Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 52106
Entry Year 2024
Acreage: 662
County Emmet
Management Area: Mackinaw Lake Plain

Stand Examiner: John Scheele

Legal Description:

T38N - R6W Sections 25, 26, 35, and 36.

Identified Planning Goals:

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

Soil and topography:

There are 2 general soil associations in the compartment. The Carbondale-Tawas-Roscommon association is along the low ground, south shore of Wycamp Lake and along Wycamp Creek. The Rubicon association is located in the higher ground portions of the compartment,

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

Compartment is a contiguous block of state owned land. Surrounding ownership is mostly larger-sized private, forested parcels. The north boundary borders Wycamp Lake and Wilderness State Park.

Unique Natural Features:

Wycamp Lake, dam, and creek are located along the north boundary of the compartment. Wycamp dam is actually located on a small parcel of Emmet County property. Observations of Bald Eagle, Loon, and Ram's head Lady's Slipper have been documented in the compartment or surrounding area.

Archeological, Historical, and Cultural Features:

There are documented archeological occurrences in Sections 25, 26, and 35. There is a significant tribal interest and presence in this compartment and surrounding area.

Special Management Designations or Considerations:

There is a High Conservation Value Area (HCVA) in the northwest corner of the compartment for critical dunes and critical coastal habitat.

Watershed and Fisheries Considerations:

This compartment contains portions of the Wycamp Lake shoreline and Wycamp Creek. It also contains the Wycamp Lake boat launch, which is a frequently used access point for anglers and paddlers throughout the open water months. The proposed treatments include appropriate buffers from all surface waters, and appropriate BMP’s should be used in wet areas.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

The nearest active sand/gravel pit is just over three miles to the southwest. There is some potential for sand within the compartment, but the northwestern portion of the compartment is part of a designated Critical Dune Area, and the remainder of the compartment is designated Dune Area. The DNR typically does not lease mineral rights in Critical Dune areas, and a Part 637 permit would be required from EGLE for any dune sand mining. There is no known potential for economic oil & gas production beneath the compartment. There is no known potential for metallic minerals in this part of the state.

Vehicle Access:

Vehicle access is good within the compartment. Arbutus Road runs east and west in center of compartment while Abrams Road runs along the western portion of the compartment. Both roads are seasonal county roads in good condition.

Survey Needs:

None Needed.

Recreational Facilities and Opportunities:

The North County Pathway hiking trail runs through the compartment. There is a small boat access site located at the end of Abrams Road along the south shore of Wycamp Lake. There is an ORV route along Arbutus and Abrams roads.

Fire Protection:

No major concerns within the compartment except for the significant travel time to this compartment from the Indian River field office for any fire suppression activities.

Additional Compartment Information:

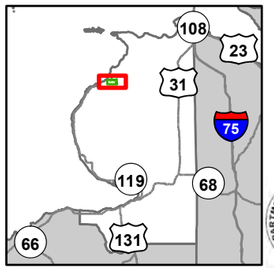
The following reports from the Inventory are attached:

- **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**

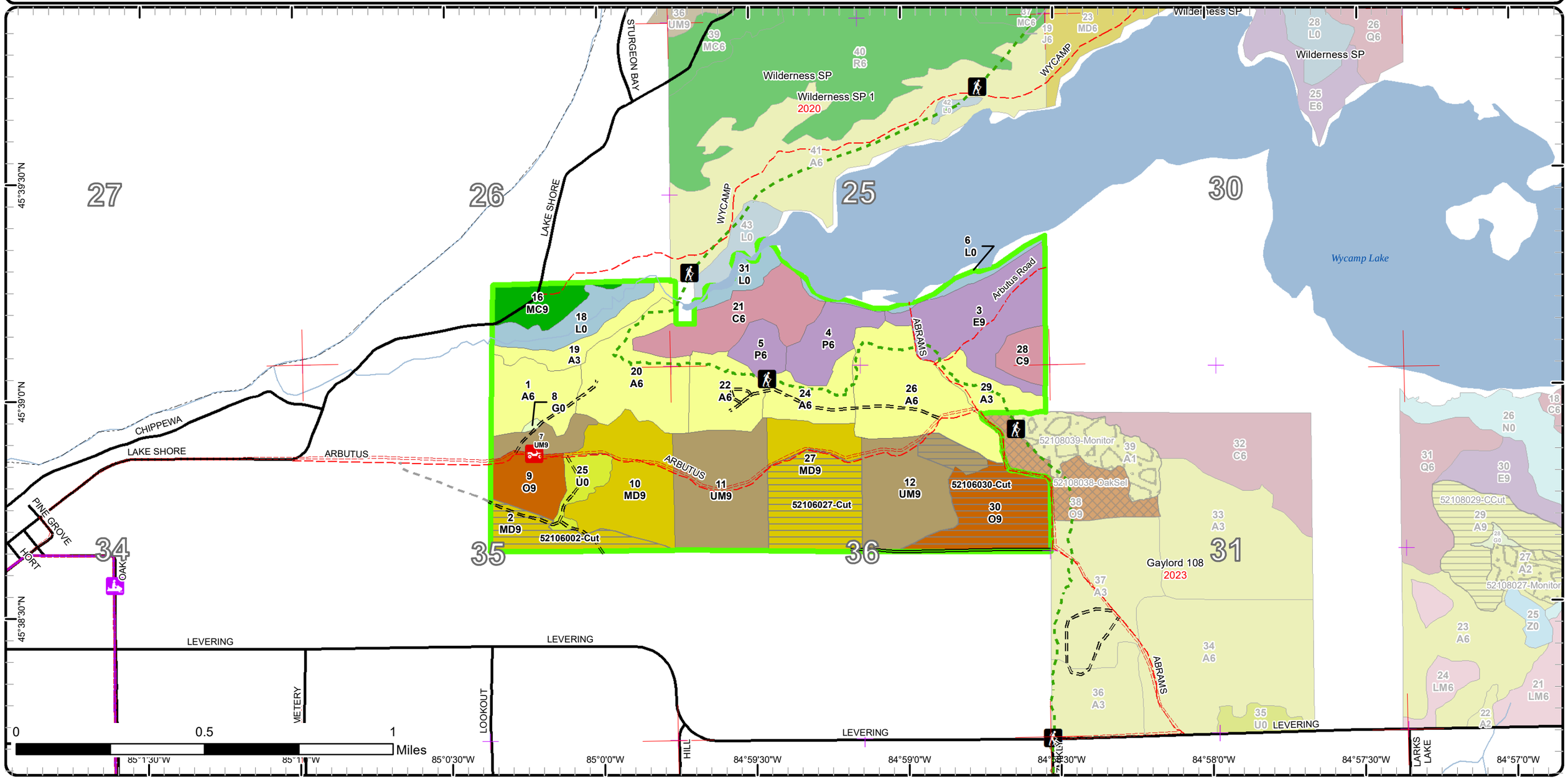
Cover Type & Treatments Map



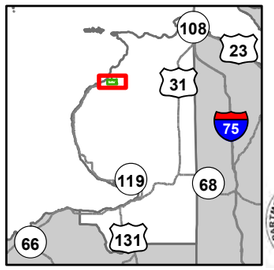
N

Compartment: 106
T38N, R06W, Sec. 25, 26, 35, 36
County: Emmet
Unit: Gaylord
Mgmt Area: Mackinaw Lake Plain
YOE: 2024
Acres: 661.6 GIS Calculated
Examiner: John Scheele
Map Revised: 11/15/2022
Map Phase: Post-Review

- Miris Corners
- Remonumented Section Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Hiking Trails
- ORV Routes
- Snowmobile Trails
- Designated Hiking Trails
- Designated Snowshoe Trails
- Designated ORV Route
- Designated Snowmobile Trails
- Lake/Pond
- Perennial River
- Shoreline
- Lakes and Rivers
- Compartment Boundary
- Clearcut (w/Reserves)
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 622 - Lowland Shrub



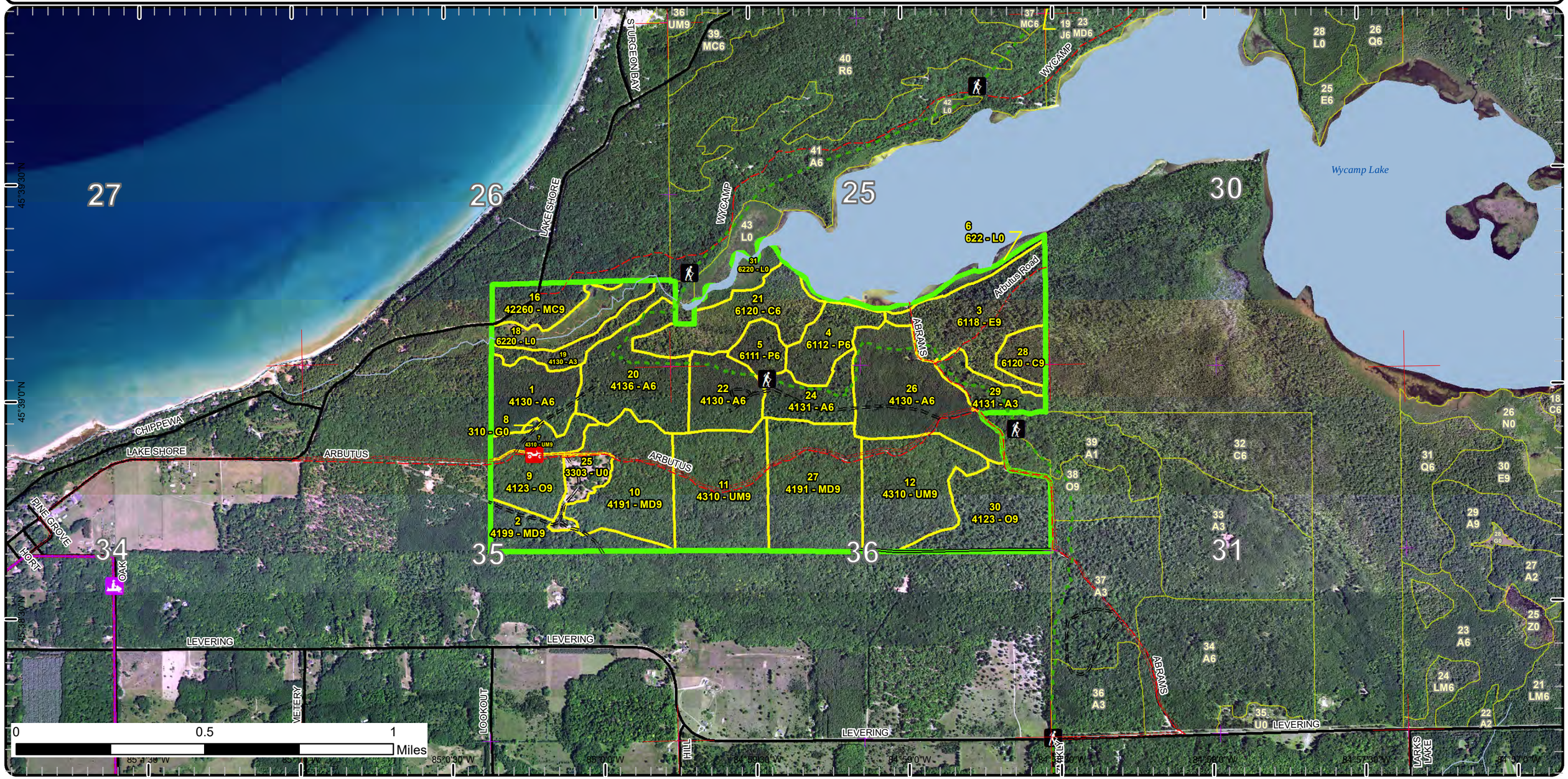
Stand Boundary Map



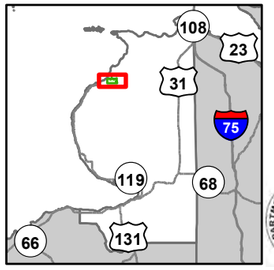
N

Compartment: 106
T38N, R06W, Sec. 25, 26, 35, 36
County: Emmet
Unit: Gaylord
Mgmt Area: Mackinaw Lake Plain
YOE: 2024
Acres: 661.6 GIS Calculated
Examiner: John Scheele
Map Revised: 11/15/2022
Map Phase: Post-Review

- Miris Corners
- Remonumented Section Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Hiking Trails
- ORV Routes
- Snowmobile Trails
- Designated Hiking Trails
- Designated Snowshoe Trails
- Designated ORV Route
- Designated Snowmobile Trails
- Lake/Pond
- Perennial River
- Shoreline
- Lakes and Rivers
- Compartment Boundary
- Stand Boundaries
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 622 - Lowland Shrub



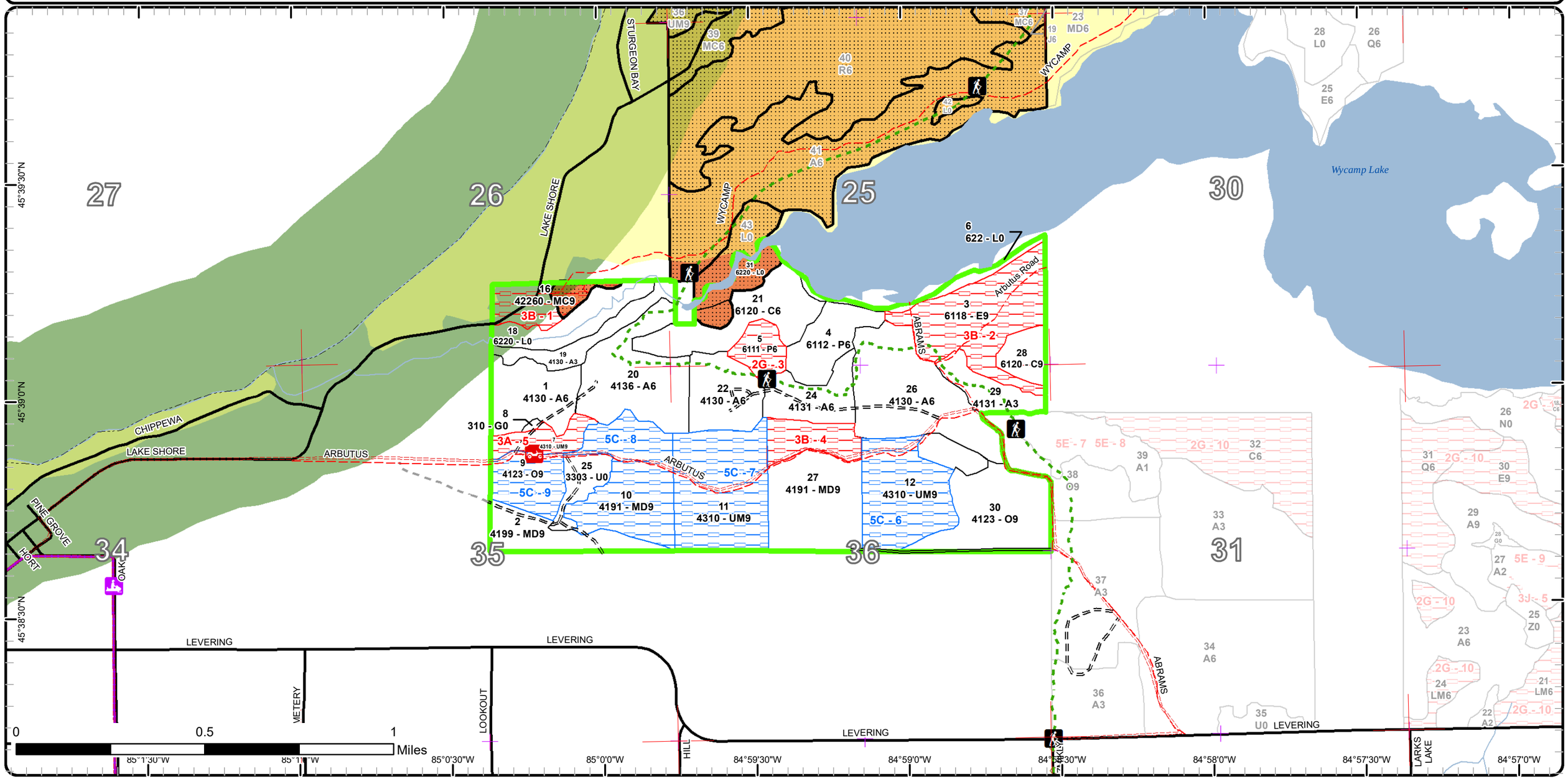
Special Conservation Areas



N

Compartment: 106
T38N, R06W, Sec. 25, 26, 35, 36
County: Emmet
Unit: Gaylord
Mgmt Area: Mackinaw Lake Plain
YOE: 2024
Acres: 661.6 GIS Calculated
Examiner: John Scheele
Map Revised: 11/15/2022
Map Phase: Post-Review

- Miris Corners
- Remonumented Section Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Hiking Trails
- ORV Routes
- Snowmobile Trails
- Designated Hiking Trails
- Designated Snowshoe Trails
- Designated ORV Route
- Designated Snowmobile Trails
- Lake/Pond
- Perennial River
- Shoreline
- Lakes and Rivers
- Compartment Boundary
- Available w/ Constraints
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable
- 2G: Too wet (sensitive soils, does not include access issues)
- 3A: Conservation Values incompatible with harvest at this time
- Stand Boundaries
- SCA
- Critical Dunes
- Critical Coastal Habitat (Piping Plover)
- Cold Water Streams
- Cold Water Lakes
- Other Habitat Area



Report 1 – Total Acres by Cover Type and Age Class

Gaylord Mgt. Unit **Compartment 106 Year of Entry 2024**

John Scheele : Examiner

Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	14	14	62	101	0	0	0	0	0	0	0	0	0	0	0	0	0	**191**
Cedar	0	0	0	0	0	0	0	0	0	0	35	10	0	0	0	0	0	0	**45**
Herbaceous Openland	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Low-Density Trees	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
Lowland Aspen/Balsam Poplar	0	0	0	19	0	0	0	10	0	0	0	0	0	0	0	0	0	0	**29**
Lowland Deciduous	0	0	0	0	0	0	0	0	0	0	48	0	0	0	0	0	0	0	**48**
Lowland Shrub	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**36**
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	98	0	20	0	0	0	0	0	0	**118**
Natural Mixed Pines	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	**17**
Oak	0	0	0	0	0	0	0	0	0	39	18	0	0	0	0	0	0	0	**57**
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	98	11	0	0	0	0	0	0	0	**109**
Total	**48**	**14**	**14**	**81**	**101**	**0**	**0**	**10**	**17**	**235**	**112**	**30**	**0**	**0**	**0**	**0**	**0**	**0**	**661**

Report 2 – Treatment Summary

Gaylord Mgt. Unit

Year of Entry: 2024

Acres of Harvest

Compartment 106

Total Compartment Acres: 662

Commercial Harvest - 106

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
Mixed Upland Deciduous	60	0	0	0	0	0	0	0	0	**60**
Oak	46	0	0	0	0	0	0	0	0	**46**
Total	**106**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**106**

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	106	0	0	0	0	0	0	0	0	**106**
Next Step	0	0	0	0	0	0	106	0	0	**106**
Total	**106**	**0**	**0**	**0**	**0**	**0**	**106**	**0**	**0**	**213**

Approved Treatments:

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
2	52106002-Cut	20.1	4199 - Other Mixed Upland Deciduous	Sawtimber Well	100	111-140	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	No

Prescription Specs: Harvest stand to regenerate. Do not cut Hemlock or pine species for stand structure diversity and which are insignificant in volume. Follow standard retention guidelines of 3 to 10%. No chipping requirement and encourage tops and slash to be placed on oak stumps as much as possible. Include trail protection specification in sale proposal.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Acceptable regeneration includes moderate to well stocked mix of deciduous and conifer species.

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2023

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
27	52106027-Cut	40.0	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	85	81-110	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	No

Prescription Specs: Harvest stand to regenerate. Leave all legacy sized DBH trees and all hemlock. Create irregularly shaped (non-linear) treatment boundaries along the west and east sides of the treatment area. Follow standard retention guidelines of 3 to10 percent. Put retention pockets in areas that have high concentration of large DBH pine trees. Include trail protection specification in prescription. No chipping requirement and encourage tops and slash to be placed on oak stumps as much as possible.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Acceptable regeneration includes a moderate to well stocked mix of deciduous and coniferous species.

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2023

Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
30	52106030-Cut	46.3	4123 - Red Oak	Sawtimber Well	85	51-80	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	No

Prescription Specs: Harvest stand to regenerate. No chipping requirement and encourage tops and slash to be placed on oak stumps as much as possible. Do not cut existing legacy trees or hemlock, which are insignificant in volume and for stand structure diversity. Follow standard retention guidelines of 3 to 10%. Include the pocket of hemlock along south boundary as retention area. Include trail protection sale specifications.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Acceptable regeneration includes a moderate to well stocked mix of deciduous species.

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2023

Total Treatment Acreage Proposed: **106.4**

Report 4 – Site Conditions

Gaylord Mgt. Unit

John Scheele : Examiner

Compartment: 106

Year of Entry: 2024

Availability for Management

Total Acres	Acres Available	*Acres Avail With Condition*	Acres Not Available		Dominant Site Conditions *5C*	2G	3A	3B
191	191	***0***	0	**Aspen**				
45	45	***0***	0	**Cedar**				
1	1	***0***	0	**Herbaceous Openland**				
10	10	***0***	0	**Low-Density Trees**				
29	19	***0***	10	**Lowland Aspen/Balsam Poplar**		10		
48	0	***0***	48	**Lowland Deciduous**				48
37	37	***0***	0	**Lowland Shrub**				
118	60	***44***	14	**Mixed Upland Deciduous**	***44***			14
17	0	***0***	17	**Natural Mixed Pines**				17
57	39	***18***	0	**Oak**	***18***			
108	8	***90***	11	**Upland Mixed Forest**	***90***		11	
662	409	***152***	100	Total Forested Acres	***152***	10	11	80
	62%	***23%***	15%	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**	**3B: Threatened, endangered, and special concern species**	17	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified

Comments:

Stand is located in a HCVA. Critical Coastal Habitat (Piping Plover). South part of stand is located along Wycamp Creek.

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
2	**Unavailable**	**3B: Threatened, endangered, and special concern species**	48	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified

Comments:

Proposed treatment north of existing two-track road was dropped during pre-review due to known Bald Eagle observation occurrences in 2020. Also, portion of stand south of existing two-track is too wet with low volume.

3	**Unavailable**	**2G: Too wet (sensitive soils, does not include access issues)**	10	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

4	**Unavailable**	**3B: Threatened, endangered, and special concern species**	14	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

Decided at pre-review to not treat area due to Bald Eagle observation concern to the north of treatment area. Reevaluate at next YOE.

5	**Unavailable**	**3A: Conservation Values incompatible with harvest at this time**	11	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified

Comments:

Potential old growth trees (150+ years old)) within stand.

6	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	39	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

Leave stand for possible treatment in next YOE.

7	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	51	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

Leave stand for possible treatment in next YOE.

8	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	44	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

Leave stand for possible treatment in next YOE.

9	**Available**	**5C: Delay treatment for age/size class diversity or exceptional site quality**	18	Unspecified	Unspecified	Unspecified	Unspecified

Comments:

Leave stand for possible treatment in next YOE.

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
52106003	Habitat Area	Other Habitat Area	**SCA**	50
Comments				
Stand is located in critical dunes and piping plover habitat. Was coded as stand condition 8 in OI. Coding needs to be maintained.				
52106004	Habitat Area	Other Habitat Area	**SCA**	2
Comments				
Stand is located in critical dunes and piping plover habitat. Was coded as stand condition 8 in OI. Coding needs to be maintained.				
52106005	Habitat Area	Other Habitat Area	**SCA**	109
Comments				
Stand is located in critical dunes and piping plover habitat. Was coded as stand condition 8 in OI. Coding needs to be maintained.				
52106006	Habitat Area	Other Habitat Area	**SCA**	29
Comments				
Stand is located in critical dunes and piping plover habitat. Was coded as stand condition 8 in OI. Coding needs to be maintained.				
52106010	Habitat Area	Other Habitat Area	**SCA**	156
Comments				
Stand is located in critical dunes and piping plover habitat. Was coded as stand condition 8 in OI. Coding needs to be maintained.				
52106011	Habitat Area	Other Habitat Area	**SCA**	167
Comments				
Stand is located in critical dunes and piping plover habitat. Was coded as stand condition 8 in OI. Coding needs to be maintained.				
52106012	Habitat Area	Other Habitat Area	**SCA**	52
Comments				
Stand is located in critical dunes and piping plover habitat. Was coded as stand condition 8 in OI. Coding needs to be maintained.				
52106013	Habitat Area	Other Habitat Area	**SCA**	125
Comments				
Stand is located in critical dunes and piping plover habitat. Was coded as stand condition 8 in OI. Coding needs to be maintained.				
52106014	Habitat Area	Other Habitat Area	**SCA**	3
Comments				
Stand is located in critical dunes and piping plover habitat. Was coded as stand condition 8 in OI. Coding needs to be maintained.				
52106015	Habitat Area	Other Habitat Area	**SCA**	5
Comments				
Expand SCA to include entire stand. Stand is located in critical dunes and piping plover habitat. Was coded as stand condition 8 in OI. Coding needs to be maintained.				

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
52106017	Habitat Area	Other Habitat Area	**SCA**	27

Comments

Eliminate the portion of this SCA which is located in compartment 106. Stand is located in critical dunes and piping plover habitat. Was coded as stand condition 8 in OI. Coding needs to be maintained.

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.
HCVA	Critical Dunes	Critical dune areas are established via the public legislative process, and governed by Part 353, Sand Dune Protection and Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the Michigan Department of Environmental Quality (DEQ). The current distribution of designated critical dunes is established by the DEQ 1989 Atlas of Critical Dune Areas.
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and cooperative process between the DNR and the U.S. Fish and Wildlife service for the recovery of threatened and endangered species, as governed by Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, and the Federal Endangered Species Act of 1973. This is an active program, with proposed species plans in various stages of review. As of now only two exist, Kirtland Warbler Habitat and Piping Plover Habitat.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
1	4130 - Aspen	Poletimber Well	25.4	37	Unspecified	N/A	High volume aspen stand.

Canopy Species	% Cover	Size Class	DBH	Age
Red Oak	5	Pole	6	
Bigtooth Aspen	68	Pole/Sapling	7	37
Beech	2	Pole/Sapling	5	
Sugar Maple	25	Sapling/Pole	4	

Sub-Canopy Species	Density	Avg. Height	Size
Balsam Fir	Low	Variable	Sapling
Beech	Low	5 - 10 feet	Sapling
Sugar Maple	Low	>20 feet	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
2	4199 - Other Mixed Upland Deciduous	Sawtimber Well	20.1	100	111-140	N/A	Really nice oak timber with some 20+ DBH trees. Aspen is over-mature and falling over. Largest DBH trees are along the south boundary line against private. Probably was never cut. No survey needed. Lots of trash and tires in stand. BA is 117.

Canopy Species	% Cover	Size Class	DBH	Age
Bigtooth Aspen	28	Log/XLog	17	
Red Oak	51	XLog/Log	18	100
Red Pine	2	XLog/Log	18	
Beech	2	Pole/Sapling	7	
Hemlock	2	Log/Pole	10	
Red Maple	13	Log/Pole	12	
White Pine	2	XLog/Log	18	

Sub-Canopy Species	Density	Avg. Height	Size
White Pine	Low	10 - 20 feet	Sapling
Beech	Medium	10 - 20 feet	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
3	6118 - Lowland Deciduous with Cedar	Sawtimber Well	48.4	95	Unspecified	N/A	Aspen is large DBH and over-mature with some blowdown occurring. Some areas of higher amounts of slash. Higher ground is along Abrams Road and two-track leading to private property. There are some 12+ DBH cedar. Most of the cedar is along the lake shore and the east boundary line. South side of access road to private is very wet ground with higher amounts of blowdown and some pockets of low canopy/lowland shrubs. There are some old beaver stumps and a heavily used deer runway along the lake shore.

Canopy Species	% Cover	Size Class	DBH	Age
Balsam Fir	10	Log/Pole	10	
Quaking Aspen	40	XLog/Log	18	95
Northern White Cedar	20	Log/Pole	11	
Red Maple	15	Log/Pole	12	
White Spruce	10	Log/Pole	12	
Bigtooth Aspen	5	Log/XLog	16	

Sub-Canopy Species	Density	Avg. Height	Size
Black Ash	Medium	5 - 10 feet	Sapling
Red Maple	Low	5 - 10 feet	Sapling
Bigtooth Aspen	Medium	5 - 10 feet	Sapling
Paper Birch	Low	5 - 10 feet	Sapling
Balsam Fir	Medium	Variable	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
4	6112 - Lowland Aspen	Poletimber Well	19.2	27	Immature	N/A	Stand has mostly wetter ground compared to Stand 24. Area along the lake was left uncut when stand was cut. A few larger diameter oak trees area scattered in stand. Lots of deer were observed.

Canopy Species	% Cover	Size Class	DBH	Age
Balsam Fir	5	Pole/Sapling	5	
Red Oak	2	Log	14	
Sugar Maple	2	Sapling/Pole	3	
Yellow Birch	2	Pole/Log	9	
Quaking Aspen	51	Pole/Sapling	5	27
Paper Birch	10	Pole/Sapling	5	
Hemlock	10	Log/Pole	12	
White Ash	2	Pole/Sapling	5	
Bigtooth Aspen	16	Pole/Sapling	6	

Sub-Canopy Species	Density	Avg. Height	Size
Willow spp.	Low	>20 feet	Sapling
Black Ash	Medium	5 - 10 feet	Sapling
Sugar Maple	Medium	>20 feet	Sapling
Balsam Fir	Medium	Variable	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
5	6111 - Lowland Balsam Poplar	Poletimber Well	10.1	60	Unspecified	N/A	Most of stand is fairly wet with some blowdown along the edge. Area may been left due to wet soils during harvest of stands to the south. Stand is close to log-sized. Ash appears healthy with no evidence of EAB. Factor limit as Too Wet or Delay Treatment until next YOE.

Canopy Species	% Cover	Size Class	DBH	Age
Balsam Poplar	40	Pole	9	60
Black Ash	5	Pole/Sapling	5	
Red Maple	5	Pole	7	
Quaking Aspen	40	Log/Pole	10	
Paper Birch	10	Pole/Sapling	6	

Sub-Canopy Species	Density	Avg. Height	Size
Black Ash	High	< 5 feet	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
6	622 - Lowland Shrub	Nonstocked	7.1	0	Unspecified	No	

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
7	4310 - Pine, Oak Mix	Sawtimber Well	10.7	90	111-140	N/A	Nice, tall Red Pine. Scattered larger DBH oak and pine trees. Pocket of hemlock along the north boundary. BA is 140.

Canopy Species	% Cover	Size Class	DBH	Age
Red Pine	40	Log/Pole	16	90
Hemlock	5	Log/Pole	14	
Bigtooth Aspen	16	Log/Pole	10	
Red Oak	25	Log/Pole	12	
White Pine	12	XLog/Log	18	
Red Maple	2	Pole	6	

Sub-Canopy Species	Density	Avg. Height	Size
White Pine	Medium	Variable	Sapling
Beech	Low	Variable	Sapling
Striped Maple	Low	>20 feet	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
8	310 - Herbaceous Openland	Nonstocked	0.7	0	Unspecified	No	Old landing area.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
9	4123 - Red Oak	Sawtimber Well	18.4	95	81-110	N/A	Stand consists of poorly formed, limby oak with some fairly large DBH oak and Red Pine (20+ DBH) trees within stand. Aspen is a little smaller diameter than in Stand 2 to the south. Understory consist of mostly pine species with very slow growing White Pine. Very little oak observed in understory.

Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	5	Pole/Log	8	
Red Oak	60	Log/Pole	16	95
White Pine	5	Pole/Sapling	7	
Bigtooth Aspen	20	Log/Pole	10	
Red Pine	10	Pole/Log	8	

Sub-Canopy Species	Density	Avg. Height	Size
Beech	Low	5 - 10 feet	Sapling
Red Pine	Medium	Variable	Sapling
White Pine	High	Variable	Sapling
Red Oak	Low	< 5 feet	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
10	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	44.1	85	81-110	N/A	Lower quality trees in this stand. Poorer quality parent oak trees, which have poor form and are fairly branchy. Aspen is lower quality with some dying out. Birch is also dying out as well. Pockets of larger DBH aspen, especially along the north boundary. A few scattered 14+ DBH Red and White Pine. Old pile of tires along the north boundary line as well.

Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	5	Pole	6	
Red Oak	53	Log/Pole	12	85
Paper Birch	2	Pole	6	
Red Pine	10	Log/Pole	11	
White Pine	15	Pole/Log	9	

Sub-Canopy Species	Density	Avg. Height	Size
Beech	Low	10 - 20 feet	Sapling
White Pine	High	10 - 20 feet	Sapling
Red Pine	Low	10 - 20 feet	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
11	4310 - Pine, Oak Mix	Sawtimber Well	50.8	85	81-110	N/A	Variable canopy species. Some scattered larger X-sized oaks and 16+ DBH Red Pine. Pockets of legacy pine trees in south center and north center of stand. Pockets of higher aspen canopy where aspen has trunk rot and poor quality. White Pine is fairly branchy. Understory White pine is very slow growing, which is approximately 20 feet tall and age of 50.

Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	2	Pole/Log	8	
Red Oak	33	Log/Pole	11	85
Red Pine	25	Log/Pole	12	
White Pine	20	Log/Pole/Sap	12	
Bigtooth Aspen	20	Pole/Sapling	6	

Sub-Canopy Species	Density	Avg. Height	Size
Beech	Low	10 - 20 feet	Sapling
Red Oak	Low	< 5 feet	Sapling
White Pine	High	Variable	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
12	4310 - Pine, Oak Mix	Sawtimber Well	46.7	85	81-110	N/A	Variable range of DBH from 4 to 20 inches DBH. Overall, smaller DBH trees compared to the stands to the west. Not as many large DBH trees. Pockets of potential legacy pine trees in the southern part of stand. Some over mature aspen in the northeast corner of stand. Some large DBH oak >18 and Red Pine >20. Most Red Pine is along the road and in the south portion of the stand.

Canopy Species	% Cover	Size Class	DBH	Age
Red Oak	30	Log/Pole	12	85
Red Maple	5	Pole/Log	8	
White Pine	15	Log/Pole	14	
Bigtooth Aspen	20	Log/Pole	10	
Red Pine	30	Log/Pole	12	

Sub-Canopy Species	Density	Avg. Height	Size
White Pine	High	Variable	Sapling
Beech	Low	< 5 feet	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
16	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	16.9	73	81-110	N/A	Nice quality, tall pine and aspen trees. Variable DBH trees. Pockets of cedar along the stream. Some larger DBH pine and oaks on south side of road, along Wycamp Creek. Steeper terrain on northwest side of road.

Canopy Species	% Cover	Size Class	DBH	Age
White Pine	15	Log/XLog	17	
Northern White Cedar	2	Pole/Log	8	
Paper Birch	2	Log/Pole	10	
Bigtooth Aspen	18	Log/Pole	14	
Red Maple	2	Pole/Sapling	5	
Red Oak	10	Log/Pole	14	
Red Pine	51	Log/Pole	16	73

Sub-Canopy Species	Density	Avg. Height	Size
Beech	Low	5 - 10 feet	Sapling
Red Maple	Low	>20 feet	Sapling
White Pine	High	Variable	Sapling
Balsam Fir	Low	Variable	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site
18	6220 - Alder/willow	Nonstocked	19.7		Unspecified	No

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
19	4130 - Aspen	Sapling Well	14.3	3	Immature	N/A	Some pockets of cattails. Lots of large sized slash. Mostly cedar is located along the stream boundary. Wycamp Creek is located in the northeast corner of stand. Majority of the stand sits on top of a shelf with one or two small seeps running down towards the river in the spring. North edge of stand drops down into creek floodplain with more of a cedar dominated swath in spots with overmatured aspen.

Canopy Species	% Cover	Size Class	DBH	Age
Quaking Aspen	66	Sapling	1	3
Bigtooth Aspen	20	Sapling	1	
Northern White Cedar	10	Log/Pole	10	
Black Ash	2	Sapling	3	
Red Oak	2	Log/Pole	12	

Sub-Canopy Species	Density	Avg. Height	Size
Blackberry/Raspberry	Medium	< 5 feet	Tall Shrub
White Ash	Medium	< 5 feet	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
20	4136 - Aspen, Mixed Conifer	Poletimber Well	42.0	28	Unspecified	N/A	A few larger DBH oaks, Sugar Maple, hemlock, and pine trees were left uncut from last harvest. Pockets of wet ground in center of stand. Observed a 3 to 4 foot diameter Red Oak along the west boundary of stand, on access road.

Canopy Species	% Cover	Size Class	DBH	Age
White Pine	11	Log/Pole	14	
Red Pine	2	Log/Pole	12	
Bigtooth Aspen	50	Pole/Sapling	5	28
Sugar Maple	10	Sapling	3	
Balsam Fir	3	Pole/Sapling	5	
Hemlock	7	Log	16	
Quaking Aspen	2	Pole/Sapling	5	
Red Oak	15	Log/Pole	14	

Sub-Canopy Species	Density	Avg. Height	Size
Black Ash	Low	10 - 20 feet	Sapling
Sugar Maple	Medium	< 5 feet	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
21	6120 - Lowland Cedar	Poletimber Well	34.8	95	Unspecified	N/A	Cedar is poor quality and health. A few larger diameter cedar scattered. Lots of blowdown in spots. Red Maple is dead or dying.

Canopy Species	% Cover	Size Class	DBH	Age
Quaking Aspen	20	Log	12	
Balsam Fir	5	Pole/Sapling	5	
Black Ash	5	Sapling/Pole	4	
Red Maple	5	Pole/Sapling	6	
Northern White Cedar	55	Pole	7	95
Paper Birch	10	Pole/Log	8	

Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	Low	Variable	Sapling
Balsam Fir	Medium	Variable	Sapling
Black Ash	Full	5 - 10 feet	Sapling
Bigtooth Aspen	Low	Variable	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
22	4130 - Aspen	Poletimber Well	23.4	34	Immature	N/A	Lots of deer tracks running south to north. Not as healthy in spots compared to stand to the west.

Canopy Species	% Cover	Size Class	DBH	Age
Sugar Maple	5	Sapling/Pole	3	
Red Maple	2	Sapling/Pole	4	
Red Oak	18	Pole/Sapling	6	
White Pine	2	Pole/Sapling	5	
Bigtooth Aspen	63	Pole/Sapling	6	34
Paper Birch	10	Sapling/Pole	4	

Sub-Canopy Species	Density	Avg. Height	Size
Striped Maple	Low	10 - 20 feet	Sapling
Serviceberry (Juneberry)	Low	>20 feet	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
24	4131 - Aspen, Oak	Poletimber Well	19.7	27	Immature	N/A	Lots of deer runways from south to north.

Canopy Species	% Cover	Size Class	DBH	Age
Sugar Maple	8	Sapling/Pole	4	
White Pine	10	Log/Pole	12	
Balsam Fir	2	Pole	6	
Red Maple	2	Pole/Sapling	5	
Black Cherry	2	Sapling/Pole	4	
Red Oak	23	Log	16	
Bigtooth Aspen	51	Pole/Sapling	6	27
Hemlock	2	Log/Pole	12	

Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	Low	>20 feet	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
25	3303 - Mixed Low Density Trees	Nonstocked	10.3	0	Unspecified	No	Old trash and fire pit sites within opening. Old plow line around edge of opening as well.

26 4130 - Aspen — Poletimber Well — 52.2 — 37 — Unspecified — N/A

Aspen appears to be the oldest in the area with more dead debris on the ground. Relatively high volume aspen. Higher ground with more Bigtooth Aspen in the south and lower ground with more Quaking Aspen in the north part of the stand. Portion along the lake was left during last harvest.

Canopy Species	% Cover	Size Class	DBH	Age
Paper Birch	2	Pole/Sapling	5	
Black Cherry	2	Pole	6	
Red Maple	10	Pole/Sapling	5	
Red Oak	2	Pole	6	
Quaking Aspen	30	Pole/Sapling	6	
Bigtooth Aspen	54	Pole	7	37

Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	Medium	>20 feet	Sapling
Serviceberry (Juneberry)	Low	>20 feet	Sapling
Sugar Maple	Low	>20 feet	Sapling

27 4191 - Mixed Upland Deciduous with Conifer — Sawtimber Well — 54.3 — 85 — 81-110 — N/A

Decent quality oak. Higher aspen component south of road. Some scattered larger DBH (possibly legacy) oaks and pine species. Pockets of bigger aspen. Understory White pine is slow growing about 30 feet tall and 40 to 50 years of age.

Canopy Species	% Cover	Size Class	DBH	Age
Bigtooth Aspen	25	Log/Pole	11	
Red Oak	38	Log/Pole	13	85
Red Maple	2	Pole	7	
Red Pine	15	Log/Pole	12	

Sub-Canopy Species	Density	Avg. Height	Size
Beech	Low	10 - 20 feet	Sapling
Red Oak	Low	>20 feet	Sapling
White Pine	High	Variable	Sapling

28 6120 - Lowland Cedar — Sawtimber Well — 10.0 — 102 — Unspecified — N/A

Cedar appears to be fairly healthy with some past and current blowdown. Some larger DBH cedar. More mixed tree species along the edge of stand with some nice quality hemlock. Lots of deer tracks.

Canopy Species	% Cover	Size Class	DBH	Age
Quaking Aspen	10	Log	12	
Northern White Cedar	61	Log/Pole	10	102
Hemlock	15	Log/Pole	14	
White Spruce	10	Pole/Log	8	
Paper Birch	2	Log/Pole	10	
Red Maple	2	Log/Pole	10	

Sub-Canopy Species	Density	Avg. Height	Size
Beech	Low	5 - 10 feet	Sapling
Red Maple	Low	5 - 10 feet	Sapling
Balsam Fir	Low	< 5 feet	Sapling

29 4131 - Aspen, Oak — Sapling Well — 13.8 — 17 — Immature — N/A

Stand was cut in 3/2005 except for oak, hemlock, and cedar as part of Abrams Road Aspen (52-132-04). A few larger DBH oaks are scattered in stand. Lots of deer runways running southwest to northeast.

Canopy Species	% Cover	Size Class	DBH	Age
Bigtooth Aspen	50	Sapling	4	17
Red Oak	23	Log/Pole/XLog	17	
Sugar Maple	5	Sapling	3	
Red Maple	5	Sapling/Pole	4	
Quaking Aspen	10	Sapling	4	
Hemlock	5	Log	12	
Balsam Fir	2	Sapling/Pole	4	

Sub-Canopy Species	Density	Avg. Height	Size
Red Oak	Low	5 - 10 feet	Seeding
Beech	Low	5 - 10 feet	Sapling
Red Maple	Low	5 - 10 feet	Sapling

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
30	4123 - Red Oak	Sawtimber Well	38.9	85	51-80	N/A	Stand was treated in 5/2005 as part of Abrams Road Aspen (52-132-04). Everything was cut except Red Pine, White Pine, oak, beech, and hemlock. A few small pockets of low canopy closure within stand that has full aspen regeneration. No oak regeneration was observed. Currently, the Red Oak and pine species DBH range is 6 to 14 inches. A few scattered, very large DBH oak and pine trees. High percentage of multi-stemmed, poorly formed oak trees. Lots of deer tracks. BA is 78.
31	6220 - Alder/willow	Nonstocked	9.7		Unspecified	No	

Canopy Species	% Cover	Size Class	DBH	Age
Red Oak	70	Log/Pole/XLog	12	85
White Pine	20	Log/Pole	10	
Red Pine	5	Log/Pole	10	
Hemlock	5	Pole/Log	8	

Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	Low	10 - 20 feet	Sapling
Red Maple	Medium	10 - 20 feet	Sapling
White Pine	Low	5 - 10 feet	Sapling
Bigtooth Aspen	High	>20 feet	Sapling
Beech	High	< 5 feet	Sapling