



**GWINN FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

**COMPARTMENT #46 ENTRY YEAR: 2011
Compartment Acreage: 1651 County: Marquette**

Revision Date: 3/19/2009

Stand Examiner: Jerry Mohlman

Legal Description: T44N R25W Sections 32, 33, 34

Management Goals: For the 2011 entry year, we plan to thin for the second time all the 10 acre red pine plantations in this compartment. We would also remove all remaining jack pine from these former mixed plantations. The jack pine is mature. There is significant area seeding in to jack pine adjacent, so there is minimal loss to diversity. The remaining red pine has variable stocking due to the original planting pattern so some areas will have little removed. We will strive for a residual basal area of about 110 sq. feet. We will have final harvests on one Jack pine stand, three aspen stands, and two fir stands. We will leave all white pine, red pine, hemlock and cedar if present. All of these stands will be naturally regenerated. One birch stand will have all mature birch removed due to heavy mortality, and the stand converted to mixed hardwood, which is already present in the understory. One white pine stand, harvested during the 2001 entry period, is under proposal for an understory prescribed burn, to enhance natural pine regeneration.

Soils and topography: Rubicon sand, Croswell sand, Rousseau fine sand, Emmet-Escanaba complex, Croswell-Deford complex, Carbondale and tawas muck , Tawas-Deford muck. Flat to rolling topography.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Private land used mostly for hunting camps in areas south and west. State ownership north and east except for a 40 acre parcel north along C. R. 557.

Unique, Natural Features:

Archeological, Historical, and Cultural Features: Some old logging camp locations are in this compartment.

Special Management Designations or Considerations: Special Conservation areas are stands associated with riparian zones along the creeks and rivers. Stands 1,2,30,33,34,35,37,39,43,45,49,55,56,57.

Watershed and Fisheries Considerations: Wilson Creek and Escanaba River.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions:

Vehicle Access: West side has good vehicle access. The east is blocked by private land and generally has poor vehicle access.

Survey Needs: No survey requested for the 2011 entry period.

Recreational Facilities and Opportunities: General forest recreation. No developed recreational facilities.

Fire Protection: Fire frequency is low. In the pine dominated types, access is good for fire equipment. We have a forest treatment proposal for a prescribed burn in stand 32. This is a white pine underburn to discourage hardwood and enhance pine regeneration.

Additional Compartment Information: The Sesquicentennial Plantation, an award winning endeavor honoring the State of Michigan's 150th year, planted by the DNR in 1987 along with ceremonies attended by CCC alumni and other dignitaries is in this compartment. It is Stand 13. It is mostly Red pine with tamarack in a 150 design in the center.

- **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: 46

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		21	180	337		48		11		31									628
Black Spruce							6		17	67		10							100
Cedar																30			30
Grass	41																		41
Hemlock										22									22
Jack Pine			10				28	4											42
Lowlnd Brush	32																		32
Mx Swmp Cnfr				2					53	105	132		216						508
Non Stocked	11																		11
Paper Birch			8							7	10								25
Red Pine				10					94										104
Spruce Fir									21	32									53
Upland Hdwds											25							5	30
White Pine			10	15															25
Total	84	21	208	364		48	34	15	185	264	167	10	216			30		5	1651

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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: 46

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	621																									7	628	
S Black Spruce		100																										100
C Cedar				30																								30
G Grass					41																							41
H Hemlock						22																						22
J Jack Pine							42																					42
L LowInd Brush									32																			32
Q Mx Swmp Cnfr												508																508
X Non Stocked													11															11
B Paper Birch	8														10											7		25
R Red Pine															104													104
F Spruce Fir																			53									53
M Upland Hdwds																									30			30
W White Pine																										25	25	
Total	629	100		30	41	22	42		32			508	11		10	104			53						37	32	1651	

ESCANABA RIVER STATE FOREST

GWINN FOREST MGT UNIT

MARQUETTE COUNTY

COMPARTMENT: **46**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	5585 Cds	Hardwood	910 Cds
Hardwood	15 Mbf	Softwood	1010 Cds
Softwood	10897 Cds	Softwood	184 Mbf
Softwood	1083 Mbf	Sum CutVol	2288 Cds
Sum TotVol	18678 Cds		
Total Cmpnt Acres		Acres Proposed For Cut.....	195
	1651		

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
4	R9	8	70	75	red pine	mature	thinning	2		
comnts Fmd : Plantation planted 30's mixed j. and red pine.,thinned 1991-1992 permit #49-91-01. Variable stocking. Mostly ready for another thinning. Recommend removal of remaining j. pine and mark red pine down to 110 BA. Some areas already lower BA than this due to planting both species in patches occasionally and heavy removal of J. pine in 1992. Plenty of Jack Pine seeded in former open areas adjacent, so not worried about loss of diversity. Most red pine is small log sized 8"-10"dbh. Some trees up to 16".										
5	R9	9	70	75	red pine	mature	thinning	2		
comnts Fmd : Plantation planted 30's mixed j. and red pine.,thinned 1991-1992 permit #49-91-01. Variable stocking. Mostly ready for another thinning. Recommend removal of remaining j. pine and mark red pine down to 110 BA. Some areas already lower BA than this due to planting both species in patches occasionally and heavy removal of J. pine in 1992. Plenty of Jack Pine seeded in former open areas adjacent, so not worried about loss of diversity. Most red pine is small log sized 8"-10"dbh. Some trees up to 16".										
6	R9	11	70	75	red pine	mature	thinning	2		
comnts Fmd : Plantation planted 30's mixed j. and red pine.,thinned 1991-1992 permit #49-91-01. Variable stocking. Mostly ready for another thinning. Recommend removal of remaining j. pine and mark red pine down to 110 BA. Some areas already lower BA than this due to planting both species in patches occasionally and heavy removal of J. pine in 1992. Plenty of Jack Pine seeded in former open areas adjacent, so not worried about loss of diversity. Most red pine is small log sized 8"-10"dbh. Some trees up to 16".										
8	R9	9	70	75	red pine	mature	thinning	2		
comnts Fmd : Plantation planted 30's mixed j. and red pine.,thinned 1991-1992 permit #49-91-01. Variable stocking. Mostly ready for another thinning. Recommend removal of remaining j. pine and mark red pine down to 110 BA. Some areas already lower BA than this due to planting both species in patches occasionally and heavy removal of J. pine in 1992. Plenty of Jack Pine seeded in former open areas adjacent, so not worried about loss of diversity. Most red pine is small log sized 8"-10"dbh. Some trees up to 16".										
9	R9	7	70	75	red pine	mature	thinning	2		
comnts Fmd : Plantation planted 30's mixed j. and red pine.,thinned 1991-1992 permit #49-91-01. Variable stocking. Mostly ready for another thinning. Recommend removal of remaining j. pine and mark red pine down to 110 BA. Some areas already lower BA than this due to planting both species in patches occasionally and heavy removal of J. pine in 1992. Plenty of Jack Pine seeded in former open areas adjacent, so not worried about loss of diversity. Most red pine is small log sized 8"-10"dbh. Some trees up to 16".										
15	R9	16	70	75	red pine	mature	thinning	2		
comnts Fmd : Plantation planted 30's mixed j. and red pine.,thinned 1991-1992 permit #49-91-01. Variable stocking. Mostly ready for another thinning. Recommend removal of remaining j. pine and mark red pine down to 110 BA. Some areas already lower BA than this due to planting both species in patches occasionally and heavy removal of J. pine in 1992. Plenty of Jack Pine seeded in former open areas adjacent, so not worried about loss of diversity. Most red pine is small log sized 8"-10"dbh. Some trees up to 16".										
16	R9	10	70	75	red pine	mature	thinning	2		
comnts Fmd : Plantation planted 30's mixed j. and red pine.,thinned 1991-1992 permit #49-91-01. Variable stocking. Mostly ready for another thinning. Recommend removal of remaining j. pine and mark red pine down to 110 BA. Some areas already lower BA than this due to planting both species in patches occasionally and heavy removal of J. pine in 1992. Plenty of Jack Pine seeded in former open areas adjacent, so not worried about loss of diversity. Most red pine is small log sized 8"-10"dbh. Some trees up to 16".										
17	R9	12	70	75	red pine	mature	thinning	2		
comnts Fmd : Plantation planted 30's mixed j. and red pine.,thinned 1991-1992 permit #49-91-01. Variable stocking. Mostly ready for another thinning. Recommend removal of remaining j. pine and mark red pine down to 110 BA. Some areas already lower BA than this due to planting both species in patches occasionally and heavy removal of J. pine in 1992. Plenty of Jack Pine seeded in former open areas adjacent, so not worried about loss of diversity. Most red pine is small log sized 8"-10"dbh. Some trees up to 16".										
19	R9	10	70	75	red pine	mature	thinning	2		
comnts Fmd : Plantation planted 30's mixed j. and red pine.,thinned 1991-1992 permit #49-91-01. Variable stocking. Mostly ready for another thinning. Recommend removal of remaining j. pine and mark red pine down to 110 BA. Some areas already lower BA than this due to planting both species in patches occasionally and heavy removal of J. pine in 1992. Plenty of Jack Pine seeded in former open areas adjacent, so not worried about loss of diversity. Most red pine is small log sized 8"-10"dbh. Some trees up to 16".										
23	F6	21	69	60	spruce-fir (uplands-including upland black spruce)	mature	final harvest	2		
comnts Fmd : Upland sp/fir mature and well-stocked. Fades to lowland smaller and more sparse there. Lowland adjacent would be natural seed source after harvest. Some areas will regenerate to aspen. Some areas spruce is 2-4" dbh and could be left after harvest. Some J. pine here.										
25	F6	16	80	42	spruce-fir (uplands-including upland black spruce)	mature	final harvest	2		
comnts Fmd : Upland spruce-fir with some aspen. Part will convert to aspen. Mostly 2-4 stick 6" with some bigger. Thick F3 understory and in gaps. Some areas lower BA F5 or F4. Leave w. pine and possibly cherry in harvest.										

GWINN FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 46

Entry Year: 2011

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status	
28	B5	7	87	60	northern hardwood	mature	seed tree	2			
comnts Fmd : Mostly w. birch with hardwood mixed. Not much aspen. A few hemlock and w. pine here to leave in harvest. Birch showing dieback and mortality. Cut out birch and aspen, leave hardwood and protect advanced regeneration. Could leave some birch for seed in areas that will be bare after harvest but most of stand will be hardwood and aspen.											
32	W9	10	17	60	white pine	in process of regeneration		0	natural regeneration		
comnts Fmd : FTP for burn in 2009. W9W8 stand cut in 2002 by Gigure permit # 32-014-01-01. Thick F3 and aspen coming in under BA 80 W. pine sawtimber, with some gaps. Burn to set sp/fir and aspen back and promote pine regeneration.											
41	J6	4	59	70	jack pine	mature	final harvest	2			
comnts Fmd : Jack pine seeded in naturally from adjacent plantations. Well-stocked 4-stick average. Looks good, could cut with adjacent red pine thinnings. Could scarify after and probably get adequate regeneration. A few w. birch, aspen ,fir. Leave any w. pine or red pine.											
48	R9	2	70	75	red pine	mature	thinning	2			
comnts Fmd : Plantation planted 30's mixed j. and red pine. Small patch wasn't thinned with the other patches in 1991. Variable stocking. Ready for thinning. Recommend removal of pine and mark red pine down to 110 BA. Some areas already lower BA than this due to planting both species in patches. Plenty of Jack Pine seeded in former open areas adjacent, so not worried about loss of diversity. Most red pine is small log sized 8"-10"dbh. Some trees up to 16".											
52	A6	7	59	65	white pine	mature	final harvest	2			
comnts Fmd : A6 small 3-stick with some larger mixed in. also w. and red pine scattered throughout. Aspen short, poor quality due to sandy soil. Some J. Pine. Leave w. and r. pine in harvest.											
59	A6	4	58	65	aspen (upland)	mature	final harvest	2			
comnts Fmd : Mature aspen not much mortality. Thick fir understory. Big w. pine scattered, leave in harvest.											
Total Acres.....		163									

GWINN FOREST MGT UNIT

**Proposed Treatments
With Limiting Factors**

Compartment: 46

















Entry Year: 2011

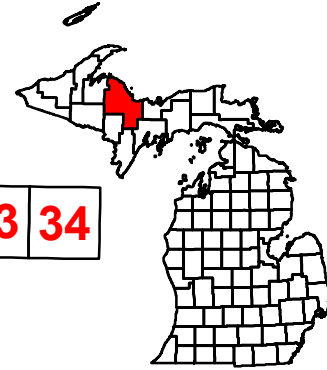
Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDI Status	
27	A6	31	85	65	aspen (upland)	mature	final harvest	2			
TREATMENT LIMITING FACTORS: Delayed treatment for age/size class diversity											
comnts Fmd : Mature, well-stocked. Left for age/class distribution last entry. A small patch of cedar to exclude NW part of stand. Possible to exclude a couple patches of hardwood NE for diversity in harvest. Some mortality occurring, but not bad. Leave w. pine.											
51	F5	11	87	70	spruce-fir (uplands- including upland black spruce)	mature	final harvest	2			
TREATMENT LIMITING FACTORS: Delayed treatment for age/size class diversity Road needed (resources not presently available)											
comnts Fmd : Stand is variable. Mix of aspen, birch, and fir. Some big pine, in patches and cedar on upland and in lowland swales. Poor quality hardwoods. Overstory sparse. Recommend cut all but pine,hemlock,cedar. Thick M3 and F3 under.											
Total Acres.....		42									

Compartment 46
 T44N, R25W, Sec. 32, 33, 34
 County: Marquette
 Unit: Gwinn
 YOE: 2011
 Acres: 1,651 GIS Calculated
 Stand Examiner: Gerald Mohlman
 Map Revised: 3/03/2009
 Map Phase: Pre-review

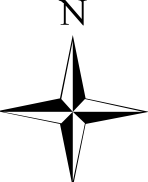

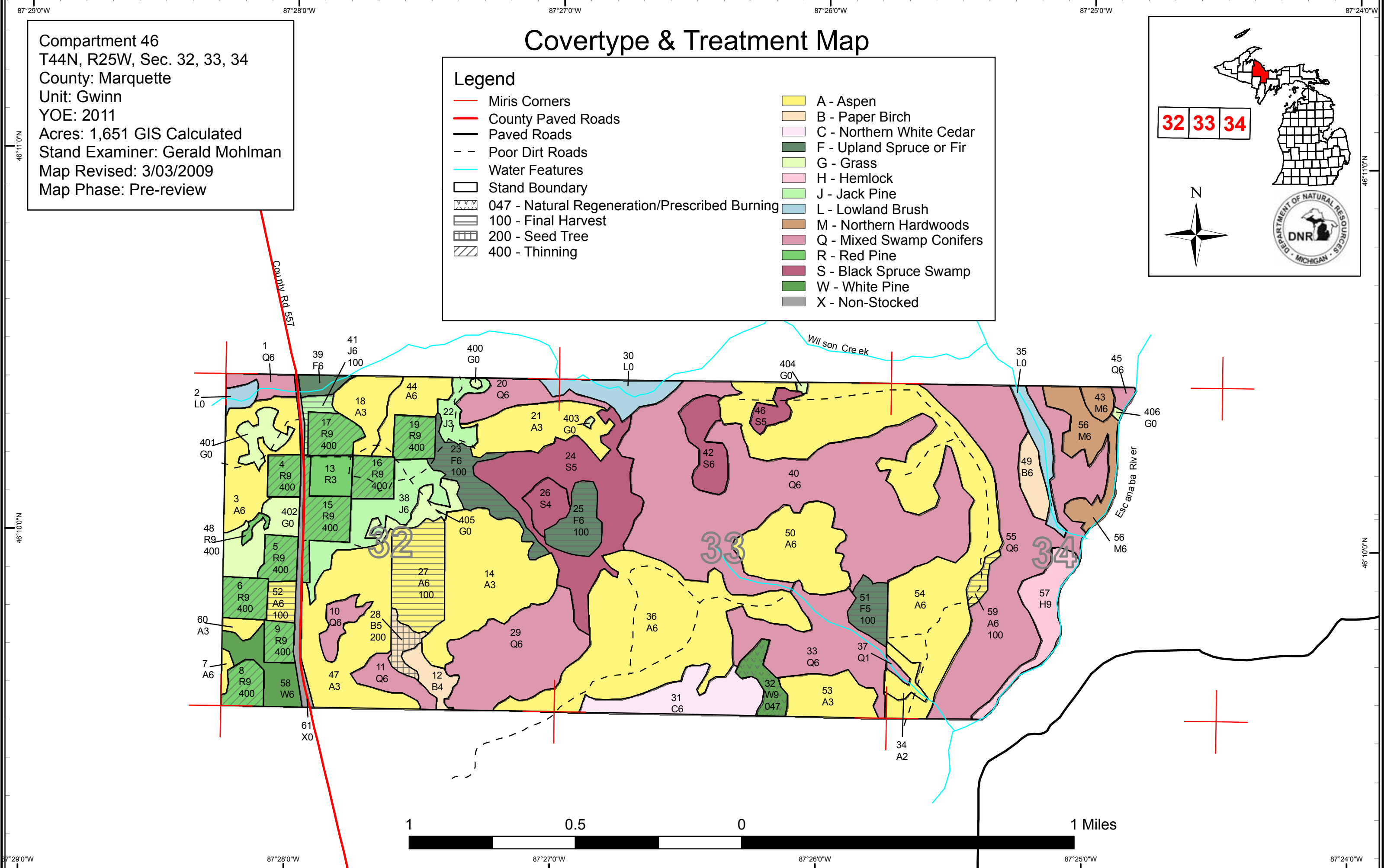
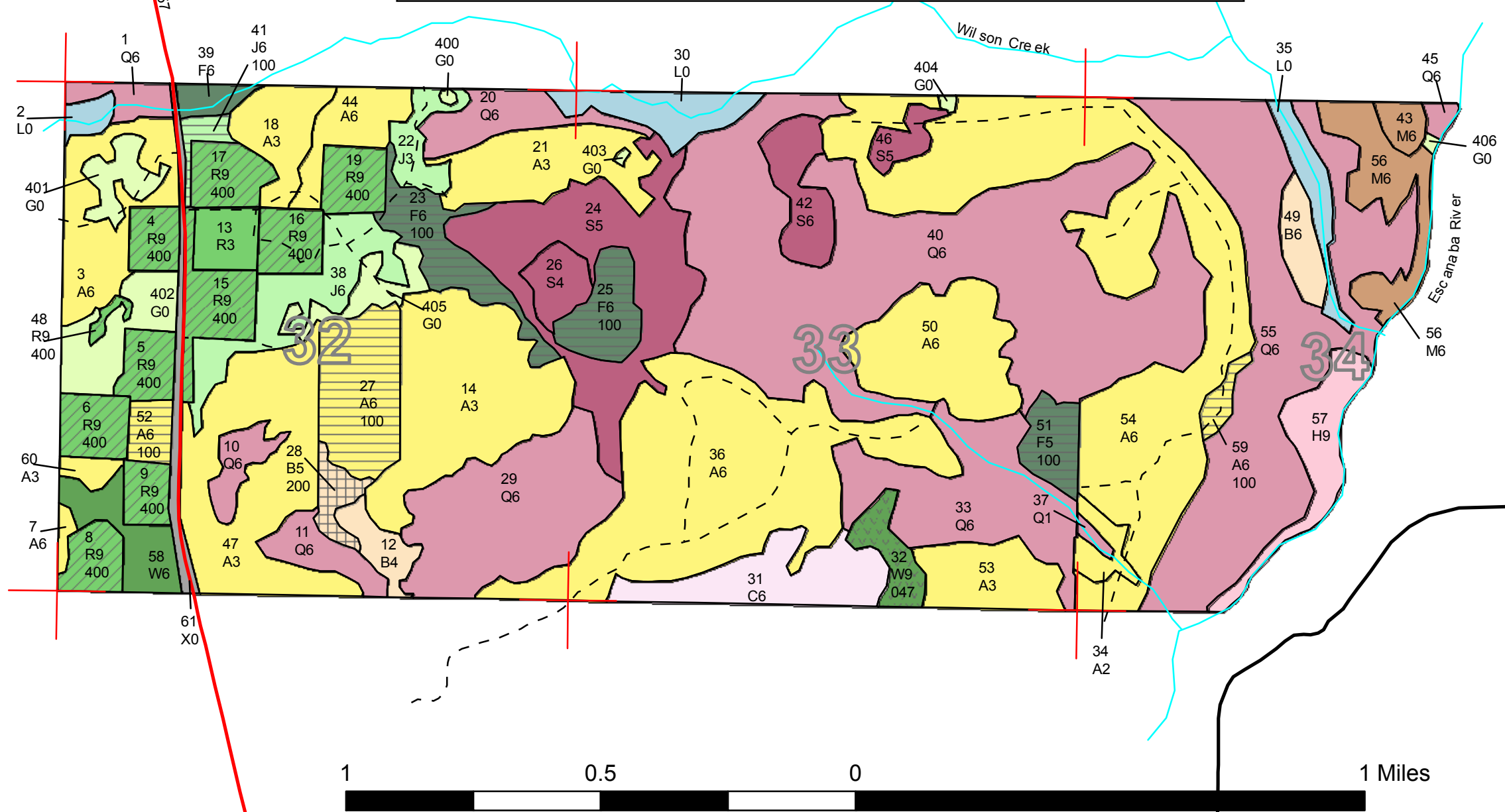
Covertime & Treatment Map

Legend

	Miris Corners		A - Aspen
	County Paved Roads		B - Paper Birch
	Paved Roads		C - Northern White Cedar
	Poor Dirt Roads		F - Upland Spruce or Fir
	Water Features		G - Grass
	Stand Boundary		H - Hemlock
	047 - Natural Regeneration/Prescribed Burning		J - Jack Pine
	100 - Final Harvest		L - Lowland Brush
	200 - Seed Tree		M - Northern Hardwoods
	400 - Thinning		Q - Mixed Swamp Conifers
			R - Red Pine
			S - Black Spruce Swamp
			W - White Pine
			X - Non-Stocked



32 33 34

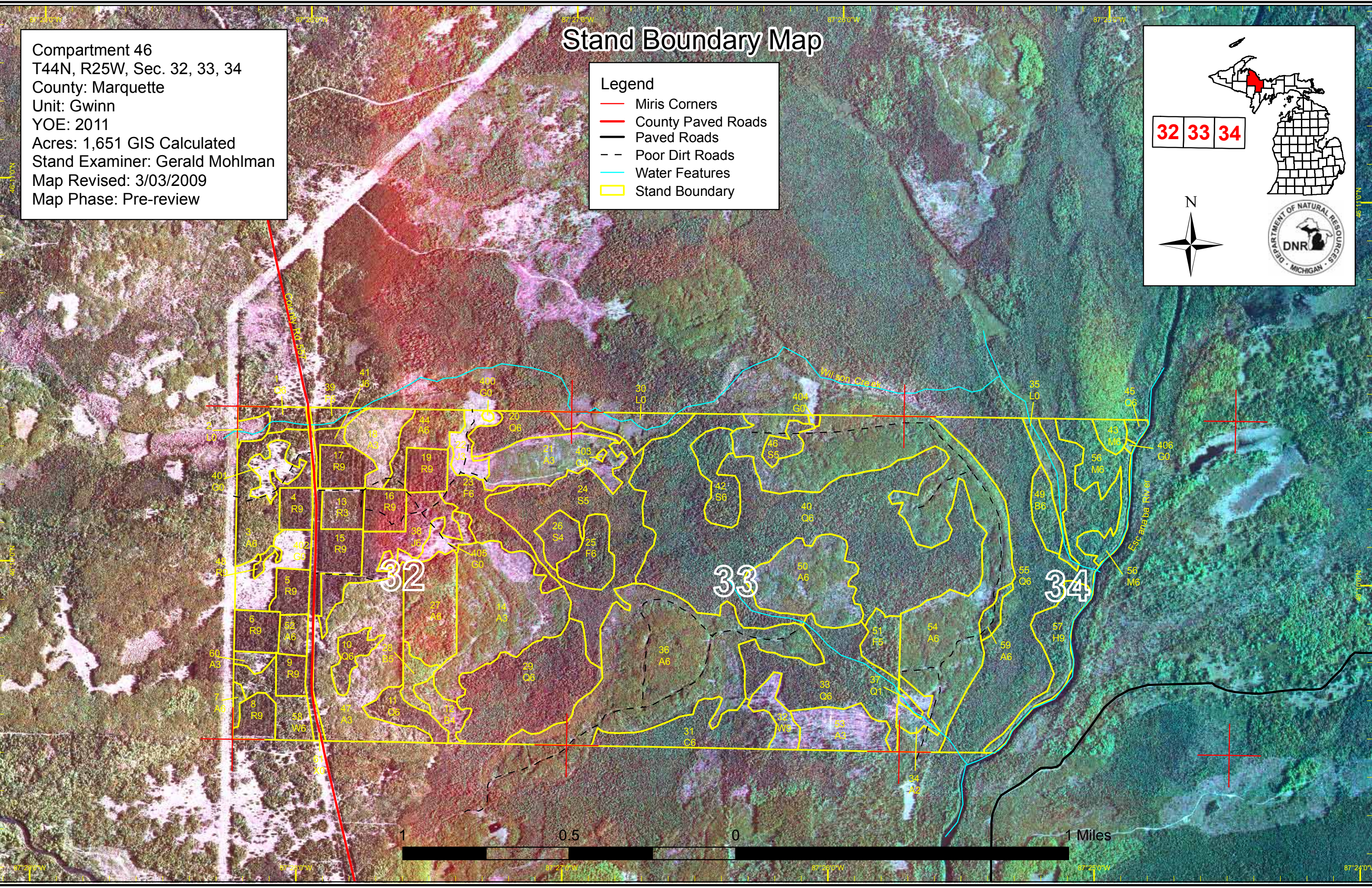
Compartment 46
T44N, R25W, Sec. 32, 33, 34
County: Marquette
Unit: Gwinn
YOE: 2011
Acres: 1,651 GIS Calculated
Stand Examiner: Gerald Mohlman
Map Revised: 3/03/2009
Map Phase: Pre-review

Stand Boundary Map

- Legend
- Miris Corners
 - County Paved Roads
 - Paved Roads
 - Poor Dirt Roads
 - Water Features
 - Stand Boundary

32 33 34

DEPARTMENT OF NATURAL RESOURCES
DNR
MICHIGAN



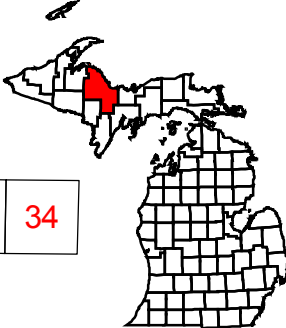
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Compartment 46
T44N, R25W, Sec. 32, 33, 34
County: Marquette
Unit: Gwinn
YOE: 2011
Acres: 1,651 GIS Calculated
Stand Examiner: Gerald Mohlman
Map Revised: 7/16/2009
Map Phase: Pre-review

Dedicated & Proposed Special Conservation Area Map


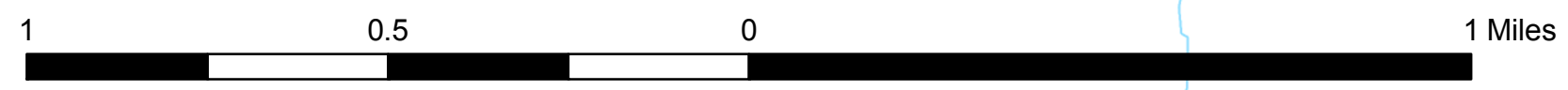
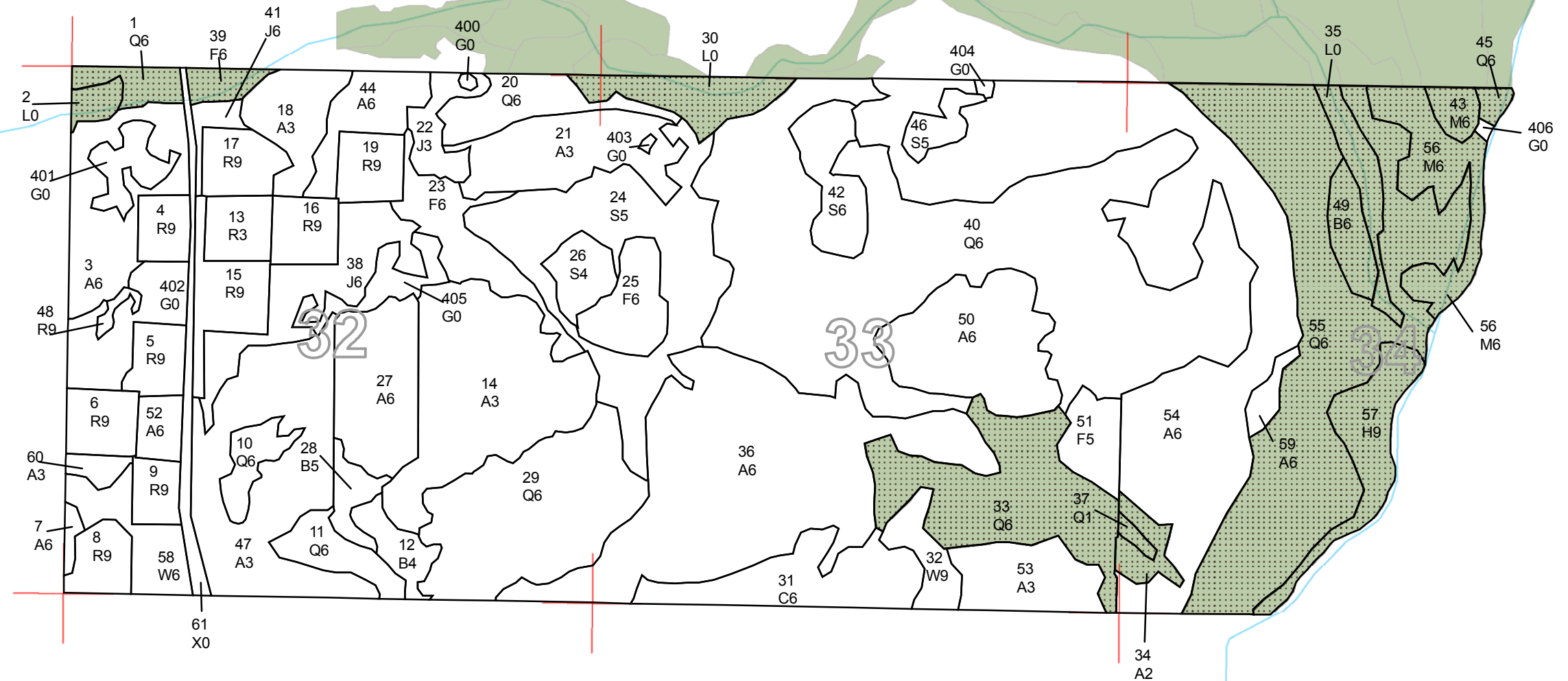
Legend

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



32 33 34

N

87°28'0"W 87°27'0"W 87°26'0"W 87°25'0"W

46°10'0"N

46°10'0"N

46°11'0"N



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.