



GRAYLING FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 288 ENTRY YEAR: 2011

GIS Compartment Acreage: 1,372 County: Crawford

Revision Date: 7/17/2009

Stand Examiner: Lucas Merrick

Legal Description: Lovell's Township T28N, R01W, Sections 34, 35, and 36

Management Goals: To maintain forest health, productivity, sustainability, species diversification, and structural diversity throughout the compartment while providing for multiple use and visual management.

Soils and Topography: Topography is flat with rolling hills. Soil types consist primarily of Grayling and Graycalm sands; these soils are somewhat excessively to excessively drained.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment is found within a large block of public ownership. The majority of private parcels in this township are found along the river corridors.

Unique, Natural Features: There is potential for dry prairie plants in grassy openings: Hill's thistle, rough fescue, Alleghany plum, and Pale Agoseris. There is potential for several animals of concern in this compartment: Kirtland's warbler, prairie warbler, bald eagle, wood turtle, Massasauga rattle snake, secretive locust, dusted skipper, grizzled skipper, and the red-legged spittle bug.

Archeological, Historical, and Cultural Features: None known at this time.

Special Management Designations or Considerations: The West Branch of Big Creek and the Middle Branch of Big Creek are designated "Natural Rivers". Natural Rivers are High Value Conservation Areas (HCVA).

Watershed and Fisheries Considerations: The West Branch of Big Creek and the Middle Branch of Big Creek flow through the compartment.

Wildlife Habitat Considerations: Try to expand the aspen component where possible. During timber harvesting make efforts to improve snag habitat and down woody debris. Also, try to leave some high stumps for feeding perches and drumming.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Coldwater Shale. The Coldwater does not have a current economic use. A gravel pit is located two miles to the south and there is potential on the upland areas. None of the Compartment is leased for oil & gas development.

Vehicle Access: Access through out the compartment is excellent by way of the county roads of Walsh and Townline Roads along with several forest roads.

Survey Needs: None at this time.

Recreational Facilities and Opportunities: A portion of the Walsh Road Trail Camp can be found in section 36. Part of the the Roll snowmobile trail #409 is located in section 34. The Shore to Shore Riding & Hiking trail is found in sections 35 and 36. Dispersed recreation occurs throughout the area.

Fire Protection: The current road system is adequate and timber conversion is not needed. The rivers, roads, and utility lines provide adequate fuel breaks.

LOTS Compartment Acreage: 1404

- **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: 288

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	362																										362
G Grass					8																						8
J Jack Pine							753																				753
P Lowlnd Poplr									12																		12
O Oak													185														185
R Red Pine															27												27
U Upland Brush																							8				8
M Upland Hdwds																								17			17
Total	362				8		753		12				185		27								8	17			1372

AUSABLE STATE FOREST

GRAYLING FOREST MGT UNIT

CRAWFORD COUNTY

COMPARTMENT: **288**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	2241 Cds	Hardwood	425 Cds
Hardwood	600 Mbf	Hardwood	184 Mbf
Softwood	3702 Cds	Softwood	940 Cds
Softwood	526 Mbf	Softwood	161 Mbf
Sum TotVol	8195 Cds	Sum CutVol	2055 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	
1372		207	

GRAYLING FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 288 Entry Year: 2011

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
28	J6	34	89	49	jack pine	low quality	final harvest	1	planting	
comnts Fmd : Poor quality. Final Harvest w/ reserves. Leave some red pine and healthy oak scattered within the sale area. Use retention islands to buffer visual concerns along the horse trail and/or road. Trench and plant around healthy regen (jack or red pine). Management objective is a moderate to fully stocked jack pine stand with components of oak, red maple, aspen, and red pine.										
35	O6	6	89	54	oak	mature	final harvest	1		
comnts Fmd : Stand is on a slope with an eastern aspect. Better oak than other portions of the compartment, but by no means great. Final harvest with no reserves in order to maximize oak regen. Leave white and red pine. Management objective is oak, but will accept a moderately stocked stand of natural regen with an oak component. Acceptable species are red, jack, and white pine, mixed oak, aspen or red maple.										
36	J9	18	89	40	jack pine	two aged	delayed removal	1	planting	
comnts Fmd : Open, below average quality stand. Looks like prior treatments removed majority of timber except for oak (60's - early 70's). Delayed removal, harvest trees 5" or greater in diameter. Leave red pine and white pine, mark some healthy oak scattered through out to leave. Leave an adequate visual buffer along walsh Rd. Trench and plant (jack or red pine) around residual. Old SI used										
43	J6	15	76	44	jack pine	mature	final harvest	1	planting	
comnts Fmd : A poor quality stand. Pine/oak/aspen. Some mixed pine found in the understory. Timber is in decline. Final harvest with reserves. Trench and plant jack pine around natural regeneration. Management objective for this stand is jack pine.										
47	J5	34	60	54	jack pine	mature	final harvest	1	natural regeneration	
comnts Fmd : Very poor quality. Some trees in the 70 age range. Potential barren management area? Several areas of standing dead jack pine. Final Harvest with reserves. Leave red pine and a couple islands. Burn as soon as possible after completion of sale. Give a specific time frame with no extensions on the contract, fill out an FTP for the burn before hand. The management objective for this stand is jack pine. Open pine barren areas should be expected. A poorly stocked stand with natural jack pine is acceptable. Harvest and burn with stands 48 and 122.										
48	J5	66	80	48	jack pine	mature	final harvest	1	natural regeneration	
comnts Fmd : Very poor quality. Stunted areas. Potential barren management area? Several areas of standing dead jack pine. A couple clones of aspen present. Final Harvest with reserves. Leave red pine and a couple islands. Burn as soon as possible after completion of sale. Give a specific time frame with no extensions on the contract, fill out an FTP for the burn before hand. The management objective for this stand is jack pine. Open pine barren areas should be expected. A poorly stocked stand with natural jack pine is acceptable. Harvest and Burn with stands 47 and 122. Old age and SI used.										
58	J6	15	56	40	jack pine	mature	final harvest	2	planting	
comnts Fmd : The stand was a buffer between two treated stands. There is smaller diameter jack in the souther finger. Heavy browse found on hdwd understory. A few trees in stand in the 70yr old range. Final harvest with reserves. Put in leave islands and individually leave scattered jack pine and wildlife trees. Have the boundary line trees dropped for dead and down creation. Trench and plant to jack pine. Management objective is jack pine.										
122	O5	19	89	52	oak	mature	final harvest	1	natural regeneration	
comnts Fmd : Stand was shelterwood harvested, residual BA of 40 sq ft. Sale # 0060201. Understory is currently red maple clumps and aspen clones. This is the southern portion of stand 22. Quality is not as good as northern portions. Final harvest no reserves: Note that boundary line does not run adjacent to horse trail. Consider this portion a reserve area. Prescribe with stands 47 and 48. Leave some scattered red pine if available. The management objective is oak and mixed pine. Moderately stocked mixed pine with an oak component is acceptable. If natural regeneration is inadequate, plant red pine while protecting natural oak regen.										
Total Acres.....		207								

**Proposed Treatments
With Limiting Factors**

Compartment: 288

Entry Year: 2011

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
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


















TREATMENT LIMITING FACTORS:

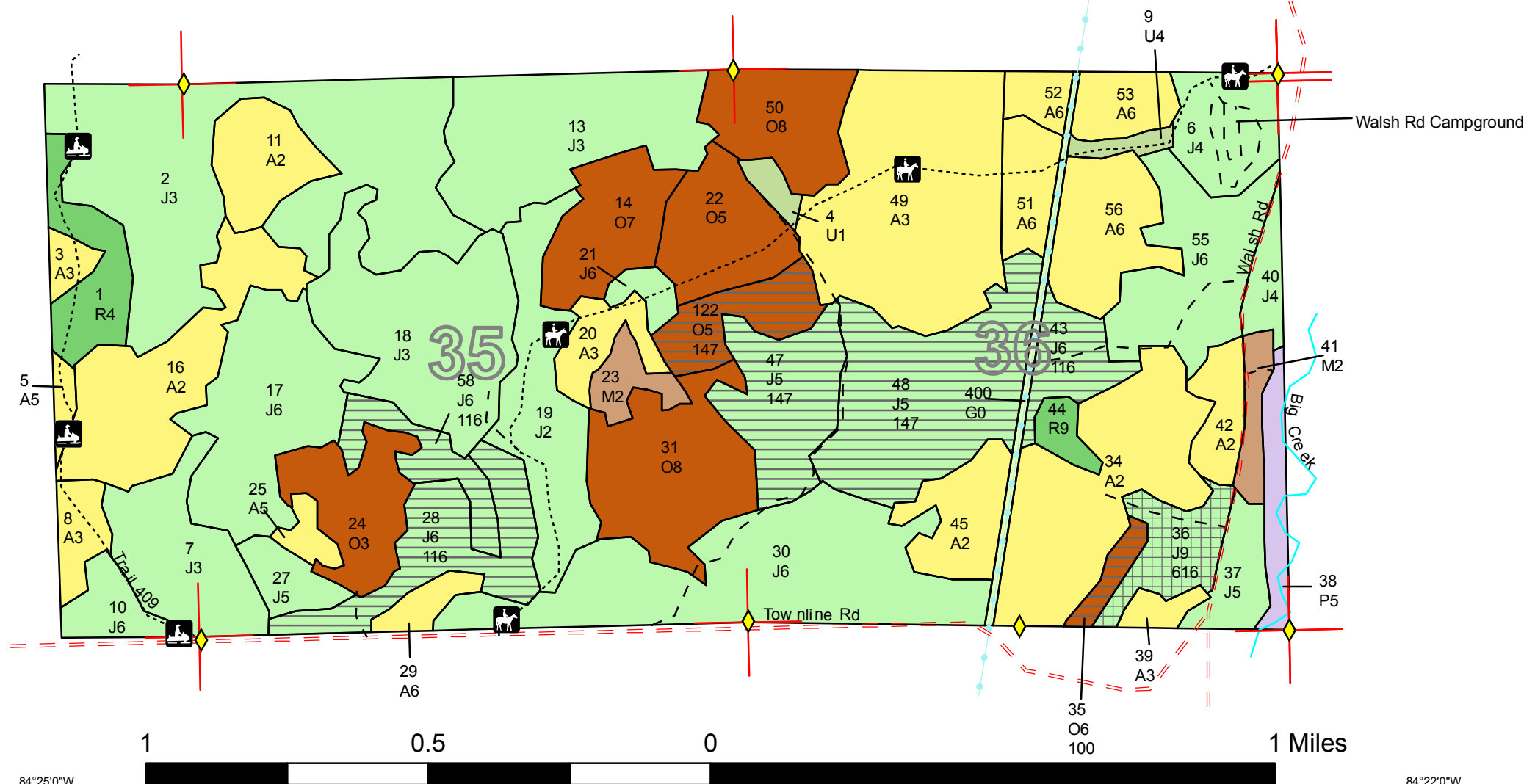
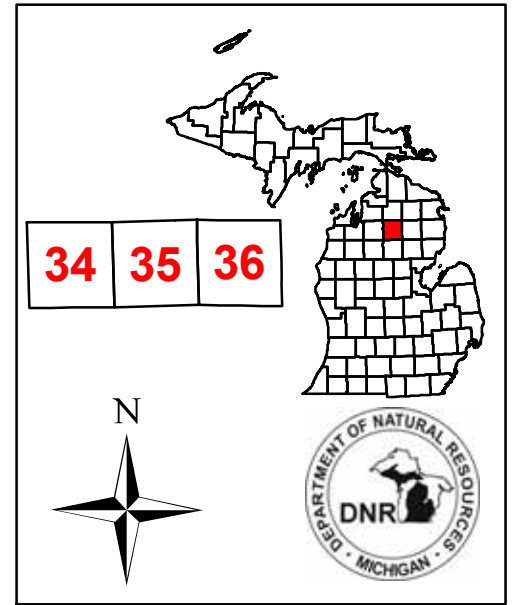
Total Acres..... 0

Compartment 288
 T28N, R01W, Sec. 34, 35, 36
 County: Crawford
 Unit: Grayling
 YOE: 2011
 Acres: 1, 372 GIS Calculated
 Stand Examiner: Lucas Merrick
 Map Revised: 8/11/2009
 Map Phase: Pre-review

Covertypes & Treatment Map

Legend











-  RIs Corners
 -  Miris Corners
 -  County Gravel Roads
 -  Poor Dirt Roads
 -  Trails
 -  Powerlines
 -  Water Features
 -  Snowmobile Trails
 -  Horse Trails
 -  Stand Boundary
 -  100 - Final Harvest
 -  116 - Final Harvest/Planting
 -  147 - Final Harvest/Natural Regeneration/Prescribed Burning
 -  616 - Delayed Removal/Planting
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-  A - Aspen
 -  G - Grass
 -  J - Jack Pine
 -  M - Northern Hardwoods
 -  O - Oak
 -  P - Balsam Poplar, Swamp Aspen, Swamp White Birch
 -  R - Red Pine
 -  U - Upland Brush

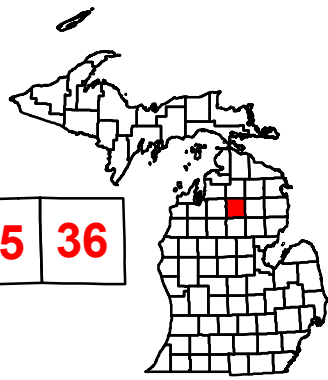


Stand Boundary Map

Compartment 288
 T28N, R01W, Sec. 34, 35, 36
 County: Crawford
 Unit: Grayling
 YOE: 2011
 Acres: 1, 372 GIS Calculated
 Stand Examiner: Lucas Merrick
 Map Revised: 8/11/2009
 Map Phase: Pre-review

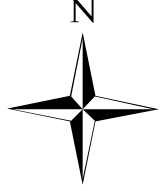

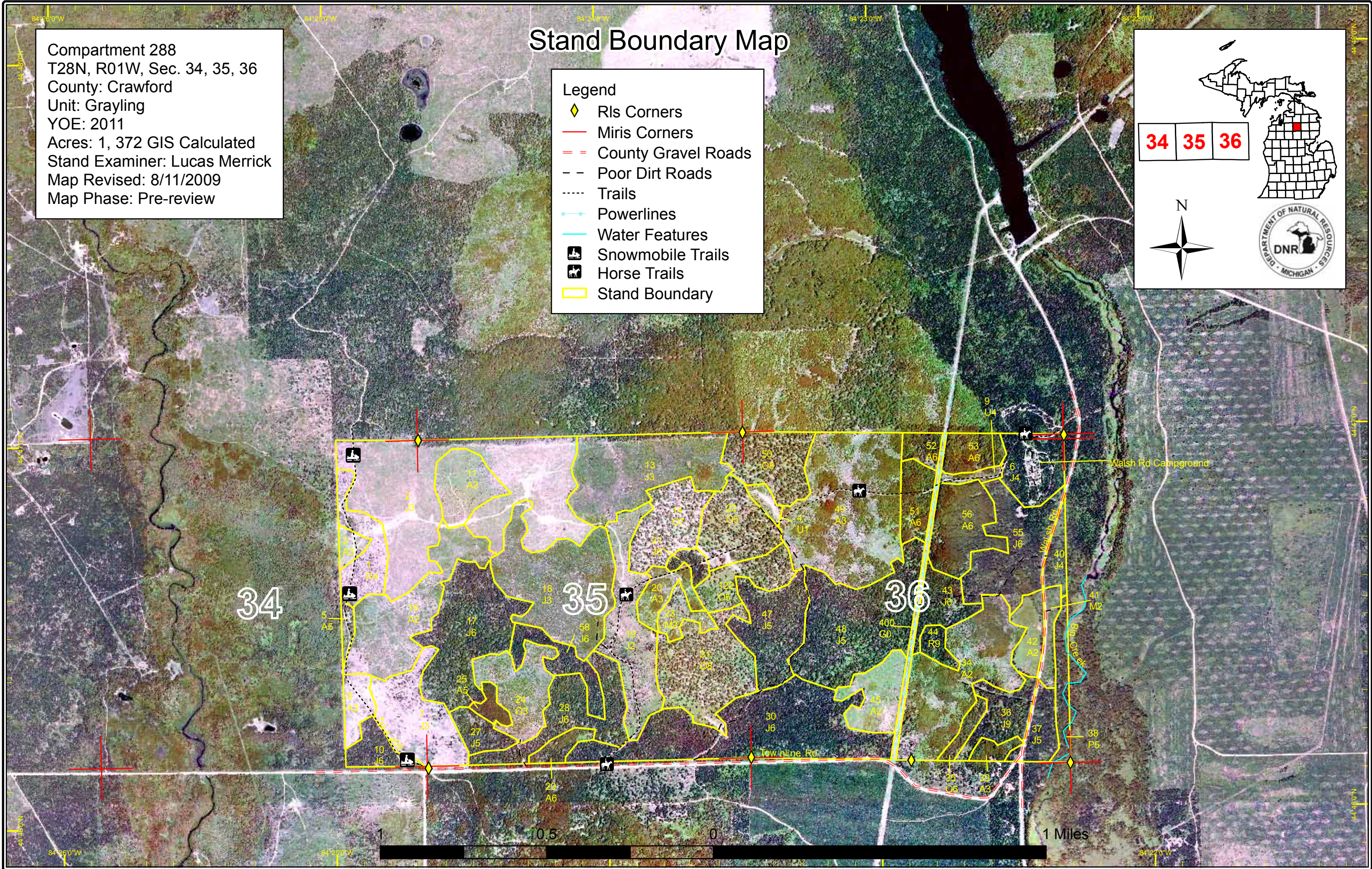
Legend

-  RIs Corners
-  Miris Corners
-  County Gravel Roads
-  Poor Dirt Roads
-  Trails
-  Powerlines
-  Water Features
-  Snowmobile Trails
-  Horse Trails
-  Stand Boundary



34 35 36

N



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	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.