



COMPARTMENT REVIEW PRESENTATION

GAYLORD FOREST MANAGEMENT UNIT

COMPARTMENT: 181

ENTRY YEAR: 2013

ACREAGE: 1,181

COUNTY: Cheboygan

Revision Date: 04/13/2011

Stand Examiner: Tricia Mitchell

Legal Description: T35N-R01W, Sections 8, 17, 18

Management Goals: To provide for the protection, integrated management and responsible use of a healthy, productive, and undiminished forest resource base for the social, recreational, environmental, and economic benefit of the State of Michigan.

Soil and Topography: This compartment is somewhat variable in its topography, especially in the western and southwest portions of Sections 8 and 17, also including the southeast quarter of section 17. Equipment operability would be restricted by season, though most restrictive topographical features have been excluded from sale boundaries. Rubicon and Emmet Sandy Loam are the dominant soil types on the following associations: Grayling-Rubicon Association (Section 17, Section 18), Cheboygan-Blue Lake Association (Section 8, Section 17), and Rubicon-Blue Lake Association (Section 17, Section 18).

Ownership Patterns, Development, and Land Use in and Around the Compartment: There is a private 120-acre parcel in the northeast quarter of section 8, also a private 40-acre parcel in the southwest corner of section 17. The entire line on the West of Sections 8 and 17 (bound by Carter Road) is juxtaposed to private property. The South end of section 17 is also entirely lined by private property. State land in section 18 is met on the North, South, and East sides by private property.

Unique, Natural Features: The Michigan Natural Features Inventory database indicated the potential for red-shouldered (*Buteo lineatus*) hawk and goshawk (*Accipiter gentilis*) in the compartment, though its presence is currently lacking. While potential exists for the presence of multiple plant and animal species, none are reported in the compartment (according to MNFI and current field observations).

Archeological, Historical, and Cultural Features: A search of the Archeological Concerns database did not identify any recorded features.

Special Management Designations or Considerations: There are no current Special Management Designations or Considerations within this compartment.

Watershed and Fisheries Considerations: This compartment is within the Little Pigeon River watershed, which is within the larger Cheboygan River drainage. The compartment contains a portion of the Little Pigeon River, which is a designated trout stream and is classified as a warm transitional stream through this reach. A minimum no clear-cut buffer of 100 feet should be maintained adjacent to the Little Pigeon River and its tributaries.

Wildlife Habitat Considerations: This compartment contains mostly upland habitat with a small wetland component in the middle of the area and the south east corner. In the upland areas, parts of stand 7 and 22 are going to be clear cut to provide early successional habitat utilized by white-tailed deer, grouse, woodcock and various early successional song birds. Oak is going to be left in stand 7 for hard mast production. Stands 4, 6, 10, and 13 are openings that are going to be maintained to provide this component within this compartment.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of ice-contact sand and gravel. The glacial drift thickness varies between 10 and 400 feet, thickening to the northeast. The Devonian Traverse Group subcrops below the glacial drift. The Traverse is used for cement and stone elsewhere in the State. The Afton limestone quarry is located three miles to the southwest. The nearest gravel pit is located in the NW of Section 21. The compartment appears to have good gravel potential. The nearest oil and gas production, the Niagaran Reef Trend, is located 12 miles to the southeast. The area was recently leased and the Collingwood Formation may have oil and gas potential.

Vehicle Access: Access is good throughout the compartment, though some road maintenance will need to be performed to open up grown-over roads and to maintain road integrity.

Survey Needs: There exist no current survey needs.

Recreational Facilities and Opportunities: There are no maintained recreational facilities or opportunities within the compartment.

Fire Protection: This compartment is composed of extremely high risk fuel types. This combined with the activities associated with the intense Antrim Gas development puts this compartment at a very high risk for future wildfires similar to the Big Creek fire which burned a portion of this compartment in 1981. The existing road network does provide easy access to most off road areas within the compartment.

Additional Compartment Information:

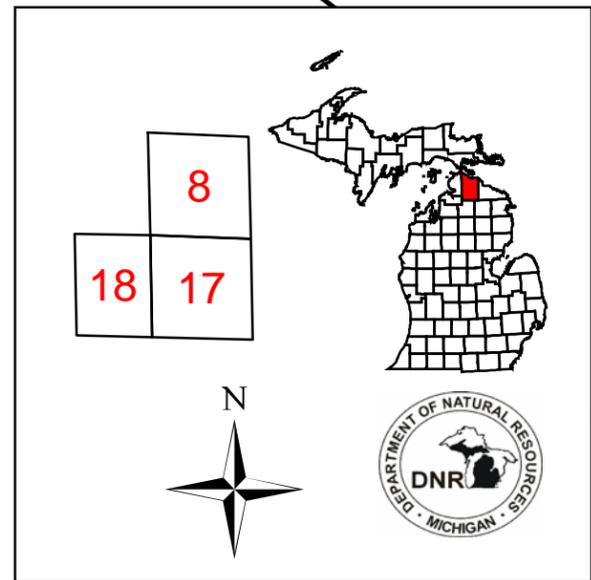
- **The following 3 reports from the IFMAP Inventory System are attached:**
 - ◆ **Cover Type by Age Class**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**

- **The following information is displayed, where pertinent, on the attached compartment maps:**
 - ◆ **Base feature information, stand numbers, cover types**
 - ◆ **Proposed treatments**
 - ◆ **Proposed road access system**
 - ◆ **Suggested potential and current SCA's**

Cover Type & Treatment Map

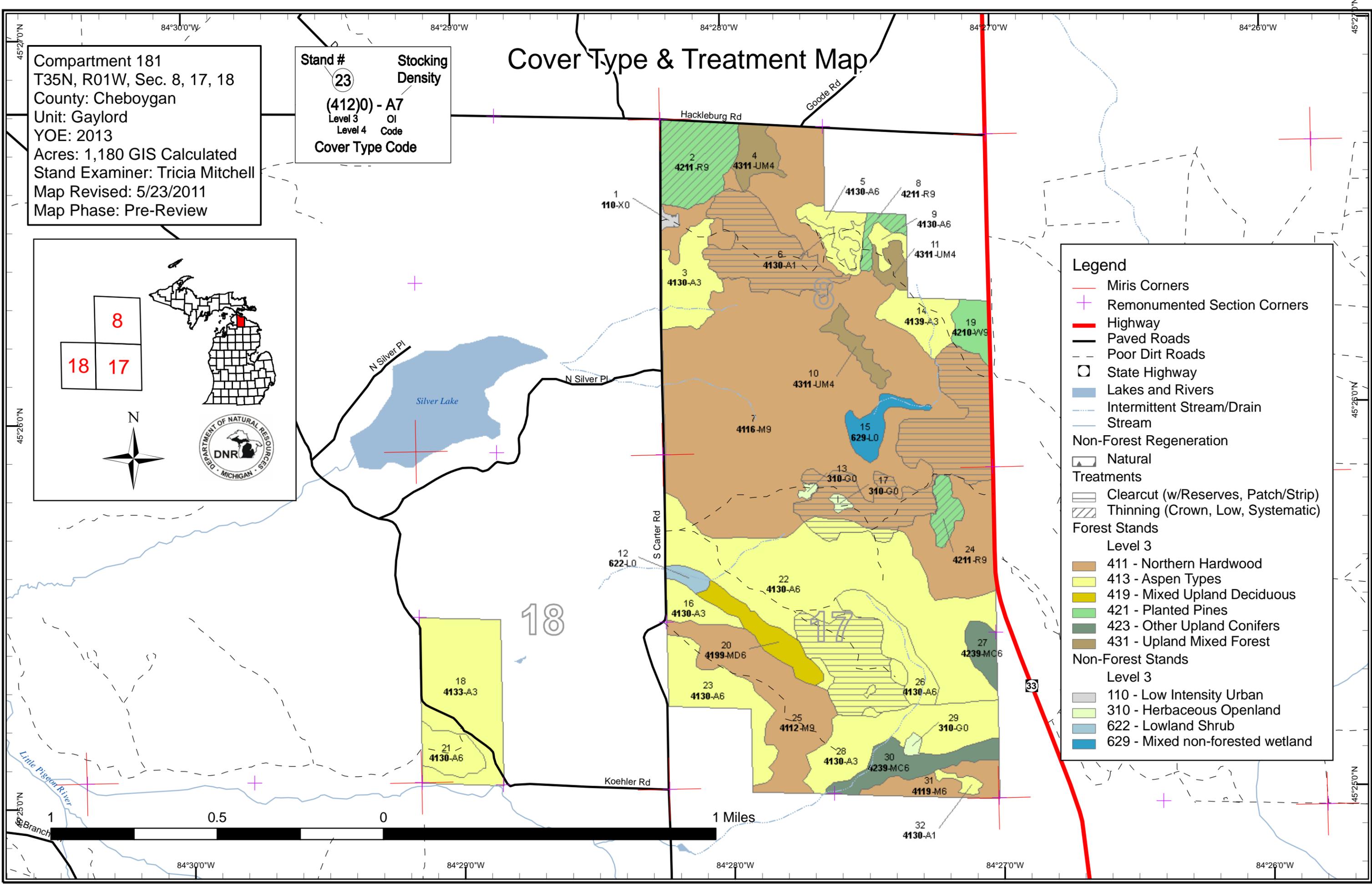
Compartment 181
 T35N, R01W, Sec. 8, 17, 18
 County: Cheboygan
 Unit: Gaylord
 YOY: 2013
 Acres: 1,180 GIS Calculated
 Stand Examiner: Tricia Mitchell
 Map Revised: 5/23/2011
 Map Phase: Pre-Review

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



Legend

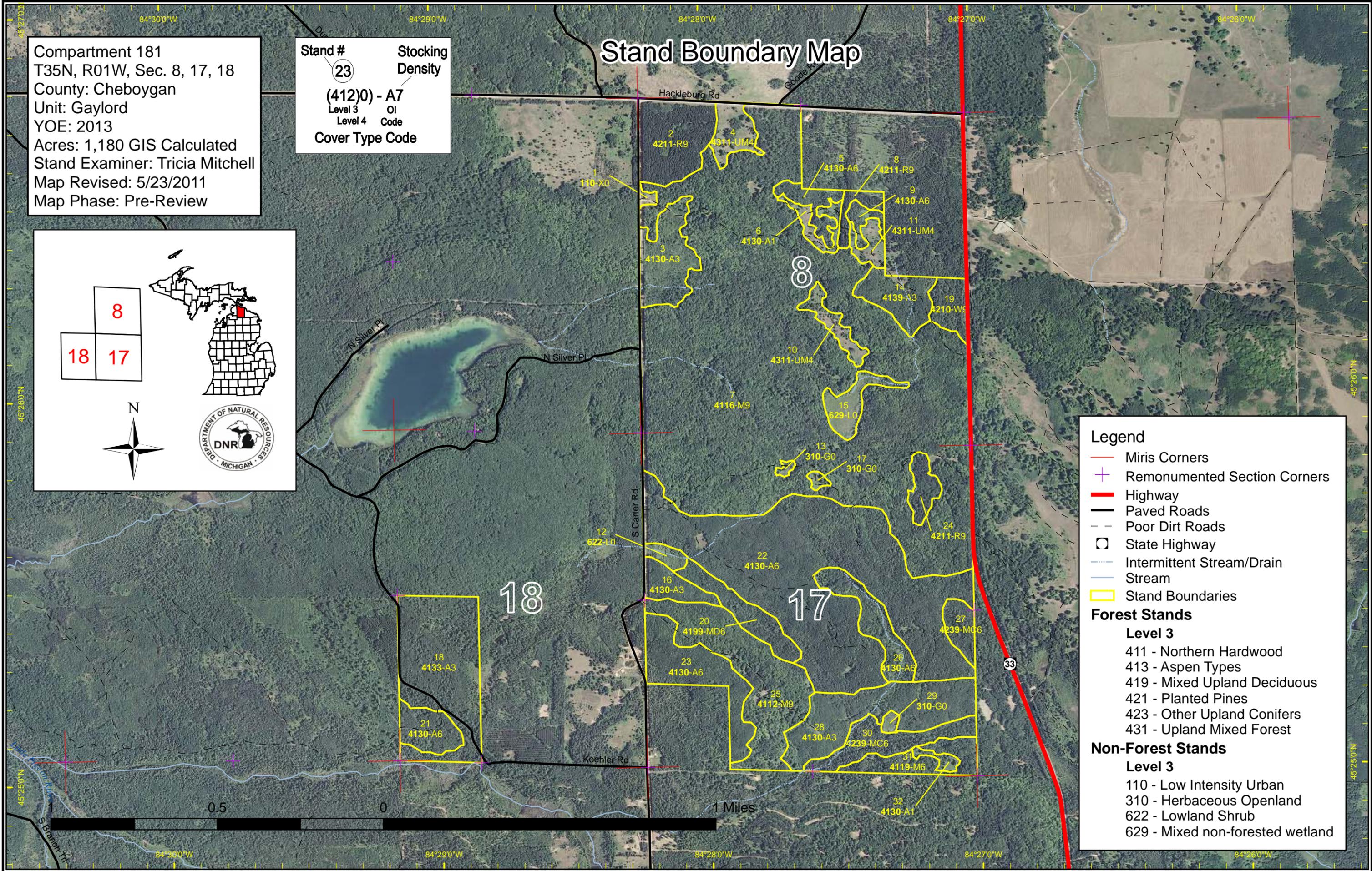
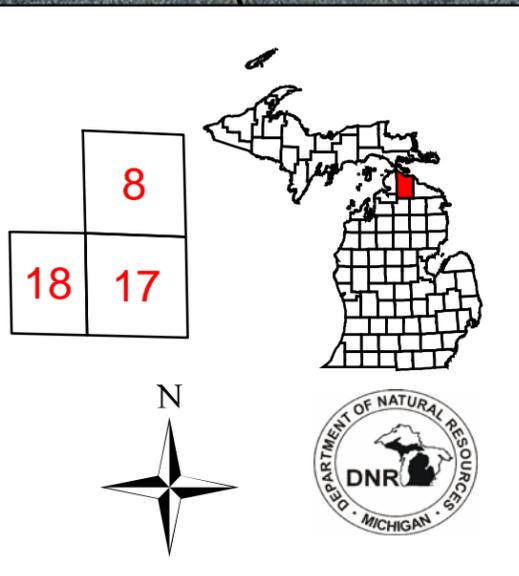
- Miris Corners
- Remonumented Section Corners
- Highway
- Paved Roads
- Poor Dirt Roads
- State Highway
- Lakes and Rivers
- Intermittent Stream/Drain
- Stream
- Non-Forest Regeneration
 - Natural
- Treatments
 - Clearcut (w/Reserves, Patch/Strip)
 - Thinning (Crown, Low, Systematic)
- Forest Stands
 - Level 3
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 423 - Other Upland Conifers
 - 431 - Upland Mixed Forest
- Non-Forest Stands
 - Level 3
 - 110 - Low Intensity Urban
 - 310 - Herbaceous Openland
 - 622 - Lowland Shrub
 - 629 - Mixed non-forested wetland



Stand Boundary Map

Compartment 181
 T35N, R01W, Sec. 8, 17, 18
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Legend

- Miris Corners
- + Remonumented Section Corners
- Highway
- Paved Roads
- - - Poor Dirt Roads
- State Highway
- - - Intermittent Stream/Drain
- Stream
- Stand Boundaries

Forest Stands

Level 3

- 411 - Northern Hardwood
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Non-Forest Stands

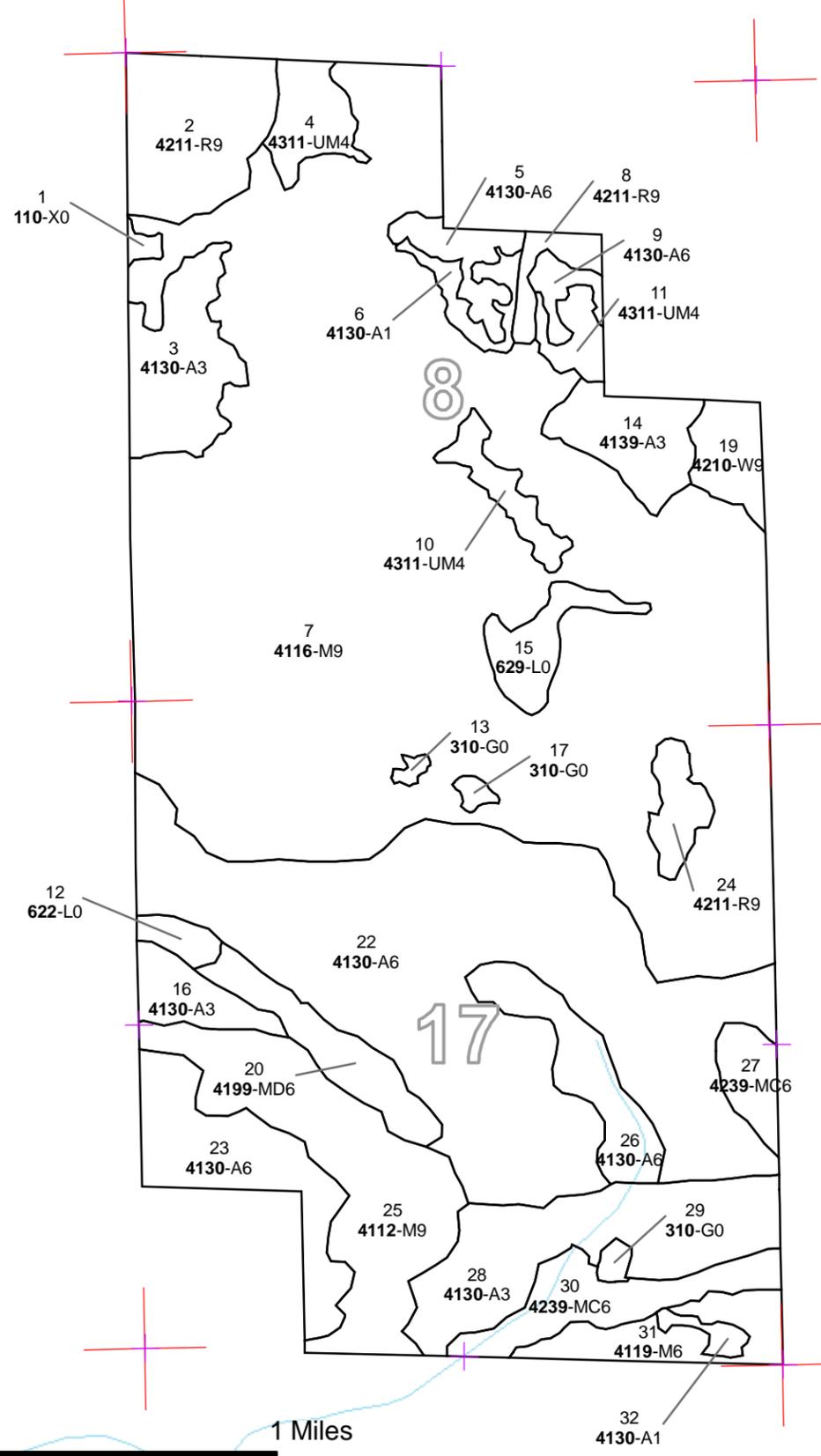
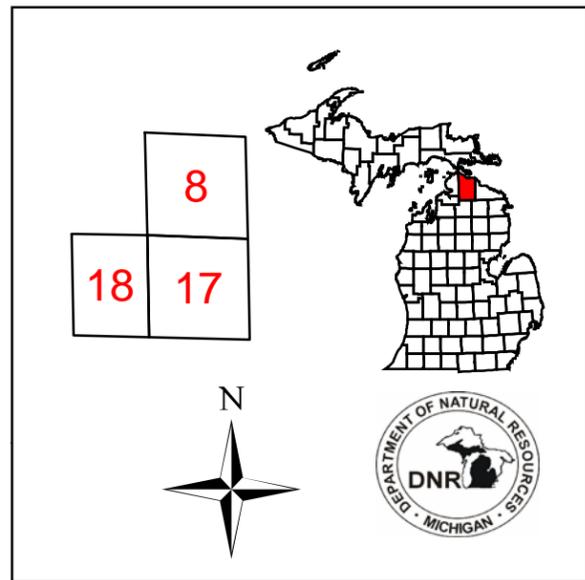
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Dedicated & Proposed Special Conservation Area Map



Legend

- Miris Corners
- ⊕ Remonumented Section Corners
- ▭ Stand Boundaries
- ▭ Dedicated Special Conservation Areas
- Cold Water Streams
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
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- 419 - Mixed Upland Deciduous
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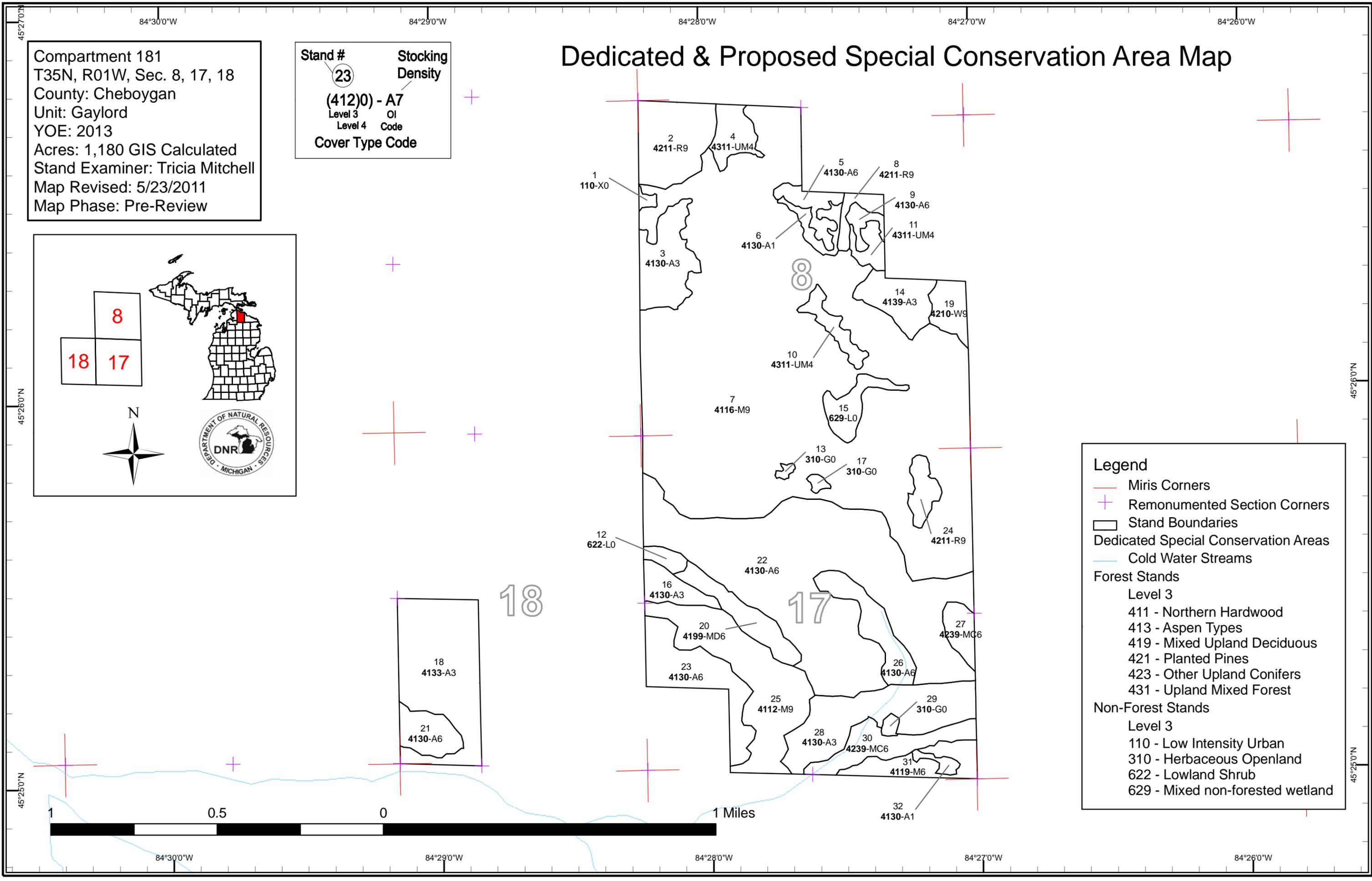


Table 1 – Total Acres by Cover Type and Age Class



	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 +		Unretn Age
Aspen	0	0	102	57	203	0	24	0	0	0	0	0	0	0	64	450
Herbaceous Openland	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Lowland Shrub	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Mixed Upland Deciduous	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	17
Northern Hardwood	0	0	0	0	0	0	501	17	0	58	0	0	0	0	0	576
Red Pine	0	0	0	0	0	41	6	0	0	0	0	0	0	0	0	47
Upland Conifers	0	0	0	0	0	0	21	0	9	0	0	0	0	0	0	30
Upland Mixed Forest	0	0	0	0	7	20	0	0	0	0	0	0	0	0	0	27
Urban	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
White Pine	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	11
Total	22	0	102	57	209	62	570	28	9	58	0	0	0	0	64	1180



Table 2 – Proposed Treatment Summaries

Gaylord Mgt. Unit
Year of Entry 2013

Compartment 181
Total Compartment Acres: 1180

Acres by Treatment Type

Commercial Harvest - 217	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 28	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

		Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	41	0	0	0	0	0	0	41
Northern Hardwood	128	0	0	0	0	0	0	128
Red Pine	0	0	0	0	47	0	0	47
Total	169	0	0	0	47	0	0	217



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	52181002-Cut	33.1	42110 - Planted Red Pine	High Density Log	49	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Mark to retain 120 BA. <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u>									
7	52181007-Cut_E	84.0	4116 - Mixed N. Hardwood - Aspen	High Density Log	50	Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Clearcut. Retain white pine, oak, hemlock, and yellow birch. Cut all scotch pine (regardless of diameter). <u>Specs:</u> <u>Other</u> Dual-polygon harvest with the purpose of regenerating aspen. <u>Comments:</u> <u>Next</u> <u>Steps:</u>									
7	52181007-Cut_N	44.4	4116 - Mixed N. Hardwood - Aspen	High Density Log	50	Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Clearcuts of trees >2" dbh with exception of all oak and white pine. <u>Specs:</u> <u>Other</u> Dual-polygon harvest with the purpose of regenerating aspen. <u>Comments:</u> <u>Next</u> <u>Steps:</u>									
8	52181008-Cut	5.9	42110 - Planted Red Pine	High Density Log	59	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Mark to retain 120 BA. <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u>									
22	52181022-Cut_small	40.7	4130 - Aspen	High Density Pole	32	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Clearcut with retention. Keep boundaries out of wet draws. <u>Specs:</u> <u>Other</u> Clearcut with the purpose of aspen regeneration. <u>Comments:</u> <u>Next</u> <u>Steps:</u>									
24	52181024-Cut	8.4	42110 - Planted Red Pine	High Density Log	49	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Mark to retain 120 BA. <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u>									

**Table 3 -- Treatments Prescribed
with No Limiting Factor**



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
4	52181004- NonFor	12.0	4311 - Pine, Aspen Mix	Low Density Pole	40	Non-Forest Management	Other - Specify	3105 - Mixed Upland Herbaceous	Cmpt. Review Proposal
<u>Prescription</u> mow and or burn, possible planting									
<u>Specs:</u>									
<u>Other</u>									
<u>Comments:</u>									
<u>Next</u>									
<u>Steps:</u>									
6	52181006- NonFor	6.8	4130 - Aspen	Low Density Sapling	10	Non-Forest Management	Other - Specify	3105 - Mixed Upland Herbaceous	Cmpt. Review Proposal
<u>Prescription</u> mow/burn or plant									
<u>Specs:</u>									
<u>Other</u>									
<u>Comments:</u>									
<u>Next</u>									
<u>Steps:</u>									
10	52181010- NonFor	8.2	4311 - Pine, Aspen Mix	Low Density Pole	42	Non-Forest Management	Other - Specify	3105 - Mixed Upland Herbaceous	Cmpt. Review Proposal
<u>Prescription</u> mow/burn or plant									
<u>Specs:</u>									
<u>Other</u>									
<u>Comments:</u>									
<u>Next</u>									
<u>Steps:</u>									
13	NF_52181013- NonFor	1.1	Non-Forested		0	Non-Forest Management	Other - Specify	3105 - Mixed Upland Herbaceous	Cmpt. Review Proposal
<u>Prescription</u> mow or plant									
<u>Specs:</u>									
<u>Other</u>									
<u>Comments:</u>									
<u>Next</u>									
<u>Steps:</u>									
Total Treatment Acreage Proposed: 244.6									

Table 4 -- Treatments Prescribed with a Limiting Factor



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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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#Error

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



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	42110 - Planted Red Pine	High Density Log	33.1	49	141-170	3rd row thin in 1993. YO 1962.
3	4130 - Aspen	High Density Sapling	25.6	12		
4	4311 - Pine, Aspen Mix	Low Density Pole	12.0	40	1-50	Decent WP regen, patchy BTA and QA; Cherry regen. Sumac.
5	4130 - Aspen	High Density Pole	9.7	30	1-50	
6	4130 - Aspen	Low Density Sapling	6.8	10		
7	4116 - Mixed N. Hardwood - Aspen	High Density Log	501.2	50		
8	42110 - Planted Red Pine	High Density Log	5.9	59	141-170	Western half of stand (running N-S) is all mature red pine. Eastern portion is a mix of red pine and white pine, lower BA (120+/-). Consider thinning Western portion only.
9	4130 - Aspen	High Density Pole	4.7	51	81-110	
10	4311 - Pine, Aspen Mix	Low Density Pole	8.2	42	1-50	
11	4311 - Pine, Aspen Mix	Low Density Pole	6.6	39	1-50	
14	4139 - Aspen, Mixed Deciduous	High Density Sapling	18.2	17		
16	4130 - Aspen	High Density Sapling	10.9	26		Pole BTA spotty and in clumps.
18	4133 - Aspen, Mixed Pine	High Density Sapling	63.8	Uneven Age		Small RO, JP component in SW, just S of the road. Some X log WP, 30+".
19	42100 - Planted White Pine	High Density Log	10.8	60	111-140	KOTAR and soil type out for pine. WP is mature, could be harvested but the stand is barely 10ac. Let it go or thin it out and lump with something in stand 1.
20	4199 - Other Mixed Upland Deciduous	High Density Pole	17.4	53		
21	4130 - Aspen	High Density Pole	13.6	25		
22	4130 - Aspen	High Density Pole	193.1	32		S central arm of 27 is about 10 years older than the north. Larger, older timber in S.

S
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Gaylord Mgt. Unit

5 – Forested Stands

Compartment: 181
Year of Entry: 2013

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	4130 - Aspen	High Density Pole	32.6	26		
24	42110 - Planted Red Pine	High Density Log	8.4	49	141-170	
25	4112 - Maple, Beech, Cherry Association	High Density Log	58.3	87	51-80	10 BA swings avg to reach 70.
26	4130 - Aspen	High Density Pole	19.7	50	51-80	Larger AB, SM on knob in N. Mixed fir/pine <2% overstory. Lowland, increased ash (less SM/AB) towards S/SE. Follow topo map.
27	42390 - Mixed Non-Pine Upland Conifers	High Density Pole	8.6	78	81-110	Balsam fir is out competing the cedar. Consider thinning out aspen and fir when the ground is frozen.
28	4130 - Aspen	High Density Sapling	48.7	17		
30	42390 - Mixed Non-Pine Upland Conifers	High Density Pole	21.2	53		
31	4119 - Mixed Northern Hardwoods	High Density Pole	16.8	68		
32	4130 - Aspen	Low Density Sapling	2.8	18		



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	11 - Low Intensity Urban	1.5	Natural Regen	Low (NonForested)	Comm Site (radio tower). PB, RO, PC, RP (NE corner), sumac present
12	6220 - Alder/willow	4.3	NVA	Unspecified	
13	310 - Herbaceous Openland	1.1	NVA	Unspecified	
15	629 - Mixed non-forested wetland	11.5	NVA	Unspecified	
17	310 - Herbaceous Openland	1.5	NVA	Unspecified	
29	310 - Herbaceous Openland	1.7	NVA	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



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.