

**CADILLAC FOREST MANAGEMENT UNIT****COMPARTMENT REVIEW PRESENTATION****COMPARTMENT # 136 ENTRY YEAR: 2010****Compartment Acreage (GIS Acres): 1,667 County: Wexford**

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**Revision Date: 12/01/2008 11:45 AM****Stand Examiner:** David Fisher, Forester, Manton Field Office**Legal Description:** T24N R10W Sections 13,14,15,22,23,24,27,34.**RMU (if applicable):** 237 Mixed Use**Management Goals:** Maintain cover types and age class diversity.**Soil and Topography:** Rubicon, Croswell, Montcalm sands. Tawas in wet areas.**Ownership Patterns, Development, and Land Use in and Around the Compartment:**

Private ownership in every section. Some full time residents on main roads. The areas in center part of sections are wooded or christmas tree plantations. Some of the small blocks of state land are landlocked due to private ownership or inaccessible because of creeks.

**Unique, Natural Features (include only non-site specific and non-sensitive information):** Wood turtle record to the nw of the compartment. Eagle to se. Potential for northern goshawk, bald eagle, osprey, great-blue heron rookery, wood turtle, massasauga, and Blanding's turtle along Buttermilk and Silver Creeks. Ginseng and Hill's thistle to ne. Potential for rare plants of cedar swamp: limestone oak fern, ram's head lady's-slipper, and calypso orchid. Potential for bog bluegrass.

**Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):** None listed

**Special Management Designations or Considerations:** None.

**Watershed and Fisheries Considerations:**

**Wildlife Habitat Considerations:** This compartment is one of 13 in this RMU which makes up most of the State ownership in Wexford County. The intent of the original agreement was to increase the aspen acreage and decrease the red/white pine acreage, while maintaining other existing cover types. Since the agreement was made, a large amount of ownership has been acquired that was originally Consumer Power land. Many aspen and oak stands have a lot of white pine in the understory. Many stands have already been converted to white pine or red pine management. Regeneration of the oak type is a concern. The Manistee River corridor and associated tributaries are valuable wildlife areas offering a good mix of aspen, lowland hardwoods, upland hardwoods, mixed fruiting shrubs, and conifer cover providing valuable habitats for many wildlife species. These areas are heavily used by wintering deer. Restrictions on the management of early

successional species and manipulation of the shrub component along these corridors will impact numerous wildlife species that used these areas in the past. (L. Smith, 9/19/08)

**Mineral Resource and Development Concerns and/or Restrictions:**

Sections 13 – 15, 22 – 24 & 34 T24N-R10W, Wexford Co

Surface sediments consist of coarse-textured till, an end moraine of coarse-textured till and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift are the Mississippian Michigan Formation and Marshall Sandstone. The Michigan is quarried for gypsum in other areas of the State and the Marshall was used as a building stone. Gravel pits are located in the area and there should be some potential. This area is located seven miles southeast of the prolific Silurian Guelph (Niagaran) reef trend. Oil and gas has unknown potential in the Compartment and none of the Compartment is currently leased.

**Vehicle Access:** A forest road access plan is detailed on the compartment map. Identified are state and county roads as well as forest roads and trails under the jurisdiction of the DNR. Also indicated are forest roads and trails under the jurisdiction of the DNR that are proposed for abandonment. These roads were determined to be in excess of the access needs in the area, are a threat to the resources, or are a concern environmentally. Proposed new roads or roads recommended for substantial improvement are noted below:

**Survey Needs:** None.

**Recreational Facilities and Opportunities:** No maintained facilities. The main recreation is dispersed hunting and fishing. No trails.

**Fire Protection:** The compartment has numerous areas of urban interface, and the potential for large fire growth in some areas due to fuel types. Access & terrain are fairly good throughout the compartment.

**Additional Compartment Information:**

**The following parcels are recommended for acquisition if they become available for sale:**

Desirable lands for access listed, section 22 W1/2 SE, 80 acres, recommend adding N1/2 NE section 14.

**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:**

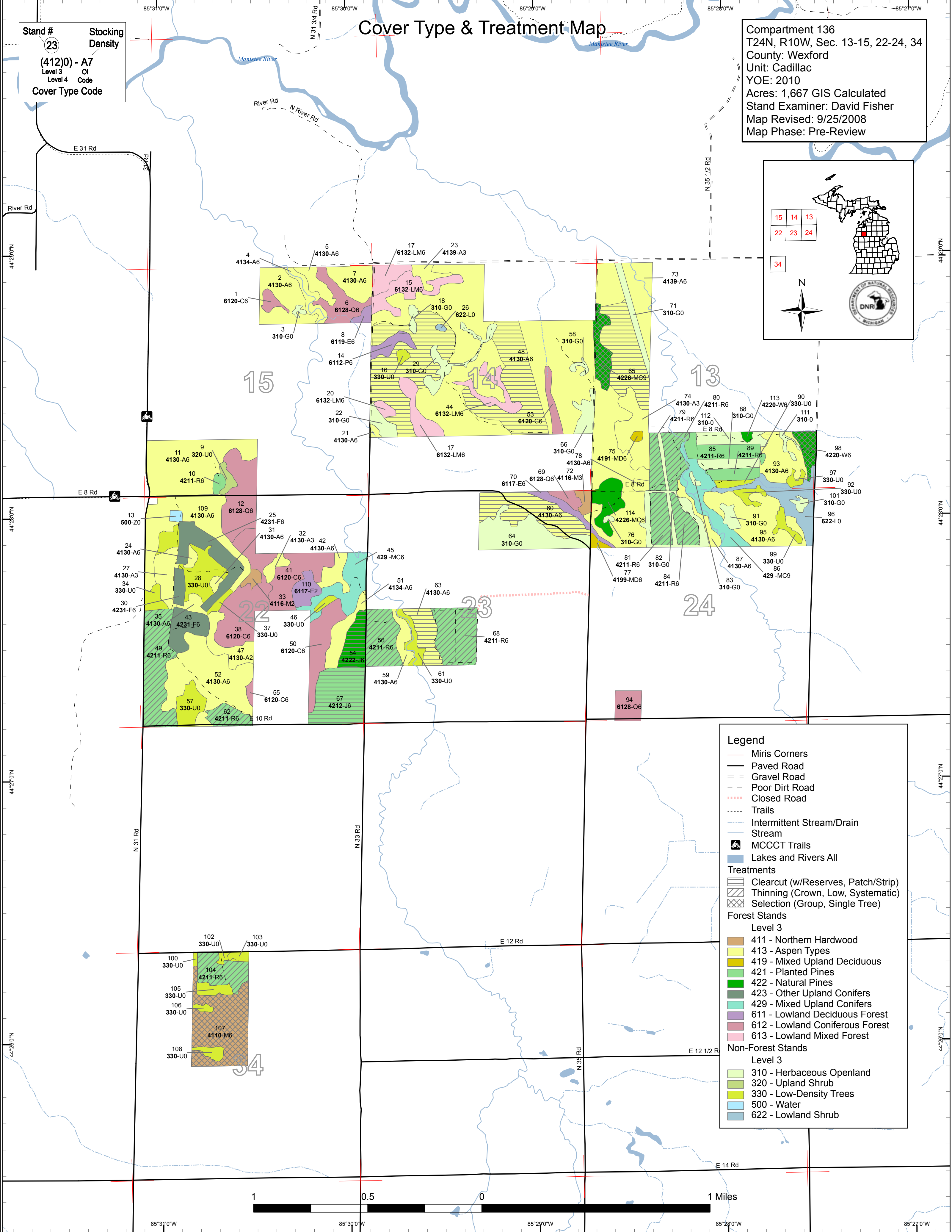
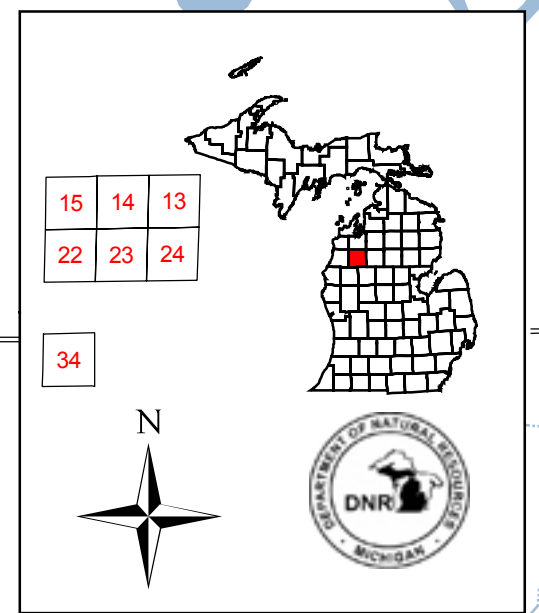
- ◆ **Base feature information, stand numbers, cover types**
- ◆ **Proposed treatments**
- ◆ **Proposed road access system**
- ◆ **Suggested potential old growth**

# Cover Type & Treatment Map

Stand #  
**23**  
Level 3  
Level 4  
Cover Type Code

Stocking  
Density

Compartment 136  
T24N, R10W, Sec. 13-15, 22-24, 34  
County: Wexford  
Unit: Cadillac  
YOE: 2010  
Acres: 1,667 GIS Calculated  
Stand Examiner: David Fisher  
Map Revised: 9/25/2008  
Map Phase: Pre-Review



### Legend

- Miris Corners
- Paved Road
- Gravel Road
- Poor Dirt Road
- Closed Road
- Trails
- Intermittent Stream/Drain
- Stream
- MCCCT Trails
- Lakes and Rivers All

### Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Thinning (Crown, Low, Systematic)
- Selection (Group, Single Tree)

### Forest Stands

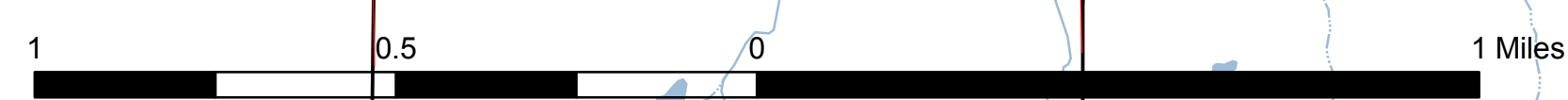
Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

### Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub

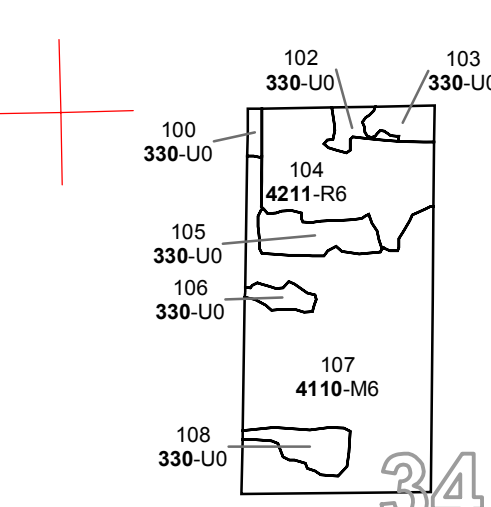
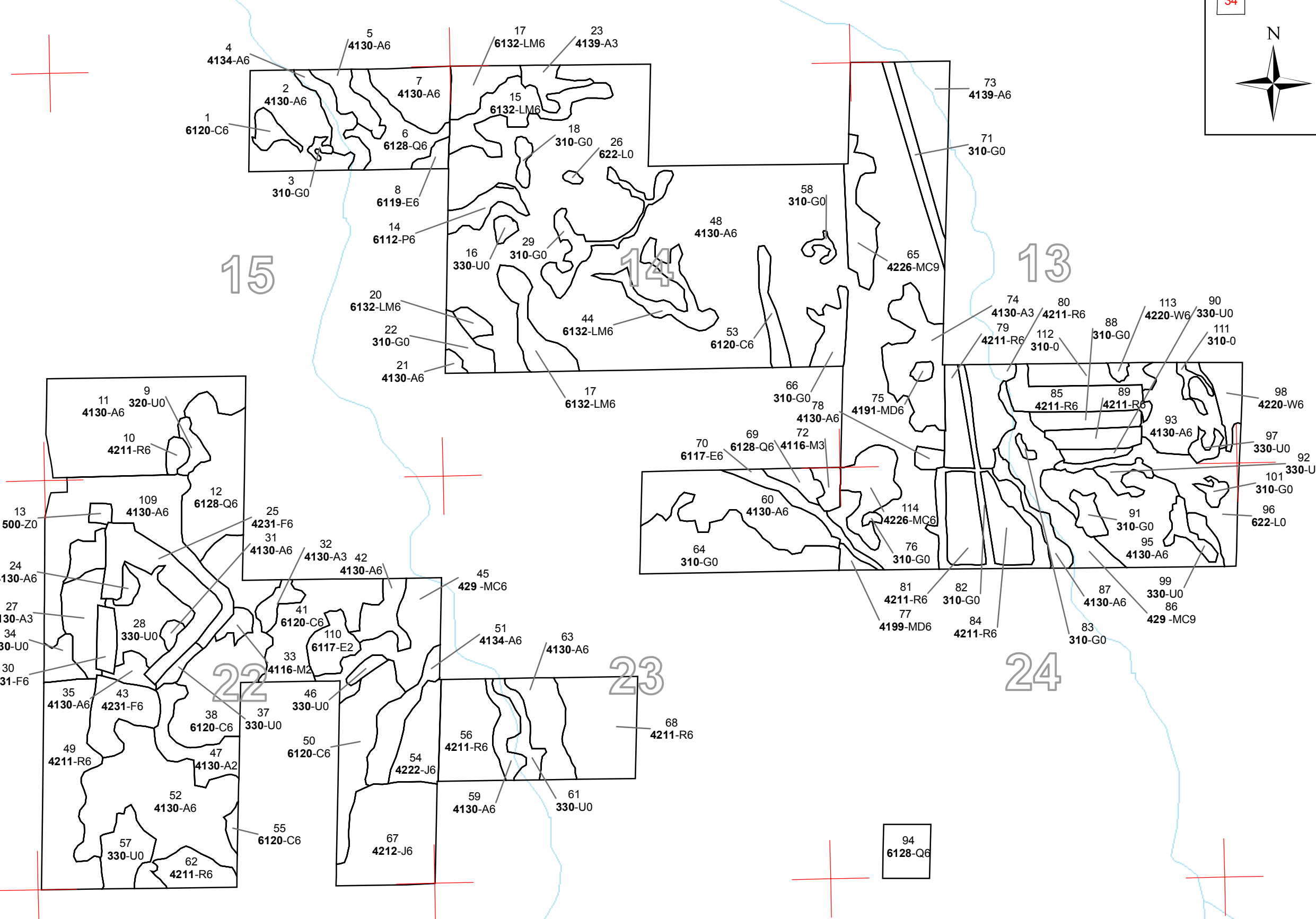
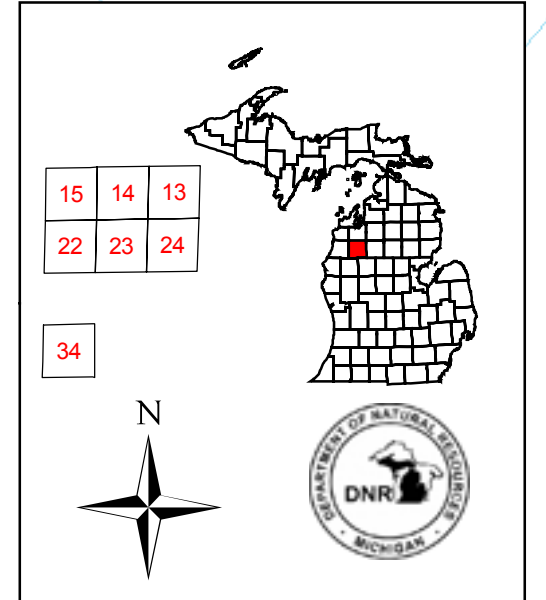




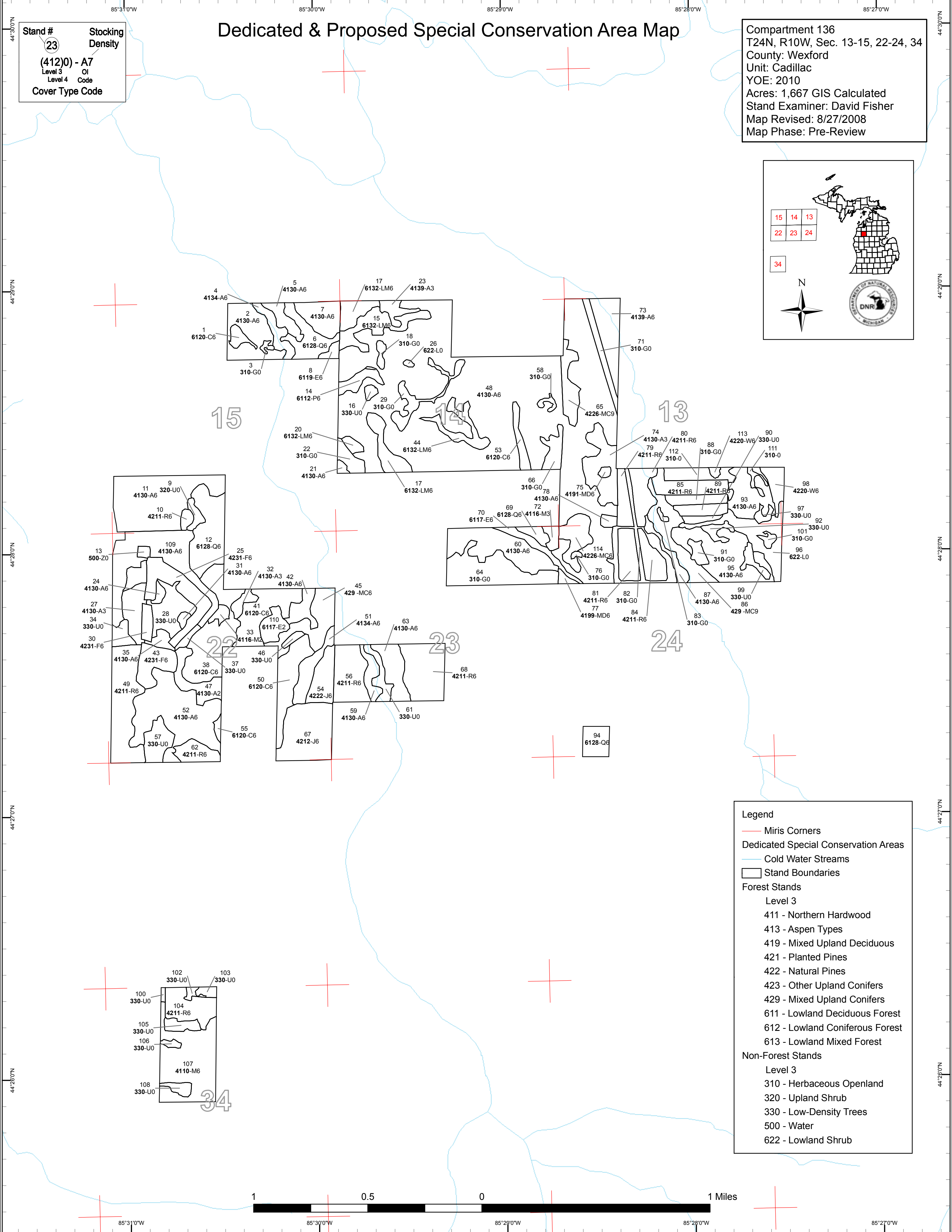
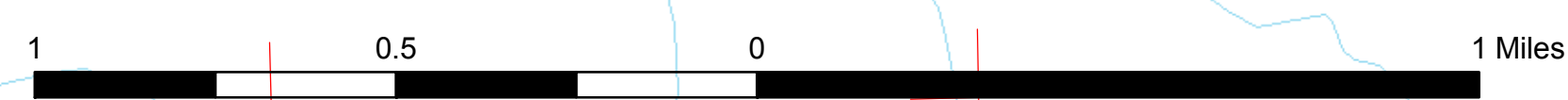
# Dedicated & Proposed Special Conservation Area Map

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

Compartment 136  
 T24N, R10W, Sec. 13-15, 22-24, 34  
 County: Wexford  
 Unit: Cadillac  
 YOE: 2010  
 Acres: 1,667 GIS Calculated  
 Stand Examiner: David Fisher  
 Map Revised: 8/27/2008  
 Map Phase: Pre-Review



- Legend**
- Miris Corners
  - Dedicated Special Conservation Areas
  - Cold Water Streams
  - Stand Boundaries
  - Forest Stands**
    - Level 3
    - 411 - Northern Hardwood
    - 413 - Aspen Types
    - 419 - Mixed Upland Deciduous
    - 421 - Planted Pines
    - 422 - Natural Pines
    - 423 - Other Upland Conifers
    - 429 - Mixed Upland Conifers
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    - 310 - Herbaceous Openland
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Cadillac Mgt. Unit

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

Compartment 136 Year of Entry 2010

Report Date: 09/25/2008



	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	51.9	4.2	0	99.2	626.4	54.0	0	0	0	0	0	0	0	0	835.7
Herbaceous Openland	112.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112.2
Low-Density Trees	78.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78.4
Lowland Coniferous Forest	0	0	0	0	0	0	0	0	0	33.1	25.8	9.8	85.7	0	0	154.5
Lowland Deciduous Forest	0	8.3	0	0	0	6.6	0	0	9.5	0	0	0	0	0	0	24.5
Lowland Mixed Forest	0	0	0	0	0	50.7	0	0	0	0	0	0	0	0	0	50.7
Lowland Shrub	23.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.7
Mixed Upland Conifers	0	0	0	0	0	0	0	20.5	0	0	0	20.9	0	0	0	41.4
Mixed Upland Deciduous	0	0	0	0	0	1.9	1.3	0	0	0	0	0	0	0	0	3.2
Natural Pines	0	0	0	0	0	13.1	13.6	1.2	0	0	0	0	0	0	19.6	47.5
Northern Hardwood	0	6.4	0	0	0	0	0	47.0	0	0	0	0	0	0	0	53.4
Other Upland Conifers	0	0	0	0	0	41.8	0	0	0	0	0	0	0	0	0	41.8
Planted Pines	0	0	0	0	0	2.6	215.0	0	0	0	0	0	0	0	0	217.6
Upland Shrub	3.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.4
Water	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7
<b>Total</b>	<b>219.3</b>	<b>66.6</b>	<b>4.2</b>	<b>0</b>	<b>99.2</b>	<b>743.1</b>	<b>283.9</b>	<b>68.6</b>	<b>9.5</b>	<b>33.1</b>	<b>25.8</b>	<b>30.7</b>	<b>85.7</b>	<b>0</b>	<b>19.6</b>	<b>1689.5</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>48 63136048-Cut_small</b>	150.5	4130 - Aspen	High Density Pole	43	Harvest	Clearcut with Reserves	Aspen

Rev  
Cmnt: Large stand of 42 year old aspen. Harvest portion this yoe to break up age classes.

Rev  
Spec: Final harvest 1/3 of stand ~150 acres. Do not cut oak or cherry. Manage for a mix of aspen, fir, oak and cherry.

Next  
Steps: Harvest 1/3 of stand in 10 years and final 1/3 of stand in 20 years.

<b>49 63136049-Cut</b>	37.7	42110 - Planted Red Pine	High Density Pole	52	Harvest	Low Thinning	Planted Red Pine
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Rev  
Cmnt:

Rev Thin to 120 BA.  
Spec:

Next  
Steps:

<b>54 63136054-Cut</b>	13.6	42220 - Natural Jack Pine	High Density Pole	57	Harvest	Clearcut	Aspen
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Rev  
Cmnt: Poor quality jack pine.

Rev Final harvest. Convert to aspen.  
Spec:

Next  
Steps:

<b>56 63136056-Cut</b>	21.8	42110 - Planted Red Pine	High Density Pole	52	Harvest	Low Thinning	Planted Red Pine
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Rev  
Cmnt: Power line passes thru stand.

Rev Thin to 120 BA. Do not cut red maple, not much, it would do more harm than good.  
Spec:

Next  
Steps:

<b>60 63136060-Cut</b>	32.7	4130 - Aspen	High Density Pole	58	Harvest	Clearcut	Aspen
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Rev  
Cmnt:

Rev Final harvest. Do not harvest oak. Manage for a mix of aspen, white pine and red maple.  
Spec:

Next  
Steps:

<b>62 63136062-Cut</b>	9.2	42110 - Planted Red Pine	High Density Pole	52	Harvest	Low Thinning	Planted Red Pine
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Rev  
Cmnt:

Rev Thin to 120 BA.  
Spec:

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
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65	63136065-Cut	11.9	42260 - Natural Pine, Mixed Deciduous	High Density Log	84	Harvest	Single Tree Selection	Natural White Pine, Mixed Deciduous
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Rev  
Cmnt: Natural white pine stand along 35 road.

Rev Harvest all aspen, red maple and jack pine. Mark pine to cut for access and remove defect.  
Spec:

Next  
Steps:

67	63136067-Cut	34.6	42120 - Planted Jack Pine	High Density Pole	57	Harvest	Clearcut	Planted Red Pine
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Rev Jack pine is falling apart.  
Cmnt:

Rev Final harvest. Do not cut oak.  
Spec:

Next Burn or hebicide to kill red maple regen. Plant red pine.  
Steps:

79	63136079-Cut	44.1	42110 - Planted Red Pine	High Density Pole	52	Harvest	Low Thinning	Planted Red Pine
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Rev  
Cmnt:

Rev Thin to 120 BA.  
Spec:

Next  
Steps:

98	63136098-Cut	7.6	42200 - Natural White Pine	High Density Pole	58	Harvest	Single Tree Selection	Natural White Pine, Mixed Deciduous
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Rev  
Cmnt:

Rev Remove aspen and red maple. Mark pine to cut for access and remove defect. Green tree some aspen to become future snags.  
Spec:

Next  
Steps:

104	63136104-Cut	17.4	42110 - Planted Red Pine	High Density Pole	52	Harvest	Low Thinning	Planted Red Pine
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Rev Heavy sugar maple regeneration in portions of the stand. Site index is 55. May need survey. Stand boarders private on two sides.  
Cmnt:

Rev Thin to 120 BA.  
Spec:

Next Long term goal is to convert the stand to northern hardwood over the next 20 years.  
Steps:

107	63136107-Cut	47.0	4110 - Sugar Maple Association	High Density Pole	65	Harvest	Single Tree Selection	Sugar Maple Association
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Rev May need a survey. Stand boarders private on 3 sides.  
Cmnt:

Rev Thin to 70-80BA.  
Spec:

Next  
Steps:

**Total Treatment  
Acreage Proposed: 428.2**

**PROPOSED TREATMENTS  
WITH LIMITING FACTORS**



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Treatment Name	Acres	Stage1 Cover Type	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
63 63136063-Cut	14.2	4130 - Aspen	High Density Pole	48	Harvest	Clearcut with Reserves	Aspen

Limiting Factor and Comment: 2A: Adjacent landowner denies access

Rev Cmnt: Stand is landlocked. Need to get adjacent landowner to allow access.

Rev Spec: Final harvest. Follow bmp guidelines along Silver Creek.

Next Steps:

No Treatment Reason

68 63136068-Cut	28.1	42110 - Planted Red Pine	High Density Pole	52	Harvest	Low Thinning	Planted Red Pine
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Limiting Factor and Comment: 2A: Adjacent landowner denies access

Rev Cmnt: Stand is landlocked. Need to gain access through private.

Rev Spec: Thin to 120 BA.

Next Steps:

No Treatment Reason

**Total Treatment  
Acreage Proposed: 42.3**



### 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.
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.