



**FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 136 ENTRY YEAR: 2011

Compartment Acreage: 1541 County: Arenac

Revision Date: October 27, 2009

Stand Examiner: Rick Myrick

Legal Description: T19N R5E, Sections 5 – 8, 17, and 18

RMU (if applicable): None

Management Goals:

Large acreages of the Compartment have been treated over the past 30 years. Subsequently, almost half of the forest cover for the area falls within the 1 to 29 year old age class. 94 acres are proposed for treatment this YOY, of which, 14 is a final harvest of red pine and 80 is a final harvest of two stands of mostly black oak. While approximately 170 acres of the Compartment is covered with 40 to 89 year old age class lowland deciduous forest, much of this land is very wet and subject to difficult access issues, which suggests a consideration for defined areas within these stands as potential old growth.

Soil and Topography:

The soils in the Compartment range from well-drained Rubicon Sand to organic Tawas soils. Approximately 40 % of the Compartment consists of moderately drained Au Gres, with 25% made up of well-drained Rubicon, another 15% contains well-drained Grayling Sand with 20% remaining as other soils.

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

The Compartment is primarily one contiguous block of State land; however 11 acres lie just north of the main area along the Rifle River, separated by private property. The city of Omer is 1.5 miles southeast of the Compartment, with numerous small parcels of rural residences aligning N. Michigan road, which leads into the area. The Compartment is almost entirely surrounded by private land. Much of the private property being a mixture of 40 to 160 acre parcels of farmland and forest.

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

The Compartment is bordered along the northeast by the Rifle River.

Archeological, Historical, and Cultural Features

The Michigan Department of History, Arts and Libraries data-base indicates a Special Conservation Area located in Section 18, of which $\frac{3}{4}$ is comprised of State land within the Compartment.

Special Management Designations or Considerations:

The Rifle River is a cold water stream and is dedicated as a Special Conservation Area. Additionally it is regulated under the Natural Rivers Act and as such is designated as a High Conservation Value Area as well.

Watershed and Fisheries Considerations:

The Compartment lies within the Rifle River watershed. Several intermittent flowing creeks drain south to Saverine Creek, which flows to the Rifle River. Redhorse Sucker migrate up the Rifle to spawn each spring.

Wildlife Habitat Considerations:

The Compartment typically experiences heavy White-tailed Deer activity, particularly during good mast years. A naturally regenerating 152 acre area of young jack pine, which was cut as a result of the 2001 YOE, provides dense winter cover. Drainage patterns within the Compartment contain pockets of hemlock which also provide winter cover, as well as subsistence browse. High density sapling aspen and aspen-oak mixed stands within the Compartment benefit Ruffed Grouse, Woodcock, and White-tailed Deer as browse and cover. The forested riparian zone along the Rifle River serves as a potential wildlife travel corridor.

Mineral Resource and Development Concerns and/or Restrictions:

Surface sediments consist of lacustrine (lake) clay, silt, sand, and gravel. The glacial drift thickness varies between 10 and 100 feet. Beneath the glacial drift are the Pennsylvanian Saginaw Formation and the Mississippian Michigan Formation and Bayport Limestone. The Saginaw is quarried for clay/shale for brick making, the Michigan for gypsum, both in other areas of the State. The Bayport is quarried for limestone one mile to the northeast. Gravel pits are located in the area and there may be some potential in the Compartment. The Deep River Oil Field is located one mile to the east. This field has produced over 27 MBO since its discovery in 1944. Most of the Compartment is currently leased for oil and gas development.

Vehicle Access:

Much of the Compartment is easily accessible by motorized vehicle. This extensive system of forest roads and trails creates potential difficulties for protective resource management.

Survey Needs:

Numerous registered corners are needed within this area, particularly in Sections 17 and 18, to establish property lines.

Recreational Facilities and Opportunities:

The Compartment provides ample prospects for hunting. Also, there is public fishing access to the Rifle River. A site in Section 5, along the Rifle River, is heavily utilized as a canoe launch by the public. Subsequently, large boulders have been placed at the back edge of this site to protect the river bank from erosive damage due to high use.

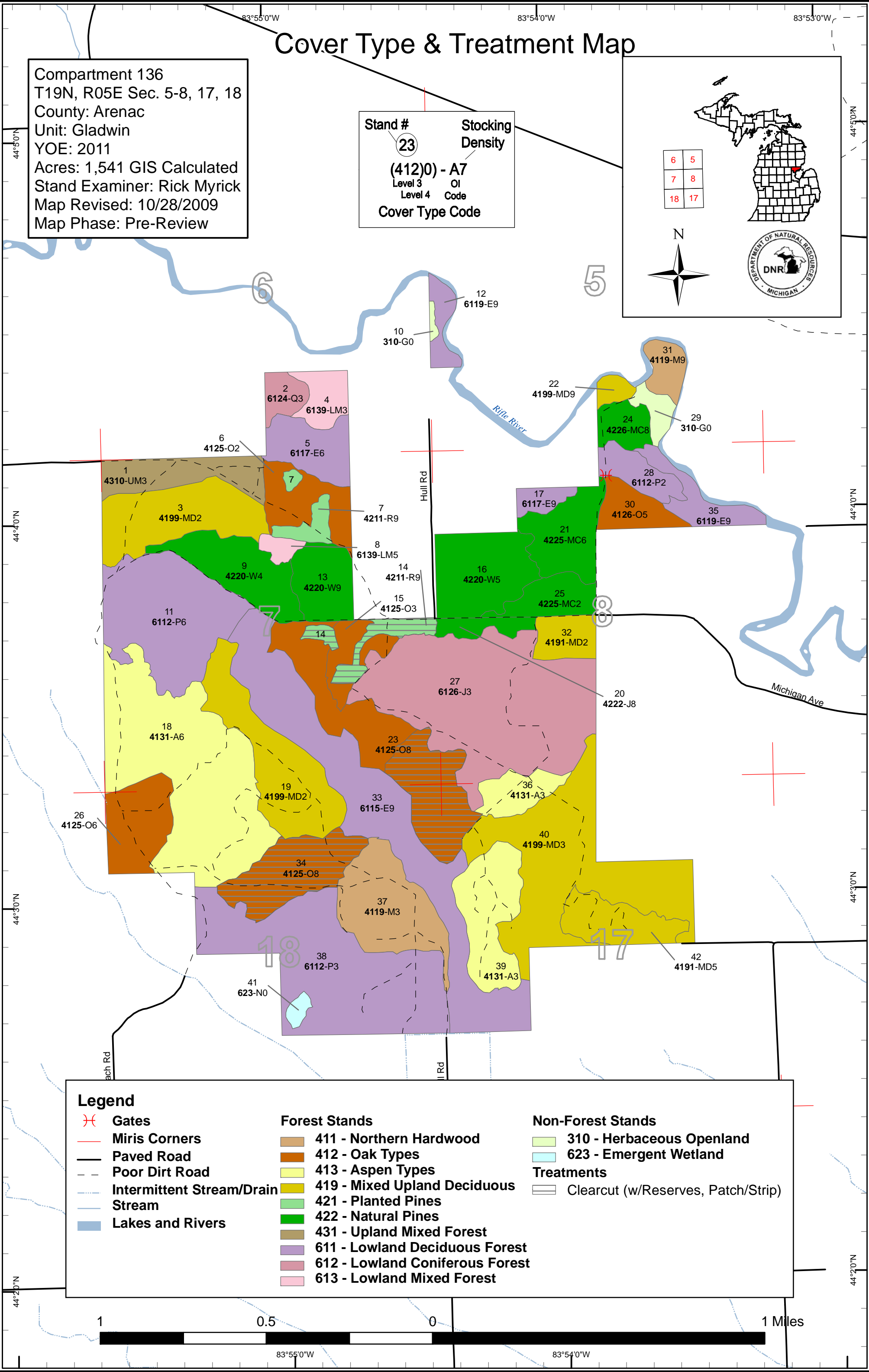
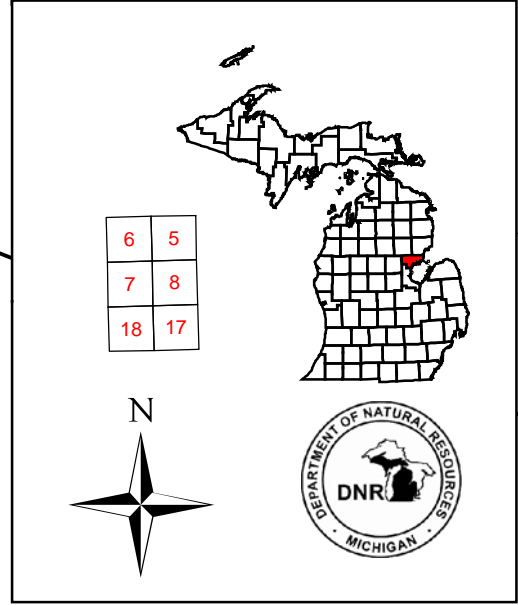
Fire Protection:

The broad accessibility of this Compartment allows for reasonable fire protection. This same accessibility however, may increase the risk for wildfires.

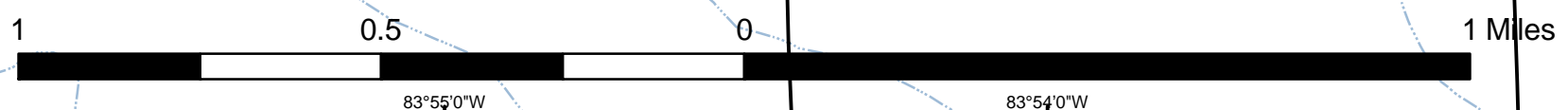
Cover Type & Treatment Map

Compartment 136
 T19N, R05E Sec. 5-8, 17, 18
 County: Arenac
 Unit: Gladwin
 YOE: 2011
 Acres: 1,541 GIS Calculated
 Stand Examiner: Rick Myrick
 Map Revised: 10/28/2009
 Map Phase: Pre-Review

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



Legend		
	Gates	
	Miris Corners	
	Paved Road	
	Poor Dirt Road	
	Intermittent Stream/Drain	
	Stream	
	Lakes and Rivers	
	Forest Stands	
	411 - Northern Hardwood	
	412 - Oak Types	
	413 - Aspen Types	
	419 - Mixed Upland Deciduous	
	421 - Planted Pines	
	422 - Natural Pines	
	431 - Upland Mixed Forest	
	611 - Lowland Deciduous Forest	
	612 - Lowland Coniferous Forest	
	613 - Lowland Mixed Forest	
	Non-Forest Stands	
	310 - Herbaceous Openland	
	623 - Emergent Wetland	
	Treatments	
	Clearcut (w/Reserves, Patch/Strip)	



83°55'0"W 83°54'0"W

44°20'N

44°30'N

44°40'N

44°50'N

44°20'N

44°30'N

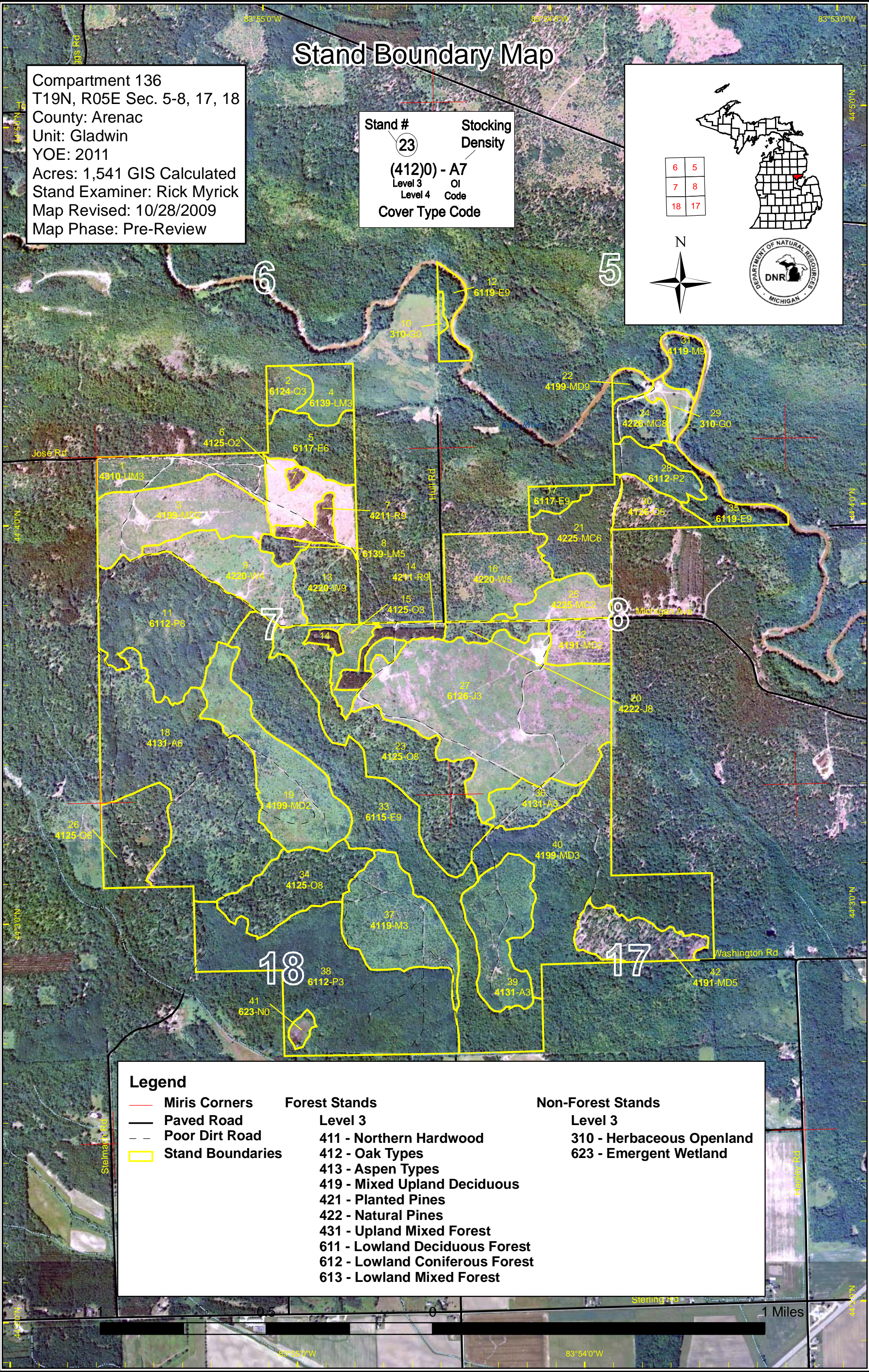
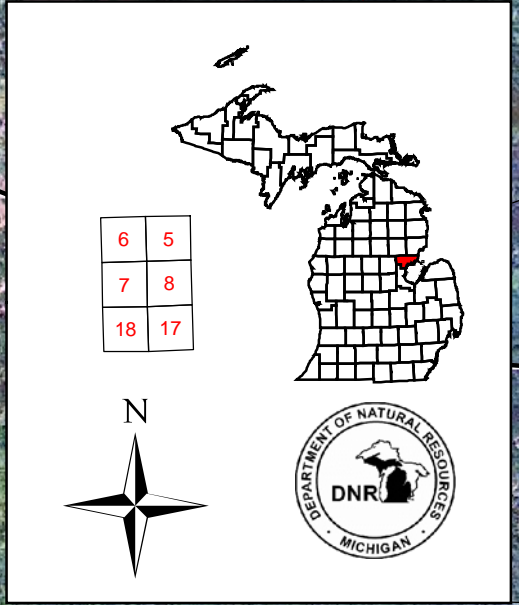
44°40'N

44°50'N

Stand Boundary Map

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



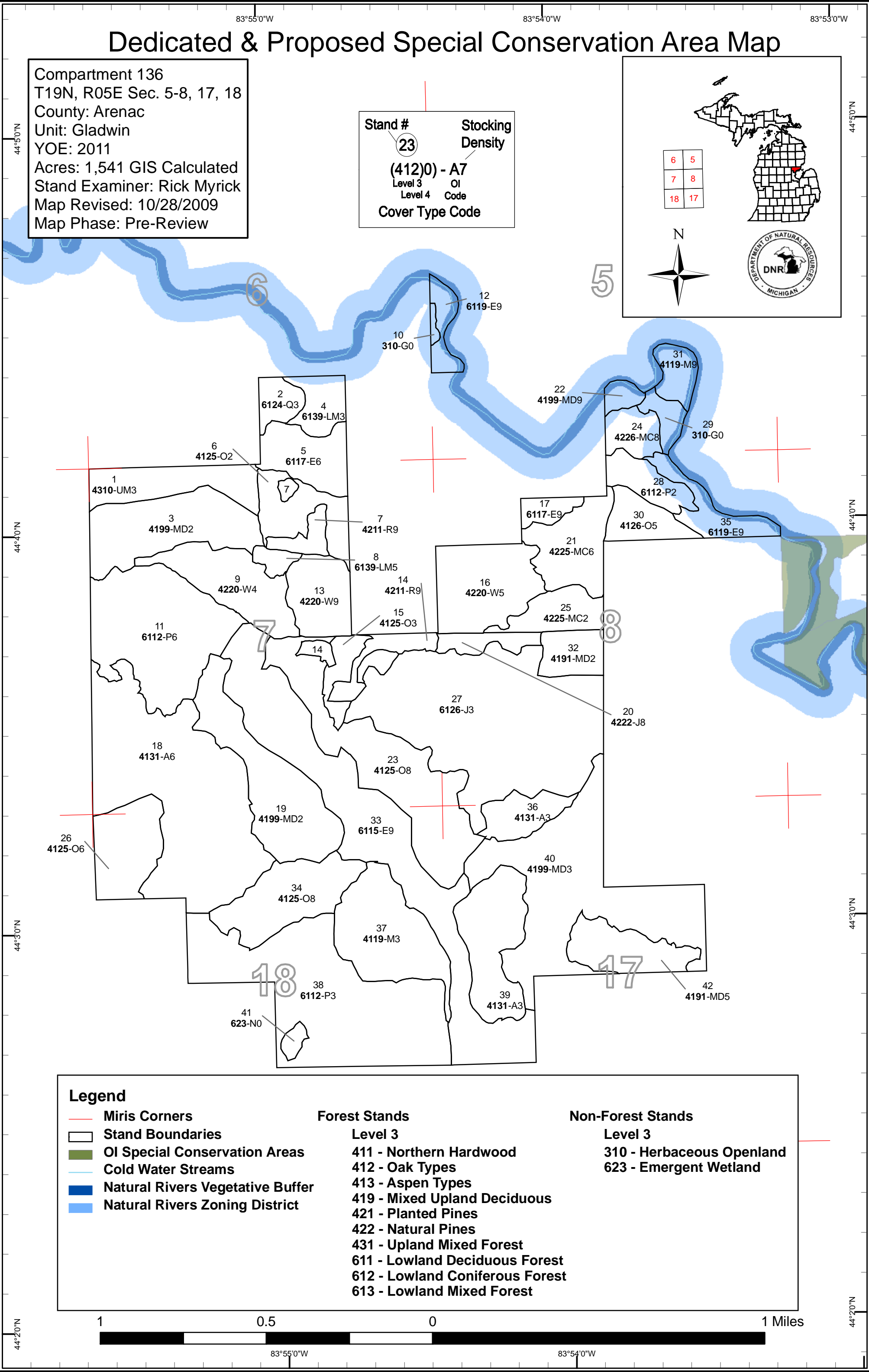
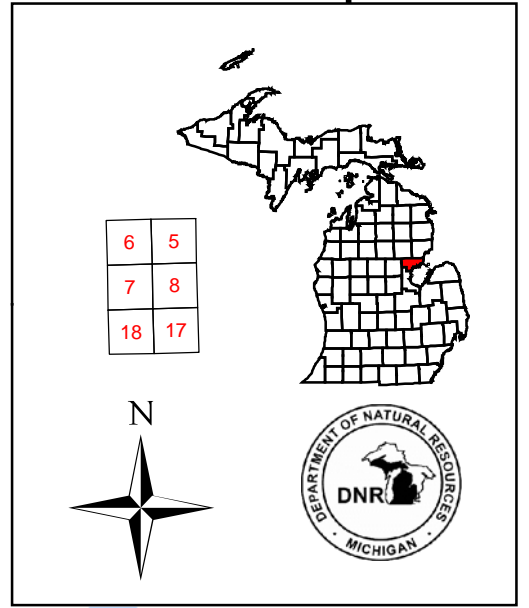
Legend		
	Miris Corners	Forest Stands
	Paved Road	Level 3
	Poor Dirt Road	411 - Northern Hardwood
	Stand Boundaries	412 - Oak Types
		413 - Aspen Types
		419 - Mixed Upland Deciduous
		421 - Planted Pines
		422 - Natural Pines
		431 - Upland Mixed Forest
		611 - Lowland Deciduous Forest
		612 - Lowland Coniferous Forest
		613 - Lowland Mixed Forest
		Non-Forest Stands
		Level 3
		310 - Herbaceous Openland
		623 - Emergent Wetland



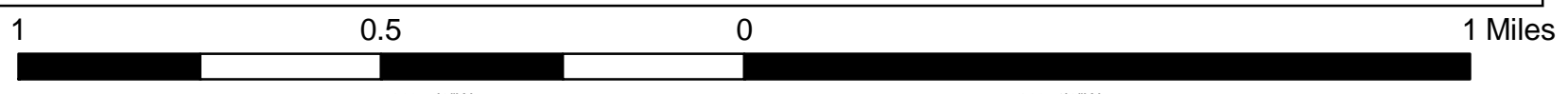
Dedicated & Proposed Special Conservation Area Map

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



Legend		Forest Stands		Non-Forest Stands	
	Miris Corners	Level 3		Level 3	
	Stand Boundaries	411 - Northern Hardwood		310 - Herbaceous Openland	
	OI Special Conservation Areas	412 - Oak Types		623 - Emergent Wetland	
	Cold Water Streams	413 - Aspen Types			
	Natural Rivers Vegetative Buffer	419 - Mixed Upland Deciduous			
	Natural Rivers Zoning District	421 - Planted Pines			
		422 - Natural Pines			
		431 - Upland Mixed Forest			
		611 - Lowland Deciduous Forest			
		612 - Lowland Coniferous Forest			
		613 - Lowland Mixed Forest			



44°20'N 83°55'0"W 83°54'0"W 83°53'0"W 44°30'N 44°40'N 44°50'N

Gladwin Mgt. Unit

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

Compartment 136 Year of Entry 2011

Report Date: 10/29/2009



	Age Class															
	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	Total
Aspen Types	0	16	41	0	134	0	0	0	0	0	0	0	0	0	0	191
Emergent Wetland	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Herbaceous Openland	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Coniferous Forest	0	151	0	0	0	10	0	0	0	0	0	0	0	0	0	161
Lowland Deciduous Forest	0	0	122	16	79	43	0	122	0	7	0	0	0	0	10	398
Lowland Mixed Forest	0	14	0	5	0	0	0	0	0	0	0	0	0	0	0	19
Mixed Upland Deciduous	0	51	74	110	0	0	0	0	0	26	0	0	5	0	0	265
Natural Pines	0	18	0	31	81	13	0	9	0	25	0	0	0	0	0	177
Northern Hardwood	0	0	0	0	50	0	0	0	0	11	0	0	0	0	0	61
Oak Types	0	24	14	0	0	31	0	76	0	56	0	0	0	0	0	202
Planted Pines	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	24
Upland Mixed Forest	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	29
Total	12	276	279	161	344	120	0	208	0	126	0	0	5	0	10	1541

**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
14 73136014-CC	14.0	42110 - Planted Red Pine	High Density Log	43	Harvest	Clearcut	Planted Red Pine
<p><u>Rev</u> No retention due to low acre size. <u>Cmnt:</u></p> <p><u>Rev</u> 2" Clear cut. <u>Spec:</u></p> <p><u>Next</u> Replant to Red Pine within northern strip at road and within southern block only. The remainder to naturally regenerate. <u>Steps:</u></p>							
23 73136023-CCR	39.3	4125 - Black, N. Pin Oak	Medium Density Log	65	Harvest	Clearcut with Reserves	Black, N. Pin Oak
<p><u>Rev</u> Focus 3-4% retention around "traditional" campsites. <u>Cmnt:</u></p> <p><u>Rev</u> 2" clear cut. <u>Spec:</u></p> <p><u>Next</u> Post-harvest prescribed burn to control Red Maple. <u>Steps:</u></p>							
34 73136034-CCR	39.9	4125 - Black, N. Pin Oak	Medium Density Log	80	Harvest	Clearcut with Reserves	Black, N. Pin Oak
<p><u>Rev</u> Focus 3 to 4% retention around "traditional" campsites within the stand. <u>Cmnt:</u></p> <p><u>Rev</u> 2" clear cut. <u>Spec:</u></p> <p><u>Next</u> Regeneration to be examined within 4 years. If failing, interplant to Red Pine. <u>Steps:</u></p>							

**Total Treatment
Acreage Proposed: 93.1**

**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
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	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.
SCA	Potential Old Growth Areas	This category contains stands were identified for a broad range of reasons and were coded in the OI database as stand condition 8 as potential old growth (POG). Approximately 310,000 acres have been identified through the Operations Inventory (OI)/Compartment Review process. For stands in Year of Entry 2008 and forward, potential old growth is managed for the identified objective until it is: 1) vetted through the Biodiversity Conservation Planning Process (BCPP) and given a specific designation and objective (as an ERA, HCVA, or other type of SCA) and is released from the potential old growth designation; or 2) it is released from the potential old growth designation via the Compartment Review process.