



# Compartment Review Presentation

## Grayling Forest Management Unit

Compartment 72004

Entry Year 2018

Acreage: 1,843

County Oscoda

Management Area: Kirtland's Warbler

**Revision Date:** 2016-08-11

**Stand Examiner:** Paul Roell

**Legal Description:**

T27N R01E Sections 15, 22, 23 and 24

**Identified Planning Goals:**

Maintain forest health, productivity, sustainability, species diversification and structural diversity of the resources while providing for multiple uses of the land., species diversity, and visual management. In addition, to maintain a healthy habitat for the endangered species *Dendroica Kirtlandii* (Kirtland's Warbler) taking into account the warbler management plan directive, species diversity, and visual management.

**Soil and topography:**

Soils consist of well drained Grayling sands, Rubicon, Roselawn sands, and AuGres Sands with lowland areas consisting of Lupton muck.

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

The State ownership is fairly solid with private ownership located within and adjacent to the compartment. This area is used by year around and seasonal residences. The state land is heavily used for hunting and dispersed recreation.

**Unique Natural Features:**

There is the potential for pine barrens and dry prairie species plants such Hill's thistle, rough fescue, Alleghany plum and pale agoseris. There is also the potential for the presence of the insects dusted skipper, grizzled skipper and red-legged spittlebug, which typically can be found in the grassy areas of the pine barrens habitat.

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

No known occurrences at this time.

**Special Management Designations or Considerations:**

Designated Kirtland's Warbler habitat

**Watershed and Fisheries Considerations:**

None

**Wildlife Habitat Considerations:**

Kirtland's Warbler

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

Surface sediments consist of ice-contact and glacial outwash sand and gravel. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is Coldwater Shale. The compartment is not leased for oil and gas development at is time. There is one lease to the east near the compartment. Gravel pits are located to the south of the compartment and there is good potential for gravel in this area.

**Vehicle Access:**

There is good access within the compartment both of forest roads and county roads.

**Survey Needs:**

Some survey work is needed in Sections 15 and 23.

**Recreational Facilities and Opportunities:**

Within Section 15 there is a well used snowmobile trail parking lot which is also used as a commuter lot. The Roll Loop snowmobile trail runs diagonally through Section 15 then down through 22. This trail receives heavy use. The Muskrat Lake snowmobile trial originates at the trailhead in Section 15 and also receives heavy use.

**Fire Protection:**

This compartment is a concern for potential large wildfires. This is due to the compartment having such a large acreage of conifer cover type. There is also some urban interface within and around the compartment. Equipment access is good throughout the compartment though sandy soils may pose some problems in off-road operations.

**Additional Compartment Information:**

Cover types are more varied as compared to other compartments dominated by KW habitat, providing more diversity.

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

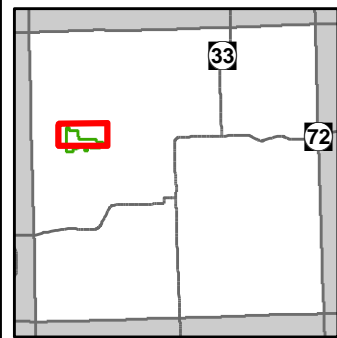
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

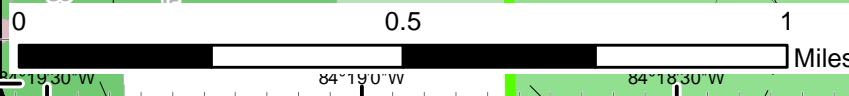
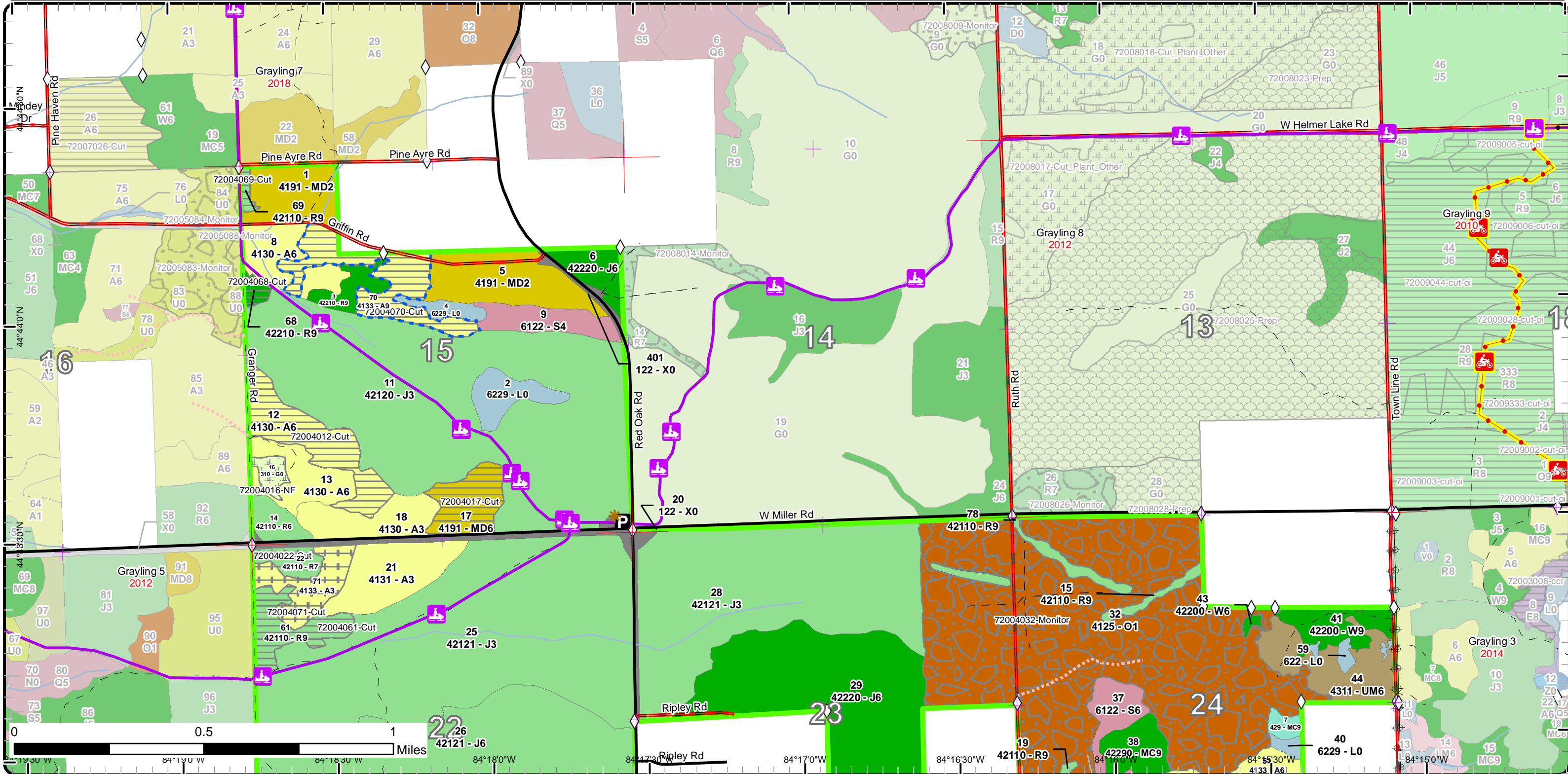
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map

Compartment: 4  
 T27N R01E 15, 22-24  
 County: Oscoda  
 Unit: Grayling  
 Mgmt Area: Kirtland's Warbler  
 YOE: 2018  
 Acres: 1843.1 GIS Calculated  
 Examiner: Paul Roell  
 Map Revised: 9/8/2016  
 Map Phase: Review

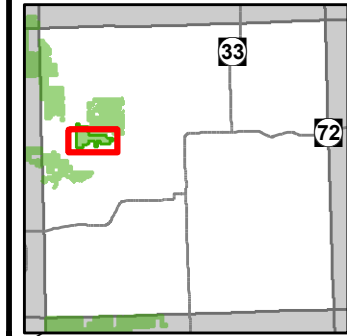


- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li>— Miris Corners</li> <li>+ Remonumented Section Corners</li> <li>◇ Field Grade GPS Corners</li> <li>P Parking Lot</li> <li>* Trailhead</li> <li>🏍 Motorcycle Trails (DNR License)</li> <li>🏍 MCCCT Trails</li> <li>🏍 Snowmobile Trails</li> <li>🏍 ORV License</li> <li>🏍 ORV License &amp; Trail Permit</li> <li>🏍 Designated Snowmobile Trails</li> </ul> | <ul style="list-style-type: none"> <li>— Michigan Cross Country Cycle Trail (MCCCT)</li> <li>— Paved Roads</li> <li>— County Gravel Roads</li> <li>— Poor Dirt Roads</li> <li>— Closed Roads</li> <li>— Rivers</li> <li>⊕ Powerline</li> <li>▭ Compartment Boundary</li> <li>▭ Treatments with Site Conditions</li> <li>▭ Clearcut (w/Reserves)</li> <li>▭ Other Treatment - See Comments</li> <li>▭ Regeneration Survey</li> <li>▭ Harvest, Overstory Removal</li> </ul> | <ul style="list-style-type: none"> <li>413 - Aspen Types</li> <li>419 - Mixed Upland Deciduous</li> <li>421 - Planted Pines</li> <li>422 - Natural Pines</li> <li>429 - Mixed Upland Conifers</li> <li>430 - Upland Mixed Forest</li> <li>612 - Lowland Coniferous Forest</li> <li>122 - Roads/Parking Lot</li> <li>310 - Herbaceous Openland</li> <li>622 - Lowland Shrub</li> <li>Lakes</li> </ul> |
|---|---|--|

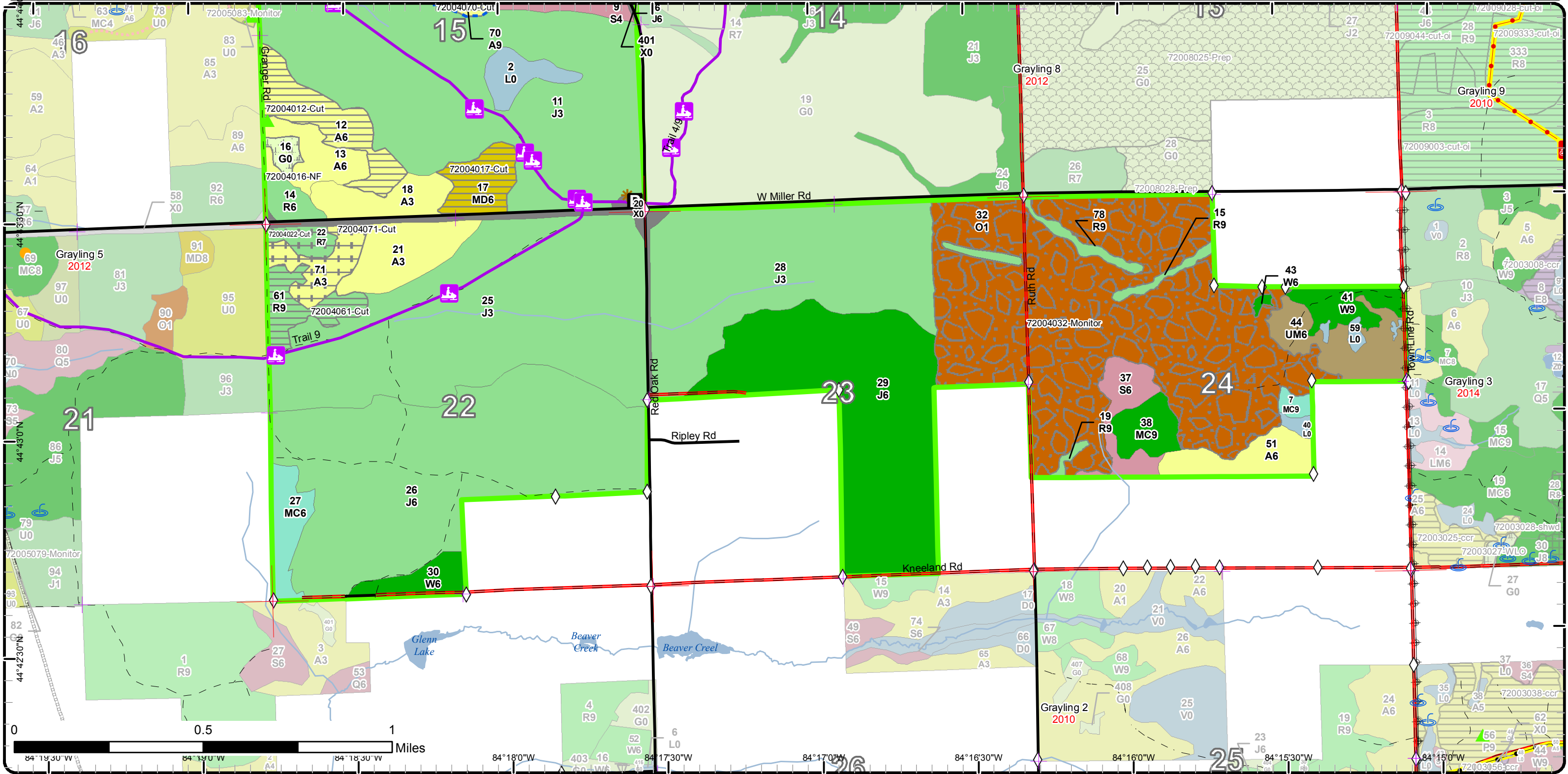


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 Examiner: Paul Roell  
 Map Revised: 3/9/2017  
 Map Phase: Post-Review

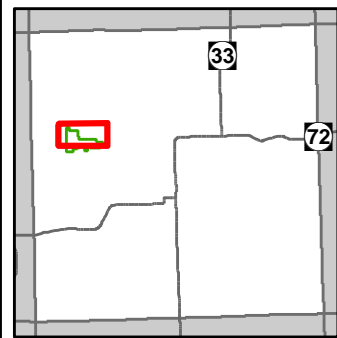


- Miris Corners
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- Field Grade GPS Corners
- ▲ OFS Human Impact
- OFS Hydro
- OFS Other-Specify
- P Parking Lot
- ★ Trailhead
- ⬇ Snowmobile Trails
- ORV License
- ORV License & Trail Permit
- Designated Snowmobile Trails
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- Poor Dirt Roads
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- Other Treatment - See Comments
- Regeneration Survey
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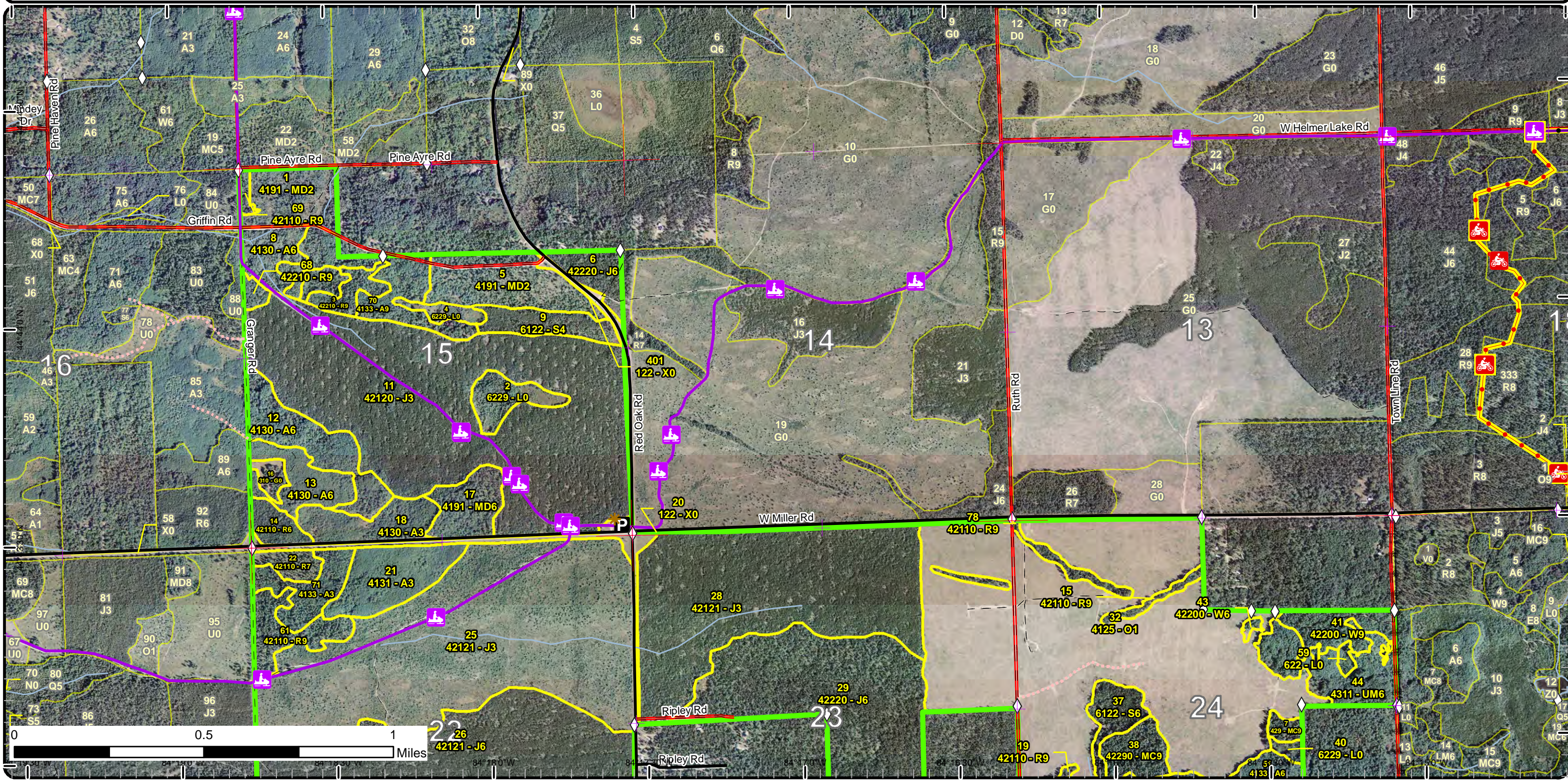


# Stand Boundary Map

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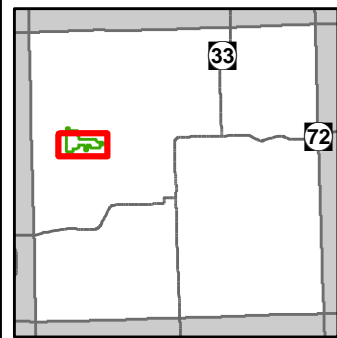


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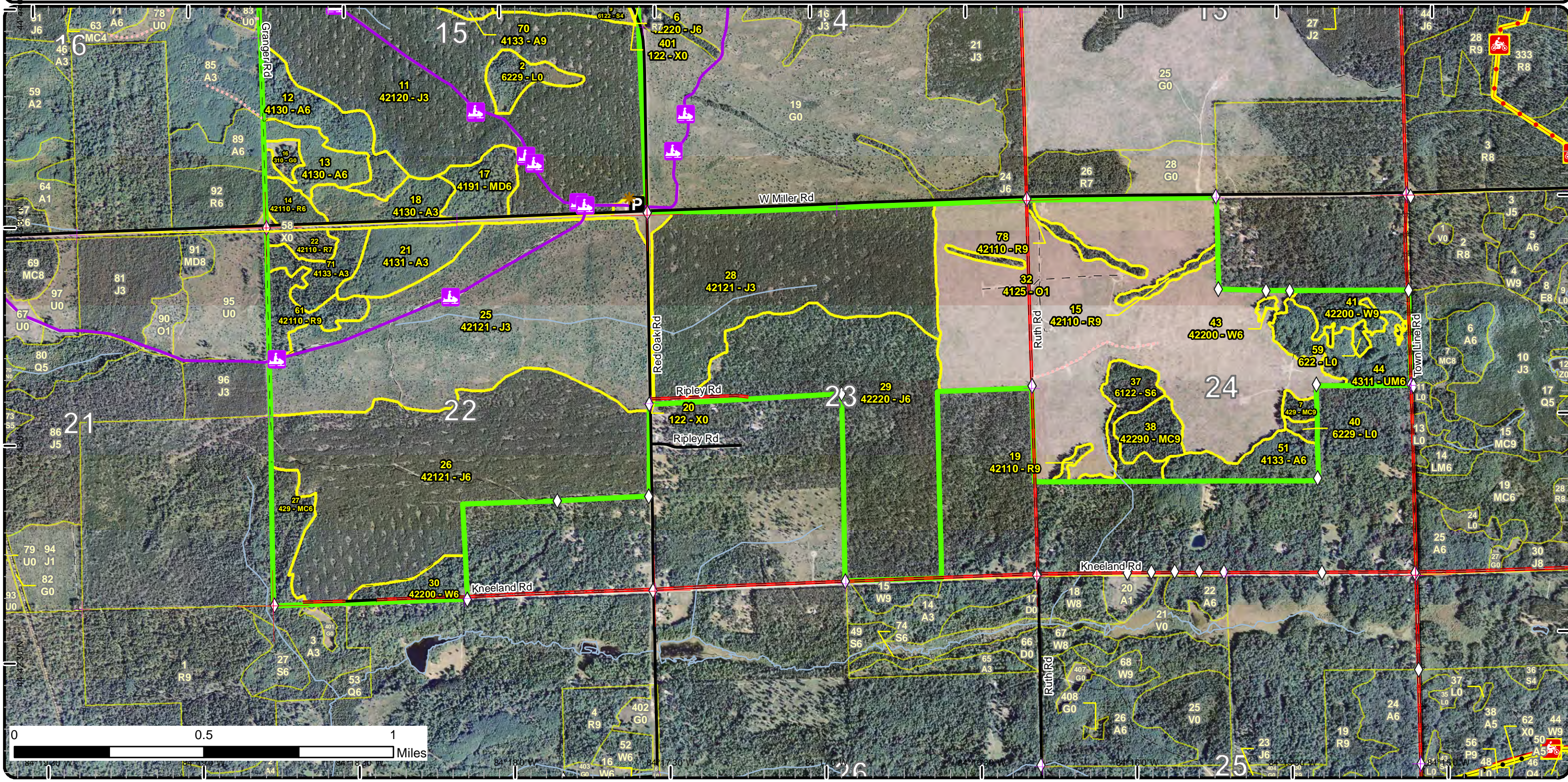


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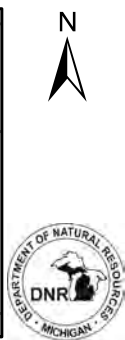
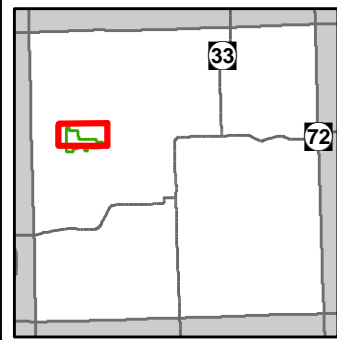


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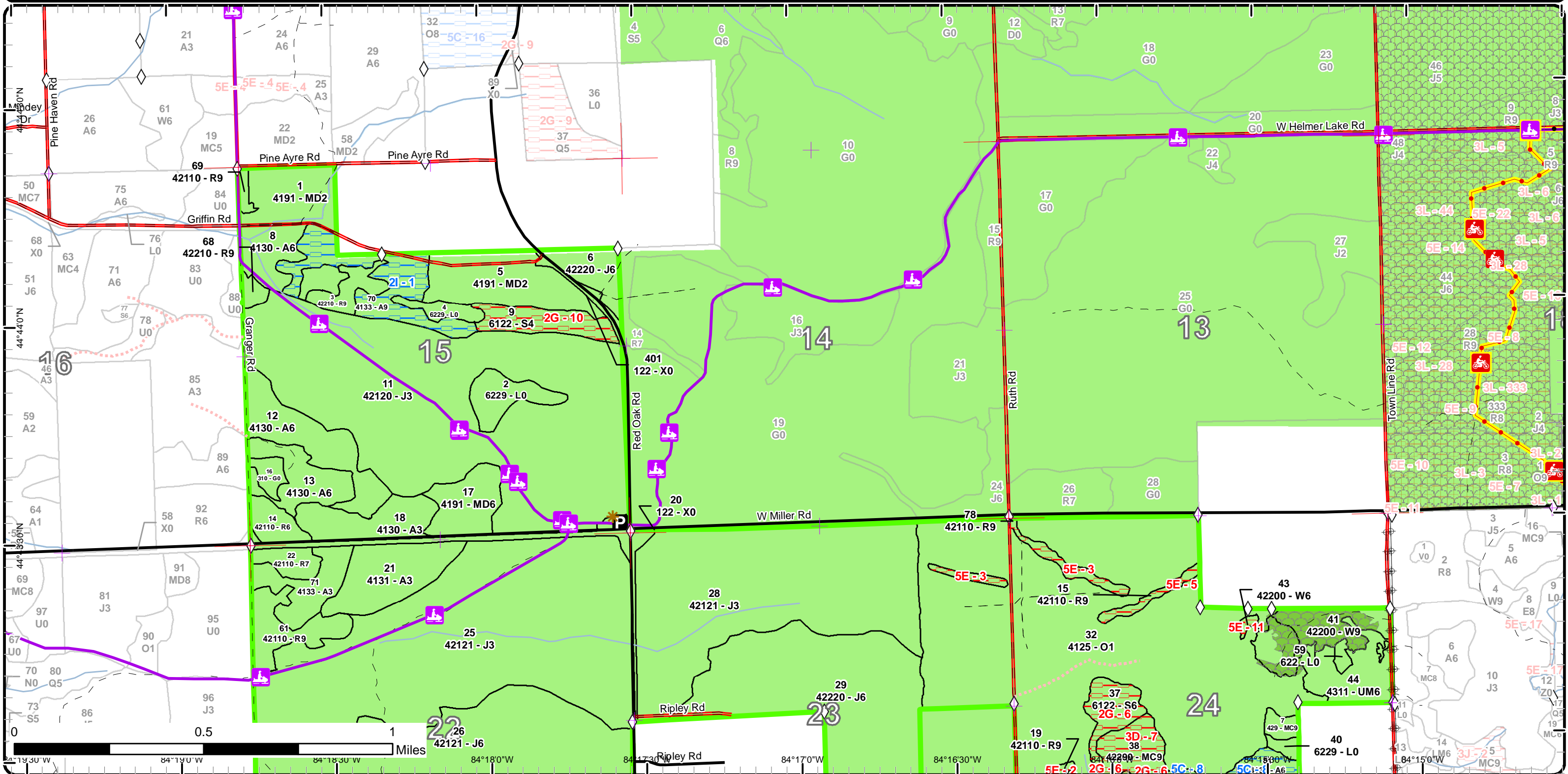


# Special Conservation Areas & Site Conditions Map

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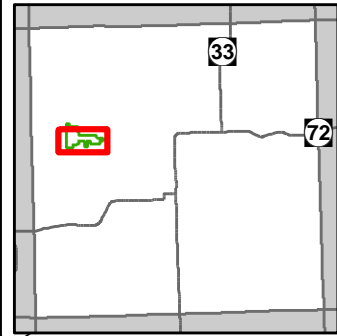


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|---|---|---|--|

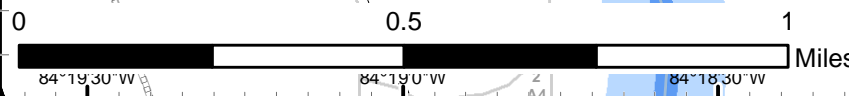
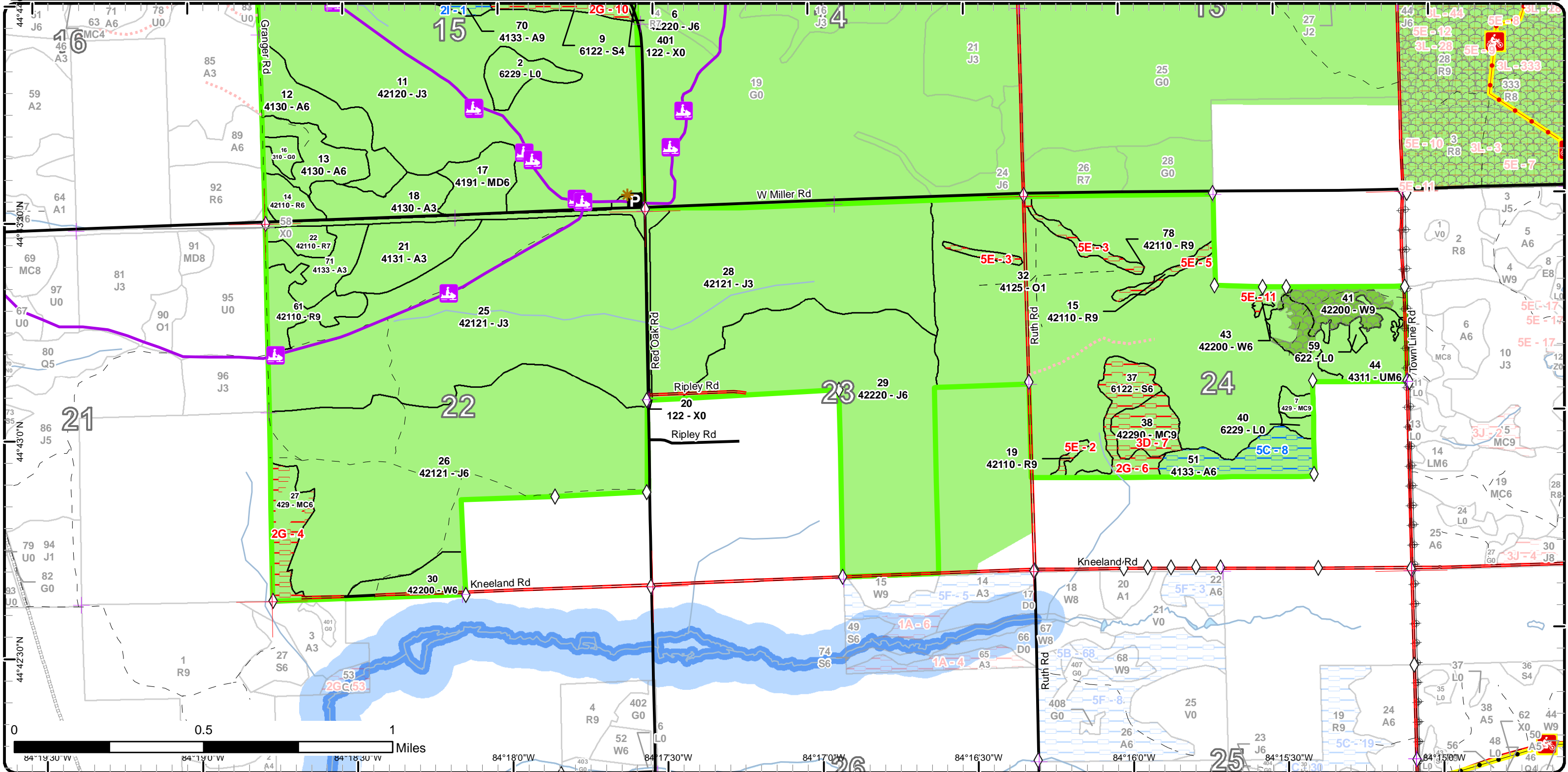


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  - SCA Removal
  - Available w/ Constraints
  - Unavailable
  - 3D: Recreational / Scenic values
  - 5E: Long-Term Retention
  - Stand Boundaries
  - Natural Rivers Vegetative Buffer
  - Natural Rivers Zoning District
  - Kirtland Warbler Habitat
  - Cold Water Streams
  - Cold Water Lakes
  - Potential Old Growth
  - Other SCA (No Category Assigned)
- 5C: Delay treatment for age/size class diversity or exceptional site quality  
 2G: Too wet (sensitive soils, does not include access issues)





Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	0	38	28	19	19	23	60	0	0	0	0	0	0	0	0	0	0	187
Herbaceous Openland	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Jack Pine	0	224	0	406	229	12	159	0	0	0	0	0	0	0	0	0	0	0	1030
Lowland Shrub	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Lowland Spruce/Fir	0	0	0	0	0	0	0	15	18	0	0	0	0	0	0	0	0	0	33
Mixed Upland Deciduous	0	0	0	57	0	0	0	0	0	18	0	0	0	0	0	0	0	0	75
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	14
Oak	0	312	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	312
Red Pine	0	0	0	0	9	0	5	17	9	21	0	0	0	0	0	0	0	0	60
Upland Conifers	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	21
Upland Mixed Forest	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	29
Urban	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
White Pine	0	0	0	0	0	0	14	1	0	16	0	0	0	0	0	0	0	0	31
<b>Total</b>	<b>49</b>	<b>536</b>	<b>38</b>	<b>491</b>	<b>257</b>	<b>60</b>	<b>222</b>	<b>93</b>	<b>27</b>	<b>55</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1840</b>



## Report 2 – Treatment Summary

Grayling Mgt. Unit

Year of Entry: 2018

Acres of Harvest

Compartment 4

Total Compartment Acres: 1,843

Commercial Harvest - 95  
 Harvests with Site Condition - 30  
 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	60	0	0	0	0	17	0	0	0	77
Mixed Upland Deciduous	18	0	0	0	0	0	0	0	0	18
Red Pine	23	0	0	0	0	7	0	0	0	30
<b>Total</b>	<b>101</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>125</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	125	0	0	0	0	311	0	5	0	440
Next Step	0	0	0	0	0	436	0	0	0	436
<b>Total</b>	<b>125</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>746</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>876</b>



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	Approval Status
12	72004012-Cut	29.7	4130 - Aspen	Poletimber Well	68	Unspec ified	Harvest	Clearcut with Retention	4131 - Aspen, Oak	Even-Aged	Draft Field Boundary

**Habitat Cut: No**

**Site Condition:**

Prescription Final harvest stand with minimal retention.

Specs: Add drumming log spec's. Note snowmobile trail, add trail protection spec's. Watch visual management.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, oak, red maple and mixed pine

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

16	72004016-NF	4.5	310 - Herbaceous Openland	Nonstocked	18	Immatu re	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Draft Field Boundary
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**Habitat Cut: No**

**Site Condition:**

Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, liming, food plot seeding, no-till prairie grass seeding, mowing,

Specs: brushing, burning, herbicide application, and planting of mast producing tree and shrubs along opening edges.

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

17	72004017-Cut	18.3	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	89	51-80	Harvest	Clearcut with Retention	412 - Oak Types	Even-Aged	Draft Field Boundary
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**Habitat Cut: No**

**Site Condition:**

Prescription Cut all trees four inches and larger in diameter. Protect established oak, and white pine regeneration. Leave all Red Pine.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable a fully stocked stand of oak, mixed hardwoods and conifer.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

22	72004022-Cut	7.2	42110 - Planted Red Pine	Sawtimber Poor	81	1-50	Harvest	Overstory Removal	4121 - Oak, Aspen	Even-Aged	Draft Field Boundary
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**Habitat Cut: No**

**Site Condition:**

Prescription Final harvest all trees 4 inches in diameter and larger. Protect established regeneration throughout the harvest. Follow retention guidelines.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable A stand that meets minimum stocking requirements of oak, aspen, red maple and mixed pine.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017



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	Approval Status
38	72004032-Monitor	310.5	42290 - Natural Mixed Pine	Sawtimber Well	94	171-200	Monitoring	Artificial Regen(1yr)	4212 - Planted Jack Pine	Even-Aged	Draft Field Boundary

**Habitat Cut: No**

**Site Condition:**

Prescription  
Specs:

Next Step ; ; ; Monitoring, Artificial Regen(3yr)  
Treatments:

Acceptable Well stocked jack pine  
Regen:

Other Percent to Treat = 100%  
Comment:

Proposed Start Date: 05/01/2016

61	72004061-Cut	17.2	42110 - Planted Red Pine	Sawtimber Well	68	111-140	Harvest	Clearcut with Retention	4121 - Oak, Aspen	Even-Aged	Draft Field Boundary
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**Habitat Cut: No**

**Site Condition:**

Prescription Cut all red pine. Protect any established regeneration. Use minimal retention. Keep harvest operations and hauling off snowmobile trail.  
Specs:

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

Acceptable A stand that meets minimum stocking requirements of oak, aspen, red maple and mixed pine.  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2017

68	72004068-Cut	3.0	42210 - Natural Red Pine	Sawtimber Well	57	81-110	Harvest	Clearcut	412 - Oak Types	Even-Aged	Draft Field Boundary
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**Habitat Cut: No**

**Site Condition:**

Prescription Cut all trees with DBH of 2 inches or larger. Project any oak regeneration present.  
Specs:

Include trail protection specs. Do not haul on trail.

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

Acceptable A stand that meets minimum stocking requirements of oak, aspen, red maple and mixed pine.  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2017

69	72004069-Cut	2.3	42110 - Planted Red Pine	Sawtimber Well	57	81-110	Harvest	Clearcut	412 - Oak Types	Even-Aged	Draft Field Boundary
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**Habitat Cut: No**

**Site Condition:**

Prescription Cut all red pine and protect the established oak understory.  
Specs:

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

Acceptable Oak with a minor component of mixed pine.  
Regen:

Other  
Comment:

Proposed Start Date: 10/01/2017



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
70 72004070-Cut	30.2	4133 - Aspen, Mixed Pine	Sawtimber Well	66	Unspecified	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

**Habitat Cut: No**      **Site Condition: Survey Needed**

Prescription Clear cut all trees 2 inches and larger in diameter. Leave some retention along the private boundary line. Watch visual management.

Specs: Add drumming log spec's. Note snowmobile trail, add trail protection spec's. Do not haul on trail.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable a fully stocked stand of aspen, oak, mixed hardwood and conifer.

Regen:

Other Both Potter and Roell looked for the survey corner adjacent to state land and weren't able to find it. A survey request is going to be required to treat this stand.

Proposed Start Date: 10/01/2017

71 72004071-Cut	17.2	4133 - Aspen, Mixed Pine	Sapling Well	18	Immature	Harvest	Overstory Removal	4121 - Oak, Aspen	Even-Aged	Draft Field Boundary
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**Habitat Cut: No**      **Site Condition:**

Prescription Cut all red pine. Protect established regeneration.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable A stand that meets minimum stocking requirements of oak, aspen, red maple and mixed pine.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

**Total Treatment Acreage Proposed: 440.1**

## Report 4 – Site Conditions

Grayling Mgt. Unit  
Paul Roell : Examiner

Compartment: 4  
Year of Entry: 2018

### Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions				
		With Condition	Not Available		2I	5C	2G	3D	5E
187	134	53	0	Aspen	30	23			
4	4	0	0	Herbaceous Openland					
1031	1031	0	0	Jack Pine					
23	23	0	0	Lowland Shrub					
33	0	0	33	Lowland Spruce/Fir			33		
76	76	0	0	Mixed Upland Deciduous					
14	0	0	14	Natural Mixed Pines				14	
312	311	0	1	Oak					1
61	47	0	14	Red Pine					14
21	9	0	12	Upland Conifers			12		
29	29	0	0	Upland Mixed Forest					
20	20	0	0	Urban					
31	30	0	1	White Pine					1
1,843	1,715	53	75	Total Forested Acres	30	23	45	14	15
	93%	3%	4%	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	2I: Survey needed	30	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
2	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
3	Unavailable	5E: Long-Term Retention	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 4 – Site Conditions

Grayling Mgt. Unit  
Paul Roell : Examiner

Compartment: 4  
Year of Entry: 2018

4	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	12	2F: Too steep	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
5	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
6	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	18	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
7	<b>Unavailable</b>	<b>3D: Recreational / Scenic values</b>	15	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
8	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	23	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Harvest next YOE							
10	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	15	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

# Report 4 – Site Conditions

Grayling Mgt. Unit  
Paul Roell : Examiner

Compartment: 4  
Year of Entry: 2018

11	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							





**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
	Potential Old Growth		SCA Removal	19
<b>Comments</b>				
Doesn't meet criteria				



## Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and cooperative process between the DNR and the U.S. Fish and Wildlife service for the recovery of threatened and endangered species, as governed by Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, and the Federal Endangered Species Act of 1973. This is an active program, with proposed species plans in various stages of review. As of now only two exist, Kirtland Warbler Habitat and Piping Plover Habitat.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.

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## Grayling Mgt. Unit

## Report 7 – Forested Stands

Compartment: 4  
Year of Entry: 2018

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	23.2	29	1-50	Cut under sale contract 72-076-88-01.
3	42210 - Natural Red Pine	Sawtimber Well	8.6	73	111-140	OPIC - FMD: PLOT DATA FROM 1986. Diverse stand. Pockets of aspen dying out. Over-all a small pocket of red pine. Would do a lot of damage to understory red pine if treated now.
5	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	34.2	29	Immature	Stand was trenched but never planted. There are also traces of red pine and spruce regeneration in the stand.
6	42220 - Natural Jack Pine	Poletimber Well	12.3	49	81-110	Scattered red pine throughout. There is a mixed age of jack pine.
7	429 - Mixed Upland Conifers	Sawtimber Well	3.6	50	Unspecified	
8	4130 - Aspen	Poletimber Well	19.1	38	Unspecified	
9	6122 - Black Spruce	Poletimber Poor	15.0	68	Unspecified	
11	42120 - Planted Jack Pine	Sapling Well	247.6	29	Immature	
12	4130 - Aspen	Poletimber Well	29.7	68	Unspecified	
13	4130 - Aspen	Poletimber Well	18.7	43	Unspecified	
14	42110 - Planted Red Pine	Poletimber Well	8.5	34	1-50	RP planted in 1983, NPO, BTA & RM sprout regen from the 1982 harvest along with naturally recruited JP.
15	42110 - Planted Red Pine	Sawtimber Well	4.4	86	111-140	
17	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	18.3	89	51-80	
18	4130 - Aspen	Sapling Well	21.0	18	Immature	Cut in 1999 contract # 014-98-01, 4 corners aspen. Stump sprouting of oak is more predominant than aspen in a few area along the north edge.
19	42110 - Planted Red Pine	Sawtimber Well	1.8	86	111-140	Retention Island
21	4131 - Aspen, Oak	Sapling Well	28.2	29	Immature	Stand final harvested 1988 with a trace of oak and red pine log sized trees left.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	42110 - Planted Red Pine	Sawtimber Poor	7.2	81	1-50	Harvested in early 2010 - "Big Red" #720160801. No red pine regeneration. Stand along county road 608, Shelterwood harvest mark to leave 30 BA of Red pine. The management objective is red pine but will accept any combination red pine, aspen, oak, and jack pine that will provide for sufficient stocking to meet the regeneration needs of the stand. If the stands overall level is determined to be insufficient, the stand will be artificially regenerated to red pine. A couple of small finger of red pine enter into the adjacent A3 stand. Mark heavier in south and east edge of stand to help regenerate more aspen.
25	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	224.1	8	Immature	(KW - CUT ONLY IF NEEDED FOR NEW KW PLAN. SNOW TRAIL BISECTS. Stand was put up for sale #013-98-01, only one unit (unit 5) 35 acres was cut, contractor went out of business. Rest of the stand has been put up for sale again #022-00-01. Stand final harvested by Inman forest products spring of 2003.) FTP # 72-483 submitted to plant to KW JP includes both cut areas. 01/06/2004 mm Stand planted to 2-0 jack pine during summer 2006 under FTP W72-483. Jack Pine planted May 2009 per W72-483.
26	42121 - Planted Jack Pine, Mixed Deciduous	Poletimber Well	229.3	37	Unspecified	Majority of this stand was planted in 1980 with a small portion planted in 1985.
27	429 - Mixed Upland Conifers	Poletimber Well	17.3	53	81-110	Areas of flowing water in the north and of a defined creek to the south
28	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	158.5	27	Immature	Cut under sale number 72-033-88-01
29	42220 - Natural Jack Pine	Poletimber Well	158.7	57	Unspecified	Old OI comment is very accurate. A few open areas beginning to fill in nicely. Some nice oak regen but also heavy deer browse. Larger diameter exists in the SENW portion of this stand.
30	42200 - Natural White Pine	Poletimber Well	14.1	56	81-110	I agree with the old OI comment it also appears as if there was a fire in portions of this stand with a salvage harvest. OPIC - FMD: VARIABLE AGE - MANY SMALL HARVESTS WITH OVERSTORY REMOVED IN 1984. A few scattered red pine and large white pine. White pine understory.
32	4125 - Black, N. Pin Oak	Sapling Poor	312.0	4	Immature	Stand was harvested in 2014 under contract 72-034-13-01. Planted in the spring of 2015. Portion of stand west of Ruth Road (approx. 80 acres) is an experimental planting of mixed jack pine and red pine.
37	6122 - Black Spruce	Poletimber Well	18.2	74	Unspecified	Traces of red maple in the overstory. Wet stand with a mixture of spruce/fir, aspen, white pine and paper birch. Some pockets of tag alder. When the adjacent stands were treated portions of the this stand were final harvested.
38	42290 - Natural Mixed Pine	Sawtimber Well	14.5	94	171-200	
41	42200 - Natural White Pine	Sawtimber Well	16.0	80	111-140	There are some older super canopy pine in this stand 115-120. Planting records in the section adjacent to this stand show red and white pine planted 1930/31 which lines up with some of the trees that were aged.

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## Grayling Mgt. Unit

## Report 7 – Forested Stands

Compartment: 4  
Year of Entry: 2018

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
<b>43</b>	42200 - Natural White Pine	Poletimber Well	1.2	66	81-110	Pocket of retention
<b>44</b>	4311 - Pine, Aspen Mix	Poletimber Well	29.3	47	81-110	Ownership cards list wildlife habitat harvests and a dead oak harvest in this stand. Some mature red maple and aspen in the stand. There is a drainage that connects the three low areas snow limited identification of the drainage.
<b>51</b>	4133 - Aspen, Mixed Pine	Poletimber Well	22.6	50	Unspecified	There is a cut record on the ownership cards. Also a small amount of red pine present in the stand.
<b>61</b>	42110 - Planted Red Pine	Sawtimber Well	17.2	68	111-140	
<b>68</b>	42210 - Natural Red Pine	Sawtimber Well	3.0	57	81-110	
<b>69</b>	42110 - Planted Red Pine	Sawtimber Well	2.3	57	81-110	
<b>70</b>	4133 - Aspen, Mixed Pine	Sawtimber Well	30.2	66	Unspecified	
<b>71</b>	4133 - Aspen, Mixed Pine	Sapling Well	17.2	18	Immature	Cut in 1999 contract # 014-98-01, 4 corners aspen. Stump sprouting of oak is more predominant than aspen in a few area along the north edge. Scattered red pine, and a few clumps
<b>78</b>	42110 - Planted Red Pine	Sawtimber Well	8.2	86	111-140	OPIC - FMD: Open with little understory. Follow the Muskrat Lake Management Plan. DO NOT TREAT STAND UNTIL 2013 PER WILDLIFE. Heavier JP along CR-608. Red pine currently not utility pole quality with the exception of a few individuals. Some scattered oak in the pole-size class.



Stand	Cover Type	Acres	Managed Site	General Comments:
2	6229 - Mixed lowland shrub	12.7	No	Low stocked lowland stand with some balsam, spruce, tamarack and aspen.
4	6229 - Mixed lowland shrub	5.4	No	A lot of tag alder with some birch, white pine, spruce and fir seeding in along the edge looks like an old beaver pond based off the 1998 photos.
16	310 - Herbaceous Openland	4.5	Yes	
20	122 - Road/Parking Lot	16.0	No	SNOWMOBILE PARKING LOT/ ROAD
40	6229 - Mixed lowland shrub	2.5	No	
59	622 - Lowland Shrub	2.9	No	Mostly tag alder there is some water under the snow.
401	122 - Road/Parking Lot	3.9	No	