



Gwinn Forest Management Unit
Compartment Review Presentation
Compartment 231 **Entry Year: 2009**
Compartment Acreage: 1248 **County: Marquette**

Revision Date: March 24, 2009

Stand Examiner: Thomas Seablom

Legal Description: T45N R28W Sec. 8, 17 and 18

RMU (if applicable): None

Management Goals: Management goals include maintaining and increasing timber productivity, maintaining and improving wildlife habitat and protecting 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: This compartment is relatively flat to gently rolling and occurs within a larger sandy outwash plain. Soils are composed of mucks and sands. Depressions and drainages consist of the Carbondale and Tawas soils mapping unit while the uplands are composed of Rubicon sands and its associates.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Ownership in this area is almost entirely State with some private inholdings including two larger hunting clubs. Very little development occurs in this area besides camps. Land use in and around the compartment includes timber, wildlife, fish and recreation.

Unique, Natural Features: None

Archeological, Historical, and Cultural Features: Abandoned railroad grades exist in this compartment and surrounding area from the pine era. Frenchy Lake had been used for commercial ice production. Part of the abandoned ELF right-of-way passes through this compartment.

Special Management Designations or Considerations: Stands along the Flat Rock Creek and surrounding Heart Lake are listed as Special Conservation Areas (SCA) for Potential Old Growth (POG).

Watershed and Fisheries Considerations: Habitat along the Flat Rock Creek needs to be maintained to provide for the quality of the cold water fishery. Aspen management within the immediate area of the creek needs to be discouraged.

Wildlife Habitat Considerations: Text

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of coarse-textured till and peat & muck. There is insufficient data to determine the glacial drift thickness. The Precambrian Archean Granite/Gneiss subcrops below the glacial drift. This rock could be used as dimension stone and there is a rock quarry located in Section 19. Sand and gravel pits are located in this area and there should be some potential. The abandoned Republic iron mine is located six miles to the northwest. Part of this Compartment was previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access: Access to this compartment is limited. The Flat Rock Road provides the primary access to this compartment. Secondary roads off of it provide access to the south and east. Virtually all of the north and western portions of this compartment are inaccessible. Some stands to the extreme north can be accessed through private property with winter roads.

Survey Needs: None at this time.

Recreational Facilities and Opportunities: No recreation facilities exist at this time. There is potential for development of a campground around Heart Lake, however there is currently no vehicle access to it.

Fire Protection: This compartment is within the South Ishpeming-581 Zone dispatch area. Access to the majority of this compartment by mechanical fire apparatuses is limited as no roads in the north and west exist. Covertypes in this roadless area include lowland brush, conifer swamps, birch and jack pine with some spruce-fir. The jack pine and birch are mid-rotation to mature and have an understory component of fir and upland black spruce. The south and eastern portions of the compartment can be accessed via the Flat Rock Road and secondary side roads.

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: 231

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				100	24			4	13										141
Black Spruce									52	51	33								136
Bog or Marsh	30																		30
Cedar											33								33
Grass	12																		12
Jack Pine		43	41				72	5	4										165
Lowlnd Brush	232																		232
Marsh	23																		23
Mx Swmp Cnfr									115		88								203
Non Stocked	8																		8
Paper Birch								11	49										60
Red Pine						22	4	23										24	73
Spruce Fir	8		22	4		14			45										93
Treed Bog	9																		9
Upland Hdwds							10												10
Water	20																		20
Total	342	43	63	104	24	36	86	43	278	51	154							24	1248

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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: 231

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	139						2																				141
S Black Spruce		136																									136
V Bog or Marsh			30																								30
C Cedar				33																							33
G Grass					12																						12
J Jack Pine							165																				165
L LowInd Brush									232																		232
N Marsh											23																23
Q Mx Swmp Cnfr												203															203
X Non Stocked													8														8
B Paper Birch															60												60
R Red Pine																73											73
F Spruce Fir																39		54									93
D Treed Bog																						9					9
M Upland Hdwds																10											10
Z Water																									20		20
Total	139	136	30	33	12		167		232		23	203	8		60	122		54				9			20		1248

ESCANABA RIVER STATE FOREST

GWINN FOREST MGT UNIT

MARQUETTE COUNTY

COMPARTMENT: **231**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	2488 Cds	Hardwood	1075 Cds
Softwood	9580 Cds	Softwood	2134 Cds
Softwood	99 Mbf	Softwood	29 Mbf
Sum TotVol	12266 Cds	Sum CutVol	3267 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	189
1248			

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	DFD Status
30	A6	11	68	50	aspen (upland)	mature	final harvest	1		
comnts Fmd : This stand is being prescribed for clearcutting. Cut all trees regardless of merchantability (no retention). This stand is a marginal aspen stand and marginal for red pine. It is well suited for jack pine, however, with the majority of this landscape being jack pine, it is desired to manage this as a mixed stand of aspen, jack pine, and spruce-fir.										
31	J6	2	69	62	jack pine	mature	final harvest	1	direct seeding	
comnts Fmd : It is being prescribed to clearcut this stand and plant back to jack pine. All trees are to be cut regardless of merchantability (no retention). Herbicide will likely be need to control aspen and red maple sprouting.										
32	A6	2	69	62	jack pine	mature	final harvest	1	direct seeding	
comnts Fmd : This stand is being prescribed for clear cutting and converting to jack pine. All trees are to be cut (no retention) and herbicide used to control sprouting. This is a sandy site currently stocked with off site aspen.										
33	J6	2	69	62	jack pine	mature	final harvest	1	direct seeding	
comnts Fmd : This stand is being prescribed for clearcutting and planting back to jack pine or possibly converting to red pine if habitat type allows. All trees are to be cut (no retention). Some herbicide may be needed to control areas of aspen sprouting.										
42	M6	10	54	55	red pine	mature	final harvest	1	planting	
comnts Fmd : This stand is on a knoll/ridge and is a mix of red maple, white birch and balsam fir. There is some jack pine and scattered red pine. There is a heavy hazel and red maple understory as well as balsam. The birch is dying out. It is being prescribed to clear cut this stand reserving a few birch clumps and the jack pine. It will then be anchor chained to expose mineral soil for a seed bed for birch, jack pine, and red pine seed. All other trees (except oak) are to be cut. The source for the red pine seed will be the plantation (44 years old) that is immediately adjacent on the west side of this stand as there are no red pine within this stand. SEE LOCKED COMMENTS.										
47	R9	1		70	red pine	mature	shelterwood-seed	2		
comnts Fmd : This is a small stand of mature red pine surrounded by aspen. A shelterwood-seedtree cut is being prescribed to regenerate this stand while retaining approximately 50 sq/ft of the large over mature red pine, creating 1/3 to 1/4 acre gaps. Harvesting will be restricted to snow free conditions to aid in scarification. Cut this stand along with stand 48 to the south. Stand 400, grass opening to the west of this stand will be used as a landing area.										
48	R9	9		70	red pine	mature	shelterwood-seed	1		
comnts Fmd : This stand is being prescribed for a shelterwood-seedtree type cut to regenerate this stand while retaining approximately 50 sq/ft of the large over mature red pine, creating 1/3 to 1/4 acre gaps. Cut all other trees regardless of merchantability except cut no oak. Harvesting will be restricted to snow free conditions to aid in scarification. Cut this stand along with stand 47 to the north. Stand 400 to the west of this stand can be used as a landing area for this sale.										
57	R5	23	61	58	red pine	two aged	seed tree	3		
comnts Fmd : Poorly stocked stand overall, heavier stocking in some areas where points fell brought the avg. ba/ac up. Would benefit from clearcutting and planting to either red pine or jack pine. Red pine could be regenerated via a seed tree cut too leaving the majority of the red pine, except on the southwest side where a very dense pocket of pure red pine exists. This area would require a heavier cutting, down to 50 sq ft. If this stand is held another 10 years we'd get on average another 1 stick per tree in the fir and jack pine.										
60	F0	8		55	spruce-fir (uplands- including upland black spruce)	high risk		0	planting	
comnts Fmd : This stand needs a site visit for a regeneration exam and to determine if a cultural treatment is needed. It was cut in the fall of 2003 by Roy Nelson, III, timber sale #107-01-01, Coniber ELF Sale. Birch seed trees were left as well as any oak, cherry, and cedar as well as 1 to 3 stick spruce. Upon examining this stand in January 2009, virtually no regeneration was present at snow level. There are some red maple sprouts as well as some spruce and fir seedlings, though very low stocking. Pending a field visit, stand will be planted with an upland conifer mix.										
Total Acres.....		68								

GWINN FOREST MGT UNIT

**Proposed Treatments
With Limiting Factors**

Compartment: 231 **Entry Year: 2011**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
13	B4	7	77	50	paper birch	old growth (potential or actual)	seed tree	3		

TREATMENT LIMITING FACTORS: Potential or designated old growth

comnts Fmd : SCA-Potential Old Growth. Birch island next to Heart Lake. Could possibly treat this stand along with stand 15 and remove it from SCA status. Access is severely limited here.

15	F5	39	77	50	red pine	sparse	final harvest	3	direct seeding	
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TREATMENT LIMITING FACTORS: Road needed (resources not presently available)

comnts Fmd : 8/12/2009: It is being prescribed to clearcut this stand reserving all red and any white pine and scattered white birch. Seeding red or jack pine via snowmobile may be the regeneration option as summer access is difficult. 3/2009: Very sparse stand, pts just happened to fall in areas of denser timber. Very poor quality stand, very low productivity right now. Would benefit from clearcutting and replanting to either red or jack pine, preferably red pine. Since access is a problem, we could consider doing a seed tree cut or seed via snowmobile. If cut, cut with stand 18. Access here is very difficult. There currently is no road to this area of the compartment. A major road building project would need to be undertaken including installing a bridge over the Flat Rock Creek.

17	B6	29	77	46	paper birch	mature	shelterwood-seed	3		
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TREATMENT LIMITING FACTORS: Potential or designated old growth

comnts Fmd : A shelterwood-seed tree cut is being prescribed for this stand leaving approx. 10 trees per acre of white birch and a balsam fir. All other live trees, except any red or white pine, are to be cut regardless of merchantability. Leave a 300 ft. buffer (ie stand 67) from Heart Lake, .

18	J6	54	53	60	jack pine	mature	final harvest	3		
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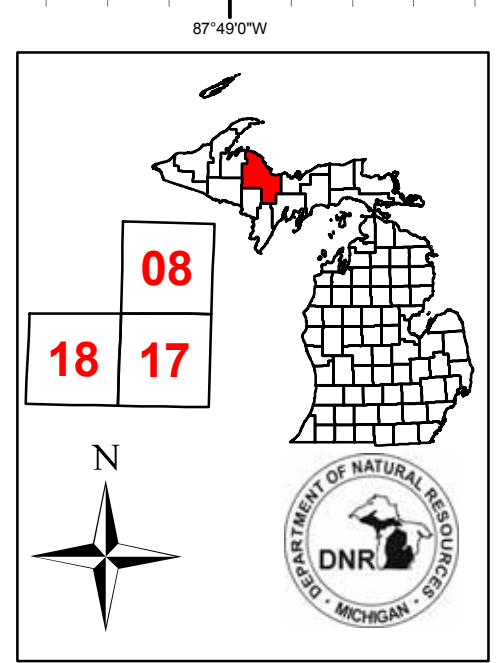
TREATMENT LIMITING FACTORS: Road needed (resources not presently available)

comnts Fmd : 8/12/2009: This stand is being prescribed for clearcutting. All trees, except any red or white pine are to be cut regardless of merchantability. There are several spruce pockets (upland) and young jack pine pockets within the stand. Accessing this stand will take an immense amount of road work including a bridge across the Flat Rock creek.

Total Acres..... 129

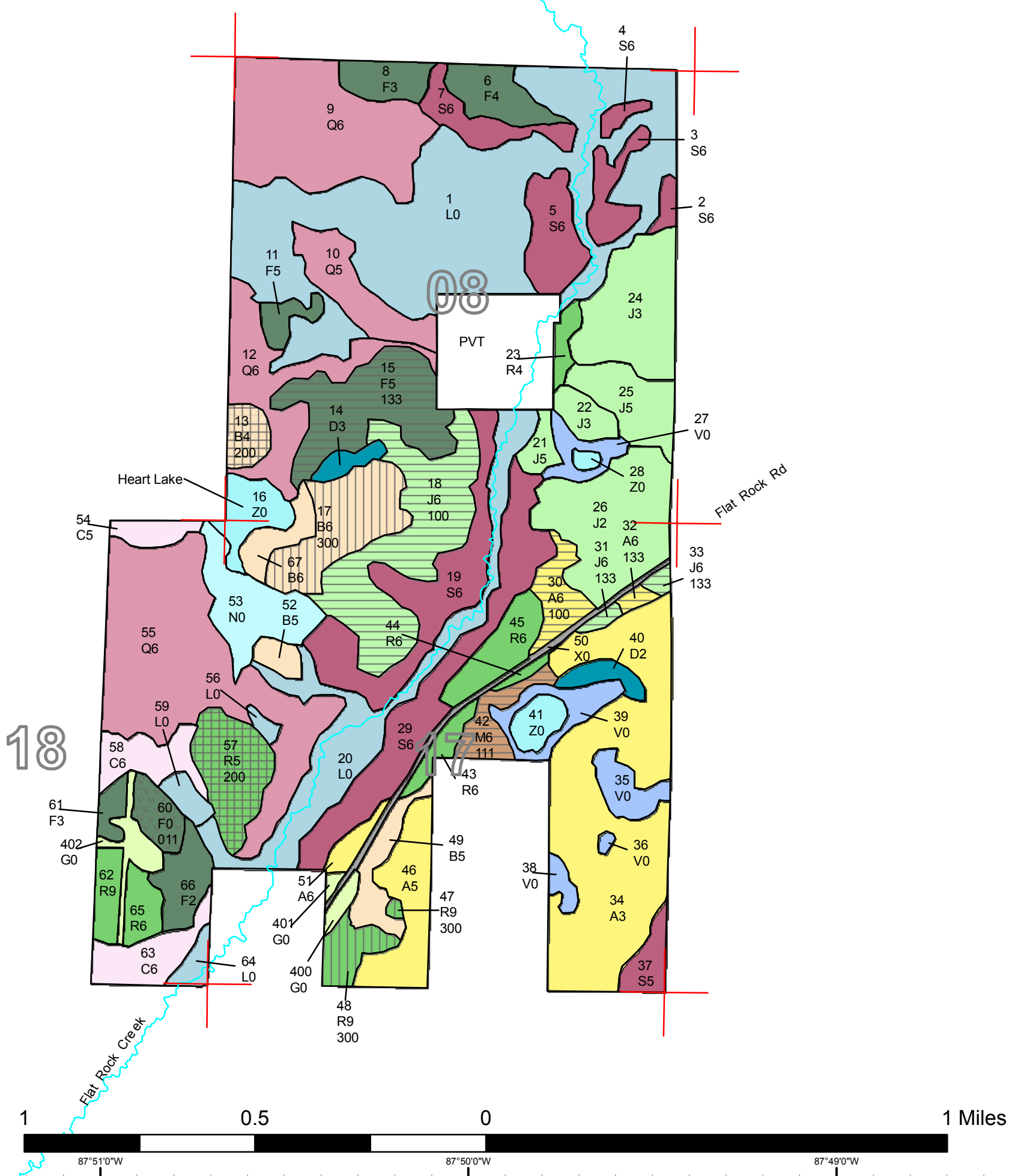
Covertime & Treatment Map

Compartment 231
 T45N, R28W, Sec. 8, 17, 18
 County: Marquette
 Unit: Gwinn
 YOE: 2011
 Acres: 1,248 GIS Calculated
 Stand Examiner: Thomas Seablom
 Map Revised: 8/25/2009
 Map Phase: Pre-review



Legend

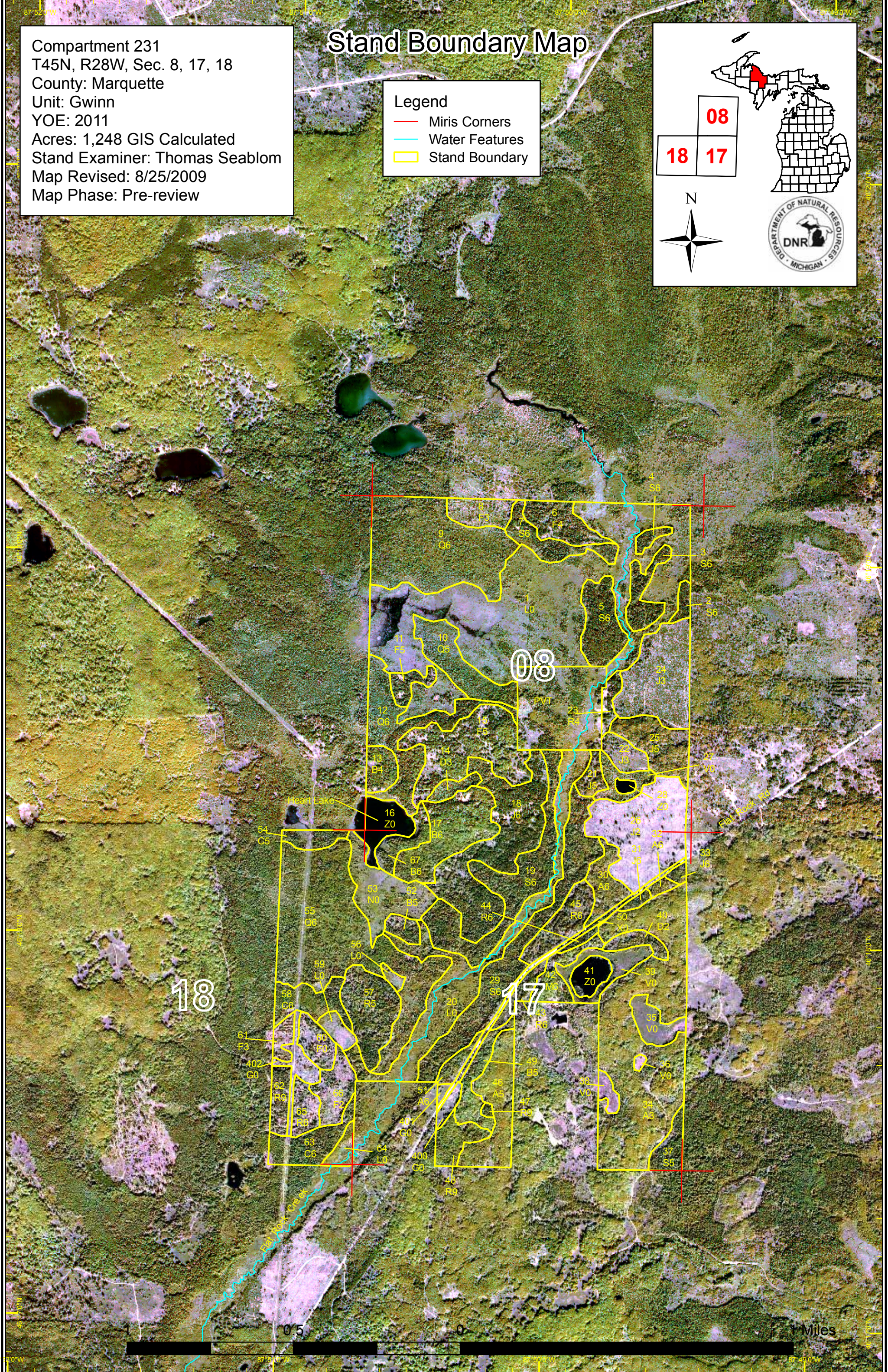
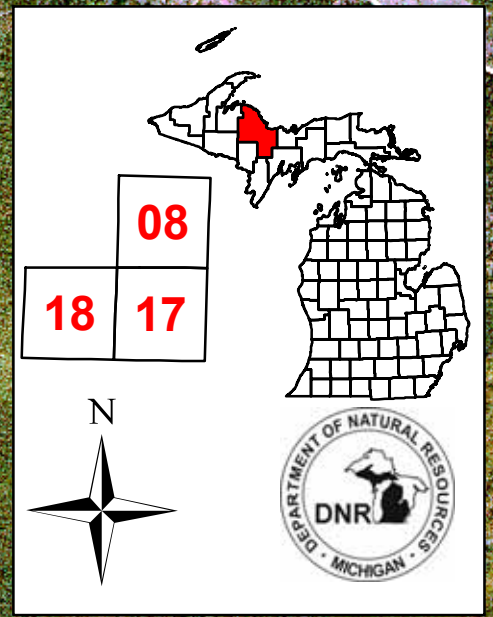
Miris Corners	A - Aspen
Water Features	B - Paper Birch
Stand Boundary	C - Northern White Cedar
011 - Planting/Hand Tools	D - Treed Bog
100 - Final Harvest	F - Upland Spruce or Fir
111 - Final Harvest/Planting/Hand Tools	G - Grass
133 - Final Harvest/Direct Seeding/Ground Application	J - Jack Pine
200 - Seed Tree	L - Lowland Brush
300 - Shelterwood - Seed	M - Northern Hardwoods
	N - Marsh
	Q - Mixed Swamp Conifers
	R - Red Pine
	S - Black Spruce Swamp
	V - Bog or Muskeg
	X - Non-Stocked
	Z - Water



Compartment 231
T45N, R28W, Sec. 8, 17, 18
County: Marquette
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Stand Boundary Map

- Legend
- Miris Corners
 - Water Features
 - Stand Boundary



18

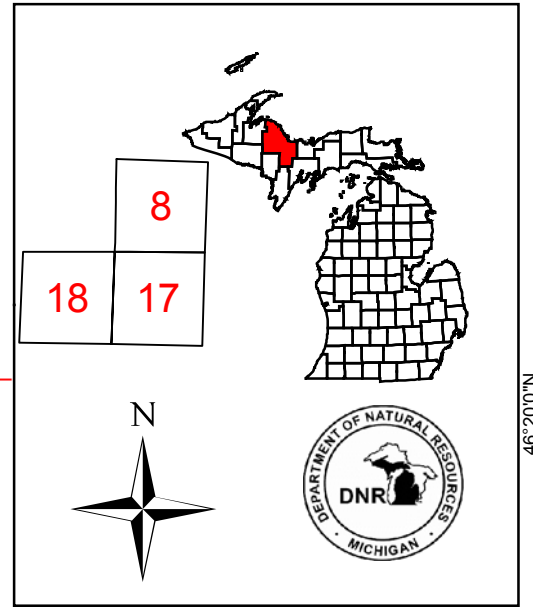
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17

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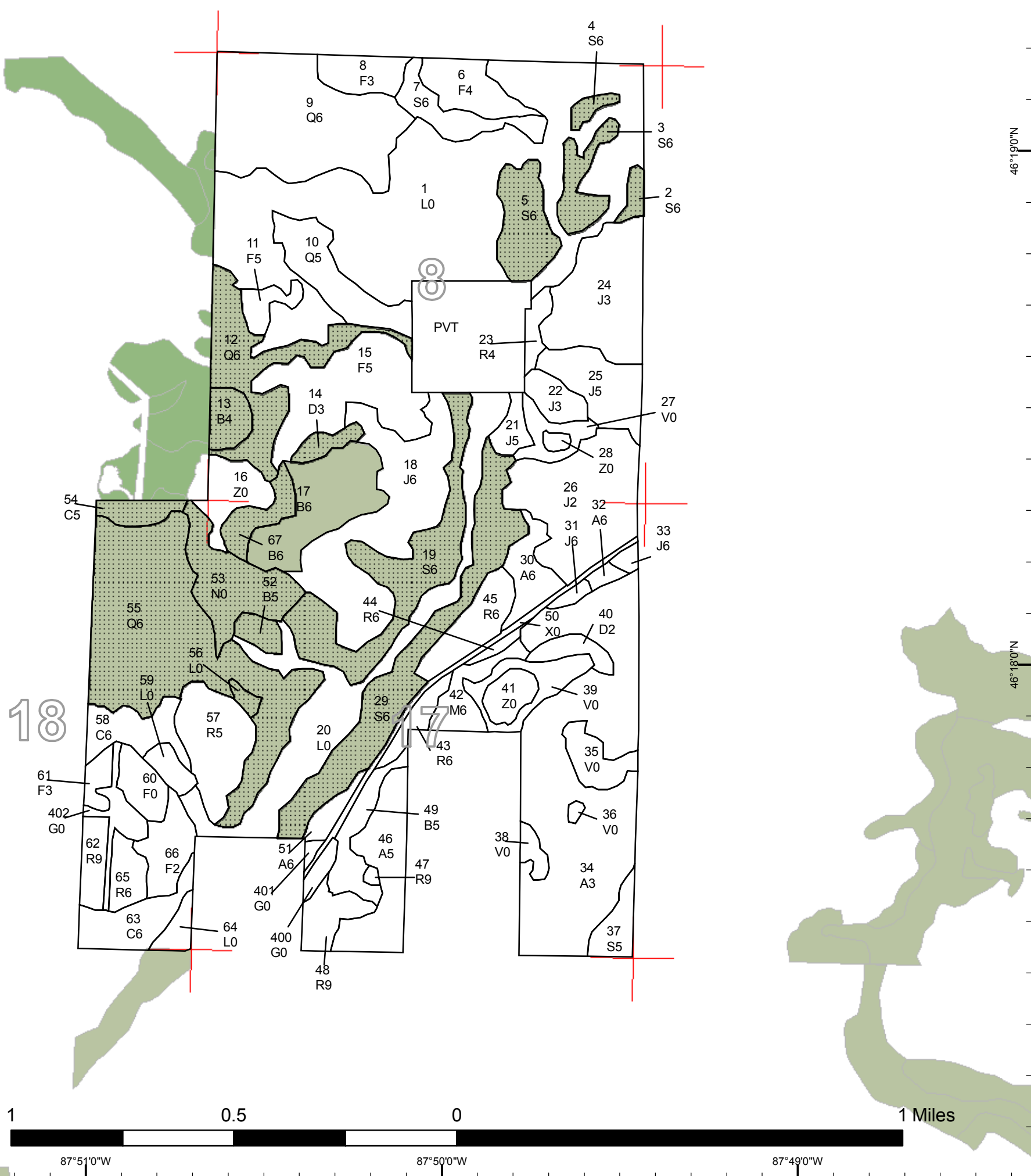
Dedicated & Proposed Special Conservation Area Map

Compartment 231
 T45N, R28W, Sec. 8, 17, 18
 County: Marquette
 Unit: Gwinn
 YOE: 2011
 Acres: 1,248 GIS Calculated
 Stand Examiner: Thomas Seablom
 Map Revised: 8/25/2009
 Map Phase: Pre-review



Legend

- Miris Corners
- Stand Boundary
- Proposed Special Conservation Areas
- Dedicated Special Conservation Areas**
- 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	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.