



**GRAYLING FOREST MANAGEMENT UNIT  
COMPARTMENT REVIEW PRESENTATION**

**COMPARTMENT # 216 ENTRY YEAR: 2011**

**GIS Compartment Acreage: 875 County: Crawford**

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**Revision Date: July 20, 2009**

**Stand Examiner: Patrick A. Mohney**

**Legal Description: T28N, R03W, Sections 31, 32 and 33**

**Management Goals:**

To maintain forest health, productivity, sustainability, species diversification and structural diversity throughout the compartment while providing for multiple use and visual management.

**Soils and Topography:** Topography within this compartment is primarily flat with some rolling hills. Some areas have some steep hills, mostly east of I-75. Soil types are a mixture of Rubicon, Blue Lake, Kalkaska and Feldhauser sands. The soils are well drained and pose minimal threat for windthrow. Soils and terrain present erosion concerns in steep areas in the compartment

**Ownership Patterns, Development, and Land Use in and Around the Compartment:**

This compartment is bordered by some private ownership as well as Hartwick Pines State Park. There is a large amount of private ownership within the sections included in the compartment. Within the compartment there is Forbush Corners XC Ski area. This business has ski trails which pass through lands with state ownership.

**Unique, Natural Features (include only non-site specific and non-sensitive information):**

There is a potential for dry prairie plants in grassy openings. Hill's thistle, rough fescue, Alleghany plum and pale agoseris. There is also potential for rare grassland birds such as grasshopper sparrow, Henslow's sparrow and Massasauga rattle snake. Neighboring compartments have historically had Dusted skipper, Red Legged Spittlebug, Secretive Locust, Blanding's Turtle, Kirtland's Warbler, Bald Eagle, Common Loon and Red Shouldered hawk.

**Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):**

None known at this time.

**Special Management Designations or Considerations:**

None known at this time.

**Watershed and Fisheries Considerations:**

There are no bodies of water within this compartment.

**Wildlife Habitat Considerations:**

Try to expand the aspen component where possible by removing poor quality plantation white pine.

**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. The Coldwater does not have a current economic use. A gravel pit is located in Section 33 and potential is good on the upland areas. The Compartment is not currently leased, but the land to the west has been developed for Antrim Shale gas.

**Vehicle Access:**

There is very good access throughout the compartment by way of county roads, forest roads and gas pipeline and well access roads.

**Survey Needs:**

Current surveys are adequate for prescribed stands some areas may need to be surveyed in the future.

**Recreational Facilities and Opportunities:**

There are motorized recreation trails that pass through the compartment. There are cross country ski trails in the compartment that are maintained by Forbush Corners.

**Fire Protection:** The current road system is adequate, timber conversion is not needed. Topography will be limiting for equipment in certain locations.

**Additional Compartment Information:**

**LOTS Compartment Acreage: 873.4**

- **The following 5 reports from the Operations Inventory System (OIPC) are attached:**
  - ◆ **Cover Type by Age Class**
  - ◆ **Cover Type by Management Objective**
  - ◆ **Compartment Volume Summary**
  - ◆ **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 old growth**

# Cover Type & Treatment Map

Compartment 216  
 T28N, R03W, Sec. 31, 32, 33  
 County: Crawford  
 Unit: Grayling  
 YOY: 2011  
 Acres: 875 GIS Calculated  
 Stand Examiner: Patrick Mohny  
 Map Revised: 9/11/2009  
 Map Phase: Pre-Review

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

**Legend**

- Miris Corners
- Highways
- County Paved Road
- Paved Road
- - - Poor Dirt Road
- Powerlines
- Pipelines
- Intermittent Stream/Drain
- Stream
- Interstate Highway
- █ Lakes and Rivers
- Clearcut (w/Reserves, Patch/Strip)

**Forest Stands Level 3**

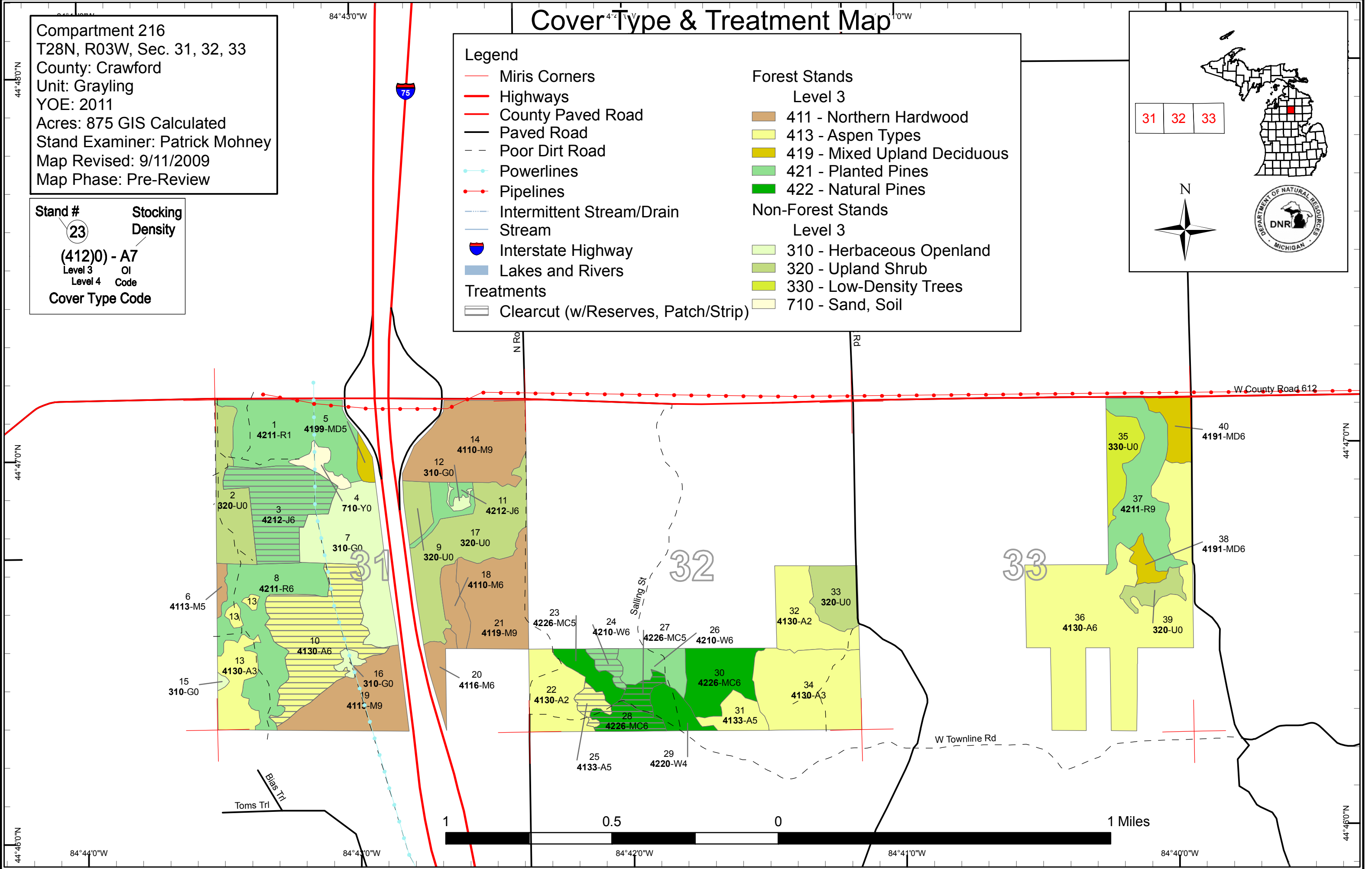
- █ 411 - Northern Hardwood
- █ 413 - Aspen Types
- █ 419 - Mixed Upland Deciduous
- █ 421 - Planted Pines
- █ 422 - Natural Pines

**Non-Forest Stands Level 3**

- █ 310 - Herbaceous Openland
- █ 320 - Upland Shrub
- █ 330 - Low-Density Trees
- █ 710 - Sand, Soil

31 32 33

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

# Stand Boundary Map

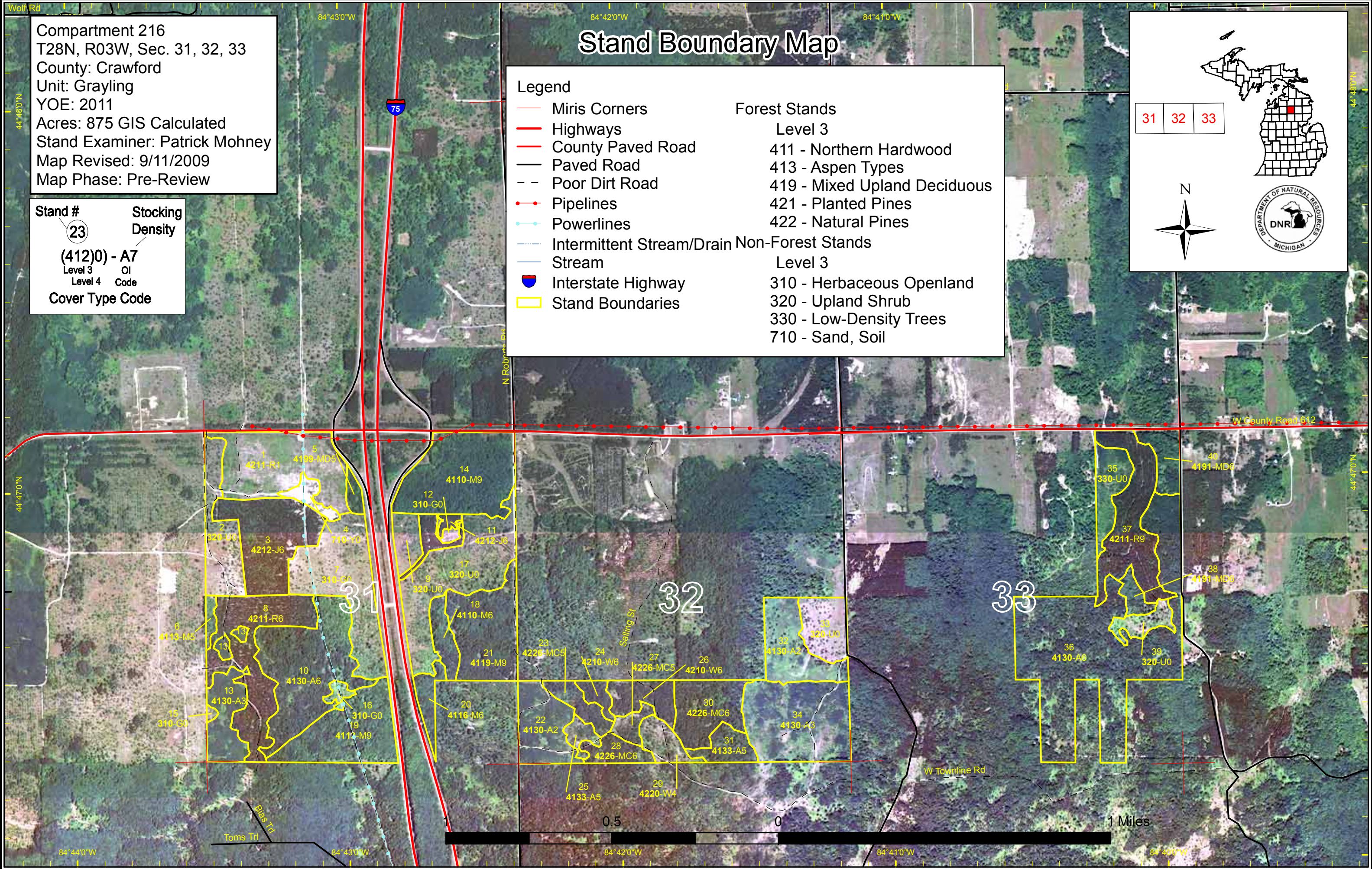
## Legend

- |                                               |                              |
|-----------------------------------------------|------------------------------|
| — Miris Corners                               | Forest Stands                |
| — Highways                                    | Level 3                      |
| — County Paved Road                           | 411 - Northern Hardwood      |
| — Paved Road                                  | 413 - Aspen Types            |
| - - Poor Dirt Road                            | 419 - Mixed Upland Deciduous |
| •• Pipelines                                  | 421 - Planted Pines          |
| — Powerlines                                  | 422 - Natural Pines          |
| — Intermittent Stream/Drain Non-Forest Stands | Level 3                      |
| — Stream                                      | 310 - Herbaceous Openland    |
| — Interstate Highway                          | 320 - Upland Shrub           |
| — Stand Boundaries                            | 330 - Low-Density Trees      |
|                                               | 710 - Sand, Soil             |

31 32 33

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Grayling Mgt. Unit

**Covertime, Acres, and Age summary**  
(Level 3 Cover Type)

Compartment 216 Year of Entry 2011

Report Date: 09/11/2009



	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	24	90	0	126	5	55	0	0	0	0	0	0	0	0	300
Herbaceous Openland	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
Low-Density Trees	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Mixed Upland Deciduous	0	0	0	0	0	0	3	16	0	0	0	0	0	0	0	19
Natural Pines	0	0	0	0	26	5	0	0	23	0	0	0	0	0	0	55
Northern Hardwood	0	0	0	0	0	0	7	39	0	57	0	0	0	0	35	139
Planted Pines	0	45	0	0	5	89	51	0	0	0	0	0	0	0	0	190
Sand, Soil	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Upland Shrub	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	103
<b>Total</b>	<b>173</b>	<b>70</b>	<b>90</b>	<b>0</b>	<b>157</b>	<b>99</b>	<b>117</b>	<b>55</b>	<b>23</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>35</b>	<b>875</b>

**PROPOSED TREATMENTS  
NO LIMITING FACTORS**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
<b>3 72216003-Cut</b>	38.1	42120 - Planted Jack Pine	High Density Pole	58	Harvest	Clearcut with Reserves	Mixed Upland Shrub

Rev --Elaine Carlson : 07/23/2009 comments: I actually made it to here.  
Cmnt:

Rev Poor JP site. Final Harvest with retention islands to create edge effect. The goal is to let this stand regenerate to cherry brush with jack pine patches.  
Spec:

Next  
Steps:

<b>10 72216010-Cut</b>	54.7	4130 - Aspen	High Density Pole	55	Harvest	Clearcut with Reserves	Aspen
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Rev  
Cmnt:

Rev Lots of poor quality aspen with patches of white pine scattered throughout. Final harvest and leave patchest of white pine to regenerate to better quality  
Spec: aspen. Any combination of aspen, white pine, red maple, beech, or ironwood is acceptable.

Next  
Steps:

<b>24 72216024-Cut</b>	4.6	42100 - Planted White Pine	High Density Pole	35	Harvest	Clearcut with Reserves	Aspen, Mixed Deciduous
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Rev  
Cmnt:

Rev Weevil damaged white pine plantation that was never thinned. There are some spots with aspen throughout. Clearcut stand, mark 3-5 white pine per  
Spec: acre to keep. Choose larger, quality stems for seed source. Will accept any combination of aspen, red maple, beech and white pine as regeneration. Cut with stands 25, 27 and 28.

Next  
Steps:

<b>25 72216025-Cut</b>	4.6	4133 - Aspen, Mixed Pine	Medium Density Pole	40	Harvest	Clearcut with Reserves	Aspen, Mixed Pine
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Rev  
Cmnt:

Rev This stand has mostly poor quality aspen. There are patches of white pine and the occasional red pine throughout. Final Harvest to regenerate to better  
Spec: quality aspen. Adjacent stand 22 was cut recently and has regenerated to a decent quality A3. Do not cut Red Pine. Any combination of aspen, red pine and white pine is acceptable. Cut with stands 24, 27 and 28.

Next  
Steps:

<b>27 72216027-Cut</b>	5.2	42260 - Natural Pine, Mixed Deciduous	Medium Density Pole	40	Harvest	Clearcut with Reserves	Aspen, Mixed Pine
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Rev  
Cmnt:

Rev This stand is made up of poor quality white pine, jack pine and aspen. Final Harvest this stand leaving all Jack Pine. Any combination of aspen, white  
Spec: pine and jack pine is acceptable regeneration. Cut with stands 24, 25, 27 and 28.

Next  
Steps:

**PROPOSED TREATMENTS  
NO LIMITING FACTORS**



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	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Page 2 of 2
28	72216028-Cut	8.6	42260 - Natural Pine, Mixed Deciduous	High Density Pole	38	Harvest	Clearcut with Reserves	Aspen, Mixed Pine	

Rev  
Cmnt:

Rev Poor quality white pine plantation that has a lot of weevil damage. Final Harvest this stand to regenerate to aspen. Mark 3-5 white pine per acre to  
Spec: keep, choosing larger, better quality stems. Cut with stand 25, 27 and 24. Regeneration of aspen and white pine is acceptable.

Next  
Steps:

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**Total Treatment  
Acreage Proposed: 115.8**

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Grayling Mgt. Unit  
Inventory Method: IFMAP

### PROPOSED TREATMENTS WITH LIMITING FACTORS

Compartment: 216      Entry Yr: 2011  
Date 09/11/2009



Treatment Name	Acres	Stage1 Cover Type	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Page 1 of 1
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Limiting Factor and Comment:

Rev Cmnt:

Rev Spec:

Next Steps:

No Treatment Reason

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**Total Treatment Acreage Proposed:      0**



**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 Name	Acres	Comments



## 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	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.