



Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 56

Entry Year 2015

Acreage: 1,922

County Antrim

Management Area: Jordan Valley

Revision Date: 04/10/2013

Stand Examiner: Ric Barta

Legal Description:

Chestonia Township, T30N, R06W, Sections: 3, 10 & 15.

Identified Planning Goals:

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

Soil and topography:

This compartment is rolling to severely hilly. The Jordan River is the major drainage, running east to west across Section 10. Cascade and Landslide Creeks drain the southeast quadrant of the compartment and flow northwesterly into the Jordan. Small streams flow southerly out of Section 3 and northerly out of Section 15 to feed the aforementioned waterways. Soils consist primarily of sandy soils in the Kalkaska-Montcalm series on the hills, ridges and knolls with mucky/loamy soils of the Tawas series in the saturated areas in the valley bottoms where the streams occur.

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

The three sections that make up the compartment are entirely under state ownership and most of the adjacent land is as well. Adjacent private land to the north and south is undeveloped except for a few warm weather cabins.

Unique Natural Features:

The Jordan River has Natural River designation. All of this compartment except for the very northwest corner of Section 3 falls within the Jordan set-aside.

Archeological, Historical, and Cultural Features:

There are no HAL concerns assigned to this compartment.

Special Management Designations or Considerations:

The Jordan River has Natural River designation. All of this compartment except for the very northwest corner of Section 3 falls within the Jordan Valley Management Plan, which directs that it be managed primarily as a natural area. Potential exists for the occurrence of several endangered/threatened species of plants and animals.

Watershed and Fisheries Considerations:

This compartment is located in the Jordan River watershed. Portions of the Jordan River, Landslide Creek, Cascade Creek, and additional small tributaries are found within the proposed treatment area. The appropriate BMP's and Natural Rivers buffers should be followed.

Wildlife Habitat Considerations:

This compartment consists of a mix of upland hardwoods and lowland complex associated with the Jordan River and Cascade Creek. The lowland area is used by a variety of species including waterfowl, amphibians, and various furbearers and songbirds. The upland area consist mainly of northern hardwoods. This area gets hunting pressure for white-tailed deer and wild turkey.

Mineral Resource and Development Concerns and/or Restrictions

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of coarse-textured glacial till and 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 Shale. The Ellsworth is quarried for cement products elsewhere in the State. A gravel pit is located in Section 22 and the uplands appear to have good 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 surface development is not allowed. None of the State land in the compartment is currently leased for oil and gas development. A small part of Section 3 is being drained of hydrocarbons.

Vehicle Access:

There is a gated forest road coming onto State land from private land to the north that allows access to the area north of

the river. Access to the same area for the general public is limited to foot travel across the bridge at Pinney Bridge campground. The area south of the river is served by Pinney Bridge Road and Cascade Road, and a forest trail system that is rather limited due to the hilly topography of this compartment.

Survey Needs:

None at this time.

Recreational Facilities and Opportunities:

This area provides plenty of opportunity for hunting and fishing. In addition, it contains the Pinney Bridge campground and a few miles of the Jordan Valley Pathway.

Fire Protection:

Additional Compartment Information:

The following reports from the Inventory are attached:

- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

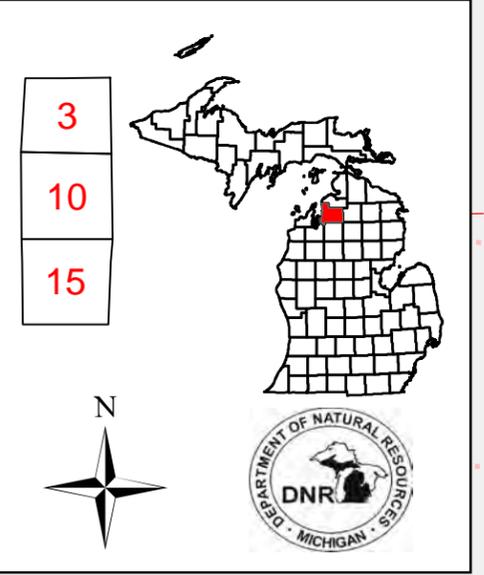
The following information is displayed, where pertinent, on the attached compartment maps:

- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatment Map

Compartment: 056
 T30N R06W Sec. 3, 10, 15
 County: Antrim
 Unit: Gaylord
 YOE: 2015
 Acres: 1,922 GIS Calculated
 Examiner: Ric Barta
 Map Revised: 03/18/2014
 Map Phase: Post-Review

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



Legend

- Remonumented Section Corners
- Miris Corners
- PLSS Corner
- Culverts
- Hiking Trails
- Snowmobile Trails
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Hiking Trail
- Snowmobile Trail
- Stream
- Intermittent Stream
- Lakes and Rivers
- State Forest Land

Treatments Post Review

- Monitoring - See Comments
- Selection (Group, Single Tree)
- Opening Maintenance
- Treatments w/ Site Condition

Forest Stands

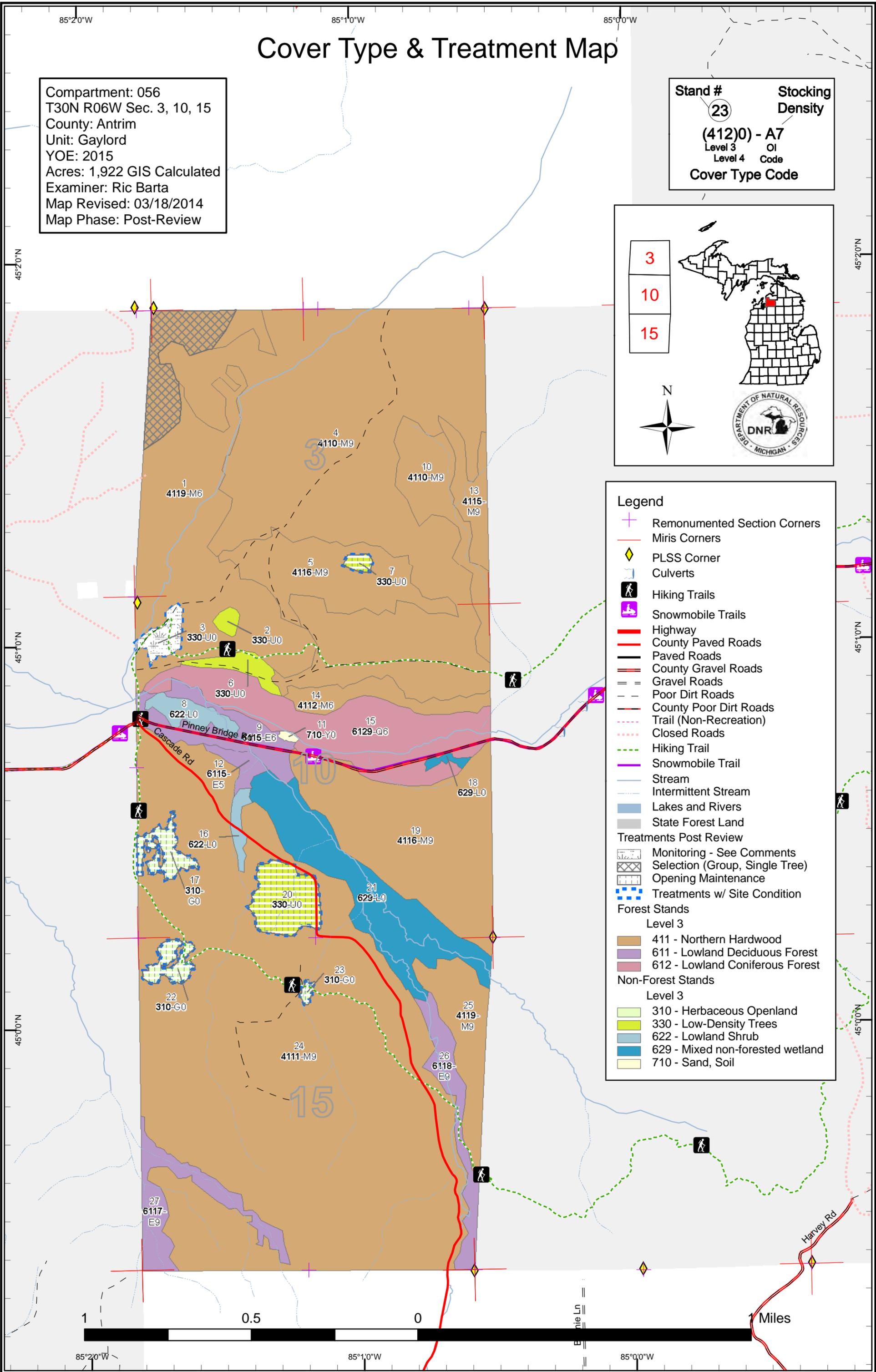
Level 3

- 411 - Northern Hardwood
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

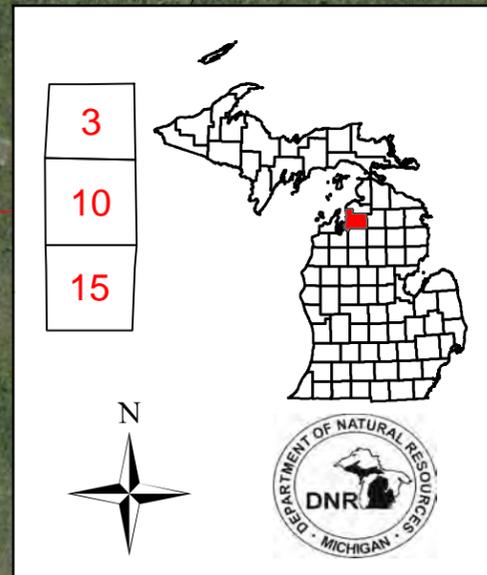
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 622 - Lowland Shrub
- 629 - Mixed non-forested wetland
- 710 - Sand, Soil



Stand Boundary Map

Compartment: 056
 T30N R06W Sec. 3, 10, 15
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Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- + Remonumented Section Corners
- Miris Corners
- ◆ PLSS Corner
- Culverts
- Hiking Trails
- Snowmobile Trails
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
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- - - Closed Roads
- - - Hiking Trail
- Snowmobile Trail
- Stream
- - - Intermittent Stream
- Stand Boundaries

Forest Stands

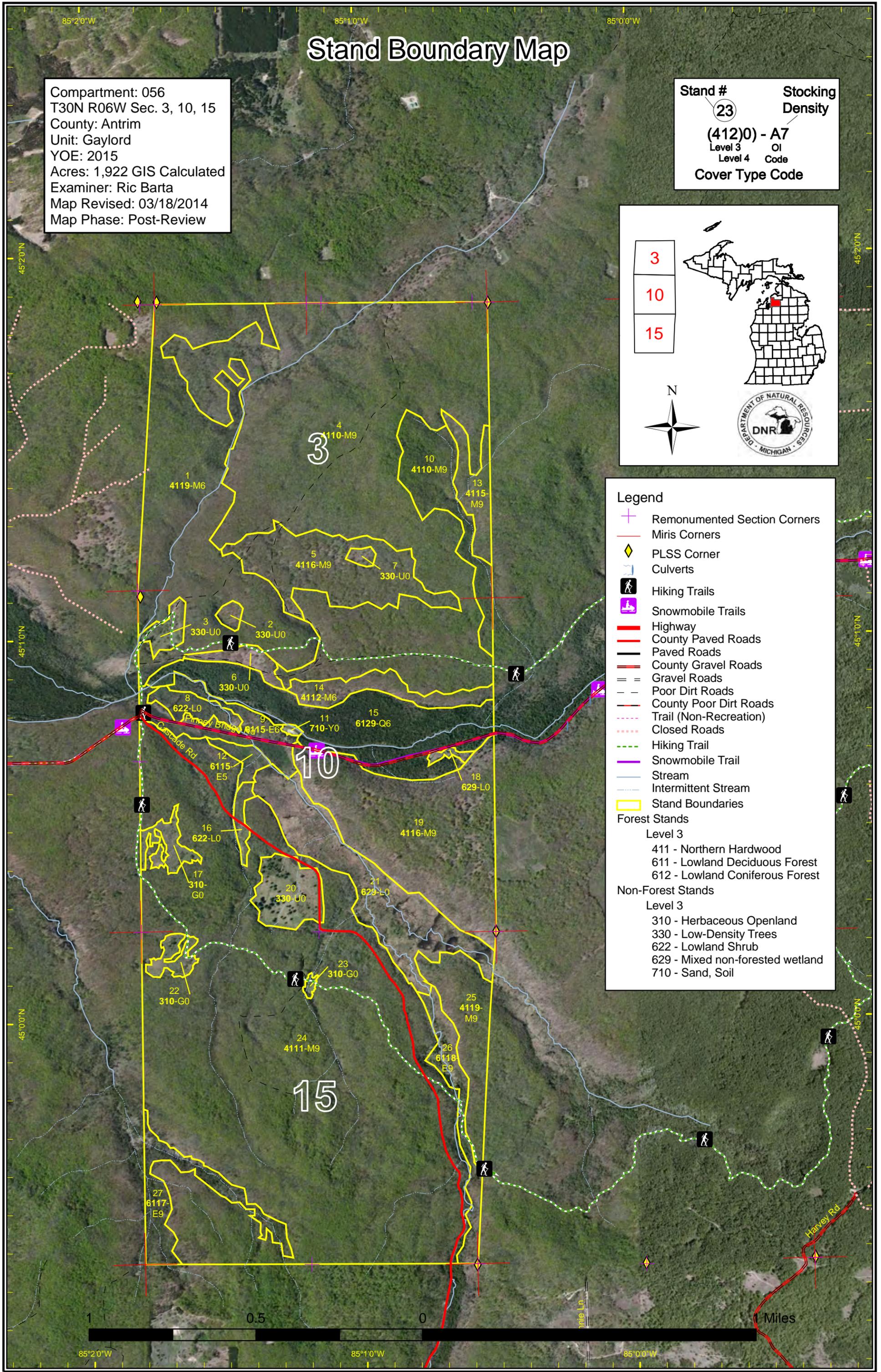
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Special Conservation Areas & Site Conditions Map

Compartment: 056
 T30N R06W Sec. 3, 10, 15
 County: Antrim
 Unit: Gaylord
 YOE: 2015
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 Examiner: Ric Barta
 Map Revised: 03/18/2014
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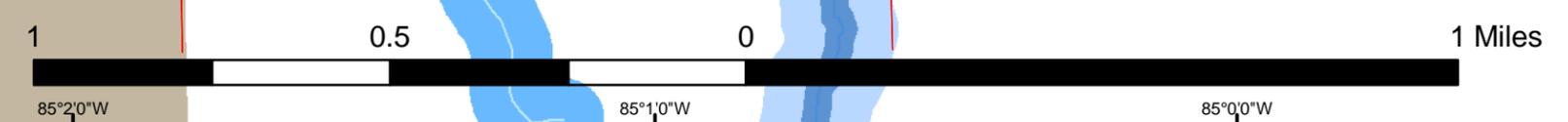
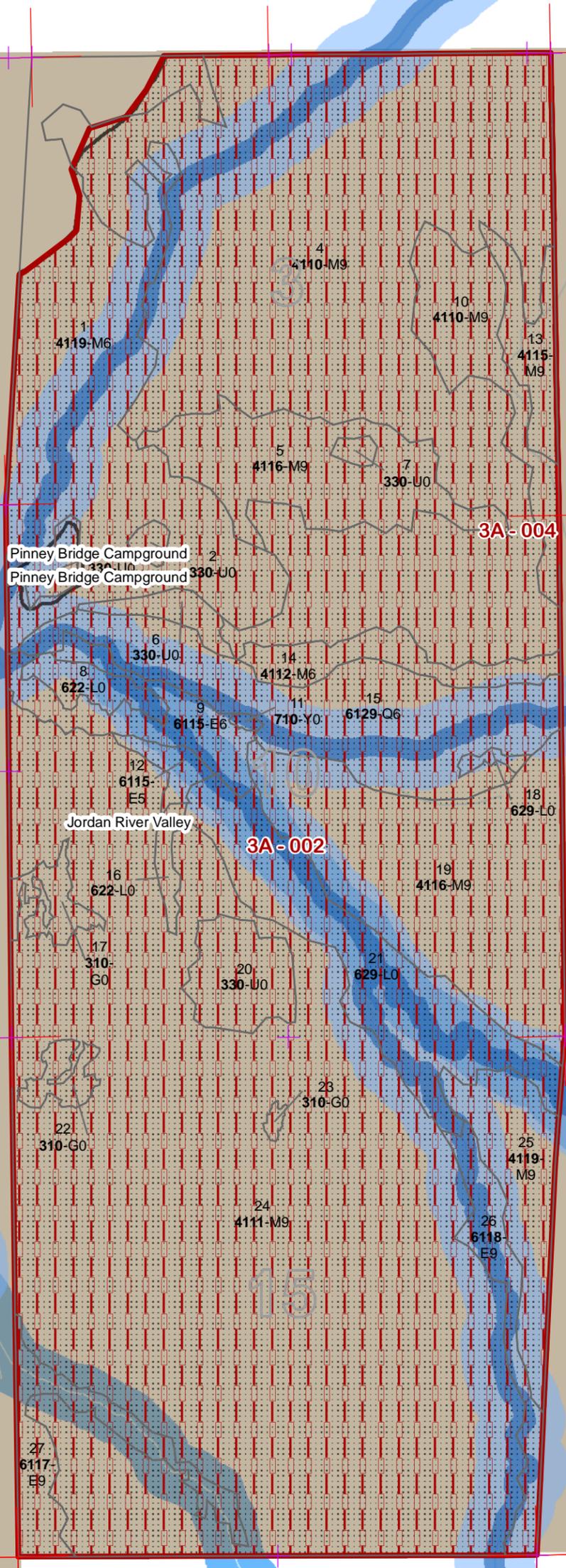
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 Stacking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
 Cover Type Code

3
10
15

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Legend

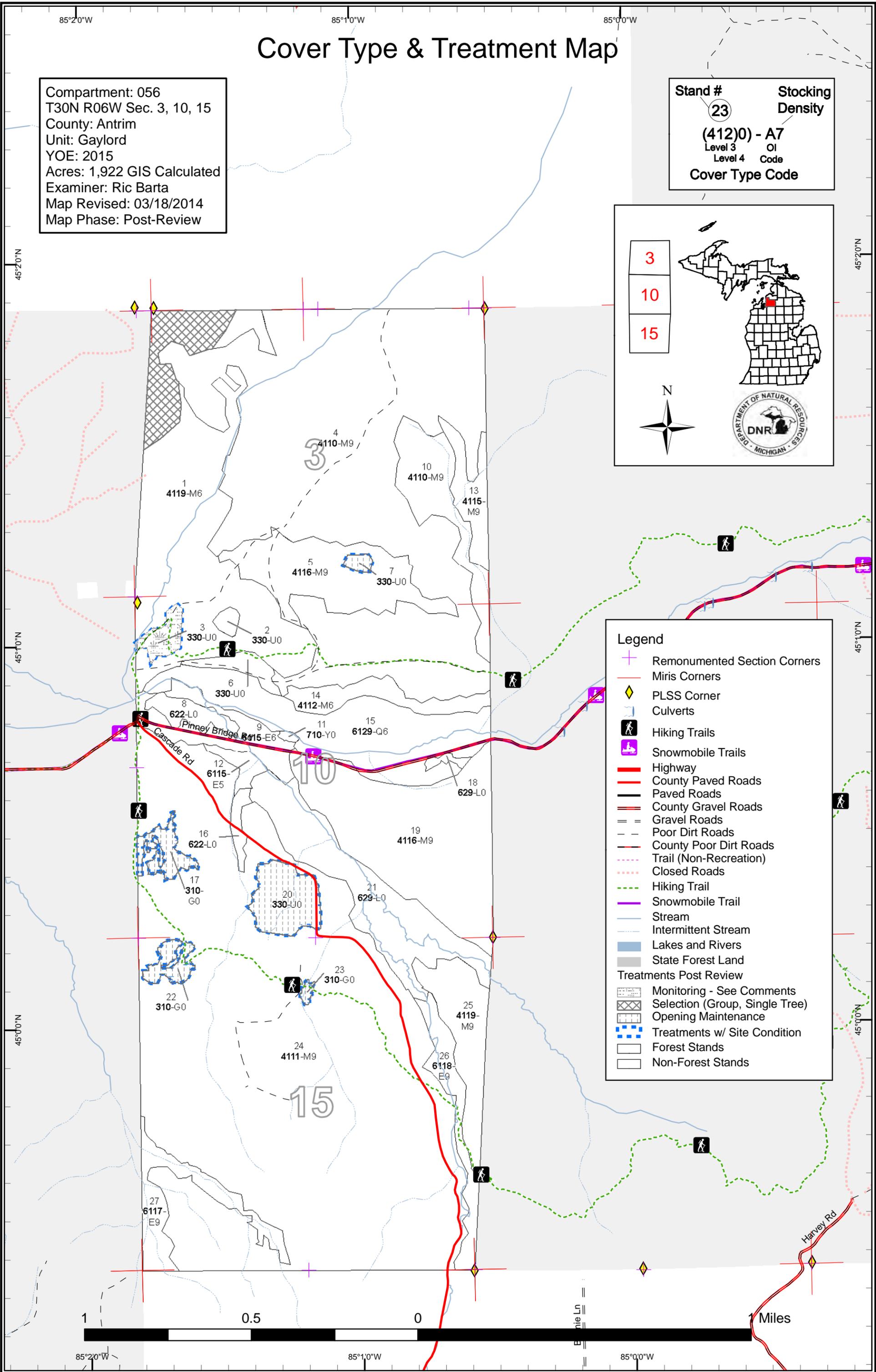
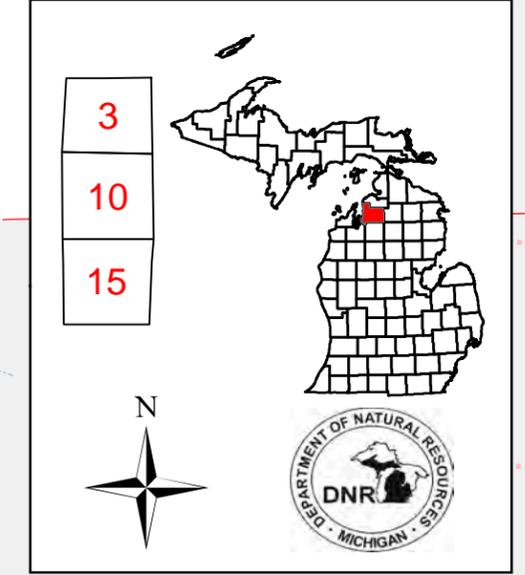
- Remonumented Section Corners
- Miris Corners
- Stand Boundaries
- Site Condition Available
 - Available w/ Constraints (Factor - Number)
 - Unavailable (Factor - Number)
- Site Condition Type
 - 3A: Potential old growth / biodiversity
- Reviewable SCAs
 - Proposed SCA
- Dedicated Special Conservation Areas
 - Cold Water Streams
 - Cold Water Lakes
 - Natural Rivers Vegetative Buffer
 - Natural Rivers Zoning District
 - Dedicated Management Areas
 - High Priority Trout Stream Buffer



Cover Type & Treatment Map

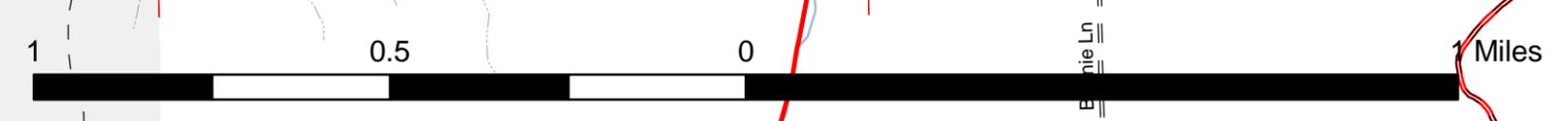
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- Treatments Post Review**
- Monitoring - See Comments
- Selection (Group, Single Tree)
- Opening Maintenance
- Treatments w/ Site Condition
- Forest Stands
- Non-Forest Stands



Report 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 +	Uneven Age	
Herbaceous Openland	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Low-Density Trees	46	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Lowland Conifers	0	0	0	0	0	0	94	0	0	0	0	0	0	0	94
Lowland Deciduous	0	0	0	0	0	0	89	0	0	0	0	0	0	0	89
Lowland Shrub	93	0	0	0	0	0	0	0	0	0	0	0	0	0	93
Northern Hardwood	0	0	0	0	0	150	283	480	669	0	0	0	0	0	1582
Sand, Soil	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	158	0	0	0	0	150	466	480	669	0	0	0	0	0	1922



Report 2 – Proposed Treatment Summaries

Gaylord Mgt. Unit
Year of Entry 2015

Compartment 056
Total Compartment Acres: 1,922

Acres by Treatment Type

Commercial Harvest - 31	Tree Planting - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 44	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Northern Hardwood	0	31	0	0	0	0	31
Total	0	31	0	0	0	0	31



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	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	52056001_cut	30.8	4119 - Mixed Northern Hardwoods	High Density Pole	79	111-140	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Fld. Tr. Bdy. - Incomplete

Prescription --Richard Barta : 04/01/2013 comments: Thin to 80-90 BA, favoring best tree in place. Look to salvage ash and beech when the opportunity presents itself. Place regen gaps as appropriate while taking into consideration ash and beech mortality as well as the presence of senescent aspen. Regeneration should be such that northern hardwoods remain dominant in the stand.

Other Comments:

Next Steps: --Richard Barta : 04/01/2013 comments:

Proposed Start Date: 10/01/2014

Total Treatment Acreage Proposed: 30.8



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
7	NF_52056007- NonFor	2.4	3301 - Low Density Deciduous Trees				Non-Forest Management	Brush Cutting	3105 - Mixed Upland Herbaceous	Fld. Tr. Bdy. - Incomplete
<u>Prescription</u>										
<u>Specs:</u>										
<u>Other</u>										
<u>Comment:</u>										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> Unspecified										
<u>Limiting Factor</u> 3A: Potential old growth / biodiversity										
17	NF_52056017- NonFor	9.7	3105 - Mixed Upland Herbaceous				Non-Forest Management	Brush Cutting	3105 - Mixed Upland Herbaceous	Fld. Tr. Bdy. - Incomplete
<u>Prescription</u>										
<u>Specs:</u>										
<u>Other</u>										
<u>Comment:</u>										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> Unspecified										
<u>Limiting Factor</u> 3A: Potential old growth / biodiversity										
20	NF_52056020- NonFor	23.6	3302 - Low Density Conifer Trees				Non-Forest Management	Brush Cutting	3105 - Mixed Upland Herbaceous	Fld. Tr. Bdy. - Incomplete
<u>Prescription</u>										
<u>Specs:</u>										
<u>Other</u>										
<u>Comment:</u>										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> Unspecified										
<u>Limiting Factor</u> 3A: Potential old growth / biodiversity										
22	NF_52056022- NonFor	7.5	3105 - Mixed Upland Herbaceous				Non-Forest Management	Brush Cutting	3105 - Mixed Upland Herbaceous	Fld. Tr. Bdy. - Incomplete
<u>Prescription</u> Add recreation trail spec to FTP.										
<u>Specs:</u>										
<u>Other</u>										
<u>Comment:</u>										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> Unspecified										
<u>Limiting Factor</u> 3A: Potential old growth / biodiversity										

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
23 NF_52056023-NonFor	1.2	3105 - Mixed Upland Herbaceous				Non-Forest Management	Brush Cutting	3105 - Mixed Upland Herbaceous	Fld. Tr. Bdy. - Incomplete

Prescription Add recreation trail to FTP.

Specs:

Other

Comment:

Next

Steps:

Proposed

Start Date: Unspecified

Limiting Factor

3A: Potential old growth / biodiversity

3 NF_52056003-Monitor	7.9	3301 - Low Density Deciduous Trees				Monitoring	See Comments	3301 - Low Density Deciduous Trees	Fld. Tr. Bdy. - Incomplete
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Prescription Monitor garlic mustard.

Specs:

Other

Comment:

Next

Steps:

Proposed

Start Date: 09/16/2013

Limiting Factor

3A: Potential old growth / biodiversity

**Total Treatment
Acreage Proposed: 52.3**

Report 5 – Site Conditions

Gaylord Mgt. Unit
Ric Barta : Examiner

Compartment 056
Year of Entry 2015

Availability for Management

Total Acres	Acres		Dominant Site Conditions	Dominant Site Conditions	
	Available	Not Available		No	3A
94		94	Lowland Conifers		94
89		89	Lowland Deciduous		89
1581	35	1547	Northern Hardwood	35	1,547
1,764	35	1,729	Total Forested Acres	35	1,729
	2%	98%	Relative Percent		

**Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
002	Not Available	3A: Potential old growth / biodiversity	1,888				
Comments: The Jordan River reserve.							
004	Not Available	3A: Potential old growth / biodiversity	0	3D: Recreational / Scenic values	1C: Other dept or div proc/practices		
Comments:							



Report 6 – 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.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Pinney Bridge Campground	Concentrated Recreation Area	State Forest Campground	SCA	8.3
Comments Jordan River Pathway passes by.				
Jordan River Valley	Habitat Areas or Corridors	Habitat Corridor	SCA	1877.9
Comments Consolidating and maintaining previous corridor designation.				

**Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS**

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
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 Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
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	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.
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.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4119 - Mixed Northern Hardwoods	High Density Pole	186.5	79	111-140	Terrain is very steep in places. Running water in the bottom of the drainage.
4	4110 - Sugar Maple Association	High Density Log	417.1	84	111-140	Hilly.
5	4116 - Mixed N. Hardwood - Aspen	High Density Log	62.5	80	111-140	Stem quality appears lower relative to the rest of the hardwood in the compartment.
9	6115 - Lowland Ash	High Density Pole	28.7	76	81-110	Lots of stems but generally submerchantable. Patchy wet with beaver sign. Flooded and showing mortality in places. Apparent EAB presence. Occasional conifers.
10	4110 - Sugar Maple Association	High Density Log	39.3	76	111-140	High BA, but this part of the compartment is prohibitively steep.
12	6115 - Lowland Ash	Medium Density Pole	6.5	76	51-80	Many stems are still submerchantable. Beaver sign. Flowing water.
13	4115 - Y. Birch, Hemlock NH	High Density Log	19.0	76	141-170	High BA but prohibitively steep with flowing water in the drainage.
14	4112 - Maple, Beech, Cherry Association	High Density Pole	21.4	68	111-140	This is, for the most part, a south facing slope just outside of the floodplain. Very heavy to red maple.
15	6129 - Mixed Coniferous Lowland Forest	High Density Pole	93.7	75	81-110	WET with lots of water along the toe of the slope to the north. Braided streams. Significant blowdown. West end isn't as heavily stocked and is more to tamarack.
19	4116 - Mixed N. Hardwood - Aspen	High Density Log	128.6	63	111-140	Aspen in this stand is concentrated on the steep slopes at the north and southwest perimeter.
24	4111 - S. Maple, Hard Mast Association	High Density Log	668.5	95	81-110	Severe slopes in places. Draws commonly carry small streams.
25	4119 - Mixed Northern Hardwoods	High Density Log	38.7	74	81-110	Somewhat sparse in places. Jordan Valley Pathway passes through.
26	6118 - Lowland Deciduous with Cedar	High Density Log	24.0	78	111-140	Steep sided draw containing Landslide Creek. Jordan Valley Pathway passes through.
27	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	29.9	78	81-110	Drainage with seeps and springs.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	3301 - Low Density Deciduous Tree	3.0	No	Unspecified	In a bowl... may be a frost pocket. Has a few poorly formed cherry. Wildlife Division would like to maintain these openings.
3	3301 - Low Density Deciduous Tree	7.9	Yes	High	Pinney Bridge Campground.
6	3301 - Low Density Deciduous Tree	8.6	No	Unspecified	Steep south-facing hillside with scattered hardwoods.
7	3301 - Low Density Deciduous Tree	2.4	No	Unspecified	A very small opening with a few scattered hardwoods.
8	6229 - Mixed lowland shrub	10.6	No	Unspecified	No ponds but there was plenty of beaver sign.
11	710 - Sand, Soil	1.0	Yes	Low	
16	6229 - Mixed lowland shrub	5.3	No	Unspecified	
17	3105 - Mixed Upland Herbaceous	9.7	Yes	Unspecified	
18	629 - Mixed non-forested wetland	2.1	No	Unspecified	
20	3302 - Low Density Conifer Trees	23.6	Yes	Unspecified	
21	629 - Mixed non-forested wetland	74.9	No	Unspecified	
22	3105 - Mixed Upland Herbaceous	7.5	Yes	Unspecified	
23	3105 - Mixed Upland Herbaceous	1.2	Yes	Unspecified	