



**NEWBERRY FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 129 ENTRY YEAR: 2010

Compartment Acreage: 3757 (GIS Calculated) County: Luce

Revision Date: 9/15/08

Stand Examiner: Jason Tokar

Legal Description: T45N R8W Sections 19, 29, 29, 30-32
T45N R9W Sections 24 & 25

RMU (if applicable):

Management Goals: Wildlife habitat along with some timber management and recreation are the main uses of this area. The goal is to maintain and improve the forest health and diversity, while subsequently improving wildlife habitat through proper management. Treatments prescribed will help ensure the sustainability of the forest resource and continue to enhance the quality of the wildlife habitat. Timber management (aspen and northern hardwoods) will continue at the current sustainable level of management.

Soil and Topography: The soil in this compartment is predominantly Carbondale, Lupton and Tawas mucks, along with Dorval muck. Cover types associated with these soils include cedar, black spruce, and mix swamp conifer. Pickford silt loam, Rudyard silt loam, and Spot-Finch soil complex are the other major soil types in the compartment. Lowland aspen and lowland hardwoods are associated with these soil types. The southern reaches of the compartment have some areas of higher ground aspen and hardwoods on slightly better soils. The topography is level throughout almost the entire compartment with some slight ridges in the south.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment is almost entirely State land. There is one block of private land within the compartment boundary in Section 30. State land borders the compartment to the north, east and west. To the south is a mixture of small private land owners and State ownership. Due to the lowland nature of the compartment and surrounding State land, land use and development are minimal to moderate. The private parcels to the south have both seasonal camps and permanent residences on them. The area is used primarily for deer hunting. Due to the lowland nature and "inaccessibility" of the compartment, land use within the compartment boundaries will remain minimal.

Unique, Natural Features (include only non-site specific and non-sensitive information): MNFI doesn't list any occurrences within the compartment.

MNFI does list the potential for eagle, osprey and great blue heron rookery. Potential for moose and wolf. Potential for Blanding's turtle along drainage. They also list potential for fir clubmoss. Potential for sweet coltsfoot, Wiegand's sedge, northern prostrate clubmoss, fir clubmoss, English sundew, round-leaved orchis, black crowberry, yellow pitcher plant, and panicked screwstem in treed bogs. Potential for climbing fumitory, goblin moonwort, large toothwort, ginseng, and showy orchis in mature hardwoods. Potential for auricled

twayblade in streamside thickets. Potential for calypso orchis, lapland buttercup, ram's head lady's slipper, round-leaved orchid and limestone oak fern in cedar swamps.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): The Bureau of History does not list any historical features within the compartment.

Special Management Designations or Considerations: The compartment lies within the Sage River Deeryard and therefore has been designated as a Special Conservation Area (SCA). Being located within the boundaries of the deer yard, management decisions shall be dictated by the promotion and enhancement of the desired characteristics associated with the winter yarding habitat. Conifer canopies should remain undisturbed. Harvesting in these areas will likely take place during winter months.

Watershed and Fisheries Considerations: Fisheries Values

Moderate. Third Creek is classified as first quality trout water, FQCW. The tributaries to it in section 25 are SQCW. Are you a masochist? Do you enjoy the effort of finding "un-tapped" trout fisheries in a tag alder choked swamp? Then, the East Branch Sage River is for you. Classified SQCW, it supports native brook trout. All of these will be adequately protected by following BMP guidelines.

Wildlife Habitat Considerations: Compartment 129 lies in southern Luce county and is in the Seney Sand Lake Plain ecological sub-subsection. The compartment lies within the Sage River Deer yard which supports high numbers of deer during stressful winter periods. The compartment is largely lowland conifer types with some northern hardwoods and lowland birch and aspen scattered around. Several creeks and drainages exist in the compartment and serve as excellent wildlife travel corridors.

Cedar canopies will be left throughout the compartment. Conifers will be left in swamp aspen stands and species and structural diversity will be maximized in final harvest aspen stands. Nest and den trees, snags, and woody debris will be maintained in stands where they exist. Travel corridors along streams and drainages will be preserved during harvest. Wildlife species potentially using this compartment include white-tailed deer, moose, black bear, bobcat, gray wolf, coyote, fisher, snowshoe hare, mink, beaver and otter.

Mineral Resource and Development Concerns and/or Restrictions:

Sections 19, 20 & 29 - 32, T45N-R8W & Sections 24 & 25, T45N-R9W, Luce County
Surface sediments consist of lacustrine (lake) clay & silt and peat & muck, thin to discontinuous in places. There is insufficient data to determine the glacial drift thickness. The Silurian Burnt Bluff Group, Cabothead Shale and Manitoulin Dolomite subcrop below the glacial drift. The Burnt Bluff and Manitoulin are quarried for stone in the UP. Hendricks quarry is located in Section 31 and is leased for limestone. Gravel pits are located to the northwest and there could be some potential. There is no economic oil and gas production in the UP.

Vehicle Access: This compartment is located approximately 11 miles east of Newberry. Access to the compartment is via County Road 393 (Borgstrom Road). Access can be gained from the south via a few poor quality two track roads. Several abandoned/closed roads used for past timber sales are also found throughout the area. In general, vehicle access is limited due to the lowland nature of the compartment.

Survey Needs: There are no survey needs at this time.

Recreational Facilities and Opportunities: There are no established recreational facilities within the compartment. Recreational opportunities would be primarily hunting.

Fire Protection: Large fire runs are not likely, because of the swamp conifer and hardwood types. Poor access with wheeled equipment will limit suppression abilities. Private property risk is low.

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

NEWBERRY FOREST MGT UNIT

LUCE COUNTY

COMPARTMENT: 129

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		27		63	37	3		7	22										159
Black Spruce									13		5								18
Cedar				9			21	24	27	1448	69	21	354						1973
Grass	26																		26
Hemlock																		19	19
LowInd Brush	103																		103
LowInd Poplr		307	27	7	111				51										503
Marsh	89																		89
Mx Swmp Cnfr					38	54			19	167								44	322
Non Stocked	18																		18
Paper Birch										9									9
Swamp Hrdwds																		161	161
Treed Bog	9																		9
Upland Hdwds		2		8				4		27								182	223
Water	4																		4
White Pine																		121	121
Total	249	336	27	87	186	57	21	35	132	1651	74	21	354					527	3757

LAKE SUPERIOR STATE FOREST

NEWBERRY FOREST MGT UNIT

LUCE COUNTY

COMPARTMENT: 129

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	159																										159
S Black Spruce		18																									18
C Cedar				1973																							1973
G Grass					26																						26
H Hemlock						19																					19
L LowInd Brush									103																		103
P LowInd Poplr										503																	503
N Marsh											89																89
Q Mx Swmp Cnfr												322															322
X Non Stocked													18														18
B Paper Birch															9												9
E Swamp Hrdwds																			161								161
D Treed Bog																						9					9
M Upland Hdwds	27																							196		223	
Z Water																									4	4	
W White Pine																										121	121
Total	186	18		1973	26	19			103	503	89	322	18		9					161		9		196	4	121	3757

LAKE SUPERIOR STATE FOREST

NEWBERRY FOREST MGT UNIT

LUCE COUNTY

COMPARTMENT: **129**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	13470 Cds	Hardwood	3097 Cds
Hardwood	168 Mbf	Hardwood	23 Mbf
Softwood	46087 Cds	Softwood	470 Cds
Softwood	564 Mbf	Sum CutVol	3613 Cds
Sum TotVol	61021 Cds		
Total Cmpt Acres		Acres Proposed For Cut.....	
3757		178	

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDf Status
3	H6	19		47	hemlock	unevenaged	shelterwood-seed	2		
comnts Fmd : Large diameter white pine and hemlock over lower quality red maple, white birch, black spruce. Thick F3 throughout most of the stand, areas of M2/M3. Some mortality and dieback in some white pine and hemlock. Areas of more hardwoods and areas/pockets of thick hemlock. Prescribe the stand for a shelterwood treatment. Management Objective of hemlock with white pine and hardwoods. Access is through private land to the north. Permission is already granted for timber sale access. 98 = spruce, balsam, cedar										
Wld : Leave hyemlock and encourage by thinning around when possible. Encourage cedar regeneration is possible. Leave most if not all cedar. Winter cut										
6	P6	9	69	47	balsam poplar & swamp aspen and swamp white birch	mature	final harvest	2		
comnts Fmd : P6/M6. Not as much Hemlock and White Pine as stand 3. Originally all one stand (last YOE). Separated for management purposes. White birch is in decent shape. RM is fairly low quality, some overmature. Some cedar throughout. Prescribe for a final harvest. Clearcut with reserves. Small acreage - no retention needed. Management objective of lowland aspen/birch with hardwoods.										
Wld : leave cedar and hemlock and encourage regeneration when possible.winter cut.										
11	M6	34		60	northern hardwood	unevenaged	thinning	2		
comnts Fmd : Red maple with some Hard maple, black ash and spruce. Pockets with a high BA and good quality. Southern and western portions of the stand are lower quality and more conifer mixed in. Best quality is in the 8-9 inch class of maple. Some overmature red maple. Prescribe stand for a thinning. Residual BA average of 70 sq ft. Lower residual in areas of lower quality. Management objective of northern hardwoods.										
Wld : leave a decent conifer component, leave a yellow birch component if it occurs in the stand. Winter cut										
36	M6	27	84	57	aspen (upland)	mature	final harvest	1		
comnts Fmd : Red maple and aspen. Pockets thick to mature aspen. Overmature aspen throughout the stand. Red maple is medium quality. Pockets of better quality maple. Thick balsam understory thoroughout. Scattered white birch. Paquin-spot soil complex. 98 = balsam and white spruce. Prescribe the stand for a final harvest. Clearcut with reserves. Conversion of the stand to aspen. Site appears to be better suited for aspen, better quality than red maple on site. Leave a few pockets of better quality red maple for retention? Management objective of aspen with red maple.										
Wld : do not chip this stand, see header comments. Leave yellow birch and cherry if any. Leave a few large aspen. Leave some mature trees of various species that occur in the stand, including some spruce and fir.winter cut										
59	M6	26		50	northern hardwood	unevenaged	thinning	1		
comnts Fmd : Red maple ridge with white birch. More white birch along the edges and in the northern end. Scattered hemlock. Moderate quality in most of the red maple. Best quality is in the SW. Areas with some hemlock regen. Prescribe stand for a thinning. Slopes in the stand may make harvesting difficult. Reduce BA to 70 sq ft on avg. Keep BA higher (80) in better quality areas and lower BA in areas of lesser quality. In areas of white birch reduce the BA to allow for white birch regeneration. Management objective of northern hardwoods.										
Wld : leave a yellow birch and cherry component if it occurs in the stand. Leave hemlock and thin around to encourage where you can. Protect hemlock regeneration.winter cut										
60	M6	20		50	northern hardwood	low quality	final harvest	1		
comnts Fmd : Lower quality WB and RM. Pockets of H6/H9 through the middle of the stand. Some lowland pockets of cedar. Scattered aspen. Lots of decline in the white birch. Much of the red maple is small diameter, low quality. Some nice large diamate white spruce. Prescribe for treatment. Clearcut with reserves. Leave the lowland cedar pockets and hemlock patches. Management objective of northern hardwoods and will have a mixture of conifer regeneration also.										
Wld : leave a yellow birch and cherry component if it occurs in the stand. Leave hemlock and thin around to encourage where you can. Protect hemlock regeneration. Leave low cedar in pockets. Leave a few mature trees of various species in the stand. Winter cut										
61	M6	10		50	northern hardwood	unevenaged	shelterwood-seed	1		
comnts Fmd : Red maple ridge with a white birch component. Moderate quality in the red maple. Some hemlock and spruce. Stand boundary would be at the lower ground. F3 understory throughout. Prescribe for treatment. Shelterwood harvest to promote red maple regen. Residual BA to avg 50-60 sq ft. Maintain a WB component and leave all hemlock as residual.. Management objective of northern hardwoods.										
Wld : leave a yellow birch and cherry component if it occurs in the stand. Leave hemlock and thin around to encourage where you can. Protect hemlock regeneration. Leave a birch component and a spruce component. Winter cut										
77	A6	7	67	52	aspen (upland)	mature	final harvest	1		
comnts Fmd : Mature aspen showing signs of decline and mortality. Component of maple, spruce and other hardwoods. Lots of 2-4 inch balsam. More white birch within the southern portions of the stand. Semi open stand bordering the A3 and G0. Prescribe for harvest. Clearcut. Small acreage, no retention needed. Possibly leave a few large white spruce. Management objective of aspen.										
Wld : leave a few large sprucea dn white pine and a couple of the really limby red maple (on the south end)										

NEWBERRY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 129 Entry Year: 2010

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
80	A6	13	76	55	aspen (upland)	mature	final harvest	1		

comnts Fmd : Aspen stand along the county line. Mature aspen is showing some mortality. More spruce within the E1/2 of the stand. Stand quality decreases closer to the lowland type to the east. Scattered white birch and cherry. Prescribe for treatment. Clearcut with reserves. Retain all aspen, maple, and balsam up to 4 inches DBH. Leave all white birch as residual. Possibly leave a few large spruce and mature aspen along the stand edge with stand 481. Management objective of aspen. Spot-Finch soil complex

Wld : leave a few large diameter aspen and spruce. Leave a few cherry.

Total Acres..... 165

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDI Status
57	P6	13	70	50	balsam poplar & swamp aspen and swamp white birch	two aged	final harvest	2		

TREATMENT LIMITING FACTORS: Too wet
Deer yards

comnts Fmd : Primarily white birch with red maple, cedar and some spruce. Occasional balsam poplar. Oversized red maple showing mortality and decline. Some rot and dead tops in the white birch. Difficult access - possible through prescribed stands to the south. Prescribe the stand for a final harvest. Clearcut with reserves. Maintain cedar component. Management objective of "P", lowland birch and aspen.

Wld : leave the cedar to where it is heavier to cedar and can cut cedar where it is scattered in the stand. Leave a few large diameter aspen or birch

Total Acres..... 13

Compartment 129
 T45N, R08W, Sec. 19, 20, 29, 30-32
 T45N, R09W, Sec. 24, 25
 County: Luce
 Unit: Newberry
 YOE: 2010
 Acres: 3,757 GIS Calculated
 Stand Examiner: Jason Tokar
 Map Revised: 09/23/2008
 Map Phase: Pre-review

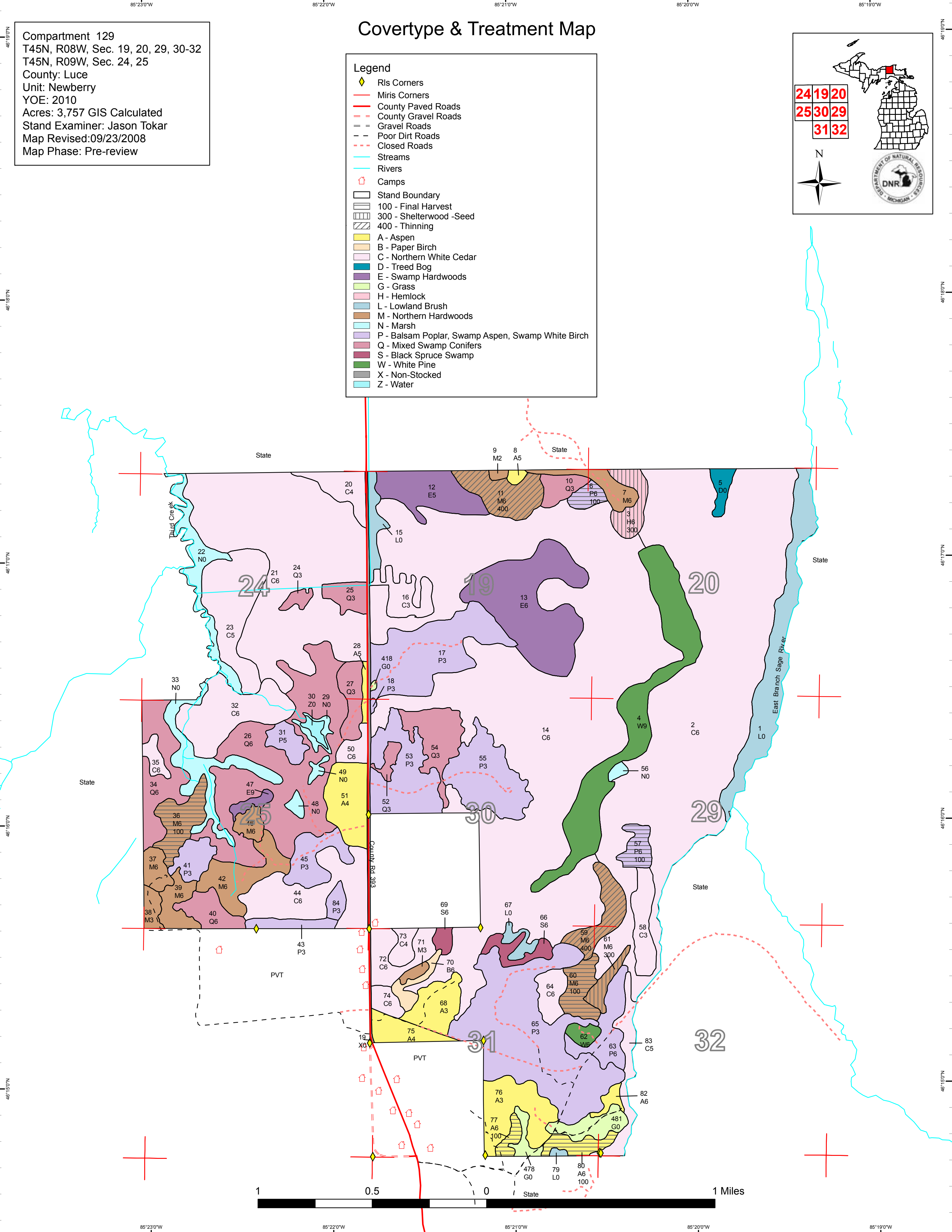
Covertypes & Treatment Map

Legend

- ◆ RIs Corners
- Miris Corners
- County Paved Roads
- - - County Gravel Roads
- - - Gravel Roads
- - - Poor Dirt Roads
- - - Closed Roads
- Streams
- Rivers
- ⬜ Camps
- ⬜ Stand Boundary
- ▨ 100 - Final Harvest
- ▨ 300 - Shelterwood -Seed
- ▨ 400 - Thinning
- A - Aspen
- B - Paper Birch
- C - Northern White Cedar
- D - Treed Bog
- E - Swamp Hardwoods
- G - Grass
- H - Hemlock
- L - Lowland Brush
- M - Northern Hardwoods
- N - Marsh
- P - Balsam Poplar, Swamp Aspen, Swamp White Birch
- Q - Mixed Swamp Conifers
- S - Black Spruce Swamp
- W - White Pine
- X - Non-Stocked
- Z - Water

24 19 20
 25 30 29
 31 32

N

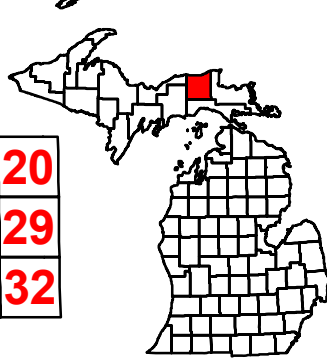


Stand Boundary Map

Compartment 129
 T45N, R08W, Sec. 19, 20, 29, 30-32
 T45N, R09W, Sec. 24, 25
 County: Luce
 Unit: Newberry
 YOE: 2010
 Acres: 3,757 GIS Calculated
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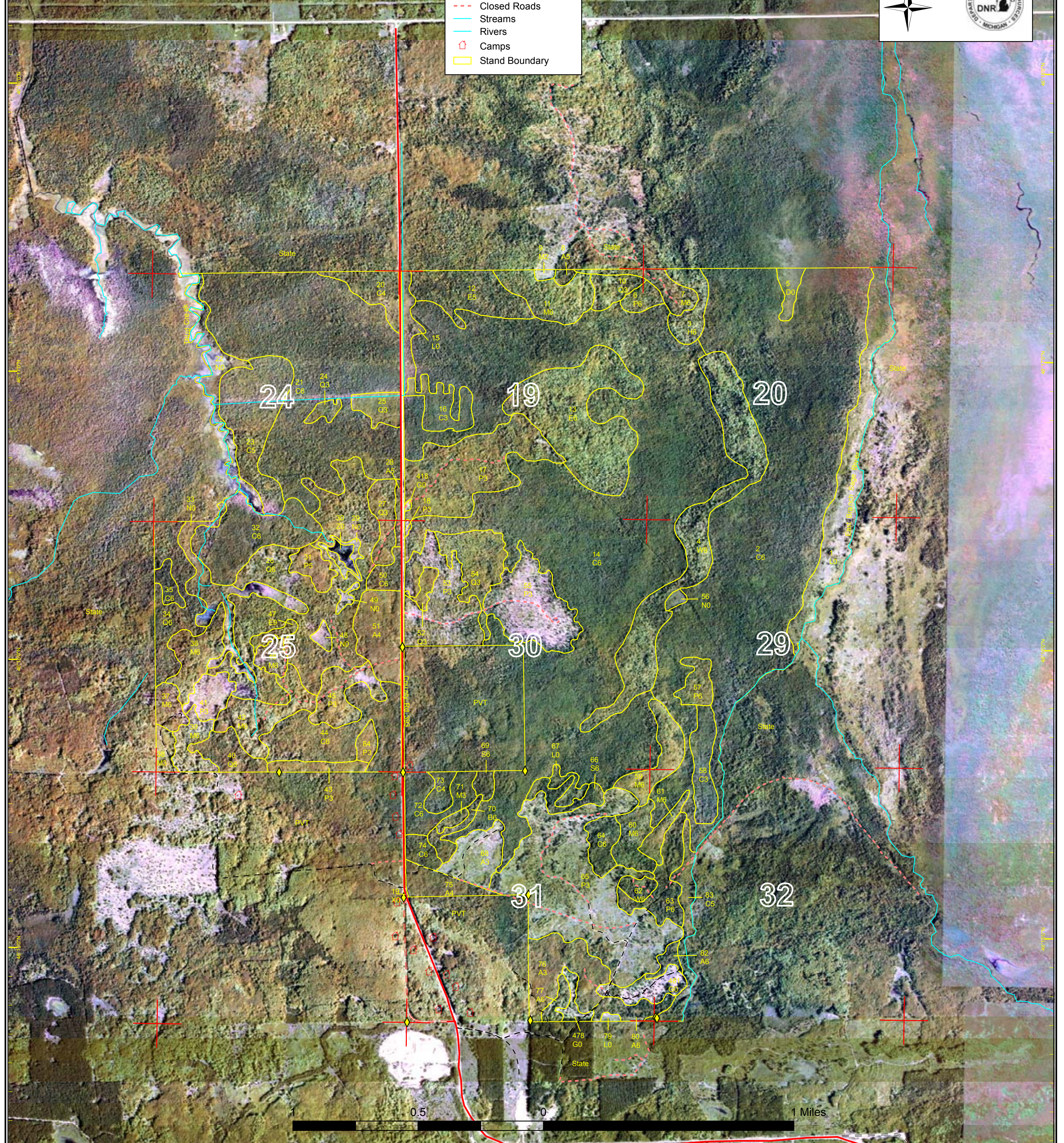
Legend

-  Rls Corners
-  Miris Corners
-  County Paved Roads
-  County Gravel Roads
-  Gravel Roads
-  Poor Dirt Roads
-  Closed Roads
-  Streams
-  Rivers
-  Camps
-  Stand Boundary











24	19	20
25	30	29
	31	32

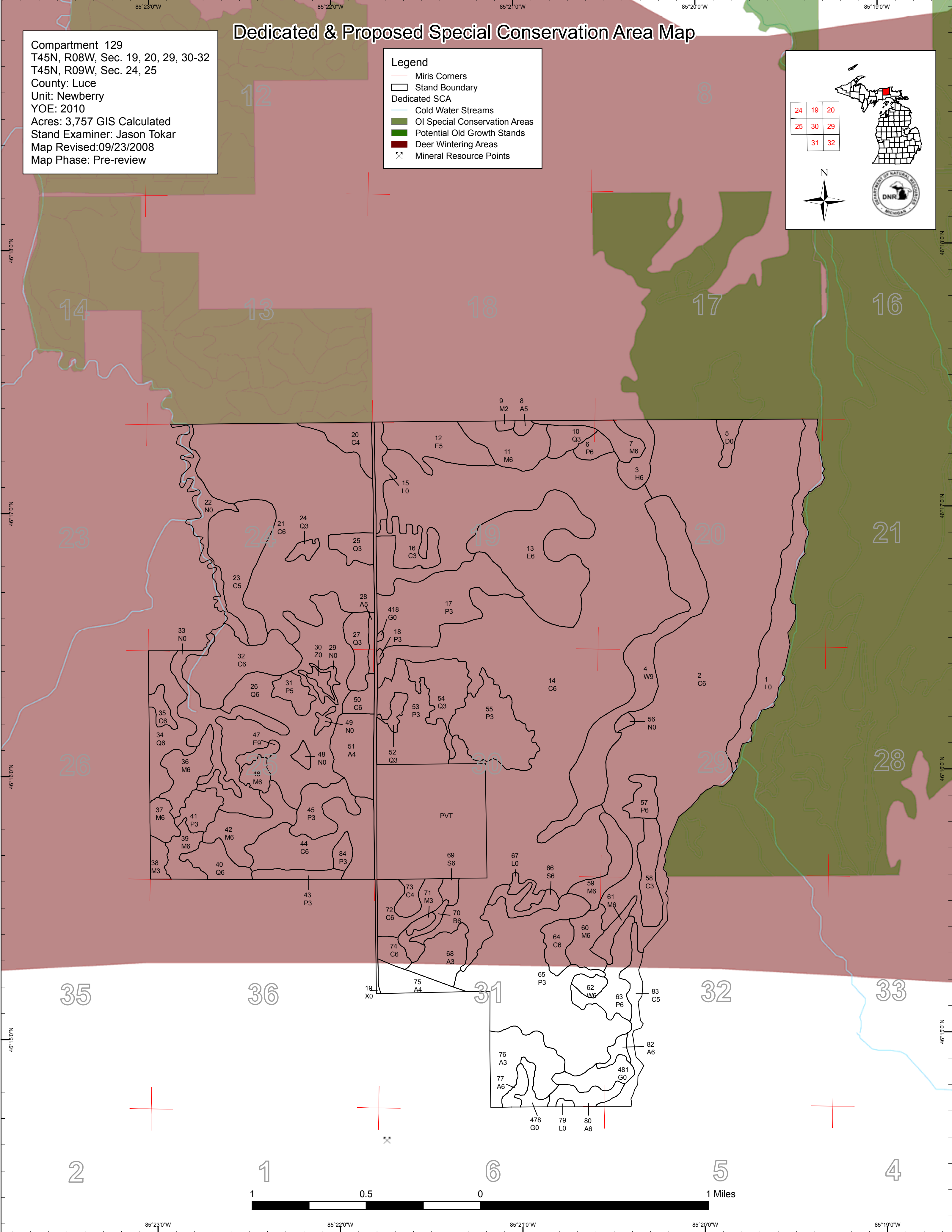
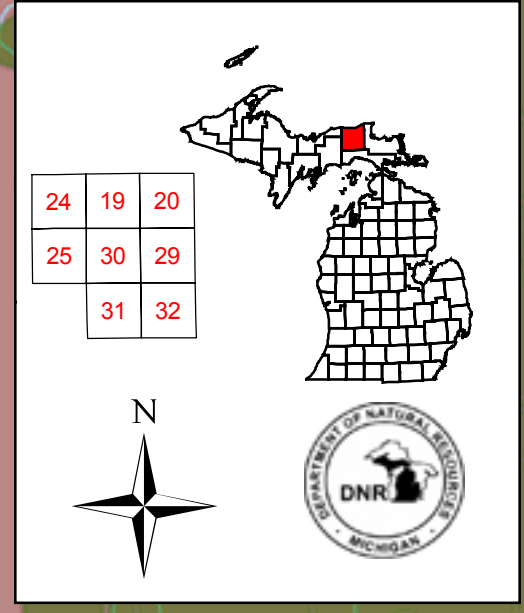
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Dedicated & Proposed Special Conservation Area Map

Compartment 129
 T45N, R08W, Sec. 19, 20, 29, 30-32
 T45N, R09W, Sec. 24, 25
 County: Luce
 Unit: Newberry
 YOE: 2010
 Acres: 3,757 GIS Calculated
 Stand Examiner: Jason Tokar
 Map Revised: 09/23/2008
 Map Phase: Pre-review

- Legend**
-  Miris Corners
 -  Stand Boundary
 -  Dedicated SCA
 -  Cold Water Streams
 -  OI Special Conservation Areas
 -  Potential Old Growth Stands
 -  Deer Wintering Areas
 -  Mineral Resource Points





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	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.
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.