



# Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32230

Entry Year: 2027

Acreage: 1,376

County: Marquette

Management Area: Suomi Till and Outwash Plain

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**Stand Examiner:** Kyle Gould

**Legal Description:**

T45N R28W Sec's 9, 10, 15, and 16

**Identified Planning Goals:**

See Chain Lakes Moraine Management Area section of the WUP Regional State Forest Management Plan.

**Soil and topography:**

Generally level to slightly rolling terrain. Soils range from well drained to very poorly drained and consist of Sayner-Rubicon, Rubicon-Keweenaw, and Sagola-Rubicon in the uplands, and Tawas-Derford mucks and Carbondale-Tawas soils in the lowlands. Surface cobbles/boulders exist throughout most of the upland soil types.

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

Ownership is predominantly State with intermixed private inholdings. An exception being the Michigan Northwoods Club, owning approximately 10,000 acres to the east of this compartment. Development in this vicinity is very limited and is predominantly seasonal camps. Two miles to the north is the end of Marquette County Rd. 581 and there are permanent residences in that location. Land use in and around the compartment is commercial forest production, hunting, fishing, berry picking, trapping, and snowmobiling.

**Unique Natural Features:**

The headwaters of both the Wild West Creek and the Camp Eleven Creek are in and around this compartment.

**Archeological, Historical, and Cultural Features:**

Historically, sharptail grouse management took place in and around this compartment. Several old railroad spurs exist in the general area as a result of the pine logging era.

**Special Management Designations or Considerations:**

**Watershed and Fisheries Considerations:**

This compartment contains headwater reaches of Wild West Creek and Camp Eleven Creek. Wild West Creek and Camp Eleven Creek are designated Type 1 trout streams less than 50-ft wide and have predicted mean July water temperatures of 61.3 and 62.2°F (cold streams), respectively. 300-ft buffers are recommended for Wild West Creek and Camp Eleven Creek in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, a minimum 100-foot, plus 5 feet per 1% increase in slope, Riparian Management Zone is recommended to protect these areas in accordance with Best Management Practices.

**Wildlife Habitat Considerations:**

This compartment is found within the Soumi Till and Outwash Management Area, on a Disintegration Moraine in Southwestern Marquette County. The dominant Natural Communities are dry mesic northern forests, poor conifer swamps, and mesic northern forests. This management area offers opportunities to increase diversity and perhaps long-term oak sustainability through underplanting white and red pine. Another priority is to maintain or increase wildlife corridors, especially along riparian corridors. Wildlife management issues in the management area are mast (hard and soft); habitat fragmentation; mature forest conditions; mesic conifer; coarse woody debris; and retention or development of large living and dead standing trees (for cavities). This management area represents approximately ¼ of the oak resource on WUP state forest. The following have been identified as featured species for the Soumi Till and Outwash Management Area: Blackburnian Warbler, Golden-winged Warbler, Kirtland's Warbler, Red Crossbill, Black-backed Woodpecker, Ruffed Grouse, American Marten, White-tailed Deer, Black Bear.

**Mineral Resource and Development Concerns and/or Restrictions**

Sections 9-10 & 14-17, T45N R28W, Marquette County No known potential exists for commercial oil & gas production in this part of the state. No active sand/gravel operations are known to exist in the area. There may be some potential for production of minor amounts of sand & gravel within the compartment on the uplands, but the compartment may be too far

from populated areas (commercial markets) for any aggregate resources to have significant value beyond use for local road maintenance. No past metallic mineral mining has occurred in this area, but some sparse exploration of State-owned minerals occurred in the late 1980s just south of the compartment. Potential for metallic and/or critical minerals beneath the compartment is considered low at this time, and there is no current mineral leasing activity involving State-owned mineral rights within two miles of the compartment. The State does not own all the mineral rights within the compartment. Because the mineral estate is the dominant estate, the surface owner must provide the owner of the mineral rights reasonable access to the surface for mineral exploration and development.

**Vehicle Access:**

Primary access to the compartment is via Co. Rd. CAA (Flat Rock Road) which originates at the terminus of Marquette Co. Rd. 581. Various two-track woods roads and county roads traverse the compartment providing good access. Some roads are winter access only.

**Survey Needs:****Recreational Facilities and Opportunities:**

No recreational facilities exist and there are no opportunities exist for development.

**Fire Protection:**

This compartment is located at the extreme south end of the 581 Zone dispatch. With the boundary change to the zone dispatch area, only a portion of the north part of the compartment is within the zone.

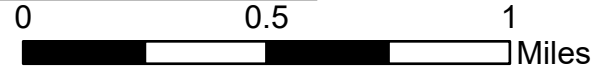
**Additional Compartment Information:**






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

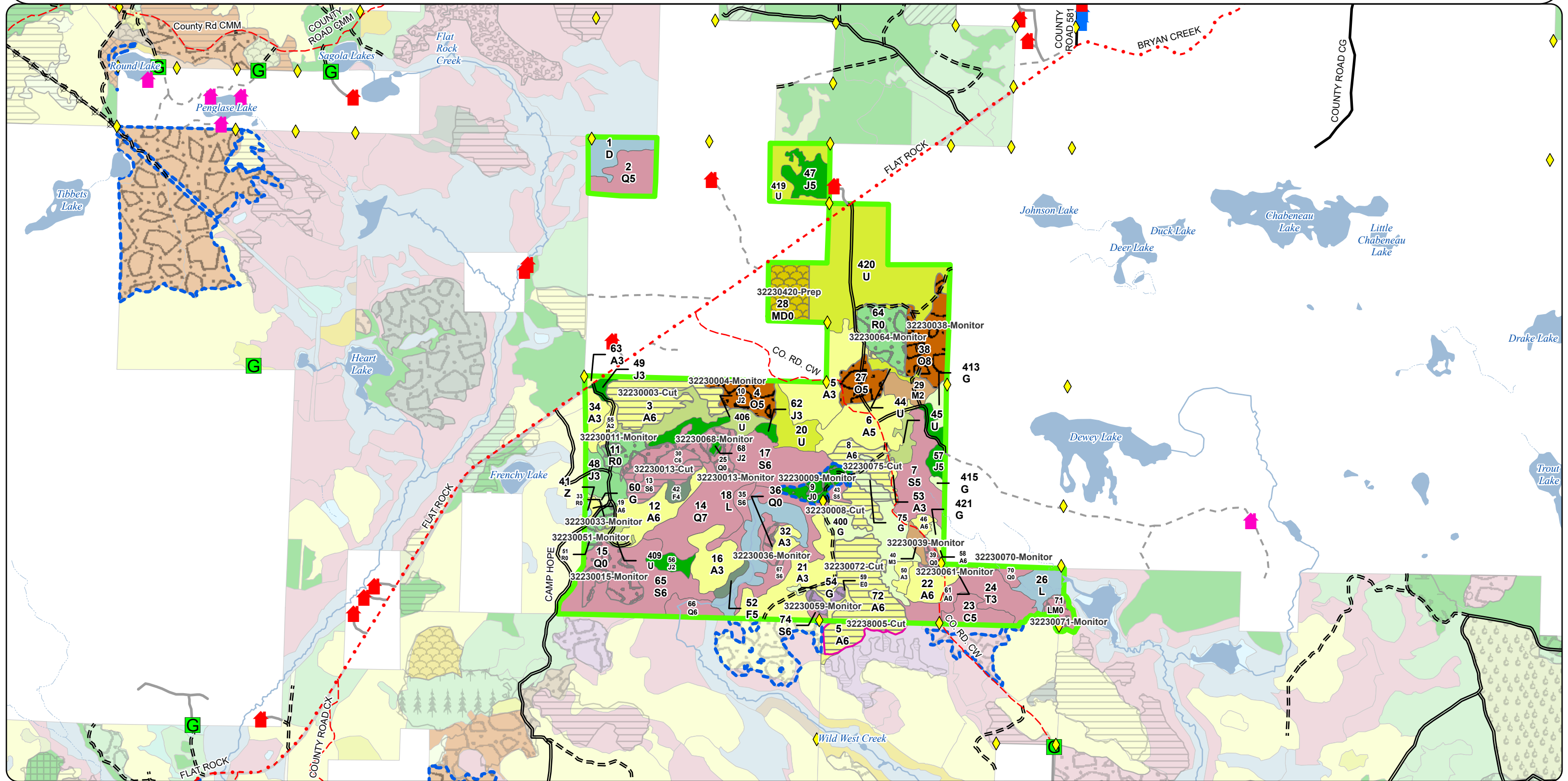


-  Survey Grade Corners  
 Cabin  
 House  
 Structure, Seasonal Dwelling  
 Gate
- === DNR - Secondary Forest Road  
 == : DNR - Forest Access Route

- |  |                                       |  |                                |
|--|---------------------------------------|--|--------------------------------|
|  | Federal / State / County - Paved Road |  | Lakes and Rivers               |
|  | County - Gravel Road                  |  | Counties                       |
|  | County - Dirt Road (Seasonal)         |  | Compartment Boundary           |
|  | Private - Paved Road                  |  | Clearcut                       |
|  | Private - Dirt / Gravel Road          |  | Site Prep                      |
|  | Intermittent Stream                   |  | Monitoring - Regeneration      |
|  | Perennial River                       |  | Monitoring                     |
|  | Powerline                             |  | Clearcut (Outside Compartment) |


















- |   |                                |   |                                 |
|---|--------------------------------|---|---------------------------------|
|    | Lakes and Rivers               |    | Treatments with Site Conditions |
|    | Counties                       |    | 411 - Northern Hardwood         |
|    | Compartment Boundary           |    | 412 - Oak Types                 |
|   | Clearcut                       |   | 413 - Aspen                     |
|  | Site Prep                      |  | 419 - Mixed Upland Deciduous    |
|  | Monitoring - Regeneration      |  | 421 - Planted Pines             |
|  | Monitoring                     |  | 422 - Natural Pines             |
|  | Clearcut (Outside Compartment) |  | 423 - Other Upland Conifers     |











-  500 - Water
-  611 - Lowland Deciduous Forest
-  612 - Lowland Coniferous Forest
-  613 - Lowland Mixed Forest
-  310 - Herbaceous Openland
-  320 - Upland Shrub
-  330 - Low Density Trees
-  622 - Lowland Shrub



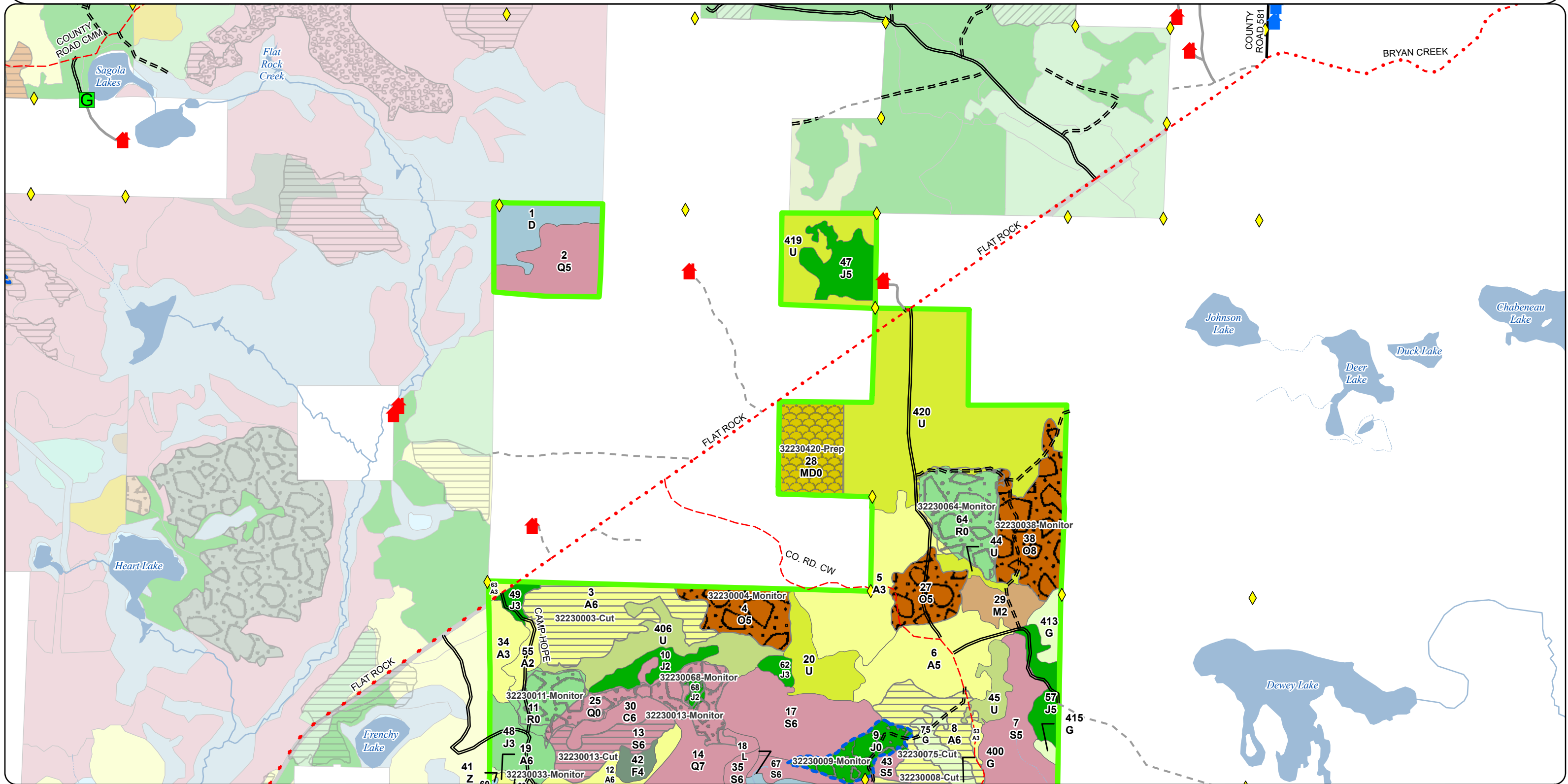


A horizontal scale bar with a black segment on the left and a white segment with a black border on the right. The number '1' is centered above the bar, and the word 'Miles' is at the right end.

- |   |                                       |   |                               |
|---|---------------------------------------|---|-------------------------------|
|    | Survey Grade Corners                  |    | County - Dirt Road (Seasonal) |
|   | Cabin                                 |   | Private - Paved Road          |
|  | House                                 |  | Private - Dirt / Gravel Road  |
|  | Gate                                  |  | Intermittent Stream           |
|  | DNR - Secondary Forest Road           |  | Perennial River               |
|  | DNR - Forest Access Route             |  | Lakes and Rivers              |
|  | Federal / State / County - Paved Road |  | Counties                      |
|  | County - Gravel Road                  |  | Compartment Boundary          |
|   |                                       |  | Clearcut                      |

- 
-  Site Prep
  -  Monitoring - Regeneration
  -  Monitoring
  -  Treatments with Site Conditions
  -  411 - Northern Hardwood
  -  412 - Oak Types
  -  413 - Aspen
  -  419 - Mixed Upland Deciduous
  -  421 - Planted Pines

-  422 - Natural Pines
-  423 - Other Upland Conifers
-  500 - Water
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-  320 - Upland Shrub
-  330 - Low Density Trees
-  622 - Lowland Shrub



# Cover Type & Treatments Map

Compartment: 32230  
T45N R28W Sec 9, 10, 14-17  
County: Marquette  
Unit: Gwinn  
Mgmt. Area: Suomi Till and Outwash Plain  
YOE: 2027  
Acres: 1,376 GIS Calculated  
Examiner: Kyle Gould  
Date Exported: 08/20/2025  
Map Phase: Web Post



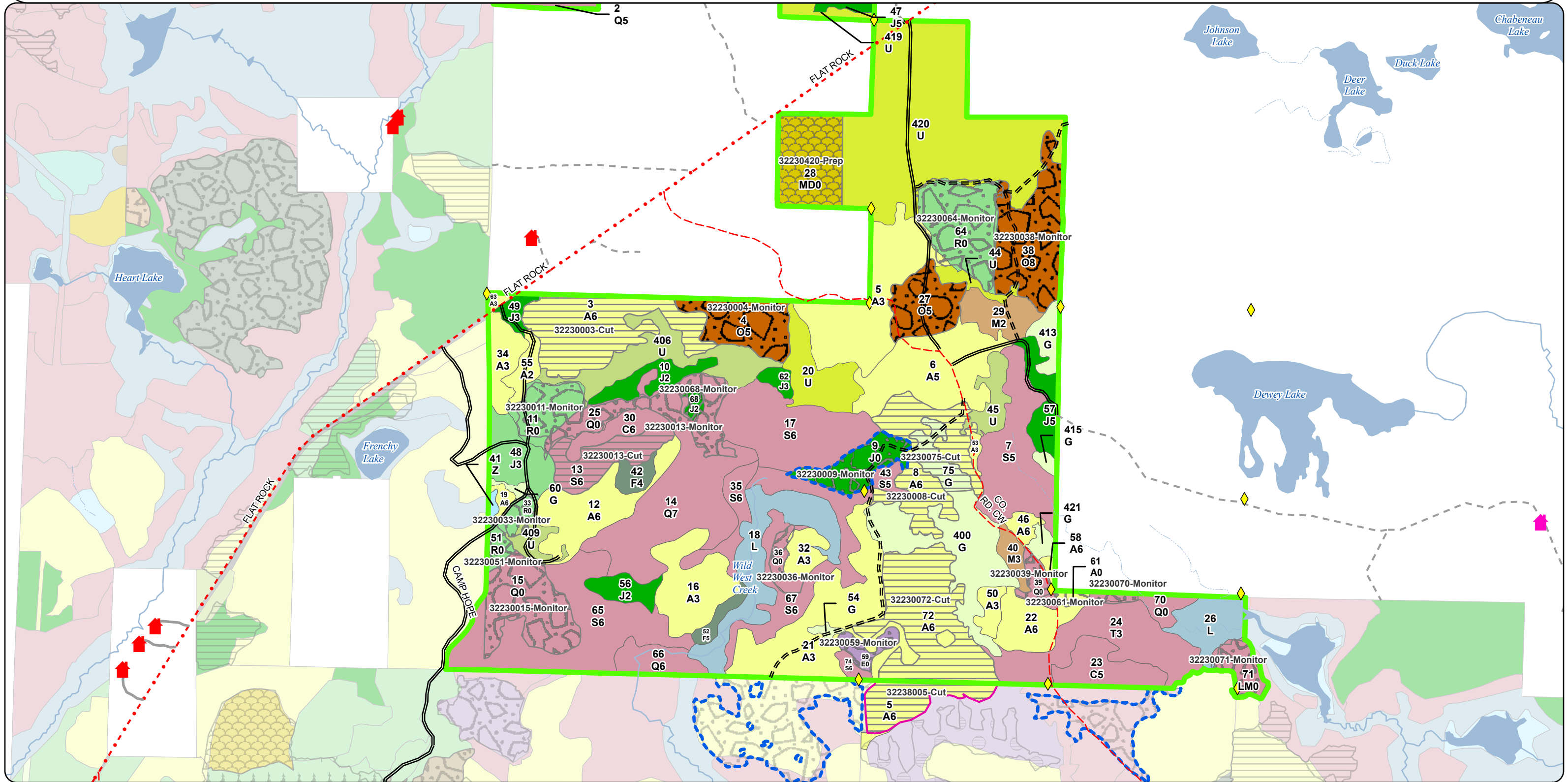
0 0.5 1 Miles

- Survey Grade Corners
- Cabin
- Structure, Seasonal Dwelling
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- County - Gravel Road
- County - Dirt Road (Seasonal)

- Private - Paved Road
- Private - Dirt / Gravel Road
- Intermittent Stream
- Perennial River
- Lakes and Rivers
- Counties
- Compartment Boundary
- Clearcut

















- Site Prep
- Monitoring - Regeneration
- Monitoring
- Clearcut (Outside Compartment)
- Treatments with Site Conditions
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen

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- 421 - Planted Pines
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- 613 - Lowland Mixed Forest
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low Density Trees
- 622 - Lowland Shrub

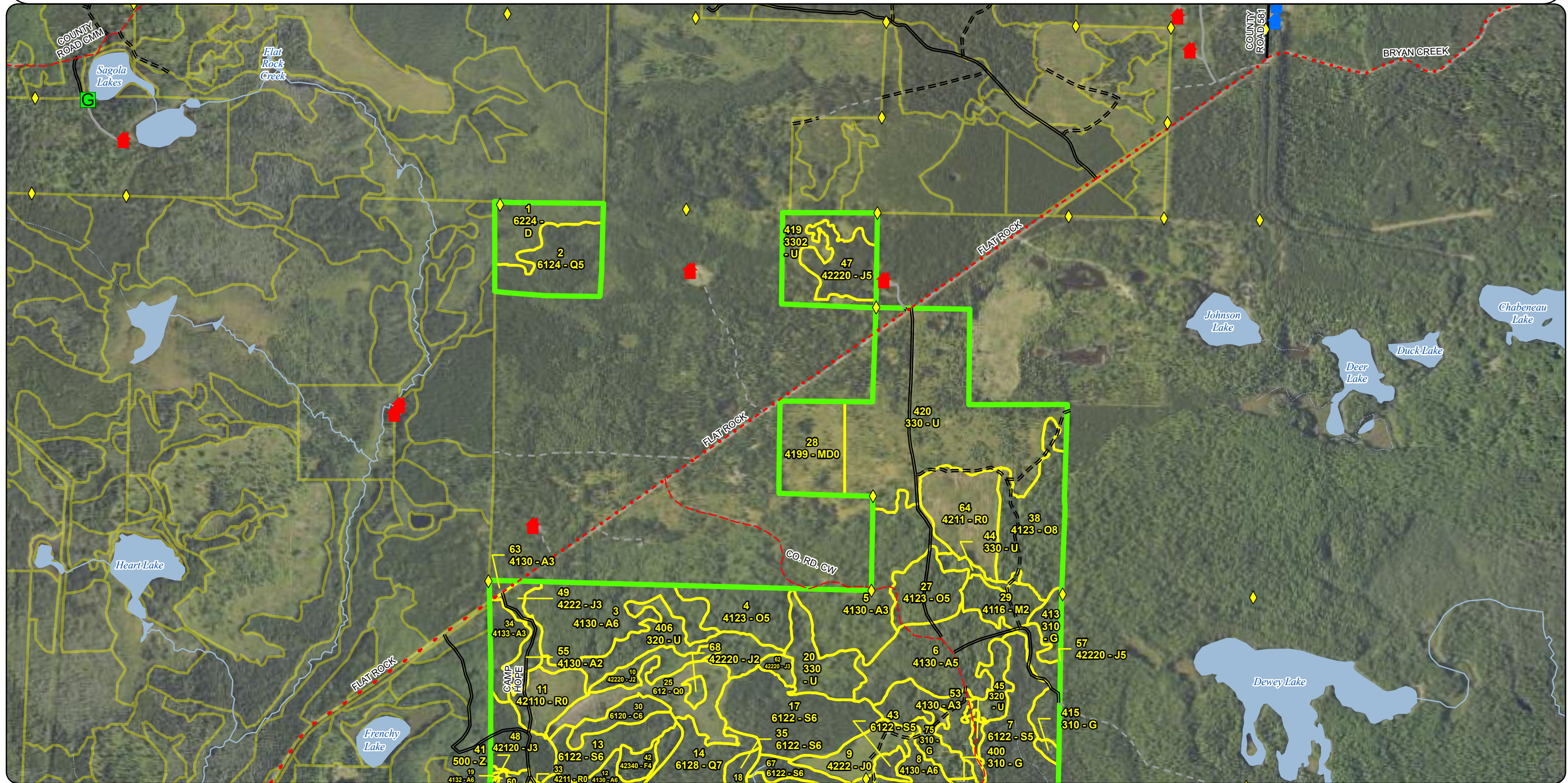






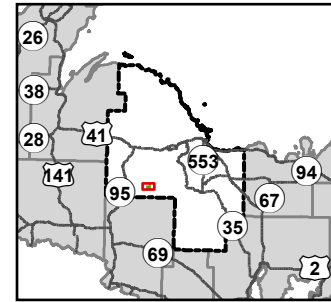
- |   |                                       |   |                               |   |                              |
|---|---------------------------------------|---|-------------------------------|---|------------------------------|
|    | Survey Grade Corners                  |    | County - Gravel Road          |  | Compartment Boundary         |
|    | Cabin                                 |    | County - Dirt Road (Seasonal) |   | 411 - Northern Hardwood      |
|   | House                                 |   | Private - Paved Road          |   | 412 - Oak Types              |
|  | Gate                                  |  | Private - Dirt / Gravel Road  |   | 413 - Aspen                  |
|   |                                       |  | Intermittent Stream           |   | 419 - Mixed Upland Deciduous |
|  | DNR - Secondary Forest Road           |  | Perennial River               |   | 421 - Planted Pines          |
|  | DNR - Forest Access Route             |  | Lakes and Rivers              |   | 422 - Natural Pines          |
|  | Federal / State / County - Paved Road |  | Counties                      |   | 423 - Other Upland Conifers  |

- 500 - Water  
612 - Lowland Coniferous Forest  
310 - Herbaceous Openland  
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330 - Low Density Trees  
622 - Lowland Shrub





# Stand Boundary Map

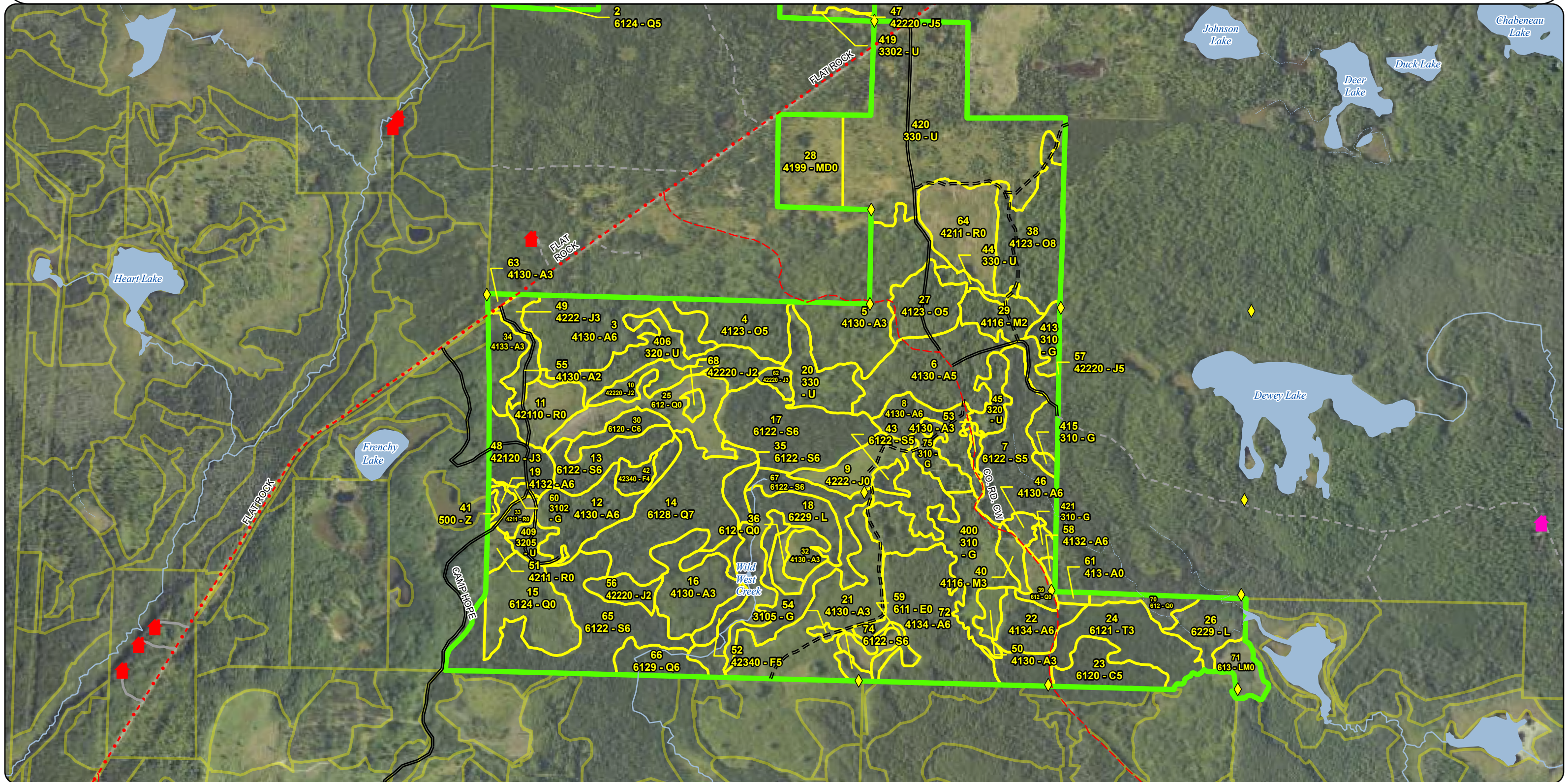


Compartment: 32230  
T43N R29W sections 4, 6 - 11, 14 - 18  
County: Marquette  
Unit: Gwinn  
Mgmt. Area: Suomi Till and Outwash Plain  
YOE: 2027  
Acres: 1,376 GIS Calculated  
Examiner: Kyle Gould  
Date Exported: 08/20/2025  
Map Phase: Web Post

0 0.5 1 Miles

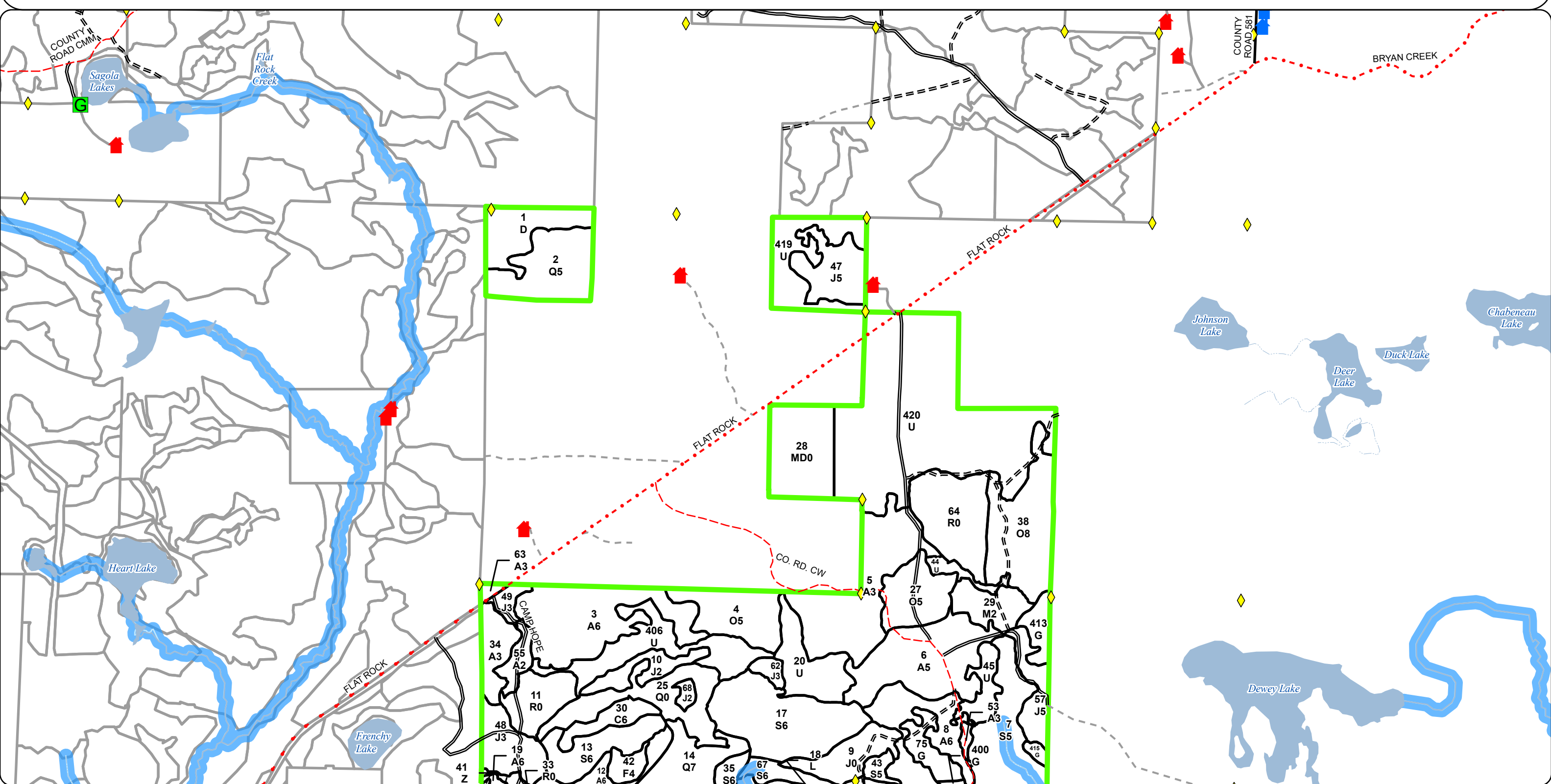
- Survey Grade Corners
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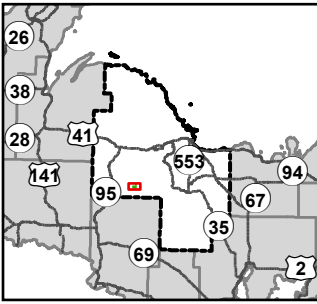
A scale bar consisting of a horizontal line divided into two equal segments. The left segment is solid black, and the right segment is white with a black outline. The number '1' is positioned above the right segment, and the word 'Miles' is positioned to the right of the bar.





# Special Conservation Areas & Site Conditions Map

Compartment: 32230  
T45N R28W Sec 9, 10, 14-17  
County: Marquette  
Unit: Gwinn  
Mgmt. Area: Suomi Till and Outwash  
Plain  
YOE: 2027  
Acres: 1,376 GIS Calculated  
Examiner: Kyle Gould  
Date Exported: 08/20/2025  
Map Phase: Web Post



0 0.5 1 Miles

Survey Grade Corners

Cabin

Structure, Seasonal Dwelling

DNR - Secondary Forest Road

DNR - Forest Access Route

County - Gravel Road

County - Dirt Road (Seasonal)

Private - Paved Road

Private - Dirt / Gravel Road

Intermittent Stream

Perennial River

Lakes and Rivers

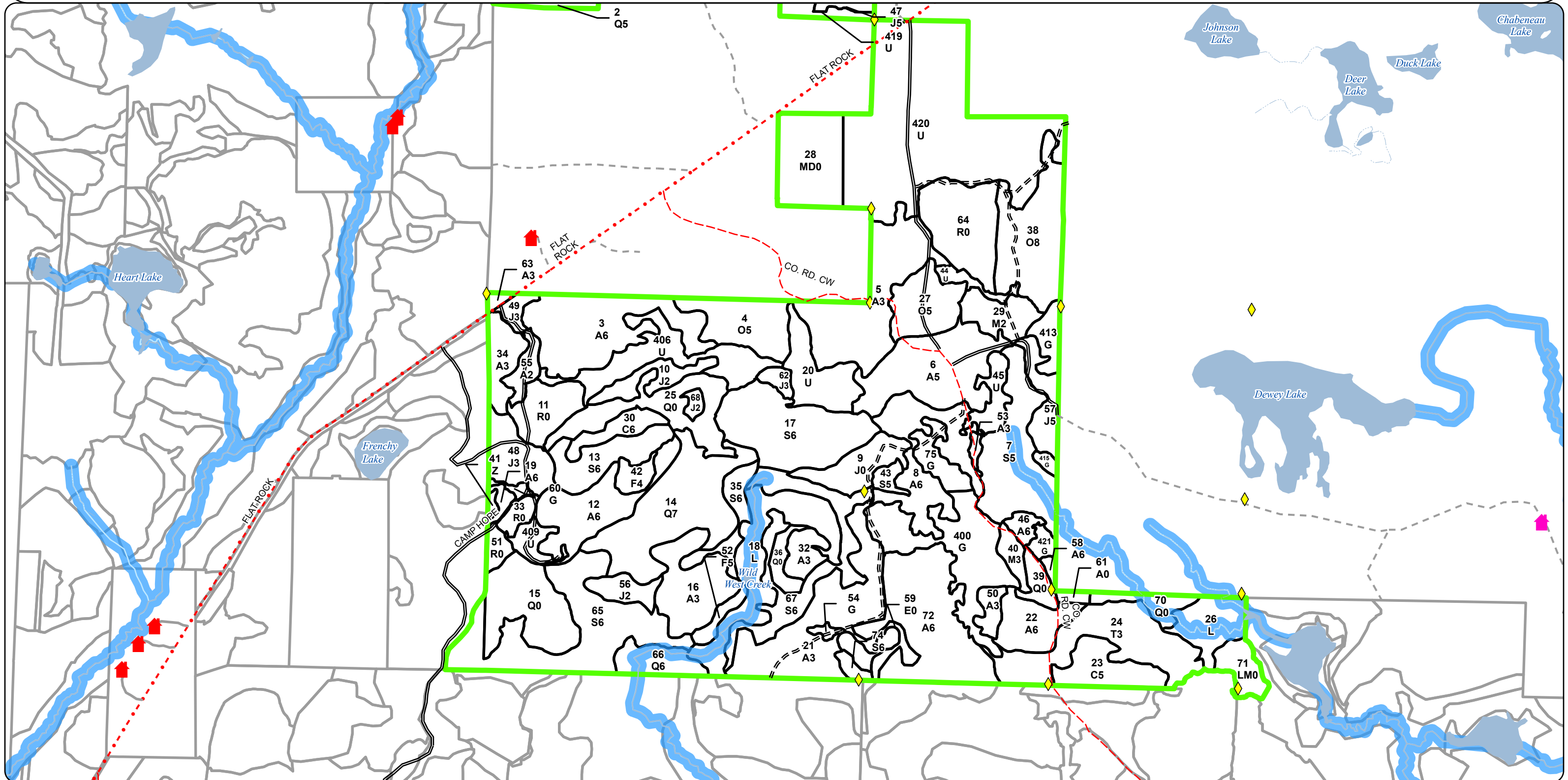
Counties

Compartment Boundary

Stand Boundaries

Cold Water Streams

High Priority Trout Stream Buffer





# 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	2	62	51	38	85	0	125	0	0	0	0	0	0	0	0	0	0	0	362
Cedar	0	0	0	0	0	0	0	0	0	0	8	0	16	0	0	0	0	0	24
Herbaceous Openland	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Jack Pine	14	0	19	23	29	0	0	0	0	0	0	0	0	0	0	0	0	0	85
Low-Density Trees	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160
Lowland Conifers	72	0	0	0	0	0	0	0	27	0	59	0	0	0	0	0	0	0	157
Lowland Deciduous	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Lowland Mixed Forest	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Shrub	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
Lowland Spruce/Fir	0	0	0	0	0	0	0	3	0	39	110	39	0	0	0	0	0	0	190
Mixed Upland Deciduous	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Northern Hardwood	0	5	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Oak	0	0	0	0	0	0	0	0	21	18	36	0	0	0	0	0	0	0	75
Red Pine	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
Tamarack	0	0	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	37
Treed Bog	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Upland Shrub	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
Upland Spruce/Fir	0	0	0	0	0	5	0	4	0	0	0	0	0	0	0	0	0	0	9
Water	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>Total</b>	<b>508</b>	<b>67</b>	<b>70</b>	<b>61</b>	<b>163</b>	<b>5</b>	<b>125</b>	<b>7</b>	<b>48</b>	<b>57</b>	<b>213</b>	<b>39</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1376</b>





## Report 2 – Treatment Summary

Gwinn Mgt. Unit  
Year of Entry: 2027

Acres of Harvest

Compartment 230  
Total Compartment Acres: 1,376

Commercial Harvest - 294  
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	121	0	0	0	0	0	0	0	0	121
Herbaceous Openland	9	0	0	0	0	0	0	0	0	9
Lowland Spruce/Fir	17	0	0	0	0	0	0	0	0	17
Total	147	0	0	0	0	0	0	0	0	147

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	147	0	0	0	0	0	219	0	0	391
Next Step	0	0	25	0	0	76	202	25	25	353
Total	147	0	25	0	0	76	421	25	25	744





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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**Proposed Treatments:**

<b>3</b>	<b>32230003-Cut</b>	42.3	4130 - Aspen	6	52	51-80	Harvest	Clearcut	4319 - Mixed Upland Forest	Planting Record	No
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Prescription Clearcut with retention. Leave all oak, red pine, and white pine. Consider putting retention around a wet pocket in the interior of the stand.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, pine, red maple, spruce, fir

Regen:

Other

Comment:

Site Condition:

Proposed Start Date: 10/01/2026

<b>8</b>	<b>32230008-Cut</b>	31.5	4130 - Aspen	6	55	51-80	Harvest	Clearcut	4319 - Mixed Upland Forest	Planting Record	No
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Prescription Clearcut with retention. Leave all white pine, red pine, and oak.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, jack pine, red pine, oak, red maple, spruce, fir

Regen:

Other

Comment:

Site Condition:

Proposed Start Date: 10/01/2026

<b>13</b>	<b>32230013-Cut</b>	17.2	6122 - Black Spruce	6	97	81-110	Harvest	Clearcut	612 - Lowland Coniferous Forest	Planting Record	No
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Prescription Clearcut with retention. Leave all cedar. Leave all white pine over 12" DBH. Winter harvest due to wet soils. Consider leaving retention around pond in the west end of the stand. Make sure some large tamarack is left in the retention area.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Spruce, tamarack, balsam fir, aspen

Regen:

Other

Comment:

Site Condition:

Proposed Start Date: 10/01/2026





Standard

	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
72	32230072-Cut	47.2	4134 - Aspen, Spruce/Fir	6	50	81-110	Harvest	Clearcut	413 - Aspen	Planting Record	No
<u>Prescription</u> Clearcut with retention. Leave oak, red pine, and white pine. Leave retention where it makes sense. There may be a little bit of wet ground at the south end of the stand. <u>Specs:</u> <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> <u>Acceptable</u> Aspen, pine, fir, spruce <u>Regen:</u> <u>Other</u> <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2026											
75	32230075-Cut	8.8	310 - Herbaceous Openland	99			Harvest	Clearcut	310 - Herbaceous Openland	Previous Inventory	No
<u>Prescription</u> Clearcut. Leave no retention. Opening maintenance cut. <u>Specs:</u> <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> <u>Acceptable</u> grass. aspen, jack pine <u>Regen:</u> <u>Other</u> <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2026											
5	32238005-Cut	16.2	4130 - Aspen	6	50	Unspecified	Harvest	Clearcut	413 - Aspen	Planting Record	No
<u>Prescription</u> Clearcut with retention. Leave all oak, white pine, and red pine. <u>Specs:</u> <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> <u>Acceptable</u> aspen, maple, spruce, fir, pine. <u>Regen:</u> <u>Other</u> <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2026											

**Approved Treatments:**

4	32230004-Monitor	39.4	4123 - Red Oak	5	79	51-80	Monitoring	Monitoring	412 - Oak Types	Current	No
<u>Prescription</u> Monitor for oak wilt <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>											



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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Proposed Start Date: 10/01/2024

9	32230009-Monitor	14.4	4222 - Natural Jack Pine	0	1		Monitoring	Monitoring - Regeneration	4212 - Planted Jack Pine		No
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Prescription

Specs:

Next Step

Treatments:

Acceptable Jack Pine

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition: Long-Term Retention

Proposed Start Date: 10/01/2026

11	32230011-Monitor	12.6	42110 - Planted Red Pine	0	0	Immature	Monitoring	Monitoring - Regeneration	4211 - Planted Red Pine	Planting Record	No
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Prescription

Specs:

Next Step Pesticide, Skidder - Release

Treatments:

Acceptable Red pine

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition:

Proposed Start Date: 10/01/2025

25	32230013-Monitor	22.7	612 - Lowland Coniferous Forest	0	0		Monitoring	Monitoring - Regeneration	6122 - Black Spruce	Planting Record	No
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Prescription Regen check as per TMS guidance.

Specs:

Next Step

Treatments:

Acceptable Black spruce, tamarack, cedar, balsam fir, balsam poplar.

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition:

Proposed Start Date: 10/01/2034

15	32230015-Monitor	28.7	6124 - Lowland Spruce-Fir	0	0		Monitoring	Monitoring - Regeneration	6124 - Lowland Spruce-Fir	Planting Record	No
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Prescription Intermediate natural regen survey. Seedlings are starting to show up in stand. Need to monitor to ensure adequate regeneration.

Specs:

Next Step

Treatments:

Acceptable Black spruce, tamarack, cedar, balsam poplar.

Regen:

Other Regen appears to be showing up around stumps and areas where sphagnum is present.

Comment:

Site Condition:

Proposed Start Date: 10/01/2034





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
33	<b>32230033-Monitor</b>	4.5	4211 - Planted Red Pine	0	0	Immature	Monitoring	Monitoring - Regeneration	4211 - Planted Red Pine	Planting Record	No
<u>Prescription</u> <u>Specs:</u>  <u>Next Step</u> Pesticide, Skidder - Release <u>Treatments:</u>  <u>Acceptable</u> Red pine <u>Regen:</u>  <u>Other</u> Percent to Treat = 100% <u>Comment:</u>  <u>Site Condition:</u>  <u>Proposed Start Date:</u> 10/01/2025											
36	<b>32230036-Monitor</b>	5.1	612 - Lowland Coniferous Forest	0	0		Monitoring	Monitoring - Regeneration	6122 - Black Spruce	Planting Record	No
<u>Prescription</u> <u>Specs:</u>  <u>Next Step</u> <u>Treatments:</u>  <u>Acceptable</u> Black spruce, tamarack, balsam fir, jack pine, aspen. <u>Regen:</u>  <u>Other</u> Percent to Treat = 100% <u>Comment:</u>  <u>Site Condition:</u>  <u>Proposed Start Date:</u> 10/01/2034											
38	<b>32230038-Monitor</b>	35.3	4123 - Red Oak	8	90	51-80	Monitoring	Monitoring	4123 - Red Oak	Planting Record	No
<u>Prescription</u> Monitor for forest health, oak wilt concerns. <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> 10/01/2026											
39	<b>32230039-Monitor</b>	4.1	612 - Lowland Coniferous Forest	0	1		Monitoring	Monitoring - Regeneration	6122 - Black Spruce	Planting Record	No
<u>Prescription</u> <u>Specs:</u>  <u>Next Step</u> <u>Treatments:</u>  <u>Acceptable</u> Black spruce, tamarack, jack pine, cedar <u>Regen:</u>  <u>Other</u> Percent to Treat = 100% <u>Comment:</u>  <u>Site Condition:</u>  <u>Proposed Start Date:</u> 10/01/2034											



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
51	<b>32230051-Monitor</b>	3.9	4211 - Planted Red Pine	0	0	Immature	Monitoring	Monitoring - Regeneration	4211 - Planted Red Pine	Planting Record	No
<u>Prescription</u> <u>Specs:</u>  <u>Next Step</u> Pesticide, Skidder - Release <u>Treatments:</u>  <u>Acceptable</u> Red pine <u>Regen:</u>  <u>Other</u> Percent to Treat = 100% <u>Comment:</u>  <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2025											
59	<b>32230059-Monitor</b>	5.0	611 - Lowland Deciduous Forest	0	1		Monitoring	Monitoring - Regeneration	6122 - Black Spruce	Planting Record	No
<u>Prescription</u> <u>Specs:</u>  <u>Next Step</u> <u>Treatments:</u>  <u>Acceptable</u> Black spruce, tamarack, aspen <u>Regen:</u>  <u>Other</u> Percent to Treat = 100% <u>Comment:</u>  <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2034											
61	<b>32230061-Monitor</b>	1.9	413 - Aspen	0	4		Monitoring	Monitoring - Regeneration	413 - Aspen	Planting Record	No
<u>Prescription</u> <u>Specs:</u>  <u>Next Step</u> <u>Treatments:</u>  <u>Acceptable</u> Aspen, maple, spruce, fir. <u>Regen:</u>  <u>Other</u> Percent to Treat = 100% <u>Comment:</u>  <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2034											
64	<b>32230064-Monitor</b>	29.8	4211 - Planted Red Pine	0	2	Immature	Monitoring	Monitoring - Regeneration	4211 - Planted Red Pine		No
<u>Prescription</u> <u>Specs:</u>  <u>Next Step</u> Pesticide, Skidder - Release; ; Monitoring, Artificial Regen (3yr) <u>Treatments:</u>  <u>Acceptable</u> Red pine <u>Regen:</u>  <u>Other</u> Percent to Treat = 100% <u>Comment:</u>  <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2024											





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
68	<b>32230068-Monitor</b>	1.6	42220 - Natural Jack Pine	2	13	Immature	Monitoring	Monitoring - Regeneration	4212 - Planted Jack Pine	Planting Record	No
<u>Prescription</u> Count and assess if any actions are needed <u>Specs:</u>  <u>Next Step</u> <u>Treatments:</u>  <u>Acceptable</u> Jack pine <u>Regen:</u>  <u>Other</u> <u>Comment:</u>  <u>Site Condition:</u>  <u>Proposed Start Date:</u> 10/01/2025											
70	<b>32230070-Monitor</b>	2.2	612 - Lowland Coniferous Forest	0	4		Monitoring	Monitoring - Regeneration	6122 - Black Spruce	Planting Record	No
<u>Prescription</u> <u>Specs:</u>  <u>Next Step</u> <u>Treatments:</u>  <u>Acceptable</u> Spruce, tamarack, fir, aspen <u>Regen:</u>  <u>Other</u> Percent to Treat = 100% <u>Comment:</u>  <u>Site Condition:</u>  <u>Proposed Start Date:</u> 10/01/2034											
71	<b>32230071-Monitor</b>	7.6	613 - Lowland Mixed Forest	0	4		Monitoring	Monitoring - Regeneration	612 - Lowland Coniferous Forest	Planting Record	No
<u>Prescription</u> <u>Specs:</u>  <u>Next Step</u> <u>Treatments:</u>  <u>Acceptable</u> Black spruce, balsam fir, tamarack, white spruce, balsam poplar, cedar. <u>Regen:</u>  <u>Other</u> Percent to Treat = 100% <u>Comment:</u>  <u>Site Condition:</u>  <u>Proposed Start Date:</u> 10/01/2034											
420	<b>32230420-Prep</b>	25.1	330 - Low-Density Trees	99			Site Prep-Mech.	Site Prep	4319 - Mixed Upland Forest	Planting Record	No
<u>Prescription</u> Clear, fence, and establish various tree species as part of the statewide assisted migration study. <u>Specs:</u>  <u>Next Step</u> Planting, Initial Plant; NonForestMgt, Mowing; Monitoring, Herbicide Use; Pesticide, Drone - Site Prep; Other, Regeneration Fencing <u>Treatments:</u>  <u>Acceptable</u> A mix of species per assisted migration study. <u>Regen:</u>  <u>Other</u> <u>Comment:</u>  <u>Site Condition:</u>  <u>Proposed Start Date:</u> 12/01/2025											



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

Total Treatment  
Acreage Proposed: 407.1





Availability for Management

Total Acres    Acres Available    Acres With Condition    Acres Not Available

Dominant Site Conditions

5C    5F    2G    3J    5A    5E

355	355	0	1	Aspen						1
24	16	0	8	Cedar					8	
60	60	0	0	Herbaceous Openland						
72	71	0	1	Jack Pine						1
160	160	0	0	Low-Density Trees						
130	39	26	65	Lowland Conifers		26		16	48	2
5	5	0	0	Lowland Deciduous						
9	9	0	0	Lowland Mixed Forest						
48	48	0	0	Lowland Shrub						
166	20	38	108	Lowland Spruce/Fir	38		2	106		
27	27	0	0	Mixed Upland Deciduous						
17	17	0	0	Northern Hardwood						
75	75	0	0	Oak						
38	37	0	2	Red Pine						2
11	0	0	11	Tamarack				11		
18	18	0	0	Treed Bog						
41	41	0	0	Upland Shrub						
9	5	0	4	Upland Spruce/Fir				4		
1	1	0	0	Water						
1,265	1,002	64	199	Total Forested Acres	38	26	2	136	56	5
	79%	5%	16%	Relative Percent						

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

Site No.	Dominant Site Cond	Dominant Site 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)	55	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Headwaters to the Wild West Creek are throughout this stand. A very limited portion of the stand would be harvestable. The western portion of the stand was excluded from harvest last entry due to this factor.								

## Report 4 – Site Conditions



2	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> 6/17/2015: Camp 11 Creek runs through this stand. Buffering it would eliminate a good portion of the stand.							
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	38	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> 6/17/2015: Larger diameter and heights are along the northern fringe. smaller diameter and heights in the middle and south part of the stand. Hold till next entry.							
4	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	24	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> 6/17/2015: Hold stand till next entry. Large amount of lowland being harvested this current YOY.							
5	Unavailable	5A: Not able to obtain desirable regeneration	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
6	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
8	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							



# Report 4 – Site Conditions

Gwinn Mgt. Unit  
Kyle Gould: Examiner

Compartment: 230  
Year of Entry: 2027



9	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Available	5F: Evaluated for Forest Health Considerations	26	Unspecified	Unspecified	Unspecified	Unspecified
Comments: 2017-Lowland stand that was recently inventoried.							
11	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
13	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
14	Unavailable	5A: Not able to obtain desirable regeneration	48	Unspecified	Unspecified	Unspecified	Unspecified
Comments: This is a wet birch site with heavy tag alder in the understory. If we did cut it, there is a really good chance that it would not regenerate to birch and we would only get scattered red maple stump sprouts and some conifer where they are present. A fully stocked stand is highly unlikely.							
15	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

# Report 4 – Site Conditions

Gwinn Mgt. Unit  
Kyle Gould: Examiner

Compartment: 230  
Year of Entry: 2027



16	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	36	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
17	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
19	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

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
Comments				





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																						
1	6224 - Treed Bog	None	17.7			No	2025 - agree with previous comments. Tagel alder is fairly thick and very little merchantable timber. An old freeze road comes to the stand from the northwest. 9/20/2005: OPIC - FMD: A treed bog with open lowland brush interspersed with very slow growing tamarack, black spruce, & a trace of cedar. Tree cover is of seedling/sapling size class with some small poles.																																																						
2	6124 - Lowland Spruce-Fir	Poletimber Medium	26.5	71	1-50	N/A	2025 - tree diameters are still a bit on the small side. A freeze road from the NW was used to access the area previously. The stand is a little patchy and most the trees look healthy. The southeast end of the stand turns to more of an open bog. 9/20/2005: OPIC - FMD: The vast majority of this stand is swampy with leatherleaf ground cover, primarily spruce/tamarack & only a trace of cedar. The slightly higher elevation small inclusions support a few jack pine (like on the southwest boundary of the forty) and also balsam fir occupy the dryer sites. Most larger fir was killed off by spruce budworm and seedling/sapling fir as well as spruce is very abundant in the stand. A few birch are present also that are mostly dead now.																																																						
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Black Spruce</td><td>40</td><td>Seedling</td><td>7</td><td>71</td><td>Balsam Fir</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Northern White Cedar</td><td>5</td><td></td><td>8</td><td></td><td>Tag Alder</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Balsam Fir</td><td>15</td><td>Seedling</td><td>6</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Tamarack</td><td>30</td><td>Seedling</td><td>7</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Jack Pine</td><td>10</td><td></td><td>9</td><td></td><td></td><td></td><td></td><td></td></tr></table>								Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	Black Spruce	40	Seedling	7	71	Balsam Fir	Medium	5 - 10 feet	5 - 10 feet	Northern White Cedar	5		8		Tag Alder	Medium	5 - 10 feet	5 - 10 feet	Balsam Fir	15	Seedling	6						Tamarack	30	Seedling	7						Jack Pine	10		9					
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Balsam Fir	15	Seedling	6																																																										
Tamarack	30	Seedling	7																																																										
Jack Pine	10		9																																																										
3	4130 - Aspen	Poletimber Well	42.4	52	51-80	N/A	2024 - aspen is ready for harvest1/9/15: Aspen in good shape. Small patches of jack pine scattered throughout the stand. Scattered spruce fir in the understory, possibly a trace in the overstory. Beaked hazel in the understory, more so on the east end of the stand. Diameter is variable across the stand. some areas the trees are approaching 10" whereas the majority are in the 7-8" range. Some open areas exist where there are depressions. These are not wetland depressions. Stand is harvestable. OPIC - FMD: Was commercially cut in summer of 1973 by Holli Forest Products, Inc., permit #16/73. All merchantable aspen, birch, and mixed hardwood was to be cut. Apparently jack pine was not to be cut and what about oak? Also, birch located within 200 ft of the Flat Rock or Camp Hope Rd was not to be cut. I (Warren Heikkila) found an FTP #W3-438 which was for K-G cutter treatment of this stand (and stand 4 also) to knock down residual trees following the commercial cut of stand 3 which they say occurred in Spring of 1973. Purpose was to get maximum aspen stocking & survival in the new stand. It was written by Jack C.Mauer when he was a Game Area Manager in Gwinn. Oak was to be left as well as jack pine. Actual treatment occurred between July to Oct of 1973.																																																						
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Quaking Aspen</td><td>98</td><td>Seedling</td><td>9</td><td>52</td><td>Balsam Fir</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Jack Pine</td><td>2</td><td>Seedling</td><td>9</td><td></td><td>White Spruce</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>Hazelnut (Beaked)</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>								Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	Quaking Aspen	98	Seedling	9	52	Balsam Fir	Low	10 - 20 feet	10 - 20 feet	Jack Pine	2	Seedling	9		White Spruce	Low	10 - 20 feet	10 - 20 feet						Hazelnut (Beaked)	Medium	5 - 10 feet	5 - 10 feet																		
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
<b>4</b>	4123 - Red Oak	Poletimber Medium	21.1	79	51-80	N/A	<p>2025 - stand of small log sized oak with aspen and birch pockets mixed in. 1/9/15: Predominantly an oak log stand. Basal area ranges from 90-100 sq. ft/ac. Pockets of quaking and big tooth aspen exist. Understory (actually mid-canopy) is all red maple, both stump sprout and seed origin. These exist where there are essentially gaps so they aren't truly part of the canopy yet. East end and south are more open. Scattered jack pine groups and along the edge of the stand. Stand is very beneficial to wildlife at this point in development. OPIC - FMD: Stand is semi-open in places with hazel brush common, and red maple saplings &amp; small poles. Northern fringes have more birch. Bordered on the south by a heavily stocked A6 stand or clone of young aspen (yr of origin 1971). Was this young aspen a result of a KG Wildlife operation? Overall, this stand probably is very beneficial to wildlife in it's present condition. I found an FTP (#W3-438) written for K-G cutter treatment of this stand (and also stand 3), leaving all oak &amp; jack pine, and a clump of birch on the north property boundary in the NWNE. Purpose here was to improve deer habitat and it did stimulate some aspen sprouting on the south edge of stand 4, where currently is found a well stocked young A6 stand. Actual treatment occurred between July to Oct. 1973.</p>
		Canopy Species	% Cover	Size Class	DBH	Age	
		Bigtooth Aspen	10	Seedling	6		
		Red Oak	71		12	79	
		Jack Pine	4	Seedling	8		
		Paper Birch	15		8	53	
		Sub-Canopy Species	Density	Avg. Height	Size		
		Red Maple	Medium	10 - 20 feet	10 - 20 feet		
		Hazelnut (Beaked)	Low	5 - 10 feet	5 - 10 feet		
<b>5</b>	4130 - Aspen	Sapling Well	43.0	17	Immature	N/A	<p>2025 - fully stocked aspen stand with some red maple sprouts as well. Some large oak present that were left during the harvest. The aspen is a little things when the oak are thicker 12/8/2014: Most of the birch seed trees that were left have died. Regen doing well. Birch had sprouted but were browsed too much to survive. 6/20/2008: OPIC - FMD: Harvested during spring breakup 2008 by Holli Forest Products: TS#110-07-01, Three Tick Sale. Left all oak as well as marked birch seed trees.</p>
		Canopy Species	% Cover	Size Class	DBH	Age	
		Red Oak	5		12	86	
		Red Maple	25	Log	3	17	
		Quaking Aspen	70	Log	3	17	
<b>6</b>	4130 - Aspen	Poletimber Medium	39.2	38	1-50	N/A	<p>2024 - pole sized aspen. The stocking is patchy. The stand has rocky soils. There are some large red oak left from the last harvest. OPIC - FMD: Was commercially cut in Nov 1987 by Oscar Antilla from Republic, permit #12-87, "Camp Eleven Creek Block". Red &amp; white pine was left as well as some birch &amp; oak marked with green paint. FTP #W31-185 was for K-G treecutter of residual hardwood to maximize aspen regeneration, after commercial logging of the stand. No oak was to be cut nor any other marked trees. Accomplished in 1989.</p>
		Canopy Species	% Cover	Size Class	DBH	Age	
		Red Maple	15	Pole	4		
		Bigtooth Aspen	35	Seedling	7		
		Quaking Aspen	50	Seedling	7	38	
<b>7</b>	6122 - Black Spruce	Poletimber Medium	35.8	86	1-50	N/A	<p>2024 - stand could be harvested now. There are pockets of small diameter trees as well. OPIC - FMD: Quite variable in stocking and size class. Significant younger sapling size conifers. Rather unevenaged in places. When any cut is made, an adequate buffer (minimum of 100 ft) must be left along headwaters of Camp 11 Creek.</p>
		Canopy Species	% Cover	Size Class	DBH	Age	
		Black Spruce	80	Sapling	7	86	
		Northern White Cedar	10	Seedling	7		
		Tamarack	10	Seedling	8		
		Sub-Canopy Species	Density	Avg. Height	Size		
		Tag Alder	Medium	5 - 10 feet	5 - 10 feet		



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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
28	4199 - Other Mixed Upland Deciduous	Unspecified	27.2	1	1-50		2024 - trees are slowly starting to fill in the opening. Mostly jack pine clumps and aspen clones. Overall the site is very open. There are a couple small ponds in the NE end of the stand. 12/8/2014: Grass opening complex that was historically managed for sharp-tailed grouse. Scattered clumps of jack pine and aspen. Scattered areas of shrubs. Historical notes state that Autumn Olive, hawthorn, and Siberian crab were planted here along the south east edge. 9/20/2005: OPIC - FMD: Some sparse to medium stocking of natural jack pine regeneration already exists in patches here. Per our mini-review held on 9/14/05, Wildlife would like this stand burned by prescribed fire, or mechanical treatment is also an acceptable alternative to burning. Robert Ziel visited this stand after the mini-review and concluded a prescribed burn here is feasible.
		<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>	
		Bigtooth Aspen		Low	Variable	Variable	
		Jack Pine		Low	10 - 20 feet	10 - 20 feet	
29	4116 - Mixed N. Hardwood - Aspen	Sapling Medium	12.2	36	1-50	N/A	2024 - poor quality stand. Mostly red maple with some aspen.
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>		
Quaking Aspen		25	Sapling	5			
Red Maple		70	Pole	4	36		
Bigtooth Aspen		5	Sapling	5			
30	6120 - Lowland Cedar	Poletimber Well	8.2	97	81-110	N/A	2024 - This stand was one stand with the spruce that was harvested to the north and the prescribed spruce to the south. This stand is heavy to cedar and dense enough that it would be difficult to harvest without cutting some cedar. There is a small pond in the west end of the stand.
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>	<b>Density</b>
Tamarack		10	Seedling	8		Tag Alder	Low
White Pine		7		9			
Black Spruce		15	Sapling	7	97	Black Spruce	Low
Northern White Cedar		65	Seedling	8	97		
Balsam Poplar		3	Seedling	8			
32	4130 - Aspen	Sapling Well	7.3	8		N/A	2025 - stand has regenerated well to aspen. Looks healthy and fully stocked. There are a few large residual trees in the middle of the stand.This stand was prepped as part of Brad's Bear aspen SBW (32-119-16-01). A SBW sale this area was set up a year early to salvage fir volume. The stand was harvested in the winter of 2016-17 by J. Carey logging. 12/19/2014: There are a few black spruce inclusions within this stand that had previously been typed out as separate stands. OPIC - FMD: Was commercially cut by Holli Forest Products, Inc. between 1973 - 75, permit #41/70 A, "Dewey Lake Block". This was a 180 acre sale which extended south into Cmpt 237. Specs were to cut all merchantable aspen, birch, & maple --- all black spruce & fir with 2 or more sticks --- all white spruce 12 inch or larger in stump diameter --- and all jack pine in the spruce/fir & aspen/birch types. No cutting within 100 feet of Wild West Creek. This sale was a scale sale & it was cut manually by chain saw (piece cutters).
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>		
Quaking Aspen		100	Log	1	8		



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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
47	42220 - Natural Jack Pine	Poletimber Medium	17.8	36	1-50	N/A	2024 - 6-8" 3-4 stick jack pine. Some sparse areas. SE survey corner is old but found it12/8/2014: Stand is filling in with jack pine. Some areas are sparse, but trees are entering the pole size class and could be harvested for either cordwood or chips if paired with a stand in the main part of the compartment. 9/20/2005: OPIC - FMD: Stand is variable at present, ranging from G to J3 in stocking (overall a J2 average). Averages 3 to 4 inch dbh, 12 to 20 ft tall. Parts of stand were roller chopped in past - marks still visible in the sod layer. The private forty west of this one has been cut recently (jack pine regeneration about 3 ft tall). Also I found corners of unknown origin (pipe, rebar, and/or steel fence posts) at three of the approx forty corners , and a registered corner exists at the Sec. Corner. I found a wildlife FTP #31-16 for roller chopping this stand (extending north into Sec 4) dated Nov 1978, - purpose was for sharptail grouse habitat. Note: at our 9/14/05 mini-review, wildlife expressed their desire to manage this stand for grass. Thus it should be prescribe burned, or as an alternative, mechanically treated to eliminate the existing jack pine stand. Latest update: Robert Ziel field examined this stand for possibility of burning here, and recommended we hold till a merchantable cut can be made to liquidate this stand (possibly chipping slash for boiler fuel), and follow up with a burn. Thus long term objective for this stand is grass.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Jack Pine		100	Seedling	6	36	Sweet Fern		High	5 - 10 feet	5 - 10 feet
						Sedges		Full	Not Applicable	Not Applicable
						Blueberry/Bilberry/Cranberry		High	5 - 10 feet	5 - 10 feet
48	42120 - Planted Jack Pine	Sapling Well	15.8	26	Immature	N/A	2025 - stand is nearing the small pole aize class. Stand is fully stocked and appears healthy.5/28/2015: Stand is in good shape. The few white birch that were left along the road have started to die off. OPIC - FMD: This stand was commercially cut in Dec. 1998 by Tom St.John (Oro Logging Co.) under permit # 5-97, " Camp Hope Road Sale". Oak, cherry, red and white pine were left as well as a few birch for aesthetics near the road. Herbicide as needed, disk trench, and planted to jack pine (in 1999 or 2000) . FTP #C31-391.			
Canopy Species		% Cover	Size Class	DBH	Age					
Jack Pine		100		4	26					
49	4222 - Natural Jack Pine	Sapling Well	3.8	13	Immature	N/A	1/8/2015: Stand was trenched & seeded November 2013. OPIC - FMD: 2011 Comments: Stand harvested in October of 2010 by Holli Forest Products, Inc. TS# 32-111-07-01. All birch were left. Tops and limbs from this stand were ground/chipped. 2005 Commnets: Most of birch would be left for aesthetics here due to travel influence. Also the oak if any present. Small triangle of land north of Flat Rock Road was cut in 2001 as part of an adjacent sale (#106-01-01) in Sec 8 (Cmpt 231). It was subsequently disk trenched & seeded with jack pine, but no birch were cut during the timber sale. Oak, cherry, red & white pine were left as well. I believe it was trenched & seeded in 2003. The alternative acceptable management objective here is aspen - red maple.			
50	4130 - Aspen	Sapling Well	4.8	4		N/A	2024 - Aspen regeneration looks good. Fully stocked stand. Cut by Holli winter of 202112/19/2014: Evidence of fire within this stand, not sure if it's from a prescribed burn or natural fire. Plow furrows are still visible. Prepared Under Sale 32-105-17 Coyote & A Covey Mix. No residual per Rx.			
Canopy Species		% Cover	Size Class	DBH	Age					
Quaking Aspen		80	Log	1	4					
Balsam Fir		5	Log	1						
Red Maple		15	Log	1						



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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
56	42220 - Natural Jack Pine	Sapling Medium	7.3	26	Immature	N/A	2024 - agree with previous comments. 5/28/2015: Stand is quite thick in places with jack pine, and then thins out as you head east. East end is more aspen than jack pine. OPIC - FMD: This stand was commercially cut in Dec.1998 by Tom St.John (Oro Logging Co.) under permit # 5-97, "Camp Hope Road Sale". Access was from the northwest across narrow strip of swamp. Future stand will likely be a mix of aspen, balsam fir, spruce and jack pine, with jack pine being dominant. This jack pine is natural and not the result of disk trenching & seeding. Oak, cherry, red and white pine were left uncut. Soil is sandy here. This stand is essentially an island of high ground surrounded by swamp.			
Canopy Species		% Cover	Size Class	DBH	Age					
Jack Pine		67		4	26					
Quaking Aspen		25	Log	4						
White Spruce		5	Seedling	6						
Balsam Fir		3	Sapling	5						
57	42220 - Natural Jack Pine	Poletimber Medium	11.4	36	1-50	N/A	2024 - pole sized jack pine with a mix of other upland conifer species as well.OPIC - FMD: Was commercially cut in 1988 by Oscar Antilla from Republic, permit #12-87, "Camp Eleven Creek Block". This was followed by a K-G treecutter treatment under FTP #W31-185 . This post-treatment or the logging itself initiated this natural regeneration of jack pine here. A significant and surprising amount of white pine regeneration is mixed in as well, plus a trace of fir and red pine. Scattered larger remnant red maple, but few in number.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Quaking Aspen		5	Seedling	6		Sweet Fern		Medium	5 - 10 feet	5 - 10 feet
White Pine		30	Seedling	6						
Red Maple		5	Seedling	8						
Jack Pine		60	Seedling	6	36					
58	4132 - Aspen, Jack Pine	Poletimber Well	1.3	31	51-80	N/A		2024 - fully stocked, pole sized aspen stand with some jack pine mixed in. OPIC - FMD: Was commercially cut in 1991 by Minerick Logging Inc., permit #14-87, "Swamp Stripcut Block". A trespass occurred here on Mich. Northwoods Club property on the NWSE of Sec 15, because we used their north-south fenceline as the sale boundary. Now as of Sept 2003, Paul Bressette set the 1/16th corner falling on the west edge of the road and revealed that their fence is in error (too far east about 100 ft). Their fence is also too far south (approx 2.5 chs) where it runs east-west, but Minerick's cutting stopped at the fence for stand 24.		
Canopy Species		% Cover	Size Class	DBH	Age					
Jack Pine		20	Seedling	5						
Quaking Aspen		80	Seedling	5	31					
59	611 - Lowland Deciduous Forest	Unspecifed	5.0	1			2024 - spruce and tamarack regeneration is doing decent. Most is 3-6 feet tall. It will be fully stocked if it fills in a little more. This stand was prepped as part of Brad's Bear aspen SBW (32-119-16-01). A SBW sale this area was set up a year early to salvage fir volume. The stand was harvested in the winter of 2016-17 by J Carey logging.			
60	3102 - Grass	None	1.6			No		2025 - opening is starting to fill in with trees. Some are near merchantable size5/28/15: Grass and sweet fern. OPIC - FMD: Was herbicided in July 1989.		
61	413 - Aspen	Unspecifed	1.7	4		2025 - Stand was harvested in 2021. Starting to regenerate to aspen and conifer. Continue to monitor. 12/189/2014: Harvest with adjacent stand. OPIC - FMD: This parcel was made known following a 2003 survey when the 1/16th corner just west of the road was set. It was not cut in 1994 by Minerick's swamp sale in stand 24 because the Mich. Northwoods Club fenceline was in trespass on State land here. Prepared Under Sale 32-105-17 Coyote & A Covey Mix. No residual.				
62	42220 - Natural Jack Pine	Sapling Well	3.1	12	Immature		N/A	2025 - most jack pine is 10-15 feet tall. In the open spots it is seeding it. There is a 1/4 acre low spot in the middle of the stand. Spruce will probably grow back in the wet soils there.1/8/2015: Stand trenched & seeded 11/2013. Harvested in fall of 2010 by Holli Forest Products, TS #32-111-07-01 (Mother Goose Mix)		
Canopy Species		% Cover	Size Class	DBH	Age					
Jack Pine		90	Log	1	12					
Quaking Aspen		5	Log	1						
Black Spruce		5	Log	1						





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																					
63	4130 - Aspen	Sapling Well	1.5	26	Immature	N/A	2024 - stand looks healthy and fully stocked. Growing well. This stand was cut with the adjacent compartment on the west side of the Flat Rock Rd. Partially trenched and seeded and the remainder is volunteer aspen regen.																																					
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64	4211 - Planted Red Pine	Unspecified	28.4	2	Immature		OPIC - FMD: Stand is situated east of trail road and a harvest here will be delayed for 10 yrs to provide aesthetic benefits since essentially all surrounding stands have been or are being cut at this time. Prepped under 3210517 Coyote & a Covey. Residual BA 9.3SF oak, .7SF red pine. Cut By Holli FP in the winter of 2021  Planted Spring 2023.																																					
65	6122 - Black Spruce	Poletimber Well	52.0	90	81-110	N/A	2025 - mature lowland conifers that are ready for harvest. Some areas of dense cedar should be excluded from the harvest area. Cedar is mostly in the west end of the stand. Stand is mostly spruce and tamarack with some cedar pockets. Mostly lowland with couple high spots. Stand contains a small stream that runs from the Northwest corner of stand 65 and ties in the Northwest corner of stand 66 and flows into the stream in that stand.																																					
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66	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	10.7	90	51-80	N/A	2025 - the stream runs along the north and west edges of the stand. About 2/3 of the stand would be harvestable after a buffer on the creek.5/28/15: Mixed stand, very clumpy in nature. Tamarack, cedar, and black spruce all occur in essentially their own patch. The confluence of two creeks are in this stand that form the beginning of the Wild West Creek. OPIC - FMD: This is a biodiversity mgt area for the purpose of buffering the Wild West Creek. See cmpt header for additional comments.																																					
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67	6122 - Black Spruce	Poletimber Well	29.1	102	51-80	N/A	2025 - narrow atrip of black spruce bordering the wild west creek and surrounding wetlands. OPIC - FMD: This stand is a potential biodiversity mgt area buffering the Wild West Creek. See cmpt header for additional comments.																																					
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68	42220 - Natural Jack Pine	Sapling Medium	2.0	13	Immature	N/A	2025- stand is well stocked in most places but some open patches exist. It will continue to fill in with jack pine and other species. So residual trees were left on the edge of the stand when the surrounding stands was harvested. 1/9/2015: Stand was trenched and seeded in November 2013, FTP #32-765 . OPIC - FMD: Stand harvested in October 2010 by Holli Forest Products, Inc. TS# 32-111-07-01 (Mother Goose Mix). Stand is an island of high ground surrounded by swamp.																																					
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
406	320 - Upland Shrub	None	26.2			No	2025 - scrubby cherry brush and mixed shrub stand. 1/8/2015: Very brushy stand with scattered clumps and single trees. Red maple, cherry, red oak (12" dbh), and hazel. No record of maintenance in this stand. OPIC - FMD: Somewhat brushy in character with cherry (heavily damaged by feeding bear it appears), hazel brush, and some encroaching tree species such as aspen, maple, & jack pine. But it all adds to the diversity here and probably is very desirable in this condition to wildlife. In late March, there were badgers actively digging and spewing fresh dirt out upon the snow. They are becoming quite numerous in recent years in southern Marquette Co. (probably have no natural prey species that will tackle them). Buck rubs aren't hard to find in this area.
409	3205 - Mixed Upland Shrub	None	5.9			Yes	2015 - stand is slowly filling in with trees. Most are at merchantable size.  1/7/2015: Grass opening between aspen stand and lowland conifer swamp. Part of opening is on a hill side. Very sandy soil. OPIC - FMD: Located in the NWSW of Sec 16, bordering swamp to the south.
413	310 - Herbaceous Openland	None	6.6			No	2024 - aspen clones and conifers are starting to fill in. Overall very open still. OPIC - FMD: Was herbicided in 1989. A natural opening, generally devoid of trees.
415	310 - Herbaceous Openland	None	1.7			No	2024 - fairly open with some scattered red maple. OPIC - FMD: Stand was herbicided in 1989. This is a south facing slope dropping down to the swamp. Although it is not totally devoid of trees, it is nearly so. A few red maple & birch & conifer, etc. It was never rock raked or disked & seeded - simply a natural opening.
419	3302 - Low Density Conifer Trees	None	21.7			Yes	2024 - stand is very open with scattered jack pine and shrubs. 12/8/2014: Semi-open grass opening mixed with pockets of and scattered jack pine make up this stand today. Historically it had been managed for sharp-tailed grouse. 9/200/2005: OPIC - FMD: Currently it has sparse jack pine regeneration present. Per our mini-review held on 9/14/05, Wildlife would like to have this stand prescribe burned, or mechanically treated as an alternative. Robert Ziel visited this stand after the mini-review to assess it for prescribed burning.
420	330 - Low-Density Trees	None	116.0			Yes	2024 - trees are slowly starting to fill in the opening. Mostly jack pine clumps and aspen clones. Overall the site is very open. There are a couple small ponds in the NE end of the stand. 12/8/2014: Grass opening complex that was historically managed for sharp-tailed grouse. Scattered clumps of jack pine and aspen. Scattered areas of shrubs. Historical notes state that Autumn Olive, hawthorn, and Siberian crab were planted here along the south east edge. 9/20/2005: OPIC - FMD: Some sparse to medium stocking of natural jack pine regeneration already exists in patches here. Per our mini-review held on 9/14/05, Wildlife would like this stand burned by prescribed fire, or mechanical treatment is also an acceptable alternative to burning. Robert Ziel visited this stand after the mini-review and concluded a prescribed burn here is feasible.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
421	310 - Herbaceous Openland	None	3.0	No			2024 - some pole sized jack pine but otherwise very open.OPIC - FMD: Grass opening mostly east of trail road and bounded by Mich. Northwoods Club on east.		
				Sub-Canopy Species		Density		Avg. Height	Size
				Jack Pine		Low		10 - 20 feet	10 - 20 feet