



COMPARTMENT REVIEW PRESENTATION *GAYLORD FOREST MANAGEMENT UNIT*

COMPARTMENT: 055

ENTRY YEAR: 2014

ACREAGE:

COUNTY: Antrim

Revision Date: 2/28/2012

Stand Examiner: Lucas Merrick

Legal Description: Antrim County, Chestonia Township, T30N, R06W, Sections 4, 9, 16, and 21

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: Topography varies from nearly level to very steep. The majority of section 16 contains steep terrain with multiple seeps found on hill sides and in the valleys. The soils consist of a Kalkaska – Montcalm Association outside of the river valley. These soils are excessively drained and well drained. Organic soils are found along the Jordan River and tributaries.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment is primarily contiguous state ownership minus a couple small in holdings. Ownership along the Jordan River in this Township is 98% public land. There are two small parcels of non-state ownership found in section 4 which should be considered priority acquisitions.

Unique, Natural Features: Red shouldered hawks are known to nest throughout the area. There is potential for goshawk and Eastern Massasauga Rattlesnake. The Jordan River and Green River may provide possible habitat for Blanding's turtle and wood turtle. This compartment also has potential for rare snails as well as rare plants of rich mesic forests.

Archeological, Historical, and Cultural Features: Potential exists for such features.

Special Management Designations or Considerations: Compartment 55 is located within the Jordan River Management Area. This area is a dedicated High Value Conservation Area (HCVA). The Jordan River, Green River, as well as associated tributaries found in sections 9 and 16 are Designated "Natural Rivers" which are also HCVA's. Per the Jordan River Management Plan approximately 1/3 of this compartment is designated as "potential old growth".

Watershed and Fisheries Considerations: This compartment contains portions of and tributaries of the Jordan River and the Green River, including Stevens Creek. Yearling steelhead are stocked by Fisheries Division into the Jordan River just upstream of this area. The Jordan River is stocked with both brown trout and steelhead; however the trout population of the Green River is supported by natural reproduction and is not stocked. To keep these two excellent trout streams in good condition it is critical that the appropriate BMP's and buffers are strictly adhered to. Adjacent wetland areas should also be protected.

Wildlife Habitat Considerations: This compartment consists of a mix of upland hardwoods and a lowland complex associated with the Jordan River and upland seeps. The lowland area is used by a variety of species including waterfowl, amphibians, and various furbearers and songbirds. The upland area consists mainly of upland hardwoods with a small component of aspen that is utilized white-tailed deer, grouse, and woodcock.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of an end moraine of coarse-textured glacial till (uplands) and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Devonian Ellsworth and Antrim Shales. These shales are quarried for cement products elsewhere in the State. One gravel pit is located on the moraine deposits to the east. All State lands located on the moraine deposits have excellent gravel potential. Oil and gas potential in the area is primarily for the Antrim Shale gas play. This is part of the Jordan Valley Management Area and development is allowed only by drilling horizontal wells from outside the JVMA. None of the State land in the compartment is currently leased for oil and gas development.

Vehicle Access: Sections 4 and 16 are closed to vehicle access. Pinney Bridge Road and Alba Highway are the best roads for compartment access. The County Road Commission abandoned the majority of Green River Road found in section 21. It is still drivable during snow free conditions as a forest road.

Survey Needs: None needed at this time.

Recreational Facilities and Opportunities: Two campgrounds are near by but not found within the compartment. Graves Crossing Campground is located in section 5 of adjacent compartment 54. Pinney Bridge Campground is located in section 10 of adjacent compartment 54. The Jordan Valley Pathway is found along the eastern edge of the compartment.

Fire Protection: The cover types found in this compartment and surrounding areas are rarely prone to large fire events. Access issues due to steep topography and/or water features are the greatest factors of concern.

Additional Compartment Information:

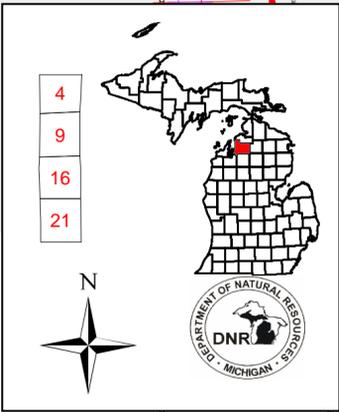
- **The following 3 reports from the IFMAP Inventory System are attached:**
 - ◆ **Cover Type by Age Class**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**

- **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 and current SCA's**

Cover Type & Treatment Map

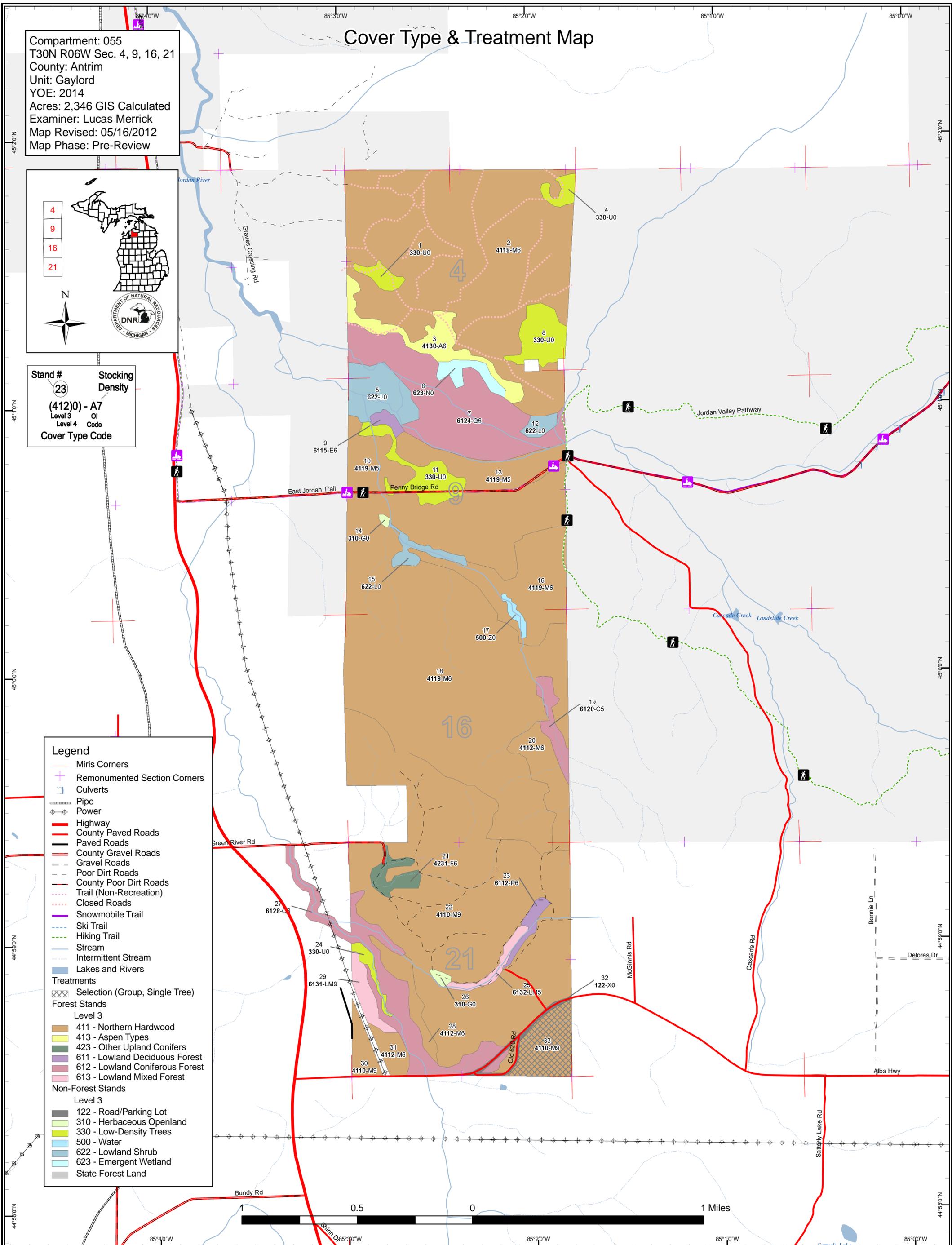
Compartment: 055
 T30N R06W Sec. 4, 9, 16, 21
 County: Antrim
 Unit: Gaylord
 YOY: 2014
 Acres: 2,346 GIS Calculated
 Examiner: Lucas Merrick
 Map Revised: 05/16/2012
 Map Phase: Pre-Review



Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

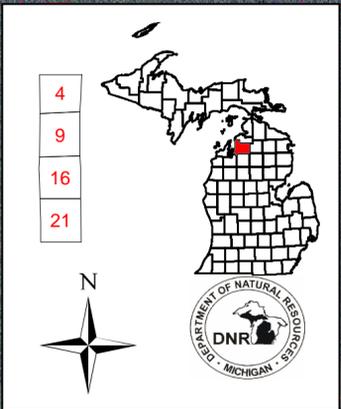
Legend

- Miris Corners
- Remonumented Section Corners
- Culverts
- Pipe
- Power
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Snowmobile Trail
- Ski Trail
- Hiking Trail
- Stream
- Intermittent Stream
- Lakes and Rivers
- Treatments**
- Selection (Group, Single Tree)
- Forest Stands**
- Level 3**
- 411 - Northern Hardwood
- 413 - Aspen Types
- 423 - Other Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- Non-Forest Stands**
- Level 3**
- 122 - Road/Parking Lot
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- State Forest Land



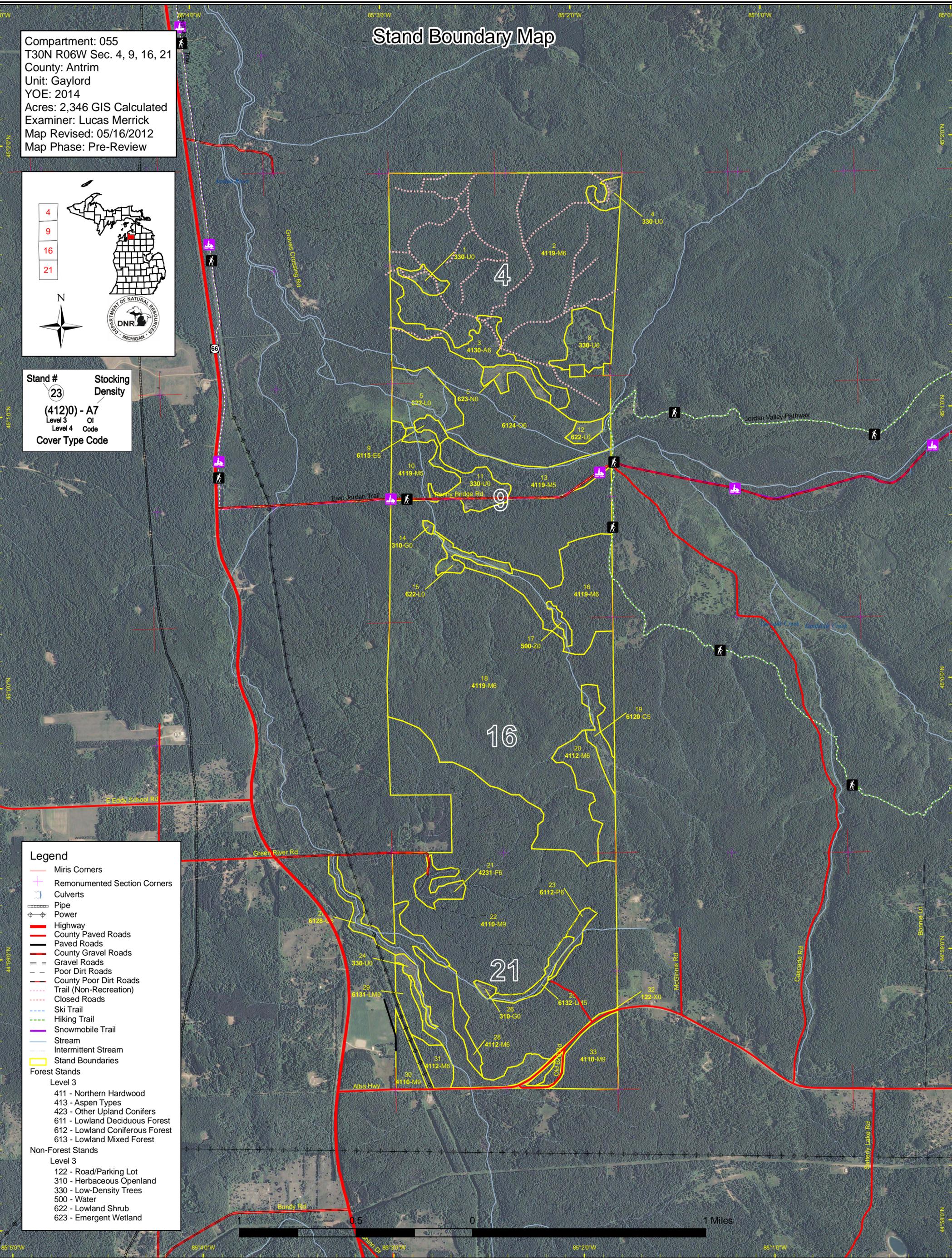
Stand Boundary Map

Compartment: 055
 T30N R06W Sec. 4, 9, 16, 21
 County: Antrim
 Unit: Gaylord
 YOE: 2014
 Acres: 2,346 GIS Calculated
 Examiner: Lucas Merrick
 Map Revised: 05/16/2012
 Map Phase: Pre-Review



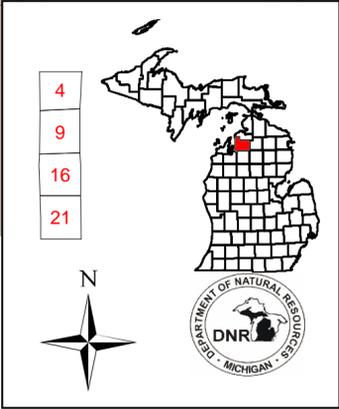
Stand # **23**
 Stacking Density
(4120) - A7
 Level 3 OI
 Level 4 Code
 Cover Type Code

- Legend**
- Miris Corners
 - ⊕ Remonumented Section Corners
 - Culverts
 - Pipe
 - ⊕ Power
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trail (Non-Recreation)
 - Closed Roads
 - Ski Trail
 - Hiking Trail
 - Snowmobile Trail
 - Stream
 - Intermittent Stream
 - Stand Boundaries
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
 - 413 - Aspen Types
 - 423 - Other Upland Conifers
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
 - 613 - Lowland Mixed Forest
- Non-Forest Stands**
- Level 3
- 122 - Road/Parking Lot
 - 310 - Herbaceous Openland
 - 330 - Low-Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland



Dedicated & Proposed Special Conservation Area Map

Compartment: 055
 T30N R06W Sec. 4, 9, 16, 21
 County: Antrim
 Unit: Gaylord
 YOE: 2014
 Acres: 2,346 GIS Calculated
 Examiner: Lucas Merrick
 Map Revised: 05/16/2012
 Map Phase: Pre-Review



Stand #
 23
Stocking Density
 (4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

- Legend**
- Miris Corners
 - Remonumented Section Corners
 - Stand Boundaries
 - Proposed Special Conservation Areas**
 - ▨ SCA - Special Conservation Area
 - ▨ SCA Removal
 - Dedicated Special Conservation Areas**
 - ▨ Natural Rivers Vegetative Buffer
 - ▨ Natural Rivers Zoning District
 - ▨ Dedicated Management Areas
 - ▨ Campgrounds
 - ▨ Boat Access Sites
 - Cold Water Streams
 - Forest Stands**
 - Level 3
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 423 - Other Upland Conifers
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
 - 613 - Lowland Mixed Forest
 - Non-Forest Stands**
 - Level 3
 - 122 - Road/Parking Lot
 - 310 - Herbaceous Openland
 - 330 - Low-Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland

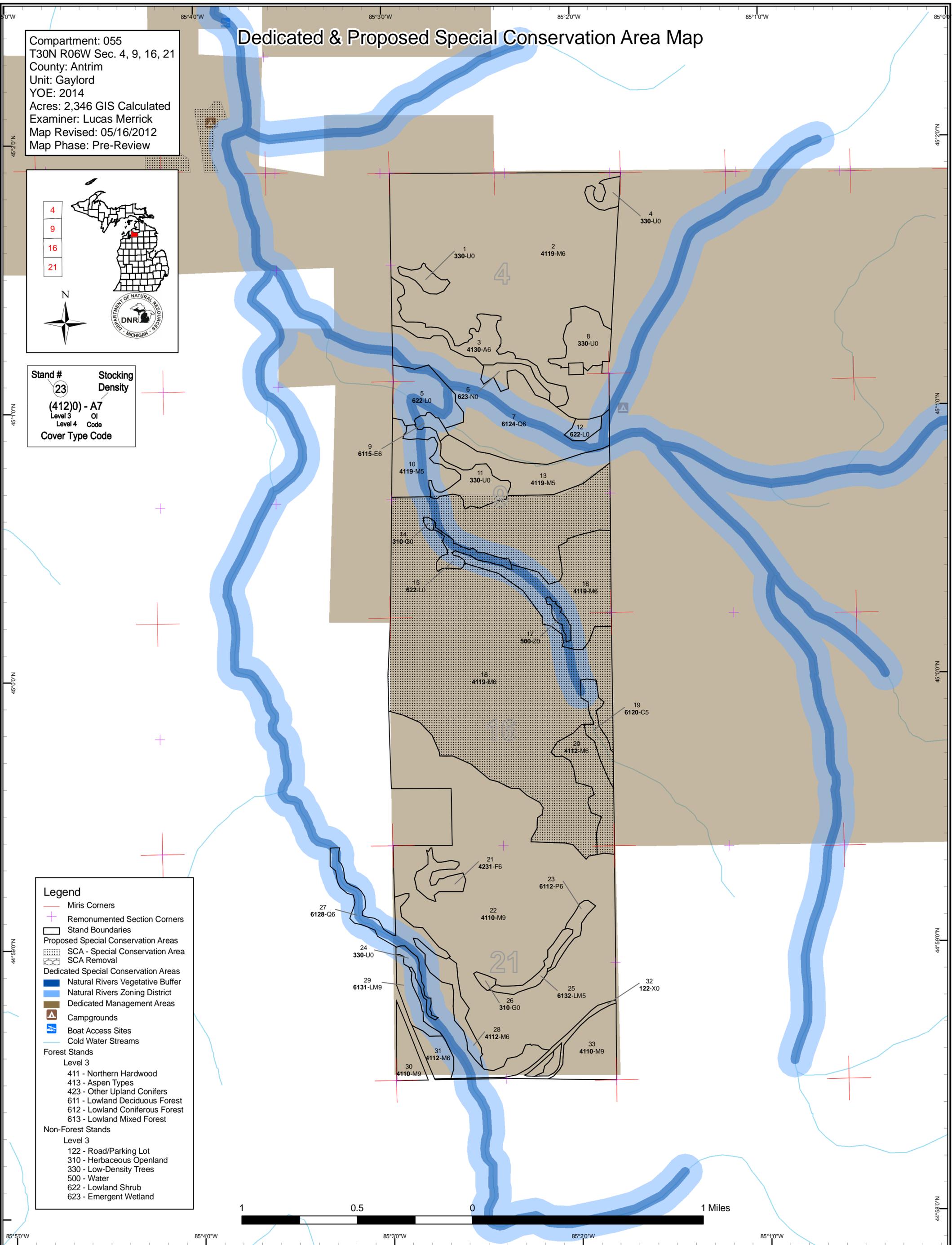


Table 1 – Total Acres by Cover Type and Age Class



	Age Class													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 +		Uneten Age
Aspen	0	0	0	0	38	0	0	0	0	0	0	0	0	0	38
Cedar	0	0	0	0	0	0	0	0	16	0	0	0	0	0	16
Herbaceous Openland	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Low-Density Trees	81	0	0	0	0	0	0	0	0	0	0	0	0	0	81
Lowland Aspen/Balsam Poplar	0	0	0	8	0	0	0	0	0	0	0	0	0	0	8
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	76	138	0	0	213
Lowland Deciduous	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	24	0	0	0	0	24
Lowland Shrub	56	0	0	0	0	0	0	0	0	0	0	0	0	0	56
Marsh	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Northern Hardwood	0	0	0	0	0	0	122	529	1211	0	0	0	0	0	1862
Upland Spruce/Fir	0	0	0	0	0	14	0	0	0	0	0	0	0	0	14
Urban	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Water	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	166	0	0	8	38	14	122	534	1227	24	76	138	0	0	2346



Table 2 – Proposed Treatment Summaries

Gaylord Mgt. Unit
Year of Entry 2014

Compartment 055
Total Compartment Acres: 2346

Acres by Treatment Type

Commercial Harvest - 39	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

		Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Northern Hardwood	0	39	0	0	0	0	0	39
Total	0	39	0	0	0	0	0	39



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
33	52055033-Cut	38.7	4110 - Sugar Maple Association	High Density Log	81	111-140	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription</u> Mark to an 80 BA residual. There is a fair white ash component. Primary focus might be to salvage majority of ash. Decline and possible EAB evident. Mark for crop tree release and make sure to establish and clean up regeneration gaps. Protect conifer component where possible. If opportunities for snag creation and/or dead and down creation present themselves take advantage of opportunities to enhance wildlife values.</p> <p><u>Other</u> Stand is hilly in the south east. A few slopes/ ridges may have to be walk through. Minor amounts of blue paint evident along southern line. Red shouldered hawks are known to occur in the area. Omitted smaller portion west of Old Alba Road from treatment.</p> <p><u>Next</u> Monitor regeneration.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2013</p>										

**Total Treatment
Acreage Proposed: 38.7**

S
t
a
n
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
52055_OutOfY OE-Cut	15.7					Harvest	Single Tree Selection	4110 - Sugar Maple Association	Fld. Tr. Bdy. - Incomplete
<u>Prescription</u> Select mark to include with Compartment 51, stand 99 treatment.									
<u>Specs:</u>									
<u>Other Comment:</u> See prescription for Compartment 51, stand 99. This is included for accessibility.									
<u>Next Steps:</u> Check for regeneration success.									
<u>Proposed Start Date:</u> 10/01/2011									
<u>Limiting Factor and No Treatment Reason</u> 4A: No merchantable products (see product standards)									
<hr/>									
Total Treatment Acreage Proposed:		15.7							

Out of YOE -- Treatments
Prescribed with No Limiting Factor

Year of Entry: 2014



Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
----------------	-------	-----------	--------------	-----------	----------	----------------	------------------	----------------------	-----------------

Prescription
Specs:

Other
Comments:

Next
Steps:

Proposed
Start Date: #Error

**Total Treatment
Acreage Proposed: 0**

S
t
a
n
d

Gaylord Mgt. Unit

5 – Forested Stands

Compartment: 055

Year of Entry: 2014



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	4119 - Mixed Northern Hardwoods	High Density Pole	438.7	78	81-110	There are still areas with orange marked trees. A few good hills, mostly in the southern portions. A large system of forest trail roads found throughout stand. Some are currently being driven by vehicles, others are blocked by blowdown and are walkable only. Some maintenance (blowdown clearing) being done on a few of the more well traveled roads.
3	4130 - Aspen	High Density Pole	37.9	40	81-110	Aspen stand found along edge of conifer swamp.
7	6124 - Lowland Spruce-Fir	High Density Pole	137.7	115	141-170	A lowland conifer swamp, open water throughout. This stand surrounds the Jordan River.
9	6115 - Lowland Ash	High Density Pole	5.2	70	51-80	A small diameter deciduous lowland stand. Extensive browse.
10	4119 - Mixed Northern Hardwoods	Medium Density Pole	37.7	72	81-110	An open area that has been filling in with trees for the last 70 years.
13	4119 - Mixed Northern Hardwoods	Medium Density Pole	52.5	72	51-80	An old open area that has been filling in with trees for last 70yrs.
16	4119 - Mixed Northern Hardwoods	High Density Pole	84.4	68	81-110	A red maple and aspen dominated hdwd stand. North Country Trail runs along eastern edge of majority of stand.
18	4119 - Mixed Northern Hardwoods	High Density Pole	623.6	80	111-140	Fairly consistent timber type with small areas of variation throughout stand (size, quality, composition). There is some extreme topography associated with this stand.
19	6120 - Lowland Cedar	Medium Density Pole	15.6	82	51-80	Small conifer swamp along the creeks. Majority of hemlock is in the north.
20	4112 - Maple, Beech, Cherry Association	High Density Pole	37.4	68	111-140	Majority of stand follows a ridge. Pretty nice hemlock established in understory.
21	42310 - Planted Spruce	High Density Pole	14.5	50	81-110	Spruce plantation thinned last entry.
22	4110 - Sugar Maple Association	High Density Log	496.7	81	81-110	A very nice looking northern hardwood stand.
23	6112 - Lowland Aspen	High Density Pole	7.9	36	81-110	An aspen stand found in transition zone between q-type and hdwds.
25	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	9.9	97	51-80	A mixed lowland type following a drainage.
27	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	75.5	100	111-140	A conifer swamp corridor w/ multiple water attributes.
28	4112 - Maple, Beech, Cherry Association	High Density Pole	19.6	81	111-140	A hardwood stand dominated by red maple. Adjacent to a conifer swamp drainage.

S
t
a
n
d

Gaylord Mgt. Unit

5 – Forested Stands

Compartment: 055
Year of Entry: 2014

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
29	6131 - Hemlock, White Pine, Maple, Birch	High Density Log	14.1	92	111-140	A sawlog lowland stand with a wonderful hemlock component.
30	4110 - Sugar Maple Association	High Density Log	15.0	81	51-80	A hardwood stand regenerating in the understory after a selection cut.
31	4112 - Maple, Beech, Cherry Association	High Density Pole	13.7	81	81-110	A northern hardwood stand. Best quality is along old railroad grade.
33	4110 - Sugar Maple Association	High Density Log	42.3	81	111-140	A nice looking northern hardwood stand.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	3301 - Low Density Deciduous Tree	8.6	N/A	Unspecified	Open area filling in w/ trees.
4	3301 - Low Density Deciduous Tree	8.2	No	Unspecified	An open stand on top of a hill starting to fill in with trees.
5	622 - Lowland Shrub	37.3	N/A	Unspecified	Recent beaver activity throughout stand.
6	6233 - Wet Meadow	12.1	No	Unspecified	Conifer swamp that has been flooded out.
8	3301 - Low Density Deciduous Tree	28.6	No	Unspecified	A open field of bracken fern and upland shrubs converting into a hdwd stand. ORV use evident.
11	3301 - Low Density Deciduous Tree	29.3	No	Unspecified	Open area filling in with trees. Spotted knappweed present. Decent mast producing shrub component.
12	622 - Lowland Shrub	6.9	No	Unspecified	open water present. cattails, grasses, and lowland shrubs.
14	3105 - Mixed Upland Herbaceous	1.2	N/A	Unspecified	An open upland area along a creek.
15	622 - Lowland Shrub	11.5	No	Unspecified	Opening with lowland and upland components. Trapping activity evident.
17	50 - Water	4.2	N/A	Unspecified	Stand created by a cascade of beaver damns. Multiple lodges.
24	3302 - Low Density Conifer Trees	6.3	N/A	Unspecified	Stand of dead cedar along creek.
26	310 - Herbaceous Openland	2.6	N/A	Unspecified	Open area w/ blackberry and open grown hardwoods.
32	122 - Road/Parking Lot	9.3	N/A	Unspecified	Alba and Old Alba roads

**7 – 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.

Stand	SCA Type	SCA Name	Acres	Comments
multiple - see	Unique Site - SCA	Jordan_Valley_AOI	752.0	This area has been identified as a unique area within the Jordan Valley. With several limiting factors such as difficult access, BMP's, and equipment limiting topography it was decided to manage this area without harvest operations. Natural forest dynamics will dictate future cover types.



8 – 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.

Conservation Area	Type	Description
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.
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.