



Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32035

Entry Year 2023

Acreage: 1,466

County Marquette

Management Area: Chain Lakes Moraine

Revision Date: 2021-08-03

Stand Examiner: Peter Holodnick

Legal Description:

T45N R26W Sections 6,7,18

Identified Planning Goals:

To improve the quality and diversity of State forests and wildlife through proper habitat management, while protecting the riparian values of our wetlands and waters.

Soil and topography:

Topography varies greatly from nearly level to quite steep. Although there are some organic soils, most are excessively drained sands. Soil associations include Rubicon, Crowell, Carbondale, Lupton, Tawas, Rifle, Dawson, Kinross, Kalkaska, Munising and Keweenaw.

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

Most of the compartment is surrounded by State land except for the private holdings in section 6.

Unique Natural Features:

Unique, Natural Features: Potential for osprey, eagle, and great blue heron rookery. Potential for red shouldered hawk and goshawk. Potential for moose and wolf. Potential for wood turtle in Bear Creek. Potential for grasshopper sparrow in grassy openings. Potential for auricled tway-blade, western dock, veiny meadow-rue, and linear-leaved gentian along riparian areas. Potential for Farwell's water-milfoil and alternate-leaved water-milfoil in shallow lakes. Potential for purple clematis in dry-mesic conifer stands. Potential for fir clubmoss in moist sandy depressions and shorelines. Potential for Canada rice-grass in grassy openings and in clearings in jack pine.

Archeological, Historical, and Cultural Features:

None identified.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

This compartment contains a northern section and larger southern section. The northern section of this compartment does not contain any waterbodies. The southern section of this compartment contains Bear Creek. Bear Creek is designated a Type 1 trout stream less than 50' width and has a predicted mean July temperature that ranges from 59.1 to 61.2 °F (cold stream). 300' buffers are recommended for Bear Creek in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices.

Wildlife Habitat Considerations:

Compartment 035 is found within the Chain Lakes Moraine 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 Chain Lakes Management Area: black bear, gray jay, pileated woodpecker, Northern goshawk, red crossbill.

Mineral Resource and Development Concerns and/or Restrictions

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of coarse textured glacial

till. The glacial drift thickness varies between 50 and 200 feet. Precambrian Archean Granite/Gneiss subcrops below the glacial drift. There is not a current economic use for this formation. Gravel pits are located two miles to the southeast and potential should be good. Abandoned iron mines are located six miles to the east. Sections 7 and 19 were previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access:

Very good from County Road 565, Hemmings Lake Road, and Chain-o-Lakes Road.

Survey Needs:

None at this time

Recreational Facilities and Opportunities:

A segment of the Bass Lake ORV trail runs through this compartment. In addition, hunting opportunities are excellent for upland game, deer, and bear.

Fire Protection:

This compartment has a low risk for wildfire.

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**

Report 1 – Total Acres by Cover Type and Age Class

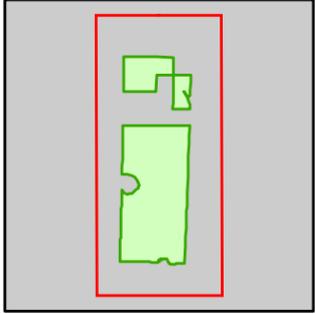


Age Class

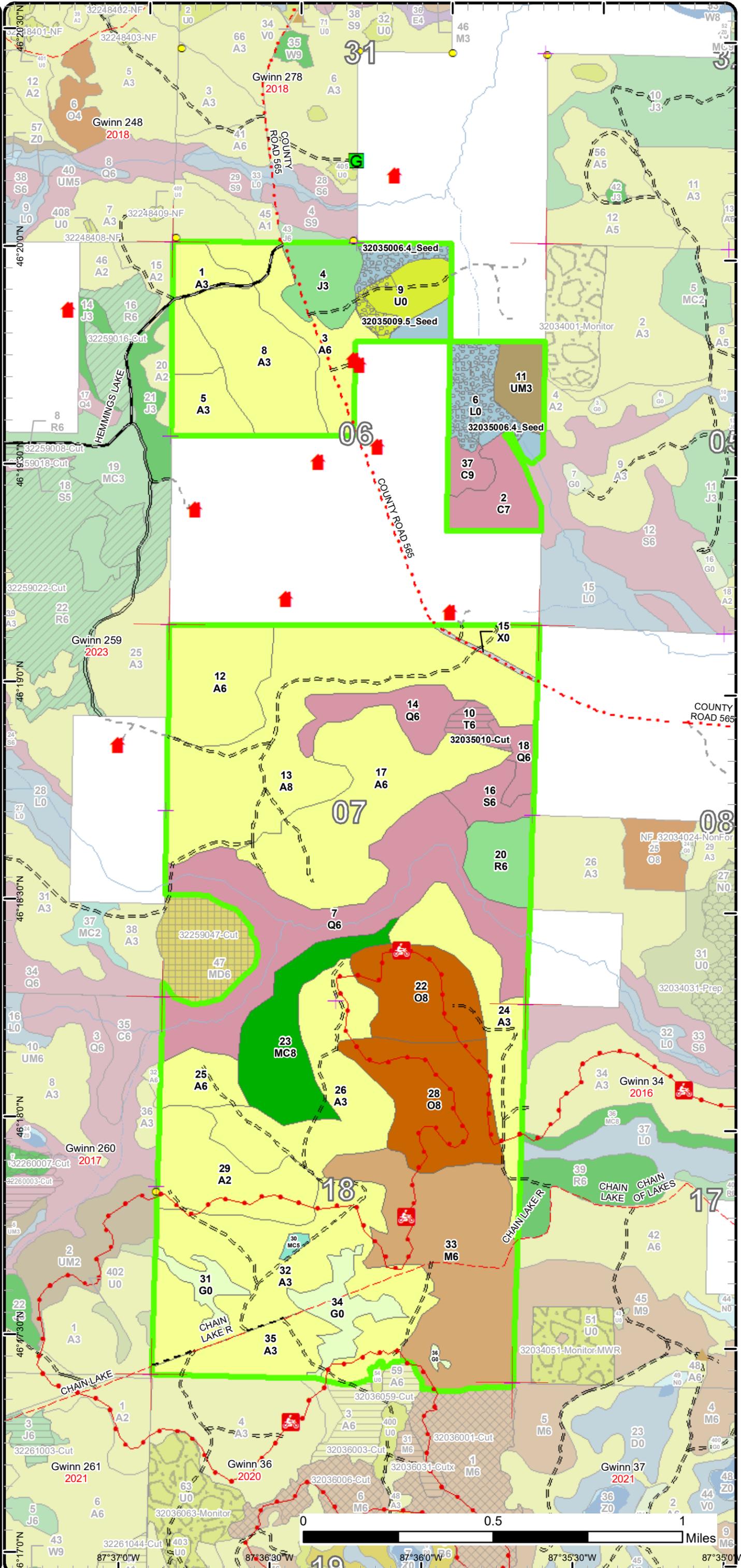
	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	42	51	87	557	70	0	0	0	0	0	0	0	0	0	0	0	0	806
Cedar	0	0	0	0	0	0	0	0	0	0	0	24	9	0	0	0	0	0	33
Herbaceous Openland	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Jack Pine	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Low-Density Trees	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	160	0	0	0	0	0	0	0	160
Lowland Shrub	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	15
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	0	49	0	0	0	0	0	0	49
Northern Hardwood	0	0	0	0	0	0	0	0	0	118	0	0	0	0	0	0	0	0	118
Oak	0	0	0	0	0	0	0	0	0	46	64	0	0	0	0	0	0	0	110
Red Pine	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Tamarack	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7
Upland Conifers	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Upland Mixed Forest	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Urban	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	101	42	51	136	574	70	0	0	22	164	224	73	9	0	0	0	0	0	1465

Cover Type & Treatments Map

Compartment: 35
 T45N, R26W, Sec. 06, 07, 18
 County: Marquette
 Unit: Gwinn
 Mgmt Area: Chain Lakes Moraine
 YOE: 2023
 Acres: 1465.6 GIS Calculated
 Examiner: Peter Holodnick
 Map Revised: 8/20/2021
 Map Phase: Review

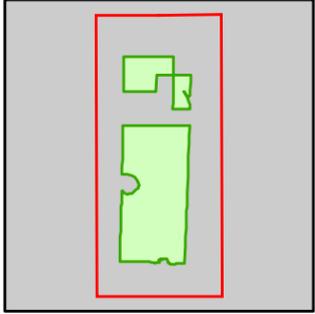


- Miris Corners
- Remonumented Section Corners
- Survey Grade Corners
- Counties
- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Motorcycle Trails (DNR License)
- ORV License & Trail Permit
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Cabin
- Berms
- Gate
- Compartment Boundary
- Clearcut (w/Reserves)
- Seeding (tree species)
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 622 - Lowland Shrub

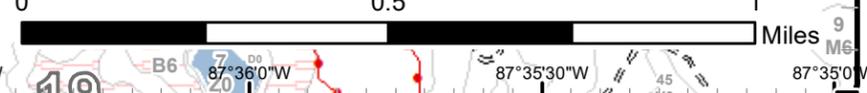
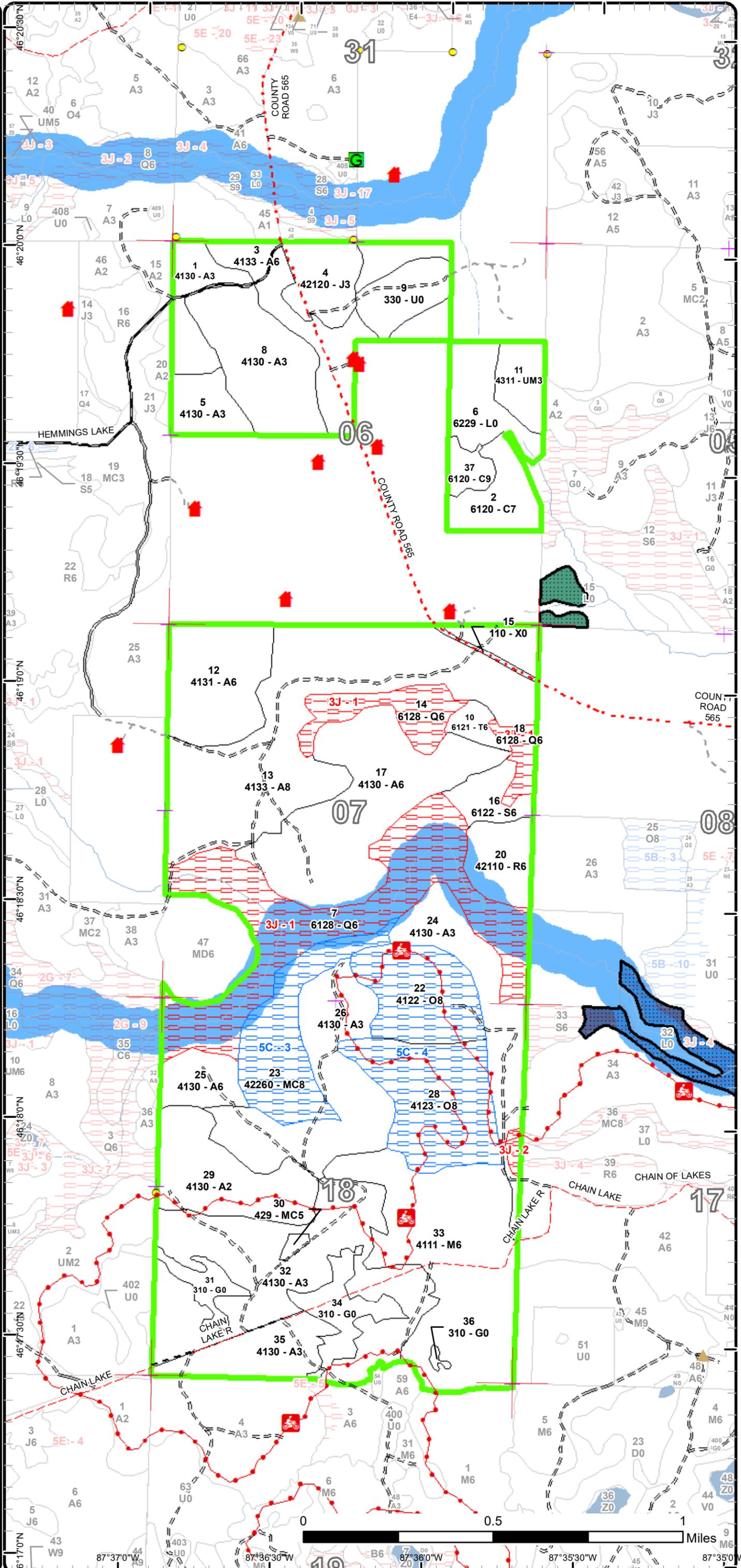


Special Conservation Areas

Compartment: 35
 T45N, R26W, Sec. 06, 07, 18
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- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers
- 🏠 Cabin
- ▲ Berms
- G Gate
- Compartment Boundary
- Available w/ Constraints
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- SCA
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Spring or Seep
- Habitat Corridor





Report 2 – Treatment Summary

Gwinn Mgt. Unit

Year of Entry: 2023

Acres of Harvest

Compartment 35
Total Compartment Acres: 1,466

Commercial Harvest - 7
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
Tamarack		7	0	0	0	0	0	0	0	0	7
	Total	7	0	0	0	0	0	0	0	0	7

Proposed and Next Step Treatments by Method

		Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current		7	0	0	39	0	0	0	0	0	46
Next Step		0	0	0	39	0	0	41	0	0	79
	Total	7	0	0	77	0	0	41	0	0	125



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:

6	32035006.4_S eed	33.4	6229 - Mixed lowland shrub	Nonstocked	0	Unspec ified	Seeding	Machine Seed	6124 - Lowland Spruce-Fir	Even-Aged	No
<u>Prescription</u> Snow mobile seed Black spruce. Do this in conjunction with stand 9.											
<u>Specs:</u>											
<u>Next Step</u> Seeding, Machine Seed; Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Spruce and Tamarack											
<u>Regen:</u>											
<u>Other</u> There is tag alder coming in in some places. Seed as much of it as you can with the snowmobile.											
<u>Comment:</u>											
<u>Site Condition</u>											
<u>Proposed Start Date:</u> 10/1 /2022											
9	32035009.5_S eed	5.2	330 - Low-Density Trees	Nonstocked	0	Unspec ified	Seeding	Machine Seed	4319 - Mixed Upland Forest	Even-Aged	No
<u>Prescription</u> Snowmobile seed Jack Pine and Spruce. Snowmobile seed in conjunction with stand 10 the spruce stand that surrounds it.											
<u>Specs:</u>											
<u>Next Step</u> Seeding, Machine Seed											
<u>Treatments:</u>											
<u>Acceptable</u> Jack pine and Spruce											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Site Condition</u>											
<u>Proposed Start Date:</u> 10/1 /2022											
10	32035010-Cut	7.4	6121 - Tamarack	Poletimber Well	76	111- 140	Harvest	Clearcut	613 - Lowland Mixed Forest	Even-Aged	No
<u>Prescription</u> Cut all but Cedar and Hemlock. Parts of this stand may need to be excluded with redline if there is too much cedar to operate. No retention needed due to small size.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Any tree species currently in the overstory will be acceptable.											
<u>Regen:</u>											
<u>Other</u> Cut this stand with those stands in comp 38.											
<u>Comment:</u>											
<u>Site Condition</u>											
<u>Proposed Start Date:</u> 10/1 /2022											

Total Treatment 46
Acreage Proposed:

Report 4 – Site Conditions

Gwinn Mgt. Unit

Compartment: 35

Peter Holodnick: Examiner

Year of Entry: 2023

Availability for Management

Total Acres	Acres Available	Acres Avail With Condition	Acres Not Available	Dominant Site Conditions		
Acres	Available	With Condition	Not Available	5C	2G	3J
806	803	0	3	Aspen		3
33	33	0	0	Cedar		
33	33	0	0	Herbaceous Openland		
24	24	0	0	Jack Pine		
21	21	0	0	Low-Density Trees		
160	1	0	159	Lowland Conifers	0	159
45	45	0	0	Lowland Shrub		
15	15	0	0	Lowland Spruce/Fir		
49	0	49	0	Natural Mixed Pines	49	
118	118	0	0	Northern Hardwood		
109	0	109	0	Oak	109	
23	23	0	0	Red Pine		
7	7	0	0	Tamarack		
2	2	0	0	Upland Conifers		
17	17	0	0	Upland Mixed Forest		
2	2	0	0	Urban		
1,466	1,145	158	162	Total Forested Acres	158	162
	78%	11%	11%	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	3J: Water quality / BMPs (stream, river, or lake)	159	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Lots of cedar to operate in. Not a great place to regenerate cedar.</p>							
2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments:</p>							

Report 4 – Site Conditions

Gwinn Mgt. Unit

Compartment: 35

Peter Holodnick: Examiner

Year of Entry: 2023

3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	49	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Wait until the aspen gets bigger to cut.</p>							
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	109	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: wait for the regen to grow up before cutting</p>							

Mgt. Unit

Compartment: #Type!

Year of Entry:



Report 5 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
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Comments



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
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	4130 - Aspen	Sapling Well	23.0	7	Immature	N/A	Mixed aspen (quaking and big tooth) with red oak sawtimber, white birch and red maple.																																													
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Oak</td> <td>2</td> <td>Log</td> <td>12</td> <td></td> </tr> <tr> <td>Quaking Aspen</td> <td>49</td> <td>Sapling</td> <td>3</td> <td>7</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>40</td> <td>Sapling</td> <td>3</td> <td>7</td> </tr> <tr> <td>Red Maple</td> <td>4</td> <td>Sapling/Pole</td> <td>3</td> <td></td> </tr> <tr> <td>Paper Birch</td> <td>5</td> <td>Sapling</td> <td>3</td> <td></td> </tr> </tbody> </table>								Canopy Species	% Cover	Size Class	DBH	Age	Red Oak	2	Log	12		Quaking Aspen	49	Sapling	3	7	Bigtooth Aspen	40	Sapling	3	7	Red Maple	4	Sapling/Pole	3		Paper Birch	5	Sapling	3																
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2	6120 - Lowland Cedar	Sawtimber Poor	24.4	103	Unspecified	N/A	Stand cut under 32-007-13-01 565 Spruce in the winters of 2016-2017 and 2017-2018. wait longer to see if more tamarack and black spruce comes up for regen(2020). 2020 notes: Black spruce and Tamarack are not coming up yet. There is Cattails and tag alder coming up. Its going to take more time.																																													
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3	4133 - Aspen, Mixed Pine	Poletimber Well	38.5	34	51-80	N/A	Aspen poles and saplings with mixed white,jack, and red pines along Co. Rd 565.																																													
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4	42120 - Planted Jack Pine	Sapling Well	24.3	27	Unspecified	N/A	10-15' tall 3-4" jack pine with an occasional aspen pole. Some damage to this plantation because of 2019 heavy snow.																																													
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Red Maple	4	Sapling	2																																																	
6	6229 - Mixed lowland shrub	Nonstocked	45.0	0	Unspecified	6122 - Black Spruce	Stand cut under 32-007-13-01 565 Spruce in the winters of 2016-2017 and 2017-2018. wait longer to see if more tamarack and black spruce comes up for regen(2020). 2020 notes: Black spruce and Tamarack are not coming up yet. There is Cattails and tag alder coming up. Its going to take more time.																																													
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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7	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	126.1	90	111-140	N/A	Typical lowland conifer stand. Heavier cedar component along Bear Creek. Hard to cut without doing damage to Cedar.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	10	Pole	7		Balsam Fir	Low	Variable	Sapling
Paper Birch	10	Pole	8		Black Spruce	Low	Variable	Sapling
Balsam Fir	10	Pole	8					
White Spruce	10	Log/Pole	10					
Black Spruce	20	Pole/Log	10					
Northern White Cedar	40	Log/Pole	10	90				

8	4130 - Aspen	Sapling Well	55.6	27	Unspecified	N/A	2-4' aspen saplings with occasional red oak pole in the overstory.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Oak	2	Pole	9		Red Maple	Low	< 5 feet	Sapling
Quaking Aspen	85	Sapling	2	27				
White Spruce	4	Pole/Sapling	6					
Balsam Fir	4	Sapling/Pole	3					
Red Maple	5	Pole/Sapling	6					

9	330 - Low-Density Trees	Nonstocked	21.4	0	Unspecified	No	Stand cut under 32-007-13-01 565 Spruce in the winters of 2016-2017 and 2017-2018.
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Sub-Canopy Species	Density	Avg. Height	Size
Quaking Aspen	Low	5 - 10 feet	Sapling
Jack Pine	Low	5 - 10 feet	Sapling

10	6121 - Tamarack	Poletimber Well	7.4	76	111-140	N/A	Typical lowland conifer stand. Heavier cedar component along Bear Creek. Tamarack stand that is starting to fall apart.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Paper Birch	5	Pole	8		Balsam Fir	Low	Variable	Sapling
Balsam Fir	10	Pole	8		Black Spruce	Low	Variable	Sapling
Black Spruce	5	Log/Pole	10		Tag Alder	Low	5 - 10 feet	Tall Shrub
Northern White Cedar	10	Log/Pole	10					
Tamarack	70	Log/Pole	10	76				

11	4311 - Pine, Aspen Mix	Sapling Well	17.0	30	51-80	N/A	2"-4" aspen and jack pine saplings. 60-40 aspen/jack pine blend.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Quaking Aspen	50	Pole/Sapling	5	30	White Spruce	Low	5 - 10 feet	Sapling
Jack Pine	40	Pole/Sapling	5		White Pine	Low	5 - 10 feet	Sapling
Balsam Fir	5	Pole/Sapling	5					
Black Spruce	5	Pole/Sapling	5					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																											
12	4131 - Aspen, Oak	Poletimber Well	50.6	41	81-110	N/A	Red oak and white pine sawtimber over 4" aspen saplings. A trace of red pine and white birch. Fair white pine in the understory with red maple and red oak saplings. Terrain is ridgy with moderately steep slopes. red oak ba 40, white pine 10. Let the Aspen get bigger before managing.																																											
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13	4133 - Aspen, Mixed Pine	Sawtimber Medium	165.0	36	51-80	N/A	wait until the aspen gets bigger to cut.																																											
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14	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	24.7	90	111-140	N/A	Typical lowland conifer stand. Heavier cedar component along Bear Creek. Hard to cut without doing damage to Cedar.																																											
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15	110 - Low Intensity Urban	Nonstocked	2.0		Unspecified	No	Co. Rd 565																																											
16	6122 - Black Spruce	Poletimber Well	14.8	76	111-140	N/A	Typical lowland conifer stand. Heavier cedar component along Bear Creek. Look to cut next entry.																																											
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17	4130 - Aspen	Poletimber Well	101.1	36	Unspecified	N/A	Aspen saplings over decent white pine regeneration with pockets of W7. Scattered red oak and large red pine sawtimber.																																											
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20	42110 - Planted Red Pine	Poletimber Well	22.9	27	141-170	N/A	Almost pure young 4" red pine plantation with a few volunteer white pine and balsam fir. Wait until next entry to thin.																																																			
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22	4122 - Oak, Pine	Sawtimber Medium	45.6	87	1-50	N/A	Red oak, white pine, and red pine sawtimber over M3 -red maple-stump sprouts and scattered white pine seedlings. Stand was cut around 1994 under contract # 014-93-01. Nice pocket of large red pine in se corner. Good Red Oak regen.																																																			
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23	42260 - Natural Pine, Mixed Deciduous	Sawtimber Medium	49.1	103	51-80	N/A	Mixed pine sawtimber over aspen, fir, and black spruce. 30 ba white pine, 35 ba red pine, 20 ba of mixed aspen, red maple, black spruce. Scattered red oak. wait for the aspen and maple to get bigger before cutting.																																																			
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
25	4130 - Aspen	Poletimber Well	18.7	45	81-110	N/A	Take a look at for cutting next entry
Canopy Species	% Cover	Size Class	DBH	Age			
Quaking Aspen	94	Pole	6	45			
Balsam Fir	2	Pole	7				
White Spruce	2	Pole	6				
White Pine	2	Log	18				
Sub-Canopy Species	Density	Avg. Height	Size				
Balsam Fir	Low	Variable	Sapling				
26	4130 - Aspen	Sapling Well	75.4	31	Unspecified	N/A	Aspen saplings with super canopy red and white pine, red oak over fir, jack pine, and white pine.
Canopy Species	% Cover	Size Class	DBH	Age			
Red Oak	5	XLog	16				
Quaking Aspen	77	Sapling/Pole	3	31			
Balsam Fir	5	Sapling/Pole	4				
White Pine	5	Log/Pole	10				
Red Pine	5	Log	12				
Jack Pine	3	Pole	8				
Sub-Canopy Species	Density	Avg. Height	Size				
Balsam Fir	Medium	Variable	Sapling				
White Pine	Low	Variable	Sapling				
Jack Pine	Low	Variable	Sapling				
28	4123 - Red Oak	Sawtimber Medium	63.7	98	51-80	N/A	Nice high quality red oak sawtimber stand of acorn and stump sprout origin. The stand contains areas of heavier white birch and aspen in the north and west end with a fair amount of white birch dead standing. Scattered large boulders and rolling terrain. There is good regen mostly in stump sprouts of mostly maple. There is scattered oak and white pine regen as well.
Canopy Species	% Cover	Size Class	DBH	Age			
Red Oak	85	Log/XLog	14	98			
White Pine	10	XLog/Log	18				
Red Pine	5	Log	17				
Sub-Canopy Species	Density	Avg. Height	Size				
Red Maple	Medium	>20 feet	Sapling				
Balsam Fir	Low	Variable	Sapling				
White Pine	Medium	5 - 10 feet	Sapling				
Quaking Aspen	Low	< 5 feet	Sapling				
Red Oak	Low	5 - 10 feet	Sapling				
29	4130 - Aspen	Sapling Medium	51.3	15	Unspecified	N/A	Cut in 2005 by LaFleur under permit # 019-03-01. 1' aspen saplings with a super canopy of red and white pine, and red oak.
Canopy Species	% Cover	Size Class	DBH	Age			
Red Oak	3	Log	12				
Quaking Aspen	90	Sapling	1	15			
White Pine	2	Log	18				
Red Pine	5	Log	14				
Sub-Canopy Species	Density	Avg. Height	Size				
Balsam Fir	Low	Variable	Sapling				
30	429 - Mixed Upland Conifers	Poletimber Medium	2.0	21	Immature	N/A	Small natural opening. used to be a grass opening and has filled in.
Canopy Species	% Cover	Size Class	DBH	Age			
White Pine	45	Sapling/Pole	4	21			
Balsam Fir	10	Sapling/Pole	2				
Quaking Aspen	30	Sapling/Pole	3				
Red Pine	5	Pole/Sapling	3				
Red Oak	5	Sapling/Pole	2				
Jack Pine	5	Pole/Sapling	4				



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																			
31	310 - Herbaceous Openland	Nonstocked	10.7		Unspecified	No	Natural grass opening																																			
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32	4130 - Aspen	Sapling Well	124.9	30	1-50	N/A	A highly variable stand of multiple clones of aspen, scattered small openings throughout and supercanopy pines and red oak, with pockets of jack pine and balsam fir.																																			
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33	4111 - S.Maple, Hard Mast Association	Poletimber Well	118.3	87	81-110	N/A	Even-aged hard maple stand with large red oak. Also contains scattered hemlock and white spruce. Ridgey, rocky, rolling terrain. Harvested as "Chain-O-Lakes Oak" #016-13 in August - Oct, 2015 by LaFleur. Very little regeneration. Lots of sedge and possible deer browse of regen. Large oak in the northern portion.																																			
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34	310 - Herbaceous Openland	Nonstocked	21.5		Unspecified	No	Larger natural opening with upland brush.																																			
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36	310 - Herbaceous Openland	Nonstocked	1.1		Unspecified	No	Small grass opening																																			



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
37	6120 - Lowland Cedar	Sawtimber Well	8.7	111	Unspecified	N/A	

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Black Spruce	5	Pole/Sapling	6		Black Spruce	Medium	Variable	Sapling
Tamarack	10	Pole	8		Tag Alder	Low	< 5 feet	Tall Shrub
Northern White Cedar	80	Log/Pole/XLog	10	111	Leatherleaf	High	< 5 feet	Tall Shrub
Balsam Fir	5	Log/Pole/XLog	6		Balsam Fir	Low	< 5 feet	Sapling