



**Gwinn Forest Management Unit
Compartment Review Presentation
Compartment 252 Entry Year: 2014
Compartment Acreage: 1,166 County: Marquette**

Revision Date: 8/20/12

Stand Examiner: Dean Wilson

Legal Description: T46N-R27W, Sections 28, 33.

RMU (if applicable): Chain Lakes Moraine Management Area

Management Goals: Mixed use.

Soil and Topography: Soils range from sandy in the north to loamy sands to sandy loams in the south. Some organic peat and muck soils occur in smaller wetland areas. Topography ranges from level to rolling to moderately hilly.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment is primarily surrounded by State land; however, it has some non-industrial lands adjacent to and inside its boundary. Land use around the area is passive recreation and forest production.

Unique, Natural Features: No known MNFI concerns. Potential for wetland plants such as Canada rice grass, black sedge, clinton's bulrush, *Juncus vaseyi*, sweetcoltsfoot. Potential for red-shouldered hawk in northern stands. Potential for merlin, goshawk, and eagle in W9 stands. Potential for rare plants of rich mesic forests: *Carex assiniboinensis*, green spleenwort, showy orchis, Ginseng, Goblin Fern. Potential for rare plants of dry northern forest and dry mesic northern forest: *Dalibarda repens*, pine drops.

Archeological, Historical, and Cultural Features: None identified with HAL

Special Management Designations or Considerations: Special Conservation areas are designated around riparian areas.

Watershed and Fisheries Considerations: Hemmings Lake, a small bog pond, and a spring fed tributary to the Escanaba River occur in this compartment.

Wildlife Habitat Considerations: Featured species include black bear, gray jay, northern goshawk, pileated woodpecker and red crossbill.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and minor coarse-textured glacial till. The glacial drift thickness varies between 50 and 100 feet. The Precambrian Archean Granite/Gneiss subcrop below the glacial drift. This rock could be used as dimension stone. Gravel pits are not located in the area, but potential may be good in the southern portion. The Empire iron mine is located seven miles to the northeast. Sections 34 and 35, to the east, were previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access: Is good to and around the compartment.

Survey Needs: None at present.

Recreational Facilities and Opportunities: There are no developed recreational facilities in this compartment.

Fire Protection: Moderate fire risk here due to existing soils.

Additional Compartment Information:

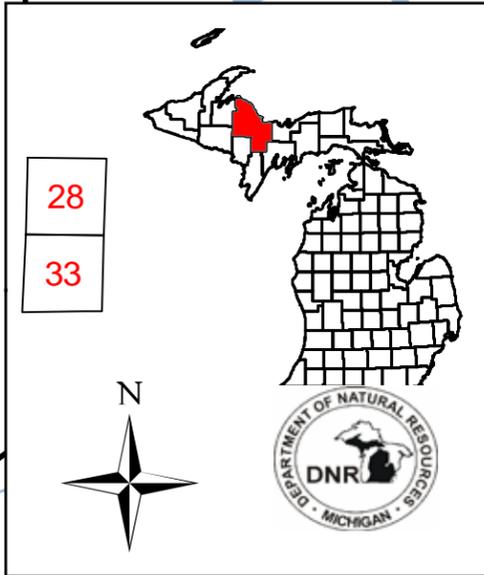
- **The following reports from the Inventory are attached:**
 - ◆ **Total Acres by Cover Type and Age Class**
 - ◆ **Proposed Treatment Summary**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**
 - ◆ **Stand Details (Forested and Nonforested)**
 - ◆ **Dedicated and Proposed Special Conservation Areas**

- **The following information is displayed, where pertinent, on the attached compartment maps:**
 - ◆ **Base feature information, stand boundaries, cover types, and numbers**
 - ◆ **Proposed treatments**
 - ◆ **Details on the road access system**

Cover Type & Treatment Map

Compartment: 252
 T46N R27W Sec. 28, 33
 County: Marquette
 Unit: Gwinn
 YOE: 2014
 Acres: 1,166 GIS Calculated
 Examiner: Dean Wilson
 Map Revised: 08/28/2012
 Map Phase: Pre-Review

Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- ◆ Survey Grade
- + Remonumented Section Corners
- Miris Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- - - Poor Dirt Roads
- - - County Poor Dirt Roads
- - - Trail (Non-Recreation)
- - - Closed Roads
- Stream
- - - Intermittent Stream
- Lakes and Rivers
- State Forest Land

Treatments

- Clearcut (w/Reserves, Patch/Strip)

Forest Stands

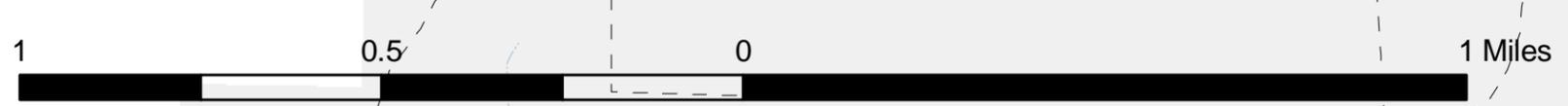
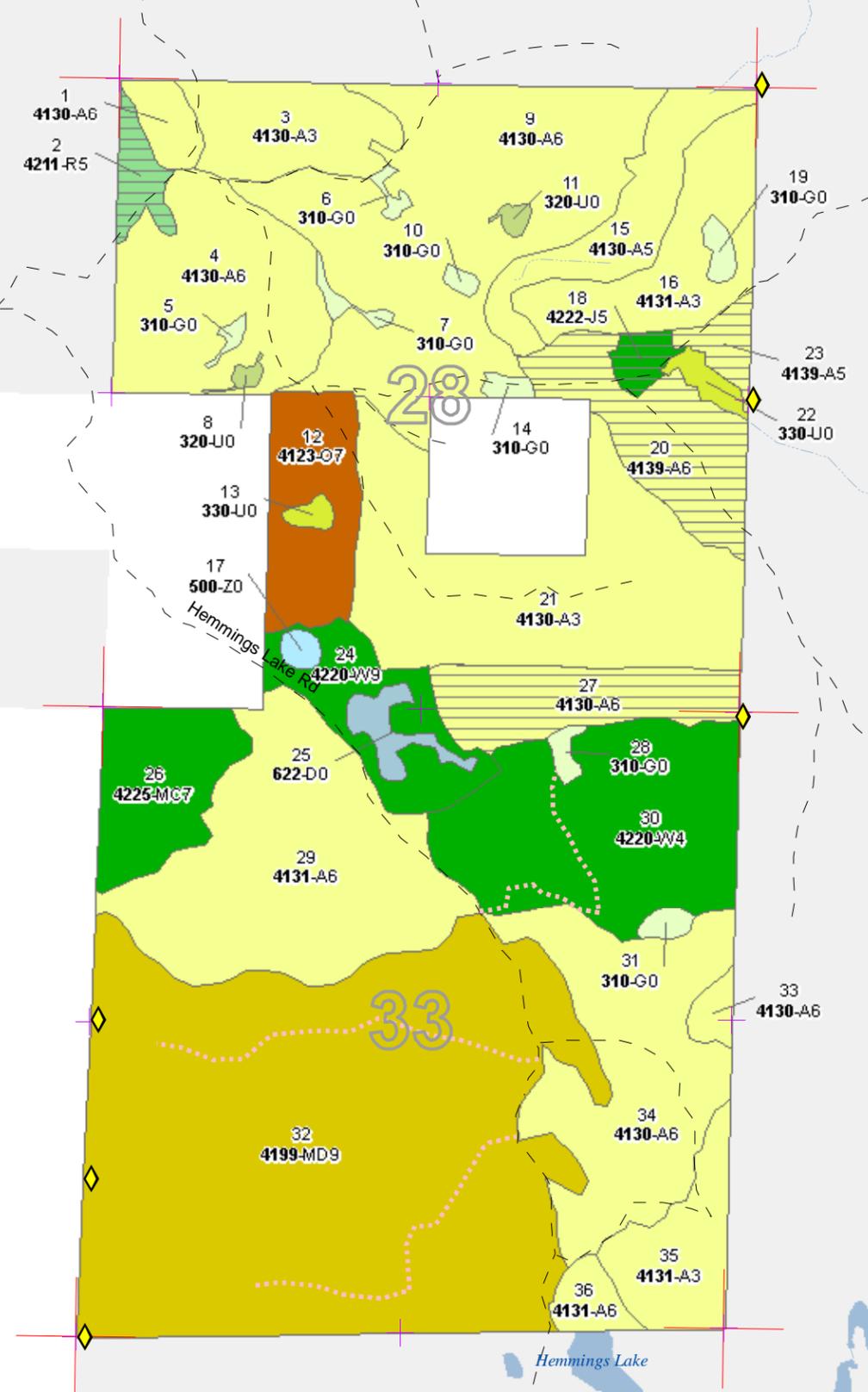
Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines

Non-Forest Stands

Level 3

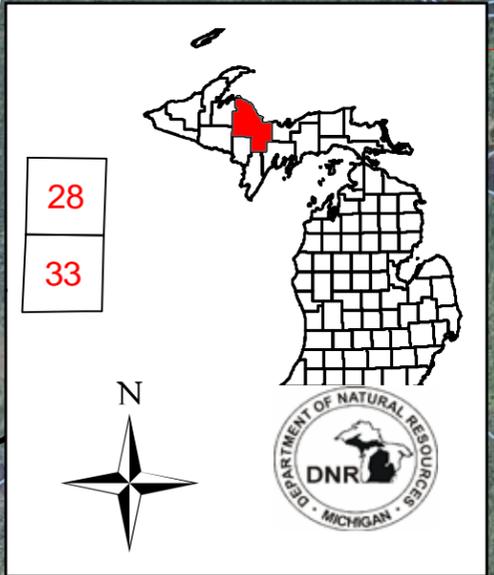
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub



Stand Boundary Map

Compartment: 252
 T46N R27W Sec. 28, 33
 County: Marquette
 Unit: Gwinn
 YOE: 2014
 Acres: 1,166 GIS Calculated
 Examiner: Dean Wilson
 Map Revised: 07/13/2012
 Map Phase: Pre-Review

Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- Miris Corners
- ◆ Survey Grade
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Stream
- Intermittent Stream
- Stand Boundaries

Forest Stands

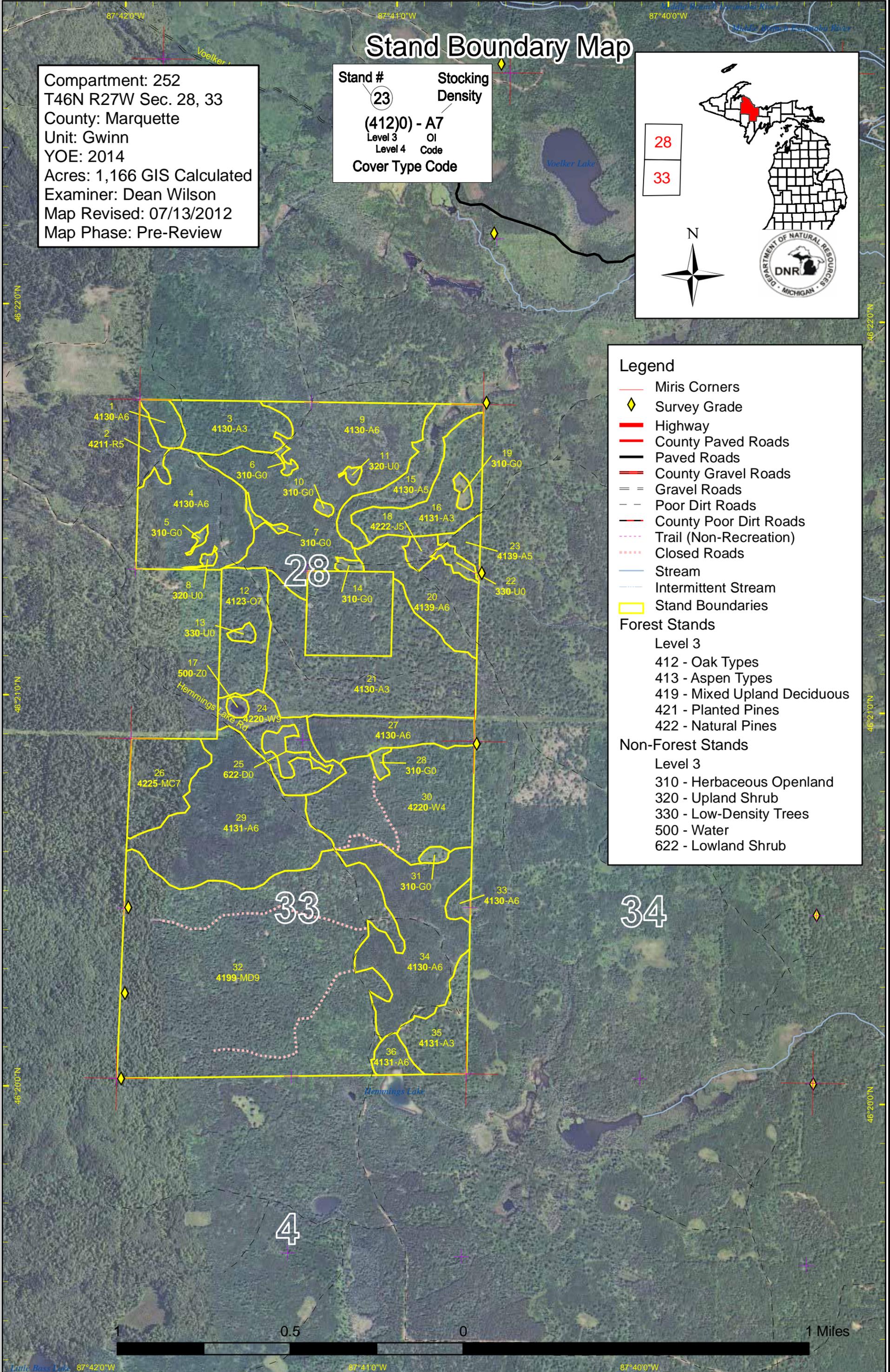
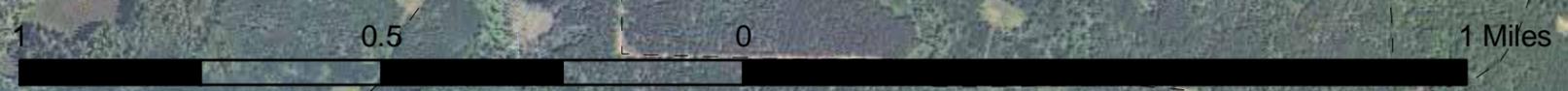
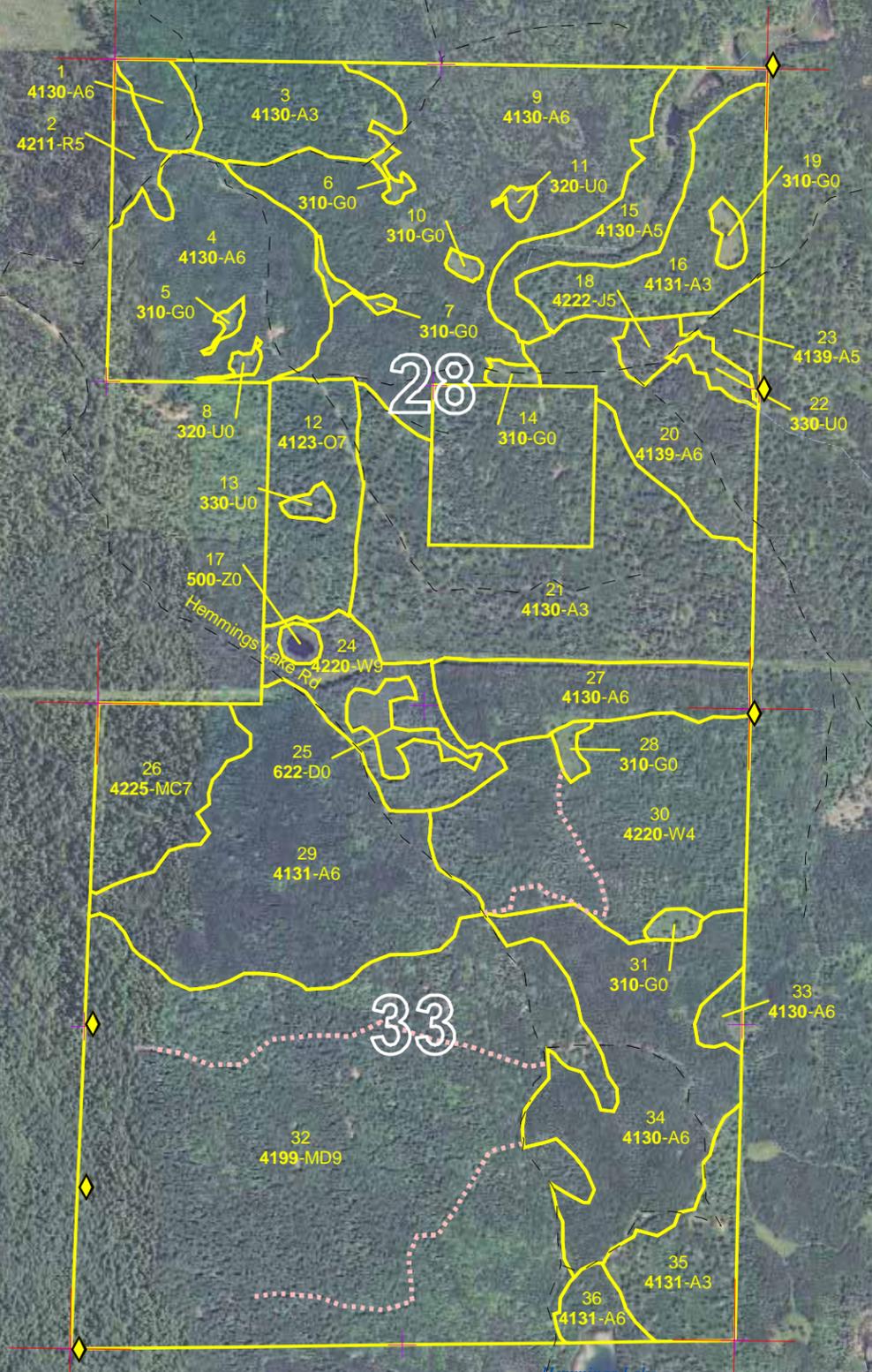
Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
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- 422 - Natural Pines

Non-Forest Stands

Level 3

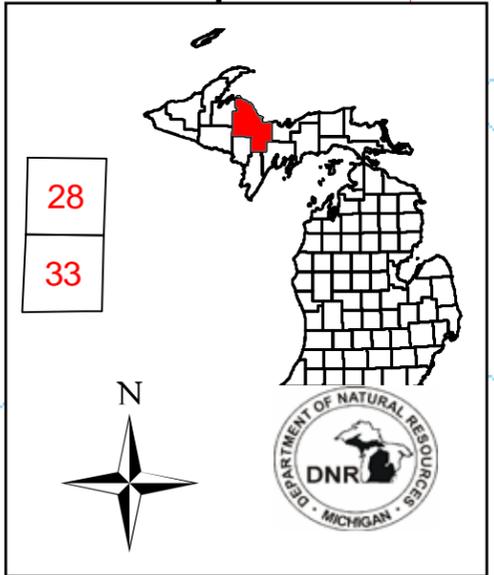
- 310 - Herbaceous Openland
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- 500 - Water
- 622 - Lowland Shrub



Dedicated & Proposed Special Conservation Area Map

Compartment: 252
 T46N R27W Sec. 28, 33
 County: Marquette
 Unit: Gwinn
 YOE: 2014
 Acres: 1,166 GIS Calculated
 Examiner: Dean Wilson
 Map Revised: 08/28/2012
 Map Phase: Pre-Review

Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- Miris Corners
- Stand Boundaries
- Proposed Special Conservation Areas
 - SCA - Special Conservation Area
 - SCA Removal
- Dedicated Special Conservation Areas
- Cold Water Streams

Forest Stands

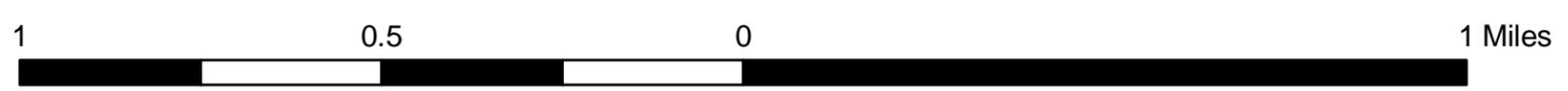
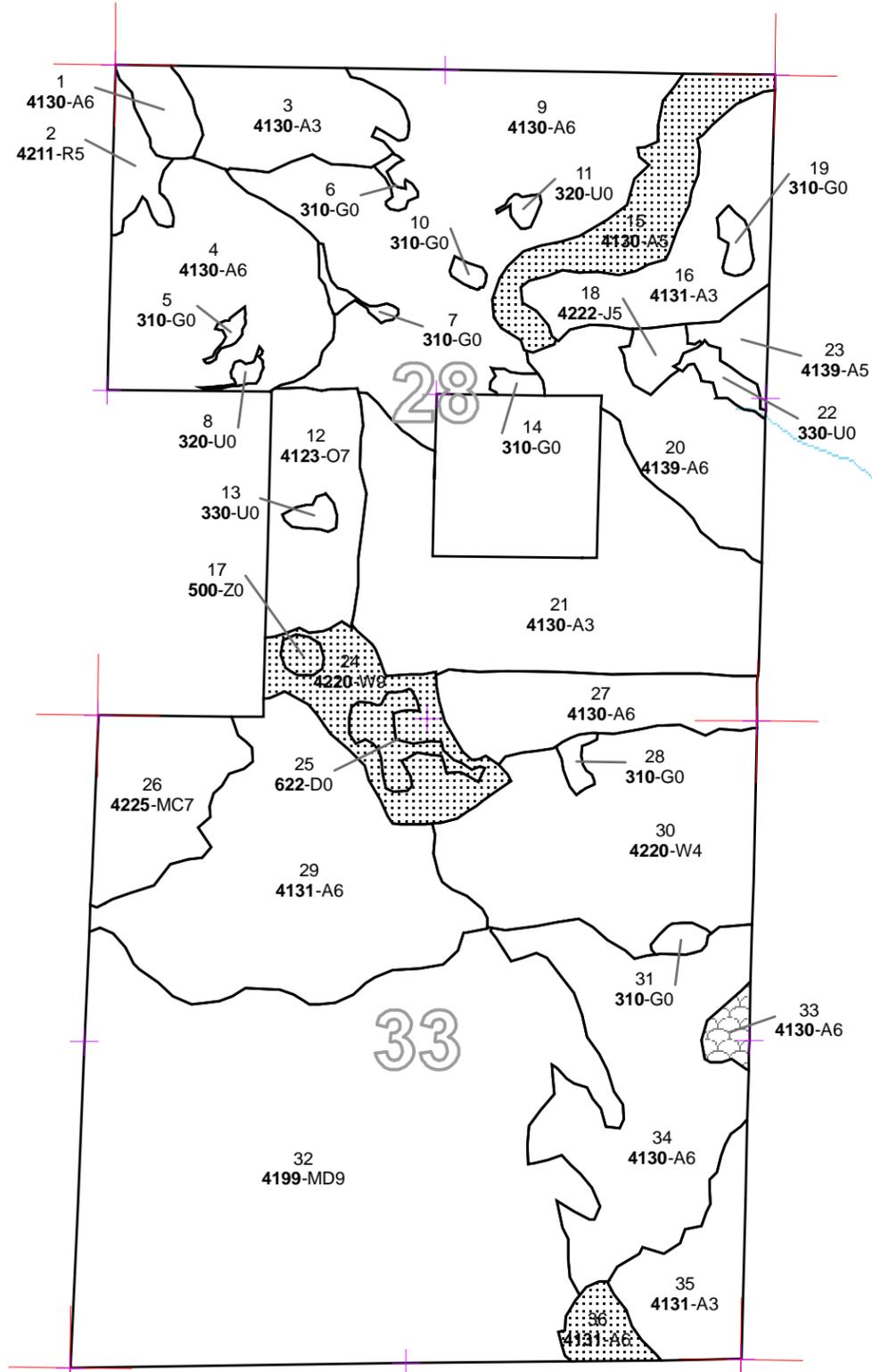
Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub



87°42'0"W 87°41'0"W 87°40'0"W

46°22'0"N

46°22'0"N

46°21'0"N

46°21'0"N

46°20'0"N

46°20'0"N

Table 1 – Total Acres by Cover Type and Age Class



	Age Class														Total
	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 +	Uneten Age	
Aspen	26	163	178	106	77	0	0	0	106	7	0	0	0	0	662
Herbaceous Openland	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Jack Pine	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
Low-Density Trees	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	289	0	0	0	0	289
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	32	0	0	0	0	32
Oak	0	0	0	0	0	0	0	0	0	31	0	0	0	0	31
Red Pine	0	0	0	0	0	8	0	0	0	0	0	0	0	0	8
Treed Bog	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Upland Shrub	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Water	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
White Pine	0	0	0	0	0	0	0	0	108	0	0	0	0	0	108
Total	56	163	178	106	77	8	0	0	219	359	0	0	0	0	1166



Table 2 – Proposed Treatment Summaries

Gwinn Mgt. Unit
Year of Entry 2014

Compartment 252
Total Compartment Acres: 1166

Acres by Treatment Type

Commercial Harvest - 87	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	74	0	0	0	0	0	74
Jack Pine	5	0	0	0	0	0	5
Red Pine	8	0	0	0	0	0	8
Total	87	0	0	0	0	0	87



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	32252002-Cut	8.0	42110 - Planted Red Pine	Medium Density Pole	52	81-110	Harvest	Clearcut	42120 - Planted Jack Pine	Cmpt. Review Proposal
<u>Prescription:</u> Clearcut. <u>Specs:</u> <u>Other Comments:</u> No retention due to small stand size. May want to mark 2 to 3 red pine per acre to leave. <u>Next Steps:</u> Post harvest disk trench and direct seed to jack pine. Check regeneration per work instructions. <u>Proposed Start Date:</u> 10/01/2013										
18	32252018-Cut	4.9	42221 - Natural Jack Pine, Mixed Deciduous	Medium Density Pole	87	51-80	Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal
<u>Prescription:</u> Clearcut all species excluding oak and any red or white pine that may occur. <u>Specs:</u> <u>Other Comments:</u> Retention of oak, red and white pine will accomplish 3 to 10 percent of basal area. <u>Next Steps:</u> Post harvest disk trench and direct seed to jack pine. Herbicide as necessary. Check regeneration per work instructions. <u>Proposed Start Date:</u> 10/01/2013										
20	32252020-Cut	35.9	4139 - Aspen, Mixed Deciduous	High Density Pole	87	81-110	Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal
<u>Prescription:</u> Stand is currently under contract. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> Check retention per work instruction. <u>Proposed Start Date:</u> 10/01/2011										
23	32252023-Cut	6.6	4139 - Aspen, Mixed Deciduous	Medium Density Pole	87	51-80	Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal
<u>Prescription:</u> Clearcut all species excluding oak, red and white pine. <u>Specs:</u> <u>Other Comments:</u> May want to mark a few oak to meet the 3 to 10 percent of basal area retention guidelines. <u>Next Steps:</u> Check regeneration per work instructions. <u>Proposed Start Date:</u> 10/01/2013										

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
27 32252027-Cut	31.2	4130 - Aspen	High Density Pole	87	81-110	Harvest	Clearcut with Reserves	4133 - Aspen, Mixed Pine	Cmpt. Review Proposal

Prescription. Clearcut all species excluding oak, red and white pine. Retain two 1/4 acre patches uncut.

Specs:

Other Retaining oak, red and white pine will amount to 3 to 10 percent of basal area.

Comments:

Next Check regeneration per work instructions.

Steps:

Proposed

Start Date: 10/01/2013

**Total Treatment
Acreage Proposed: 86.6**

**Table 4 -- Treatments Prescribed with
a Limiting Factor**



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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#Error

Prescription
Specs:

Other
Comment:

Next
Steps:

Proposed
Start Date: #Error

Limiting Factor and No
Treatment Reason

**Total Treatment
Acreage Proposed: 0**

Out of YOE -- Treatments
Prescribed with No Limiting Factor

Year of Entry: 2014



Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
<u>Prescription Specs:</u>									
<u>Other Comments:</u>									
<u>Next Steps:</u>									
<u>Proposed Start Date:</u> #Error									

Total Treatment Acreage Proposed: 0

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Gwinn Mgt. Unit

5 – Forested Stands

Compartment: 252
Year of Entry: 2014

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	High Density Pole	7.7	39	1-50	KG bladed in 1973 to regenerate aspen.
2	42110 - Planted Red Pine	Medium Density Pole	8.0	52	81-110	Machine planted to red pine in 1960-failed with an estimated 40 to 50 percent survival. Natural jack pine of various ages mixed in and mostly overmature.
3	4130 - Aspen	High Density Sapling	28.7	16		Harvested in 1996: TS# 7-64. Two storied stand.
4	4130 - Aspen	High Density Pole	59.3	26	1-50	Harvested in 1986: TS# 011-84-2.
9	4130 - Aspen	High Density Pole	118.6	26	1-50	Harvested in 1986: TS# 011-84-01.
12	4123 - Red Oak	Low Density Log	31.3	95	1-50	Harvested in 1997: TS# 14-94. Two storied stand.
15	4130 - Aspen	Medium Density Pole	28.1	87	51-80	SCA = Riparian zone protection.
16	4131 - Aspen, Oak	High Density Sapling	36.1	17		Harvested in 1995: TS# 14-94.
18	42221 - Natural Jack Pine, Mixed Deciduous	Medium Density Pole	4.9	87	51-80	
20	4139 - Aspen, Mixed Deciduous	High Density Pole	35.9	87	81-110	
21	4130 - Aspen	High Density Sapling	97.7	15	1-50	Harvested in 1997: TS# 1147-94-01.
23	4139 - Aspen, Mixed Deciduous	Medium Density Pole	6.6	87	51-80	
24	42200 - Natural White Pine	High Density Log	26.6	87	111-140	SCA = Buffer around a bog.
26	42250 - Pine, Oak	Low Density Log	31.6	96	1-50	Cut in 1997: TS# 16-94. Two storied stand.
27	4130 - Aspen	High Density Pole	31.2	87	81-110	
29	4131 - Aspen, Oak	High Density Pole	98.4	37	81-110	Harvested in 1975.
30	42200 - Natural White Pine	Low Density Pole	81.3	87	1-50	Harvested in 1997: TS# 8-94. Two storied stand.
32	4199 - Other Mixed Upland Deciduous	High Density Log	289.2	95	51-80	Selectively cut in 2008: TS# 115-04-01 and in 1997: TS# 12/76A

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Gwinn Mgt. Unit

5 – Forested Stands

Compartment: 252
Year of Entry: 2014



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
33	4130 - Aspen	High Density Pole	4.1	87	51-80	SCA = Buffer to kettle hole.
34	4130 - Aspen	High Density Pole	77.0	44	81-110	Treated in 1968.
35	4131 - Aspen, Oak	High Density Sapling	25.5	7	1-50	Harvested in 205: TS# 116-04-01. Oak and pine retained.
36	4131 - Aspen, Oak	High Density Pole	7.3	96	111-140	SCA = Buffer around Hemmings Lake.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
5	3105 - Mixed Upland Herbaceous	1.0	Yes	Low (NonForested)	
6	3105 - Mixed Upland Herbaceous	1.3	No	Unspecified	
7	3105 - Mixed Upland Herbaceous	1.9	No	Unspecified	
8	3201 - Sweet Fern	1.1	Yes	Low (NonForested)	
10	310 - Herbaceous Openland	1.1	No	Unspecified	
11	3201 - Sweet Fern	1.3	Yes	Low (NonForested)	
13	330 - Low-Density Trees	1.9	No	Unspecified	
14	3105 - Mixed Upland Herbaceous	1.7	No	Unspecified	
17	50 - Water	2.1	No	Unspecified	
19	3105 - Mixed Upland Herbaceous	2.5	Yes	Low (NonForested)	
22	330 - Low-Density Trees	3.8	No	Unspecified	
25	6224 - Treed Bog	6.7	No	Unspecified	
28	3105 - Mixed Upland Herbaceous	2.0	Yes	Low (NonForested)	
31	3103 - Rubus-Fern	2.2	Yes	Low (NonForested)	



7 – 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.

Stand	SCA Type	SCA Name	Acres	Comments
15	Unique Site - SCA	32252015	28.1	SCA = Riparian zone protection.
24	Unique Site - SCA	32252024	26.6	SCA = Surrounds a bog complex providing unique habitat.
33	SCA Removal	32252033	4.1	SCA Removal - does not meet POG criteria.
36	Unique Site - SCA	32252036	7.3	SCA = Riparian zone protection around Hemmings Lake.
17	Unique Site - SCA	NF_32252017	2.1	SCA = Part of a bog complex and includes a small bog lake,
25	Unique Site - SCA	NF_32252025	6.7	SCA = Part of a treed bog complex.



8 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

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.