



## GRAYLING FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 248 ENTRY YEAR: 2012

GIS Compartment Acreage: 1865 County: Crawford

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**Revision Date:** 9/2/2010

**Stand Examiner:** Lucas Merrick

**Legal Description:** Lovells Township, T28N R02W, Sections 16, 17, 18

**Management Goals:** To provide an area that allows for National Guard training while maintaining forest health, productivity, sustainability, species diversification, and structural diversity throughout the compartment.

**Soils and Topography:** The compartment is flat to gently rolling. Soils are primarily Graycalm, Klacking, and Grayling Sands.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** This compartment and surrounding area is under the 1935 long-term lease agreement L-1479 (Act 154 P.A. 1935) with the Michigan National Guard, Department of Military and Veteran Affairs. The agreement provides for use by the military during their encampment, with no permanent buildings or improvements to be erected. Military needs take precedence over resource management needs on long-term lease lands. The DNR will coordinate all prescribed treatments and associated activities with the National Guard to ensure they are compatible with military training needs. The majority of this compartment is inaccessible to the public due to the Range 40 Complex fence. There is excellent potential for unexploded ordinances within the fence boundary.

**Unique, Natural Features:** No recorded occurrences.

**Archeological, Historical, and Cultural Features:** None known at this time.

**Special Management Designations or Considerations:** Military training and Range 40 complex. The East Branch AuSable River is a designated "Natural River" (HCVA). The entire Compartment is considered a Special Conservation Area (SCA), it is designated under "Research and Development" for military lands.

**Watershed and Fisheries Considerations:** The East Branch AuSable River meanders through section 18 of this compartment. This river is a designated "Natural River". Rivers and streams with this designation are considered High Conservation Value Areas (HCVA). Timber Lake and two other small bodies of water feeding the river are also encompassed by compartment 248. The entire portion of the river and the small lakes found in this compartment are within the fenced portion of Range 40 and are not accessible by public land users.

**Wildlife Habitat Considerations:** The range provides excellent habitat for species best suited to large open areas. The range has several fires annually and creates opportunities for plant species that have adapted to ecosystems which are prone to frequent fire events.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of ice-contact outwash sand and gravel. The glacial drift thickness varies between 600 and 800 feet. Beneath the glacial drift is the Coldwater Shale. There is not an economic use for the Coldwater Shale. The nearest gravel pit is three miles to the

south, and gravel potential is considered good on the upland areas. None of the State land in the compartment is currently leased for oil and gas. This is part of the DMVA artillery range.

**Vehicle Access:** Access is poor. The southern boundary of the compartment is drivable along the range fence. The range fence boundary is easily accessible off of County Road 612 by forest 2-tracks and designated county roads.

**Survey Needs:** None at this time.

**Recreational Facilities and Opportunities:** None at this time.

**Fire Protection:** Range 40 is subject to frequent fire events created by military artillery. Burn out operations along fences boundaries and frequent monitoring help to limit fires to within the range boundaries. Sand and hills are the greatest limiting factors for fire equipment in the event of an escaped fire.

**LOTS Compartment Acreage:** 1,868 acres

- **The following reports are available:**
  - ◆ **Cover Type by Age Class**
  - ◆ **Proposed Treatment Summaries**
  - ◆ **Dedicated Conservation Area Details**
  - ◆ **Listing of Forested Stands**
  - ◆ **Listing of Non-Forested Stands**
  - ◆ **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, recreation trails and facilities**
  - ◆ **Proposed treatments**
  - ◆ **Proposed road access system**
  - ◆ **Special Conservation areas**

# Cover Type & Treatment Map

Compartment 248  
 T28N, R02W, Sec. 16-18  
 County: Crawford  
 Unit: Grayling  
 YOY: 2012  
 Acres: 1,865 GIS Calculated  
 Stand Examiner: Lucas Merrick  
 Map Revised: 8/26/2010  
 Map Phase: Pre-Review

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

**Legend**

- Miris Corners
- Paved Roads
- - - County Gravel Roads
- - - Poor Dirt Roads
- - - Military Range Fence
- · - Intermittent Stream/Drain
- Stream
- Lakes and Rivers

**Forest Stands**

Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 612 - Lowland Coniferous Forest

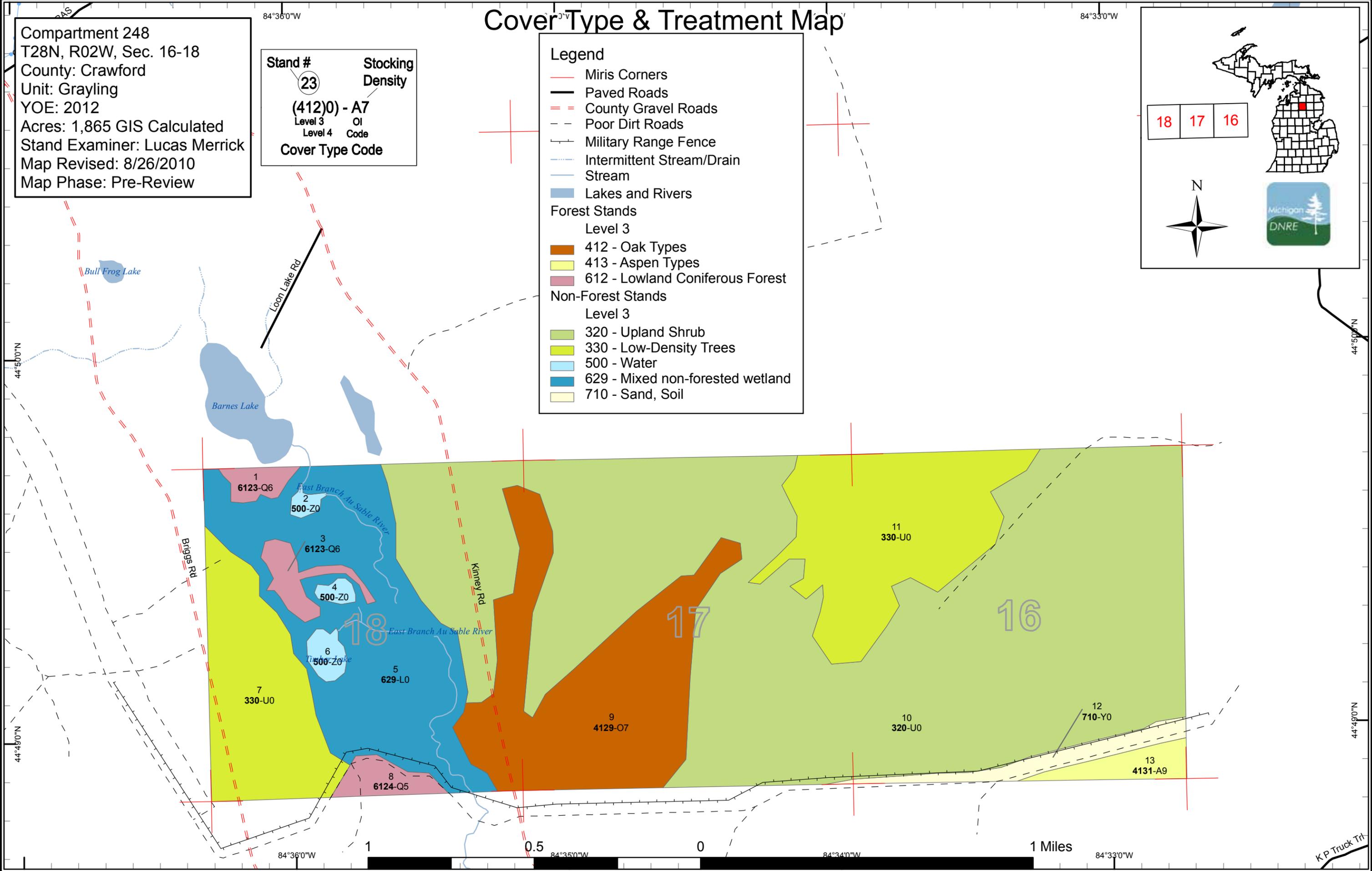
**Non-Forest Stands**

Level 3

- 320 - Upland Shrub
- 330 - Low-Density Trees
- 500 - Water
- 629 - Mixed non-forested wetland
- 710 - Sand, Soil

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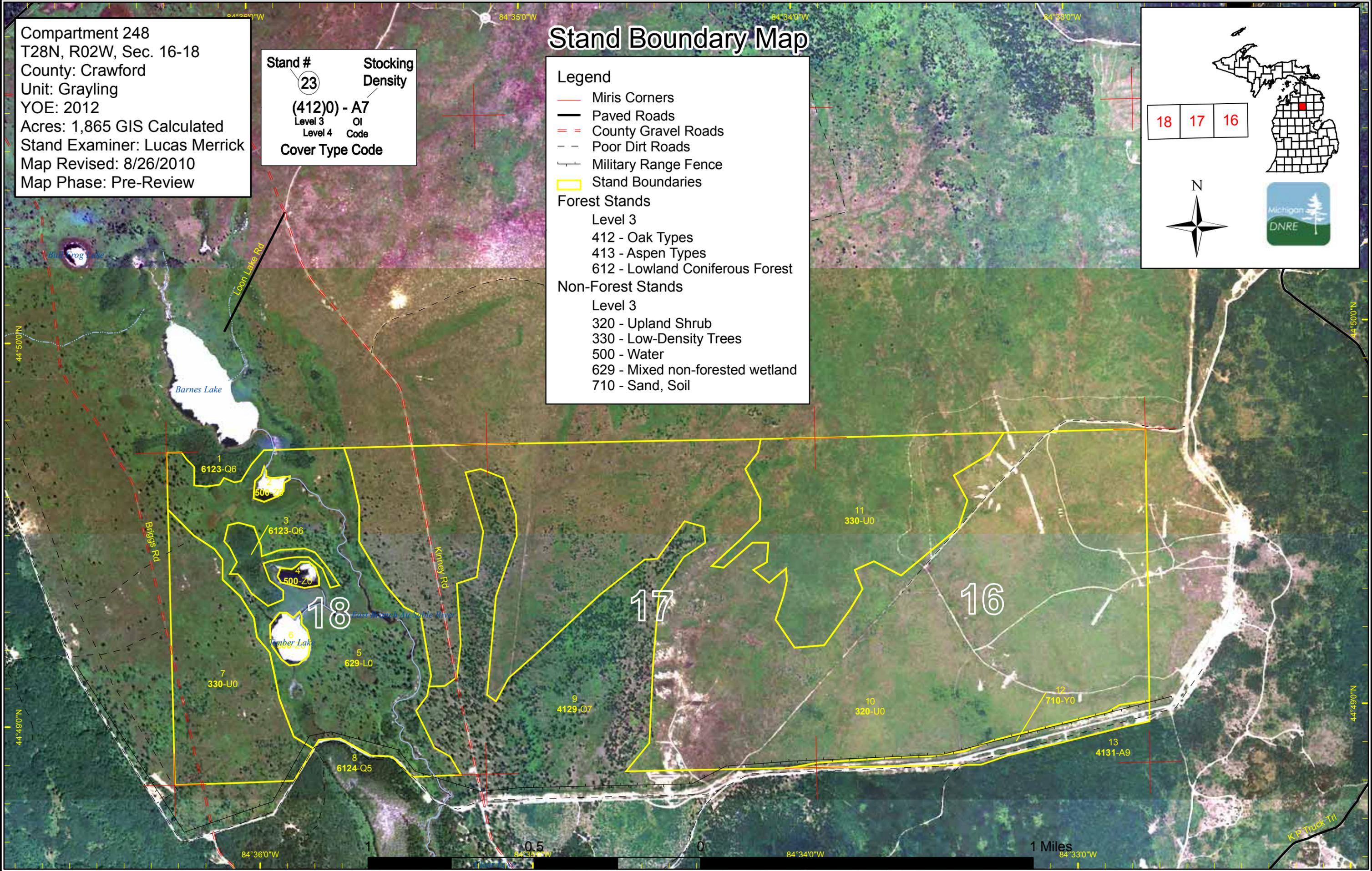
**Stand #**  
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# Stand Boundary Map

- Legend**
- Miris Corners
  - Paved Roads
  - - County Gravel Roads
  - - Poor Dirt Roads
  - - Military Range Fence
  - Stand Boundaries
- Forest Stands**
- Level 3
- 412 - Oak Types
  - 413 - Aspen Types
  - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3
- 320 - Upland Shrub
  - 330 - Low-Density Trees
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# Dedicated & Proposed Special Conservation Area Map

Compartment 248  
 T28N, R02W, Sec. 16-18  
 County: Crawford  
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 YOE: 2012  
 Acres: 1,865 GIS Calculated  
 Stand Examiner: Lucas Merrick  
 Map Revised: 8/26/2010  
 Map Phase: Pre-Review

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

**Legend**

- Miris Corners
- Stand Boundaries
- Dedicated Special Conservation Areas
- Cold Water Streams
- Research, Development, and Military Lands
- Natural Rivers Zoning District
- Natural Rivers Vegetative Buffer

**Forest Stands**

Level 3

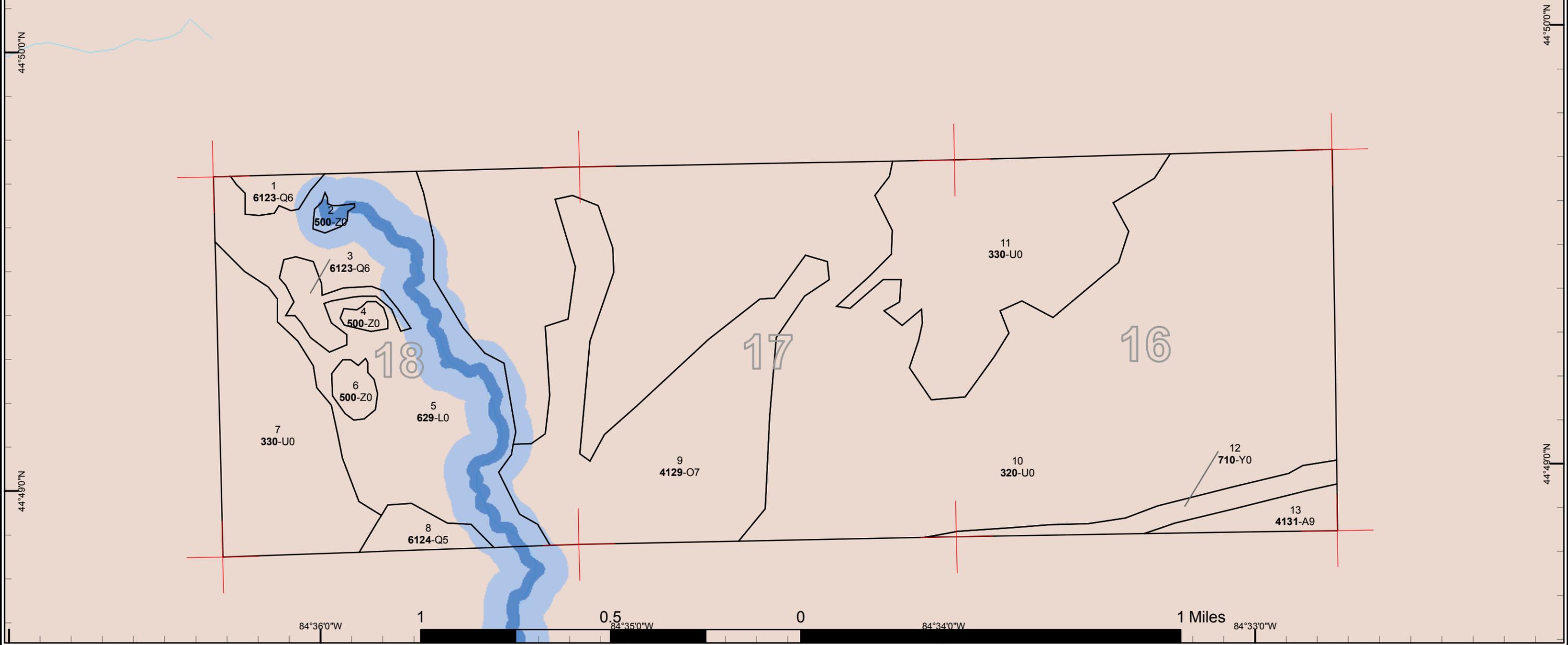
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18 17 16



**Table 1 – Total Acres by Cover Type and Age Class**

Data updated before 2:00 PM



	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	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	21
Low-Density Trees	320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	320
Lowland Conifers	0	0	0	0	0	0	0	0	28	0	17	0	0	0	0	46
Lowland Shrub	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	238
Oak	0	0	0	0	0	0	0	0	219	0	0	0	0	0	0	219
Sand, Soil	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Upland Shrub	974	0	0	0	0	0	0	0	0	0	0	0	0	0	0	974
Water	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
<b>Total</b>	<b>1579</b>	<b>0</b>	<b>248</b>	<b>21</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1865</b>						



## Table 2 – Proposed Treatment Summaries

Data updated before 2:00 PM

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

**Compartment 248**  
**Total Compartment Acres: 1865**

### Acres by Treatment Type

Commercial Harvest - 0	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
	#Error	#Error	#Error	#Error	#Error	#Error	#Error
<b>Total</b>	#Error	#Error	#Error	#Error	#Error	#Error	#Error



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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  
Comments:

Next  
Steps:

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**Total Treatment  
Acreage Proposed: 0**



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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

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**Total Treatment  
Acreage Proposed:        0**

Data updated before 2:00 PM

Out of YOE -- Treatments  
Prescribed with No Limiting Factor

Year of Entry: 2012



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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  
Comments:

Next  
Steps:

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**Total Treatment  
Acreage Proposed: 0**

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Grayling Mgt. Unit

## 5 – Forested Stands

Compartment: 248

Data updated before 2:00 PM

Year of Entry: 2012



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6123 - Lowland Fir	High Density Pole	11.1	70		No access due to bombing range.
3	6123 - Lowland Fir	High Density Pole	17.3	70		No access due to bombing range.
8	6124 - Lowland Spruce- Fir	Medium Density Pole	17.4	90		Mixed lowland conifer and white/red pine. The river runs through the middle of the stand. Looks like flooding has killed the majority of timber in the center except for a handful of cedar. This area also has cattails and alder. The western edge of the stand is small diameter aspen with scattered conifer.
9	4129 - Mixed Oak	Low Density Log	219.4	75		a little over 25% canopy cover of mixed oak and pine. Some harvesting occurred within the fence in the early 90's. This area burns almost annually.
13	4131 - Aspen, Oak	High Density Log	21.1	80		A nice looking stand. The oak and aspen are in good condition. The birch is either dead or in severe decline. Fairly thick wildlife shrub cover. This stand will be treated with the adjacent compartment.



Stand	Cover Type	Acres	Gen Cmts:
2	50 - Water	3.9	
4	50 - Water	4.4	
5	629 - Mixed non-forested wetland	238.4	This is a drainage area that runs through the range. 3 small lakes drain into the river. There are ridges running through the stand but the water table is right there. Bb, huckleberry, alder, and bracken fern visible through the snow. The higher ground may have been picked through in the early 90's. This stand burns almost annually.
6	50 - Water	9.3	Timber Lake
7	3303 - Mixed Low Density Trees	133.2	This stand burns almost annually. Extensive sweet fern(sticking out of the snow).
10	3201 - Sweet Fern	973.7	
11	3301 - Low Density Deciduous Tree	187.2	Scattered amounts of aspen clones and stump sprouts?
12	710 - Sand, Soil	28.6	Range fence road. Mixed regeneration along edges. This road often used as a fuel break. Knappweed present.



### 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.

*Data updated before 2:00 PM*

Stand	SCA Type	SCA Name	Acres	Comments
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## 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.

*Data updated before 2:00 PM*

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	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.
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated for research, or other purposes. They include the 5,847 acre Forest Fire Experiment Station, the 12,000 acre Houghton Lake Wildlife Research Area, the Beaver Islands Archipelago Wildlife Research Area (that includes most of Garden Island, all of High and Hog Islands, all state owned land on Beaver, South Fox and North Fox Islands), the Cusino Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research Station, the 125 acre Wyman Nursery, and over 144,000 acres of Military Lands.