

CADILLAC FOREST MANAGEMENT UNIT



COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 95 ENTRY YEAR: 2011

Compartment Acreage (GIS Acres): 2,106 County: Missaukee

Revision Date: 09/14/2009 3:03 PM

Stand Examiner: Jim Malloy, Forester, Manton Field Office

Legal Description: T22N-R5W, Sections 12, 13, 14 (NE), and 15.

RMU (if applicable): 225

Management Goals: Maintain cover types and age class diversity. The pine has excellent form and is responding to recent thinning. The M types, once thinned have potential to become high quality hardwoods.

Soil and Topography: Primarily Saugatuck sand. Low, wet with scattered areas of higher ridges.

Ownership Patterns, Development, and Land Use in and Around the Compartment Solid block of State ownership in all sections above, except section 15 has private ownership on west side of Muskegon river. Most adjacent sections also in State ownership. Private lands are mostly undeveloped, with some cabins and a few year-round homes.

Unique, Natural Features (include only non-site specific and non-sensitive information): Muskegon River and Dead Horse flooding and ditches run through the compartment. This compartment comprises a portion of the Houghton Lake Wildlife Research Area commonly known as the Porter Ranch.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): There is a Prehistoric Indian camp located in or near this Resource Management Unit (RMU).

Special Management Designations or Considerations: As outlined by the RMU, the key value is habitat/vegetative-wildlife intensive. The major management emphasis is on wildlife research (particularly deer). Also, improvement of winter deer range is a major objective.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations: This compartment is one of three that make up the portion of the Porter Ranch Wildlife Research Station in Missaukee County. This area is a large wintering complex for deer. Major concerns center around regenerating the jack pine to provide thermal cover and maintaining the ground cover of blueberry. The combination of conifer cover, mixed deciduous timber, and blueberry provide valuable habitat for many wildlife species. The high water table throughout this area presents major concerns in establishing regeneration. Mixed habitat types and age classes in the lowland areas along the Muskegon River offer valuable habitats for bobcat, eagle, pileated woodpecker, and related wildlife species. Proposed treatments must take in consideration any potential wildlife research related issues. (L. Smith, 9/11/09)

Mineral Resource and Development Concerns and/or Restrictions:

Sections 12 - 15, T22N-R5W, Missaukee County

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and peat & muck. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Pennsylvanian Saginaw Formation. The Saginaw is quarried for clay/shale in other parts of the State. Gravel pits are located in the area, and there may be some potential. The compartment is located four miles south of Enterprise Field. This field has produced nearly 5 million BO from the Devonian Richfield Formation and is in secondary recovery operations. The Compartment is not currently leased for oil and gas exploration.. (T. Hone 7/22/09)

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: No developed recreation. Hunting, Trapping and wildlife viewing are popular activities in this compartment. A portion of the Houghton Lake snowmobile trail passes through sections 14 & 15.

Fire Protection: Much of this compartment has poor access for suppression equipment. Fuels could be support large fire growth. Initial Attack is from the Houghton Lake FO.

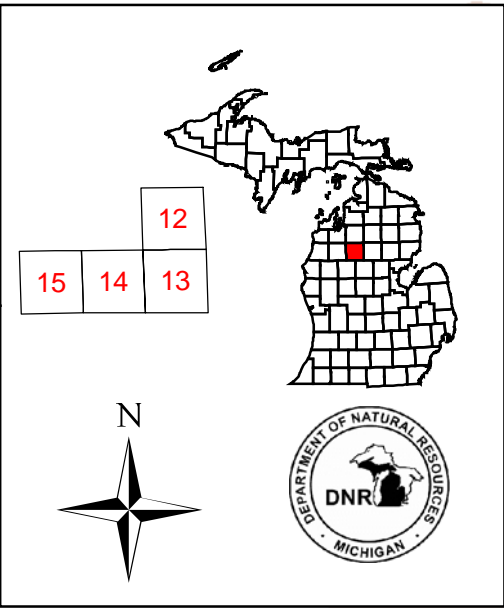
Additional Compartment Information: There is a County road bridge on Kelly road crossing the Muskegon River. There is a culvert-tube style crossing in place to cross the Dead horse flooding dam with a flood-gateway. The forest road crosses the dam and is then closed and blocked on the east side of the dam to prevent wheeled traffic any further east. There is also a similar bridge crossing in place for Headquarters Rd. 2-track to cross Dead Horse creek in the NW corner of sec. 12.

The following parcels are recommended for acquisition if they become available for sale: N/A

- **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**

Compartment 95
 T22N, R05W, Sec. 12-15
 County: Missaukee
 Unit: Cadillac
 YOE: 2011
 Acres: 2,106 GIS Calculated
 Stand Examiner: Jim Malloy
 Map Revised: 9/11/2009
 Map Phase: Pre-Review

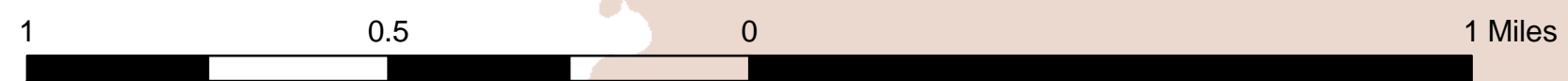
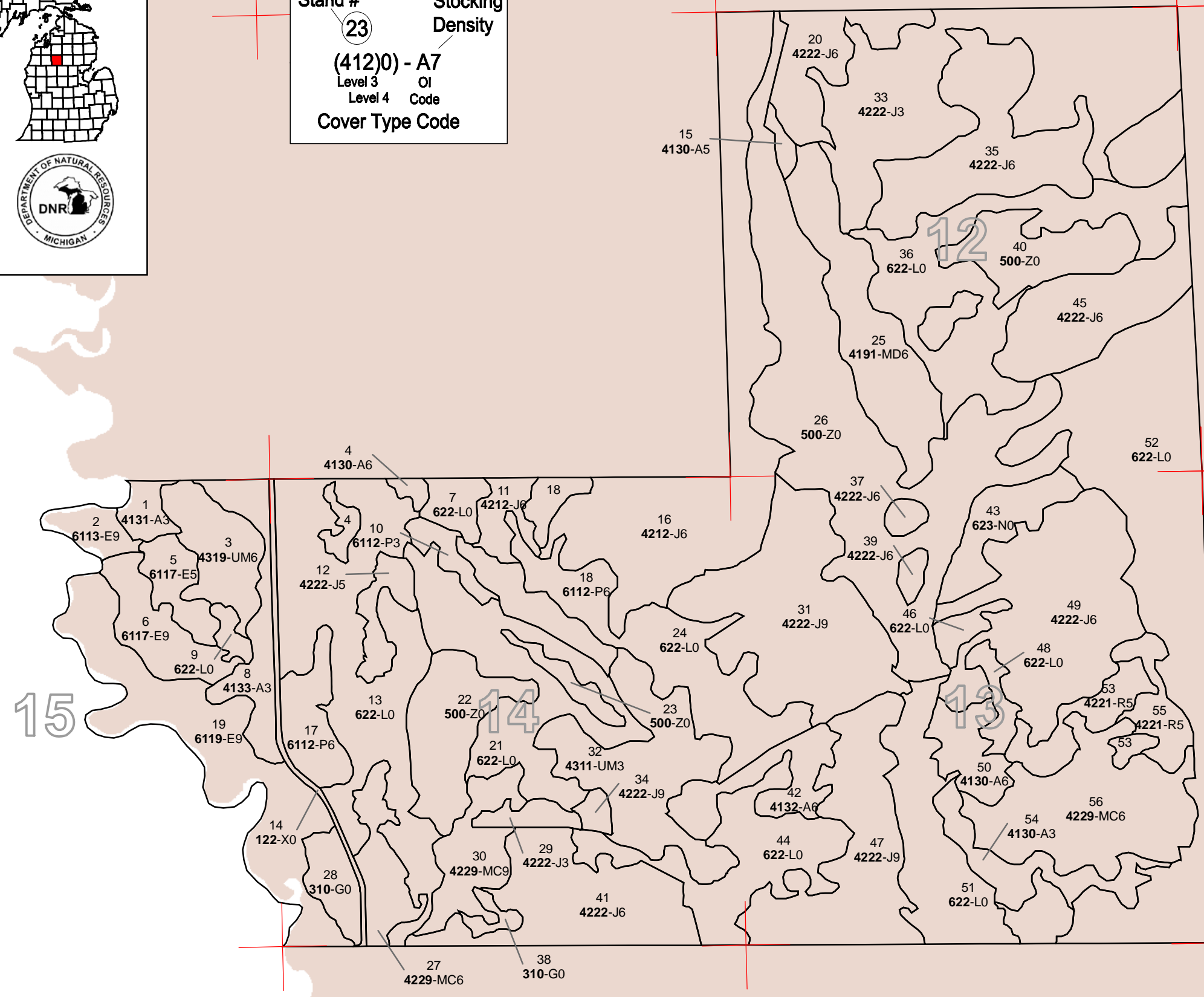


Dedicated & Proposed Special Conservation Area Map

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

Legend

- Miris Corners
- Stand Boundaries
- Dedicated Special Conservation Areas
- Wildlife Research Areas
- Forest Stands
 - Level 3
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 431 - Upland Mixed Forest
 - 611 - Lowland Deciduous Forest
- Non-Forest Stands
 - Level 3
 - 122 - Road/Parking Lot
 - 310 - Herbaceous Openland
 - 500 - Water
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland



84°55'0"W 84°54'0"W 84°53'0"W 84°52'0"W 84°51'0"W

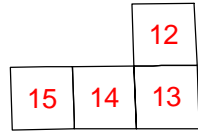
44°19'0"N

44°19'0"N

44°18'0"N

44°18'0"N

Compartment 95
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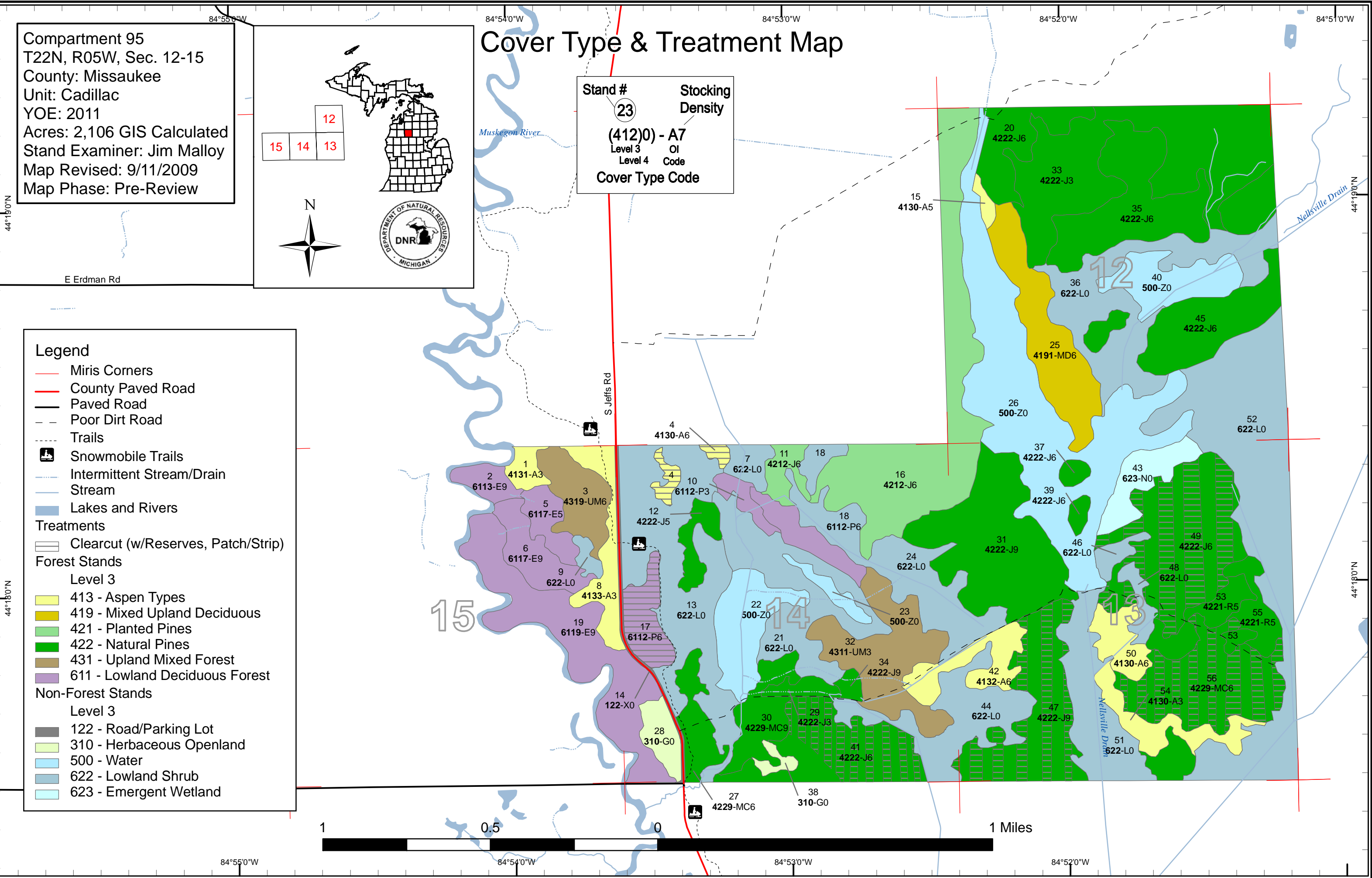
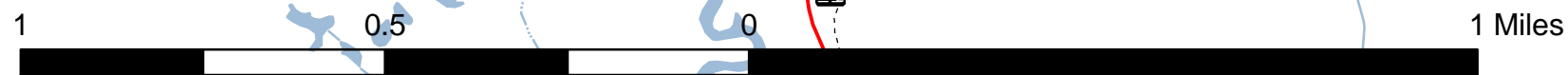


Cover Type & Treatment Map

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

Legend

- Miris Corners
- County Paved Road
- Paved Road
- - - Poor Dirt Road
- - - Trails
- Snowmobile Trails
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers
- Treatments**
- Clearcut (w/Reserves, Patch/Strip)
- Forest Stands**
- Level 3
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- Non-Forest Stands**
- Level 3
- 122 - Road/Parking Lot
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Cadillac Mgt. Unit

Covertypes, Acres, and Age summary
(Level 3 Cover Type)

Compartment 095 Year of Entry 2011

Report Date: 09/14/2009



	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	52	0	0	23	3	16	7	0	0	0	0	0	0	0	102
Emergent Wetland	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Herbaceous Openland	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Lowland Deciduous Forest	0	7	0	0	14	58	10	0	0	0	0	0	0	0	76	165
Lowland Shrub	567	0	0	0	0	0	0	0	0	0	0	0	0	0	0	567
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	53	0	0	0	0	0	53
Natural Pines	0	122	0	0	40	26	238	237	24	0	0	0	0	0	55	742
Planted Pines	0	0	0	0	0	0	126	0	0	0	0	0	0	0	0	126
Road/Parking Lot	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Upland Mixed Forest	0	56	0	0	0	0	25	0	0	0	0	0	0	0	0	81
Water	226	0	0	0	0	0	0	0	0	0	0	0	0	0	0	226
Total	838	238	0	0	76	86	415	243	24	53	0	0	0	0	132	2106

**PROPOSED TREATMENTS
NO LIMITING FACTORS**



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Page 1 of 2
4	63095004-Cut	6.9	4130 - Aspen	High Density Pole	62	Harvest	Clearcut with Reserves	Aspen	
<p><u>Rev</u> <u>Cmnt:</u></p> <p><u>Rev</u> Clearcut aspen and jack pine. leave cherry and white pines. allow aspen to spread into adjacent grass opening. <u>Spec</u></p> <p><u>Next</u> <u>Steps:</u></p>									
17	63095017-Cut	19.2	6112 - Lowland Aspen	High Density Pole	48	Harvest	Clearcut with Reserves	Aspen	
<p><u>Rev</u> <u>Cmnt:</u></p> <p><u>Rev</u> Clear-cut. Leave oaks for mast. <u>Spec</u></p> <p><u>Next</u> <u>Steps:</u></p>									
41	63095041-Cut	21.0	42220 - Natural Jack Pine	High Density Pole	59	Harvest	Patch or Strip Clearcut	Natural Jack Pine, Mixed Deciduous	
<p><u>Rev</u> <u>Cmnt:</u> Winter cut due to wet conditions.</p> <p><u>Rev</u> clearcut strips 2 chains wide throughout stand. No retention within clearcut strips. <u>Spec</u></p> <p><u>Next</u> <u>Steps:</u></p>									
47	63095047-Cut	28.0	42220 - Natural Jack Pine	High Density Log	66	Harvest	Patch or Strip Clearcut	Natural Jack Pine, Mixed Deciduous	
<p><u>Rev</u> <u>Cmnt:</u> Winter cut due to wet conditions.</p> <p><u>Rev</u> clearcut strips 2 chains wide throughout stand. No retention within clearcut strips. <u>Spec</u></p> <p><u>Next</u> <u>Steps:</u></p>									
49	63095049- Cut1	47.3	42220 - Natural Jack Pine	High Density Pole	62	Harvest	Patch or Strip Clearcut	Natural Jack Pine	
<p><u>Rev</u> <u>Cmnt:</u> Winter cut due to wet conditions</p> <p><u>Rev</u> clearcut strips 2 chains wide throughout stand. No retention within clearcut strips. <u>Spec</u></p> <p><u>Next</u> <u>Steps:</u></p>									
56	63095056-Cut	33.1	42290 - Natural Mixed Pine	High Density Pole	52	Harvest	Patch or Strip Clearcut	Natural Jack Pine	
<p><u>Rev</u> <u>Cmnt:</u> Winter cut due to wet conditions.</p> <p><u>Rev</u> clearcut strips 2 chains wide throughout stand. No retention within clearcut strips. <u>Spec</u></p> <p><u>Next</u> <u>Steps:</u></p>									

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Cadillac Mgt. Unit
Inventory Method: IFMAP

**PROPOSED TREATMENTS
NO LIMITING FACTORS**

Compartment: 095 Entry Yr 2011
Date 09/14/2009



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
Total Treatment Acreage Proposed:		155.6					

**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	Page 1 of 1
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Limiting Factor
and Comment:

Rev
Cmnt:

Rev
Spec:

Next
Steps:

No Treatment
Reason

**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.
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.