



**SHINGLETON FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT #58 ENTRY YEAR: 2010

Compartment Acreage: 1513 County: Schoolcraft

Revision Date: 9/22/2008

Stand Examiner: Bob Burnham

Legal Description: T43N R15W Sections 21,28 & 33

RMU (if applicable):

Management Goals: The goals in this compartment include conducting multiple resource management for current and future generations. Forest Health, Recreation, Biodiversity Stewardship, Wildlife and Timber Management are some of the key management components within this compartment.

Soil and Topography: Soils within the compartment range from organic mucky peats on the lowlands to rubicon sands in the old openings and Mcmillan Complexes which are more loamy where the hardwoods occur. There is an abrupt ridge that runs along Brace Creek that separates the uplands from the lowlands within the compartment.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment is mostly contiguous State land. However, there are some fragmented forties with camps on them. The camps are mainly used for hunting and summer recreation.

Unique, Natural Features (include only non-site specific and non-sensitive information): Currently under review by Michigan Natural Features Inventory (MNFI).

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): None known.

Special Management Designations or Considerations: Several stands on the west side of the compartment are being scheduled for opening maintenance. These stands fit into a larger opening complex which is managed for open land species and also as a breakout area for deer.

Watershed and Fisheries Considerations: Stream reaches of the Stutts Creek and Brace Creek are found within this compartment. Standard BMP's should be implemented to control sediment sources from adjacent uplands. Fine sediments such as silt and sand negatively affect natural reproduction of fish, decrease the diversity of aquatic invertebrate and fish taxa, and result in lower overall fish populations.

Wildlife Habitat Considerations: This compartment is within the Seney Sand Lake Plain ecological sub-subsection. Brace Creek is located near the middle of the compartment while Stutts Creek forms the northeastern boundary. The compartment is situated at the northeast end of the Highrollways openings complex, and contains the transition from oak savannah cover type to forested ecosystem. The southwest end is at the edge of the opening complex, northern hardwoods Wildlife objectives include maintaining the

large opening habitat in the southwest, providing age class and structural diversity in northern hardwoods through selective cutting, and promoting early successional young deciduous habitat by clear cutting and encouraging birch growth in birch stands. Maintenance of the opening complex is important to white-tailed deer due to the proximity of the Sturgeon Hole deer yard. Hemlock should be left where present, and a component of cherry and beech should be retained to provide sources of soft and hard mast and for species diversity.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel, coarse-textured till and peat and muck. There is insufficient data to determine the glacial drift thickness. The Silurian Manitoulin Dolomite and Ordovician Queenston Shale subcrop below the glacial drift. The Manitoulin could be used for stone. Gravel pits are located three miles to the west and there should be some potential. There is no commercial oil and gas production in the UP.

Vehicle Access: The upland portion of the compartment is in what is locally termed the High Rollways and has the High Rollways Truck Trail which is a county road running through it. This area has many roads and is well used by the public. The east side of the compartment is accessed by the Old Camp Manistique Road.

Survey Needs: None at the present time.

Recreational Facilities and Opportunities: The compartment has one recreational facility which is a snowmobile trail. Roads within the compartment see a good amount of use from ORV enthusiasts. The remaining recreational opportunities include hunting, fishing, trapping, bird watching and berry picking.

Fire Protection: The area has numerous roads which will aid in suppression efforts if a fire were to occur. However, there is a large area north of Brace Creek which is inaccessible. In general, the Sharptail Corridor has been managed through fire, therefore most of fuel has been removed which lessens the chance for a large fire to occur.

Additional Compartment Information:

- **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

LAKE SUPERIOR STATE FOREST

SHINGLETON FOREST AREA

SCHOOLCRAFT COUNTY

COMPARTMENT: 58

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		10		79	56														145
Black Spruce		4						3	91	6									104
Cedar										262									262
Grass	88																		88
Hemlock									30										30
Jack Pine				58	7				8										73
Lowlnd Brush	329																		329
Lowlnd Poplr				13															13
Mx Swmp Cnfr		20																	20
Paper Birch									23										23
Red Pine		7					90			1									98
Spruce Fir		5						17											22
Swamp Hrdwds									5										5
Upland Hdwds																		228	228
Water	7																		7
White Pine							34		32										66
Total	424	46		150	63		124	20	189	269								228	1513

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

LAKE SUPERIOR STATE FOREST

SHINGLETON FOREST AREA

SCHOOLCRAFT COUNTY

COMPARTMENT: 58

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	105			40																							145
S Black Spruce		104																									104
C Cedar				262																							262
G Grass				88																							88
H Hemlock						30																					30
J Jack Pine				27			46																				73
L LowInd Brush									329																		329
P LowInd Poplr										13																	13
Q Mx Swmp Cnfr												20															20
B Paper Birch															23												23
R Red Pine															98												98
F Spruce Fir															5			17									22
E Swamp Hrdwds																				5							5
M Upland Hdwds																								228		228	
Z Water																									7	7	
W White Pine															20											46	66
Total	105	104		262	155	30	46		329	13		20			28	118			17	5				228	7	46	1513

LAKE SUPERIOR STATE FOREST

SHINGLETON FOREST AREA

SCHOOLCRAFT COUNTY

COMPARTMENT: **58**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	4962 Cds	Hardwood	1477 Cds
Hardwood	997 Mbf	Hardwood	460 Mbf
Softwood	6302 Cds	Softwood	895 Cds
Softwood	403 Mbf	Softwood	53 Mbf
Sum TotVol	14064 Cds	Sum CutVol	3398 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	
1513		553	

SHINGLETON FOREST AREA

Proposed Treatments
With NO Limiting Factors

Compartment: 58

Entry Year: 2010

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
4	S6	6	78	40	black spruce-swamp	mature	final harvest	2		
comnts Fmd : Small island of mature black spruce with some white pine mixed in. Cut stand and buffer the small creek on the north end. Leave some pine.										
8	F6	16	65	49	spruce-fir (uplands-including upland black spruce)	mature	final harvest	2		
comnts Fmd : The stand is a conglomeration. Stand is mainly upland with drainages. Will need to buffer the creek on the south end as well as the oxbow on the north. May achieve retention by leaving patches which include the lower areas that pond in the spring. Leave some pine throughout and cedar. Acceptable regen is a mix of the current species including aspen. Soils are Pelkie Deford Complex and the habitat type is AFPO. As agreed at pre-review protect the 2 larger vernal ponds with buffers, these will be retention patches.										
Wld : Agree with FMFM comments, and leave some super-canopy white pine as some of the pine left.										
9	F1	5	3	50	paper birch	in process of regeneration		0	other - specify in remarks	
comnts Fmd : LEAVE SOME BIRCH SEED TREES. [6/23/05 BB] Sale is now closed, Brace Creek Sale. Stand cut winter 2005. Prepped acres shrank substantially. Seed trees came from the edges. Stumps are likely to high for scarification, check regeneration in 2009.										
Stand re-inventoried and walk through in the spring of 2008 showed failed regeneration with only a few fir showing up. The white birch was browsed to submission as well as the red maple. However, some of the red maple is getting by the deer. Give stand 1 more year when its actually due on the timeclock. Soils are Proper Fine sand and the habitat type is PVE.										
11	Q0	4	3	50	mixed swamp conifer	in process of regeneration		0	other - specify in remarks	
comnts Fmd : [6/23/05 BB] Sale is now closed, Brace Creek Sale. Stand cut winter 2005. Prepped acres shrank substantially. Check regeneration in 2009.										
Stand re-inventoried and walk through in the spring of 2008 showed failed regeneration with no trees showing at all. Give stand 1 more year when its actually due on the timeclock. Soils are Proper Fine sand and the habitat type is PVE.										
14	M6	99		56	northern hardwood	unevenaged	selection	2		
comnts Fmd : Thinned summer 1997. Permit # 43-95-01, Brace Creek Hardwoods. Stand was cut 1996-1997 then a second sale was set up for the pole area on the northand cut in 1998. Corrections cam in after that and salvaged some of the topwood that was left for firewood. South end seems to have more browse issues. Some pockets of mountain ash within stand. Soils are McMillan Stutts Complex and the Habitat type is AFPO. Stand is being prescribed again since the basal area is high enough to support a cut and there is quite a beech component within portions of the stand and beech scale has just been detected within the stand. Mark appropriately.										
Wld : Agree with FMFM comments, but leave some beech to retain the mature beech component in the stand as well as some cherry and all hemlock and mountain ash. Maintain some mature wolfy trees.										
16	B6	12	74	53	paper birch	mature	final harvest	2		
comnts Fmd : The birch within stand is not going to hold on for much longer there is already approximately 30 square feet of birch snags within stand. It is expected to be difficult to regenerate the birch due to deer browsing therefore leave the maple component so the stand can transition over time into the adjacent stand. If the birch doesn't regenerate northern hardwoods is an acceptable species alternative. Soils are McMillan Stutts Complex and the Habitat type is AFPO. As agreed at pre-review leave some birch for retention.										
Wld : Agree with FMFM comments, and in this stand and stand 17 plant a total of approximately 20 larger red oak to provide a source of hard mast.										
17	B6	4	74	53	paper birch	mature	final harvest	2		
comnts Fmd : The birch within stand is not going to hold on for much longer there is already approximately 30 square feet of birch snags within stand. It is expected to be difficult to regenerate the birch due to deer browsing therefore leave the maple component so the stand can transition over time into the adjacent stand. If the birch doesn't regenerate northern hardwoods is an acceptable species alternative. Soils are McMillan Stutts Complex and the Habitat type is AFPO. As agreed at pre-review leave some birch for retention.										
Wld : Agree with FMFM comments, and in this stand and stand 16 plant a total of approximately 20 larger red oak to provide a source of hard mast.										
19	S1	3	3	45	black spruce-swamp	in process of regeneration		0	other - specify in remarks	
comnts Fmd : [6/23/05 BB] Sale is now closed, Brace Creek Sale. Stand cut winter 2005. Check regeneration in 2009.										
Stand examined in spring of 2008 under normal inventory with a walk through regen check which showed a few black spruce but not enough to be considered even adequately stocked. However, the stand has 1 more year before it needs to be fully stocked so check again next year. Soils are Proper Fine sand and the Habitat type is PVE.										

SHINGLETON FOREST AREA

Proposed Treatments
With NO Limiting Factors

Compartment: 58

Entry Year: 2010

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
20	S1	1	3	45	black spruce-swamp	in process of regeneration		0	other - specify in remarks	
comnts Fmd : [6/23/05 BB] Sale is now closed, Brace Creek Sale. Stand cut winter 2005. Check regeneration in 2009.										
Stand examined in spring of 2008 under normal inventory with a walk through regen check which showed a few black spruce but not enough to be considered even adequately stocked. However, the stand has 1 more year before it needs to be fully stocked so check again next year. Soils are Proper Fine sand and the Habitat type is PVE.										
22	Q0	11	3	42	mixed swamp conifer	in process of regeneration		0	other - specify in remarks	
comnts Fmd : SET UP WITH STANDS IN COMPARTMENT 61. SNOWMOBILE TRAIL RUNS THROUGH STAND. [6/23/05 BB] Sale is now closed, Brace Creek Sale. Stand cut winter 2005. Check regeneration in 2009.										
27	R6	71	48	50	red pine	immature	thinning	2		
comnts Fmd : The stand is now nearly 50 years old and never thinned. There are areas with good stocking as well as areas with poor stocking. There are some other species like aspen and hardwood that didn't show on plots. There is a jack pine inclusion on the west edge. Thin stand but in areas of less stocking maintain basal area by modified row thinning where more than every third row is left. Soils are Rubicion and the Habitat type is PArV.										
Wld : Maintain a component of maple, cherry, and oak in the stand.										
28	W6	16	48	49	white pine	two aged	thinning	2		
comnts Fmd : This is more of a natural stand, white pine inter-planted in the area in the 1960's making the stand 2-aged. There are other species such as aspen and maple that need to be cut but not showing on plots. Soils are Rubicion and the Habitat type is PArV.										
Wld : Maintain a component of maple, cherry, and oak in the stand.										
29	R6	19	48	60	red pine	immature	thinning	2		prescribed for fdf treatment
comnts Fmd : Stand cut under contract 34-00, Mad Hawk Sale. Stand was cut spring of 2001.										
Stand needs to be treated again. Soils are certainly better in this stand than the survey shows but it is mapped as Rubicion and the Habitat type is PArV.										
Wld : Maintain a component of maple, cherry, and oak in the stand.										
30	M9	128		56	northern hardwood	unevenaged	selection	2		
comnts Fmd : (9/14/06 AP) FTP C41-858 closed with letter. Majority of acreage was planted. Too late to plant remaining acreage.										
Stand was cut between 1995-1996. There are heavy areas of beech and beech bark disease is just entering the stand. For this reason cut stand now to salvage some of the beech and attempt to convert those areas to other species. There is good regen but when cut concentrate on making quality regen holes in areas lacking regen. Soils are McMillan Greylock Complex and the Habitat type is AFPo.										
Wld : Agree with FMFM, and leave some beech to retain the mature beech component in the stand. Leave some cherry and all hemlock and mountain ash, as well as some mature wolfy trees.										
33	A4	15	28	47	grass	immature	final harvest	2	opening maintenance	
comnts Fmd : Stand was a part of a large opening complex but has over time filled in. Like in the adjacent Compartment 59 schedule stand for chipping followed by a prescribed burn to convert back to grass. Soils are Rubicion and the Habitat type is PArV.										
42	M6	1		48	northern hardwood	mature	final harvest	2		
comnts Fmd : Stand is very small final harvest stand and leave hemlock and white pine. Soils are Rubicion and the Habitat type is PArV.										
Wld : Agree with FMFM, and leave some beech to retain the mature beech component in the stand. Leave some cherry and all hemlock and mountain ash, as well as some mature wolfy trees.										
43	J4	7	28	50	grass	immature	final harvest	2	opening maintenance	
comnts Fmd : Stand was a part of a large opening complex but has over time filled in. Like in the adjacent Compartment 59 schedule stand for chipping followed by a prescribed burn to convert back to grass. Soils are Rubicion and the Habitat type is PArV.										
44	A3	25	28	50	grass	immature	final harvest	2	opening maintenance	
comnts Fmd : Stand was a part of a large opening complex but has over time filled in. Like in the adjacent Compartment 59 schedule stand for chipping followed by a prescribed burn to convert back to grass. Soils are Rubicion and the Habitat type is PArV.										

SHINGLETON FOREST AREA

Proposed Treatments
With NO Limiting Factors

Compartment: 58

Entry Year: 2010

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
46	J6	8	68	58	jack pine	mature	final harvest	2	natural regeneration	
comnts Fmd : Stand is heavy to red pine on the south. Leave some red pine and white pine. Soils are Proper Fine sand and the habitat type is PVE. Acceptable regeneration is jack pine or red pine only. Stand is small, therefore retention will be met by the red and white pine that are left and the dead snags. No patches.										
47	W8	20	70	47	red pine	immature	shelterwood-seed	2	planting	
comnts Fmd : Stand has heavy pockets of pine especially near the river which is red pine. There is little regen in stand. Thin stand to make holes and plant holes with red pine also cut stand in the summer to scuff the soil. Volume per acre will be quite low. In addition there is a bend on the Stutts that has eroded over time. At some point a re-ventment project may be done in which trees from this stand will be used to place in creek. Soils are Proper Fine sand and the habitat type s PVE. Maintain at least a 50' buffer from the top of the bank on Stutts Creek. The northern finger will likely be excluded due to the buffer, this area will become retention.										
48	R3	7	6	57	red pine	immature		0	release	
comnts Fmd : Stand cut under contract 34-00, Mad Hawk Sale. Stand was cut summer of 2001. Stand was planted under FTP C41-996, never burned, planted in spring 2002. Waiting for regen count results. [1/7/04 BB] Stand was covered under FTP-996, stand was never burned and therefore this FTP was cancelled with a blanket letter. New OI Comments, the red pine is being over-topped by a fully stocked stand of A3 which needs to be treated. FTP C41-997 is still open and release work should occur soon. Soils are Rubicion and the Habitat type is PArV. (8/25/08 AP) Inmates hinged aspen and site looks good. It will be planted in spring 2009 wherever holes exist.										
54	J4	8	27	55	grass	immature	final harvest	2	opening maintenance	
comnts Fmd : Stand was a part of a large opening complex but has over time filled in. Lke in the adjacent Compartment 59 schedule stand for chipping followed by a prescribed burn to convert back to grass. Soils are Rubicion and the Habitat type is PArV.										
55	J2	12	27	55	grass	immature	final harvest	2	opening maintenance	
comnts Fmd : Stand was a part of a large opening complex but has over time filled in. Lke in the adjacent Compartment 59 schedule stand for chipping followed by a prescribed burn to convert back to grass. Soils are Rubicion and the Habitat type is PArV.										
426	G0	85		53	grass	nonstocked	final harvest	2	opening maintenance	
comnts Fmd : Burned spring 2000. Aspen and jack pine sprouted back, jack pine area quite vigorously. Schedule for chipping with adjacent stands and burn again after sale. Soils are Rubicion and the Habitat type is PArV.										
Total Acres.....		583								

SHINGLETON FOREST AREA

Proposed Treatments
With Limiting Factors

Compartment: 58

Entry Year: 2010

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDI Status
52	R6	1	82	48	red pine	two aged	shelterwood-seed	3	planting	

TREATMENT LIMITING FACTORS: Inadequate volume due to small acreage

comnts Fmd : This stand is very small, isolated and has difficult access. Stand is 2 aged if treated remove older red pine overstory and all other species. Leave younger red pine poles and plant with inmates.

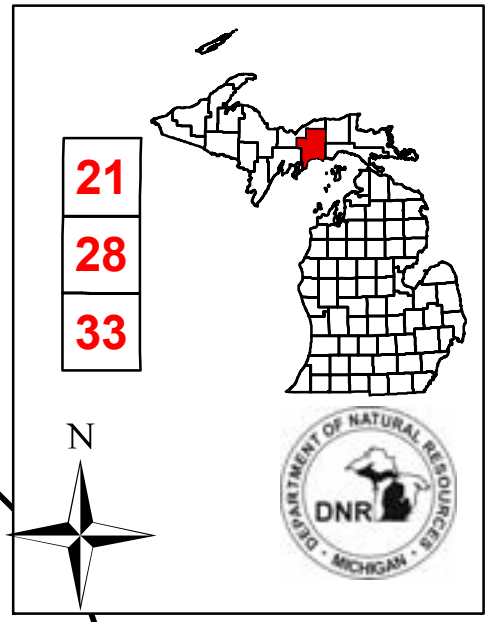
Total Acres..... 1

Covertypes & Treatment Map

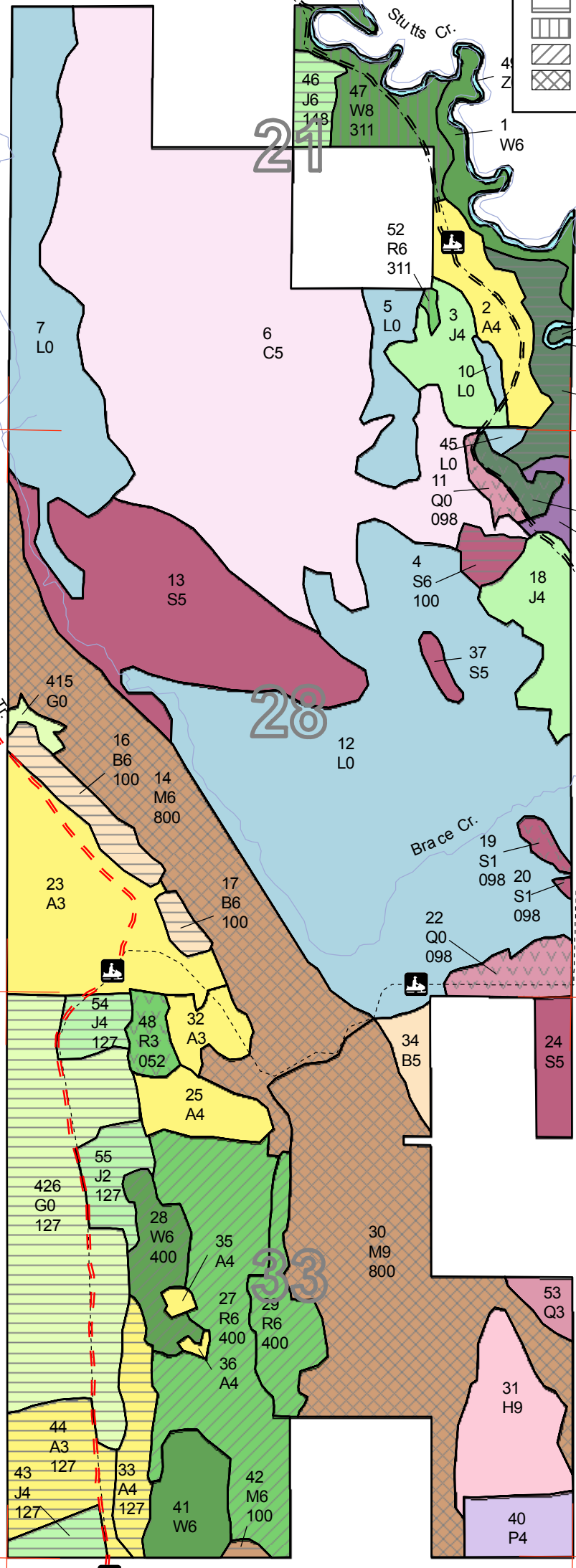
Compartment 58
 T43N, R45W, Sec. 21, 28, 33
 County: Schoolcraft
 Unit: Shingleton
 YOE: 2010
 Acres: 1513 GIS Calculated
 Stand Examiner: Robert Burnham
 Map Revised: 10/29/2008
 Map Phase: Pre-Review

Legend

- Miris Corners
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Trails
- Water Features
- Snowmobile Trails
- Stand Boundaries
- 052 - Release/Aerial Application
- 098 - Other/Other
- 100 - Final Harvest
- 127 - Final Harvest/Opening Maintenance/Prescribed Burning
- 145 - Final Harvest/Natural Regeneration/Mechanical
- 311 - Shelterwood-seed/Planting/Hand Tools
- 400 - Thinning
- 800 - Selection



- ### Cover Types
- A - Aspen
 - B - Paper Birch
 - C - Northern White Cedar
 - E - Swamp Hardwoods
 - F - Upland Spruce or Fir
 - G - Grass
 - H - Hemlock
 - J - Jack Pine
 - L - Lowland Brush
 - M - Northern Hardwoods
 - P - Balsam Poplar, Swamp Aspen, Swamp White Birch
 - Q - Mixed Swamp Conifers
 - R - Red Pine
 - S - Black Spruce Swamp
 - W - White Pine
 - Z - Water



86:12:0"W 86:11:0"W 86:10:0"W

46:7:0"N

46:6:0"N

46:5:0"N

46:7:0"N

46:6:0"N

46:5:0"N

Stand Boundary Map

Compartment 58
T43N, R45W, Sec. 21, 28, 33
County: Schoolcraft
Unit: Shingleton
YOE: 2010
Acres: 1513 GIS Calculated
Stand Examiner: Robert Burnham
Map Revised: 10/29/2008
Map Phase: Pre-Review

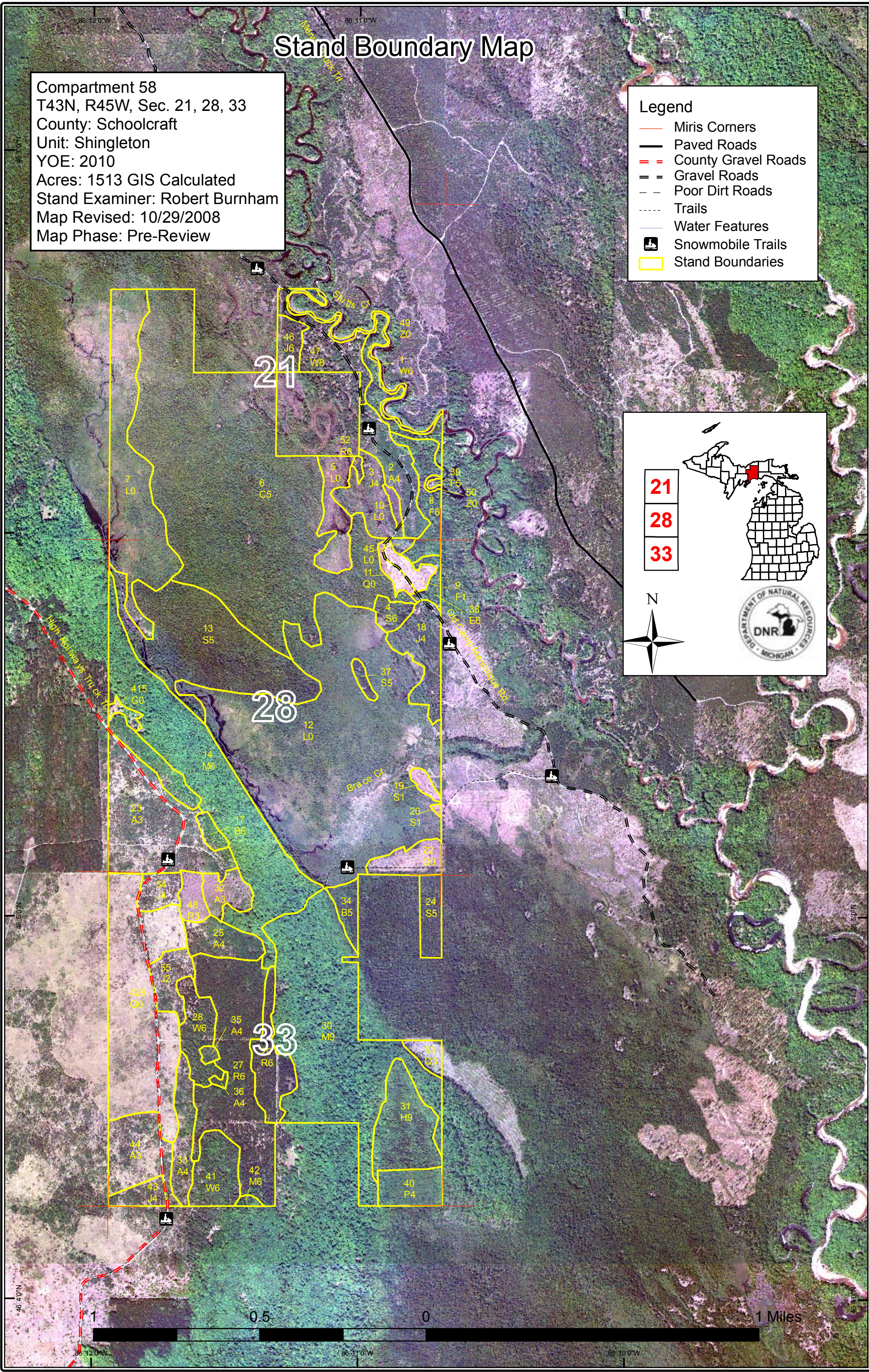
Legend

- Miris Corners
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Trails
- Water Features
- Snowmobile Trails
- Stand Boundaries

21
28
33

N






DEPARTMENT OF NATURAL RESOURCES
DNR
MICHIGAN

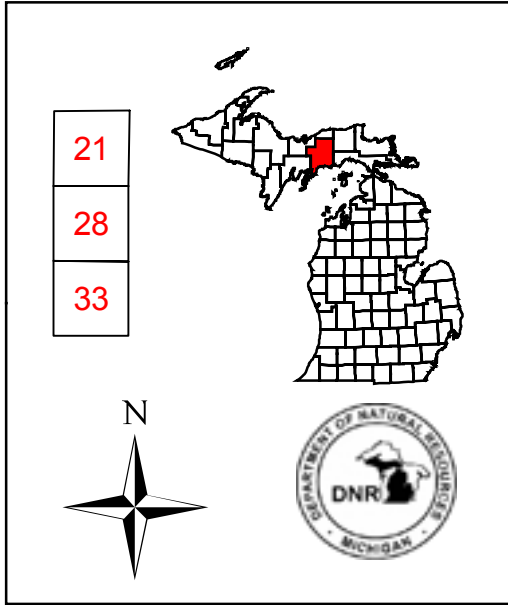
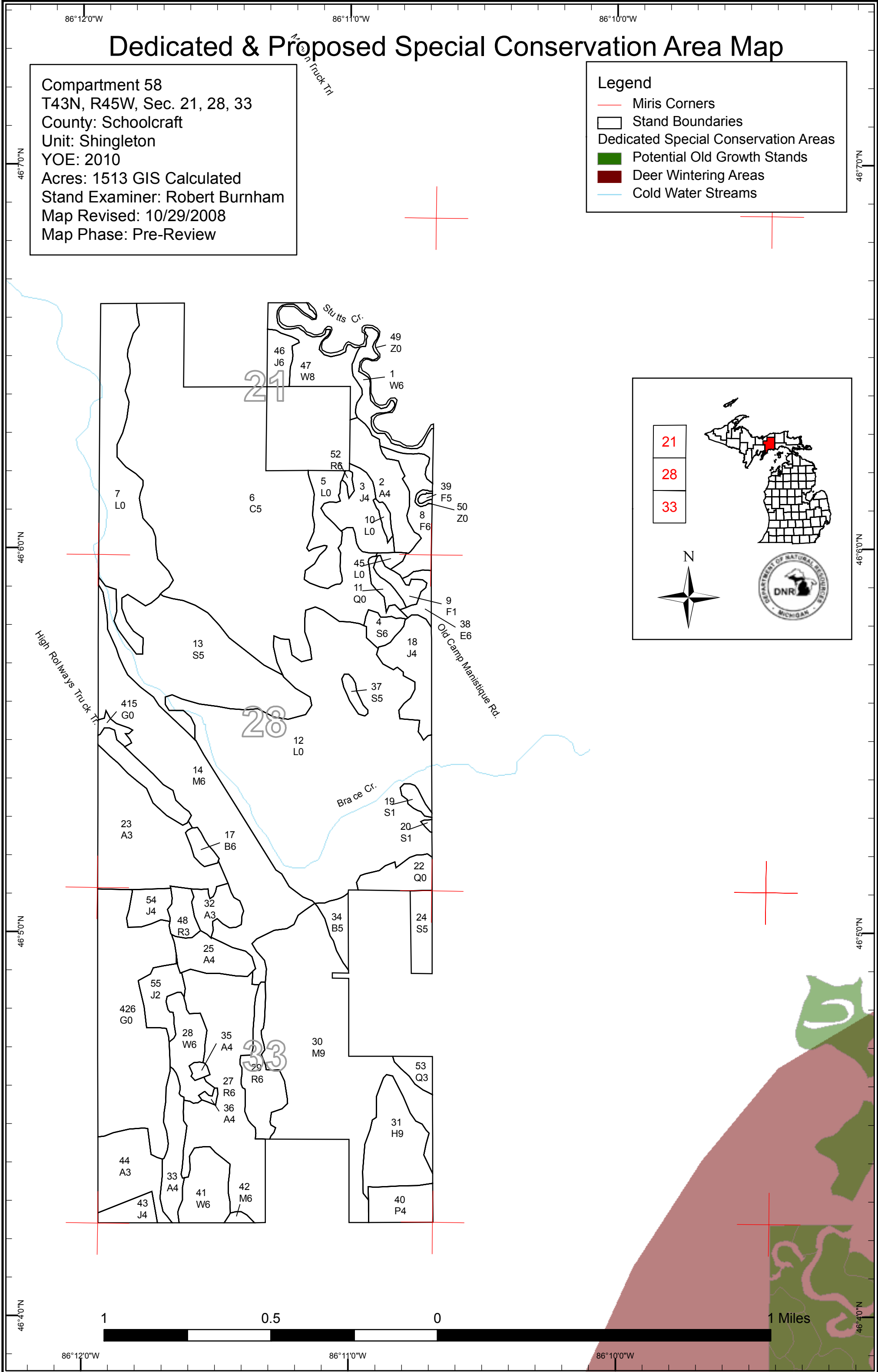


Dedicated & Proposed Special Conservation Area Map

Compartment 58
 T43N, R45W, Sec. 21, 28, 33
 County: Schoolcraft
 Unit: Shingleton
 YOY: 2010
 Acres: 1513 GIS Calculated
 Stand Examiner: Robert Burnham
 Map Revised: 10/29/2008
 Map Phase: Pre-Review

Legend

-  Miris Corners
-  Stand Boundaries
- Dedicated Special Conservation Areas**
-  Potential Old Growth Stands
-  Deer Wintering Areas
-  Cold Water Streams





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	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.