



Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 52024

Entry Year 2024

Acreage: 537

County Otsego

Management Area: AuSable Outwash

Stand Examiner: Doug Tyran

Legal Description:

Otsego County, T30N R01W Sections 31, 32, and 33

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:

Soils in this compartment are Rubicon Sand, Emmet Sandy Loam, and Roselawn Sand. The terrain is level to gently rolling.

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

The ownership on the north and south side of this compartment is primarily private. Deer and small game hunting, snowmobiling and riding ORV's are the primary recreational activities in this compartment.

Unique Natural Features:

None known.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

Listed are the MNFI comments; Slight potential secretive locust in V types; slight potential for dusted skipper, blazing star borer, and red-legged spittlebug in grassy openings. Pale agoseris record to the west. Pale agoseris, Rough fescue, Hill's thistle to the south. Potential for dry Prairie plants in grassy openings.

Watershed and Fisheries Considerations:

This compartment is to the northeast of Big Bass Lake. There are no water bodies in this compartment, so Fisheries has no concerns.

Wildlife Habitat Considerations:

This compartment consists mostly of upland areas of aspen, oak and red pine. This early successional habitat benefits white-tailed deer, wild turkey, grouse, woodcock, and various songbirds. This area receives significant hunting pressure for white-tailed deer, grouse, woodcock, and wild turkey.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and an end moraine of medium-textured till. The glacial drift thickness varies between 600 and 1,000 feet. The Mississippian Coldwater Shale subcrops below the glacial drift and does not have a current economic use. The nearest gravel pit is located in Section 31 and potential appears to be good. The compartment appears to be completely developed for Antrim Shale gas production and has had some Guelph (former Niagaran) reef development. Additional potential exists for Guelph reefs.

Vehicle Access:

Compartment is easily accessible by way of county road, forest trails, and/or non-exclusive pipeline right-of-ways.

Survey Needs:

None at this time.

Recreational Facilities and Opportunities:

No recreational facilities. Hunting, ORV playing, ATVing, Snowmobiling, Hiking, and Bird Watching are all common.

Fire Protection:

The many pipelines and large power line provide excellent fuel breaks. Equipment access is not a concern.

Additional Compartment Information:

None at this time.

The following reports from the Inventory are attached:

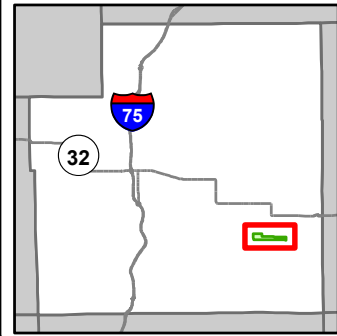
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

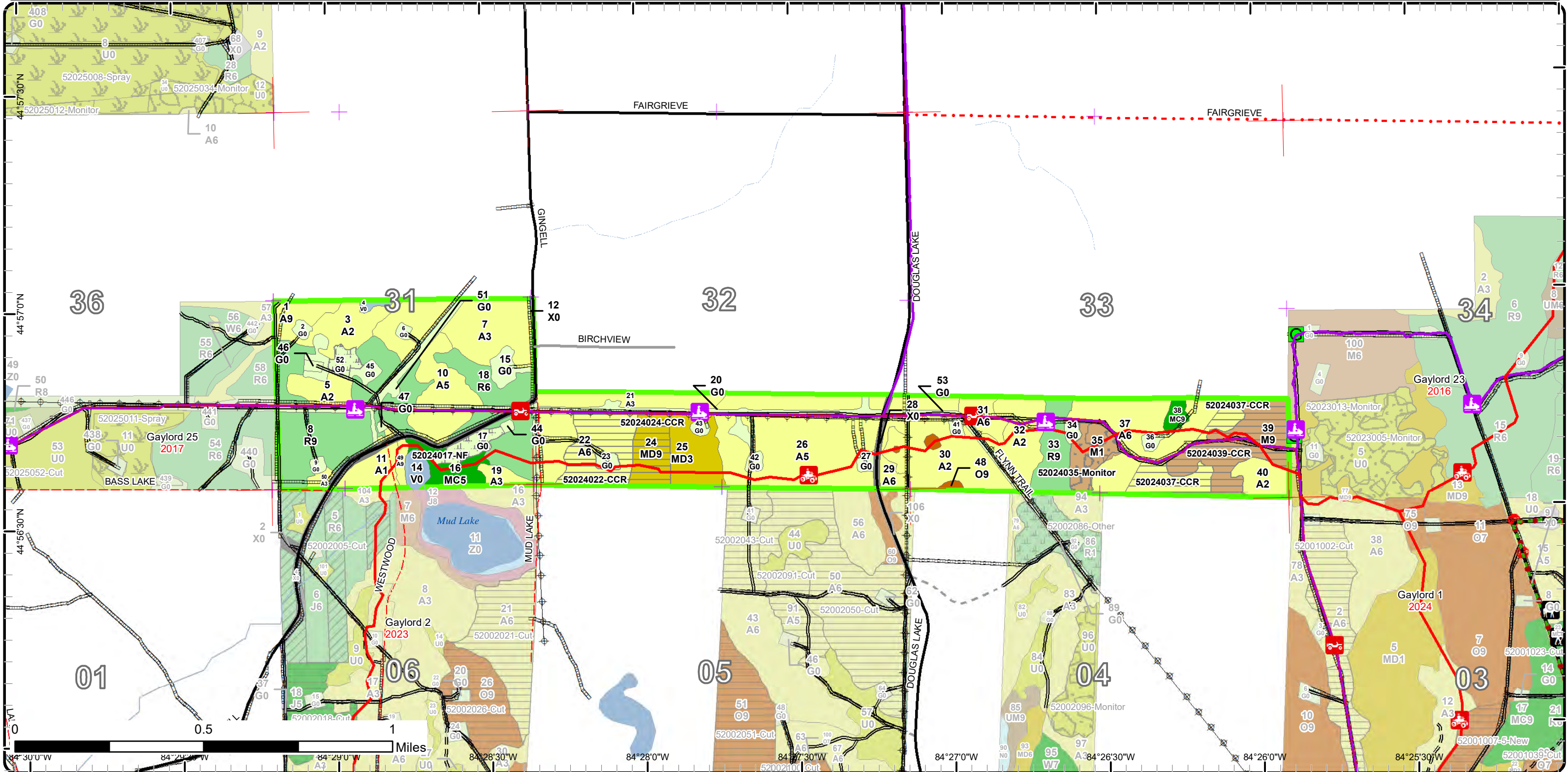
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 24
 T30N, R01W, Sec. 31-33
 County: Otsego
 Unit: Gaylord
 Mgmt Area: AuSable Outwash
 YOE: 2024
 Acres: 537.4 GIS Calculated
 Examiner: Doug Tyran
 Map Revised: 11/15/2022
 Map Phase: Post-Review



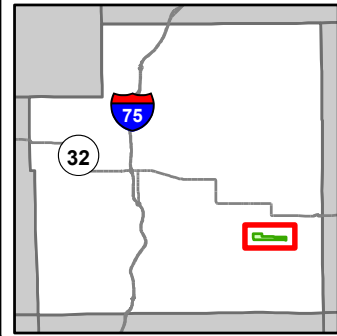
- Miris Corners
- + Remonumented Section Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Paved Road
- Private - Dirt / Gravel Road
- Hiking Trails
- Horse Trails
- ORV Trails
- ORV Routes
- Snowmobile Trails
- - - Designated Hiking Trails
- Designated Equestrian Trails
- Designated Multi-Use Trails
- Designated ATV
- - - Designated ORV Route
- Designated Snowmobile Trails
- Gate
- Sign
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Pipeline
- Powerline
- Compartment Boundary
- Other Treatment - See Comments
- Clearcut (w/Reserves)
- Regeneration Survey
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 622 - Lowland Shrub



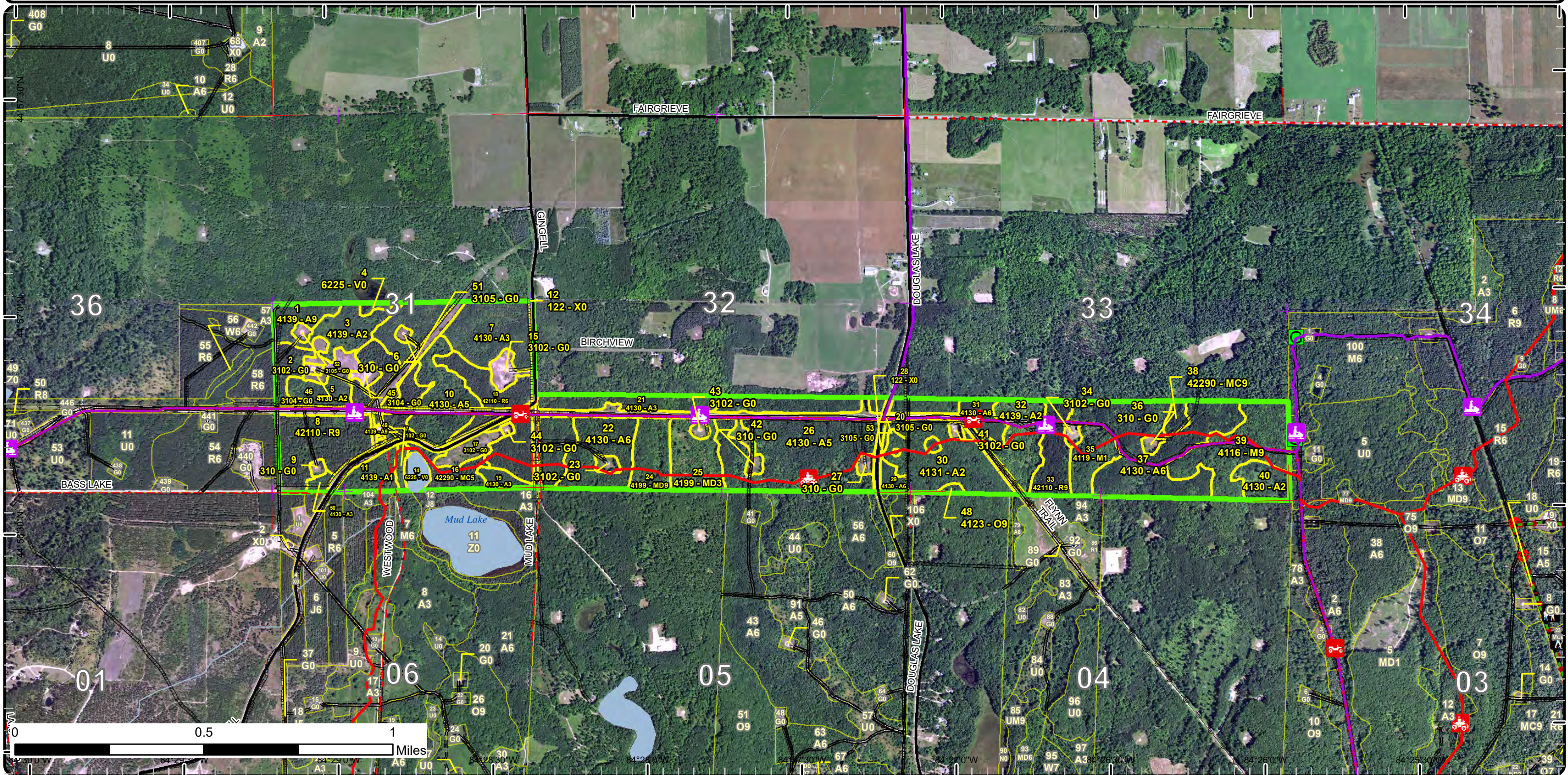
Map coordinates: 44°57'30"N, 44°57'0"N, 44°56'30"N, 84°30'0"W, 84°29'0"W, 84°28'30"W, 84°28'0"W, 84°27'0"W, 84°26'30"W, 84°26'0"W

Stand Boundary Map

Compartment: 24
 T30N, R01W, Sec. 31-33
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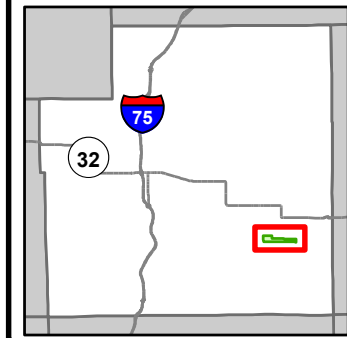


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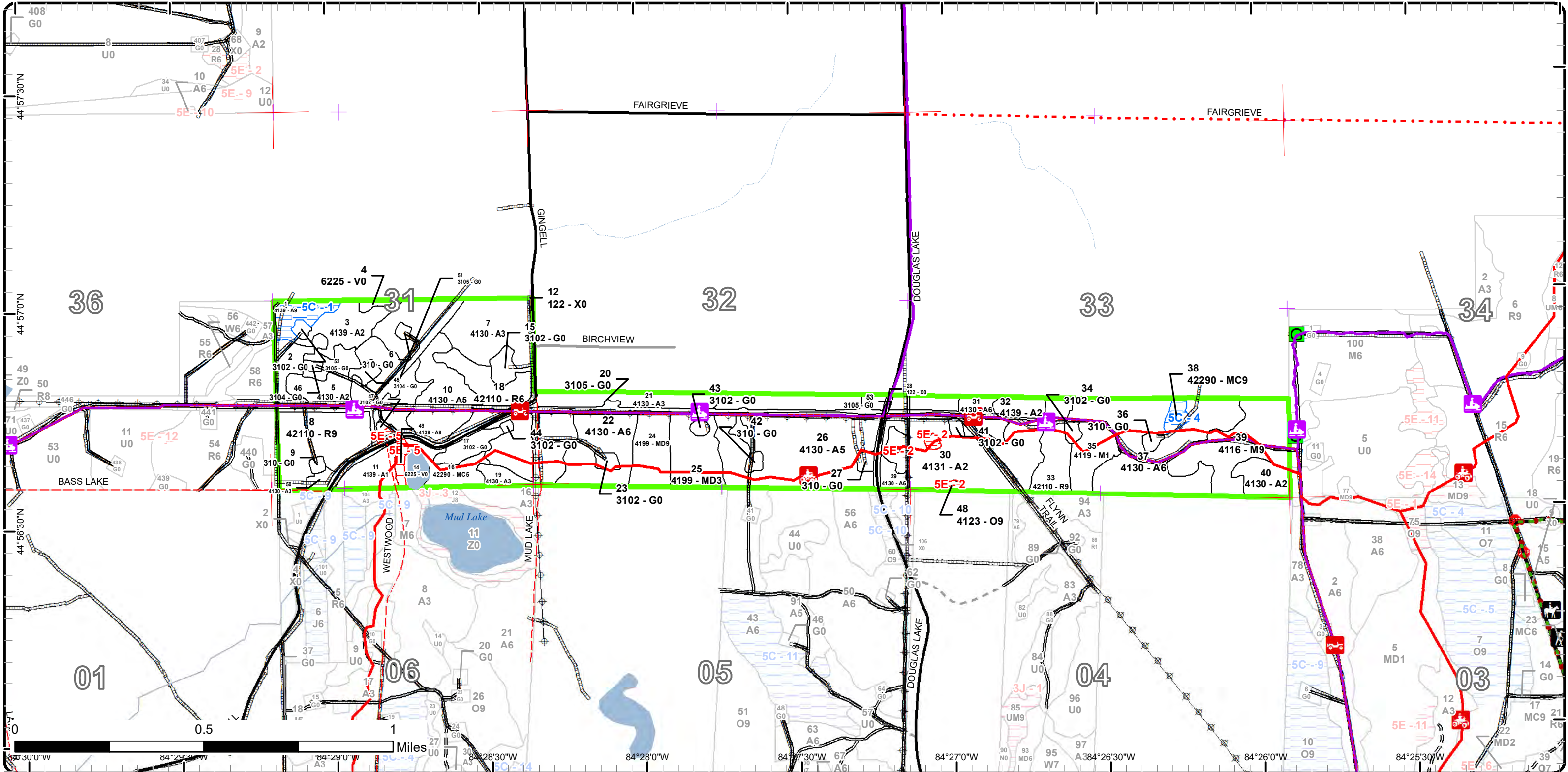


Special Conservation Areas

Compartment: 24
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- Perennial River
- Lakes and Rivers
- Pipeline
- Powerline
- Compartment Boundary
- Available w/ Constraints
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable
- 5E: Long-Term Retention
- Stand Boundaries



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+	Unnever-Aged	Total
Aspen	0	40	36	66	73	76	0	7	3	0	0	0	0	0	0	0	0	0	301
Bog	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Herbaceous Openland	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
Mixed Upland Deciduous	0	0	15	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	27
Natural Mixed Pines	0	0	0	0	0	0	0	0	3	8	0	0	0	0	0	0	0	0	11
Northern Hardwood	0	10	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	37
Oak	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Red Pine	0	0	0	0	0	0	0	80	0	0	0	0	0	0	0	0	0	0	80
Urban	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Total	82	50	51	66	73	76	0	87	8	47	0	0	0	0	0	0	0	0	540



Report 2 – Treatment Summary

Gaylord Mgt. Unit

Year of Entry: 2024

Acres of Harvest

Compartment 24

Total Compartment Acres: 537

Commercial Harvest - 71
 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
Aspen	33	0	0	0	0	0	0	0	0	33
Mixed Upland Deciduous	12	0	0	0	0	0	0	0	0	12
Northern Hardwood	27	0	0	0	0	0	0	0	0	27
Total	71	0	0	0	0	0	0	0	0	71

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	71	0	0	0	0	10	0	8	0	89
Next Step	0	0	50	0	0	50	71	0	0	172
Total	71	0	50	0	0	50	81	0	8	261



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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Approved Treatments:

17	52024017-NF	5.3	3102 - Grass	Nonstocked		Unspecified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		No
<p><u>Prescription</u> Mow, plant, burn,brush, or herbicide to maintain openings. Plant hard and soft mast. <u>Specs:</u> <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> <u>Regen:</u> <u>Other</u> <u>Comment:</u> <u>Site Condition</u> <u>Proposed Start Date:</u> 10/1 /2023</p>											

22	52024022-CCR	18.9	4130 - Aspen	Poletimber Well	47	1-50	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	No
<p><u>Prescription</u> Cut all trees 2" and up, leave 3-10% area retention. <u>Specs:</u> <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> <u>Acceptable</u> Aspen, Maple, Oak that meets minimum stocking requirements. <u>Regen:</u> <u>Other</u> Add recreational trail spec. <u>Comment:</u> Add grouse/hare/deer spec. <u>Site Condition</u> <u>Proposed Start Date:</u> 10/1 /2023</p>											

24	52024024-CCR	11.8	4199 - Other Mixed Upland Deciduous	Sawtimber Well	82	81-110	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	No
<p><u>Prescription</u> Cut all trees 2" and up, leave 3-10% area retention. <u>Specs:</u> Require the producer to pile tops/treetops on and around stumps of harvested hardwoods to protect the stump sprouts from browse. <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> <u>Acceptable</u> Aspen, Maple, Oak & pine that meets minimum stocking requirements. <u>Regen:</u> <u>Other</u> Add recreational trail spec. <u>Comment:</u> Add grouse/hare/deer spec. <u>Site Condition</u> <u>Proposed Start Date:</u> 10/1 /2023</p>											



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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35	52024035-Monitor	9.6	4119 - Mixed Northern Hardwoods	Sapling Poor	3	Immature	Monitoring	Natural Regen (Intermediate)	4123 - Red Oak	Even-Aged	No
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Prescription Evaluate Regeneration. If poor regen see next step treatments to plant the site.

Specs:

Next Step Pesticide, Skidder - Site Prep; Planting, Initial Plant

Treatments:

Acceptable A mix of oak, aspen, red maple, and white pine that meets minimum stocking requirements for oak.

Regen:

Other Percent to Treat = 100%

Comment:

Protect Recreational trail with any follow up treatments.

Site Condition

Proposed Start Date: 10/1 /2023

37	52024037-CCR	13.6	4130 - Aspen	Poetimber Well	37	81-110	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	No
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Prescription Cut all trees 2" and up, leave 3-10% area retention.

Specs:

Opportunistically plant areas with poor/undesirable regeneration to Oak/Pine.

Next Step Monitoring, Natural Regen (Intermediate); Pesticide, Skidder - Site Prep; Planting, Initial Plant

Treatments:

Acceptable Aspen, Maple, Oak & Pine that meets minimum stocking requirements.

Regen:

Other Add recreational trail spec.

Comment:

Add grouse/hare/deer spec.

Site Condition

Proposed Start Date: 10/1 /2023

39	52024039-CCR	27.0	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	85	111-140	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	No
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Prescription Cut all trees 2" and up, leave 3-10% area retention.

Specs:

Opportunistically plant areas with poor/undesirable regeneration to Oak/Pine.

Next Step Monitoring, Natural Regen (Intermediate); Pesticide, Skidder - Site Prep; Planting, Initial Plant

Treatments:

Acceptable Aspen, Maple, Oak, & Pine that meets minimum stocking requirements.

Regen:

Other Add recreational trail spec.

Comment:

Add grouse/hare/deer spec.

Site Condition

Proposed Start Date: 10/1 /2023



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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
52 52024052-NF	3.1	3105 - Mixed Upland Herbaceous	Nonstocked		Unspecified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		No
<p><u>Prescription</u> Mow, plant, burn, brush, or herbicide to maintain openings. Plant hard and soft mast.</p> <p><u>Specs:</u></p> <p><u>Next Step</u></p> <p><u>Treatments:</u></p> <p><u>Acceptable</u></p> <p><u>Regen:</u></p> <p><u>Other</u></p> <p><u>Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2023</p>										

Total Treatment 89.3
Acreage Proposed:

Report 4 – Site Conditions

Gaylord Mgt. Unit
Doug Tyran : Examiner

Compartment: 24
Year of Entry: 2024

Availability for Management

Total Acres	Acres Available	Acres Avail With Condition	Acres Not Available	Dominant Site Conditions		
Acres	Available	With Condition	Not Available	5C	5E	
300	290	7	3	Aspen	7	3
5	5	0	0	Bog		
66	66	0	0	Herbaceous Openland		
26	26	0	0	Mixed Upland Deciduous		
11	8	3	0	Natural Mixed Pines	3	
37	37	0	0	Northern Hardwood		
2	0	0	2	Oak		2
80	80	0	0	Red Pine		
11	11	0	0	Urban		
537	523	10	5	Total Forested Acres	10	5
	97%	2%	1%	Relative Percent		

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Site condition added to hold this stand until harvesting pine stand to the South. Concerns of regeneration due to stand size >10 acres, will likely be browsed heavily and regenerate poorly.</p>							
2	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: This is retention for the immediately surrounding timber harvest near the snowmobile / atv trail</p>							
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	3	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Site condition in place to hold the underlying stand until the surrounding Aspen is harvested.</p>							

Report 4 – Site Conditions

Gaylord Mgt. Unit
Doug Tyran : Examiner

Compartment: 24
Year of Entry: 2024

5	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Long-Term retention for the timber harvest directly to the W/SW							

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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Mgt. Unit

Compartment:

Year of Entry



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
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
1	4139 - Aspen, Mixed Deciduous	Sawtimber Well	7.2	66	51-80	N/A	Site condition added to hold this stand until harvesting pine stand to the South. Concerns of regeneration due to stand size >10 acres, will likely be browsed heavily and regenerate poorly. And to discourage small stand management in this compartment.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Maple		30	Log	11		Hazelnut (Beaked)		Medium	5 - 10 feet	Tall Shrub
Paper Birch		10	Log	10		Serviceberry (Juneberry)		Medium	5 - 10 feet	Sapling
Red Oak		15	Log	12		Beech		Low	< 5 feet	Sapling
Bigtooth Aspen		45	Log	10	66	Red Maple		Medium	Variable	Sapling
2	3102 - Grass	Nonstocked	1.2							
3	4139 - Aspen, Mixed Deciduous	Sapling Medium	11.9	16	Immature	N/A	Cut in 07' fully stocked with 4,333 aspen stems/ac and 166 red maple stems/ac			
Canopy Species		% Cover	Size Class	DBH	Age					
Red Maple		20	Sapling	2						
Bigtooth Aspen		15	Sapling	2						
Serviceberry (Juneberry)		10	Sapling	1						
Black Cherry		15	Sapling	2						
Quaking Aspen		40	Sapling	2	16					
4	6225 - Bog	Nonstocked	1.2			No				
5	4130 - Aspen	Sapling Medium	7.3	27	1-50	N/A	Cut in 95', well stocked, MO aspen			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Quaking Aspen		45	Sapling	3		Black Cherry		Medium	10 - 20 feet	Sapling
Black Cherry		10	Sapling	4						
Bigtooth Aspen		45	Sapling	4	27					
6	310 - Herbaceous Openland	Nonstocked	1.0		Unspecified					
						Sub-Canopy Species	Density	Avg. Height	Size	
						Spotted Knapweed	Medium	Unspecified	Non-Wood	
						Sweet Fern	Medium	5 - 10 feet	Tall Shrub	
						Sedges	High	Unspecified	Non-Wood	
7	4130 - Aspen	Sapling Well	32.3	28	Immature	N/A	Poor quality aspen in spots. Slightly lower stocked on E side of pipeline. Stand was cut in 95'			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Maple		10	Sapling	4		Witch Hazel		Medium	5 - 10 feet	Tall Shrub
White Pine		3	Sapling	5						
Black Cherry		10	Sapling	4						
Serviceberry (Juneberry)		5	Sapling	2						
Paper Birch		1	Sapling	2						
Jack Pine		1	Sapling	4						
Quaking Aspen		70	Sapling	4	28					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																						
8	42110 - Planted Red Pine	Sawtimber Well	44.7	63	111-140	N/A	Row thinned in 2007.																																						
<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 Pine</td> <td>100</td> <td>Log/Pole</td> <td>10</td> <td>63</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Red Pine	100	Log/Pole	10	63	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Red Maple</td> <td>Low</td> <td>< 5 feet</td> <td>Sapling</td> </tr> <tr> <td>Red Oak</td> <td>Low</td> <td>< 5 feet</td> <td>Sapling</td> </tr> <tr> <td>Witch Hazel</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Low	< 5 feet	Sapling	Red Oak	Low	< 5 feet	Sapling	Witch Hazel	Low	5 - 10 feet	Tall Shrub																
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10	4130 - Aspen	Poletimber Medium	17.8	36	1-50	N/A	Very marginal stand, open grown aspen with pine, Most of the White Pine is on the south side of the road, MO natural White Pine that is very healthy and doing well under the marginal aspen overstory. 1' leaders.																																						
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11	4139 - Aspen, Mixed Deciduous	Sapling Poor	7.8	3	Immature	N/A	MO Aspen and Oak, Clear-cut to promote Oak stump sprouting with Aspen, leave 100' buffer along bog and small part of stand North of Gingell Rd. Sale size should be 8 AC after buffer and north part of stand are left out. Stand harvested in summer of 2019 (52-008-14-01) Wally World Mix. Scattered Oak left for mast production within cut boundary.																																						
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12	122 - Road/Parking Lot	Nonstocked	8.0		Unspecified	No																																							
14	6225 - Bog	Nonstocked	3.4			No																																							
15	3102 - Grass	Nonstocked	3.9		Unspecified																																								



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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16	42290 - Natural Mixed Pine	Poletimber Medium	8.3	83	81-110	N/A			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen		10	Pole	8		White Pine	Low	10 - 20 feet	Sapling
Red Oak		5	Log	13		Red Pine	Low	10 - 20 feet	Sapling
White Oak		2	Log	11		Jack Pine	Low	10 - 20 feet	Sapling
Red Maple		10	Pole	7		Red Oak	Low	Variable	Sapling
Jack Pine		10	Pole	7	30	Serviceberry (Juneberry)	Low	Variable	Sapling
White Pine		25	Log	12		White Oak	Low	5 - 10 feet	Sapling
Red Pine		38	Log	13	83	Red Maple	Medium	Variable	Sapling
						Bigtooth Aspen	Low	10 - 20 feet	Sapling

17	3102 - Grass	Nonstocked	5.3		Unspecified	No	
Sub-Canopy Species		Density	Avg. Height	Size			
Spotted Knapweed		Medium	Unspecified	Non-Wood			
Sedges		High	Unspecified	Non-Wood			

18	42110 - Planted Red Pine	Poletimber Well	22.5	62	141-170	N/A	Third row thinned summer 2019, Wally World Mix (52-008-14-01).		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Jack Pine		2	Pole	6		Red Maple	Low	< 5 feet	Sapling
Quaking Aspen		16	Pole	7					
Red Pine		82	Pole	8	62				

19	4130 - Aspen	Sapling Well	3.3	26	Immature	N/A	Old railroad grade runs through stand. Cut in 95'	
Canopy Species		% Cover	Size Class	DBH	Age			
White Pine		2	Sapling	2				
Black Cherry		3	Sapling	2				
Quaking Aspen		95	Sapling	2	26			

20	3105 - Mixed Upland Herbaceous	Nonstocked	15.4			No	
Sub-Canopy Species		Density	Avg. Height	Size			
Spotted Knapweed		Medium	Unspecified	Non-Wood			
Sweet Fern		Medium	5 - 10 feet	Tall Shrub			
Sedges		Medium	Unspecified	Non-Wood			

21	4130 - Aspen	Sapling Well	21.9	26	Immature	N/A	Cut in 95', MO aspen, let it grow.		
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple		35	Sapling	3		Red Oak	Medium	< 5 feet	Sapling
Quaking Aspen		25	Sapling	3					
Bigtooth Aspen		40	Sapling	4	26				



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																									
22	4130 - Aspen	Poletimber Well	18.9	47	1-50	N/A	Stand was cut in 75' MO aspen.																																																									
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23	3102 - Grass	Nonstocked	1.7		Unspecified																																																											
24	4199 - Other Mixed Upland Deciduous	Sawtimber Well	11.8	82	81-110	N/A	Many old pine stumps, no cutting history, mixed aged Oak with hardwood/aspen component.																																																									
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25	4199 - Other Mixed Upland Deciduous	Sapling Well	14.6	15	Immature	N/A	Cut 07', AJD full chip operation. Almost no slash but it was cut before 1/6 to 1/3 guidelines. Stand looks great otherwise. Averaged 1000 Red Oak/ac 100 Bigtooth/ac and 400 Red Maple/ac. Fully stocked but deer browse has kept oak from reaching that free to grow stage.																																																									
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26	4130 - Aspen	Poletimber Medium	56.7	45	51-80	N/A	Part of this stand was cut in 76' and the rest was cut in 85'. Combined two stands because it makes sense to manage together and there isn't much growth difference. The southeast part of the stand is poor quality and makes for better pine ground.																																																									
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28	122 - Road/Parking Lot	Nonstocked	2.7		Unspecified	No																																																																									
29	4130 - Aspen	Poletimber Well	4.7	30	1-50	N/A	Well stocked stand of Bigtooth Aspen																																																																								
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31	4130 - Aspen	Poletimber Well	6.0	37	51-80	N/A	Stand was cut in 85' MO aspen																																																																								
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Bigtooth Aspen	72	Pole	6	37																																																																											
32	4139 - Aspen, Mixed Deciduous	Sapling Medium	15.8	15	Immature	N/A	Cut 07' AJD full chip operation. Must have had more Aspen than Oak when cut because plots averaged 1,333 Aspen/ac 666 Red Maple/ac 333 Red Oak/ac 250 Beech/ac and 1166 shrubs/ac. The Oak is not free to grow yet and does have browse damage. Right now the stand sits at 8% Oak. Stand is fully stocked (had trees on every plot). MO Aspen/Oak mix																																																																								
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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33 42110 - Planted Red Pine Sawtimber Well 12.4 60 141-170 N/A Marked & thinned in 2017. 5 BA swings 160, 150, 170, 160, 150. Healthy looking crowns. Planted in 1962.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Oak	2	Log	14		Beech	Low	Variable	Sapling
Quaking Aspen	2	Pole	7		Red Maple	Medium	5 - 10 feet	Sapling
Red Pine	94	Log	11	60	Red Oak	Medium	Variable	Sapling
Red Maple	2	Pole	9					

34 3102 - Grass Nonstocked 1.5 Unspecified

35 4119 - Mixed Northern Hardwoods Sapling Poor 10.3 3 Immature N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Oak	10	Log	13		Witch Hazel	Medium	5 - 10 feet	Tall Shrub
Red Oak	10	Sapling	1	3	Hazelnut (Beaked)	Medium	5 - 10 feet	Tall Shrub
Red Maple	50	Sapling	1	3				
Beech	10	Sapling	1					
Serviceberry (Juneberry)	10	Sapling	1					
Black Cherry	10	Sapling	1					

Little to no understory prior to harvest, thoughts were the stand was young enough to successfully stump sprout yet. Northern 2 acres of stand harvested in 2017 due to storm salvage, rest of stand harvested in 2019 Great Wall Mix (52-014-14-01).

This stand is the most heavily browsed I have ever seen. Lots of deer & elk tracks. Only pre-harvest trees are above the browse line. All new growth is less than 3 feet. DT

36 310 - Herbaceous Openland Nonstocked 1.3

Sub-Canopy Species	Density	Avg. Height	Size
Sweet Fern	Medium	5 - 10 feet	Tall Shrub
Mixes Sedges/Grasses	High	Unspecified	Non-Wood
Spotted Knapweed	Medium	Unspecified	Non-Wood

37 4130 - Aspen Poletimber Well 44.7 37 81-110 N/A

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Bigtooth Aspen	35	Pole	7		Beech	Medium	Variable	Sapling
White Pine	5	Pole	9		White Pine	Low	5 - 10 feet	Sapling
Sugar Maple	5	Log	10		Serviceberry (Juneberry)	Low	Variable	Sapling
Red Maple	8	Log	12		Sugar Maple	Low	5 - 10 feet	Sapling
Beech	4	Log	10		Red Maple	Low	5 - 10 feet	Sapling
Quaking Aspen	39	Pole	7	37				
Paper Birch	4	Pole	6					

Cut 85', pocket of hardwood and young paper birch in NE corner, Bigtooth on ridges and Quaking on toe slopes. MO Aspen



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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38	42290 - Natural Mixed Pine	Sawtimber Well	2.6	75	171-200	N/A	MO White Pine, Manage stand on extended rotation due to small size.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Quaking Aspen	5	Pole	8		Beech	Medium	Variable	Sapling
Serviceberry (Juneberry)	1	Pole	6		Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub
White Pine	30	Log	13					
Beech	5	Pole	8					
Red Pine	44	Log	16	75				
Sugar Maple	3	Pole	8					
Red Maple	12	Log	12					

39	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	27.0	85	111-140	N/A	Heavy to Beech, possible thin next inventory cycle, more aspen in the east end of the stand.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	23	Log	12		Beech	High	5 - 10 feet	Sapling
Red Maple	24	Log	12	85				
Beech	30	Log	10	85				
Red Oak	2	Pole	8					
Bigtooth Aspen	20	Log	10					
Paper Birch	1	Log	13					

40	4130 - Aspen	Sapling Medium	8.0	15	Immature	N/A	Cut 07' 1,500 stems aspen/ac. Fully stocked (tree on every plot) with a few red oak stump sprouts. Aspen appears to be over topping the oak
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	3	Sapling	1		Blackberry/Raspberry	Low	< 5 feet	Tall Shrub
Red Oak	5	Sapling	1		Red Pine	Low	< 5 feet	Sapling
Bigtooth Aspen	79	Sapling	2	15	Beech	Medium	5 - 10 feet	Sapling
Black Cherry	10	Sapling	1		Witch Hazel	Low	5 - 10 feet	Tall Shrub
Red Pine	1	Log	11					
Red Oak	1	Log	16					
White Pine	1	Log	13					

41	3102 - Grass	Nonstocked	1.0		Unspecified		Well site.
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42	310 - Herbaceous Openland	Nonstocked	1.3				
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Sub-Canopy Species	Density	Avg. Height	Size
Mixes Sedges/Grasses	High	Unspecified	Non-Wood
Sweet Fern	Medium	5 - 10 feet	Tall Shrub
Spotted Knapweed	High	Unspecified	Non-Wood

43	3102 - Grass	Nonstocked	1.2		Unspecified		
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																
44	3102 - Grass	Nonstocked	0.6		Unspecified																																																		
45	3104 - Degraded	Nonstocked	2.0																																																				
46	3104 - Degraded	Nonstocked	0.9																																																				
47	3102 - Grass	Nonstocked	0.4		Unspecified																																																		
48	4123 - Red Oak	Sawtimber Well	1.9	75	111-140	N/A	Sale harvested spring of 2017. Logger clean up was excellent.																																																
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49	4139 - Aspen, Mixed Deciduous	Sawtimber Well	2.6	75	81-110	N/A	MO Aspen and Oak, Clear-cut to promote Oak stump sprouting with Aspen, Mixed age classes Oak 60+ and Aspen 40+, leave 100' buffer along bog and small part of stand North of Gingell Rd.																																																
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51	3105 - Mixed Upland Herbaceous	Nonstocked	14.2		Unspecified	No																																																	
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								Sweet Fern	Medium	5 - 10 feet	Tall Shrub
								Sedges	Medium	Unspecified	Non-Wood
Spotted Knapweed	Medium	Unspecified	Non-Wood								
53	3105 - Mixed Upland Herbaceous	Nonstocked	4.7		Unspecified	No					
								Sub-Canopy Species	Density	Avg. Height	Size
								Spotted Knapweed	Medium	Unspecified	Non-Wood
								Sweet Fern	Medium	5 - 10 feet	Tall Shrub
Sedges	Medium	Unspecified	Non-Wood								