



COMPARTMENT REVIEW PRESENTATION

GAYLORD FOREST MANAGEMENT UNIT

COMPARTMENT: 37

ENTRY YEAR: 2012

ACREAGE: 3,687

COUNTY: Charlevoix

Revision Date: 04/20/2010

Stand Examiner: Ric Barta

Legal Description: T33N R05W Sec. 1-4, 9-15

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: This compartment is level to gently rolling with occasional steep slopes. Upland areas are generally forested with northern hardwoods and young aspen. Wetlands are generally forested with deciduous/coniferous mixes or lowland brush.

Ownership Patterns, Development, and Land Use in and Around the Compartment: State ownership is fairly contiguous. Land use on the adjacent private lands is generally residential or recreational with some limited farming.

Unique, Natural Features: Red shouldered hawk

Archeological, Historical, and Cultural Features: None known.

Special Management Designations or Considerations: None

Watershed and Fisheries Considerations: This compartment contains portions of North Branch Spring Brook, South Branch Spring Brook, and Spring Brook, designated trout streams within the Bear River watershed. Scheduled treatments are well away from the river, and provide appropriate protection for this waterbody.

Wildlife Habitat Considerations: This compartment consists of a large lowland complex and an upland component along the east side of the compartment that contains aspen and upland hardwoods. The lowland mixed forests are used by a variety of wildlife species that includes; black bear, white-tailed deer, and various furbearers and amphibian species. The majority of the upland areas have been treated in previous years, with the exception of stand 44. This treated area contains a heavier component of aspen than surround stands and after treatment will have patches of young aspen surrounded by a hardwood matrix which creates significant diversity and edge that is preferred by various species of upland wildlife.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of coarse textured glacial till and glacial outwash sand & gravel and postglacial alluvium. The glacial drift thickness varies between 10 and 200 feet. Beneath the glacial drift is the Antrim Shale. This shale is quarried for cement products, elsewhere in the State. Several gravel pits are located on the uplands in this area. All State lands located on uplands have good gravel potential. Oil and gas potential in the area is primarily for the Antrim Shale gas play. The area is near the updip extent of the Antrim Shale and may be too risky to drill. None of the State land in the area is currently leased for oil and gas development.

Vehicle Access: Access is good throughout the compartment.

Survey Needs: No survey assistance is anticipated.

Recreational Facilities and Opportunities: This compartment has a segment of motorcycle trail passing through sections 1, 12 and 13.

Fire Protection:

Additional Compartment Information:

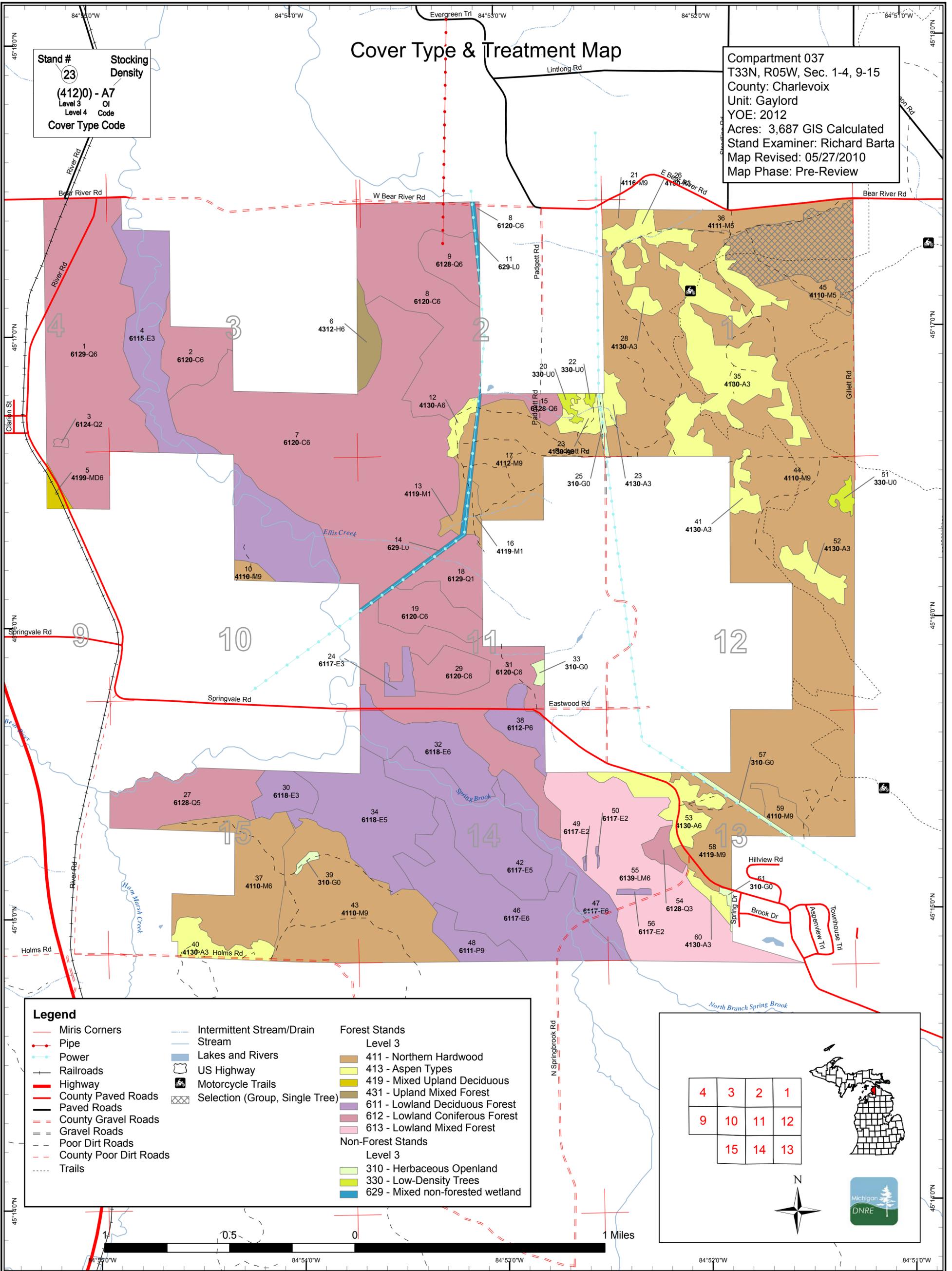
- **The following 3 reports from the IFMAP Inventory System are attached:**
 - ◆ **Cover Type by Age Class**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**

- **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

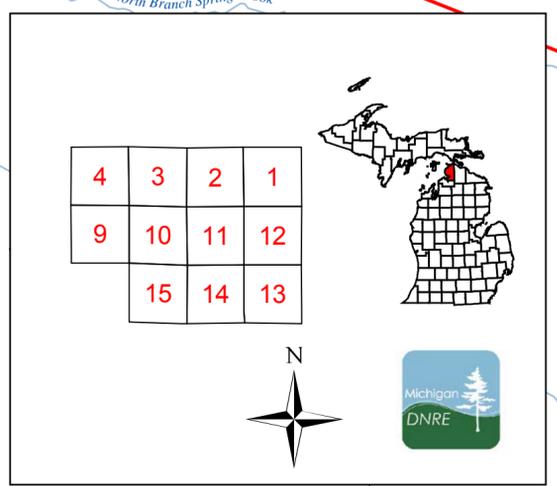
Stand #
(4120) - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

Compartment 037
 T33N, R05W, Sec. 1-4, 9-15
 County: Charlevoix
 Unit: Gaylord
 YOY: 2012
 Acres: 3,687 GIS Calculated
 Stand Examiner: Richard Barta
 Map Revised: 05/27/2010
 Map Phase: Pre-Review



Legend

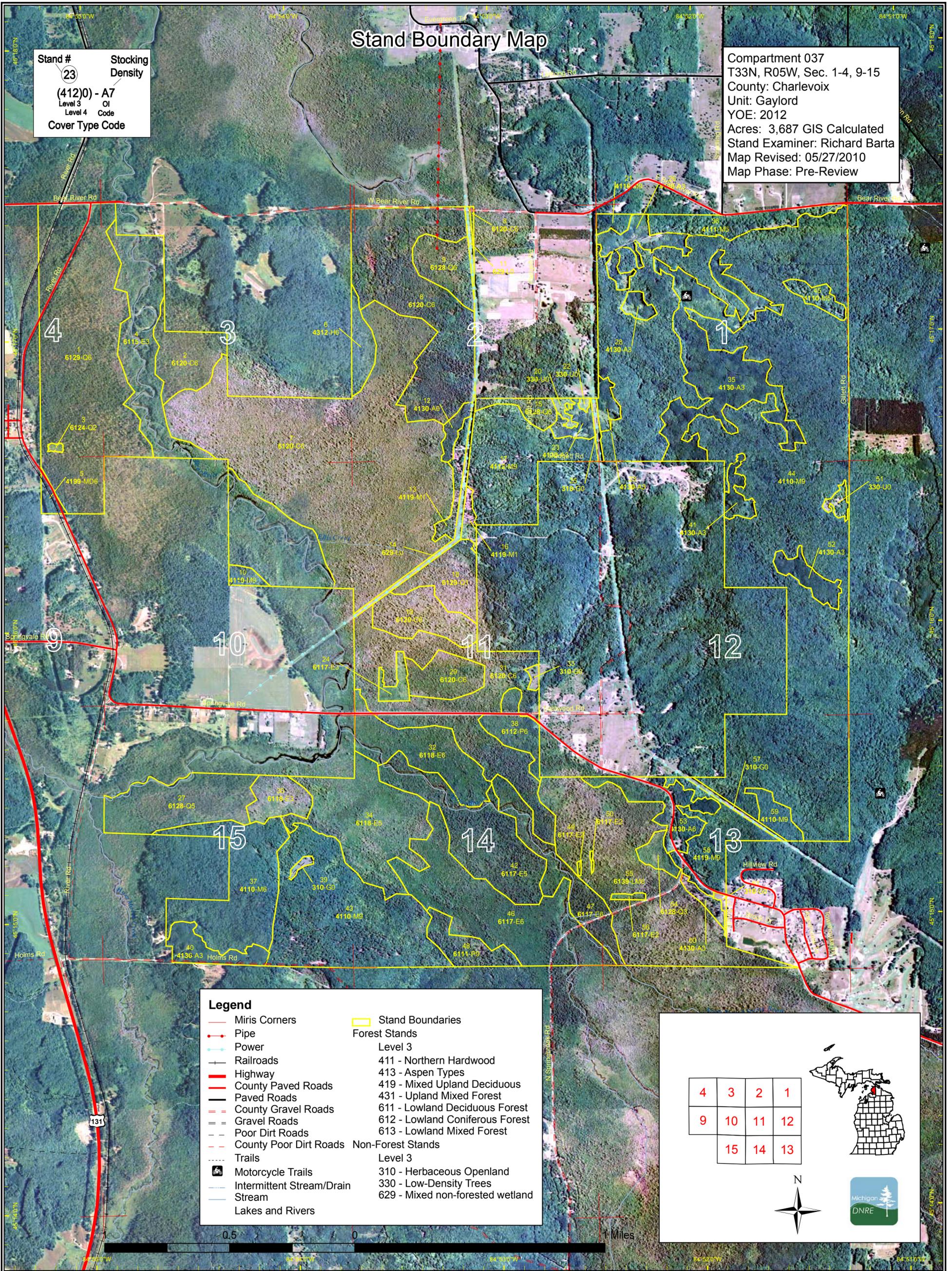
- Miris Corners
 - Pipe
 - Power
 - Railroads
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trails
 - Intermittent Stream/Drain
 - Stream
 - Lakes and Rivers
 - US Highway
 - Motorcycle Trails
 - Selection (Group, Single Tree)
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 431 - Upland Mixed Forest
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
 - 613 - Lowland Mixed Forest
- Non-Forest Stands**
- Level 3
- 310 - Herbaceous Openland
 - 330 - Low-Density Trees
 - 629 - Mixed non-forested wetland



Stand Boundary Map

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

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Legend

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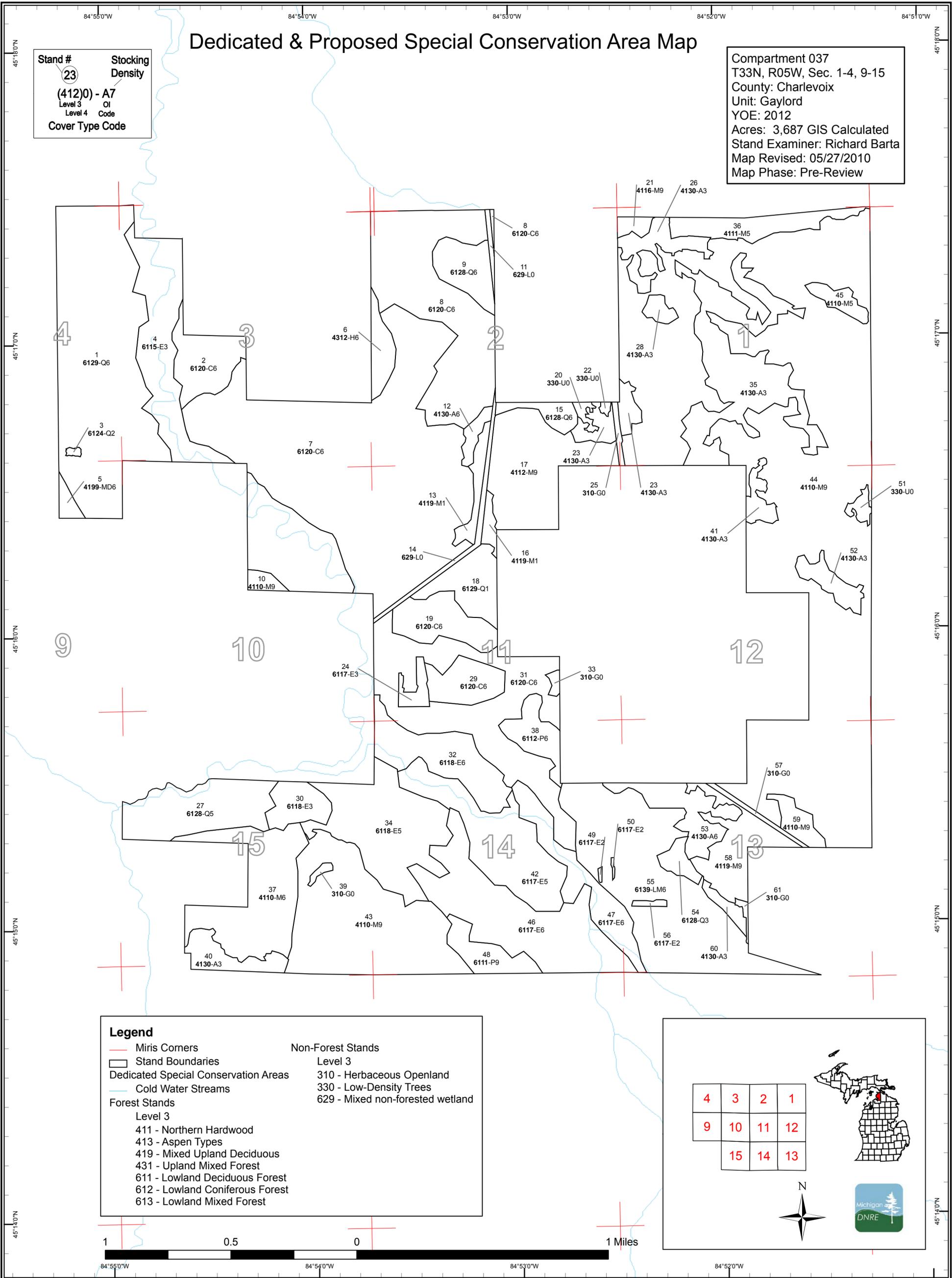
4	3	2	1
9	10	11	12
15	14	13	



Dedicated & Proposed Special Conservation Area Map

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

Compartment 037
 T33N, R05W, Sec. 1-4, 9-15
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 Map Revised: 05/27/2010
 Map Phase: Pre-Review



- Legend**
- Miris Corners
 - Stand Boundaries
 - ▭ Dedicated Special Conservation Areas
 - Cold Water Streams
 - Forest Stands
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Table 1 – Total Acres by Cover Type and Age Class
(Level 3 Cover Type)



	Age Class														Total	
	Non-Forested	1-9	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
Aspen Types	0	0	53	191	45	0	0	0	0	0	0	0	0	0	7	295
Herbaceous Openland	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Low-Density Trees	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Lowland Coniferous Forest	0	0	0	1	10	0	0	70	0	622	287	0	41	0	189	1221
Lowland Deciduous Forest	0	0	0	35	24	0	0	0	24	292	136	0	0	0	159	670
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	188	0	0	0	0	0	188
Mixed non-forested wetland	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Mixed Upland Deciduous	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6
Northern Hardwood	0	0	0	0	0	0	14	857	355	6	0	0	0	0	19	1251
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	17
Total	40	0	53	227	78	0	20	927	379	1124	423	0	41	0	374	3687



Table 2 – Proposed Treatment Summaries

Gaylord Mgt. Unit
Year of Entry 2012

Compartment 037
Total Compartment Acres: 3687

Acres by Treatment Type

Commercial Harvest - 79	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	79	0	0	0	0	0	79
Total	0	79	0	0	0	0	0	79

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	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
44	52037044_sm all-Selection	78.7	4110 - Sugar Maple Association	High Density Log	61	Harvest	Single Tree Selection	Sugar Maple Association	Cmpt. Review Proposal

Prescription: TSI the hardwoods. Species thin aspen and mark out hardwoods where they occur in aspen clones. The objective is to maintain small patches
Specs: of aspen within the larger hardwood matrix.

OtherComments:NextSteps:

**Total Treatment
Acreage Proposed: 78.7**

**Table 4 -- Treatments Prescribed with
a Limiting Factor**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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Prescription
Specs:

Other
Comment:

Next
Steps:

Limiting Factor and No
Treatment Reason

**Total Treatment
Acreage Proposed: 0**

Stand	Gaylord Mgt. Unit		5 – Forested Stands			Compartment: 037	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Inventory Method: IFMAP	
1	6129 - Mixed Coniferous Lowland Forest	High Density Pole	248.3	90	51-80	Wet. Flowing and standing water. Little Traverse Conservancy preserve is adjacent.	
2	6120 - Lowland Cedar	High Density Pole	39.2	80	51-80	Lots of blowdown. Wet.	
3	6124 - Lowland Spruce-Fir	Medium Density	1.2	27			
4	6115 - Lowland Ash	High Density Sapling	158.8	Uneven Age	1-50		
5	4199 - Other Mixed Upland Deciduous	High Density Pole	6.0	52	141-170	Needs thinning but is a very small, isolated stand with railroad and powerline running through. Access would have to be through neighbor's yard.	
6	4312 - Hemlock, Mixed Deciduous	High Density Pole	16.9	85	111-140	South end heavier to white birch and red maple.	
7	6120 - Lowland Cedar	High Density Pole	407.2	84	81-110	Areas of blowdown. Some tag alder and standing water.	
8	6120 - Lowland Cedar	High Density Pole	155.1	Uneven Age	111-140	Areas of blowdown with black ash regeneration.	
9	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	29.8	85	51-80		
10	4110 - Sugar Maple Association	High Density Log	6.0	80	141-170		
12	4130 - Aspen	High Density Pole	7.8	32	111-140	DBH seems small for its age.	
13	4119 - Mixed Northern Hardwoods	Low Density Sapling	13.4	Uneven Age	1-50	Species thinned in 2005. Could be combined with stand across the powerline. Patchy.	
15	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	12.6	112	171-200	Wet. Stream is present.	
16	4119 - Mixed Northern Hardwoods	Low Density Sapling	6.1	Uneven Age	1-50	Species thinned in 2005. Patchy. Could be combined with stand across the powerline.	
17	4112 - Maple, Beech, Cherry Association	High Density Log	92.3	79	81-110	Thinned in 2005.	
18	6129 - Mixed Coniferous Lowland Forest	Low Density Sapling	34.2	Uneven Age	1-50	Lots of standing dead with scattered white pine, cedar and spruce.	
19	6120 - Lowland Cedar	High Density Pole	38.8	91	51-80	Lots of standing dead. Wet.	





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	4116 - Mixed N. Hardwood - Aspen	High Density Log	6.0	75	81-110	West half with some mature aspen. Houses adjacent to north.
23	4130 - Aspen	High Density Sapling	21.6	14		
24	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	8.7	24		Site index = 30. Appears to be a deer feed cut.
26	4130 - Aspen	High Density Sapling	24.8	14	1-50	In places, heavy to maple, beech cherry and/or ironwood.
27	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	70.3	63	51-80	Wet. Most of this stand is recently acquired. It appears to have been high-graded in some places, clearcut in others. There is some blowdown along with the slash. Tag alder is occasional. Site index is 30.
28	4130 - Aspen	High Density Sapling	6.5	14	1-50	Scattered maple, cherry, beech and ironwood.
29	6120 - Lowland Cedar	High Density Pole	28.7	110	111-140	Some blowdown.
30	6118 - Lowland Deciduous with Cedar	High Density Sapling	23.3	20	1-50	BA swings include some submerchantable stems. Some blowdown. Tag alder in the sparse spots. Low islands and standing water.
31	6120 - Lowland Cedar	High Density Pole	145.5	84	51-80	Standing water.
32	6118 - Lowland Deciduous with Cedar	High Density Pole	60.1	85	1-50	Bear River and Springbrook run through.
34	6118 - Lowland Deciduous with Cedar	Medium Density Pole	104.7	80	51-80	
35	4130 - Aspen	High Density Sapling	142.2	24	1-50	In places it is heavy to sugar maple, beech, cherry and ironwood.
36	4111 - S.Maple, Hard Mast Association	Medium Density Pole	33.6	61	51-80	Sparse and clumpy in places. Patchy with regeneration of ironwood, beech and sugar maple. Small clearings in east end. Occasional aspen clones are mature.
37	4110 - Sugar Maple Association	High Density Pole	95.3	75	81-110	Newly acquired parcel at northwest corner has been high-graded hard and someone left a travel trailer behind. North end of old state land was cut 16 years ago; south end was cut 6 years ago. Southwest is very hilly.
38	6112 - Lowland Aspen	High Density Pole	23.9	33	51-80	Lots of low fir. Patchy with some areas more to conifers, black ash or tag alder.
40	4130 - Aspen	High Density Sapling	22.3	26	51-80	Lots of gypsy moth sign.

Stand	Gaylord Mgt. Unit			5 – Forested Stands		Compartment: 037
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012
						General Comments:
41	4130 - Aspen	High Density Sapling	10.8	24	1-50	Heavy in places to maple, beech, cherry and ironwood.
42	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	88.7	91	1-50	
43	4110 - Sugar Maple Association	High Density Log	161.1	73	81-110	South end was cut on the last round; north end was cut 16 years ago. Some uncut slopes. Species composition is somewhat variable. Stocking is higher on steep slopes and wet areas.
44	4110 - Sugar Maple Association	High Density Log	766.1	61	81-110	BA is an average of many swings over a large acreage.
45	4110 - Sugar Maple Association	Medium Density Pole	11.0	61	51-80	Small openings here and there with some regen.
46	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	127.0	89	51-80	Plenty of tag alder in lower canopy.
47	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	47.5	91	51-80	Springbrook runs through. Some tag alder present.
48	6111 - Lowland Balsam Poplar	High Density Log	24.3	76	51-80	Bam is on lower ground in the north; trembling aspen is on low ridge in the south.
49	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density	0.5	24		Apparent deer feed cut. Some tag alder present.
50	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density	0.5	24		Apparent deer feed cut. Some tag alder present.
52	4130 - Aspen	High Density Sapling	15.9	24	1-50	Heavy in places to maple, beech, cherry and/or ironwood.
53	4130 - Aspen	High Density Pole	36.7	33	111-140	
54	6128 - Lowland Coniferous, Mixed Deciduous	High Density Sapling	9.8	34	1-50	On the wet side.
55	6139 - Mixed Lowland Forest	High Density Pole	188.1	81	51-80	Tough going. Wet with some blowdown. Some tag alder established where canopy is sparse.
56	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density	2.0	24		Apparently an deer feed cut. Some tag alder present.
58	4119 - Mixed Northern Hardwoods	High Density Log	45.9	65	81-110	Beech Bark Disease present. Spring and creek present. HILLY! STEEP in places. Poles and small logs. Some clumps. Heavy to poles that are not quite merchantable.



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Gaylord Mgt. Unit

5 – Forested Stands

Compartment: 037

Inventory Method: IFMAP

Year of Entry: 2012



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
59	4110 - Sugar Maple Association	High Density Log	13.7	54	111-140	Very steep in places, to the point of making access an issue. Beech Bark Disease is present. Needs a pole thinning.
60	4130 - Aspen	High Density Sapling	6.8	Uneven Age	1-50	Aspen regeneration with overtopping, scattered residual.



Stand	Cover Type	Acres	Gen Cmts:
11	629 - Mixed non-forested wetland	3.3	
14	629 - Mixed non-forested wetland	12.0	
20	3301 - Low Density Deciduous Tree	3.5	Mostly cherry brush following a clear cut in 1996.
22	330 - Low-Density Trees	1.2	
25	310 - Herbaceous Openland	3.4	
33	3102 - Grass	2.4	
39	3102 - Grass	2.1	
51	330 - Low-Density Trees	5.2	
57	3102 - Grass	4.8	
61	3102 - Grass	1.8	



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.

Inventory Method: IFMAP

Stand	SCA Type	SCA Name	Acres	Comments
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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.

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

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	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.