



**FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 59 ENTRY YEAR: 2011

Compartment Acreage: 1279 County: Gladwin

Revision Date: April 2009, Oct. 2009

Stand Examiner: Steven Nyhoff

Legal Description: T19N R02E, Sections 28 and 33

RMU (if applicable):

Management Goals:

The compartment has been heavily managed for the past 30 years. Most of the aspen stands have been cut and are now less than 30 years old. Last Year of Entry (YOE), much of the oak in the compartment was harvested by clearcut or shelterwood harvest.

The regeneration from these past harvests have been generally good, especially in the aspen stand. In the oak stands the regeneration is somewhat mixed but most came back to a medium stocking. The stands in which regeneration was questionable were interplanted with jack pine to bring up to full stocking.

The stands in the compartment are to be managed for the current cover types. In harvested stands if the regeneration is poor they are to be interplanted with red pine where the soils are suitable and to jack pine in other types. This is to keep a diversity of conifers in the compartment. The compartment already has a significant component of jack pine and white pine seed in pockets throughout the compartment. The current red pine stands are converting to hardwoods.

Soil and Topography:

The soils range from excessively to well-drained Rubicon sand to very poorly drained Roscommon fine sand. Overall, the compartment is moderately to somewhat poorly drained.

The terrain is generally flat with extensive micro relief. However, the east side has undulating to rolling terrain and the flood plain of the Molasses River and its tributaries are bordered by steep banks.

Ownership Patterns, Development, and Land Use in and Around the Compartment:

The compartment is a solid block of state ownership, which is bordered on all sides by state land. There is a subdivision a quarter mile to the west of the compartment. This area is made up of mainly permanent residences.

Unique, Natural Features (include only non-site specific and non-sensitive information):

There are no known occurrences and none were located during the inventory process. There are records of Ellipse mussel in the Molasses River to the west of the compartment.

Archeological, Historical, and Cultural Features

There are no known occurrences and none were located during the inventory process.

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations:

The Molasses River flows through the central part of the compartment and Fish Creek in the southern portion. These are both warm water fisheries with sand bottoms making them low quality. Because of this, only Best Management Practices need to be followed. In addition, the treatments that are scheduled are out of the flood plains so there should be no impact to the streams by the scheduled harvest.

Wildlife Habitat Considerations:

While doing inventory it was noted that much of the regeneration from last YOE show signs of heavy deer browse. Deer were browsing on oak, aspen, white pine, and jack pine.

Wildlife considerations are certainly moderated by the existence of both posted open and illegal ORV activities. Maintenance and protection of the existing landscape are high wildlife priorities for this compartment. Projects above and beyond landscape protection will not be implemented by Wildlife Division. The advancement of roads threatens ecological integrity within the compartment.

Turkey, grouse, woodcock and deer are actively pursued by hunters across this compartment.

Wildlife controlled burns were previously implemented in the south half of Sec. 33 as a means of promoting blueberry and wintergreen. Regeneration of non-target species, along with forest succession, has minimized the need/option for further burning during the recent past.

Mineral Resource and Development Concerns and/or Restrictions:

Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 100 and 200 feet. Beneath the glacial drift are the Pennsylvanian Grand River and Saginaw Formations. The Saginaw Formation is used for clay/shale for brick making in other areas of the State. This area is predominantly sand, and gravel potential in the compartment is considered limited. Very little oil and gas exploration has occurred in this area. There are no current State oil and gas leases in the compartment.

Vehicle Access:

The compartment has many forest two-tracks in it, the ORV Route, Mosquito Alley Truck Trail, and Ridge Road. Therefore, access into the compartment is good.

Survey Needs:

No surveys are need at the current time.

Recreational Facilities and Opportunities:

A portion of the Gladwin ORV trail, Gladwin ORV route, and the MCCCT trail are located in the central portion of the compartment. These are the only established facilities in the compartment. In addition, the compartment is heavily use for hunters and there are several traditional hunting camps present along roads and trails.

Fire Protection:

The compartment has a mixture of cover types and good access so the potential for fire is low to moderate.

Additional Compartment Information:

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

AUSABLE STATE FOREST

GLADWIN FOREST MGT UNIT

GLADWIN COUNTY

COMPARTMENT: 59

Table 3

(acres shown in boxes)

STAND AGE CLASS

COVER TYPE	Not Coded	STAND AGE CLASS																All Aged	Total
		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		
Aspen			144	88	12	22	5												271
Bog or Marsh	2																		2
Grass	18																		18
Jack Pine			52	69	26		16												163
Lowlnd Brush	111																		111
Lowlnd Poplr			13	44															57
Marsh	3																		3
Mx Swmp Cnfr													31					18	49
Oak		28	190	28	22		24		48	66		24							430
Red Pine							27					4							31
Swamp Hrdwds				9				3										96	108
Tamarack									2										2
Upland Hdwds								34											34
Total	134	28	399	238	60	22	72	37	50	66		28	31					114	1279

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

AUSABLE STATE FOREST

GLADWIN FOREST MGT UNIT

GLADWIN COUNTY

COMPARTMENT: 59

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	263						8																				271
V Bog or Marsh			2																								2
G Grass					18																						18
J Jack Pine							158									5											163
L Lowlnd Brush									111																		111
P Lowlnd Poplr										57																	57
N Marsh											3																3
Q Mx Swmp Cnfr												49															49
O Oak														430													430
R Red Pine																31											31
E Swamp Hrdwds																			108								108
T Tamarack																					2						2
M Upland Hdwds																									34		34
Total	263		2		18		166		111	57	3	49		430		36				108	2				34		1279

AUSABLE STATE FOREST

GLADWIN FOREST MGT UNIT

GLADWIN COUNTY

COMPARTMENT: **59**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	2634 Cds	Hardwood	906 Cds
Hardwood	573 Mbf	Hardwood	56 Mbf
Softwood	2041 Cds	Softwood	797 Cds
Softwood	301 Mbf	Softwood	41 Mbf
Sum TotVol	6423 Cds	Sum CutVol	1897 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	128
1279			

GLADWIN FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 59

Entry Year: 2011

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status	
1	A5	14	39	50	aspen (upland)	immature	final harvest	2	natural regeneration		
comnts Fmd : The stand has some drainages running through it. This is an off site for trembling aspen. This stand is next to stand 21 of compartment 58 YOE 2008. This stand is scheduled for harvest and may want to add this stand to that sale.											
8	O5	24	53	50	oak	mature	final harvest	1	natural regeneration		
comnts Fmd : The trembling aspen has poor form and the stand itself is quiet variable. Final Harvest the stand retaining oak less than 4 inches DBH, cut all other species to 2 inches DBH. Plant the 1-2 chain along Mosquito Alley Truck Trail with jack pine. Retention will be a 1/2 to 1 Chain buffer around maintained wildlife openings. The grassy opening are not to be used for landings. The stand is expected to regenerate to a medium stocked stand of oak and aspen, if stand does not regenerate interplant jack pine.											
10	A4	8	41	50	jack pine	immature	final harvest	1	planting		
comnts Fmd : The stand is variable with areas that are well stocked and areas that are poorly stocked. The terrain is hummocky. It should be Final Harvested with stand 110 and then interplanted with red pine where possible. Because of the terrain, it may not be able to be trenched. Some regeneration is expected but not enough to reach medium to full stocking.											
11	A4	5	53	60	aspen (upland)	mature	final harvest	2	planting		
comnts Fmd : The stand has scattered black and choke cherry in it with some areas of good timber. These areas are heavy to aspen with some oaks. It could be harvested which may increase the aspen component. The volume of the stand is not sufficient if harvested alone it will need to be included in a larger sale. When it is harvested, clear cut to 2 inches DBH, retain some oak and cherry for mast. The stand will need to be interplanted with red pine after it has been harvested.											
12	R6	10	53	55	red pine	immature	final harvest	1	planting		
comnts Fmd : The stand is ready for a row thinning but the rows curve and they are difficult to follow. Final Harvest the stand and plant to red pine. The stand was under planted and in 1984 was released via aerial spraying of herbicide. If the stand is thinned, it will start to convert to oak as it is doing in the stand where the crown closer is around 75%. The retention should be concentrated along the road to minimize visual impact of harvest.											
38	J6	11	52	50	jack pine	mature	final harvest	1	natural regeneration		
comnts Fmd : The terrain in the stand is hummocky and has the ground cover of sheep laurel, blueberry and some leatherleaf. There are some definite areas of very wet ground. The stand does look like it dries out in late summer. Final Harvest the stand to 2 inches DBH in late summer, try to have the branches left. Because of the moist ground and semi-serotinous cones if the branches are left, the stand should regenerate well. However, if natural regeneration does not occurred the stand will have to be interplanted to jack pine.											
101	R9	4	49	60	red pine	mature	final harvest	1	natural regeneration		
comnts Fmd : The stand has already been set up for harvest with stand 31 of compartment 58 YOE 2008. This treatment was approved at the 2008 compartment review on 12/15/06. The retention in the stand is about 10%.											
106	M6	34	60	55	northern hardwood	immature	final harvest	1	natural regeneration		
comnts Fmd : The terrain is hummocky but dry. It needs to be harvested in dry summer through winter as a 2-inch spec clear cut. The retention should be kept along the L-Type drainages. However, it should not exceed 3% by area. The stand is expected to regenerate naturally, but if not interplant with jack pine. The access to the stand is from the west through stand 3.											
108	R6	13	53	60	red pine	immature	final harvest	1	planting		
comnts Fmd : This stand was under planted with red pine. Harvest the stand as a 2-inch spec clearcut retaining some of the red pine for visual. The hardwoods in the stand are too heavy to remove with out doing significant damage to the residual red pine. Therefore, the stand is to be converted to hardwoods. The retention should be concentrated along the road to minimize visual impact of harvest. It is expected to regenerate naturally to a mixture of aspen, oak, and red maple, if not interplant red pine.											
110	J6	5	53	48	red pine	immature	final harvest	1	planting		
comnts Fmd : The jack pine in the stand appears to have been open grown and has heavy branches all the way to the ground. Harvest the stand as a 2-inch spec clearcut and replant to red pine. Retention should not be considered because of how small and narrow the stand is.											
Total Acres.....		128									

**Proposed Treatments
With Limiting Factors**

Compartment: 59

Entry Year: 2011

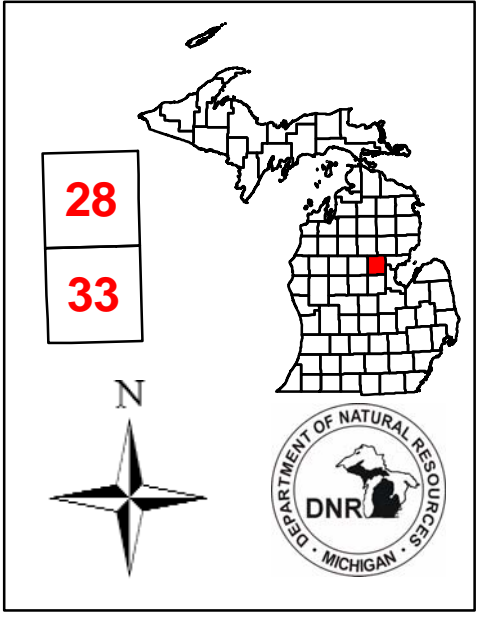
Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
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TREATMENT LIMITING FACTORS:

Total Acres..... 0

Compartment 59
 T19N, R2E, Sec. 28, 33
 County: Gladwin
 Unit: Gladwin
 YOE: 2011
 Acres: 1,279 GIS Calculated
 Stand Examiner: Steven Nyhoff
 Map Revised: 10/29/2009
 Map Phase: Pre-Review

Covertypes & Treatment Map

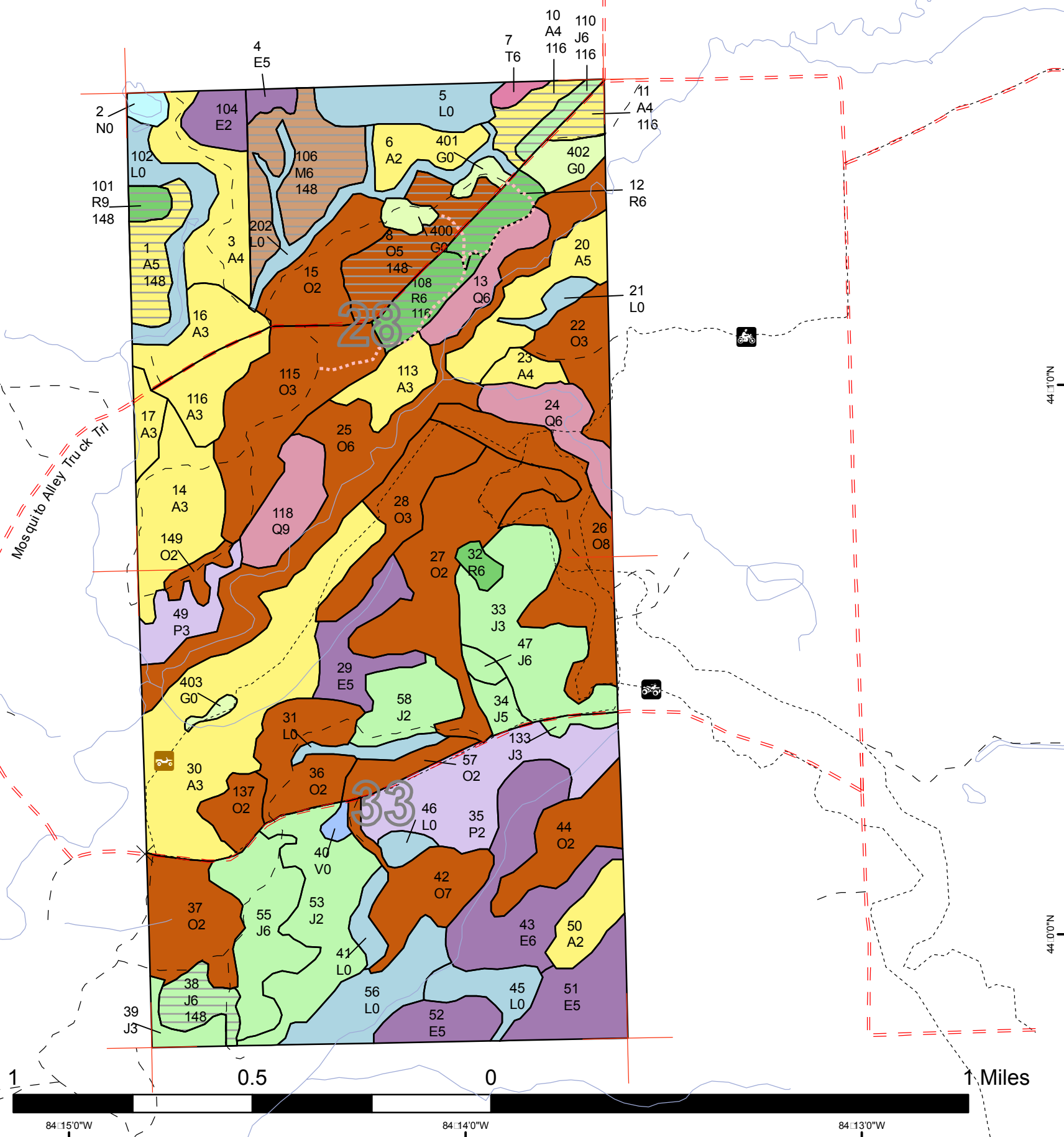


Legend

—	Miris Corners	■	A - Aspen
- - -	County Gravel Roads	■	E - Swamp Hardwoods
- - -	Poor Dirt Roads	■	G - Grass
⋯	Closed Roads	■	J - Jack Pine
⊗	Gates	■	L - Lowland Brush
---	Trails	■	M - Northern Hardwoods
⊗	ORV Trails	■	N - Marsh
⊗	ORV Routes	■	O - Oak
⊗	MCCCT Trails	■	P - Balsam Poplar, Swamp Aspen, Swamp White Birch
—	Water Features	■	Q - Mixed Swamp Conifers
□	Stand Boundaries	■	R - Red Pine
		■	T - Tamarack
		■	V - Bog or Muskeg

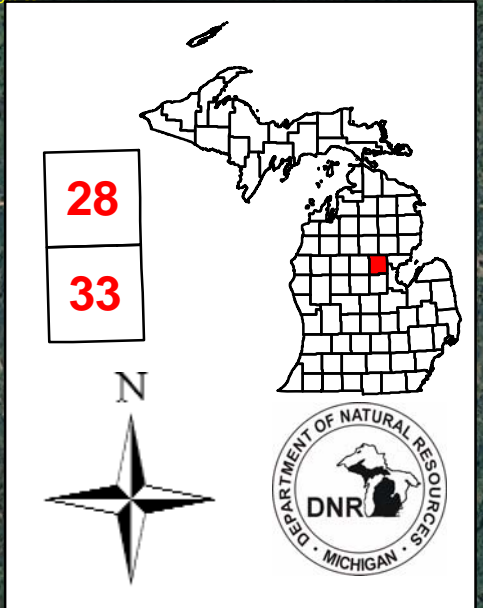
Treatments

▨	116 - Final harvest/Planting
▨	148 - Final harvest/Natural regeneration/Other (see comments)



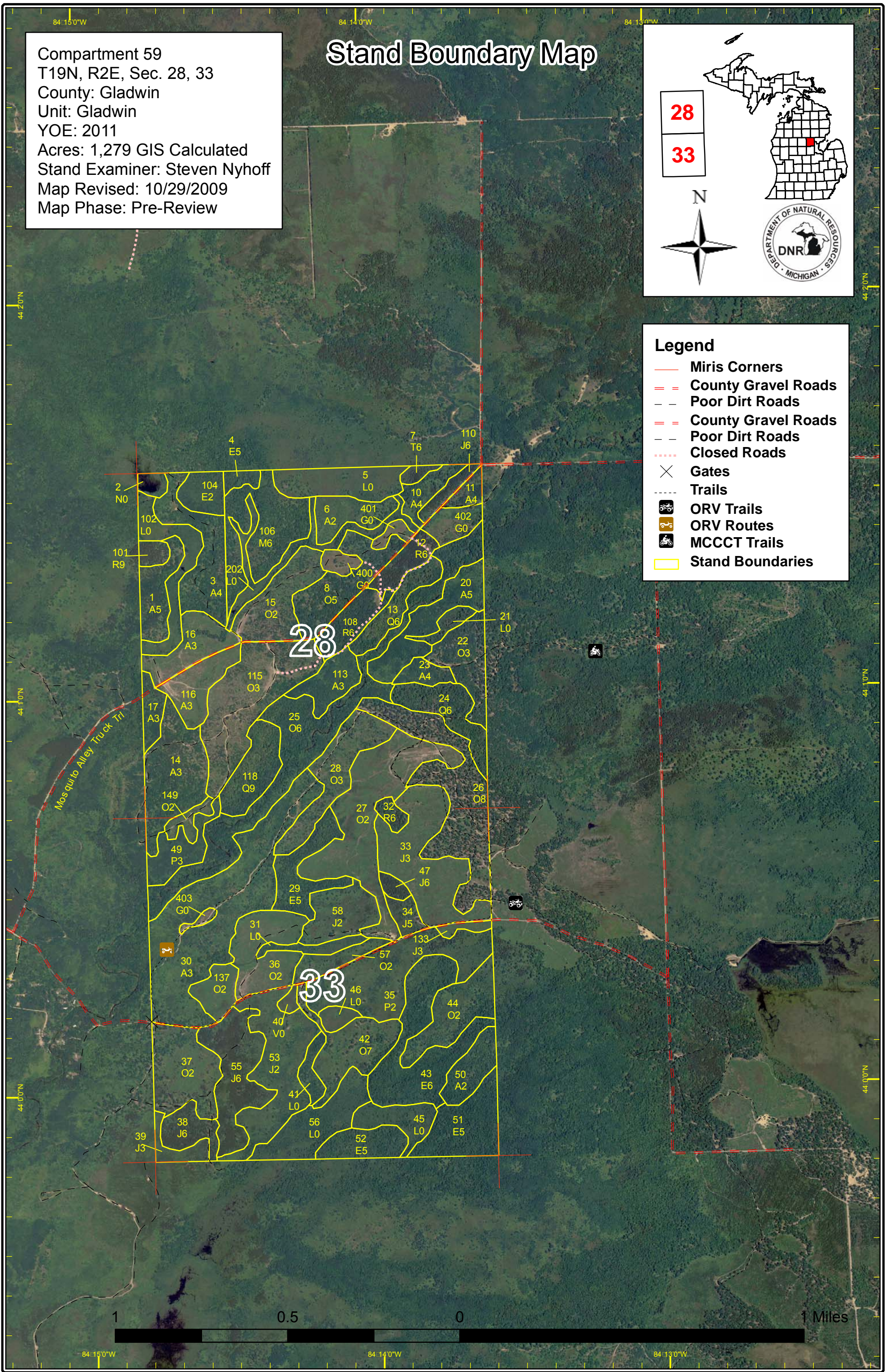
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Stand Boundary Map



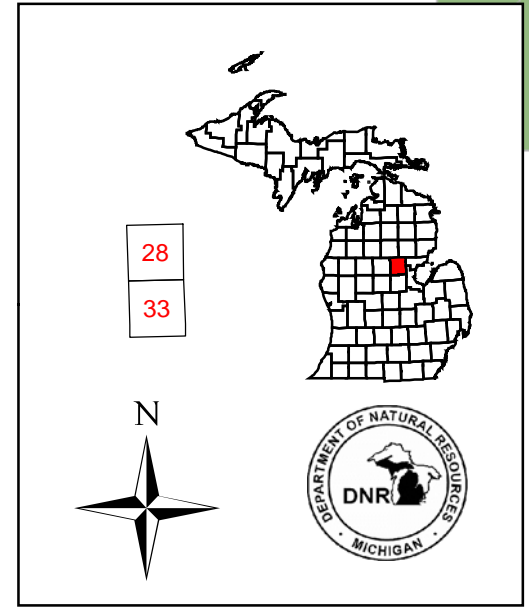
Legend

- Miris Corners
- = County Gravel Roads
- - Poor Dirt Roads
- = County Gravel Roads
- - Poor Dirt Roads
- ⋯ Closed Roads
- ⊗ Gates
- ⋯ Trails
- ORV Trails
- ORV Routes
- MCCCT Trails
- Stand Boundaries



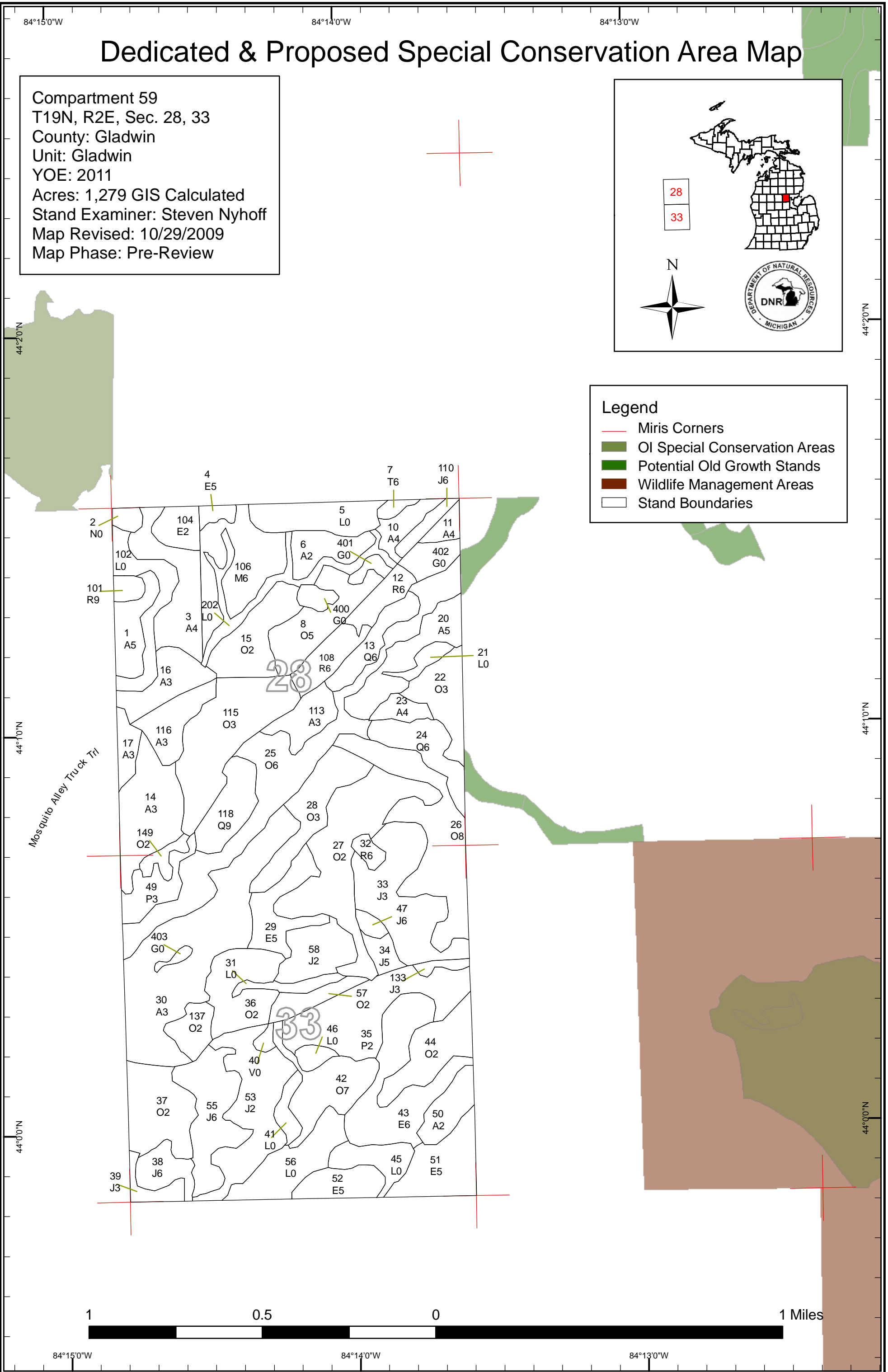
Dedicated & Proposed Special Conservation Area Map

Compartment 59
 T19N, R2E, Sec. 28, 33
 County: Gladwin
 Unit: Gladwin
 YOE: 2011
 Acres: 1,279 GIS Calculated
 Stand Examiner: Steven Nyhoff
 Map Revised: 10/29/2009
 Map Phase: Pre-Review



Legend

- Miris Corners
- OI Special Conservation Areas
- Potential Old Growth Stands
- Wildlife Management Areas
- Stand Boundaries



84°15'0"W 84°14'0"W 84°13'0"W

44°20'N

44°20'N

44°10'N

44°10'N

44°00'N

44°00'N

Mosquito Alley Truck Trl



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	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.