



# Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32243

Entry Year 2026

Acreage: 1,185

County Marquette

Management Area: Suomi Till and Outwash Plain

**Stand Examiner:** Eric Brolin

## Legal Description:

T45N-R29W, Sections 27 & 34.

## Identified Planning Goals:

Maintain or increase the component of oak, birch and aspen within the compartment. Harvest older stands to encourage regeneration of both deciduous and coniferous species.

## Soil and topography:

Topography ranges from level creek bottoms, swamp conifer, tag alder and bog or marshlands to rolling or only slightly hilly upland terrain.

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

This compartment is essentially surrounded by State land on all sides and borders Dickenson County on the south end. It does have some small parcels of non-industrial private ownership in the surrounding area. Development (other than the ELF communication system cleared right of way) is virtually nonexistent. A few seasonal dwelling/hunting camps occupy the private parcels. Production of forest products along with low key recreational activities such as hunting, trapping and snowmobiling make up the land uses here.

## Unique Natural Features:

Hermit Lake and the Schwartz creek and tributaries.

## Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

## Special Management Designations or Considerations:

None.

## Watershed and Fisheries Considerations:

This compartment contains headwater reaches of Schwartz Creek. Schwartz Creek is a designated Type 1 trout stream less than 50-ft wide with a predicted mean July temperature of 59.2 °F (cold stream). A 300-foot buffer is recommended for Schwartz Creek in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, a minimum 100-foot, plus 5 feet per 1% increase in slope, buffer is recommended to protect these areas in accordance with Best Management Practices.

## Wildlife Habitat Considerations:

This compartment is found within the Soumi Till and Outwash Management Area, on a Disintegration Moraine in Southwestern Marquette County. The dominant Natural Communities are dry mesic northern forests, poor conifer swamps, and mesic northern forests. This management area offers opportunities to increase diversity and perhaps long-term oak sustainability through under planting white and red pine. Another priority is to maintain or increase wildlife corridors especially along riparian corridors. Wildlife management issues in the management area are mast (hard and soft); habitat fragmentation; mature forest conditions; mesic conifer; coarse woody debris; and retention or development of large living and dead standing trees (for cavities). This management area represents approximately ¼ of the oak resource on WUP state forest.

The following have been identified as featured species for the Soumi Till and Outwash Management Area: Blackburnian Warbler, Golden-winged Warbler, Kirtland's Warbler, Red Crossbill, Black-backed Woodpecker, Ruffed Grouse, American Marten, White-tailed Deer, Black Bear.

## Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of an end moraine of coarse-textured till and medium and coarse-textured tills. There is insufficient data to determine the glacial drift thickness. The Precambrian Archean Granite/Gneiss subcrops below the glacial drift. This rock could be used as dimension stone. A gravel pit is located two miles away, but potential should be good. The abandoned Republic iron mine is located ten miles to the north. Section 27 was previously leased and Section

34 is leased for metallic exploration. There is no economic oil and gas production in the UP.

**Vehicle Access:**

The Floodwood Road (county road FFO) provides primary access for most of the compartment from the South. The Porterfield Lake Road also provides access from the North. Various other two track roads provide access to the compartment interior though limited by pickup truck.

**Survey Needs:**

No survey needs for this year of entry.

**Recreational Facilities and Opportunities:**

The Porterfield Lake Motorcycle ORV trail provides recreational opportunity to ORV users. Other recreational activities include: fishing, hunting, biking, berry picking, bird watching and trapping.

**Fire Protection:**

This compartment is included within the "581 Zone Dispatch" area which provides for a pre-planned dispatch of specified fire equipment from within the Gwinn and Crystal Falls Management Units. This dispatch is dependent on the severity of forecast burning conditions for the specified day. Areas of jack pine and red pine cover types with the encroachment of recreational seasonal dwellings have warranted this pre-planning. Mutual aide agreements with local township volunteer fire departments also provide critical fire suppression response, especially in the area of structure fire and/or protection, and evacuations.

**Additional Compartment Information:**

**The following reports from the Inventory are attached:**

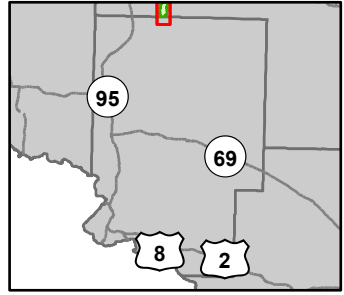
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

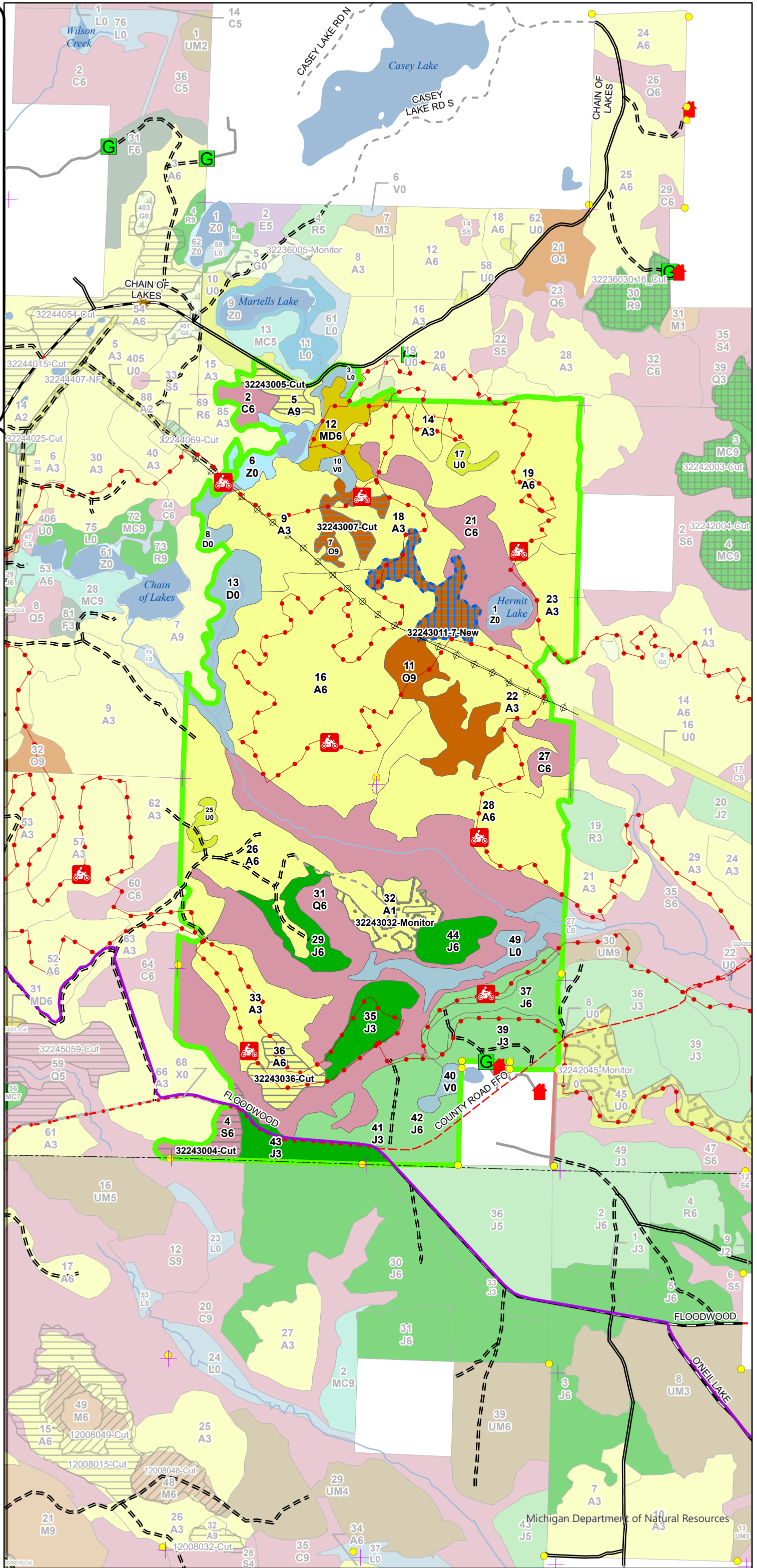
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map

Compartment: 32243  
 T45N, R29W, Sec. 27, 34  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Suomi Till and  
 Outwash Plain  
 YOE: 2026  
 Acres: 1185.5 GIS Calculated  
 Examiner: Eric Brolin  
 Map Revised: 08/19/2024  
 Map Phase: Web - Post

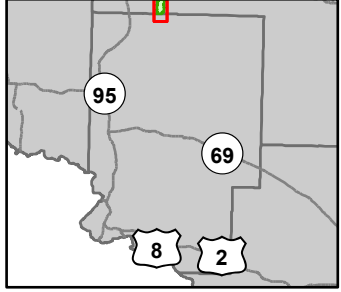


- Motorcycle Trails (DNR License)
- Designated Motorcycle Trails
- Designated Snowmobile Trails
- Remonumented Section Corners
- Survey Grade Corners
- Counties
- Cabin
- Gate
- Culvert
- Trailhead
- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Paved Road
- Private - Dirt / Gravel Road
- Island in Lake or River
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Powerline
- Compartment Boundary
- Treatments with Site Conditions
- Clearcut (w/Reserves)
- Seed Tree (w/Reserves)
- Regeneration Survey
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 612 - Lowland Coniferous Forest
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub

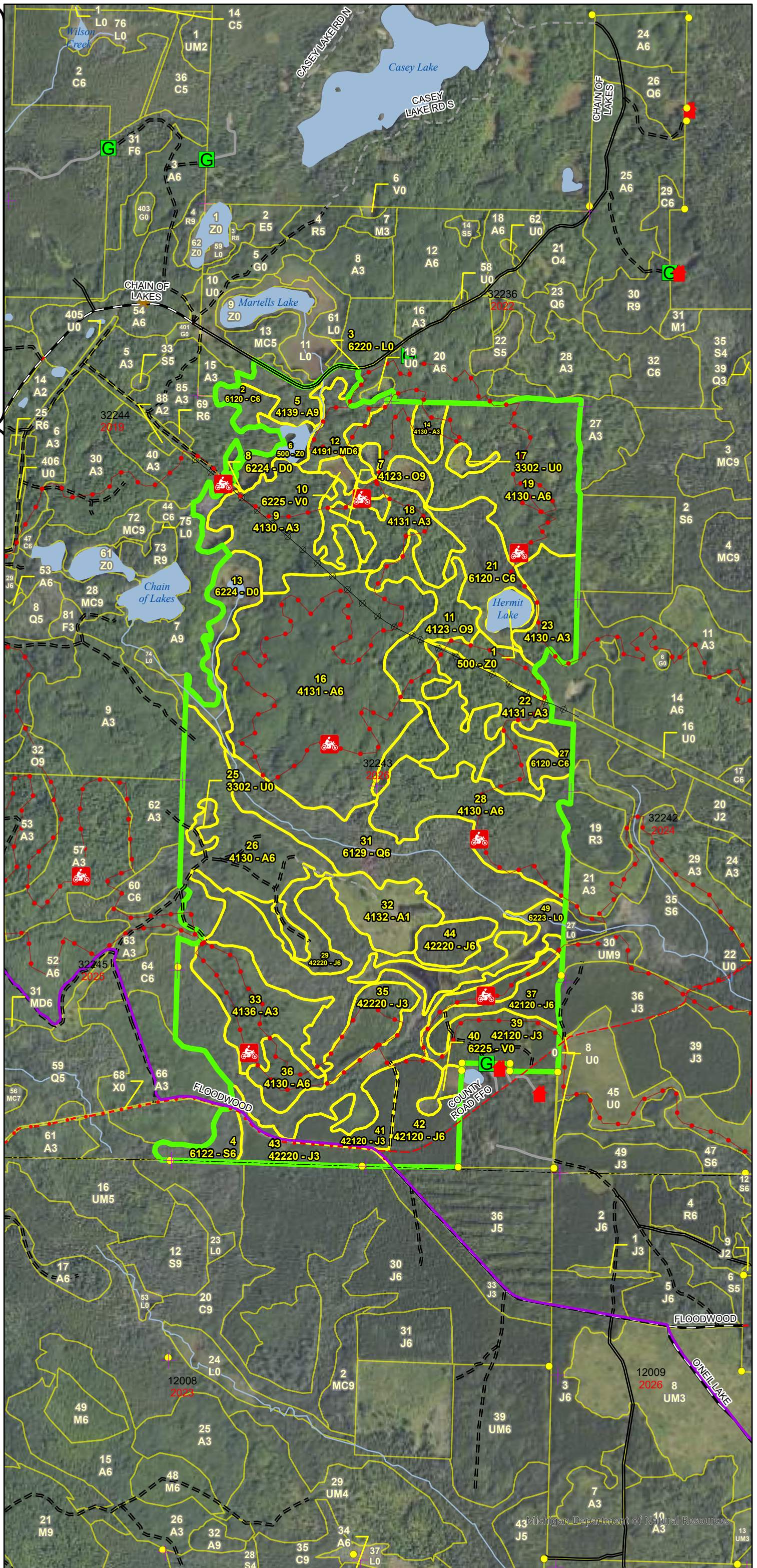


# Stand Boundary Map

Compartment: 32243  
 T45N, R29W, Sec. 27, 34  
 County: Marquette  
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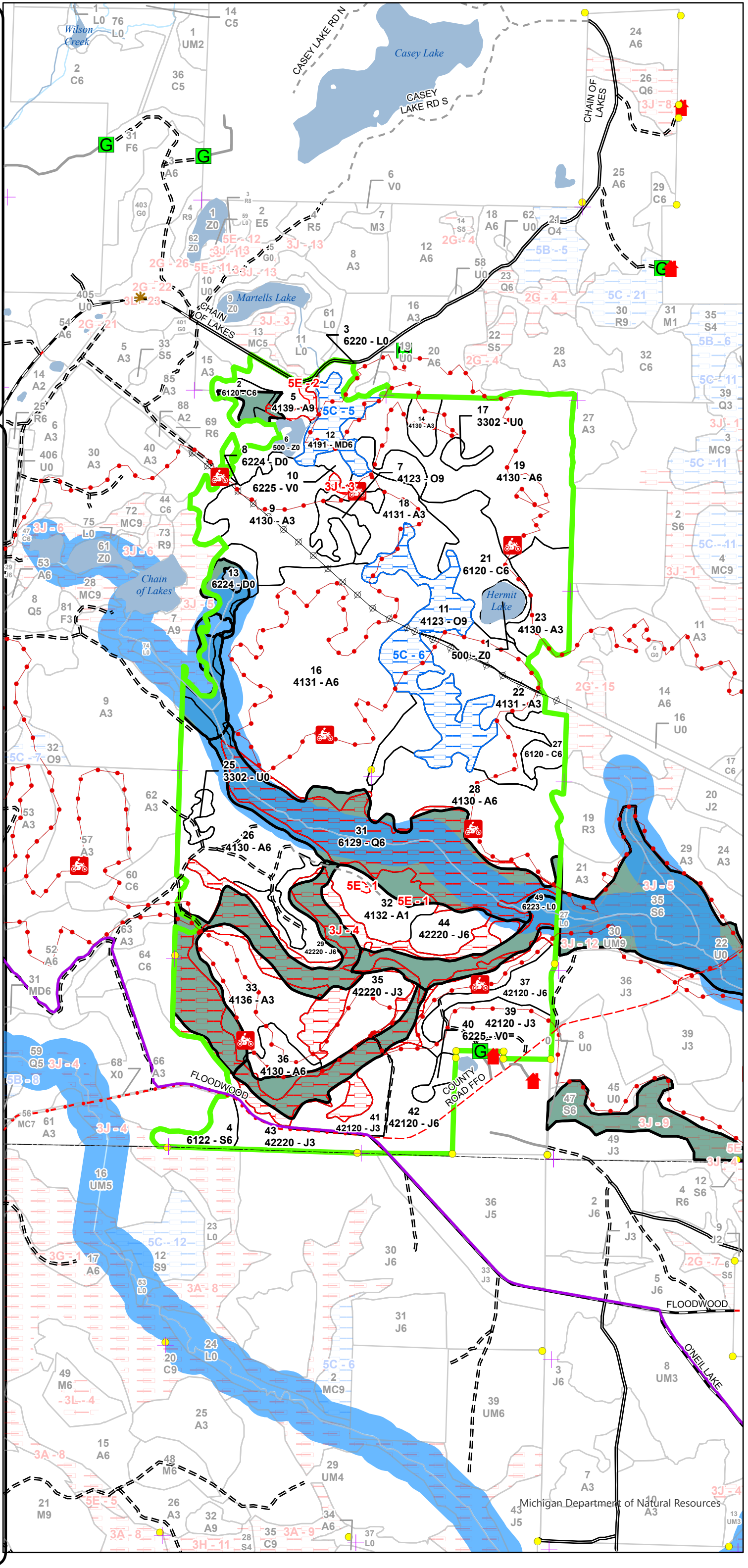
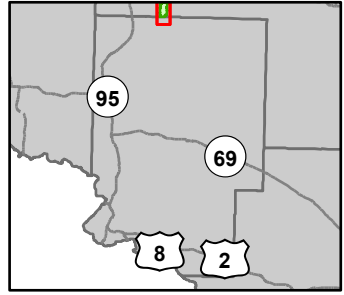


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- State Forests



# Special Conservation Areas & Site Conditions Map

Compartment: 32243  
 T45N, R29W, Sec. 27, 34  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Suomi Till and  
 Outwash Plain  
 YOE: 2026  
 Acres: 1185.5 GIS Calculated  
 Examiner: Eric Brolin  
 Map Revised: 08/19/2024  
 Map Phase: Web - Post



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- Private - Dirt / Gravel Road
- Island in Lake or River
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Powerline
- Compartment Boundary
- SCA
- SCA Removal
- Available w/ Constraints
- Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Cold Water Streams
- High Priority Trout Stream Buffer
- Vernal Pool

Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	31	150	100	314	13	11	0	0	0	0	0	0	0	0	0	0	0	619
Bog	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Cedar	0	0	0	0	0	0	0	0	0	35	0	18	0	0	0	0	0	0	53
Jack Pine	0	0	70	32	53	0	0	0	0	0	0	0	0	0	0	0	0	0	155
Low-Density Trees	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	0	189	0	0	0	0	0	0	189
Lowland Shrub	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	16
Oak	0	0	0	0	0	0	0	0	0	58	0	0	0	0	0	0	0	0	58
Treed Bog	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Water	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
<b>Total</b>	<b>84</b>	<b>31</b>	<b>220</b>	<b>132</b>	<b>367</b>	<b>13</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>93</b>	<b>0</b>	<b>234</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1185</b>



## Report 2 – Treatment Summary

Gwinn Mgt. Unit

Year of Entry: 2026

Acres of Harvest

Compartment 243

Total Compartment Acres: 1,185

Commercial Harvest - 42  
 Harvests with Site Condition - 18  
 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	21	0	0	0	0	0	0	0	0	21
Lowland Spruce/Fir	11	0	0	0	0	0	0	0	0	11
Oak	10	0	0	18	0	0	0	0	0	28
<b>Total</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	60	0	0	0	0	0	17	0	0	77
Next Step	0	0	0	0	0	0	60	0	0	60
<b>Total</b>	<b>60</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>77</b>	<b>0</b>	<b>0</b>	<b>136</b>



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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**Proposed Treatments:**

<b>4</b>	<b>32243004-Cut</b>	10.7	6122 - Black Spruce	Poletimber Well	102	81-110	Harvest	Clearcut	6122 - Black Spruce	Even-Aged	No
<p><u>Prescription</u> Harvest to a 2" spec to promote black spruce regeneration. Leave cedar, red pine, and white pine.  <u>Specs:</u>  <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)  <u>Treatments:</u>  <u>Acceptable</u> black spruce  <u>Regen:</u>  <u>Other</u> No retention due to smaller size and surrounding seed source for narrow stand.  <u>Comment:</u>  <u>Site Condition</u>  <u>Proposed Start Date:</u> 10/1 /2025</p>											
<b>5</b>	<b>32243005-Cut</b>	8.1	4139 - Aspen, Mixed Deciduous	Sawtimber Well	50	111-140	Harvest	Clearcut with Retention	4319 - Mixed Upland Forest	Even-Aged	No
<p><u>Prescription</u> Harvest to a 2" spec to promote regeneration of mixed species. Leave oak, cedar, red pine, and white pine.  <u>Specs:</u>  <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)  <u>Treatments:</u>  <u>Acceptable</u> aspen, hardwood, conifer  <u>Regen:</u>  <u>Other</u> Long term retention will be included in the 100' water buffer along the south and east and will include a diverse mix of mature species and  <u>Comment:</u> large diameter, forked crown aspen. Include patchy openings in harvest, this will help fill in those areas. Include Spec 5.2.4.2 - (9"-15", at least 8' long by stump, 1 per every 4 acres, evenly scattered across treatment).  <u>Site Condition</u>  <u>Proposed Start Date:</u> 10/1 /2025</p>											
<b>7</b>	<b>32243007-Cut</b>	9.9	4123 - Red Oak	Sawtimber Well	80	141-170	Harvest	Clearcut with Retention	4123 - Red Oak	Even-Aged	No
<p><u>Prescription</u> Harvest all merchantable trees to promote red oak regeneration and release mixed pine saplings. Green tree to leave 10 BA of healthy red oak. Leave red pine and white pine. Paint healthy red oak for the sale boundary line.  <u>Specs:</u>  <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)  <u>Treatments:</u>  <u>Acceptable</u> red oak, mixed pine  <u>Regen:</u>  <u>Other</u> 100' buffer along lowland ground edge for retention. No interior stand retention. Narrow web will be surrounded by boundary red oak (paint healthy red oak for stand boundary to leave). This will provide seed and also allow sufficient interior sunlight for oak/pine release, recruitment, and success.  <u>Comment:</u>  <u>Site Condition</u>  <u>Proposed Start Date:</u> 10/1 /2025</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
<b>11 32243011-7-New</b>	18.2	4123 - Red Oak	Sawtimber Well	80	111-140	Harvest	Seed Tree with Retention	4122 - Oak, Pine	Two-Aged	No
<p><u>Prescription</u> Harvest all merchantable trees to promote vigorous oak regeneration and release mixed pine saplings. Leave red pine and white pine. In combination with leave species, green mark healthy, wind firm red oak to leave while maintaining a residual cover of 20-30 BA average across the stand.</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</u> oak, mixed pine</p> <p><u>Regen:</u></p> <p><u>Other</u> Try to use as many healthy, wind firm red oak for red line stand boundary trees to leave as possible. Look for interior long term retention in wider portions of stand or where less operable slopes would work.</p> <p><u>Comment:</u></p> <p><u>Site Condition</u> Age-Class or Site Quality</p> <p><u>Proposed Start Date:</u> 10/1 /2025</p>										
<b>36 32243036-Cut</b>	13.0	4130 - Aspen	Poletimber Well	48	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	No
<p><u>Prescription</u> Harvest to a 2" spec to promote aspen regeneration. Retention should include large diameter, forked crown aspen. Leave cedar, red pine, and white pine.</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</u> aspen, mixed conifer and hardwood</p> <p><u>Regen:</u></p> <p><u>Other</u> Include Spec 5.2.4.2 - (9"-15", at least 8' long by stump, 1 per every 4 acres, evenly scattered across treatment).</p> <p><u>Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2025</p>										

**Approved Treatments:**

<b>32 32243032-Monitor</b>	16.6	4132 - Aspen, Jack Pine	Sapling Poor	6	1-50	Monitoring	Artificial Regen(3yr)	4222 - Natural Jack Pine	Even-Aged	No
<p><u>Prescription</u></p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable</u> Spruce, pine, balsam, aspen and birch. jack pine</p> <p><u>Regen:</u></p> <p><u>Other</u> Percent to Treat = 100%</p> <p><u>Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2024</p>										

**Total Treatment Acreage Proposed: 76.5**

## Report 4 – Site Conditions

Gwinn Mgt. Unit  
Eric Brolin : Examiner

Compartment: 243  
Year of Entry: 2026

### Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	5C	3J	5E
		With Condition	Not Available				
619	614	0	5	Aspen			5
7	7	0	0	Bog			
53	53	0	0	Cedar			
155	155	0	0	Jack Pine			
7	7	0	0	Low-Density Trees			
189	0	0	189	Lowland Conifers		189	
25	25	0	0	Lowland Shrub			
11	11	0	0	Lowland Spruce/Fir			
16	0	16	0	Mixed Upland Deciduous	16		
58	10	47	1	Oak	47	1	
27	27	0	0	Treed Bog			
18	18	0	0	Water			
1,185	928	63	194	Total Forested Acres	63	190	5
	78%	5%	16%	Relative Percent			

*\*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Long term retention patches for Stand 32.							
2	Unavailable	5E: Long-Term Retention	3	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
<b>Comments:</b> 100' buffer for water along south and lowland along east that appears to have at least seasonal flowing water. Long term retention for Stand 5.							
3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
<b>Comments:</b> 100' buffer along lowland edge. Long term retention for Stand 7.							

## Report 4 – Site Conditions

Gwinn Mgt. Unit  
Eric Brolin : Examiner

Compartment: 243  
Year of Entry: 2026

4	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	189	3L: Other wildlife concerns	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Large web of lowland conifer. Numerous drainage ways across area. Dense cedar dominant in a lot of areas. Some edges of spruce may be managed with adjacent stands in the future.							
5	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	16	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Manage in the future with adjacent Stand 19. After water buffers and slope exclusions, manageable area will decrease significantly in size.							
6	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	47	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

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

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## Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

\* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

ERA = Ecological Reference Area  
 HCVA = High Conservation Value Area  
 SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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1	500 - Water	Nonstocked	6.2	0	Unspecified	No	Pond
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2	6120 - Lowland Cedar	Poletimber Well	7.3	102	111-140	N/A	Contains drains that flow into lake.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Paper Birch	3	Pole	9		Northern White Cedar	Low	>20 feet	Sapling
Black Spruce	10	Pole	7		Tag Alder	Medium	5 - 10 feet	Tall Shrub
Northern White Cedar	50	Pole/Log	8	102	Balsam Fir	High	10 - 20 feet	Sapling
Tamarack	30	Pole	7					
White Pine	2	Log/XLog	14					
Balsam Fir	5	Pole	6					

3	6220 - Alder/willow	Nonstocked	3.8	0		No	Lowland shrub drainage that has flowing water.
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4	6122 - Black Spruce	Poletimber Well	10.7	102	81-110	N/A	Patch of pure black spruce broken out from original Stand 31 for management. Some trees showing decline with older age. This stand should be regenerated before more widespread mortality occurs. No standing water or drainage areas observed within this stand, good manageable ground.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Balsam Fir	2	Pole	6		Balsam Fir	Low	Variable	Sapling
Black Spruce	87	Pole	8	102	Northern White Cedar	Trace	Variable	Pole
Tamarack	2	Pole/Log	9					
Northern White Cedar	5	Pole/Log	9					
Paper Birch	2	Pole	6					
Balsam Poplar	2	Log	11					

5	4139 - Aspen, Mixed Deciduous	Sawtimber Well	11.4	50	111-140	N/A	Patchy mix of ages and species. Merged from adjacent stands to road for future management. Younger aspen in NW, older aspen in south half, age estimated from mixed sizes.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Paper Birch	13	Log/Pole	11		Red Oak	Trace	Variable	Sapling
Red Pine	7	Log	16	95	Balsam Fir	Medium	Variable	Sapling
White Pine	4	Log	14		White Pine	Low	Variable	Sapling
Red Oak	3	XLog/Log/Pole	18		Red Pine	Low	Variable	Sapling
Black Cherry	3	Log/Pole	10		Red Maple	Low	5 - 10 feet	Sapling
Quaking Aspen	55	Pole/Log	8	50				
Red Maple	15	Log/Pole	10					

6	500 - Water	Nonstocked	12.2			No	Flooded lowland area.
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																								
7	4123 - Red Oak	Sawtimber Well	11.0	80	141-170	N/A	Nearly solid red oak log stand broken out from surrounding stand. No aspen regeneration present under canopy. Understory does have decent stocking of mixed pine saplings and dense to evenly distributed, beefy red oak seedlings (1' - 4' tall) across the entire area. Adjacent stands show excellent red oak recruitment with aggressive oak cutting.																																																								
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8	6224 - Treed Bog	Nonstocked	6.0			No	Bog.																																																								
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9	4130 - Aspen	Sapling Well	46.5	15	1-50	N/A	Dense aspen saplings with scattered pine and red oak from previous harvest. Pine becomes more abundant around most edges of the stand. Some steeper rolling terrain in areas.  Harvested in 2009: TS# 105-06-01. Oak, red and white pine retained.																																																								
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10	6225 - Bog	Nonstocked	3.1			No	Small bog with scattered conifer saplings.																																																								
11	4123 - Red Oak	Sawtimber Well	47.0	80	111-140	N/A	Stand was delineated out from adjacent aspen stands after field examination. Canopy is dense to red oak, log to larger pole sized trees. Understory has very little to no red maple or aspen regeneration. There is a high stocking of well established oak saplings ranging from 2' - 8' tall and also a fair amount of mixed pine saplings, 2' - 5' tall, evenly scattered in the understory.																																																								
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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**12** 4191 - Mixed Upland Deciduous with Conifer Poletimber Well 16.2 100 111-140 N/A Diverse stand of conifer/hardwood, heavy to larger red oak. Slopes along most edges.

Canopy Species	% Cover	Size Class	DBH	Age
White Pine	10	Log/Pole	12	
Red Pine	10	Log	16	
Paper Birch	17	Log/Pole	10	50
Red Maple	10	Pole/Sapling	7	50
Jack Pine	1	Log/Pole	10	
Quaking Aspen	5	Log/Pole	10	
Bigtooth Aspen	10	Pole	8	
Red Oak	37	Log	15	100

Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	Low	Variable	Sapling
Balsam Fir	Low	Variable	Sapling
Red Oak	Medium	Variable	Sapling
Red Pine	Low	Variable	Sapling
White Pine	Medium	Variable	Sapling

**13** 6224 - Treed Bog Nonstocked 21.4 No Large ravine flooded bog holding water in areas.

Sub-Canopy Species	Density	Avg. Height	Size
Northern White Cedar	Trace		Sapling
Black Spruce	Low		Sapling
Tamarack	Low		Sapling

**14** 4130 - Aspen Sapling Well 6.9 6 1-50 N/A Dense aspen saplings with good mix of red maple mixed in. Scattered larger pine and oak across the stand are not affecting sapling regeneration.

Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	15	Sapling	1	
White Pine	5	Log/XLog	16	
Quaking Aspen	60	Sapling	1	6
Red Pine	12	Log/XLog	15	106
Red Oak	8	Log	14	

Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	Low	Variable	Sapling
White Pine	Low	Variable	Sapling
Quaking Aspen	High	Variable	Sapling
Red Oak	Low	Variable	Sapling

This stand is located on hilly rocky ground. The Porterfield motorcycle trail traverses the stand. the stand was harvested in the spring of 2018 by Minerick Logging, under 121-16 Luna Moth Mix. About 30SQ FT of mixed pine and oak where left in the stand.

**16** 4131 - Aspen, Oak Poletimber Well 157.5 36 51-80 N/A Mixed pole stand with areas that have steeper terrain and ravines. A TON of oak regenerated with aggressive cutting. This oak is over competing aspen and is growing from both stump sprouts and scattered individual stems across the entire stand. Harvested in 1988: TS# 7-97. Red and white pine retained.

Canopy Species	% Cover	Size Class	DBH	Age
Bigtooth Aspen	30	Pole/Sapling	7	36
Red Maple	2	Pole/Sapling	5	
Red Oak	38	Pole/Log	8	36
Red Pine	3	Log	12	
White Pine	5	Log	12	
Paper Birch	2	Pole/Sapling	6	
Quaking Aspen	20	Pole/Sapling	6	36

Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	High	Variable	Sapling
Red Oak	Low	Variable	Sapling
White Pine	Low	Variable	Sapling
Red Pine	Low	Variable	Sapling
Balsam Fir	Low	Variable	Sapling

**17** 3302 - Low Density Conifer Trees Nonstocked 3.4 No Grass opening growing in with scattered conifer.

Sub-Canopy Species	Density	Avg. Height	Size
Jack Pine	Trace		Sapling
Red Pine	Low		Sapling





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																					
18	4131 - Aspen, Oak	Sapling Well	39.0	27	Unspecified	N/A	Aspen saplings with scattered residual oak/pine mix.																																																																					
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19	4130 - Aspen	Poletimber Well	91.4	35	51-80	N/A	Mixed aspen pole stand with other minor species speckled across area. Dense fully stocked under story of red maple saplings. Rolling terrain gentle to moderate across most areas of stand. Area along East edge has dense conifer cover heavy to fir with some black spruce and pine poles. A few small bogs, numerous small, patchy openings, and larger diameter pine island found interior that may have to be excluded or managed in the future.																																																																					
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21	6120 - Lowland Cedar	Poletimber Well	35.4	86	111-140	N/A	Very nice black spruce but dense cedar would make in operable without significant damage to cedar resource. Larger cedar take up a lot of canopy. Other areas dominated by black spruce canopy have dense cedar understory. Some areas along edges may be operable, noted in adjacent stands for future management. Far north and south areas are more of a stunted bog.																																																																					
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22	4131 - Aspen, Oak	Sapling Well	43.2	15	1-50	N/A	Adjacent dense oak stand was broken out from this original stand. Dense aspen saplings in most areas with a good amount of scattered log sized oak. Denser areas affected aspen regeneration.																																																																					
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
<b>23</b>	4130 - Aspen	Sapling Well	23.5	15	1-50	N/A	Mix of aspen saplings with a good component of red maple saplings. Scattered larger pine and oak across the stand. Dense understory of red maple saplings in most areas.		
	<b>Canopy Species</b>	<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>
	Bigtooth Aspen	40	Sapling	2	15	Red Maple	Full	Variable	Sapling
	White Pine	2	Log/Pole	11		Red Pine	Low	Variable	Sapling
	Red Maple	15	Sapling	2		Balsam Fir	Low	Variable	Sapling
	Red Pine	8	Log/Pole	13		White Pine	Low	Variable	Sapling
	Quaking Aspen	30	Sapling	2	15	Red Oak	Low	Variable	Sapling
	Red Oak	5	Log	14					
									Harvested in 2009: TS# 106-06-01. Oak, red and white pine retained.
<b>25</b>	3302 - Low Density Conifer Trees	Nonstocked	3.9			Managed Opening	Opening growing in with trees. A lot of moose and deer sign along the edges of this, maintain as opening with future management if possible.		
						<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>
						Red Pine	Low		Sapling
						Jack Pine	Trace		Sapling
									Opening created using herbicides in 1992.
<b>26</b>	4130 - Aspen	Poletimber Well	64.7	34	51-80	N/A	Nice aspen poles. More terrain and higher elevations in the north half hold more bigtooth aspen and scattered large diameter red oak. Scattered patches and strips of mixed pine across stand, heavy to jack pine poles. South half on flatter ground is heavier to quaking aspen with a slightly smaller average diameter and has more of the conifer mixed in.		
	<b>Canopy Species</b>	<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>
	Balsam Fir	5	Pole/Sapling	6		Balsam Fir	Medium	Variable	Sapling
	Black Spruce	3	Pole/Sapling	6		Red Maple	Low	Variable	Sapling
	Red Pine	3	Log/Pole	11		Black Cherry	Low	Variable	Sapling
	Red Maple	5	Sapling/Pole	4		White Pine	Trace	Variable	Sapling
	Red Oak	5	Log	16		Red Pine	Low	Variable	Sapling
	Bigtooth Aspen	15	Pole/Sapling	7		Black Spruce	Low	Variable	Sapling
	Jack Pine	8	Pole/Sapling	6					
	Quaking Aspen	56	Pole/Sapling	6	34				Harvested in 1989: TS# 18-86.
<b>27</b>	6120 - Lowland Cedar	Poletimber Well	10.2	100	81-110	N/A	Mostly denser cedar with a small stunted boggy area in the south with more tamarack and black spruce.		
	<b>Canopy Species</b>	<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>
	Northern White Cedar	62	Pole/Log	9	100	Tamarack	Low	Variable	Sapling
	White Pine	3	Log	15		Tag Alder	Low	5 - 10 feet	Tall Shrub
	Tamarack	15	Pole/Log	8		Northern White Cedar	Medium	Variable	Pole
	Red Pine	3	Log	15		Balsam Fir	Low	Variable	Sapling
	Paper Birch	2	Pole/Sapling	6		Black Spruce	Medium	Variable	Sapling
	Black Spruce	15	Pole	8					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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<b>28</b>	4130 - Aspen	Poletimber Well	60.5	27	1-50	N/A	Dense aspen stand. Transitioning into pole sized trees. Harvested in 1997: TS# 4-96. Oak, Cherry, red and white pine retained.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Jack Pine	5	Pole/Sapling	5		Red Oak	Low	Variable	Pole
Red Maple	12	Sapling/Pole	3		Balsam Fir	Low	Variable	Sapling
Red Oak	5	Log/Pole	13		Black Spruce	Low	Variable	Sapling
Quaking Aspen	46	Pole/Sapling	5	27	Red Maple	High	Variable	Sapling
Bigtooth Aspen	25	Pole/Sapling	5	27	Red Pine	Low	Variable	Sapling
White Pine	3	Log/Pole	12					
Red Pine	4	Log	15					

<b>29</b>	42220 - Natural Jack Pine	Poletimber Well	14.2	34	51-80	N/A	Dense in most areas to jack pine poles with patches of spruce/fir. Slight transitions into lowland conifer hold more black spruce before hitting the more solid line of cedar.  Harvested in 1989: TS# 18-86.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Jack Pine	70	Pole/Sapling	7	34	Balsam Fir	Medium	Variable	Sapling
Balsam Fir	10	Pole/Sapling	5		Black Spruce	Low	Variable	Sapling
Red Maple	2	Sapling/Pole	4		Red Pine	Low	Variable	Pole
Black Spruce	10	Pole/Sapling	6		Red Maple	Low	Variable	Sapling
Red Pine	3	Pole	7		Jack Pine	Low	Variable	Sapling
Quaking Aspen	5	Pole/Sapling	6					

<b>31</b>	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	188.8	102	111-140	N/A	Large web of lowland conifer. Most areas more dense to cedar or dense cedar topped by black spruce. Numerous drainage or flowing waterways. Opportunities to manage pure black spruce patches along the edges should be evaluated with management of adjacent stands as they become available.  SCA = Winter thermal cover for deer and wildlife corridor. Last entry wildlife requested to maintain this stand as an SCA.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Balsam Fir	2	Pole	6		Tag Alder	Low	Variable	Tall Shrub
Black Spruce	45	Pole	7	102	Balsam Fir	Medium	Variable	Sapling
Northern White Cedar	40	Pole/Log	9		Northern White Cedar	Medium	Variable	Pole
Balsam Poplar	2	Log	11		Black Spruce	Medium	Variable	Sapling
Paper Birch	2	Pole	6					
Tamarack	9	Pole/Log	9					

<b>32</b>	4132 - Aspen, Jack Pine	Sapling Poor	24.2	6	1-50	N/A	January, 2024 - Large east area has scattered, sparse jack pine saplings with smaller clones of dense aspen regen. West 1/3 is heavy to an aspen/red maple sapling mix. Scattered large diameter pine and a couple patches of pine retention within. Did not notice planted stock with snow.  Stand harvested in the spring of 2018 by Minerick logging, under 121-16 Luna Moth Mix. now under FTP 32-940 or Jack Pine regeneration.  Planted Spring 2023.
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Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	25	Sapling	1	6
Quaking Aspen	45	Sapling	1	6
Jack Pine	20	Sapling	1	6
Red Pine	10	Log/XLog	17	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
<b>33</b>	4136 - Aspen, Mixed Conifer	Sapling Well	36.8	14	Immature	N/A	Dense aspen saplings. Access road from the SE is growing in with mixed pine saplings. There is also quite a bit of mixed pine saplings in any open canopy areas and across the aspen understory. Look for opportunity to harvest pure black spruce pockets from adjacent lowland conifer stands during next entry.		
	<b>Canopy Species</b>	<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>
	Black Spruce	5	Sapling/Pole	4		White Pine	Low	Variable	Sapling
	Balsam Fir	5	Sapling/Pole	2		Red Maple	Medium	Variable	Sapling
	Quaking Aspen	50	Sapling	2	14	Balsam Fir	Low	Variable	Sapling
	White Pine	8	Log/XLog/Pole	14		Jack Pine	Medium	Variable	Sapling
	Red Pine	7	Log/Pole/XLog	14		Red Pine	Low	Variable	Sapling
	Paper Birch	5	Sapling	2					
	Bigtooth Aspen	12	Sapling	2					
	Red Maple	5	Sapling	2					
	Jack Pine	3	Sapling	3					
<b>35</b>	42220 - Natural Jack Pine	Sapling Well	18.7	14	Immature	N/A	Dense jack pine across stand with some other minor species mixed in. Strips of mature jack pine were left along the NW and SW edge. Harvested in 2010: TS# 107-06-01. Regenerated naturally. Red and white pine retained. 2015 regeneration count results are 909 jack pine per ac, and 172 vol per acre. (FTP 32-764 is now closed)		
	<b>Canopy Species</b>	<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>				
	Balsam Fir	5	Sapling	2					
	Red Pine	3	Log/XLog	14					
	White Pine	2	Pole	8					
	Black Spruce	5	Sapling/Pole	4					
	Bigtooth Aspen	3	Sapling	2					
	Quaking Aspen	7	Sapling	1					
	Jack Pine	75	Sapling	2	14				
<b>36</b>	4130 - Aspen	Poletimber Well	13.0	48	81-110	N/A	A higher ridge across the center contains some large diameter bigtooth aspen. Transition into flats along edge contain more quaking aspen with a jack pine and black spruce mix along the south lowland border edge. Harvested in 1976: TS# 8-75A. Spruce, fir, red and white pine retained.		
	<b>Canopy Species</b>	<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>
	Paper Birch	5	Pole/Log	8		Balsam Fir	Medium	Variable	Sapling
	Quaking Aspen	50	Pole	8	48	White Pine	Low	Variable	Sapling
	Red Maple	2	Pole	6					
	Jack Pine	8	Pole	7					
	Bigtooth Aspen	24	Log/Pole	11					
	White Pine	2	Log/Pole	12					
	Balsam Fir	3	Pole	7					
	Red Pine	2	XLog/Log	18					
	Black Spruce	4	Pole	7					
<b>37</b>	42120 - Planted Jack Pine	Poletimber Well	15.0	26	Immature	N/A	Most areas grown in well with dense aspen poles. Patchy sparse area in the center growing in with some other saplings and brush. Harvested in 1998: TS# 5-96-01. Trenched and direct seeded in 1998.		
	<b>Canopy Species</b>	<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>
	Black Spruce	2	Sapling/Pole	3		Black Spruce	Low	< 5 feet	Sapling
	Jack Pine	90	Pole/Sapling	6	26	Balsam Fir	Low	< 5 feet	Sapling
	Balsam Fir	3	Sapling/Pole	3					
	Quaking Aspen	5	Pole	6					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
39	42120 - Planted Jack Pine	Sapling Well	35.2	16	Immature	N/A	Grown in dense with jack pine saplings. Patch in the SE was left unplanted and contains some larger mixed conifer.  Harvested in 2007: TS# 129-06-01. Planted in 2008.		
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>				
Balsam Fir		7	Pole/Sapling	5					
Quaking Aspen		8	Sapling	3					
Black Spruce		3	Pole/Sapling	6					
Red Pine		2	Log/Pole/XLog	15					
Jack Pine		80	Sapling	3	16				
40	6225 - Bog	Nonstocked	4.1			No	Bog area with some stunted saplings in the south bubble.		
41	42120 - Planted Jack Pine	Sapling Well	16.8	25	1-50	N/A	Dense jack pine with a good mix of red pine from past planting. Large sapling to small pole size trees.  Harvested in 1998: TS# 5-96-01. Planted to red pine in 1999 which mostly failed due to competition with naturally regenerated jack pine.		
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>
Red Pine		25	Sapling/Pole	4	25	Red Pine	Low	Variable	Sapling
Jack Pine		75	Sapling/Pole	1	25	Jack Pine	Medium	Variable	Sapling
42	42120 - Planted Jack Pine	Poletimber Well	27.0	34	51-80	N/A	Dense stand of jack pine poles.  Harvested in 1988: TS#7-86-1. Planted in 1990.		
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>
Jack Pine		100	Pole/Sapling	6	34	Black Cherry	Low	Variable	Sapling
						Black Spruce	Low	Variable	Sapling
43	42220 - Natural Jack Pine	Sapling Well	16.5	15	1-50	N/A	Dense jack pine saplings with some other mixed conifer. A patch heavier to aspen borders the south/central area. Harvested in 2009: TS# 107-06-01. Regenerated naturally. 2015 Count results are 2600 jp per ac (ftp 32-764 is now closed)		
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>				
Paper Birch		1	Sapling	2					
Red Maple		2	Sapling	2					
Balsam Fir		2	Sapling/Pole	4					
Black Spruce		3	Pole	7					
White Pine		3	Log/Pole	10					
Jack Pine		77	Sapling	2	15				
Red Pine		2	Log/Pole	10					
Quaking Aspen		10	Sapling	3					
44	42220 - Natural Jack Pine	Poletimber Well	12.1	36	111-140	N/A	Dense jack pine poles. Some scattered individual mortality from dense growing conditions.		
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>
Jack Pine		98	Pole/Sapling	7	36	Balsam Fir	Low	Variable	Sapling
Quaking Aspen		2	Pole	7		Black Spruce	Low	Variable	Sapling
49	6223 - Inundated Shrub Swamp	Nonstocked	20.8			No	Flooded web of lowland shrub and water. Large beaver dams within.		
<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>					
Balsam Fir		Trace		Sapling					
Black Spruce		Medium		Sapling					