



**Gwinn Forest Management Unit
Compartment Review Presentation
Compartment #261 Entry Year: 2011
Compartment Acreage: 1255 County: Marquette**

Revision Date: May 12, 2009

Stand Examiner: Tom Seablom

Legal Description: T45N R27W Sec. 24, 25, and 36

RMU (if applicable): None

Management Goals: Within this compartment, goals are to maintain and increase timber productivity, maintain and improve wildlife habitat and protect water quality. Timber types within this compartment will continue to be managed on an even-aged basis mainly for fiber production with some saw log production occurring on the more productive sites. Managing as such will provide both cover and feed for wildlife.

Soil and Topography: Soils vary in this compartment from Kalkaska sand to Carbondale-Tawas mucks. The predominant upland soil is Pence fine sandy loam, which composes almost the entire northern two-thirds of the compartment. Croswell sand and the Croswell-Deford complex are the dominant soils in the southern third. The small amounts of mucks that do occur are in drainages and creeks surrounding Black and Charley Lakes. This compartment is relatively flat with some relief surrounding Black Lake and Charley Lakes.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Ownership is primarily State with private individual holdings scattered throughout the surrounding landscape and concentrated around inland lakes. The Michigan Northwoods Club is located approximately two miles northwest of this compartment. Development is minimal with camps being on private land. Land use is consistent with that of State land, primarily hunting, fishing, and camping.

Unique, Natural Features: None

Archeological, Historical, and Cultural Features: None

Special Management Designations or Considerations: Several stands have been recommended for Special Conservation Areas (SCA) – Potential Old Growth (POG). These stands are predominantly in the southeast portion of this compartment and exist along waterways.

Watershed and Fisheries Considerations: Text

Wildlife Habitat Considerations: Text

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of coarse-textured glacial till. The glacial drift thickness varies between 50 and 100 feet. The Precambrian Archean Granite/Gneiss subcrops below the glacial drift. This rock could be used as dimension stone. Sand & gravel pits are located in the area, and there should be potential. Abandoned iron mines are located ten miles to the north. This area was previously leased for metallic mineral development. There is no economic oil and gas production in the UP.

Vehicle Access: There is decent access throughout this compartment. The Charlie Lakes Road (a county road) is the primary road to access this compartment. Secondary woods roads provide access throughout the compartment. Some new temporary roads will need to be built to access some of the prescribed stands.

Survey Needs: Several corners need to be placed to define State ownership.

Recreational Facilities and Opportunities: A portion of the Bass Lake Motorcycle trail traverses this compartment. The Bass Lake Campground is approximately two miles to the east of this compartment. No other facilities exist at this time.

Fire Protection: There is good access throughout the compartment for all fire equipment. Vegetation is a mix of aspen, lowland conifer, and upland brush/grass opening. There is some jack pine in the southern portion of this compartment and immediately to the south in Dickinson County.

Additional Compartment Information: None

➤ **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**

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Michigan Department of Natural Resources - Operations Inventory System
Individual Compartment Report

ESCANABA RIVER STATE FOREST

GWINN FOREST MGT UNIT

MARQUETTE COUNTY

COMPARTMENT: 261

Table 3

(acres shown in boxes)

STAND AGE CLASS

COVER TYPE	Not Coded	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150-159	All Aged	Total
Aspen		20	90	127	139	166	35	63		88									728
Black Spruce								17			15								32
Bog or Marsh	9																		9
Grass	17																		17
Jack Pine						6	13	44											63
LowInd Brush	36																		36
LowInd Poplr									30										30
Mx Swmp Cnfr									137			7						23	167
Non Stocked	8																		8
Paper Birch										28									28
Spruce Fir							8												8
Swamp Hrdwds								9											9
Upland Hdwds								29		76									105
Water	15																		15
Total	85	20	90	127	139	172	56	162	167	192	15	7						23	1255

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Michigan Department of Natural Resources - Operations Inventory System
Individual Compartment Report

ESCANABA RIVER STATE FOREST

GWINN FOREST MGT UNIT

MARQUETTE COUNTY

COMPARTMENT: 261

Table 3A

(acres shown in boxes)

MANAGEMENT OBJECTIVE TYPE

COVER TYPE	A	S	V	C	G	H	J	I	L	P	N	Q	X	O	B	R	K	Y	F	E	T	D	U	M	Z	W	Total
A Aspen	728																										728
S Black Spruce		32																									32
V Bog or Marsh			9																								9
G Grass					17																						17
J Jack Pine							63																				63
L LowInd Brush									36																		36
P LowInd Poplr										30																	30
Q Mx Swmp Cnfr												167															167
X Non Stocked													8														8
B Paper Birch															28												28
F Spruce Fir																			8								8
E Swamp Hrdwds																				9							9
M Upland Hdwds																								105			105
Z Water																									15		15
Total	728	32	9		17		63		36	30		167	8		28				8	9				105	15		1255

ESCANABA RIVER STATE FOREST

GWINN FOREST MGT UNIT

MARQUETTE COUNTY

COMPARTMENT: **261**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	12035 Cds	Hardwood	4603 Cds
Softwood	5948 Cds	Softwood	2816 Cds
Sum TotVol	17983 Cds	Sum CutVol	7419 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	315
1255			

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
1	A6	22	83	55	aspen (upland)	mature	final harvest	1		
<p>comnts Fmd : It is being prescribed to clearcut this stand leaving red and white pine, and any oak or birch. White spruce with less than an 8-inch stump diameter (measured at 4-inches above the ground) are to be left for diversity, ie retention. All other trees greater than 2-inches stump diameter are to be cut regardless of merchantability. There is quite a bit of submerchantable maple in the understory which may hamper aspen regeneration. This stand should be fall or winter cut to maximize aspen sprouting and compete with the existing maple. The Bass Lake Motorcycle trail runs through this stand and will be protected during harvesting operations by fall or winter harvesting. Trees along the trail painted with orange or are marked with a cycle trail triangle will be left. This stand has the highest priority for harvesting at this entry period.</p>										
7	A6	40	81	55	aspen (upland)	mature	final harvest	1		
<p>comnts Fmd : This stand is being prescribed for clearcut only leaving birch, oak, any pine, and those white spruce with a stump diameter less than 8-inches (measured at 4-inches above the ground). To satisfy retention requirements, patches of spruce/fir and an occassional mature aspen should be left along the stand boundary. The Bass Lake Motorcycle trail runs through this stand and will be protected during harvesting operations. All trees marked with orange paint or the orange cycle trail triangle along the trail will be left.</p>										
8	A6	21	81	55	aspen (upland)	mature	final harvest	1		
<p>comnts Fmd : This stand is to be clearcut leaving all pine and oak and any cherry. Enough birch and 1/2 dead aspen are to be marked (either single tree or patches) to obtain a maximum of 3% retention either by basal area or acreage.</p>										
22	M6	56	84	65	northern hardwood	two aged	shelterwood-seed	2		
<p>comnts Fmd : This is a mixed stand of northern hardwood and aspen-birch. It is a low quality stand and is being prescribed for a shelterwood cut to regenerate northern hardwoods, paper birch and red oak. All aspen, red maple, balsam and spruce are to be cut regardless of merchantability. A summer harvest is desirable here to maximize scarification. There are scattered red and white pine throughout the stand and will benefit from this type of harvest.</p> <p>Wld : WLD would like to underplant stand after harvest with a mixture of red and white pine and possibly some oak in order to increase diversity and enhance wildlife habitat quality.</p>										
27	P6	30	75	55	balsam poplar & swamp aspen and swamp white birch	mature	final harvest	1		
<p>comnts Fmd : This stand is being prescribed for final harvest. All trees over 2-inches dbh, except cedar and ash, are to be cut. This is a very wet stand and should be cut during winter conditions.</p>										
28	S6	15	91	45	black spruce-swamp	mature	seed tree	2		
<p>comnts Fmd : A seedtree cut is being prescribed for this stand. Clumps of 10-15 trees every 5 ch's are to be left as a seed source. This will yield approx. 4-6 tpa providing adequate spacing for seed fall. This stand is wet and should be harvested during winter or frozen conditions. All cedar is to be left.</p>										
32	A6	63	67	55	aspen (upland)	old growth (potential or actual)	final harvest	1		
<p>comnts Fmd : SCA-Potential Old Growth or Extended Rotation Aspen. This is a long stand running north-south in the southeastern portion of the compartment. It is flat with slight elevational changes ranging from 2-3 feet causing portions of the stand to be wet and others dry. It currently has no roads through it. The white birch and aspen are overmature and in need of harvesting. The understory consists of advanced fir and maple regeneration occurring in various parts of the stand. As the elevation grades down on the east side, timber turns predominately to upland spruce and fir. It is being prescribed at this time to clearcut this stand during winter or frozen conditions and allowing it to regenerate. Spruce-fir seed trees could be marked along the eastern edge of the stand to provide a seed source for that timber type. Doing this would aid in the perpetuation of the conifer cover along the travel corridor between the upland and lowland timber types. This stand should be cut with the stands to the north so the same winter road system can be used. No cedar or cherry are to be cut. All other trees regardless of merchantability are to be cut. If conditions allow, a summer harvest may be accomplished.</p> <p>Wld : SCA-Extended Rotation Aspen. Leave patches of spruce/fir as well as any cedar found in stand in order to maintain conifer diversity for wildlife and provide a seed source for regeneration. Retain designation of "extended rotation" in order to allow conifer to establish and encourage multiple age classes within this stand.</p>										
34	A5	5	81	60	aspen (upland)	high risk	final harvest	1		
<p>comnts Fmd : This stand should be clearcut during dry summer or winter conditions. All trees except cedar, pine and any cherry are to be cut regardless of merchantability. Balsam fir and soft maple are present as advanced regeneration. If this stand isn't harvested at this entry period, it will likely convert to soft maple and fir as most of the aspen is well past maturity.</p>										
35	M6	29	65	48	northern hardwood	two aged	shelterwood-prep	1		
<p>comnts Fmd : This is a very poor quality mixed hardwood stand, predominately soft maple. Timber grades from maple in the north to aspen-birch in the south. There is scattered hemlock, yellow birch, and cedar throughout the stand (predominately on the swamp edges). A shelterwood-seed tree cut is being prescribed for this stand leaving approx. 50 sq. ft. per acre.</p> <p>Wld : Highly diverse stand and the proposed prescription of "shelterwood harvest" should maintain or even increase diversity for the future.</p>										

GWINN FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 261 Entry Year: 2011

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
43	J6	34	59	68	jack pine	immature	final harvest	2	planting	

comnts Fmd : This stand is being prescribed for final harvest during this entry period. It is being prescribed for this entry period eventhough it would hold for another inventory cycle as growth has culminated over the last 10 years and the jack pine and aspen in the compartment to the south (Dickinson Co.) is scheduled to be harvested during the next entry period. Harvesting this stand now will help to avoid adjacency issues and will take advantage of the high volume at this time. All trees are to be cut regardless of merchantability except cherry and any red or white pine. The site will be trenched and planted to jack pine. Harvest a portion of the jack pine stand in Dickinson Co. at the same time as this stand.

Total Acres..... 315

**Proposed Treatments
With Limiting Factors**

Compartment: 261

Entry Year: 2011

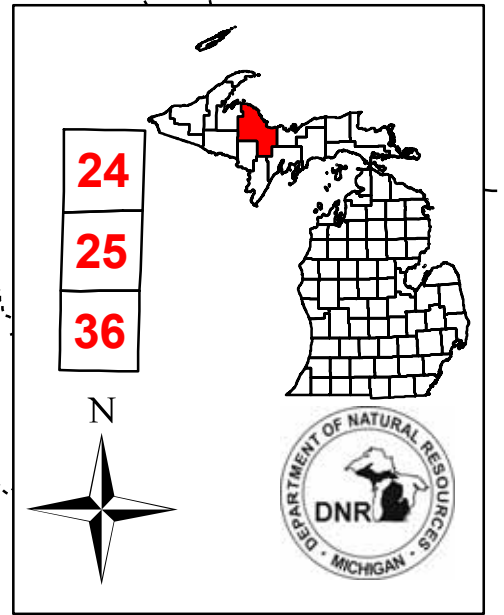
Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
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TREATMENT LIMITING FACTORS:

Total Acres..... 0

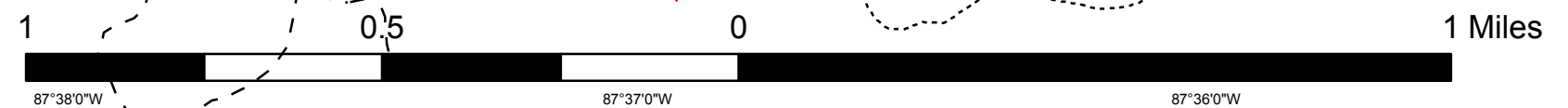
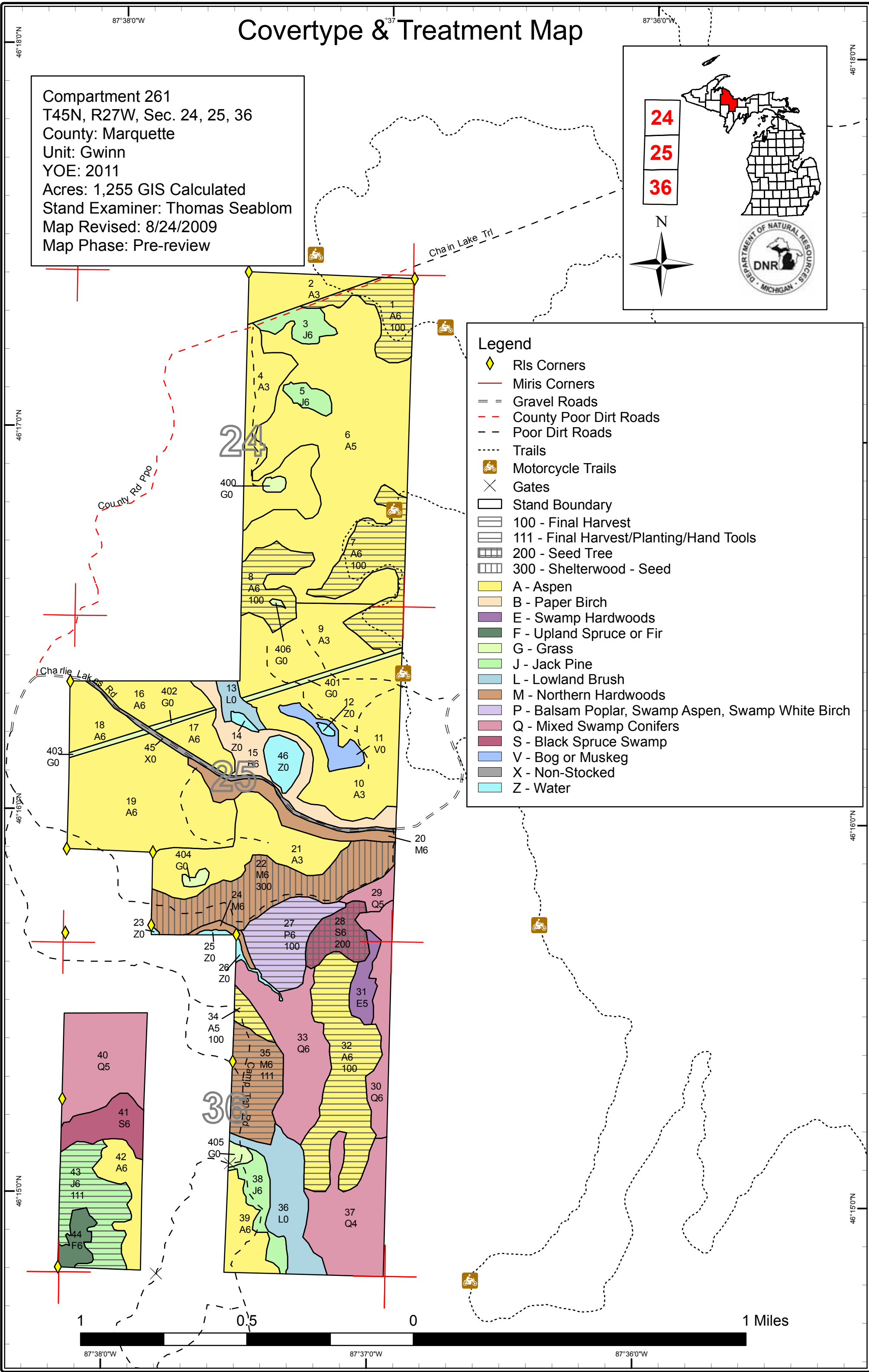
Covertime & Treatment Map

Compartment 261
 T45N, R27W, Sec. 24, 25, 36
 County: Marquette
 Unit: Gwinn
 YOE: 2011
 Acres: 1,255 GIS Calculated
 Stand Examiner: Thomas Seablom
 Map Revised: 8/24/2009
 Map Phase: Pre-review



Legend

- RIs Corners
- Miris Corners
- Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- Trails
- Motorcycle Trails
- Gates
- Stand Boundary
- 100 - Final Harvest
- 111 - Final Harvest/Planting/Hand Tools
- 200 - Seed Tree
- 300 - Shelterwood - Seed
- A - Aspen
- B - Paper Birch
- E - Swamp Hardwoods
- F - Upland Spruce or Fir
- G - Grass
- J - Jack Pine
- L - Lowland Brush
- M - Northern Hardwoods
- P - Balsam Poplar, Swamp Aspen, Swamp White Birch
- Q - Mixed Swamp Conifers
- S - Black Spruce Swamp
- V - Bog or Muskeg
- X - Non-Stocked
- Z - Water



87°38'0"W 87°37'0"W 87°36'0"W

Stand Boundary Map

Compartment 261
 T45N, R27W, Sec. 24, 25, 36
 County: Marquette
 Unit: Gwinn
 YOE: 2011
 Acres: 1,255 GIS Calculated
 Stand Examiner: Thomas Seablom
 Map Revised: 8/24/2009
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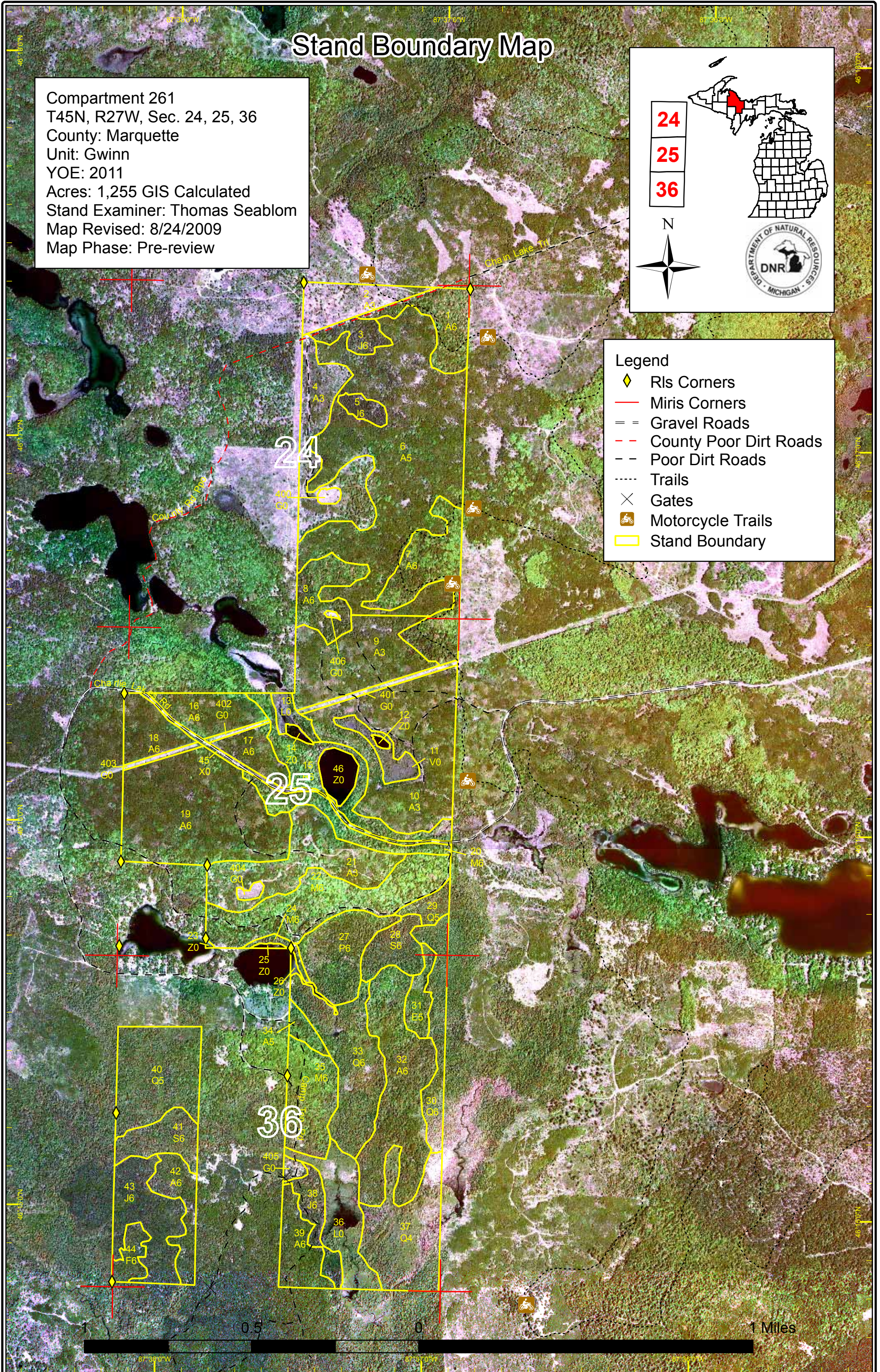
24
 25
 36

N

DEPARTMENT OF NATURAL RESOURCES
DNR
MICHIGAN

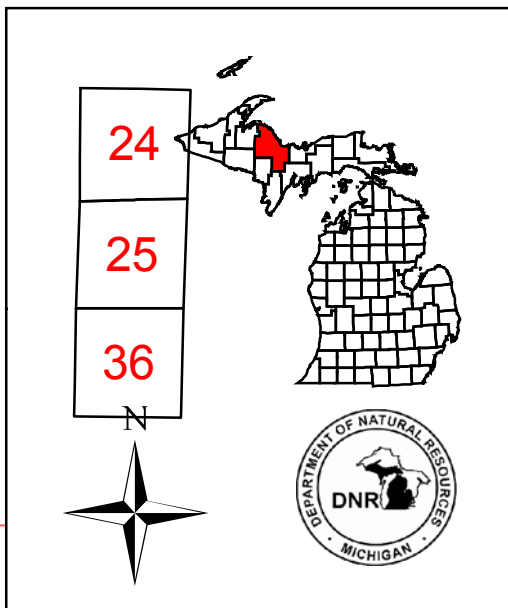
Legend

- ◆ RIs Corners
- Miris Corners
- == Gravel Roads
- - County Poor Dirt Roads
- - Poor Dirt Roads
- Trails
- × Gates
- 🏍 Motorcycle Trails
- ▭ Stand Boundary



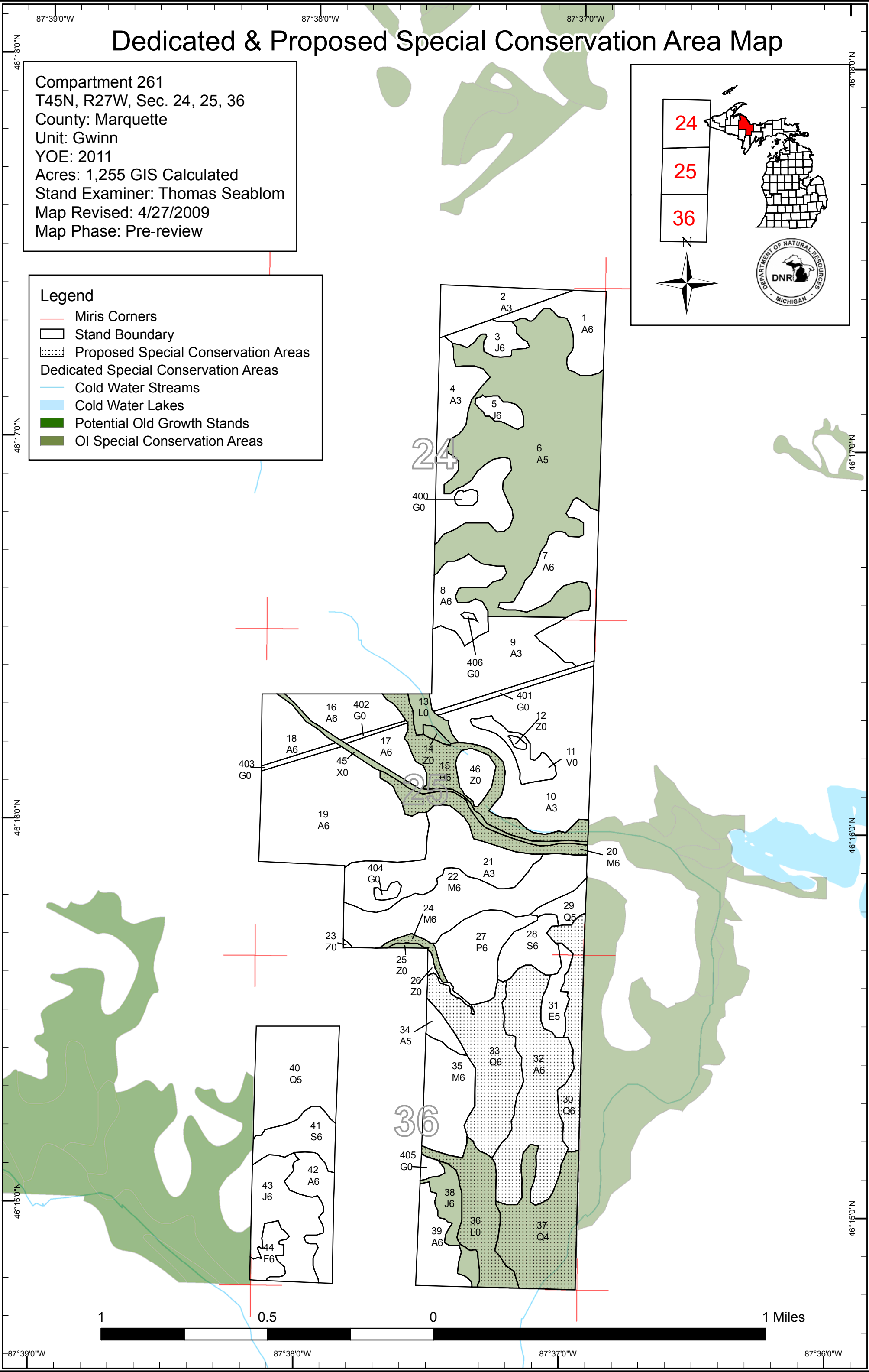
Dedicated & Proposed Special Conservation Area Map

Compartment 261
 T45N, R27W, Sec. 24, 25, 36
 County: Marquette
 Unit: Gwinn
 YOE: 2011
 Acres: 1,255 GIS Calculated
 Stand Examiner: Thomas Seablom
 Map Revised: 4/27/2009
 Map Phase: Pre-review



Legend

- Miris Corners
- Stand Boundary
- Proposed Special Conservation Areas
- Dedicated Special Conservation Areas**
- Cold Water Streams
- Cold Water Lakes
- Potential Old Growth Stands
- OI Special Conservation Areas





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.
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.