



**Gwinn Forest Management Unit
Compartment Review Presentation
Compartment 259 Entry Year: 2013
Compartment Acreage: 1, 072 County: Marquette**

Revision Date: 8/18/2011

Stand Examiner: Dean Wilson

Legal Description: T45N R27W Sections 1 and 12.

RMU (if applicable): Chain Lakes Moraine Management Area

Management Goals: Mixed use.

Soil and Topography: Soils range from coarse sands to fine sands to some areas of loamy sands in the uplands. The lowlands contain muck and or peat soils. Topography ranges from level to rolling to moderately hilly in the southwest corner.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Mostly adjacent to State land with two eighty and one forty acre parcels around the perimeter. Land use is primarily for forest production and passive recreation.

Unique, Natural Features: The Bear Creek and Flopper Creek flow through this tract. In the southwest corner is a large spring fed pond and its associated drainage that flows into the Hay lake drainage.

Archeological, Historical, and Cultural Features: Unknown.

Special Management Designations or Considerations: Watershed protection.

Watershed and Fisheries Considerations: Watershed protection.

Wildlife Habitat Considerations: Within Special Conservation Areas, try to manage for diversity and older age classes for wildlife, aesthetics, and riparian protection. Maintain or increase and/or improve oak for hard mast production, mimic natural disturbance in white and red pine, and strive to increase diversity for wildlife. Diversity in habitat types in this compartment offers a variety of hunting, trapping, and wildlife viewing opportunities. This compartment contains several constructed wildlife openings.

Mineral Resource and Development Concerns and/or Restrictions: Sections 1 and 12, T45N-R27W, Marquette County. Surface sediments consist of coarse-textured glacial till. The glacial drift thickness varies between 50 and 100 feet. The Precambrian Archean Granite/Gneiss subcrops below the glacial drift. There is not a current economic use for these rocks. Gravel pits are not located in the area, but potential appears to be good. Abandoned iron mines are located nine miles to the north. Section 2 to the west was previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access: Is good in section 1 and the north half of section 12. Access to the south half of 12 is impeded by Bear Creek.

Survey Needs: None.

Recreational Facilities and Opportunities: This area is heavily used for passive recreation.

Fire Protection: Fire risk is moderate.

Additional Compartment Information: Aspen and red pine dominate the uplands. Mixed lowland conifers and black spruce make up the forest cover in the lowlands.

- **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**

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Cover Type & Treatment Map

Compartment 259
 T45N, R27W, Sec. 36
 T45N, R27W, Sec. 01, 12
 County: Marquette
 Unit: Gwinn
 YOE: 2013
 Acres: 1,072 GIS Calculated
 Stand Examiner: Dean Wilson
 Map Revised: 8/23/2011
 Map Phase: Pre-Review

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

36
 1
 12

N

Legend

- Miris Corners
- Remonumented Section Corners
- Paved Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Berm
- Motorcycle (DNR Sticker)
- Motorcycle Trails
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers
- Planted

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Other Treatment - See Comments

Forest Stands

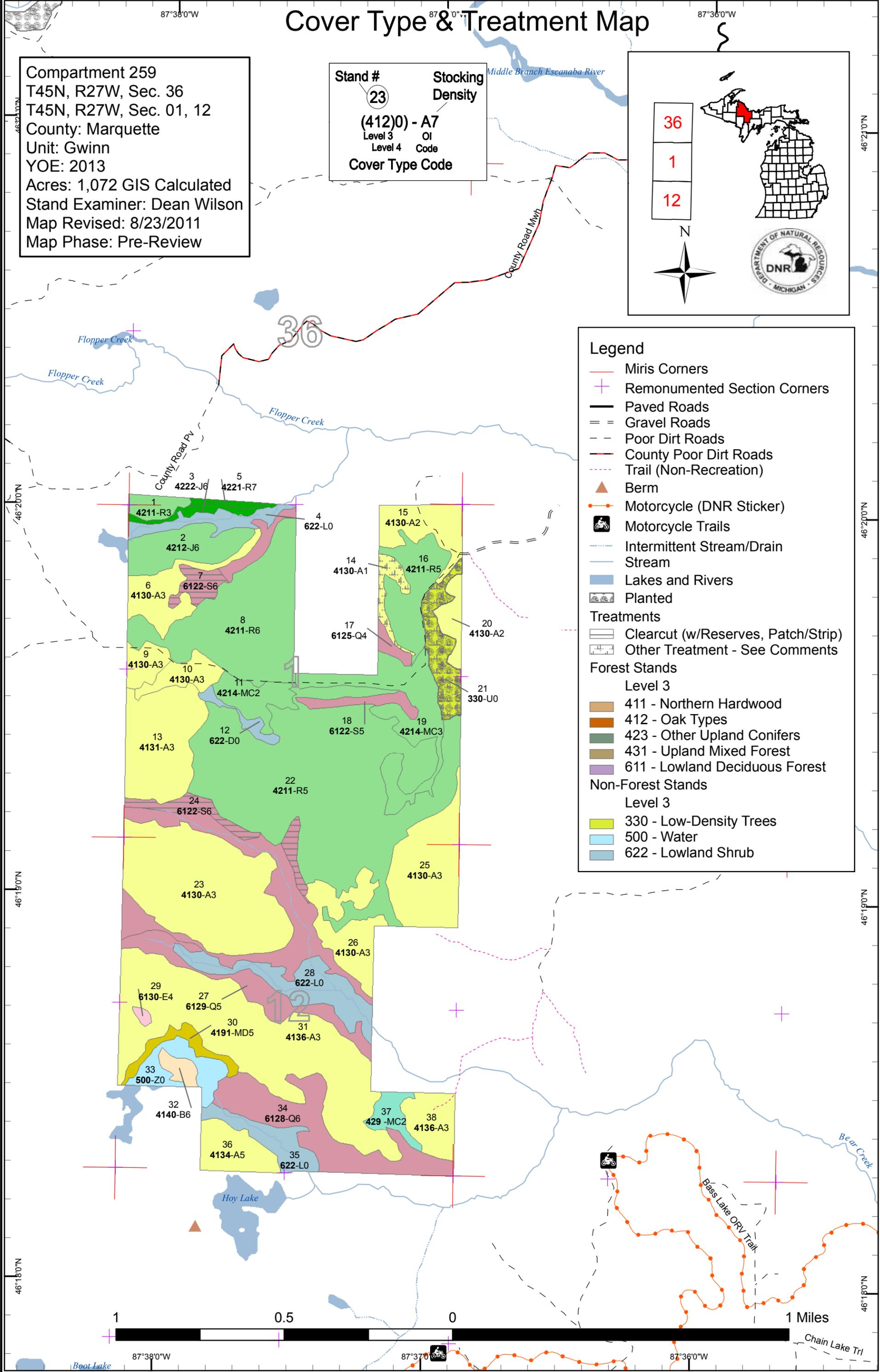
Level 3

- 411 - Northern Hardwood
- 412 - Oak Types
- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest

Non-Forest Stands

Level 3

- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub



Stand Boundary Map

Compartment 259
 T45N, R27W, Sec. 36
 T45N, R27W, Sec. 01, 12
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Stocking Density
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36
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DEPARTMENT OF NATURAL RESOURCES
DNR
MICHIGAN

Legend

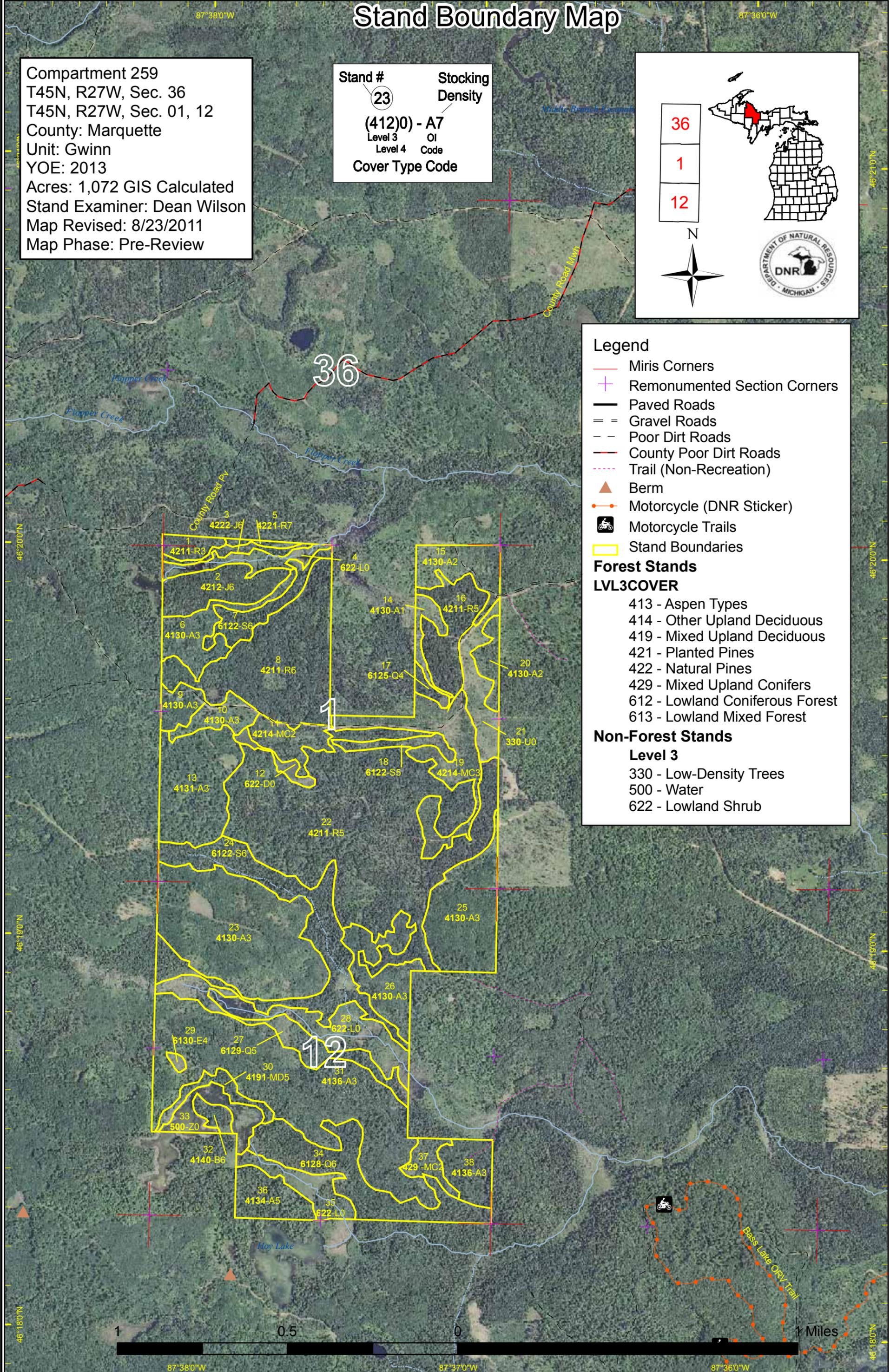
- Miris Corners
- + Remonumented Section Corners
- Paved Roads
- = = Gravel Roads
- - Poor Dirt Roads
- - County Poor Dirt Roads
- - Trail (Non-Recreation)
- ▲ Berm
- Motorcycle (DNR Sticker)
- 🏍 Motorcycle Trails
- Stand Boundaries

Forest Stands
LVL3COVER

- 413 - Aspen Types
- 414 - Other Upland Deciduous
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands
Level 3

- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub



Dedicated & Proposed Special Conservation Area Map

Compartment 259
 T45N, R27W, Sec. 36
 T45N, R27W, Sec. 01, 12
 County: Marquette
 Unit: Gwinn
 YOE: 2013
 Acres: 1,072 GIS Calculated
 Stand Examiner: Dean Wilson
 Map Revised: 8/23/2011
 Map Phase: Pre-Review

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

36

Legend

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

Forest Stands
LVL3COVER

- 413 - Aspen Types
- 414 - Other Upland Deciduous
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
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Non-Forest Stands
Level 3

- 330 - Low-Density Trees
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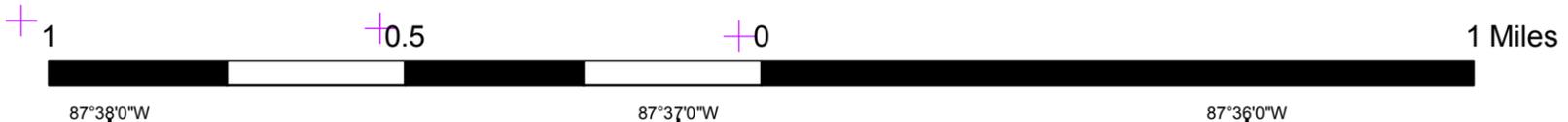
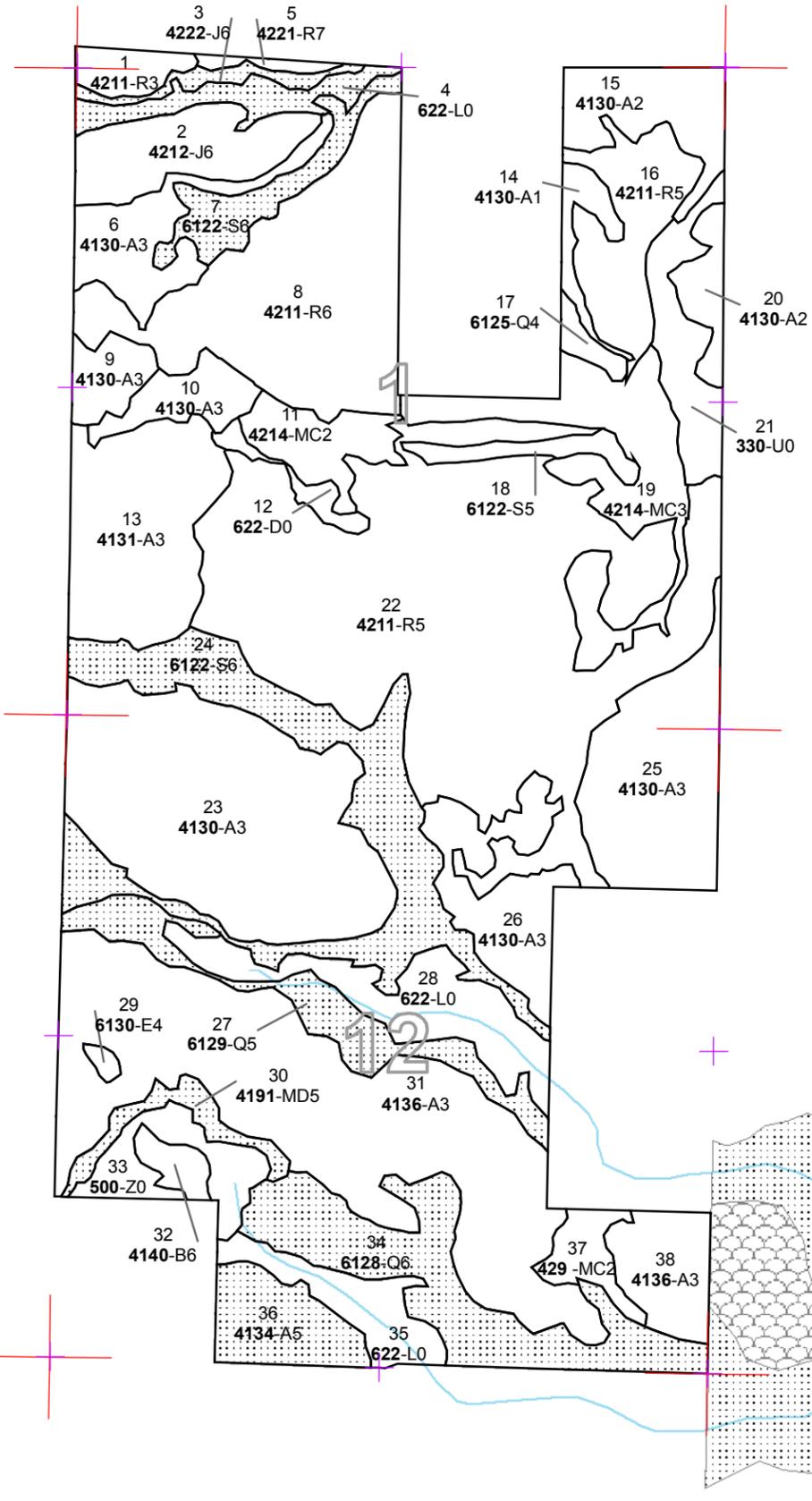


Table 1 – Total Acres by Cover Type and Age Class



	Age Class														Total	
	Non-Forested	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Uneren Age
Aspen	0	17	72	323	0	0	0	0	0	0	17	0	0	0	0	430
Jack Pine	0	0	0	24	0	0	0	0	0	5	0	0	0	0	0	29
Low-Density Trees	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Lowland Conifers	0	0	0	0	0	0	0	0	72	0	0	0	0	0	0	72
Lowland Mixed Forest	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Lowland Shrub	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	64	0	14	0	0	0	0	78
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8
Paper Birch	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
Planted Mixed Pines	0	0	51	0	0	0	0	0	0	0	0	0	0	0	0	51
Red Pine	0	0	0	7	0	292	0	0	0	0	0	0	0	0	0	299
Treed Bog	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Upland Conifers	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8
Water	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Total	91	17	123	362	0	294	0	0	136	18	31	0	0	0	0	1072



Table 2 – Proposed Treatment Summaries

Gwinn Mgt. Unit
Year of Entry 2013

Compartment 259
Total Compartment Acres: 1072

Acres by Treatment Type

Commercial Harvest - 20	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 24
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
Lowland Spruce/Fir	20	0	0	0	0	0		20
Total	20	0	0	0	0	0		20



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
7	32259007-Cut	7.6	6122 - Black Spruce	High Density Pole	95	Harvest	Patch or Strip Clearcut	6122 - Black Spruce	Cmpt. Review Proposal
<u>Prescription</u> Patch and strip cut dryer areas. <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next Steps:</u> Check regeneration per work instructions.									
24	32259024-Cut	12.7	6122 - Black Spruce	High Density Pole	76	Harvest	Patch or Strip Clearcut	6129 - Mixed Coniferous Lowland Forest	Cmpt. Review Proposal
<u>Prescription</u> Patch and strip cut dryer areas. <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next Steps:</u> Check regeneration per work instructions.									
14	32259014-Other	6.4	4130 - Aspen	Low Density Sapling	6	Other	Unspecified	42120 - Planted Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Do regeneration check. <u>Specs:</u> <u>Other</u> Cut in 2005-trenched and seeded in 2009. Preliminary seedling check indicates inadequate regeneration. <u>Comments:</u> <u>Next Steps:</u> Hand plant 2-0 jack pine if necessary.									
21	NF_32259021 regen check.	17.3	Non-Forested		0	Other	Unspecified	42120 - Planted Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Regeneration check. <u>Specs:</u> <u>Other</u> Trenched and seeded in 2009 <u>Comments:</u> <u>Next Steps:</u> Reforest if failed.									
Total Treatment Acreage Proposed:		43.9							

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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Prescription
Specs:

Other
Comment:

Next
Steps:

Limiting Factor and No
Treatment Reason

Total Treatment
Acreage Proposed: 0

Out of YOE -- Treatments
Prescribed with No Limiting Factor

Year of Entry: 2013



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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Prescription
Specs:

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 0**



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42110 - Planted Red Pine	High Density Sapling	6.8	20	1-50	Harvested and planted in 1991: TS#25-88.
2	42120 - Planted Jack Pine	High Density Pole	23.6	25	51-80	Harvested in 1984: TS#25-82. Planted in 1986.
3	42220 - Natural Jack Pine	High Density Pole	5.1	85	111-140	Stand was retained as a buffer zone along the Flopper Creek.
5	42210 - Natural Red Pine	Low Density Log	2.2	49	1-50	Partially cut in 1998. Harvested everything except red pine.
6	4130 - Aspen	High Density Sapling	20.0	27	1-50	Harvested in 1984: TS#25-82.
7	6122 - Black Spruce	High Density Pole	14.1	95	81-110	Good black spruce site that is somewhat drained.
8	42110 - Planted Red Pine	High Density Pole	73.4	49	111-140	Merchantable non-red pine trees thinned out in 1989-90: TS#39-89-2.
9	4130 - Aspen	High Density Sapling	8.4	29	1-50	Harvested in 1982: TS# 8-79.
10	4130 - Aspen	High Density Sapling	10.7	6		Harvested in 2005: TS# 122-03-01.
11	42140 - Planted Mixed Pine	Medium Density	14.1	15	1-50	Cut in 1994: TS# 8-93. Planted in 1996.
13	4131 - Aspen, Oak	High Density Sapling	44.0	17	1-50	Harvested in 1994: TS# 6-93. Significant oak residual. Contains wildlife openings.
14	4130 - Aspen	Low Density Sapling	6.4	6		Harvested in 2005: TS# 122-03-01. Trenched and seeded to jack pine in 2009. Regeneration check indicates low survival rates for the seeding. Significant aspen competition.
15	4130 - Aspen	Medium Density	19.9	18		Harvested in 1993: TS# 6-93. Regeneration in the west half of this stand is lacking.
16	42110 - Planted Red Pine	Medium Density Pole	25.2	49	51-80	Partially cut in 1992: TS# 22-92. Machine planted in 1962. A3 and J3 inclusions.
17	6125 - Lowland Black Spruce, Jack Pine	Low Density Pole	3.3	76	1-50	Marginally productive.
18	6122 - Black Spruce	Medium Density Pole	6.6	76	1-50	Portions, especially along the edges, of this stand have been cut with adjacent timber sales.
19	42140 - Planted Mixed Pine	High Density Sapling	37.3	15		Harvested in 1994: TS#8-93. Planted in 1996 with red pine and some oak. Did not observe any oak.

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Gwinn Mgt. Unit

5 – Forested Stands

Compartment: 259

Year of Entry: 2013



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	4130 - Aspen	Medium Density	8.0	18		Harvested in 1993: TS# 6-93. Stand has experienced severe aspen decline.
22	42110 - Planted Red Pine	Medium Density Pole	191.6	49	51-80	Partially cut non-red pine tree species in 1994: TS# 24-93. This management has resulted in small to large canopy breaks and a two storied stand.
23	4130 - Aspen	High Density Sapling	90.2	21		Harvested in 1990: TS# 17-88. Stand contains a wildlife opening.
24	6122 - Black Spruce	High Density Pole	57.6	76	51-80	Would like to treat portions of this stand where the spruce budworm risk is high.
25	4130 - Aspen	High Density Sapling	41.5	21		Harvested in 1990: TS# 16-68.
26	4130 - Aspen	High Density Sapling	26.1	21		Harvested in 1990: TS# 16-88. Heavy beaver impact in south end of stand.
27	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	23.0	79	81-110	SCA = Riparian buffer.
29	6130 - Fir, Aspen, Maple	Low Density Pole	1.2	40	1-50	Large kettle hole with lowest point in center turned into a beaver meadow. Perimeter sloping down to the bottom is upland and portions have been cut with adjacent timber sales.
30	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	7.8	82	51-80	SCA = Riparian buffer.
31	4136 - Aspen, Mixed Conifer	High Density Sapling	120.9	24	1-50	Cut i 1987: TS# 8-83. Areas of better soils are more pole size.
32	4140 - Other Upland Deciduous	High Density Pole	4.8	82	81-110	SCA = Riparian buffer.
34	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	45.7	76	111-140	SCA = Riparion buffer zone. Stand contains upland inclusions.
36	4134 - Aspen, Spruce/Fir	Medium Density Pole	17.4	91	51-80	Heavy aspen mortality creating a two storied stand structure with the understory mostly comprised of red maple.
37	429 - Mixed Upland Conifers	Medium Density	8.0	23		Harvested in 1988: TS# 8-83. Contains some minor lowland inclusions.
38	4136 - Aspen, Mixed Conifer	High Density Sapling	16.1	23		Harvested in 1988: TS# 8-83.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
4	6223 - Inundated Shrub Swamp	11.4	No	Unspecified	Bottom lands along the Flopper Creek.
12	6224 - Treed Bog	4.4	No	Unspecified	
21	3302 - Low Density Conifer Trees	17.3	Planted	Jack Pine	Harvested in 2005: TS# 122-03-01. Herbicided, trenched, and seeded in 2008&2009.
28	6223 - Inundated Shrub Swamp	28.4	N/A	Unspecified	
33	50 - Water	14.6	No	Unspecified	
35	6229 - Mixed lowland shrub	15.1	No	Unspecified	

**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
3	Unique Site - SCA	32259003	5.1	SCA = Riparian zone along the Flopper Creek.
7	Unique Site - SCA	32259007	14.1	Wildlife corridor along Flopper Creek.
24	SCA Removal	32259024	57.6	It is desirable to manage portions of this stand.
4	Unique Site - SCA	NF_32259004	11.4	Bottom lands along the Flopper Creek.



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.