 - Natural Mixed Pine	Poletimber Medium	2.5	20	51-80	N/A	Old landing with red and jack pine volunteers. Rare prickly gooseberry in subcanopy.
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Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	1	Sapling/Pole/Log	4	
Jack Pine	45	Pole/Log/Sap	7	20
Red Pine	45	Pole/Sapling	6	20
Black Cherry	9	Pole/Log	6	

Sub-Canopy Species	Density	Avg. Height	Size
Serviceberry (Juneberry)	Trace	Variable	Sapling
Blackberry/Raspberry	Low	< 5 feet	Tall Shrub
Red Maple	Trace	Variable	Sapling
Honeysuckle (spp.)	Low	< 5 feet	Tall Shrub
White Spruce	Trace	< 5 feet	Sapling
Ironwood	Trace	Variable	Sapling
Balsam Fir	Medium	Variable	Sapling
Bracken Fern	Medium	Unspecified	Non-Wood
Red Pine	Low	10 - 20 feet	Sapling
Beech	Trace	< 5 feet	Sapling

41	3103 - Rubus-Fern	Nonstocked	0.6	0	Unspecified	No	Nonforested opening with encroaching hardwood and pine. Cherry is sap/pole/log, red pine is sap/pole.
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Sub-Canopy Species	Density	Avg. Height	Size
Bracken Fern	Medium	Unspecified	Non-Wood
White Pine	Trace	10 - 20 feet	Sapling
Scotch Pine	Trace	5 - 10 feet	Sapling
Ironwood	Trace	Variable	Sapling
Black Cherry	Low	Variable	Sapling
Honeysuckle (spp.)	Trace	< 5 feet	Tall Shrub
Blackberry/Raspberry	High	< 5 feet	Tall Shrub
Red Pine	Low	Variable	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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42	3103 - Rubus-Fern	Nonstocked	1.3	0	Unspecified	No	Sap/Log white spruce, pole/sap white pine, P/S/L red pine, S/P/L black cherry. Conifer, cherry, and juneberry volunteers, otherwise bracken fern dominated. Two raspberry sprigs.				
								Sub-Canopy Species	Density	Avg. Height	Size
								Red Pine	Low	>20 feet	Pole
								Black Cherry	Low	Variable	Sapling
								Serviceberry (Juneberry)	Low	Variable	Sapling
								Beech	Trace	5 - 10 feet	Sapling
								Bracken Fern	Full	Unspecified	Non-Wood
								White Pine	Low	>20 feet	Pole
								White Spruce	Trace	Variable	Sapling
								Ironwood	Trace	Variable	Sapling

43	330 - Low-Density Trees	Nonstocked	0.7	0	Unspecified	No	Only the northwest 1/4ac is truly non-forested; bracken dominated. The rest of the stand is overgrown with saplings and scattered pole- and log-sized trees. BC S/P, QA S/P/L, BF S/P/L, WS S/P.				
								Sub-Canopy Species	Density	Avg. Height	Size
								Balsam Fir	Medium	Variable	Sapling
								Honeysuckle (spp.)	Trace	< 5 feet	Tall Shrub
								White Spruce	Trace	>20 feet	Sapling
								Bracken Fern	High	Unspecified	Non-Wood
								Red Maple	Medium	>20 feet	Sapling
								Quaking Aspen	Low	Variable	Sapling
								Black Cherry	Medium	Variable	Sapling
								Ironwood	Medium	Variable	Sapling
Sugar Maple	Low	< 5 feet	Seeding								

44	4117 - Mixed N. Hardwood - Pine	Poletimber Well	6.7	83	51-80	N/A	Long Term Retention for parent stand 8. Trace red maple, quaking aspen in canopy. Rare hazelnut in subcanopy. Canopy log white pine and pole hardwood; dense desirable hardwood subcanopy in west; east is less dense. Some mortality in elm.									
								Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
								American Elm	5	Pole/Sap/Log	7		White Ash	Low	< 5 feet	Sapling
								Red Pine	5	Log/XLog	16	92	Red Maple	Trace	Variable	Sapling
								Bigtooth Aspen	3	Log	14		Sugar Maple	Medium	Variable	Sapling
								Ironwood	2	Pole/Sapling	6		Ironwood	Medium	Variable	Sapling
								White Pine	20	Log/XLog	16	92	Balsam Fir	Trace	< 5 feet	Sapling
								Basswood	15	Log/Pole	10		Beech	Trace	5 - 10 feet	Sapling
								Sugar Maple	50	Pole/Log	8	83				



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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46	3103 - Rubus-Fern	Nonstocked	0.3	0	Unspecified	No	
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Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	Trace	Variable	Sapling
Red Maple	Trace	Variable	Sapling
Serviceberry (Juneberry)	Trace	10 - 20 feet	Sapling
Honeysuckle (spp.)	Trace	< 5 feet	Tall Shrub
Ironwood	Low	Variable	Sapling
Bracken Fern	Full	Unspecified	Non-Wood
White Spruce	Trace	10 - 20 feet	Sapling
Black Cherry	Trace	Variable	Sapling
Beech	Low	Variable	Sapling