



**NEWBERRY FOREST MANAGEMENT UNIT  
COMPARTMENT REVIEW PRESENTATION**

**COMPARTMENT # 32 ENTRY YEAR: 2010**

**Compartment Acreage: 1359 County: Luce**

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**Revision Date: 9/9/08**

**Stand Examiner: Ed Rice**

**Legal Description: T49N R09W sections 5, 6  
T49N R10W sections 1, 2, 12  
T50N R09W sections 27, 28, 31 – 34**

**RMU (if applicable):**

**Management Goals:** Promote multiple aged and diversified tree species where possible to reduce forest pest impacts and improve conditions for wildlife species. Retain/enhance the quality of recreational uses of the area. Provide for consistent, sustainable wood fiber production over the long term.

**Soil and Topography:** Short rolling hills, oriented west to east. Extremely steep open sand and timbered slopes (critical dune areas). Deer Park Fine Sand prevalent. Steep high river banks with occasional exposed sand slopes adjacent to the Two Hearted River.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** For the most part, contiguous state ownership is adjacent to the compartment. Private ownerships border the compartment in southwest area of section 1 and along Lake Superior. There is heavy use of the area during the spring and fall trout and salmon runs. Deer and bear hunting occur within the compartment. Intensive timber management has occurred in the past and is ongoing.

**Unique, Natural Features (include only non-site specific and non-sensitive information):** Critical dunes throughout the compartment adjacent to the Lake Superior. Two Hearted Natural River.

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

**Special Management Designations or Considerations:** Critical dunes

**Watershed and Fisheries Considerations:** Fisheries Values Excellent. The Two-Hearted River is classified as FQCW. The brook trout population is excellent and is naturally produced. In addition, Fisheries Division stocks steelhead every year, which also spawn in the River when they return from Lake Superior. The River and its tributaries all also support natural populations of chinook, coho, and pink salmon, as well as brown trout. This River is classified as a Natural River, with special buffer regulations.

**Wildlife Habitat Considerations: Compartment 32** lies in northern Luce county in the Grand Marais Sandy End Moraine and Outwash ecological sub-subsection. The Lake Superior shoreline makes up the northern boundary and the Two Hearted River lies along the southern boundary. The Two Hearted River provides an excellent travel corridor for wildlife use. The compartment is dominated by jack pine stands of various age classes. A few red or white pine stands or swamp hardwood stands border the Two Hearted River and increase diversity of the compartment slightly.

In a predominantly pine forested ecosystem, maintaining a variety of age and size classes and maintaining as much structural diversity as possible in managed stands will be important to achieving wildlife objectives. Some mature jack pine will be left in the compartment for age class diversity. Opportunities for within stand diversity in this compartment are limited and will consist mainly of retaining oak, birch and red and white pine in harvested jack pine stands. Wildlife species potentially using this compartment include white-tailed deer, black bear, coyote, fisher, otter and mink.

**Mineral Resource and Development Concerns and/or Restrictions:**

Section 6, T49N-R9W, Sections 1, 2, 11 & 12, T49N-R10W a& Sections 27, 28 & 31 – 34, T50N-R9W, Luce County

Surface sediments consist of lacustrine (lake) clay, silt, sand and gravel. There is insufficient data to determine the glacial drift thickness. The Precambrian Jacobsville Sandstone subcrops below the glacial drift. These rocks have been used as building stones in the past. There are no gravel pits in the area, but there may be some potential. There is no economic oil and gas production in the UP.

**Vehicle Access:** Overall very poor due to the extreme loose sand roads. Four wheel drive is required for most stretches of road. Temporary road improvements during logging activities.

**Survey Needs:** several timber stands ready for treatment in section 1 need survey corners placed to identify private land boundaries

**Recreational Facilities and Opportunities:**

**Fire Protection:** The entire compartment falls under the Two Hearted Zone Dispatch fire response plan. With a mostly Jack Pine cover type and long response time large fire runs are possible. Risk to private property in this compartment and private property or State facilities in neighboring compartments would be high. Access for some heavy equipment will be limited because of the loose sand composition.

**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: 32

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
Jack Pine		192		181	126	51	332	164			17								1063
Red Pine																		106	106
Sand Dune	53																		53
Swamp Hrdwds																		100	100
White Pine																		37	37
Total	53	192		181	126	51	332	164			17							243	1359

LAKE SUPERIOR STATE FOREST

NEWBERRY FOREST MGT UNIT

LUCE COUNTY

COMPARTMENT: **32**

**Table 3A**

(acres shown in boxes)

**MANAGEMENT OBJECTIVE TYPE**

<b>COVER TYPE</b>	<b>A</b>	<b>S</b>	<b>V</b>	<b>C</b>	<b>G</b>	<b>H</b>	<b>J</b>	<b>I</b>	<b>L</b>	<b>P</b>	<b>N</b>	<b>Q</b>	<b>X</b>	<b>O</b>	<b>B</b>	<b>R</b>	<b>K</b>	<b>Y</b>	<b>F</b>	<b>E</b>	<b>T</b>	<b>D</b>	<b>U</b>	<b>M</b>	<b>Z</b>	<b>W</b>	<b>Total</b>	
J Jack Pine							1063																				1063	
R Red Pine															106													106
Y Sand Dune																		53									53	
E Swamp Hrdwds																			100								100	
W White Pine																										37	37	
<b>Total</b>							1063								106			53		100						37	1359	

LAKE SUPERIOR STATE FOREST

NEWBERRY FOREST MGT UNIT

LUCE COUNTY

COMPARTMENT: **32**

*Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS*

TOTAL VOLUME		CUT VOLUME	
Hardwood	907 Cds	Softwood	3196 Cds
Softwood	11340 Cds	Sum CutVol	3196 Cds
Softwood	392 Mbf		
Sum TotVol	13031 Cds		
<b>Total Cmpt Acres</b>		Acres Proposed For Cut.....	188
1359			

**NEWBERRY FOREST MGT UNIT**

**Proposed Treatments  
With NO Limiting Factors**

**Compartment: 32**

**Entry Year: 2010**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status	
<b>7</b>	<b>J6</b>	49	53	43	jack pine	mature	final harvest	2	natural regeneration		
comnts Fmd : mature J pine. High mortality- weak crowns. Associated r pine and w pine. Remove J pine and associated asp leave any w pine, r pine, r oak. Stay minimum of 100' off of high bank down to river. Leave green up buffer and wildlife corridor along stand 11(adjacent timber sale). HCVA Two Hearted Nat R zone. N Country Trail. No secondary MO. Wld : leave red and white pine and oak											
<b>11</b>	<b>J6</b>	26	53	44	jack pine	mature	final harvest	2	natural regeneration		
comnts Fmd : mature j pine, part of Coast Guard Rd Timber sale #016-03. Still under contract and should be cut in Dec 2008. HCVA Two Hearted Nat R zone/N end is in piping plover habitat Wld :											
<b>21</b>	<b>J6</b>	17	88	40	jack pine	mature	final harvest	6	natural regeneration		
comnts Fmd : mature j pine. Still under contract Coast Guard Road Jack Pine sale #016-03. Should be cut Dec 2008. HCVA Two Hearted Nat R zone.											
<b>Total Acres.....</b>		<b>92</b>									

**NEWBERRY FOREST MGT UNIT**

**Proposed Treatments  
With Limiting Factors**

**Compartment: 32**

**Entry Year: 2010**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDI Status
25	J6	22	56	47	jack pine	mature	final harvest	2	natural regeneration	

TREATMENT LIMITING FACTORS: Land survey needed

comnts Fmd : 4-8" dbh. Scattered r maple, b spruce clumps. Associated r oak and widely scattered w pine sapls. Areas of steep open sand slopes. Remove merchantable j pine, b spruce and aspen. Leave r pine, w pine, r oak and w birch. Avoid open sand slopes in sale setup. Setup sale with stand 26. N Country Trail. HCVA crit dunes, piping plover habitat area. Corners needed around pvt land

Wld : leave red and white pine, oak and birch.

26	J6	74	65	45	jack pine	mature	final harvest	2	natural regeneration	
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TREATMENT LIMITING FACTORS: Land survey needed

comnts Fmd : short, rolling ridges running E-W throughout the stand. Areas of lowr stocking, more open grown trees in bottoms of rolling ridges (frost pockets). Very little tree species diversity. Remove merch j pine and any aspen if it occurs. Leave r pine, w pine oak, w birch. N Country Trail. S1/2 of stand is in HCVA Two Hearted Nat R zone. Survey corners needed around pvt land

Wld : leave red and white pine, oak and birch

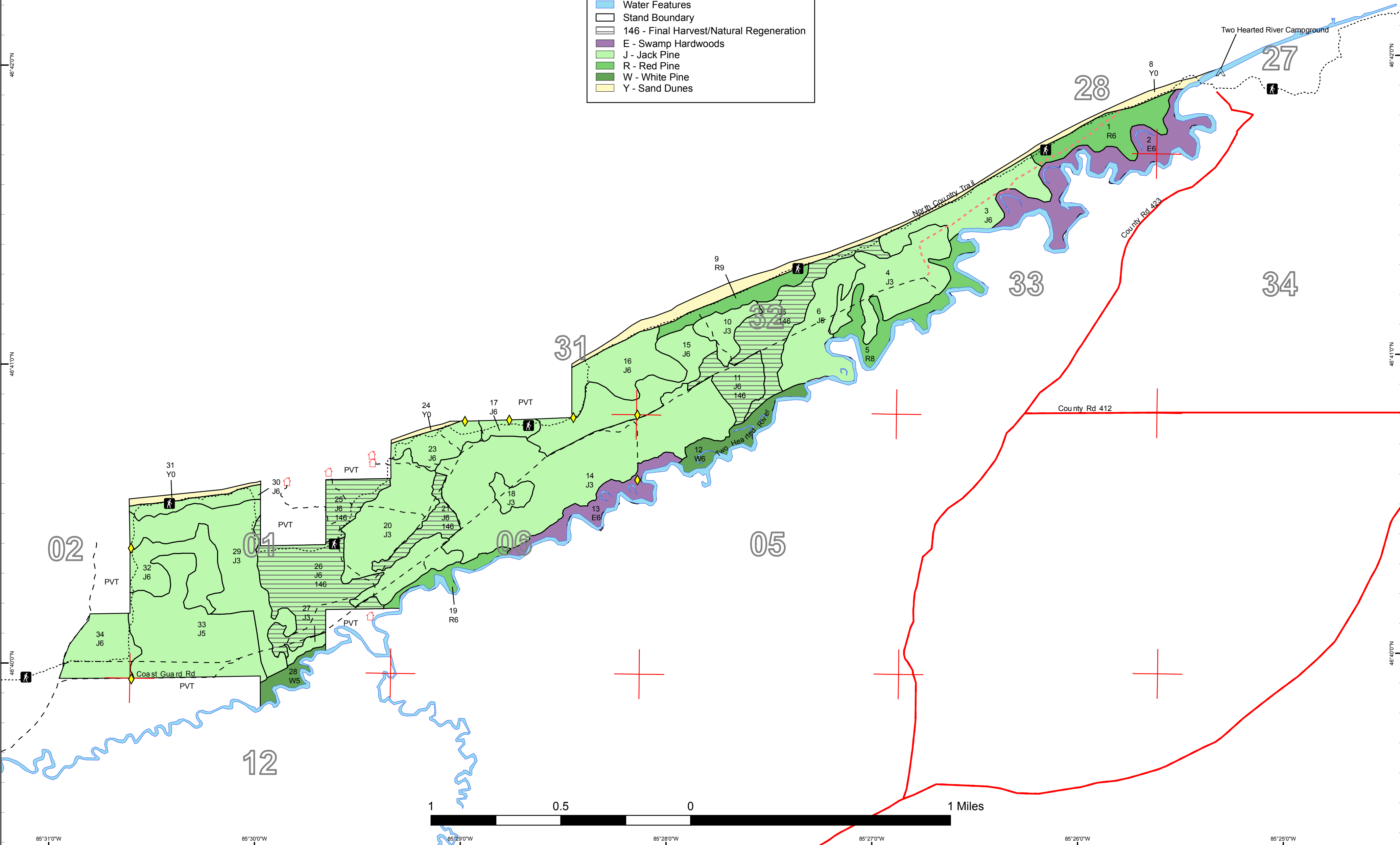
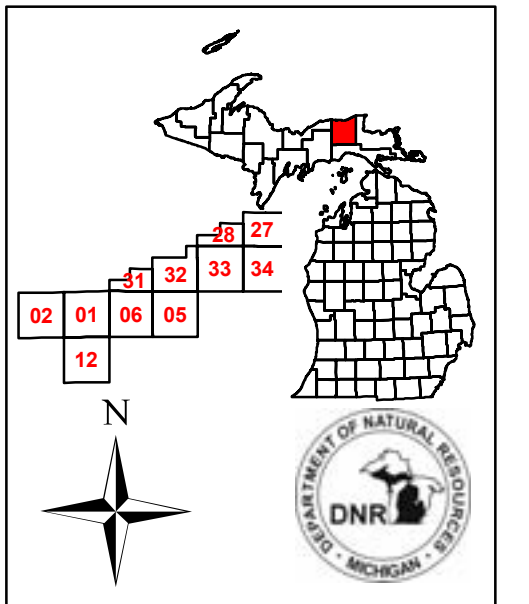
**Total Acres..... 96**

Compartment 32  
 T50N, R09W, Sec. 27, 28, 31-34  
 T49N, R09W, Sec. 5, 6  
 T49N, R10W, Sec. 1, 2, 12  
 County: Luce  
 Unit: Newberry  
 YOE: 2010  
 Acres: 1,359 GIS Calculated  
 Stand Examiner: Edward Rice  
 Map Revised: 09/22/2008  
 Map Phase: Pre-review

# Covertypes & Treatment Map

**Legend**

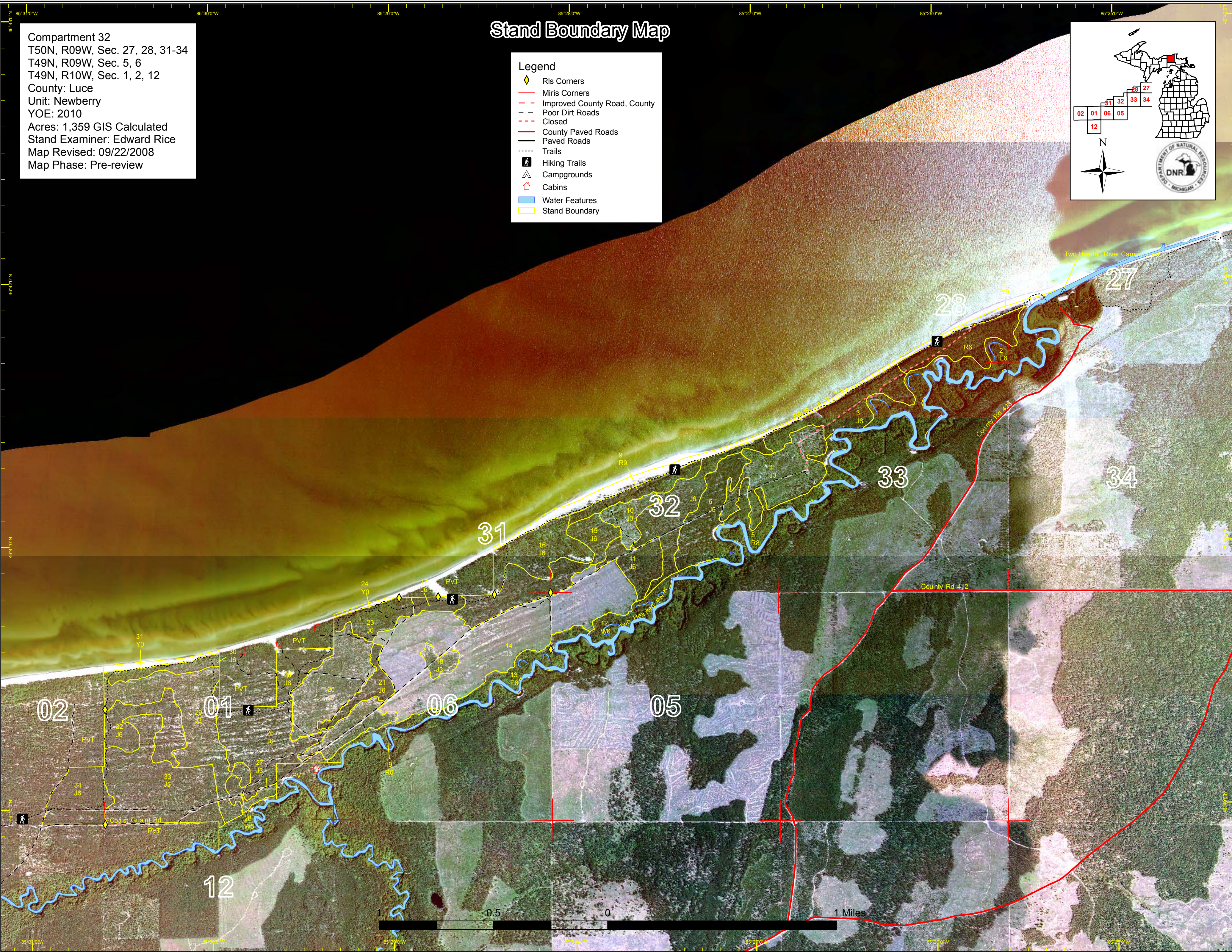
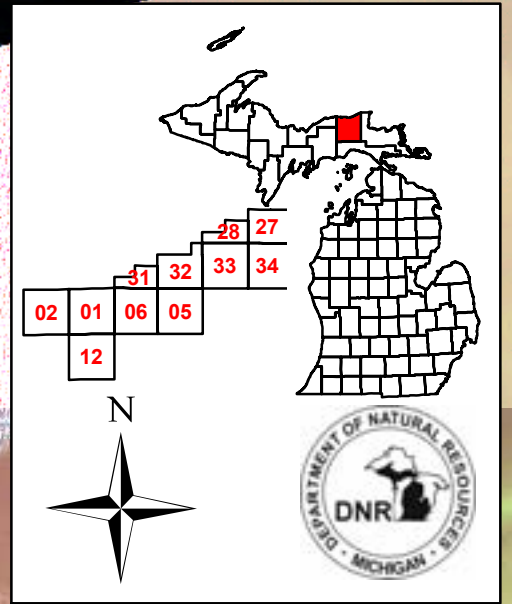
- Rls Corners
- Miris Corners
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- Closed
- Trails
- Hiking Trails
- Campgrounds
- Cabins
- Water Features
- Stand Boundary
- 146 - Final Harvest/Natural Regeneration
- E - Swamp Hardwoods
- J - Jack Pine
- R - Red Pine
- W - White Pine
- Y - Sand Dunes



# Stand Boundary Map

Compartment 32  
T50N, R09W, Sec. 27, 28, 31-34  
T49N, R09W, Sec. 5, 6  
T49N, R10W, Sec. 1, 2, 12  
County: Luce  
Unit: Newberry  
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Acres: 1,359 GIS Calculated  
Stand Examiner: Edward Rice  
Map Revised: 09/22/2008  
Map Phase: Pre-review

- Legend**
- ◆ Rls Corners
  - Miris Corners
  - Improved County Road, County
  - - - Poor Dirt Roads
  - - - Closed
  - County Paved Roads
  - Paved Roads
  - ..... Trails
  - 🚶 Hiking Trails
  - ⚖ Campgrounds
  - 🏠 Cabins
  - 🌊 Water Features
  - 🟡 Stand Boundary



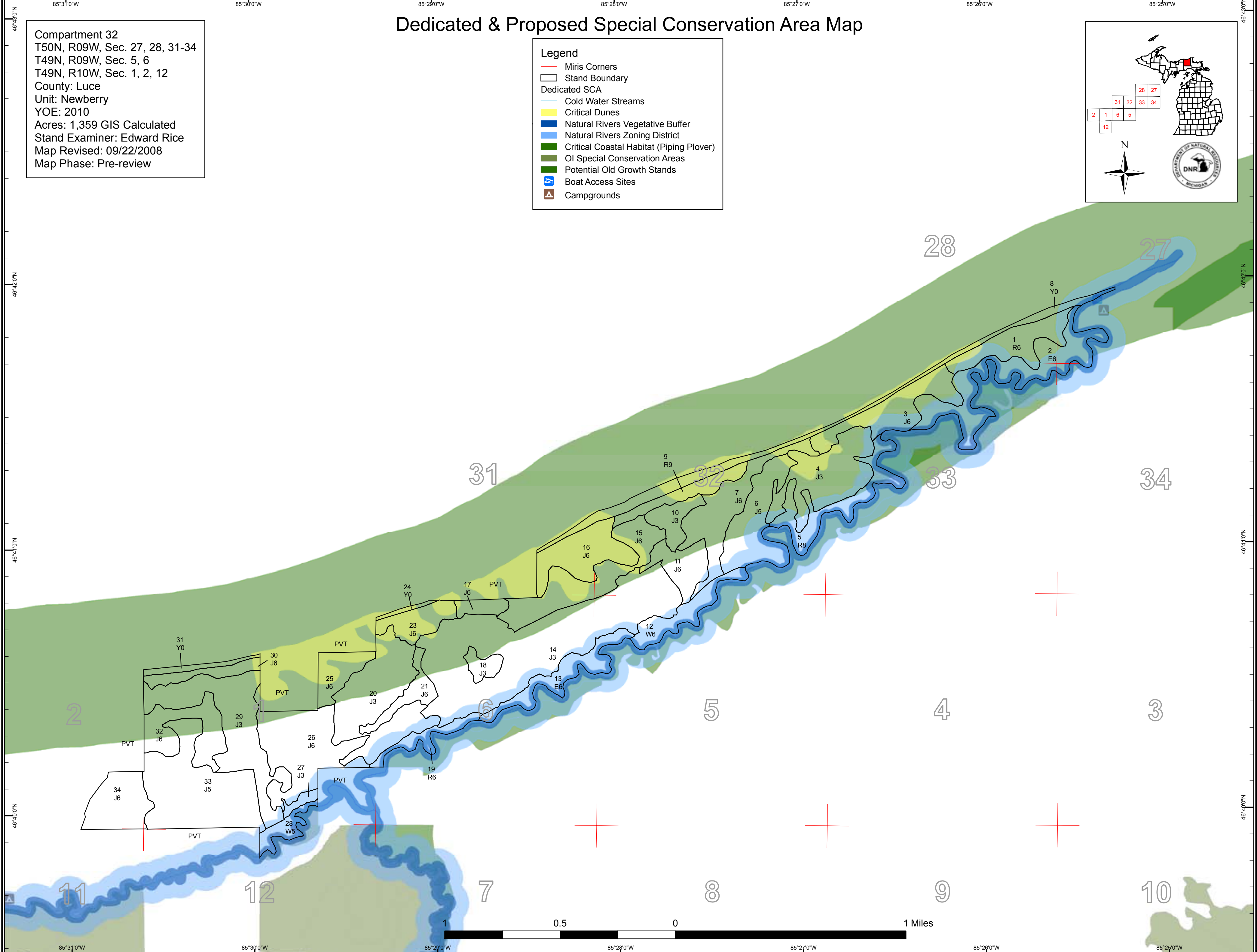
# Dedicated & Proposed Special Conservation Area Map

Compartment 32  
 T50N, R09W, Sec. 27, 28, 31-34  
 T49N, R09W, Sec. 5, 6  
 T49N, R10W, Sec. 1, 2, 12  
 County: Luce  
 Unit: Newberry  
 YOE: 2010  
 Acres: 1,359 GIS Calculated  
 Stand Examiner: Edward Rice  
 Map Revised: 09/22/2008  
 Map Phase: Pre-review

**Legend**

- Miris Corners
- Stand Boundary
- Dedicated SCA**
- Cold Water Streams
- Critical Dunes
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Critical Coastal Habitat (Piping Plover)
- OI Special Conservation Areas
- Potential Old Growth Stands
- Boat Access Sites
- ▲ Campgrounds

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## 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
HCVA	Critical Dunes	Critical dune areas are established via the public legislative process, and governed by Part 353, Sand Dune Protection and Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the Michigan Department of Environmental Quality (DEQ). The current distribution of designated critical dunes is established by the DEQ 1989 Atlas of Critical Dune Areas.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.
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	Concentrated Recreation Area	Facilities that are designed and maintained for routine or heavy recreational use, including State Parks, State Forest campgrounds, motorized and non-motorized trails, trailheads, staging areas and public access sites.
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.