

# CADILLAC FOREST MANAGEMENT UNIT



## COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 078 ENTRY YEARS: 2009

Compartment Acreage (GIS Acres): 1992 County: Missaukee

---

**Revision Date:** 09/28/2007 11:39 AM

**Stand Examiner:** Jim Malloy, Forester, Manton Field Office

**Legal Description:** T24N, R5W, Sections 3, 10, 15

**RMU (if applicable):**

**Management Goals:** Maintain a variety of cover types and age class diversity which favor game and non-game species.

**Soil and Topography:** Rubicon-Montcalm-Graycalm association in the rolling hills in the north part of the compartment and Lupton-Roscommon Tawas Association in the south part of the compartment along the Dead Stream Swamp.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** The only private ownership is within the compartment. The surrounding ownership is all state-owned. This compartment is within the Norwich Oil Field. Desirable land acquisitions: section 10 S1/2 and section 15 N1/2, exc. NWNW. We are in the process of obtaining this property (Trisch). Several cabins located on the property are delaying the purchase. The MCCCT runs through the northern portions of the compartment as well as a segment of snowmobile trail in the northwest corner and along the north edge of the compartment.

**Unique, Natural Features:** Loon to W in Grass Lake. Dusted skipper to W. Great blue heron rookery within 1 mi to the S. Bald eagles to the SE. Massasagua to the W. Kirtland's warbler to the NE. Numerous Hill's thistle records to the N. Rough fescue and whorled pogonia to the NE. Potential for great blue heron rookery, wood turtle, osprey, eagle, goshawk, red-shouldered hawk, massasauga, box turtle and Blanding's turtle. Potential for ebony bog haunter and secretive locust in bogs. Potential for prairie warbler and Kirtland's warbler.

**Archeological, Historical, and Cultural Features:** Numerous old railroad grades. None listed in HAL.

**Special Management Designations or Considerations:** Numerous above ground pipelines exist in this area. Care should be taken when setting up timber sales in that the above ground pipelines should be marked if possible. This compartment contains the Norwich Oil Field. There are 30 well sites in this compartment.

**Watershed and Fisheries Considerations:** **To be done by Fisheries Division.**

**Wildlife Habitat Considerations:** Priority wildlife species are deer, ruffed grouse, and woodcock. There are three compartments in this RMU. The south edge of these compartments make up the north edge of the Deadstream Swamp, a large deeryarding complex. The agreements called for a decrease of 220 acres of grass and upland brush and an increase of 220 acres of red pine/white pine. Major management objectives are to maintain and variety of cover types and age class diversity. (L. Smith, 9/24/07)

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

Sections 3, 10 & 15, T24N-R5W, Missaukee County

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift is the Mississippian Michigan Formation. The Michigan Formation is quarried for gypsum in other areas of the State. A gravel pit is located two miles to the east and potential is good on the uplands. East Norwich Field is located in the Compartment. The field has produced over 15.9 million BO and 15.7 Bcf gas from the Devonian Richfield Formation and is in secondary recovery operations currently. Most of the Compartment is surface only, but a few parcels in Section 15 are leased and producing.

**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 needed.

**Recreational Facilities and Opportunities:** The West Higgins Lake Snowmobile Trail runs across the north part of section 3. The only treatment along this trail is planting of red pine. Two miles of the N. Missaukee ORV Trail and about one mile of the N. Higgins Lake ORV Trail run through the north part of the compartment. No treatments are scheduled along these trails.

**Fire Protection:** The IA for this compartment is from the Houghton Lake Field Office. The Norwich oil field is also in this compartment, so there are numerous areas of “no plow” zones. There are also some urban interface within the unit. There are some pine areas within the unit, which could allow for larger fire growth.

**Additional Compartment Information:**

**Cover Type details, Proposed Treatments, and Stand listings are listed in the attached reports:**

- ◆ Cover Type by Age Class
- ◆ Proposed Treatments – No Limiting Factors
- ◆ Proposed Treatments – With Limiting Factors
- ◆ Stand Listing – Forested
- ◆ Stand Listing – Non Forested
- ◆ Special Conservation Area (SCA) Details

**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
- ◆ SCA – Special Conservation Areas





**Stage 1 Acres Summary By Level 3 Cover Type By Age**

**Compartment: 63078**

**Date: 9/26/2007**

|                                   | 0     | 1-9  | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | >89   | Uneven Age | Grand Total |
|-----------------------------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------|-------------|
| <b>Aspen Types</b>                | 0     | 98.4 | 53.8  | 5.7   | 267.1 | 12.7  | 53.1  | 7.1   | 0     | 0     | 0     | 0          | 497.9       |
| <b>Herbaceous Openland</b>        | 38.3  | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0          | 38.3        |
| <b>Low-Density Trees</b>          | 52.5  | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0          | 52.5        |
| <b>Lowland Coniferous Forest</b>  | 0     | 0    | 0     | 0     | 74.5  | 50.9  | 0     | 78    | 0     | 0     | 72.8  | 0          | 276.2       |
| <b>Lowland Deciduous Forest</b>   | 0     | 0    | 6.5   | 0     | 55    | 0     | 0     | 14.9  | 0     | 0     | 0     | 0          | 76.4        |
| <b>Lowland Mixed Forest</b>       | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 19.7  | 0     | 0     | 0     | 0          | 19.7        |
| <b>Lowland Shrub</b>              | 121.7 | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0          | 121.7       |
| <b>Mixed Upland Conifers</b>      | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 24.5  | 0     | 0     | 0     | 0          | 24.5        |
| <b>Mixed Upland Deciduous</b>     | 0     | 0    | 0     | 0     | 0     | 14.4  | 0     | 5.9   | 0     | 0     | 0     | 0          | 20.3        |
| <b>Mixed non-forested wetland</b> | 68.1  | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0          | 68.1        |
| <b>Natural Pines</b>              | 0     | 0    | 0     | 0     | 0     | 5.1   | 10.4  | 0     | 0     | 19.5  | 0     | 0          | 35          |
| <b>Oak Types</b>                  | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 188.2 | 67    | 299.5 | 0          | 554.7       |
| <b>Road/Parking Lot</b>           | 36.3  | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0          | 36.3        |
| <b>Upland Mixed Forest</b>        | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 12    | 0     | 0     | 0          | 12          |
| <b>Upland Shrub</b>               | 158.5 | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0          | 158.5       |
| <b>Grand Total</b>                | 475.4 | 98.4 | 60.3  | 5.7   | 396.6 | 83.1  | 63.5  | 150.1 | 200.2 | 86.5  | 372.3 | 0          | 1992.1      |

**PROPOSED TREATMENTS  
NO LIMITING FACTORS**

S  
t  
a  
n  
d

| Treatment Name        | Acres | Stage1 CovType                  | Size Density | 1st Age | 2nd Age | Treatment Method      | Treatment Purpose | Cover Type Objective     | Pg. 1 |
|-----------------------|-------|---------------------------------|--------------|---------|---------|-----------------------|-------------------|--------------------------|-------|
| <b>8 63078008-Cut</b> | 60.7  | 4126 - White, Black, N. Pin Oak | 6            | 82      | 0       | Single Tree Selection | Intermediate Cut  | White, Black, N. Pin Oak |       |

Rev  
Cmnt:

Rev Mark oak to cut by selecting for quality next entry. Cut all aspen and red maple. Residual BA of 60-70.  
Spec:

Next Remove quality sawlogs in future entries.  
Steps:

|                        |      |                            |   |    |    |                            |         |           |  |
|------------------------|------|----------------------------|---|----|----|----------------------------|---------|-----------|--|
| <b>31 63078031-Cut</b> | 19.5 | 42290 - Natural Mixed Pine | 6 | 83 | 50 | Shelter Wood with Reserves | Release | Oak, Pine |  |
|------------------------|------|----------------------------|---|----|----|----------------------------|---------|-----------|--|

Rev  
Cmnt:

Rev Take out jack pine, poor formed white pine, red maple and high risk oak. Stand already has advanced oak regen present.  
Spec:

Next  
Steps:

|                        |      |              |   |    |   |                        |              |                  |  |
|------------------------|------|--------------|---|----|---|------------------------|--------------|------------------|--|
| <b>37 63078037-Cut</b> | 12.7 | 4130 - Aspen | 6 | 48 | 0 | Clearcut with Reserves | Regeneration | Aspen, Jack Pine |  |
|------------------------|------|--------------|---|----|---|------------------------|--------------|------------------|--|

Rev If adequate natural regen of aspen and jack pine does not occur it is acceptable to replant the site with jack pine.  
Cmnt:

Rev Cut all aspen and Jack pine. Leave buffer along pipeline to the west.  
Spec:

Next  
Steps:

|                        |      |                          |   |    |   |                        |              |                                    |  |
|------------------------|------|--------------------------|---|----|---|------------------------|--------------|------------------------------------|--|
| <b>42 63078042-Cut</b> | 28.4 | 6126 - Lowland Jack Pine | 6 | 43 | 0 | Clearcut with Reserves | Regeneration | Natural Jack Pine, Mixed Deciduous |  |
|------------------------|------|--------------------------|---|----|---|------------------------|--------------|------------------------------------|--|

Rev Acceptable regen is a mix of aspen, red mpale, and jack pine. If adequate natural regen does not occur then plant to jack pine.  
Cmnt:

Rev Cut all jack pine, aspen, and red maple.  
Spec:

Next  
Steps:

|                        |      |                                 |   |    |   |                       |              |           |  |
|------------------------|------|---------------------------------|---|----|---|-----------------------|--------------|-----------|--|
| <b>43 63078043-Cut</b> | 35.5 | 4126 - White, Black, N. Pin Oak | 6 | 94 | 0 | Single Tree Selection | Regeneration | Oak, Pine |  |
|------------------------|------|---------------------------------|---|----|---|-----------------------|--------------|-----------|--|

Rev  
Cmnt:

Rev Cut jack pine, red maple and aspen. Mark white pine and oaks to cut. Residual BA of 50-60.  
Spec:

Next  
Steps:

|                        |      |              |   |    |   |                        |              |       |  |
|------------------------|------|--------------|---|----|---|------------------------|--------------|-------|--|
| <b>48 63078048-Cut</b> | 53.1 | 4130 - Aspen | 6 | 53 | 0 | Clearcut with Reserves | Regeneration | Aspen |  |
|------------------------|------|--------------|---|----|---|------------------------|--------------|-------|--|

Rev Leave oaks on the stand. Acceptable regen is aspen with a mix of cherry and oaks. Alternate acceptable cover type is upland brush.  
Cmnt:

Rev Poor form aspen stand. Cut to regenerate and improve quality and stocking.  
Spec:

Next  
Steps:

**PROPOSED TREATMENTS  
NO LIMITING FACTORS**

S  
t  
a  
n  
d

| Treatment Name  | Acres | Stage1 CovType                           | Size Density | 1st Age | 2nd Age | Treatment Method | Treatment Purpose | Cover Type Objective              | Pg. 2 |
|-----------------|-------|--|--------------|---------|---------|------------------|-------------------|-----------------------------------|-------|
| 85 63078085-Cut | 14.9  | 6131 - Hemlock, White Pine, Maple, Birch | 6            | 61      | 0       | Group Selection  | Regeneration      | Hemlock, White Pine, Maple, Birch |       |

Rev  
Cmnt:

Rev Remove aspen and red maple and defect in conifers. Create openings for regeneration. Avoid areas that are seasonly wet when running the treatment  
Spec: line. Do not cut or damage hemlock or cedars. Residual BA of 50-80.

Next  
Steps:

---

**Total Treatment  
Acreage Proposed: 224.9**

S  
t  
a  
n  
d

Cadillac

Mgt. Unit

**PROPOSED TREATMENTS  
WITH LIMITING FACTORS**

Compartment: 78

Entry Yr: 2009

Inventory Method: IFMAP

Treatment  
Name

Acres

Stage1  
CovType

Size  
Density

1st  
Age

2nd  
Age

Treatment  
Method

Treatment  
Purpose

Cover Type  
Objective

Pg. 1

Limiting Factor  
and Comment:

Rev  
Cmnt:

**No Stands with Limiting Factors**

Rev  
Spec:

Next  
Steps:

---

**Total Treatment  
Acreage Proposed: 0**

# Cover Type Map

Compartment 78  
 T24N, R05W, Sec. 3, 10, 15  
 County: Missaukee  
 Unit: Cadillac  
 YOE: 2009  
 Acres: 1,992 GIS Calculated  
 Stand Examiner: Jim Malloy  
 Map Revised: 8/21/2007  
 Map Phase: Pre-Review

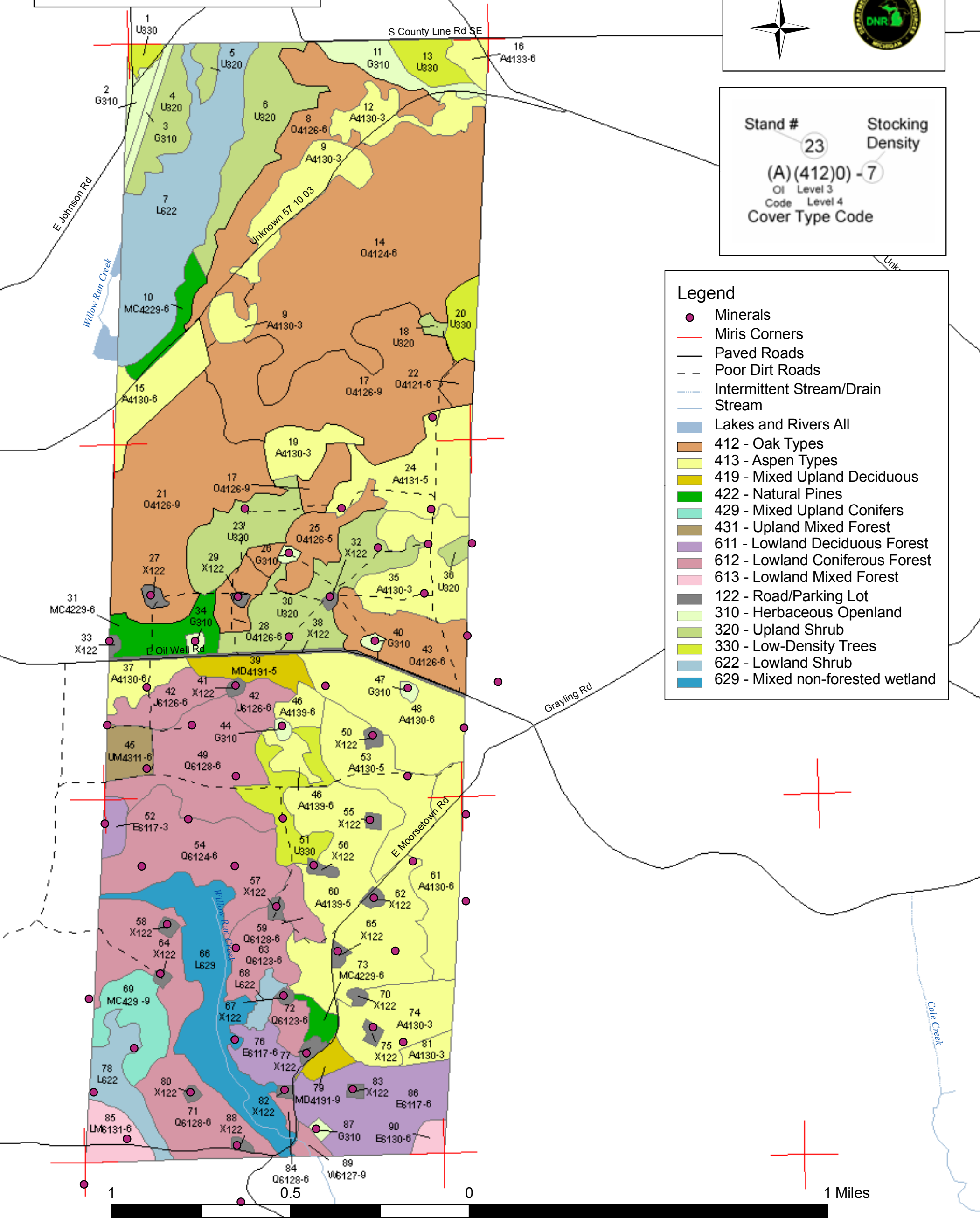
3  
 10  
 15



Stand # 23  
 Stacking Density  
 (A) (412)0) -7  
 OI Level 3  
 Code Level 4  
 Cover Type Code

## Legend

- Minerals
- Miris Corners
- Paved Roads
- - - Poor Dirt Roads
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers All
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 122 - Road/Parking Lot
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 622 - Lowland Shrub
- 629 - Mixed non-forested wetland



1 0.5 0

1 Miles