



**ESCANABA FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 57 ENTRY YEAR: 2010
Compartment Acreage: 1686 County: Menominee

Last Revision: July 25, 2008

Stand Examiner: Kelly Standerfer FMFM; Bill Rollo and Craig Albright, Wildlife Division

Legal Description: T35N, R25W Sec. 31, 32, 33, & 34

Management Goals: This year of entry (YOE), management goals are focused on managing for a mixture of both vegetative and wildlife diversity. This compartment contains a wide variety of cover types ranging from upland aspen and maple types to lowland cedar, swamp hardwood, mixed conifer swamp and bog types. Treatments are focused on aspen, maple, birch, swamp hardwood, and Q types. Aspen types to be treated will be final harvested with reserves to maintain these stands with an aspen management objective. Maple upland and swamp hardwood stands will either be thinned to increase growing space and overall stand health or treated with a shelterwood harvest to regenerate a mix of swamp hardwood, spruce and fir. There also is one birch stand that will be treated with a shelterwood harvest to release understory spruce, fir and maple and hopefully regenerate some birch as well. One small spruce stand will be final harvested with a few seed trees being left to regenerate back to a mix of spruce and pine. One tamarack stand will also be treated with a seed tree harvest where clumps of trees will be marked to leave and cedar under 6" dbh will be left. Overall treatments for this YOE are focused on maintaining stand health and vigor as well as maintaining or improving overall species diversity throughout the area. Aspen stands appear to be in relatively good health so they should regenerate nicely, however some are growing on the sandier soils which are more conducive to pine growth. Maple upland stands to be treated will likely not regenerate right away, rather these will be an intermediate thinning to improve stem quality and health. The remaining types should regenerate nicely to a mix of species.

Soil and Topography: Terrain is level to rolling. The majority of the upland consists of Deford-Woinola-Rousseau complexes. Uplands also include Onaway fine sandy loam, Rousseau fine sand and Woinola fine sand. Lowland areas consist of Deford mucky fine sand, Burleigh mucky fine sand and Tawas-Deford complexes.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment is part of a large state ownership that is about 25 miles long by 7 miles wide near the Lake Michigan shoreline. Land use on state owned lands include hunting, camping, ATV use as well as a mix of other opportunities. The east edge of this compartment abuts Wells State Park. This park is closed to hunting and timber management and is used primarily for camping and hiking. Private holdings are used primarily as homes or hunting camps.

Unique, Natural Features: This area has the potential to harbor several threatened and special concern species, such as red-shouldered hawk, goshawk, bald eagle, wood turtle, calypso orchid, ram's head lady's-slipper, marsh grass-of-parnassus, Assiniboia sedge and climbing fumitory. Several hawk nests have been found in this area so some treatments may need to be adjusted according to MNFI recommendations.

Archeological, Historical, and Cultural Features: There is an old CCC road through stand 1.

Special Management Designations or Considerations: A Special Conservation Area has been identified along the creek at the east end of the compartment. This area is potential old growth and will be left to natural succession. Also on the west edge there is one treed bog stand that is part of the Hayward Lake wetland complex. No activity is likely to occur here, however portions of this stand did burn in the past.

Watershed and Fisheries Considerations: Resource Damage Reports (RDR's) have been filled out for two tracks within this area. Most RDR's deal with damaged culverts however some road closures are needed where ATV traffic is causing rutting and sedimentation in drainages.

Wildlife Habitat Considerations: This lake plain compartment is comprised of aspen, northern hardwood, and lowland hardwood stands mixed with lowland brush. Numerous aspen stands provide habitat for wildlife species that utilize early stages of forest succession, including many of the popular game species. The northern and lowland hardwood stands provide habitat for wildlife that prefer closed-canopy forest. This compartment has been particularly attractive to nesting hawks in the past, and several nests were discovered this decade. These will be monitored to insure timber harvests do not cause negative impacts. Several lowland stands in the east portion of the compartment are designated as "Special Conservation Area" to protect a water drainage that has been attractive to hawks. This designation will also provide the large trees, standing snags, and dead woody debris that are important to other riparian wildlife species.

Mineral Resource and Development Concerns and/or Restrictions:

Vehicle Access: The western portion of this compartment has good access off of Jim Town Road and fair access via forest two tracks and the Cherry Ridge Road to the south. Cherry Ridge Road has been improved through timber sales to the south. However the forest two tracks generally are in bad shape. Two tracks should be repaired when funds are available or through timber sale activity to allow vehicle access and to help with fire suppression efforts. Access to the eastern portion of this stand is poor and is only accessible via private property.

Survey Needs: Survey corners may be needed for treatments this YOY. Several corners will likely be needed in sections 31, 33 & 34.

Recreational Facilities and Opportunities: No developed facilities are within this compartment, but this compartment provides many recreation opportunities including hunting, camping and hiking. As previously mentioned, the east edge of this compartment is next to the Wells State Park which is primarily used for camping and hiking.

Fire Protection: Roads within the area do need some work however no significant control problems are foreseen due to the lack of explosive fuels and an abundance of natural fuel breaks, such as low wet stands of timber and lowland brush. Low wet areas will impede fire suppression as well as fire spread.

Additional Compartment Information:

****** Cover type details, proposed treatments and stands designated as FDF are listed in the attached reports:**

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 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

ESCANABA FOREST MGT UNIT

MENOMINEE COUNTY

COMPARTMENT: 57

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		26	66	210	141		73	1	2	10									529
Black Spruce										2									2
Bog or Marsh	18																		18
Cedar										21	66		19	14			52		172
Grass	4																		4
LowInd Brush	168									6									174
Marsh	2																		2
Mx Swmp Cnfr		3						6											9
Non Stocked	2																		2
Paper Birch										14									14
Spruce Fir			19																19
Swamp Hrdwds										124	53	69		12					258
Tamarack																	37		37
Treed Bog					75														75
Upland Hdwds									230	13	44							84	371
Total	194	29	85	210	216		73	7	232	190	163	69	19	26			89	84	1686

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

ESCANABA RIVER STATE FOREST

ESCANABA FOREST MGT UNIT

MENOMINEE COUNTY

COMPARTMENT: 57

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	529																										529
S Black Spruce		2																									2
V Bog or Marsh			18																								18
C Cedar				172																							172
G Grass					4																						4
L Lowlnd Brush									174																		174
N Marsh											2																2
Q Mx Swmp Cnfr												9															9
X Non Stocked													2														2
B Paper Birch																			14								14
F Spruce Fir																			19								19
E Swamp Hrdwds																				258							258
T Tamarack																					37						37
D Treed Bog																						75					75
M Upland Hdwds																								371			371
Total	529	2	18	172	4				174		2	9	2						33	258	37	75		371			1686

ESCANABA RIVER STATE FOREST

ESCANABA FOREST MGT UNIT

MENOMINEE COUNTY

COMPARTMENT: **57**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	16727 Cds	Hardwood	4285 Cds
Hardwood	552 Mbf	Hardwood	49 Mbf
Softwood	4007 Cds	Softwood	926 Cds
Softwood	16 Mbf	Sum CutVol	5309 Cds
Sum TotVol	21870 Cds		
Total Cmpt Acres		Acres Proposed For Cut.....	
1686		281	

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
2	M6	29	88	55	northern hardwood	immature	selection	1	other - specify in remarks	
<p>comnts Fmd : stand use to be north end of stand 27. South end more Mtype, North end is more E- type with ash. Thin stand to 30-40BA in maple areas and 40-50 in E-type areas. Long term MO of mixed M, E, F & Q. stand lines may differ a bit when sale is set up as the area has some mixed aspen, M, and drains that don't clearly show up on imagery. Cut all A, B and thin remaining species..either orange X some birch or mark with green to maintain some birch post harvest. Goal is to come back for overstory in 10-20 years and either do a complete overstory removal or mark 10-20 BA to leave depending on regeneration level. Acceptable regen is any mix of A, M, F, Q or E. if regen doesn't occur could possibly scarify. As per pre- review wildlife would like to assist when settign this stand up. There is a possible hawk nest. Adjust sale if an active nest is found.</p> <p>Wld : Concur with FMFMD. Check for hawk activity when sale is established, there was a nest found within this stand 10 years ago, none found in 2008.</p>										
9	A6	10	86	70	aspen (upland)	mature	final harvest	1	natural regeneration	
<p>comnts Fmd : Type line on both east and west side may vary slightly depending on amount of aspen present. East edge drops down and this is where some cedar is mixed in under the overstory aspen, still upland for the most part but its lower than the ridge through center of the stand. Cut all A, C, B, M, Fb, ash and Fs. Except mark cedar with green to maintain post harvest and a few seed trees of different species. Cedar should be marked in clumps @ south end and east edge. Approximately 1/ acre with 6-9 trees/clump in cedar areas, SO if approximately only 3 acres have cedar then three clumps would be left. Also @ north end there is a wetter LO/E type area that should have green trees marked to maintain seed.</p> <p>Wld : Concur with FMFMD.</p>										
13	A6	55	48	70	aspen (upland)	mature	final harvest	1	natural regeneration	
<p>comnts Fmd : a lot of the F is already Dead but there is abundant F regen in areas along with Beech. Mark acattered seed trees of M, B & F where needed however retention may be less than 3% to increase A stem density over the majority of the stand. Save ash 6" and less to protect two small wet areas on east end of stand. Should be a nice mix of A, M, G & B regen post harvest. Retention will be advance F regen, scattered seed trees and smaller ash on east end of stand, as stated earlier retention may be slightly less than 3-10% but this is acceptable. Save small finger along LO to the west to hep add to the 3-10% retention.</p> <p>Wld : For retention, include some of the F3 also. There is a small finger-shaped L-type present. Include this in the retention also. Concur with FMFMD.</p>										
19	M6	15	95	55	northern hardwood	immature	selection	1	natural regeneration	
<p>comnts Fmd : mainly soft maple, beech, birch but there are some areas of nicer quality hard maple as well. Individual tree mark down to 80-90 BA. Marking from all species and size classes. Most M2 understory is beech. Wildlife would like to assist when setting the stand up. Inactive possible hawk nest, adjust sale accordingly if nest becomes active.</p> <p>Wld : One inactive hawk nest found within this stand. The wildlife technician will assist in marking the retention within this stand. Concur with FMFMD.</p>										
29	E6	22	85	56	swamp hardwoods	immature	shelterwood-seed	2	natural regeneration	
<p>comnts Fmd : Mainly Green ash S and East end, NW is more upland soft maple over fairly thick beech regen. Private to the west was CC probably 20 yrs ago and looks pretty good with thick M3 regen. Cut soft maple area to 30-40 BA to release Beech regen and stump sprout maple, cut the ash area to 60-70 BA. Come back in 10-20 and do an overstory removal in the soft maple area and further reduce the E type overstory if regen is acceptable. As per pre-review, be sure to mark more trees around small vernal pools as buffers and CWD.</p> <p>Wld : Avoid the distinct deep water pools within then stand when marking. Concur with FMFMD.</p>										
35	E6	48	86	59	swamp hardwoods	immature	selection	1	natural regeneration	
<p>comnts Fmd : some areas more Mtype and along drains it is more Etype with green and black ash. Variable sawlog potential. Thin to 60-80 BA. Likely will need to be cut in winter though it may be do-able in a very dry summer. A few cedar can be marked to remove other species if needed however most should be retained. Long term MO of mixed, M, E and F. much of M type area has Beech regen and lower areas has some F and Q regen.</p> <p>Wld : Concur with FMFMD.</p>										
38	S6	2	87	40	black spruce-swamp	immature	final harvest	2	natural regeneration	
<p>comnts Fmd : small spruce pocket, most of which has advanced regen in open areas. Save all pine and a few spruce or tamarack seed trees.</p> <p>Wld : Concur with FMFMD.</p>										
48	T6	37	169	33	tamarack	mature	seed tree	2	natural regeneration	
<p>comnts Fmd : cedar in stand is small for the most part with most of it being 6" and less in DBH. Save all cedar 6" and less and mark clumps of all species to save @ a spacing of 1 clump/2 acres with ~ 10 trees per clump for seed and retention. Best access is through private to the west however it may be accessable via state land in a perfect winter...wood would have to be skidded to the far west end of stand 51 or stand 46...pretty wet either way.</p> <p>Wld : Concur with FMFMD.</p>										

ESCANABA FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 57

Entry Year: 2010

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDI Status
65	B6	14	86	60	spruce-fir (uplands-including upland black spruce)	mature	seed tree	1	natural regeneration	

comnts Fmd : MO=F-M-B-Ab-C. SOME LOW AREA, MOSTLY IN SW. CUT ALL BUT CEDAR AND PINE . LEAVE A FEW SEED TREES OF OTHER SPECIES. Advanced regen of F and M already present in much of stand.

Wld : Okay to seed tree harvest leaving cedar, some pine, and other species for retention. Concur with FMFMD.

Total Acres..... 232

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
22	M6	13	83	60	northern hardwood	immature	shelterwood-seed	2	natural regeneration	

TREATMENT LIMITING FACTORS: Threatened, endangered, and special concern species/communities

comnts Fmd : Mainly soft maple mixed with birch, aspen and Ash at north end along drain area. Cut all aspen & birch and mark remaining species to 30-40BA. May leave some of the nicer pole areas a bit thicker and also in the wetter portion @ north east end of stand can be left a bit thicker. Long term MO of mixed F, M E and Q. will likely come back in 10-20 years to do the overstory removal if fully regenerated. Wildlife would like to assist when setting the sale up. Inactive possible hawk nest, adjust accordingly if nests are active.

Wld : One inactive hawk nest found within this stand. The wildlife technician will assist in marking the retention within this stand. Concur with FMFMD.

33	A6	18	49	67	aspen (upland)	mature	final harvest	1	natural regeneration	
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TREATMENT LIMITING FACTORS: Threatened, endangered, and special concern species/communities

comnts Fmd : Mixed A, B, & M. Final harvest but mark a few scattered trees for retention. Less than 3% retention is OK here as stand to the east will be retention for this area and use to be included in this stand. Shoul regnerate nicely to a mix of A, M, F and B.

Wld : An inactive hawk nest was found within this stand. The wildlife technician will assist in marking the retention within this stand. Concur with FMFMD.

49	M6	18		60	northern hardwood	unevenaged	selection	2	natural regeneration	
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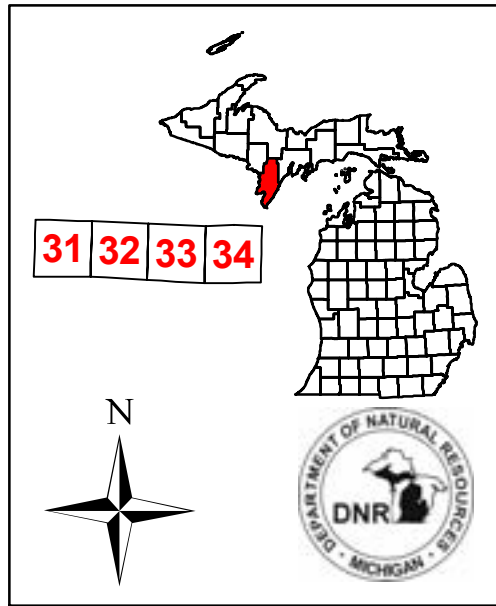
TREATMENT LIMITING FACTORS: Threatened, endangered, and special concern species/communities

comnts Fmd : main portion of the stand is mostly beech and sugar maple, south portion is more red maple, most all has a thick understory of beech and ironwood and some soft maple stems. Thin from all species and all diameters to a target BA of 80-90, also OK to poke a few regen holes in if there are larger trees that need to come down to release some of the beech regen.

Wld : As discussed in pre-review, this treatment is limited factor, due to the presence of an active hawk nest. Due to the possibility of nest failure and other factors, at least 2 years of nest inactivity must occur before considering prescribing this stand. Before prescribing, discuss with the biologist about appropriate buffer zones. Concur with FMFMD.

Total Acres..... 49

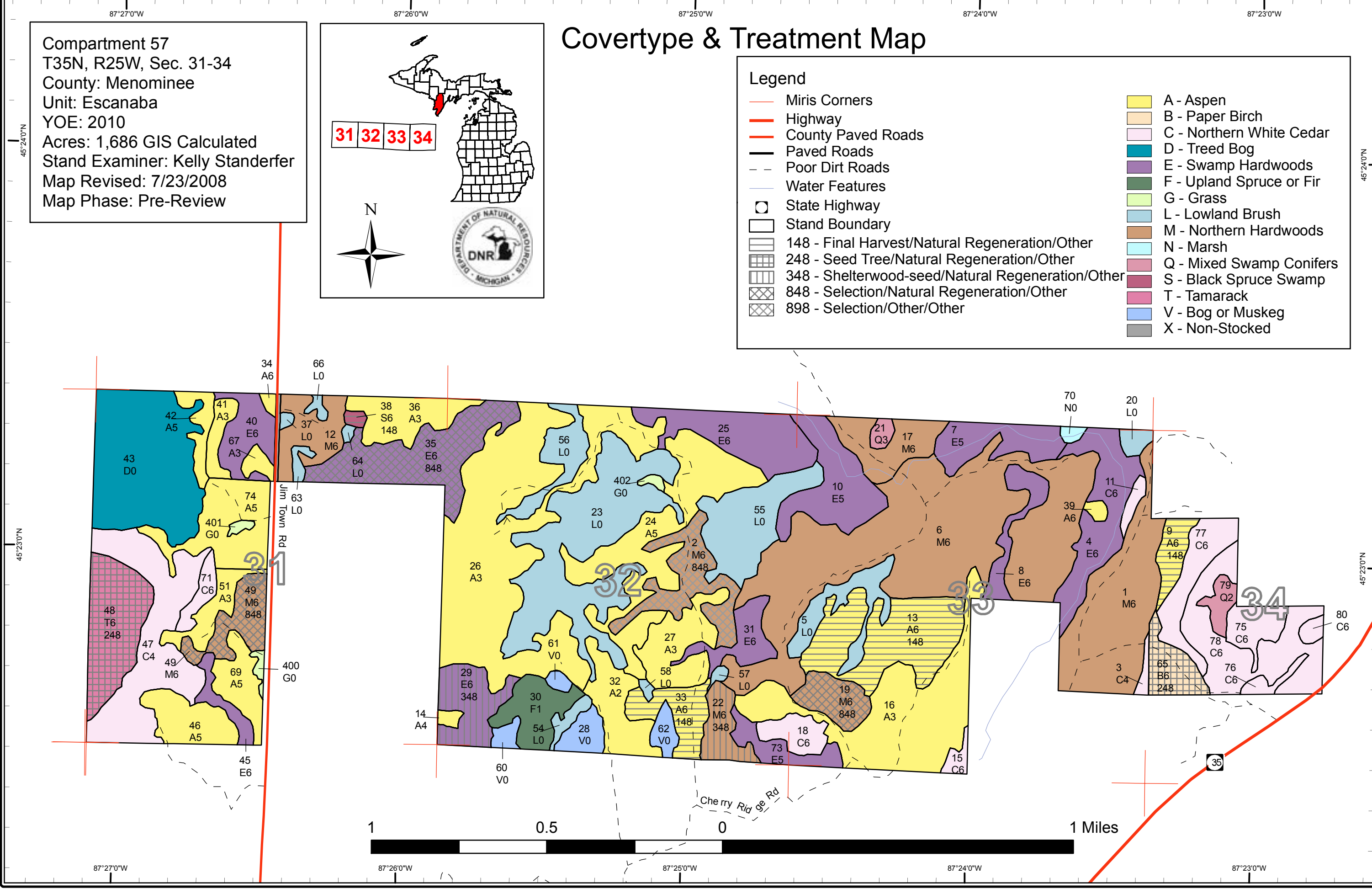
Compartment 57
 T35N, R25W, Sec. 31-34
 County: Menominee
 Unit: Escanaba
 YOE: 2010
 Acres: 1,686 GIS Calculated
 Stand Examiner: Kelly Standerfer
 Map Revised: 7/23/2008
 Map Phase: Pre-Review



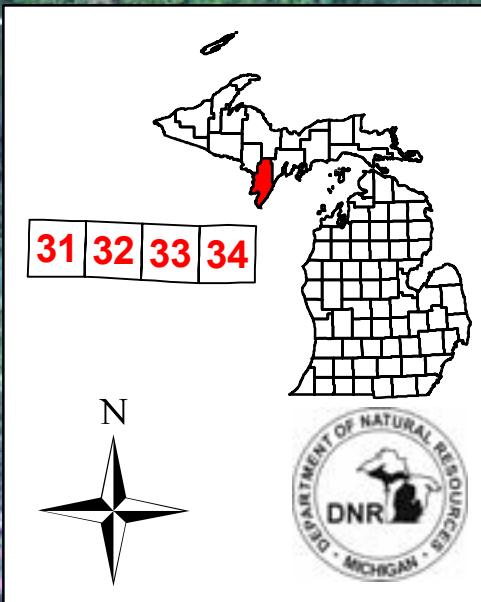
Covertime & Treatment Map

Legend

- | | |
|---|----------------------------|
| — Miris Corners | ■ A - Aspen |
| — Highway | ■ B - Paper Birch |
| — County Paved Roads | ■ C - Northern White Cedar |
| — Paved Roads | ■ D - Treed Bog |
| --- Poor Dirt Roads | ■ E - Swamp Hardwoods |
| — Water Features | ■ F - Upland Spruce or Fir |
| □ State Highway | ■ G - Grass |
| □ Stand Boundary | ■ L - Lowland Brush |
| ▨ 148 - Final Harvest/Natural Regeneration/Other | ■ M - Northern Hardwoods |
| ▩ 248 - Seed Tree/Natural Regeneration/Other | ■ N - Marsh |
| ▧ 348 - Shelterwood-seed/Natural Regeneration/Other | ■ Q - Mixed Swamp Conifers |
| ▦ 848 - Selection/Natural Regeneration/Other | ■ S - Black Spruce Swamp |
| ▤ 898 - Selection/Other/Other | ■ T - Tamarack |
| | ■ V - Bog or Muskeg |
| | ■ X - Non-Stocked |

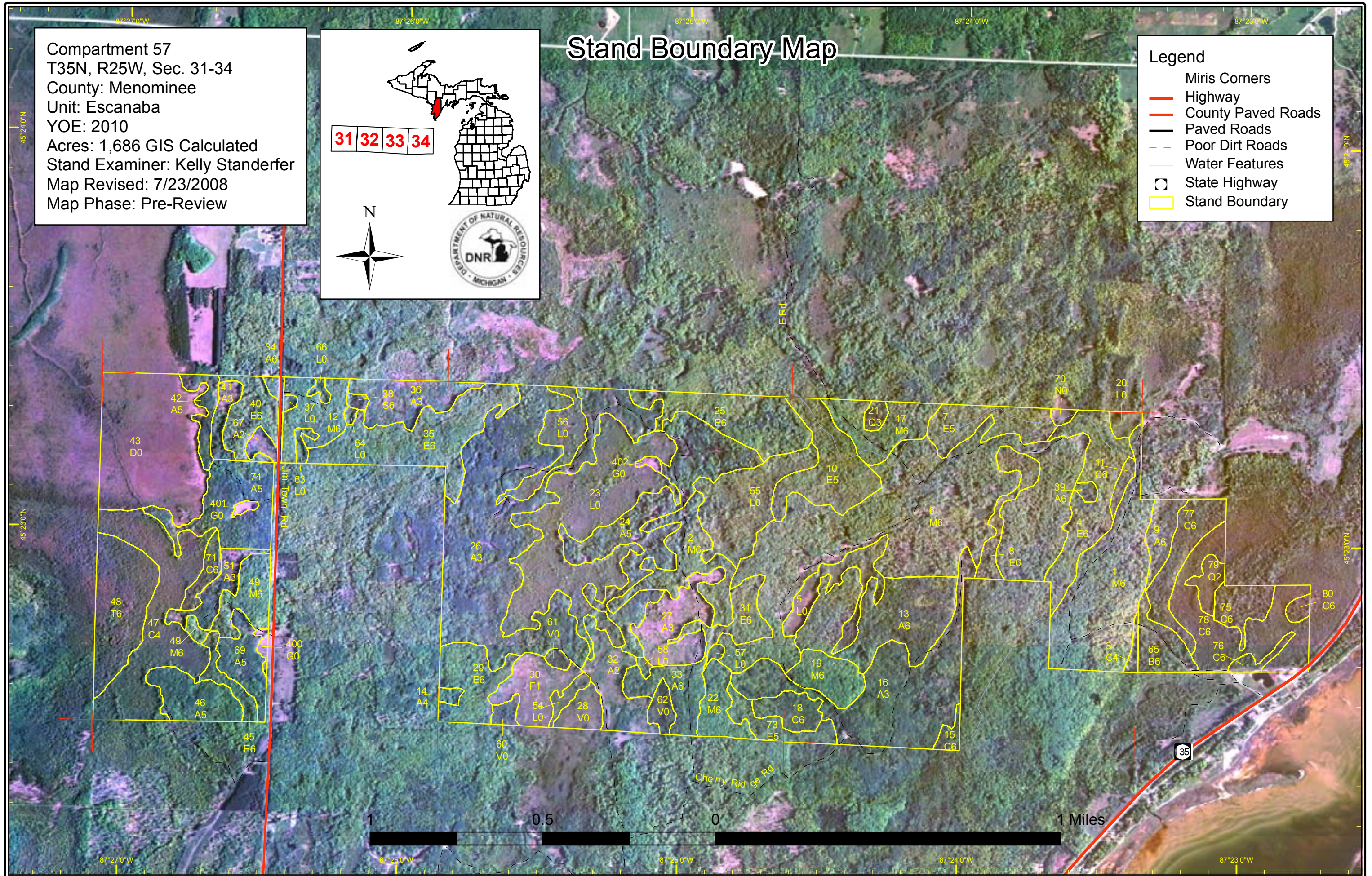


Compartment 57
 T35N, R25W, Sec. 31-34
 County: Menominee
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 Acres: 1,686 GIS Calculated
 Stand Examiner: Kelly Standerfer
 Map Revised: 7/23/2008
 Map Phase: Pre-Review



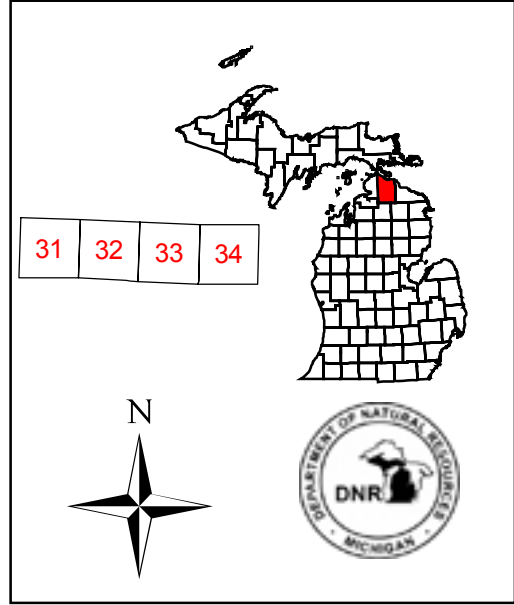
Stand Boundary Map

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



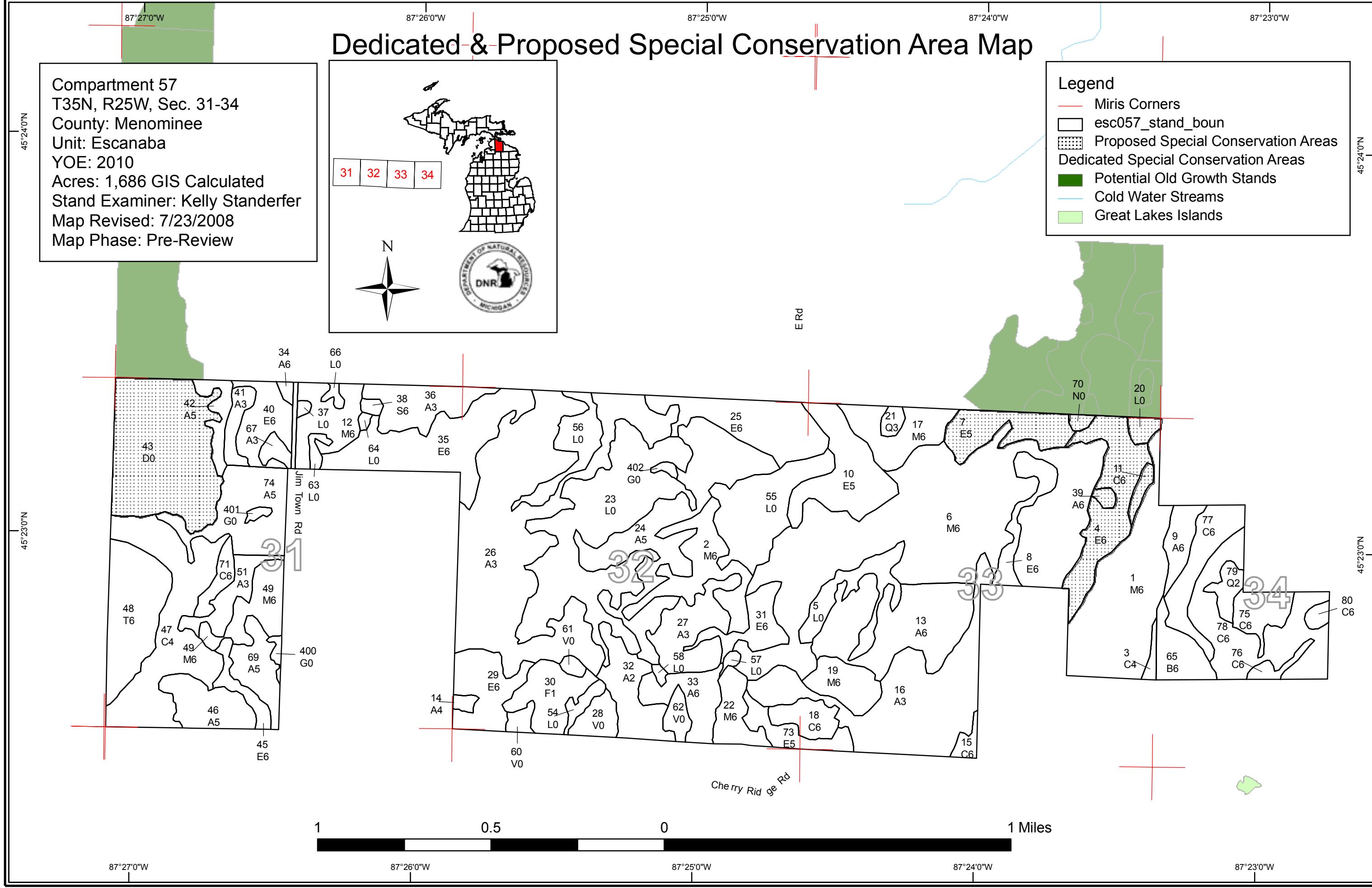
Dedicated & Proposed Special Conservation Area Map

Compartment 57
 T35N, R25W, Sec. 31-34
 County: Menominee
 Unit: Escanaba
 YOE: 2010
 Acres: 1,686 GIS Calculated
 Stand Examiner: Kelly Standerfer
 Map Revised: 7/23/2008
 Map Phase: Pre-Review



Legend

- Miris Corners
- esc057_stand_boun
- Proposed Special Conservation Areas
- Dedicated Special Conservation Areas**
- Potential Old Growth Stands
- Cold Water Streams
- Great Lakes Islands





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.