



# COMPARTMENT REVIEW PRESENTATION

## *GAYLORD FOREST MANAGEMENT UNIT*

### COMPARTMENT: 146

**ENTRY YEAR: 2012**

**ACREAGE: 1796**

**COUNTY: Cheboygan**

---

**Revision Date:** 05/04/2010

**Stand Examiner:** Zachary Crew

**Legal Description:** T33N - R03W Sections 19, 30, and 31

**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 fairly hilly that begins to level off the farther east one goes. Some of the slopes in this compartment are as steep as 50 or 60 percent on the west side of the compartment. The soil types in the compartment transition from sandy type soils in the south to more loamy sands and sandy loams in the north. Common series found in this compartment are Kalkaska Sand, Rubicon Sand, Mancelona Sand, Cheboygan Loamy Sand, Emmet Sandy Loam, and Blue Lake Sandy Loam.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** State ownership is fairly contiguous within the compartment and with the compartments to the north and east. Private parcel ownership is present on the west, south, and south east boundary lines of the compartment.

**Unique, Natural Features:**

**Archeological, Historical, and Cultural Features:** None known.

**Special Management Designations or Considerations:** None

**Watershed and Fisheries Considerations:** This compartment is north of Standard Lake, in the West Branch Sturgeon River watershed, which is within the Cheboygan River watershed. A 100-foot buffer (no clear-cut) should be maintained adjacent to Standard Lake.

**Wildlife Habitat Considerations:** This compartment consists mainly of upland hardwoods and aspen. Stands 21, 24, 29, 31, and 36 are going to be final harvested to provide early successional habitat that will be utilized by snow shoe hare, white-tailed deer, wild turkey, grouse and the occasional elk. Stands 18, 26, and 28 are prescribed for opening maintenance. The hardwoods of this compartment contained quite a bit of pine marten sign during the winter months.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of an end moraine of coarse-textured glacial till. The glacial drift thickness varies between 400 and 800 feet. The Devonian Antrim Shale subcrops below the glacial drift. The Antrim is quarried for cement products, elsewhere in the state. Gravel pits are located on the moraine deposits less than one mile to the east. This compartment has good gravel potential. The nearest oil and gas production, the Antrim Shale gas play, is located 2 miles to the east. There is potential for the Antrim Shale gas in the area. Most of this compartment is leased for oil and gas development.

**Vehicle Access:** There are 2 seasonal county roads that provide access to this compartment. One of those is Standard Lake Road coming north from Thumb Lake road. The other is Wilderness Road which comes into the compartment from the east. Both of these roads are used as part of the Snowmobile trail system (trail # 765). There are also several two tracks that run throughout the compartment that could be expanded.

**Survey Needs:** There does not appear to be any survey assistance required in this Compartment. Only one of the proposed treatments lies adjacent to a private parcel.

**Recreational Facilities and Opportunities:** As mentioned above Snowmobile Trail # 765 runs east and west through the northern third of the compartment. There is also a Motorcycle Trail that runs a loop through the south half of the compartment.

**Fire Protection:**

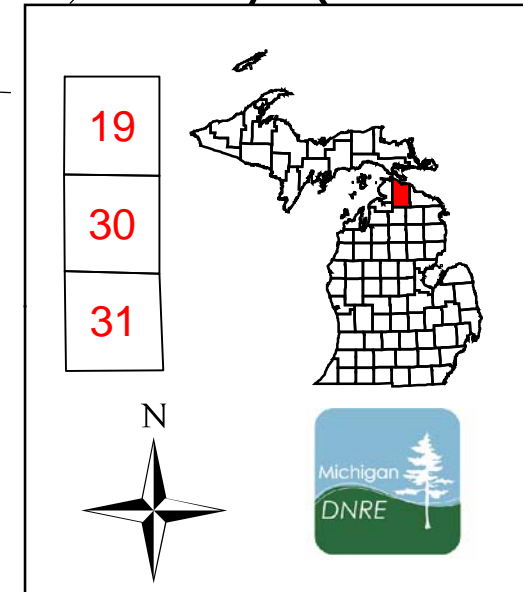
**Additional Compartment Information:**

- **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

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

Compartment 146  
 T33N, R03W, Sec. 19, 30, 31  
 County: Cheboygan  
 Unit: Gaylord  
 YOE: 2012  
 Acres: 1,795 GIS Calculated  
 Stand Examiner: Zach Crew  
 Map Revised: 05/27/2010  
 Map Phase: Pre-Review



**Legend**

- Miris Corners
- County Paved Roads
- Paved Roads
- County Gravel Roads
- - - Poor Dirt Roads
- - - County Poor Dirt Roads
- - - Trails
- 🏍 Motorcycle Trails
- 🏂 Snowmobile Trails
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers
- ▨ Mowing
- ▨ Clearcut (w/Reserves, Patch/Strip)

**Forest Stands**

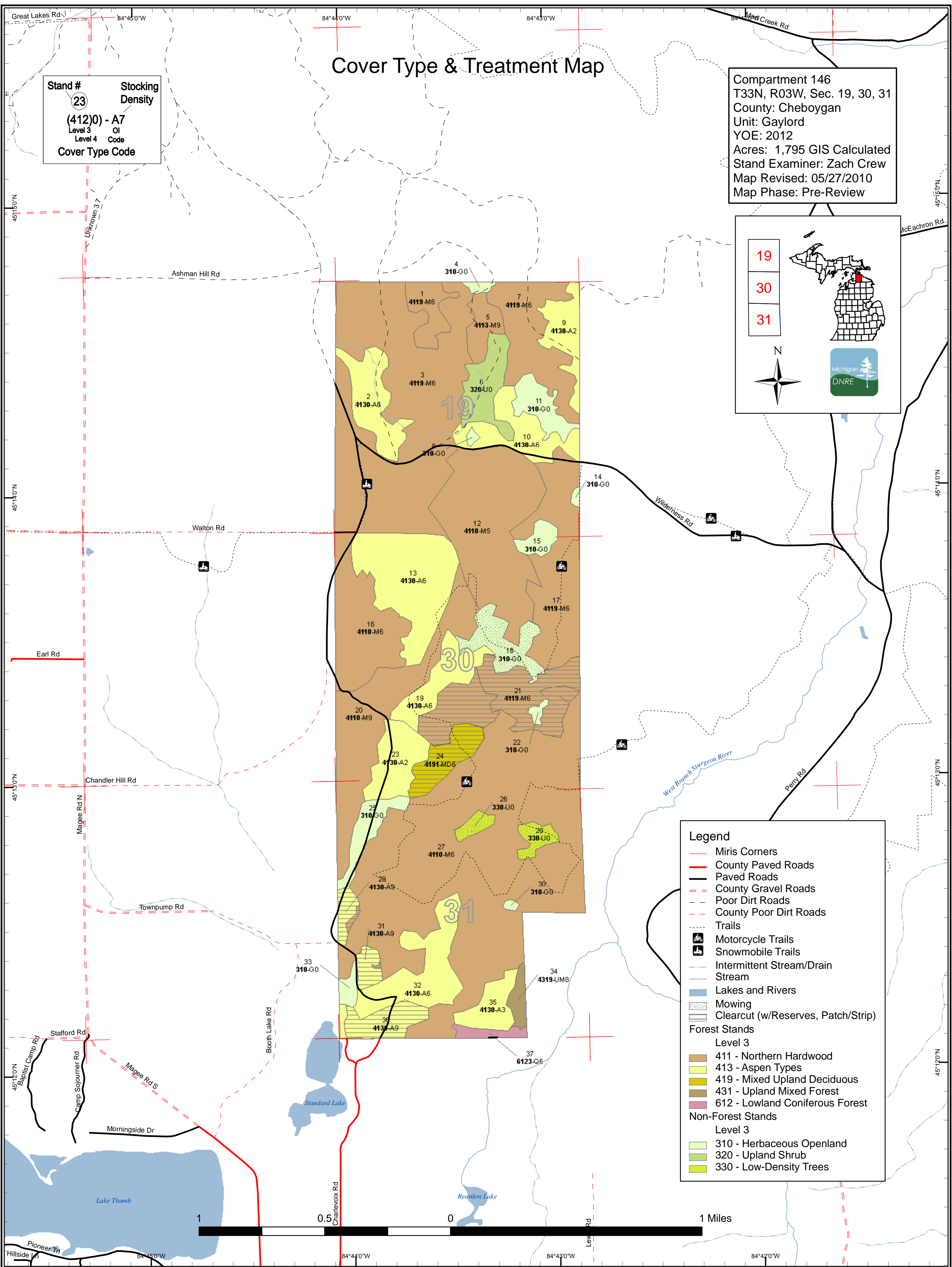
Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

**Non-Forest Stands**

Level 3

- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees



# Stand Boundary Map

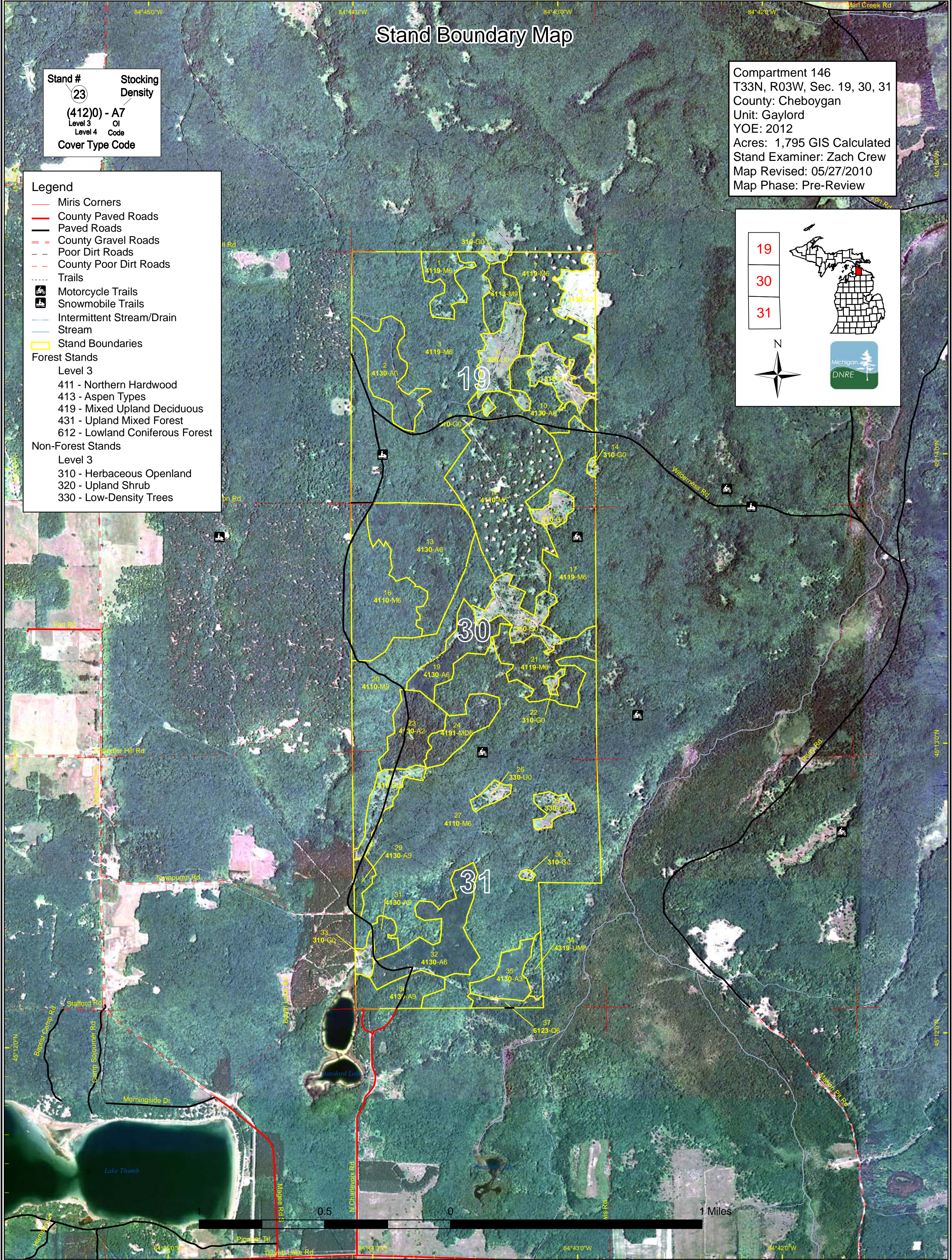
Stand #  
**23**  
 Stocking Density  
**(412)0 - A7**  
 Level 3 OI  
 Level 4 Code  
 Cover Type Code

Compartment 146  
 T33N, R03W, Sec. 19, 30, 31  
 County: Cheboygan  
 Unit: Gaylord  
 YOE: 2012  
 Acres: 1,795 GIS Calculated  
 Stand Examiner: Zach Crew  
 Map Revised: 05/27/2010  
 Map Phase: Pre-Review

- Legend**
- Miris Corners
  - County Paved Roads
  - Paved Roads
  - County Gravel Roads
  - Poor Dirt Roads
  - County Poor Dirt Roads
  - Trails
  - Motorcycle Trails
  - Snowmobile Trails
  - Intermittent Stream/Drain
  - Stream
  - Stand Boundaries
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 431 - Upland Mixed Forest
  - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3
- 310 - Herbaceous Openland
  - 320 - Upland Shrub
  - 330 - Low-Density Trees

19  
30  
31

N

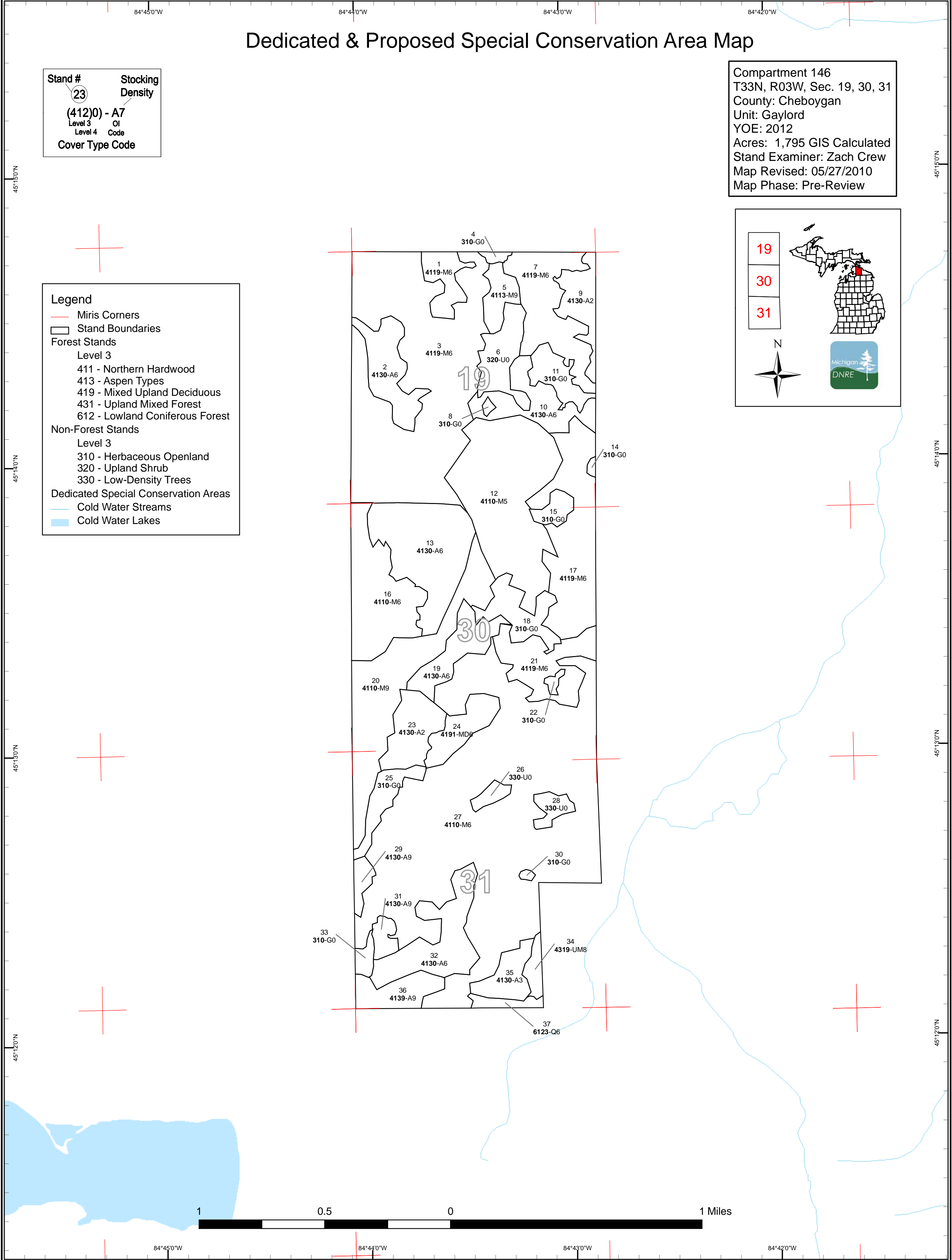
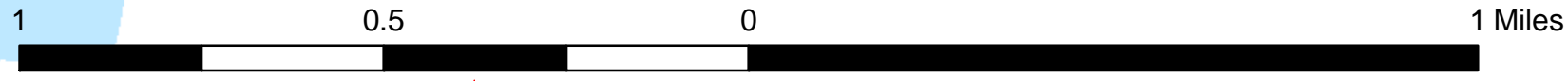
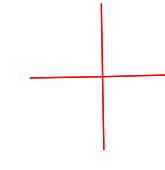
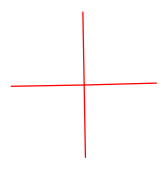
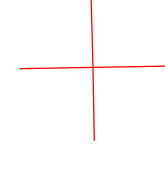
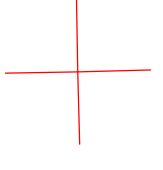
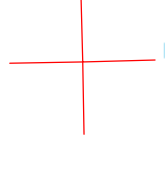
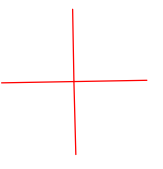
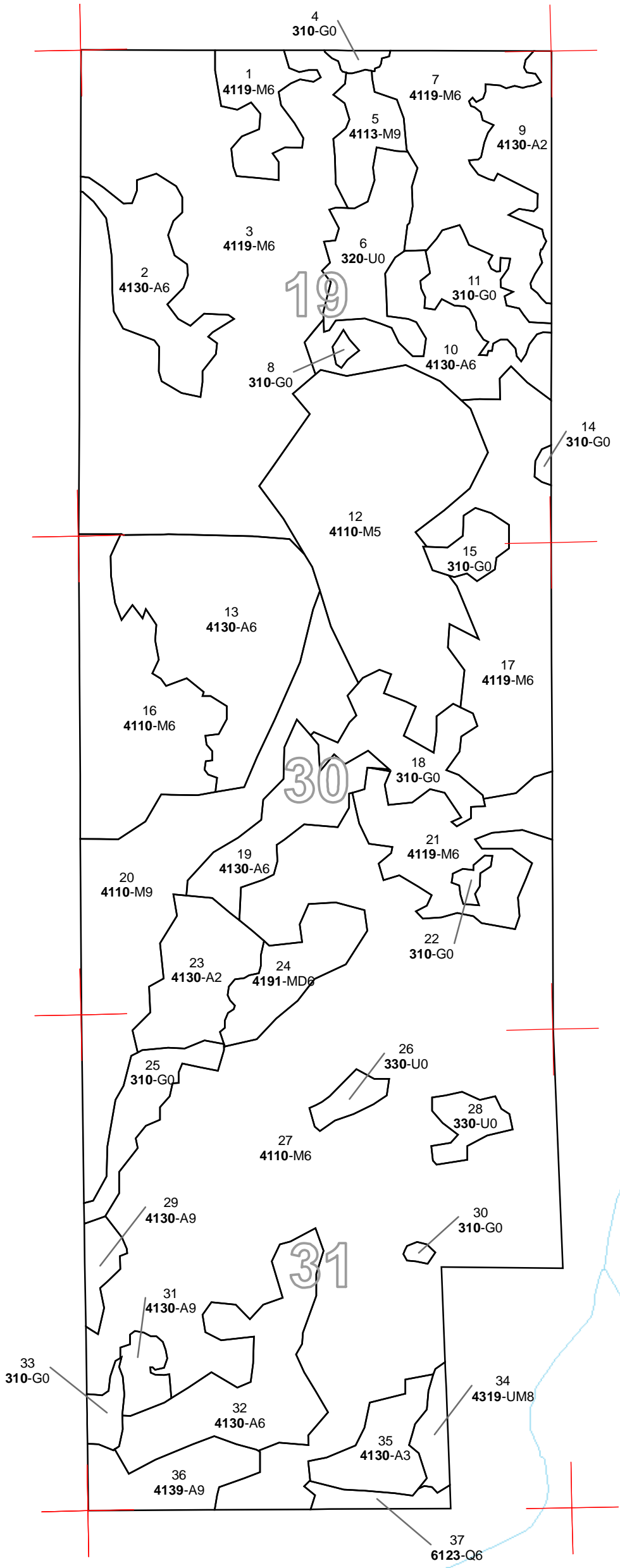
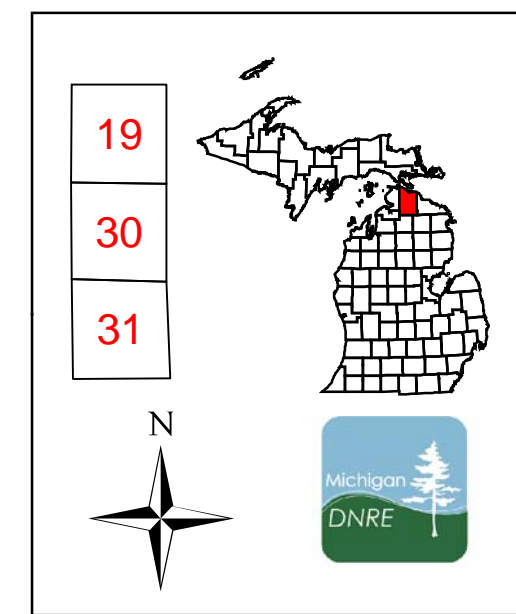


# Dedicated & Proposed Special Conservation Area Map

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

Compartment 146  
 T33N, R03W, Sec. 19, 30, 31  
 County: Cheboygan  
 Unit: Gaylord  
 YOE: 2012  
 Acres: 1,795 GIS Calculated  
 Stand Examiner: Zach Crew  
 Map Revised: 05/27/2010  
 Map Phase: Pre-Review

- Legend**
- Miris Corners
  - Stand Boundaries
  - Forest Stands**
  - Level 3
  - 411 - Northern Hardwood
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 431 - Upland Mixed Forest
  - 612 - Lowland Coniferous Forest
  - Non-Forest Stands**
  - Level 3
  - 310 - Herbaceous Openland
  - 320 - Upland Shrub
  - 330 - Low-Density Trees
  - Dedicated Special Conservation Areas**
  - Cold Water Streams
  - Cold Water Lakes



**Table 1 – Total Acres by Cover Type and Age Class**  
(Level 3 Cover Type)



	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 +		Uneven Age
Aspen Types	0	58	21	122	124	41	0	0	0	0	0	0	0	0	0	366
Herbaceous Openland	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92
Low-Density Trees	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Lowland Coniferous Forest	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
Mixed Upland Deciduous	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	25
Northern Hardwood	0	0	0	0	0	36	293	923	0	0	0	0	0	0	0	1252
Upland Mixed Forest	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	8
Upland Shrub	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
<b>Total</b>	<b>137</b>	<b>58</b>	<b>21</b>	<b>122</b>	<b>140</b>	<b>102</b>	<b>293</b>	<b>923</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1796</b>



## Table 2 – Proposed Treatment Summaries

**Gaylord Mgt. Unit**  
**Year of Entry 2012**

**Compartment 146**  
**Total Compartment Acres: 1796**

### Acres by Treatment Type

Commercial Harvest - 145	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 44	Tree Seeding - 0	Pesticide - 0	

### Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
<b>Aspen</b>	40	0	0	0	0	0	40
<b>Mixed Upland Deciduous</b>	25	0	0	0	0	0	25
<b>Northern Hardwood</b>	80	0	0	0	0	0	80
<b>Total</b>	145	0	0	0	0	0	145



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
21	52146021-Cut	49.2	4119 - Mixed Northern Hardwoods	High Density Pole	62	Harvest	Clearcut	Aspen, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Clearcut all species. No retention is to be left as agreed upon in compartment review.									
<u>Specs:</u>									
<u>Other</u> Leave opening in the middle of stand clear of equipment or any other type of operations.									
<u>Comments:</u>									
<u>Next</u> Continue to monitor regeneration on site, stand 22 is to remain an opening.									
<u>Steps:</u>									
24	52146024-Cut	24.7	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	42	Harvest	Clearcut with Reserves	Aspen, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Clearcut Stand to promote aspen regeneration.									
<u>Specs:</u>									
<u>Other</u> Be sure to buffer motorcycle trail through the stand. Do so by leaving patches along trail.									
<u>Comments:</u>									
<u>Next</u> Continue to monitor regeneration on site									
<u>Steps:</u>									
27	52146027-Cut	30.8	4110 - Sugar Maple Association	High Density Pole	61	Harvest	Clearcut	Aspen, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Clearcut Area in NW part of stand to connect clearcuts in stands 21 and 24, NO RETENTION									
<u>Specs:</u>									
<u>Other</u> The objective of connecting these two stands is to contribute to wildlife value in a number of ways and provide an area that can be managed in									
<u>Comments:</u> rotation with the other aspen stands in the compartment to provide longterm wildlife benefits.									
<u>Next</u> Monitor regeneration on site.									
<u>Steps:</u>									
29	52146029-Cut	9.1	4130 - Aspen	High Density Log	43	Harvest	Clearcut	Aspen	Cmpt. Review Proposal
<u>Prescription</u> Clearcut all species present in sale area. Leave White Pine for structure and species diversity.									
<u>Specs:</u>									
<u>Other</u> Topography may affect the total sale area.									
<u>Comments:</u>									
<u>Next</u> Per work instructions check regeneration to determine effectiveness of treatment.									
<u>Steps:</u>									
31	52146031-Cut	9.0	4130 - Aspen	High Density Log	46	Harvest	Clearcut	Aspen	Cmpt. Review Proposal
<u>Prescription</u> Clearcut all species.									
<u>Specs:</u>									
<u>Other</u> Topography may affect timber sale boundary									
<u>Comments:</u>									
<u>Next</u> Per work instructions come back to stand to determine effectiveness of regeneration.									
<u>Steps:</u>									
36	52146036-Cut	22.1	4139 - Aspen, Mixed Deciduous	High Density Log	45	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
<u>Prescription</u> Clearcut all species with the exception of Red Oak and White Pine.									
<u>Specs:</u>									
<u>Other</u> May lose acres in treatment area due to proximity to the lake, as well as topography.									
<u>Comments:</u>									
<u>Next</u> Continue to monitor regeneration after the completion of the treatment.									
<u>Steps:</u>									





S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
18	NF_52146018- NonFor	28.5	Unspecified		0	Non-Forest Management	Mowing	Mixed Upland Herbaceous	Cmpt. Review Proposal
<u>Prescription</u> Opening Maintenance to preserve diversity of landscape									
<u>Specs:</u>									
<u>Other</u>									
<u>Comments:</u>									
<u>Next</u> Observe treatment to note if desired result is achieved									
<u>Steps:</u>									
26	NF_52146026- NonFor	6.2	Unspecified		0	Non-Forest Management	Mowing	Mixed Upland Herbaceous	Cmpt. Review Proposal
<u>Prescription</u> Use of mowing and brushcutting to conduct Opening Maintenance									
<u>Specs:</u>									
<u>Other</u>									
<u>Comments:</u>									
<u>Next</u> Monitor treatment to verify the results									
<u>Steps:</u>									
28	NF_52146028- NonFor	9.3	Unspecified		0	Non-Forest Management	Mowing	Mixed Upland Herbaceous	Cmpt. Review Proposal
<u>Prescription</u> Use of mowing and brushcutting for opening maintenance									
<u>Specs:</u>									
<u>Other</u>									
<u>Comments:</u>									
<u>Next</u> Monitor treatment to verify effectiveness									
<u>Steps:</u>									
<b>Total Treatment Acreage Proposed:</b>		<b>188.9</b>							

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

Prescription Specs:

Other Comment:

Next Steps:

Limiting Factor and No Treatment Reason

---

**Total Treatment Acreage Proposed: 0**

Stand	Gaylord Mgt. Unit			5 – Forested Stands		Compartment: 146
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012
						General Comments:
1	4119 - Mixed Northern Hardwoods	High Density Pole	19.8	47	81-110	Scruffy Hardwood. Basswood dominant. Heavy red maple understory.
2	4130 - Aspen	High Density Pole	37.7	23	51-80	Good vigorous aspen regeneration, nice stand
3	4119 - Mixed Northern Hardwoods	High Density Pole	253.9	65	81-110	Lots a variability inside stand boundaries, maybe split stand into several stands? (decided not to split stand due to not a lot of variability in cover type, just density)
5	4113 - R.Maple, Conifer	High Density Log	16.3	43	51-80	Junk.
7	4119 - Mixed Northern Hardwoods	High Density Pole	63.2	64	81-110	Openings put in stand to plant acorns and white pine according to previous OI. Doesn't appear to have been an effective treatment, no visible white pine or oak regeneration present.
9	4130 - Aspen	Medium Density	25.2	7		Very young regenerating aspen stand
10	4130 - Aspen	High Density Pole	38.8	35	51-80	Scrubby Mix, low quality stems.
12	4110 - Sugar Maple Association	Medium Density Pole	134.1	57	81-110	Patch Clearcuts from a previous treatment? Doesn't look like much tree regen in gaps (mostly raspberry and blackberry)
13	4130 - Aspen	High Density Pole	84.5	23	51-80	Split from stand 23, aspen dominated, looks like a sugar maple site, KOTAR supports this, lots of sugar maple saplings
16	4110 - Sugar Maple Association	High Density Pole	70.3	53	51-80	Young hdwd stand, so so quality, mix of aspen, lots of sugar maple saplings
17	4119 - Mixed Northern Hardwoods	High Density Pole	88.8	54	81-110	
19	4130 - Aspen	High Density Pole	31.1	33	51-80	Possible Aspen Clearcut, lots of defect in Aspen trees. More white pine in North end, possibly leave White Pine?
20	4110 - Sugar Maple Association	High Density Log	98.9	61	81-110	Come back and look at possible HDWD thinning in part of the stand.
21	4119 - Mixed Northern Hardwoods	High Density Pole	45.6	62	81-110	Maybe clear cut and plant to red pine. Stand falls under the AFOCa and AFO/AFOCa Kotar type, and the soil is part of the Mancelona Series. Pine in adjacent compartment on similiar site a SI = 60
23	4130 - Aspen	Medium Density	33.1	2		Former R9 stand. RP left for structure and diversity, returning to a hardwood/aspen as per previous treatment objectives.



S  
t  
a  
n  
d

## Gaylord Mgt. Unit

## 5 – Forested Stands

Compartment: 146

Inventory Method: IFMAP

Year of Entry: 2012



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
24	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	24.6	42	81-110	According to soil map, soil is part of the Kalkaska Series, and Kotar types are a mix of AFO/AFOCA, and PARVVb/AFO, SI = for red pine on an adjacent stand of similar soils and Kotar types is 60
27	4110 - Sugar Maple Association	High Density Pole	461.1	61	81-110	Basal Area is incredibly variable, few scattered small (less than 2.5 acre) pockets of nice timber where basal area was as high as 150, generally though very poor quality timber.
29	4130 - Aspen	High Density Log	7.9	43	111-140	
31	4130 - Aspen	High Density Log	8.7	46	81-110	Large diameter mature aspen trees
32	4130 - Aspen	High Density Pole	54.1	33	81-110	Lots of Ironwood understory in north part of stand. Lots of defect on trees. Junky aspen, clearcut next entry possibly?
34	4319 - Mixed Upland Forest	Medium Density Log	8.2	37	51-80	Upland Spruce/Fir Dominate, some small openings, a mixture of decadent Basswood and Pople present, as well as some red maple poles and saplings
35	4130 - Aspen	High Density Sapling	20.7	13		Recent Clearcut, regen is coming along very well, bigger the farther east in the stand you go
36	4139 - Aspen, Mixed Deciduous	High Density Log	24.4	45	81-110	
37	6123 - Lowland Fir	High Density Pole	7.3	37	111-140	



Stand	Cover Type	Acres	Gen Cmts:
4	310 - Herbaceous Openland	2.8	
6	320 - Upland Shrub	29.8	
8	310 - Herbaceous Openland	1.4	
11	3105 - Mixed Upland Herbaceous	19.7	
14	310 - Herbaceous Openland	1.4	
15	310 - Herbaceous Openland	9.6	
18	310 - Herbaceous Openland	28.5	
22	310 - Herbaceous Openland	2.5	
25	310 - Herbaceous Openland	18.7	
26	3301 - Low Density Deciduous Tree	6.2	
28	330 - Low-Density Trees	9.3	
30	310 - Herbaceous Openland	1.3	
33	310 - Herbaceous Openland	6.0	Informal camping area not maintained by the DNR but commonly used next to Standard Lake.



**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.

Inventory Method: IFMAP

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.