



**GAYLORD FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT: 54

ENTRY YEAR: 2010
Compartment Acreage: 1,015 Acres
County: ANTRIM

Revision Date: 4/14/2008

Stand Examiner: Kimberly Lentz

Legal Description: T30N R6W Sec. 5, 6, 8, & 31

Management Goals: To provide for the protection, integrated management and responsible use of a healthy, productive and undiminished forest resource base for the social, recreational, environmental and economic benefit of the State of Michigan.

Soil and Topography: Lowlands are primarily Tawas Muck. Uplands are a combination of Kalkaska Sands and sandy loams.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The east boundary of the compartment borders state ownership. The majority of the remainder borders private property.

Unique, Natural Features:

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations: The Jordan River which is a designated wild & scenic river runs through part of the compartment which is also classified under the Natural Rivers Act. The stands adjacent to the Jordan River and Green River have been nominated for a High Conservation Value Area which includes a strip 400' on either side of these waterways because of their natural river designation.

Watershed and Fisheries Considerations: The Jordan River and the Green River are both designated Natural Rivers which flow through the compartment. The Cedar River flows through section 31 and it is not a designated natural river. This compartment is within Fisheries Division's Central Lake Michigan Management Unit.

Wildlife Habitat Considerations: This compartment is primarily forested wetland with some areas of northern hardwood. A portion of a mixed swamp conifer stand is prescribed to be clearcut to increase age class diversity in this type. Trees will be left to be felled 5 years after the harvest in order to increase wood structure on the ground, which should especially help snowshoe hare. Treatments in the northern hardwoods will maintain beech for mast.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of coarse-textured glacial till and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 800 feet. Beneath the glacial drift are the Devonian Berea Sandstone and the Ellsworth and Antrim Shales. The shales are quarried for cement products elsewhere in the State. A gravel pit is located in Section 19 and potential is very good on the uplands. Oil and gas potential in the area is for the Antrim Shale gas play. Some of the State lands are in the Jordan Valley Management Area and surface use is not allowed. Most of the State lands have been developed except the JVMA and it is offset by producing wells and is probably being drained of hydrocarbons. Some State lands have been leased as nondevelopment with horizontal wells being drilled to diminish drainage issues.

Vehicle Access: The main access road into this compartment is Graves Crossing which becomes a private road in section 5. The state forest trails in section 5 have been burned or gated to prevent vehicle access. In Section 8, Pinney Bridge Road is the primary access. Section 31 has county gravel roads bordering state land. There are no other road closures recommended at this time.

Survey Needs: The proposed treatments require very little survey work.

Recreational Facilities and Opportunities: The Jordan Valley snowmobile trail runs along Pinney Bridge Road, and along M-66 on an established utility line. Swiss Hideaway private canoe livery is operated just north of Section 5 adjacent to the Jordan River. There is also a state forest campground just north of this compartment.

Fire Protection:

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**

MACKINAW STATE FOREST

GAYLORD FOREST MGT UNIT

ANTRIM COUNTY

COMPARTMENT: **54**

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 | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | 45 |
| C Cedar | | | | 35 | | | | | | | | | | | | | | | | | | | | | | | 35 |
| G Grass | | | | | 10 | | | | | | | | | | | | | | | | | | | | | | 10 |
| N Marsh | | | | | | | | | | | 11 | | | | | | | | | | | | | | | | 11 |
| Q Mx Swmp Cnfr | | | | | | | | | | | | 326 | | | | | | | | | | | | | | | 326 |
| X Non Stocked | | | | | | | | | | | | | 5 | | | | | | | | | | | | | | 5 |
| F Spruce Fir | | | | | | | | | | | | | | | | | | | 2 | | | | | | | | 2 |
| E Swamp Hrdwds | | | | | | | | | | | | | | | | | | | | 181 | | | | | | | 181 |
| U Upland Brush | | | | | | | | | | | | | | | | | | | | | | | 5 | | | | 5 |
| M Upland Hdwds | | | | | | | | | | | | | | | | | | | | | | | | 376 | | | 376 |
| Z Water | | | | | | | | | | | | | | | | | | | | | | | | | 8 | | 8 |
| W White Pine | | | | | | | | | | | | | | | | | | | | | | | | | | 11 | 11 |
| Total | 45 | | | 35 | 10 | | | | | | 11 | 326 | 5 | | | | | | 2 | 181 | | | 5 | 376 | 8 | 11 | 1015 |

MACKINAW STATE FOREST

GAYLORD FOREST MGT UNIT

ANTRIM COUNTY

COMPARTMENT: **54**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

| COMPARTMENT SUMMARY | | | |
|--------------------------|-----------|-----------------------------|---------|
| TOTAL VOLUME | | CUT VOLUME | |
| Hardwood | 3831 Cds | Hardwood | 229 Cds |
| Hardwood | 1730 Mbf | Hardwood | 106 Mbf |
| Softwood | 4390 Cds | Softwood | 226 Cds |
| Softwood | 399 Mbf | Softwood | 27 Mbf |
| Sum TotVol | 12479 Cds | Sum CutVol | 721 Cds |
| Total Cmpnt Acres | | Acres Proposed For Cut..... | 95 |
| 1015 | | | |

GAYLORD FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 54

Entry Year: 2010

| Stand | Cover Type | Acres | Age | Site Index | Mgt Obj | Condition | Method Cut | Harvest Priority | Cultural Need | FDF Status |
|---|------------|-----------|-----|------------|---------------------|-----------|---------------|------------------|---------------|------------------------------|
| 30 | M9 | 48 | 68 | 58 | northern hardwood | mature | selection | 2 | | |
| <p>comnts Fmd : Prescribed for a selection harvest. Limited access from Pinney Bridge Road due to steep hillside which is part of stand 28. Permission from adjacent private to utilize the gas pipeline road along the west boundary is preferred access. Otherwise, a new road may have to be constructed on west state boundary. RETENTION: Selection harvest will maintain 73% of the stand. Marking efforts will also be made to leave some of the minor species such as yellow birch, elm, black cherry, and all of the hemlock. Living snags or trees suitable for becoming den trees will be left such as overmature Aspen or hollow Maple & Beech.</p> | | | | | | | | | | |
| 31 | M9 | 23 | 69 | 58 | northern hardwood | mature | selection | 2 | | prescribed for fdf treatment |
| <p>comnts Fmd : 1988: WAS COMMERCIALY THINNED IN 1979. Prescribing a selection harvest. Permission from adjacent private to utilize the gas pipeline road along the west boundary is preferred access. See access notes for stand 30. RETENTION: Selection harvest will maintain 73% of the stand. Marking efforts will also be made to leave some of the minor species such as yellow birch, elm, black cherry, and all of the hemlock. Living snags or trees suitable for becoming den trees will be left such as overmature Aspen or hollow maple & beech.</p> | | | | | | | | | | |
| 44 | Q6 | 24 | 77 | 55 | mixed swamp conifer | mature | final harvest | 3 | | |
| <p>comnts Fmd : Feature swamp conifer which has developed in the understory of overmature mixed aspen. Good wildlife habitat. Wildlife has recommended a final harvest treatment of this stand to encourage snowshoe hare. Contract specifications should include leaving trees to fell for rabbit habitat five years after the harvest. There is no other retention recommended.</p> | | | | | | | | | | |
| Total Acres..... | | 95 | | | | | | | | |

**Proposed Treatments
With Limiting Factors**

Compartment: 54

Entry Year: 2010

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

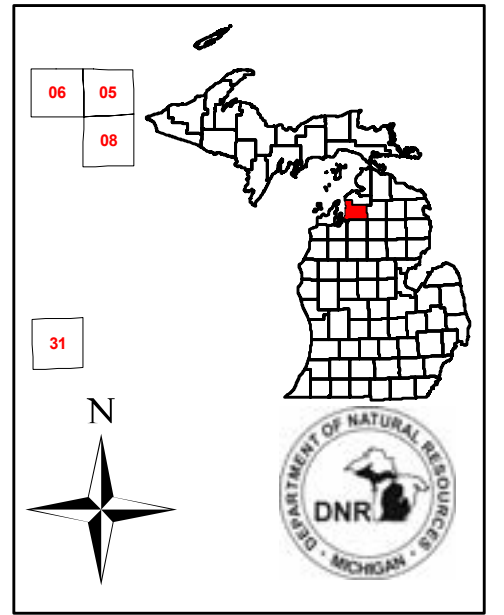
TREATMENT LIMITING FACTORS:

Total Acres..... 0

30

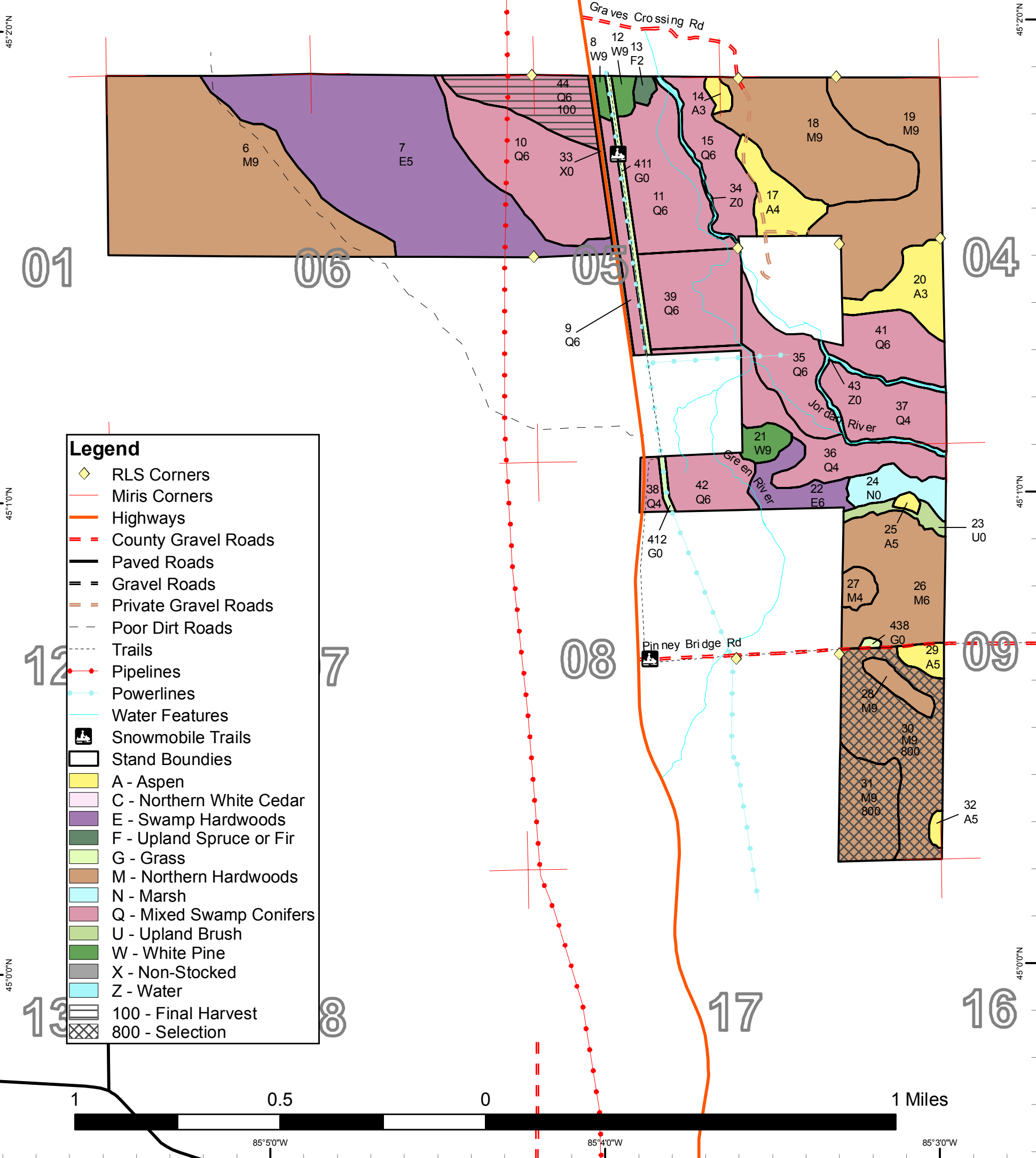
Covertime & Treatment Map

Compartment 54
 T30N, R06W, Sec. 5, 6, 8, 31
 County: Antrim
 Unit: Gaylord
 YOE: 2010
 Acres: 1,015 GIS Calculated
 Stand Examiner: Kim Lentz
 Map Revised: 6/05/2008
 Map Phase: Pre-Review



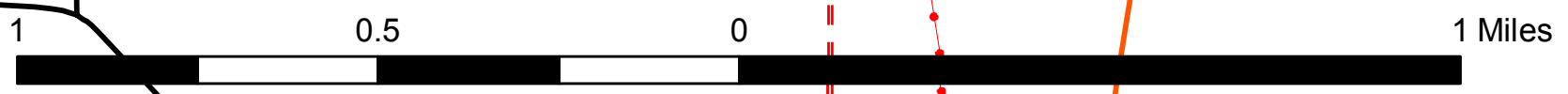
31

32



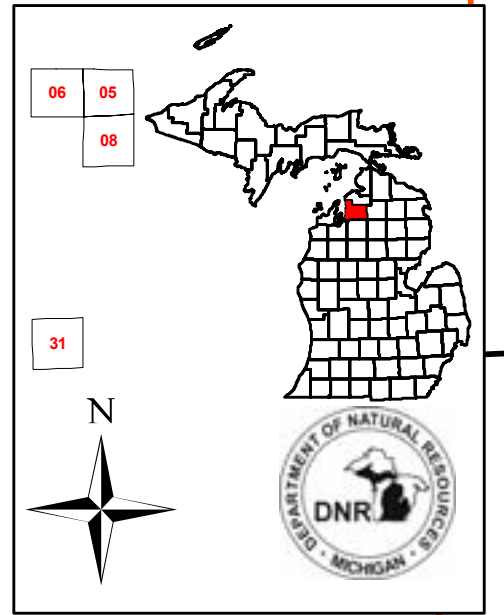
Legend

- ◆ RLS Corners
- Miris Corners
- Highways
- - - County Gravel Roads
- Paved Roads
- - - Gravel Roads
- - - Private Gravel Roads
- - - Poor Dirt Roads
- - - Trails
- Pipelines
- Powerlines
- Water Features
- Snowmobile Trails
- Stand Boundaries
- A - Aspen
- C - Northern White Cedar
- E - Swamp Hardwoods
- F - Upland Spruce or Fir
- G - Grass
- M - Northern Hardwoods
- N - Marsh
- Q - Mixed Swamp Conifers
- U - Upland Brush
- W - White Pine
- X - Non-Stocked
- Z - Water
- ▨ 100 - Final Harvest
- ▨ 800 - Selection



Covertypes & Treatment Map

Compartment 54
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 Map Revised: 6/05/2008
 Map Phase: Pre-Review



19

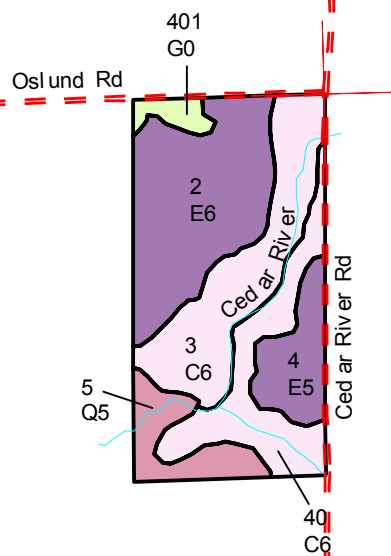
25

30

29

44°56'0"N

44°58'0"N



36

31

32

44°57'0"N

44°57'0"N

Legend

- ◆ RLS Corners
- Miris Corners
- Highways
- - - County Gravel Roads
- Paved Roads
- - - Gravel Roads
- - - Private Gravel Roads
- - - Poor Dirt Roads
- ⋯ Trails
- Pipelines
- ⋯ Powerlines
- Water Features
- ⊠ Snowmobile Trails
- Stand Boundaries
- A - Aspen
- C - Northern White Cedar
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- F - Upland Spruce or Fir
- G - Grass
- M - Northern Hardwoods
- N - Marsh
- Q - Mixed Swamp Conifers
- U - Upland Brush
- W - White Pine
- X - Non-Stocked
- Z - Water
- ▨ 100 - Final Harvest
- ▩ 800 - Selection

06

05

1

12

0.5

07

08

1 Miles

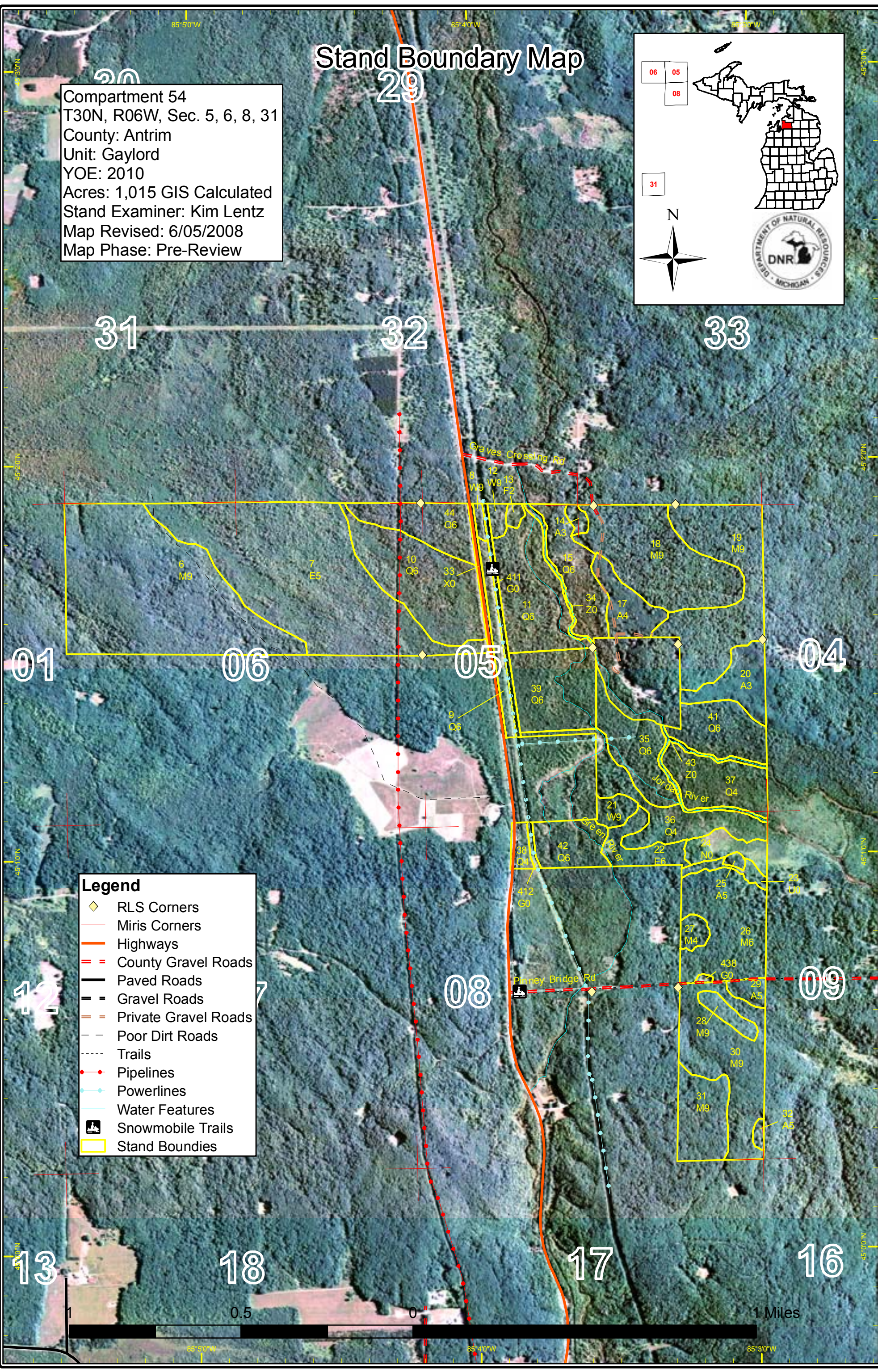
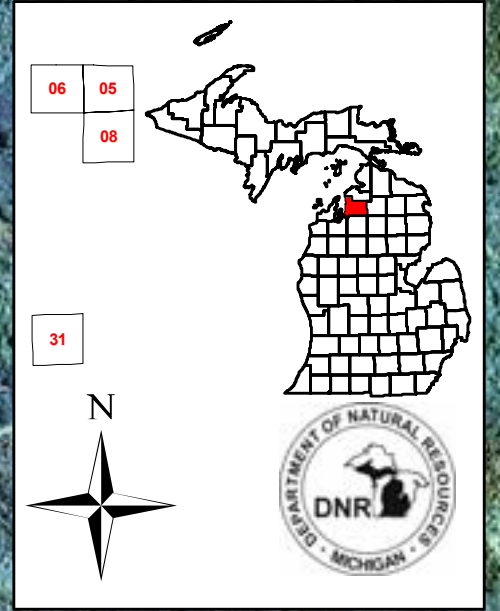
85°6'0"W

85°5'0"W

85°4'0"W

Stand Boundary Map

Compartment 54
 T30N, R06W, Sec. 5, 6, 8, 31
 County: Antrim
 Unit: Gaylord
 YOE: 2010
 Acres: 1,015 GIS Calculated
 Stand Examiner: Kim Lentz
 Map Revised: 6/05/2008
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- Legend**
- ◆ RLS Corners
 - Miris Corners
 - Highways
 - == County Gravel Roads
 - Paved Roads
 - Gravel Roads
 - Private Gravel Roads
 - Poor Dirt Roads
 - Trails
 - Pipelines
 - Powerlines
 - Water Features
 - ☛ Snowmobile Trails
 - Stand Boundaries

0.5

1 Miles

13 18

Stand Boundary Map

Compartment 54
 T30N, R06W, Sec. 5, 6, 8, 31
 County: Antrim
 Unit: Gaylord
 YOE: 2010
 Acres: 1,015 GIS Calculated
 Stand Examiner: Kim Lentz
 Map Revised: 6/05/2008
 Map Phase: Pre-Review



24

20

1

25

30

29

28

36

31

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Legend

- RLS Corners
- Miris Corners
- Highways
- County Gravel Roads
- Paved Roads
- Gravel Roads
- Private Gravel Roads
- Poor Dirt Roads
- Trails
- Pipelines
- Powerlines
- Water Features
- Snowmobile Trails
- Stand Boundaries

01

06

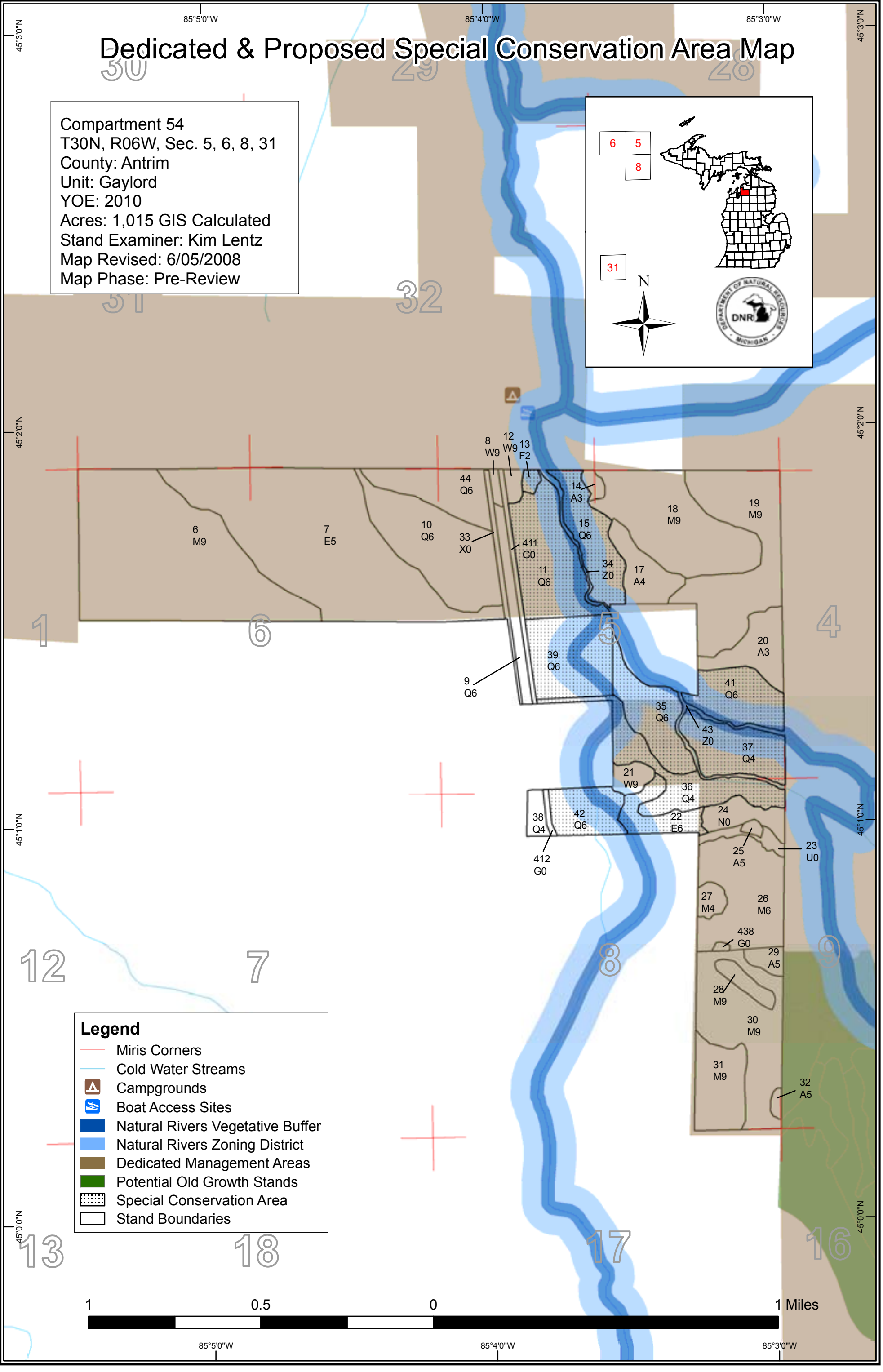
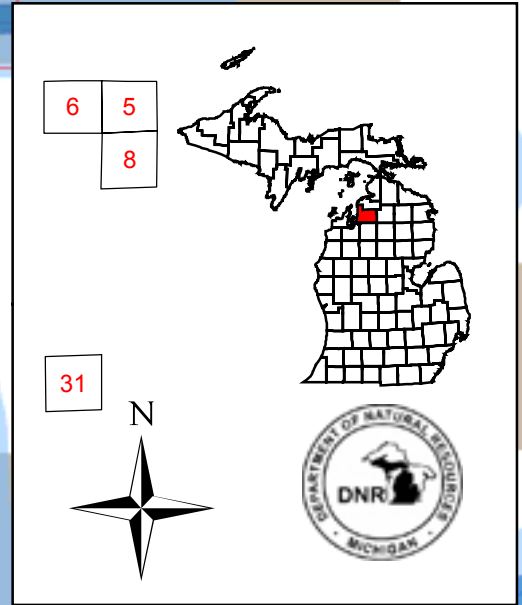
05

04

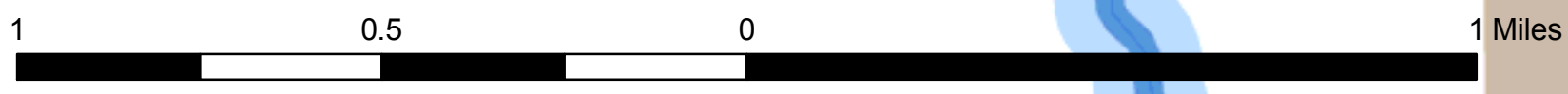
1 0.5 0 1 Miles

Dedicated & Proposed Special Conservation Area Map

Compartment 54
 T30N, R06W, Sec. 5, 6, 8, 31
 County: Antrim
 Unit: Gaylord
 YOE: 2010
 Acres: 1,015 GIS Calculated
 Stand Examiner: Kim Lentz
 Map Revised: 6/05/2008
 Map Phase: Pre-Review



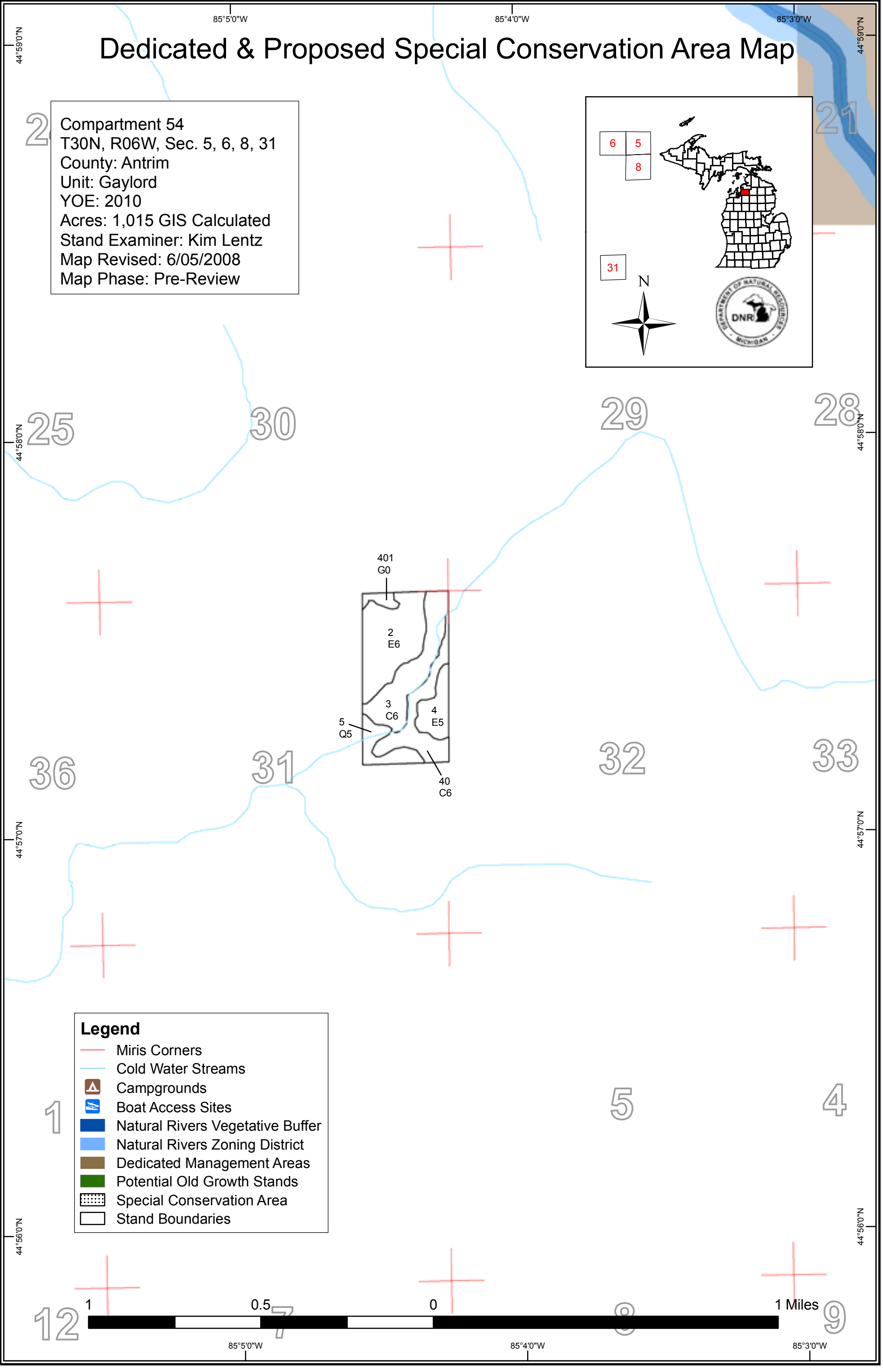
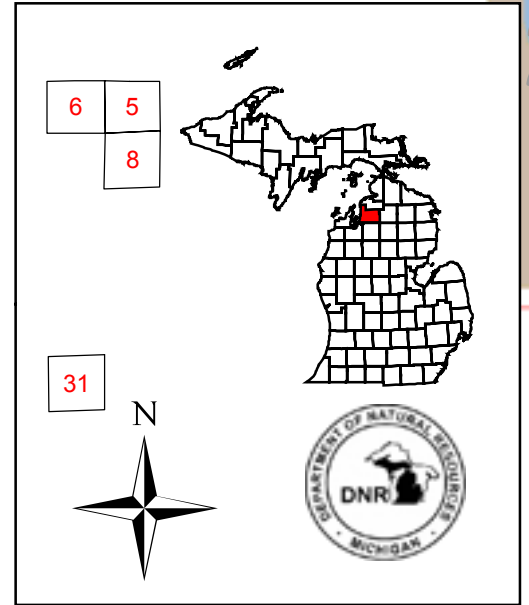
- Legend**
- Miris Corners
 - Cold Water Streams
 - Campgrounds
 - Boat Access Sites
 - Natural Rivers Vegetative Buffer
 - Natural Rivers Zoning District
 - Dedicated Management Areas
 - Potential Old Growth Stands
 - Special Conservation Area
 - Stand Boundaries



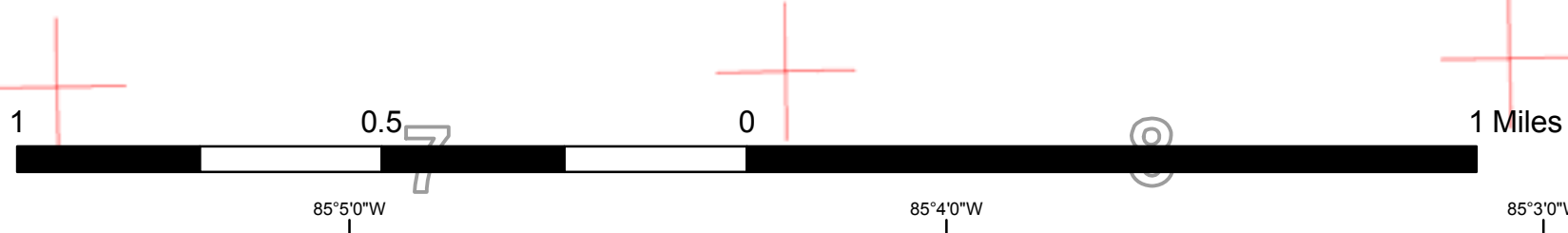
85°5'0"W 85°4'0"W 85°3'0"W

Dedicated & Proposed Special Conservation Area Map

2
 Compartment 54
 T30N, R06W, Sec. 5, 6, 8, 31
 County: Antrim
 Unit: Gaylord
 YOE: 2010
 Acres: 1,015 GIS Calculated
 Stand Examiner: Kim Lentz
 Map Revised: 6/05/2008
 Map Phase: Pre-Review



- Legend**
- Miris Corners
 - Cold Water Streams
 - ▲ Campgrounds
 - ⚓ Boat Access Sites
 - Natural Rivers Vegetative Buffer
 - Natural Rivers Zoning District
 - Dedicated Management Areas
 - Potential Old Growth Stands
 - ▨ Special Conservation Area
 - Stand Boundaries





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 | Dedicated Management Areas | Such areas are dedicated by the DNR Director for specific management uses through the promulgation of rules, as governed by Part 5, Department of Natural Resources, of the NREPA (MCL 324.502(2) and 324.504). Section 38 of the Administrative Procedures Act (MCL 24.238) provides for public requests for the promulgation of rules. This is an active program, with one proposed site currently under review by the DNR. |
| 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 | 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. |