



## GRAYLING FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 179 ENTRY YEAR: 2011

GIS Compartment Acreage: 1,397 acres County: Crawford

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**Revision Date:** 7/17/2009

**Stand Examiner:** Lucas Merrick

**Legal Description:** (South Fredric Township) T27N, R04W, Sections 28, 29, and 30

**Management Goals:** To maintain forest health, productivity, sustainability, species diversification, and structural diversity throughout the compartment while providing for National Guard training, multiple use and visual management. In addition, to maintain a healthy habitat for the endangered species *Dendroica kirtlandii* (Kirtland's Warbler), taking into account warbler management plan directives, species diversity, and visual management.

**Soils and Topography:** Terrain is level to slightly rolling. Soils consist of primarily Grayling sands. This soil is excessively drained with a low water-holding capacity.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** This compartment is comprised of primarily State owned lands with private parcels along the Manistee River Corridor. The majority of state ownership is under the 1935 long-term lease agreement L-1479 (Act 154 P.A. 1935) with the Michigan National Guard, Department of Military and Veteran Affairs.

**Unique, Natural Features:** The Manistee River is a designated "Natural River". 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, 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:** Compartment 179 is the Goose Creek Kirtland's Warbler Management Area. The Manistee River a designated "Natural River" can be found within this compartment. These areas are designated High Conservation Value Areas (HCVA).

**Watershed and Fisheries Considerations:** The Manistee River is located in this compartment.

**Wildlife Habitat Considerations:** Kirtland's warbler and prairie warbler could occur in the young jack pine. Along the lakes and streams there may be eagles, osprey, and great blue heron rookeries. There is potential for dusted skipper, grizzled skipper, and red-legged spittle bug to occur in grassy openings. Secretive locust may occur in bog habitat and surrounding uplands. Blanding's turtle, wood turtle, and massasauga rattle snake have potential to be found along the water ways.

**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 400 and 600 feet. Beneath the glacial drift are the Coldwater Shale and Marshall Sandstone. The Marshall has been used as a building stone in the past. A gravel pit is located one mile to the south and there is good potential. The compartment is not currently leased.

**Vehicle Access:** Access to the compartment is excellent by way of county and forest roads.

**Survey Needs:** None at this time.

**Recreational Facilities and Opportunities:** Dispersed recreation occurs throughout. Portions of the Fredric ORV Trail as well as Snowmobile Trail # 79 (Frederic Route) traverse the compartment.

**Fire Protection:** There is potential for extreme fire behavior due to fuel types. County roads and the Manistee River should provide adequate fuel breaks for fire of moderate to lower intensity.

**LOTS Compartment Acreage:** 1394 acres

- **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**

# Cover Type & Treatment Map

Compartment 179  
 T27N, R04W, Sec. 28, 29, 30  
 County: Crawford  
 Unit: Grayling  
 YOE: 2011  
 Acres: 1,397 GIS Calculated  
 Stand Examiner: Lucas Merrick  
 Map Revised: 8/12/2009  
 Map Phase: Pre-Review

**Legend**

- Miris Corners
- Highways
- Paved Road
- County Gravel Road
- Gravel Road
- Poor Dirt Road
- Powerlines
- Plow Lines
- Intermittent Stream/Drain
- Stream
- Trails
- ORV Trails
- ORV Routes
- Motorcycle Trails
- Snowmobile Trails
- State Highway
- Lakes and Rivers

**Forest Stands**

**Level 3**

- 412 - Oak Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 431 - Upland Mixed Forest

30 29 28

N

**Stand #** 23

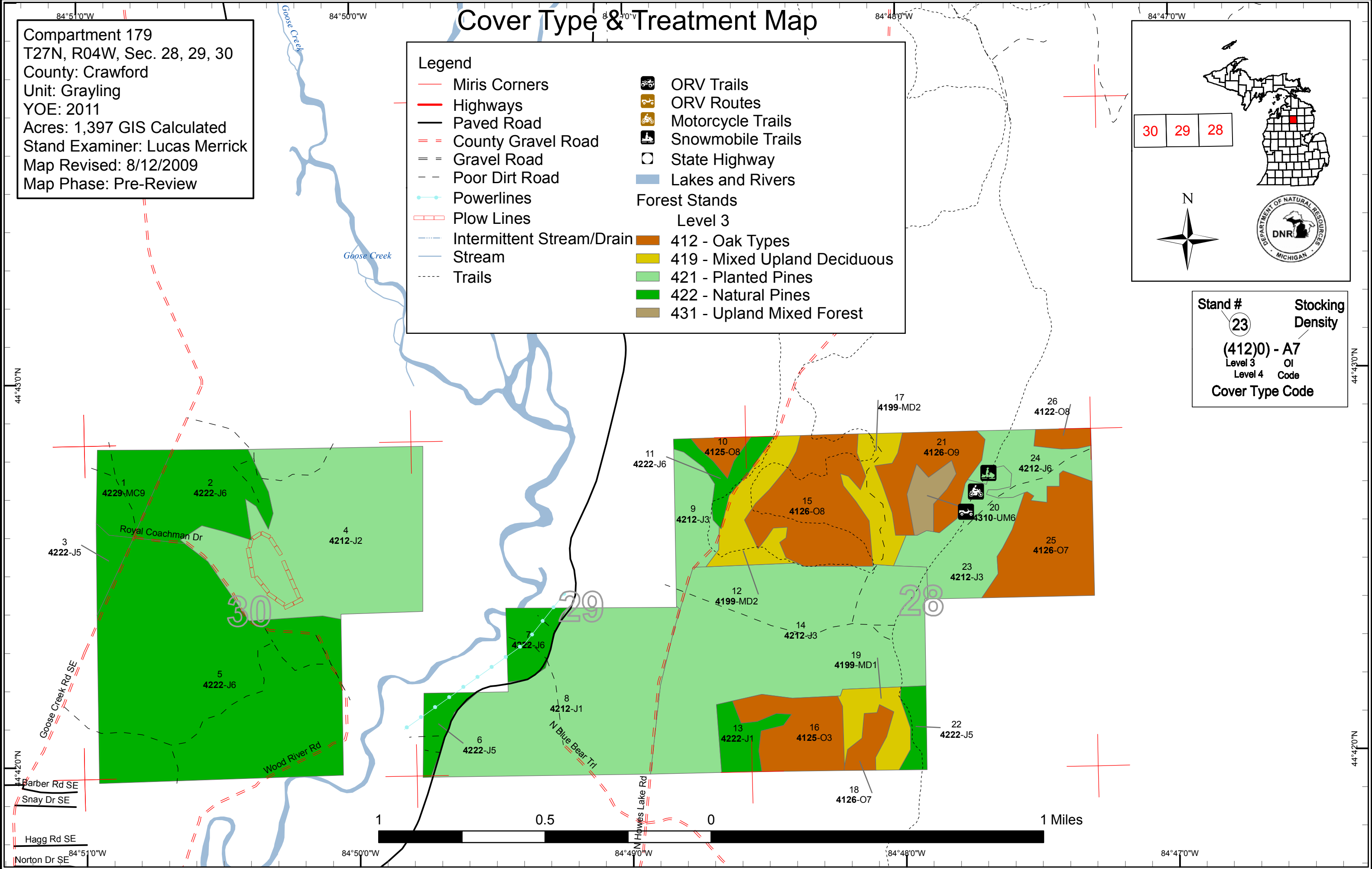
**Stocking Density**

**(412)0 - A7**

Level 3 OI

Level 4 Code

**Cover Type Code**



# Stand Boundary Map

Compartment 179  
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**Legend**

- Miris Corners
- Highways
- Paved Road
- County Gravel Road
- Gravel Road
- Poor Dirt Road
- Powerlines
- Plow Lines
- Intermittent Stream/Drain
- Stream
- Trails
- ORV Trails
- ORV Routes
- Motorcycle Trails
- Snowmobile Trails
- State Highway
- Stand Boundaries

**Forest Stands**

**Level 3**

- 412 - Oak Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 431 - Upland Mixed Forest

30 29 28

N

**Stand #** 23

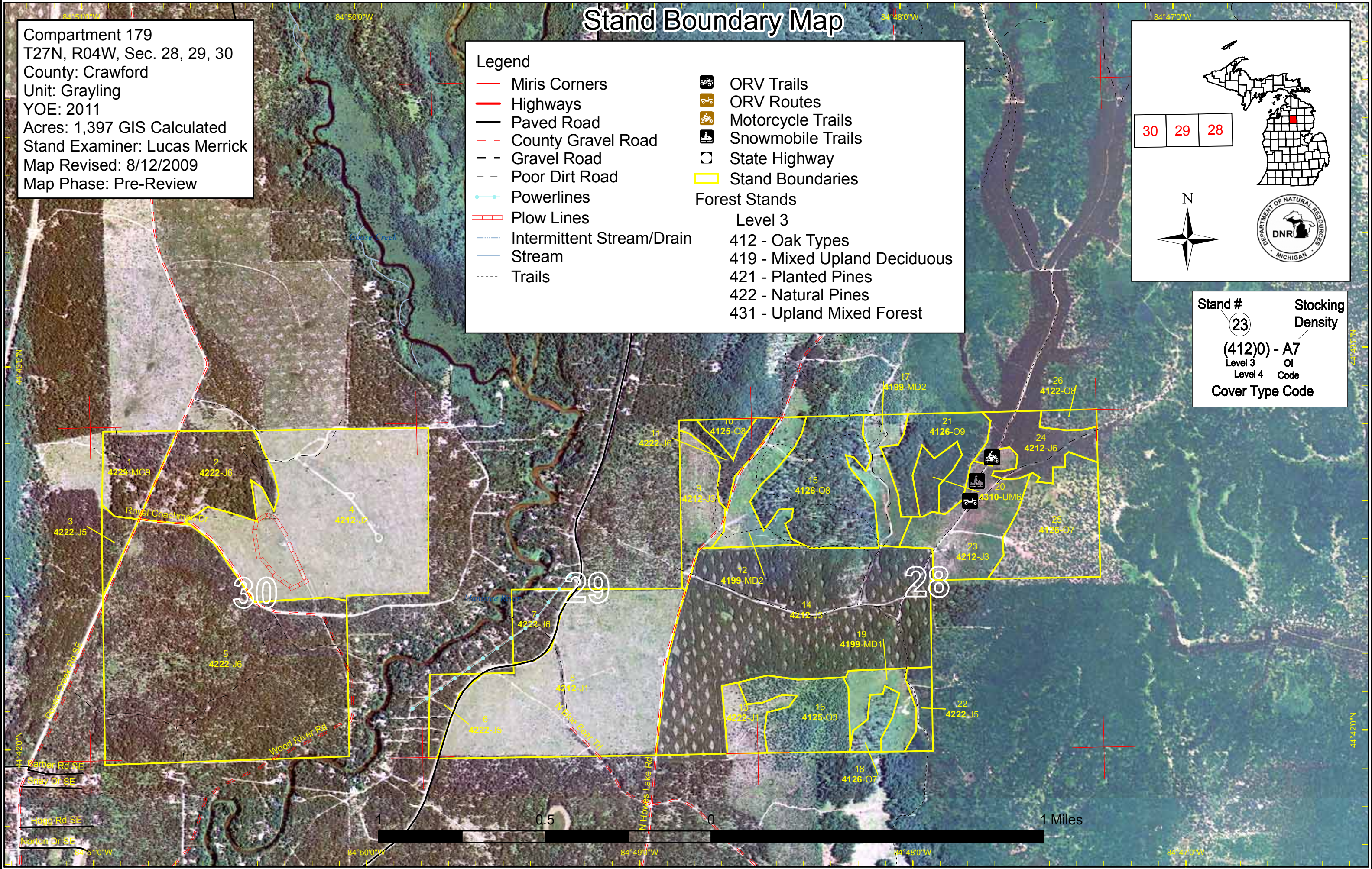
**Stocking Density**

(412)0 - A7

Level 3 OI

Level 4 Code

**Cover Type Code**



# Dedicated & Proposed Special Conservation Area Map

Compartment 179  
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**Legend**

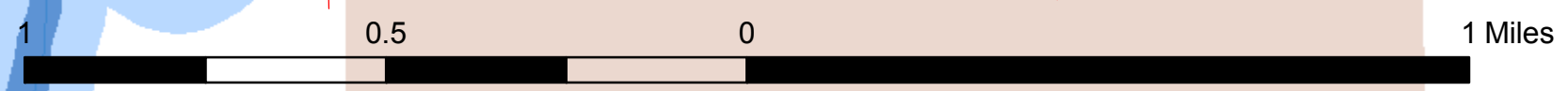
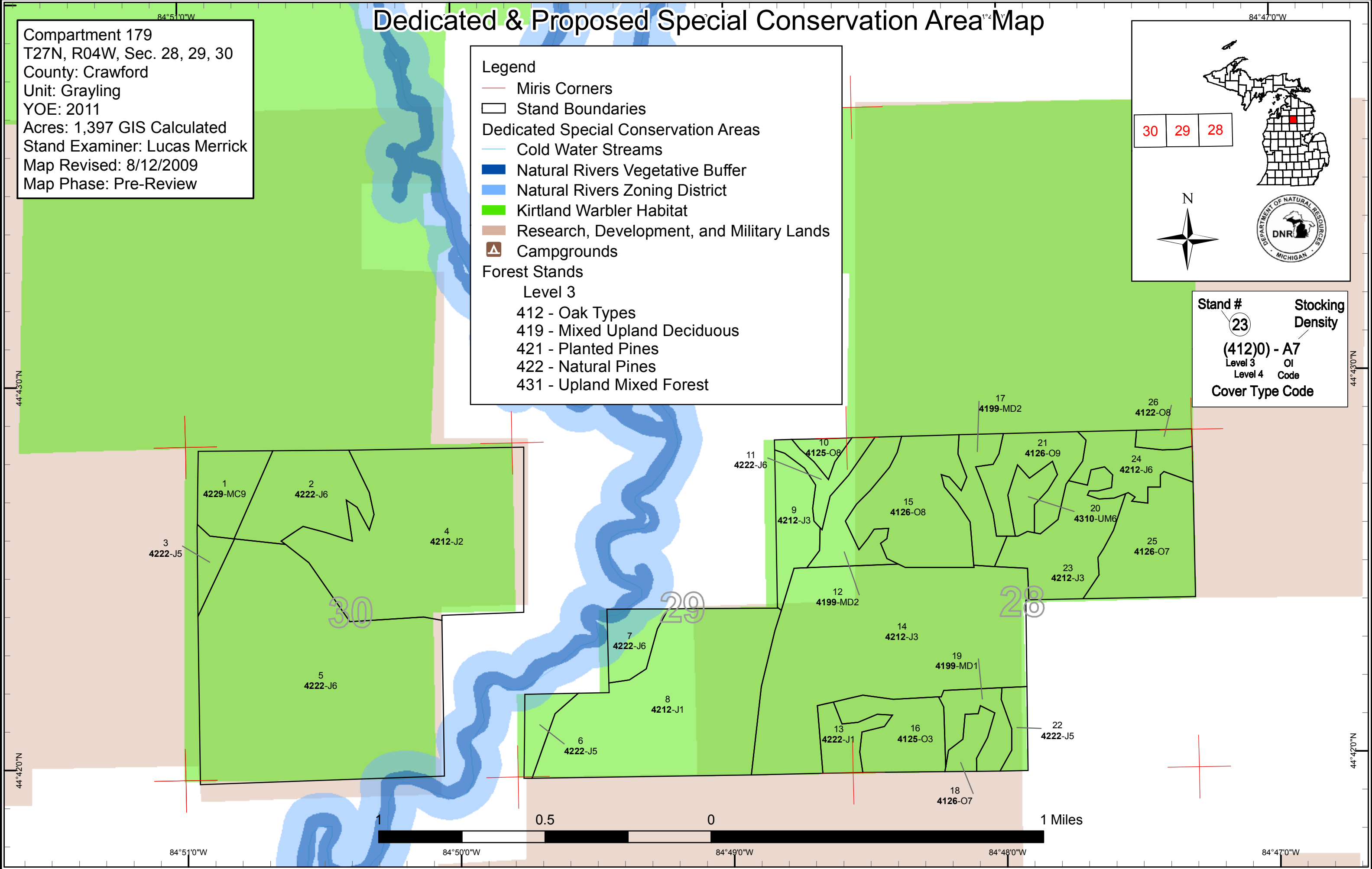
- Miris Corners
- Stand Boundaries
- Dedicated Special Conservation Areas**
- Cold Water Streams
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Kirtland Warbler Habitat
- Research, Development, and Military Lands
- ▲ Campgrounds
- Forest Stands**
- Level 3**
- 412 - Oak Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 431 - Upland Mixed Forest

30 29 28

N

DEPARTMENT OF NATURAL RESOURCES  
DNR  
MICHIGAN

**Stand #**  
 23  
**Stocking Density**  
 (412)0 - A7  
 Level 3 OI  
 Level 4 Code  
**Cover Type Code**



84°51'0"W 84°50'0"W 84°49'0"W 84°48'0"W 84°47'0"W

44°43'0"N

44°43'0"N

44°42'0"N

44°42'0"N



S  
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a  
n  
d

Grayling Mgt. Unit  
Inventory Method: IFMAP

**PROPOSED TREATMENTS  
NO LIMITING FACTORS**

Compartment: 179

Entry Yr: 2011

Date 08/12/2009



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
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Rev  
Cmnt:

Rev  
Spec:

Next  
Steps:

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**Total Treatment  
Acreage Proposed: 0**

S  
t  
a  
n  
d

Grayling Mgt. Unit  
Inventory Method: IFMAP

**PROPOSED TREATMENTS  
WITH LIMITING FACTORS**

Compartment: 179

Entry Yr: 2011

Date 08/12/2009



Treatment Name	Acres	Stage1 Cover Type	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Page 1 of 1
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Limiting Factor  
and Comment:

Rev  
Cmnt:

Rev  
Spec:

Next  
Steps:

No Treatment  
Reason

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**Total Treatment  
Acreage Proposed: 0**



**PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS**

\* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

Inventory Method: IFMAP

Stand	SCA Name	Acres	Comments



## 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	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.