



GRAYLING FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 258 ENTRY YEAR: 2011

GIS Compartment Acreage: 1,431 acres County: Crawford

Revision Date: 9/3/09

Stand Examiner: Craig Farrer

Legal Description: T27N, R02W, Section 27, 34 and 35 and T26N, R02W, Section 2. Grayling Township.

Management Goals: To provide an area that allows for National Guard training while maintaining forest health, productivity, sustainability, species diversification, and structural diversity throughout the compartment.

Soils and Topography: The soil types within the compartment consist of Grayling Sands and Graycalm/Grayling Sands with some small pockets of Graycalm Sands and Croswell-Augres Sands. The areas near Connors Flat Road and Barker Creek contain a mixture of Tawas-Lupton Muck. The topography within the compartment consists of gently rolling terrain with some valley and ridge tops. The south end of the compartment is level and gradually slopes to low wet areas near Barker Creek.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment is comprised mostly of state ownership. Lands in section 27, the E1/2 of section 34, and in section 35 are leased to the Michigan National Guard, Department of Military Affairs under L-1479 long term for the purpose of military training. The agreement provides for use by the military during their encampment, with no permanent buildings or improvements to be erected. Military needs take precedence over resource management needs on long-term lease lands. The DNR will coordinate all prescribed activities with the National Guard to ensure they are compatible with military training needs. This compartment is used heavily by the military except for lands located in section 35 and 2. There is a large block (200 acres) of private ownership in section 34 which is used for residential homes. The small blocks of state ownership within the compartment are surrounded by private ownership.

Unique, Natural Features (include only non-site specific and non-sensitive information): Evidence of the Stephan Bridge Fire still exists, which burned throughout most of the compartment in 1990, is natural and unique in itself. Rough Fescue, Hill's Thistle and Alleghany plum, rare and endangered or threatened grasses and plants have been found growing within several stands in this compartment. The Kirtland's Warbler, has also been found within stands in this compartment.

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

Special Management Designations or Considerations: The residents along Connor's Flat Road have expressed concern over visual management along the road in the past. This concern needs to be considered when performing management prescriptions. The military and their needs for training in sections 27 and 34 is to be considered in the management of this compartment.

Watershed and Fisheries Considerations: A small portion of Barker Creek flows through an isolated forty of state land and is a tributary to the AuSable River, a designated natural river.

Wildlife Habitat Considerations: Maintain existing and preferred types for ruffed grouse, white-tailed deer, wild turkey, bear, squirrel and rabbits. Swamps in section 2 are near Connors Flat Marsh and the AuSable River and serve as a deer yard.

Mineral Resource and Development Concerns and/or Restrictions:

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift is the Marshall Sandstone. The Marshall was previously used as a building stone. A gravel pit is located one mile to the north 31 and potential is good on the uplands. Currently, there are no oil and gas leases in this compartment. Due to military, all lands in Section 27, 34 and 35 are classified as non-leaseable lands, with the exception of the SENW, NWSW and the SWSW of section 34. They are classified as development for oil and gas leasing purposes. Land in T26N, R03W Section 2 acre classified as development with the exception of the NENE. That 40 acre parcel is classified as non-development due to wet conditions.

Vehicle Access: The compartment is easily accessible from the county roads of North Down River Road, Wakeley Bridge Road, Connors Flat Road and Ketcham Truck Trail. There are several state two tracks in which branch off these roads. During military training, Wakeley Bridge Road, Ketcham Truck Trail and several two tracks that branch off these roads are closed to the public for safety. There are multiple landowners who access their property using state trail roads in Section 34. Currently, we have no legal access to the forty acres contained in section 34. Any newly created roads due to management treatments to stands within this compartment are to be closed upon completion of the treatments.

Survey Needs: None.

Recreational Facilities and Opportunities: There are no designated recreational facilities or trails within the compartment. However, there is plenty of opportunity for dispersed recreational activities such as hunting, hiking, berry picking, bird watching and other wildlife viewing within this compartment.

Fire Protection: The compartment contains lots of small dense jack pine, grasses, and dead standing snags that are very susceptible to fire. The road system is adequate to allow fire equipment to access fire prone types. A near by water source is available where Barker Creek flow under Wakeley Bridge Road. The fire protection in the compartment is the responsibility of the Michigan DNR and the Grayling Township Volunteer Fire Department. Stand 15, along North Down River Road, was cut last entry and serves as a fuelbreak.

Additional Compartment Information:

LOTS Compartment Acreage: _____

- **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

AUSABLE STATE FOREST

GRAYLING FOREST MGT UNIT

CRAWFORD COUNTY

COMPARTMENT: 258

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		5		129															134
Bog or Marsh	41																		41
Grass	3																		3
Jack Pine		12		583		7	72	1		67	16								758
Lowlnd Brush	16																		16
Mx Swmp Cnfr						12							2						14
Oak		73		117					17			129							336
Red Pine				17				7		2	62								88
Upland Brush				5		9													14
Upland Hdwds				7															7
Water	6																		6
White Pine					14														14
Total	66	90		858	14	28	72	8	17	69	78	129	2						1431

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

AUSABLE STATE FOREST

GRAYLING FOREST MGT UNIT

CRAWFORD COUNTY

COMPARTMENT: 258

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	134																										134	
V Bog or Marsh			41																								41	
G Grass					3																						3	
J Jack Pine							758																				758	
L Lowlnd Brush									16																		16	
Q Mx Swmp Cnfr												14															14	
O Oak														336													336	
R Red Pine																88											88	
U Upland Brush																								14			14	
M Upland Hdwds																									7		7	
Z Water																									6		6	
W White Pine																										14	14	
Total	134		41		3		758		16			14		336		88								14	7	6	14	1431

AUSABLE STATE FOREST

GRAYLING FOREST MGT UNIT

CRAWFORD COUNTY

COMPARTMENT: **258**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	1363 Cds	Hardwood	510 Cds
Hardwood	395 Mbf	Hardwood	187 Mbf
Softwood	2545 Cds	Softwood	88 Cds
Softwood	1010 Mbf	Softwood	78 Mbf
Sum TotVol	6718 Cds	Sum CutVol	1128 Cds
Total Cmpnt Acres		Acres Proposed For Cut.....	
1431		97	

GRAYLING FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 258 **Entry Year: 2011**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDI Status	
62	09	63	98	48	oak	mature	shelterwood-seed	1	natural regeneration		
comnts Fmd : 2009: Recommend a 40% Crown clousure (shelterwood seed) . Lots of Oak regeneration in the understory1999: LOTS OF OAK ASPEN REGENERATION OF 15 FEET.											
63	09	34	101	52	oak	mature	final harvest	1	natural regeneration		
comnts Fmd : 1999: RECOMMEND A SELECTION CUT REMOVING ASPEN AND RED MAPLE. MILITARY LEASED LAND 20009: Final harvest with retention patches.											
Total Acres.....		97									

GRAYLING FOREST MGT UNIT

**Proposed Treatments
With Limiting Factors**

Compartment: 258 **Entry Year: 2011**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDI Status
74	R9	23	89	53	red pine	mature		0	other - specify in remarks	prescribed for fdi treatment

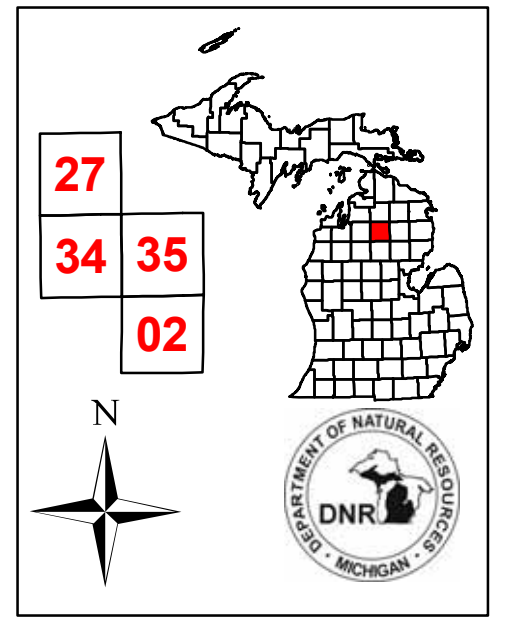
TREATMENT LIMITING FACTORS: Delayed treatment for age/size class diversity

comnts Fmd : MILITARY LEASED LANDS. REGENERATE NATURALLY. Selection cut in 2006 under timber sale contract #720290401 Mitten Red Pine. FTP written for prescribed underburn #72-558.

Total Acres..... 23

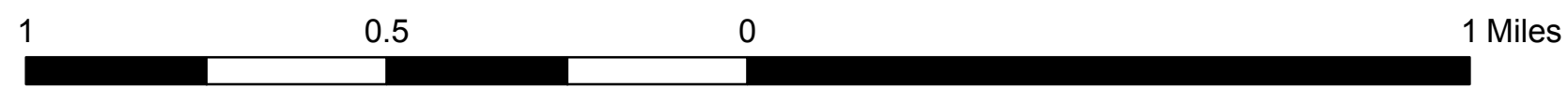
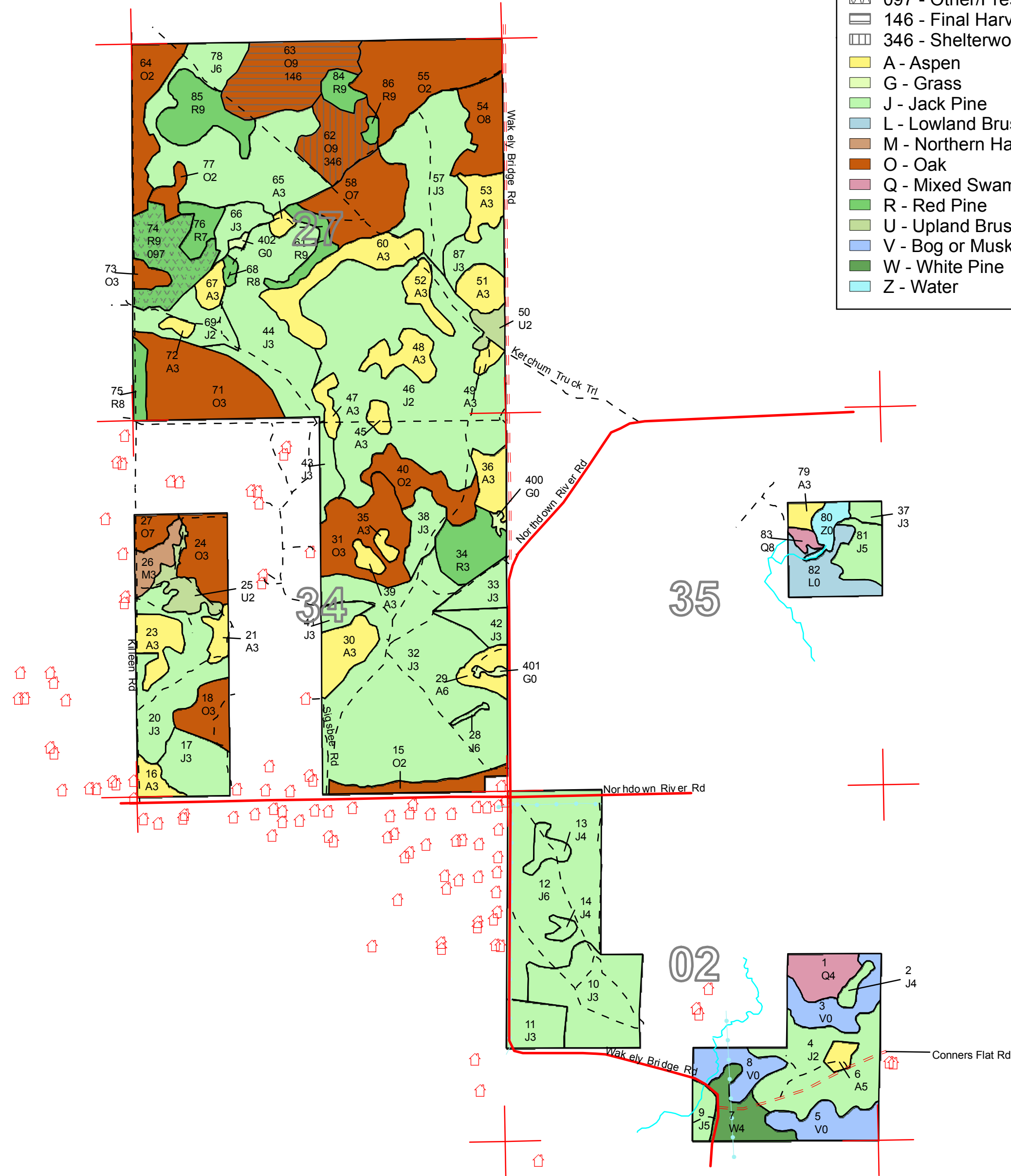
Covertypes & Treatment Map

Compartment 258
 T26N, R02W, Sec. 02
 T27N, R02W, Sec. 27, 34, 35
 County: Crawford
 Unit: Grayling
 YOE: 2011
 Acres: 1,431 GIS Calculated
 Stand Examiner: Craig Farrer
 Map Revised: 9/03/2009
 Map Phase: Pre-review



Legend

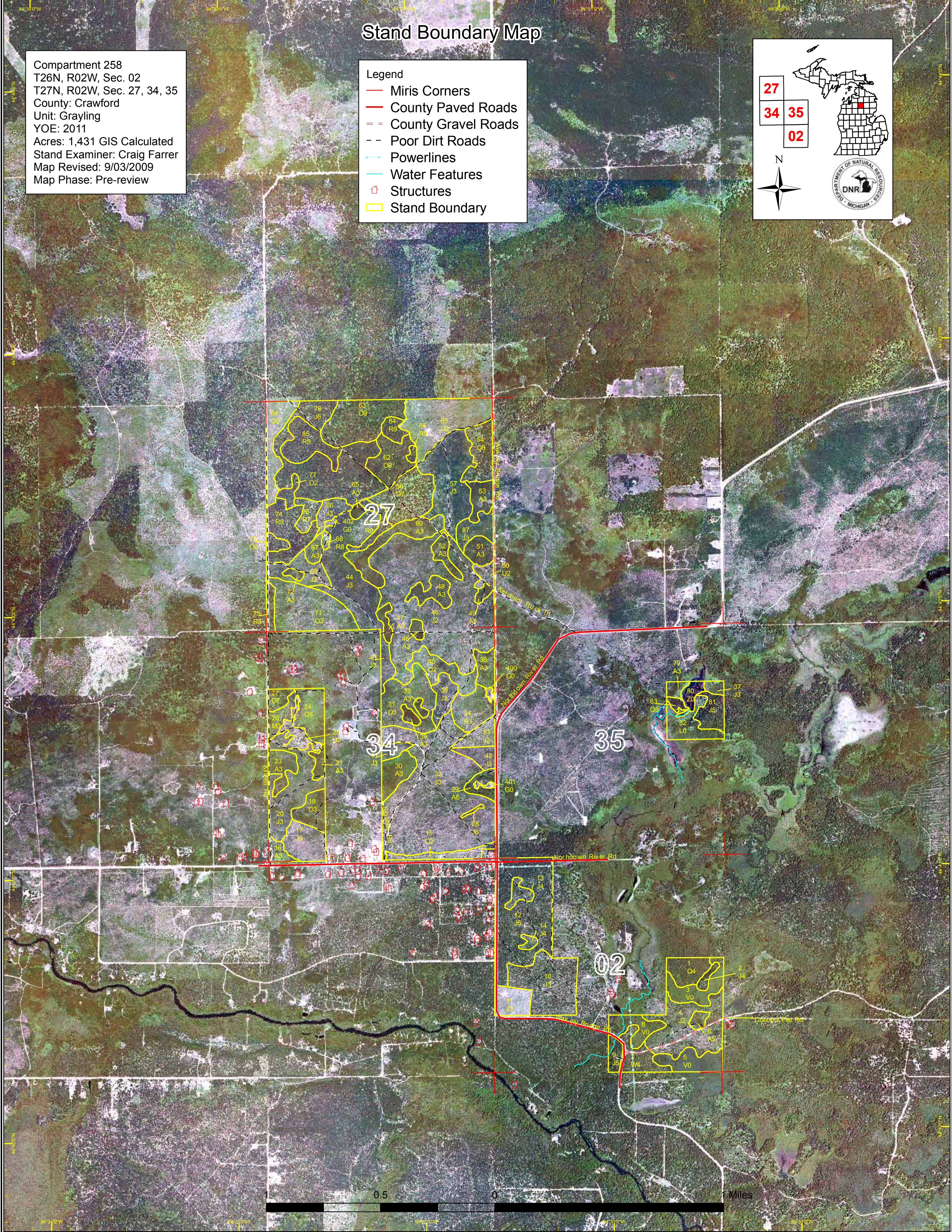
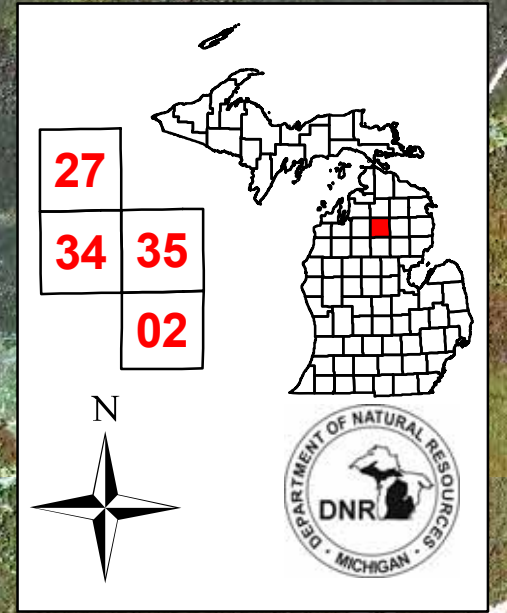
- Miris Corners
- County Paved Roads
- - County Gravel Roads
- - - Poor Dirt Roads
- Powerlines
- Water Features
- ⬆ Structures
- Stand Boundary
- 097 - Other/Prescribed Burning
- 146 - Final Harvest/Natural Regeneration
- 346 - Shelterwood - Seed/Natural Regeneration
- A - Aspen
- G - Grass
- J - Jack Pine
- L - Lowland Brush
- M - Northern Hardwoods
- O - Oak
- Q - Mixed Swamp Conifers
- R - Red Pine
- U - Upland Brush
- V - Bog or Muskeg
- W - White Pine
- Z - Water



Stand Boundary Map

Compartment 258
T26N, R02W, Sec. 02
T27N, R02W, Sec. 27, 34, 35
County: Crawford
Unit: Grayling
YOE: 2011
Acres: 1,431 GIS Calculated
Stand Examiner: Craig Farrer
Map Revised: 9/03/2009
Map Phase: Pre-review

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



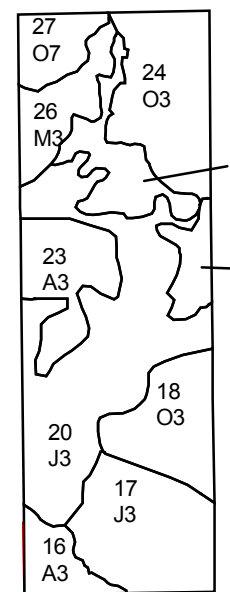
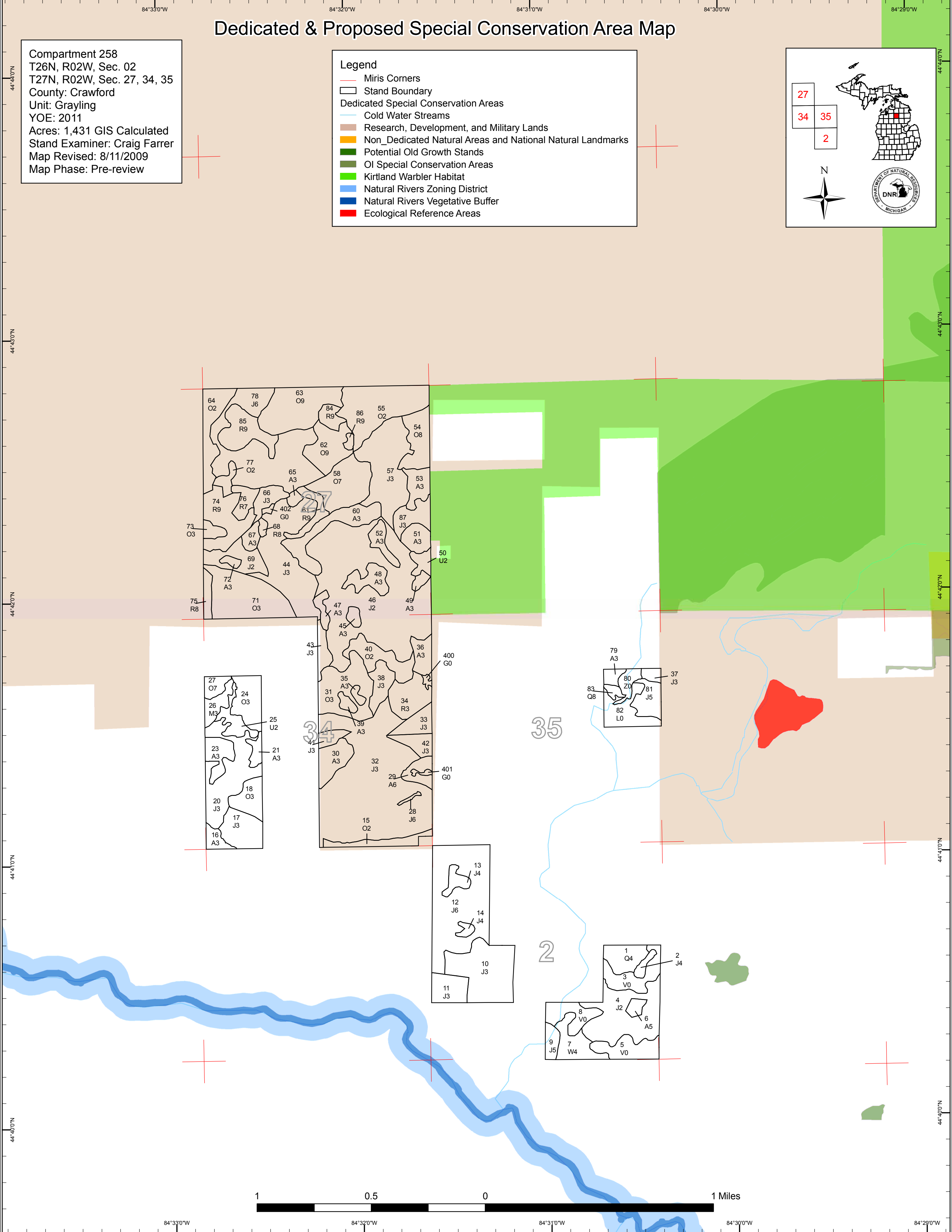
Dedicated & Proposed Special Conservation Area Map

Compartment 258
 T26N, R02W, Sec. 02
 T27N, R02W, Sec. 27, 34, 35
 County: Crawford
 Unit: Grayling
 YOE: 2011
 Acres: 1,431 GIS Calculated
 Stand Examiner: Craig Farrer
 Map Revised: 8/11/2009
 Map Phase: Pre-review

Legend

- Miris Corners
- Stand Boundary
- Dedicated Special Conservation Areas**
- Cold Water Streams
- Research, Development, and Military Lands
- Non_Dedicated Natural Areas and National Natural Landmarks
- Potential Old Growth Stands
- OI Special Conservation Areas
- Kirtland Warbler Habitat
- Natural Rivers Zoning District
- Natural Rivers Vegetative Buffer
- Ecological Reference Areas

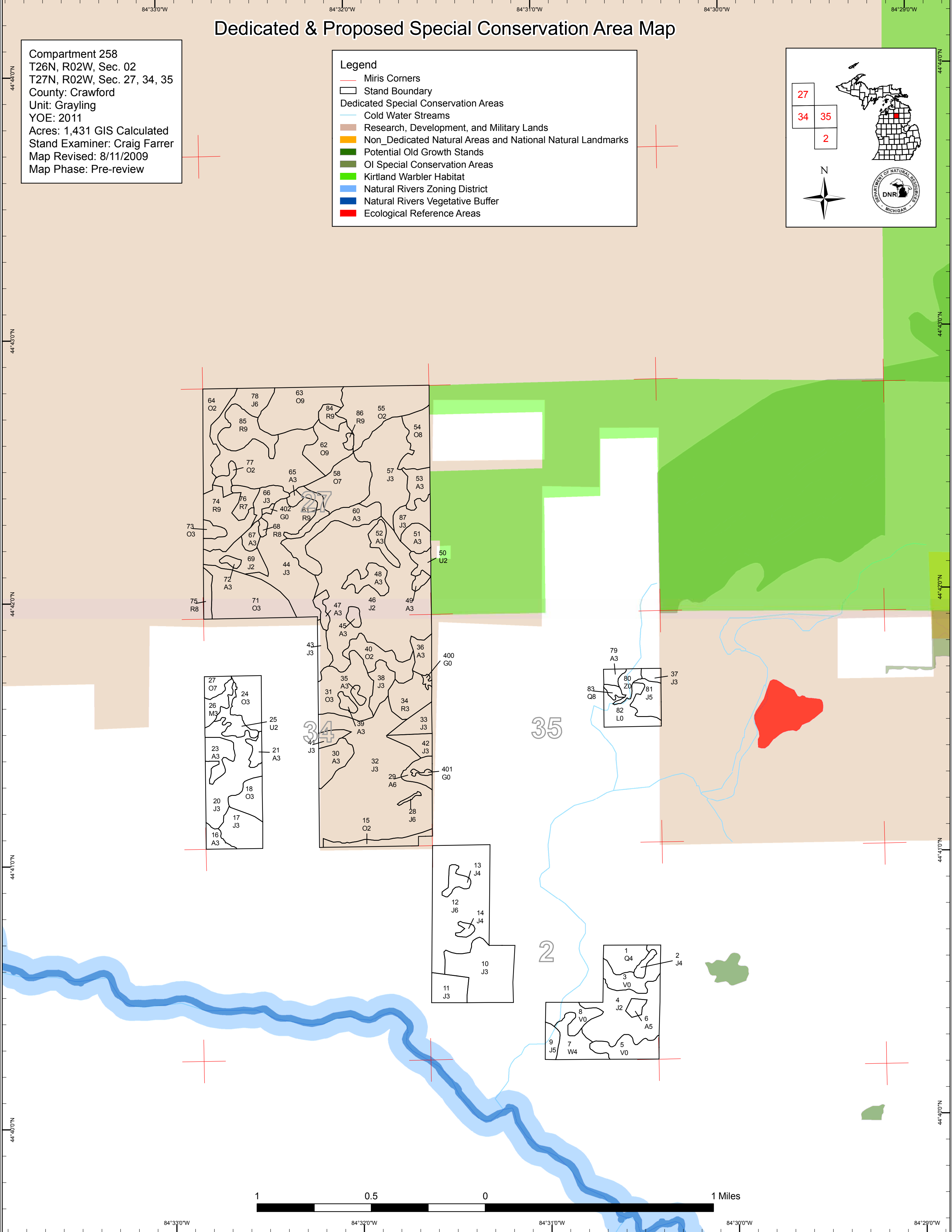
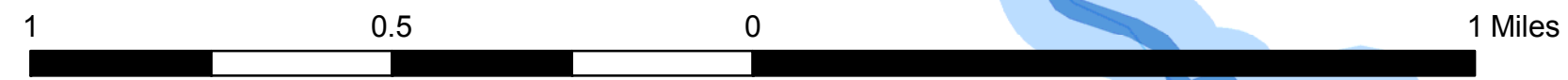
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34

35

2





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	Designated Critical Habitat	Critical habitat areas are established via a consultative and cooperative process between the DNR and the U.S. Fish and Wildlife service for the recovery of threatened and endangered species, as governed by Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, and the Federal Endangered Species Act of 1973. This is an active program, with proposed species plans in various stages of review. As of now only two exist, Kirtland Warbler Habitat and Piping Plover Habitat.
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	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.
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated for research, or other purposes. They include the 5,847 acre Forest Fire Experiment Station, the 12,000 acre Houghton Lake Wildlife Research Area, the Beaver Islands Archipelago Wildlife Research Area (that includes most of Garden Island, all of High and Hog Islands, all state owned land on Beaver, South Fox and North Fox Islands), the Cusino Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research Station, the 125 acre Wyman Nursery, and over 144,000 acres of Military Lands.