



COMPARTMENT REVIEW PRESENTATION

GAYLORD FOREST MANAGEMENT UNIT

COMPARTMENT: 162

ENTRY YEAR: 2013

ACREAGE: 1,946

COUNTY: Cheboygan

Revision Date: 05/09/2011

Stand Examiner: John Scheele

Legal Description: T38N-R03W Sections 22-24, 26, 27, and 34-36

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 relatively flat with mostly lowland forested and non-forested vegetation types. There are 2 general soil type associations within the compartment. The Tawas-Lupton Association soils make up majority of the compartment. These are deep, nearly level, very poorly drained, mucky soils that formed in organic material. The Rubicon-East Lake Association soils are located in the northwest part of the compartment. These are deep, nearly level and undulating, excessively drained and somewhat excessively drained, sandy soils that formed in sandy deposits or in sandy material over gravelly deposits.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment has Interstate 75 running through the middle of the compartment with private parcel ownerships adjacent to the interstate. There is a significant amount of common boundaries between state and private ownership. The west and east boundaries of the compartment are adjacent to areas of large state ownerships.

Unique, Natural Features: Occurrences of Three-horned moth (*Pachypolia atricornis*), Lake Huron locust, and Common loon have been recorded in the compartment.

Archeological, Historical, and Cultural Features: A search of the Archeological Concerns database did not show any recorded features to be aware of.

Special Management Designations or Considerations: A search of the Special Conservation Area database did not show any areas for consideration.

Watershed and Fisheries Considerations: This compartment is in both the Central Lake Michigan Management Unit and the Northern Lake Huron Management Unit. No treatments are planned near water in NLHMU, so Fisheries has no comments at this time for that area. No treatments are planned near water in CLMMU, so Fisheries has no comments at this time for that area.

Wildlife Habitat Considerations: This compartment contains mainly lowland with a small component of upland habitat. This lowland complex supports black bear, white-tailed deer, and various furbearers and amphibians. Stands 1, 12, and 68 are going to be clear cut to provide early successional habitat for white-tailed deer, grouse, woodcock, and various song birds.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of coarse textured glacial till (highlands), and lacustrine (lake) sand and gravel. The glacial drift thickness varies between 200 and 400 feet. The Devonian Detroit River Group subgroups below the glacial drift. The nearest gravel pit is located in the SE of Section 35. The glacial till deposits, uplands, have good gravel potential and the rest of the compartment has some potential. The nearest oil and gas production, the Antrim Shale gas play, is located 31 miles to the south. The Collingwood Formation may have oil and gas potential in the area.

Vehicle Access: The center of the compartment is mostly accessible by Levering Road, Weadock Road, and Hebron Mail Road. There are also a couple of state two-tracks that provide access to the compartment. The eastern and western portions of the compartment have very limited access due to private ownership and lowland soil types.

Survey Needs: A small amount of survey work may be required in sections 22 and 23 to establish boundary lines for prescribed treatments in those sections.

Recreational Facilities and Opportunities: No known at this time.

Fire Protection: No foreseen problems

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 162
 T38N, R03W, Sec. 22 - 24, 26, 27, 34-36
 County: Cheboygan
 Unit: Gaylord
 YOY: 2013
 Acres: 1,946 GIS Calculated
 Stand Examiner: John Scheele
 Map Revised: 5/26/2011
 Map Phase: Pre-Review

22	23	24
27	26	
34	35	36

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

Legend

- Miris Corners
- Remonumented Section Corners
- Bridges
- Highway
- Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Interstate Highway
- Lakes and Rivers
- Intermittent Stream/Drain
- Stream

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Thinning (Crown, Low, Systematic)

Forest Stands

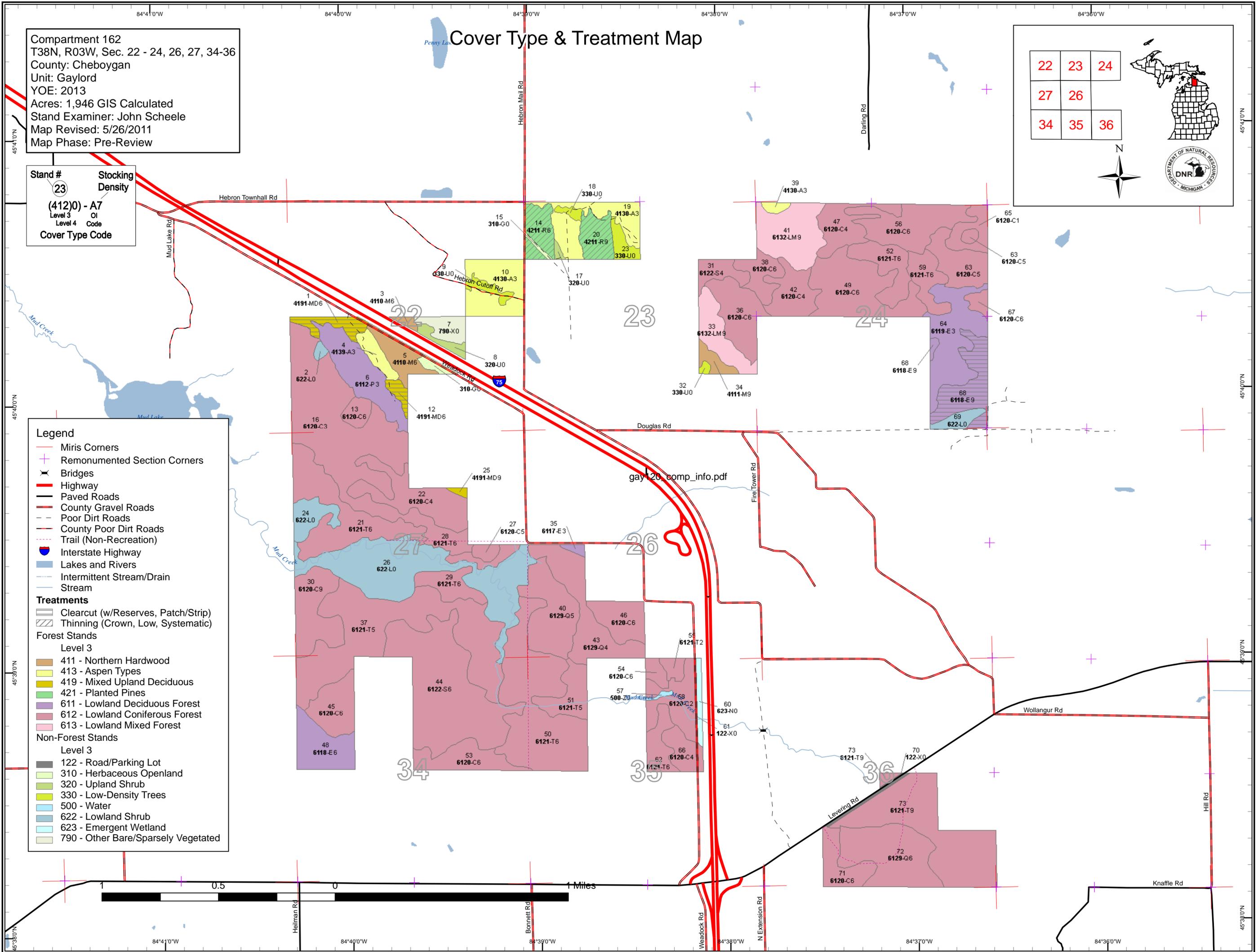
Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

Level 3

- 122 - Road/Parking Lot
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 790 - Other Bare/Sparsely Vegetated



gay120_comp_info.pdf

Dedicated & Proposed Special Conservation Area Map

Compartment 162
 T38N, R03W, Sec. 22 - 24, 26, 27, 34-36
 County: Cheboygan
 Unit: Gaylord
 YOY: 2013
 Acres: 1,946 GIS Calculated
 Stand Examiner: John Scheele
 Map Revised: 5/26/2011
 Map Phase: Pre-Review

22	23	24
27	26	
34	35	36

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

- Legend**
- Miris Corners
 - + Remonumented Section Corners
 - Stand Boundaries
 - Dedicated Special Conservation Areas**
 - Wildlife Research Areas
 - Forest Stands**
 - Level 3**
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
 - 613 - Lowland Mixed Forest
 - Non-Forest Stands**
 - Level 3**
 - 122 - Road/Parking Lot
 - 310 - Herbaceous Openland
 - 320 - Upland Shrub
 - 330 - Low-Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland
 - 790 - Other Bare/Sparsely Vegetated

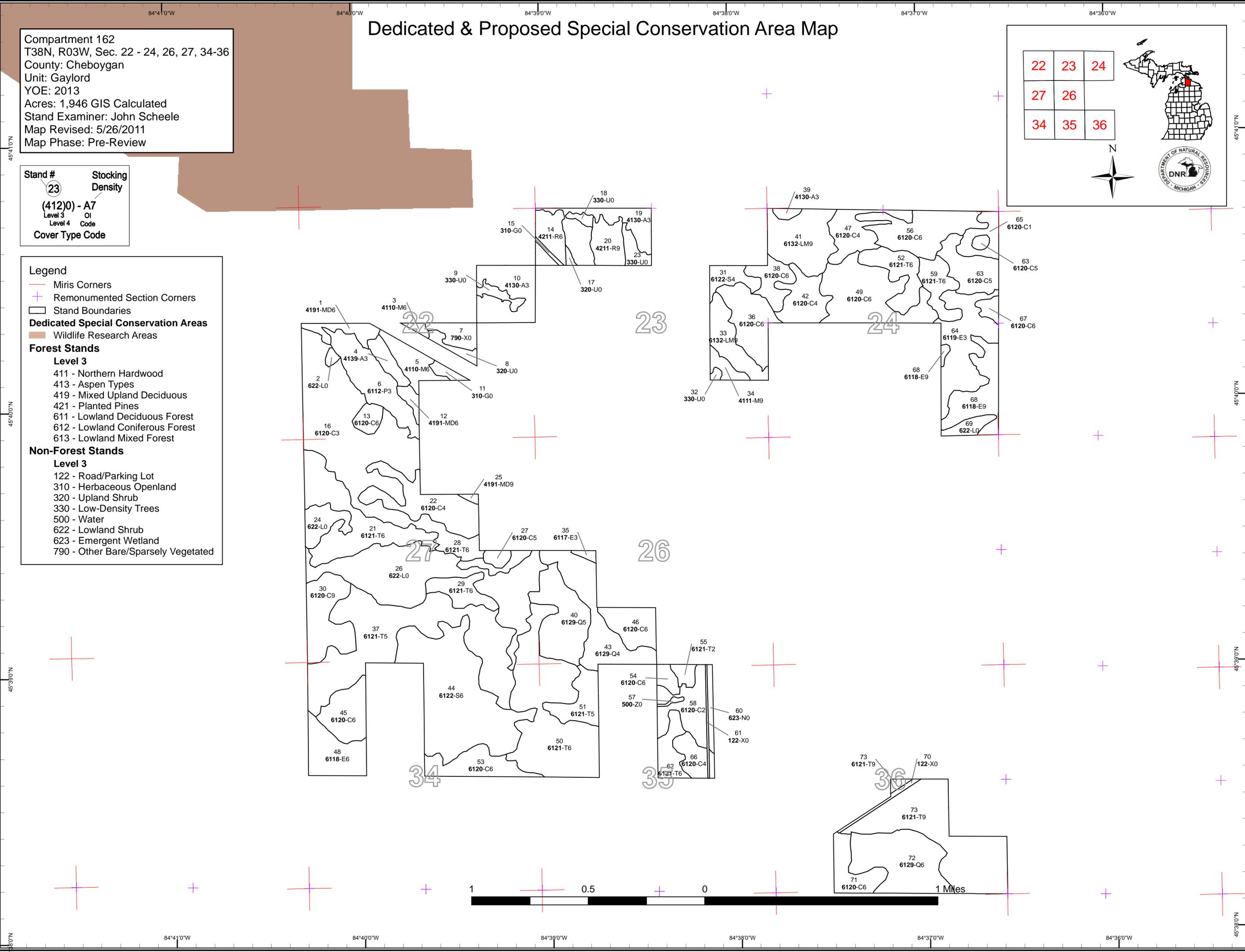
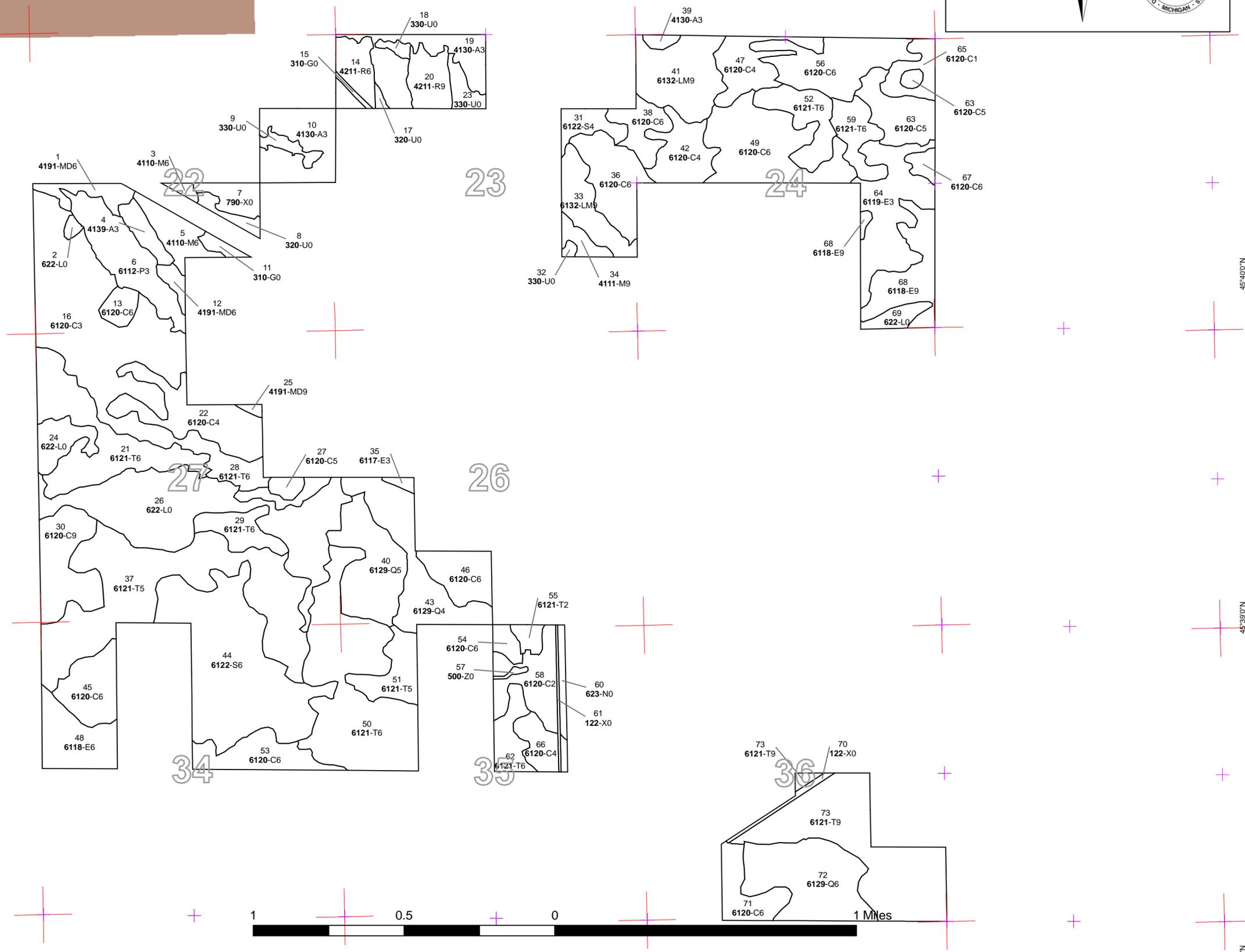


Table 1 – Total Acres by Cover Type and Age Class



	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	0	0	3	76	0	0	0	0	0	0	0	0	0	0	0	79
Bare/Sparsely Vegetated	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Cedar	0	0	0	0	0	0	27	0	17	101	283	142	22	6	24	620
Herbaceous Openland	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Low-Density Trees	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Lowland Aspen/Balsam Poplar	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0	39
Lowland Conifers	0	0	0	0	0	0	0	44	0	58	0	0	0	0	47	148
Lowland Deciduous	0	0	0	49	2	0	0	0	30	33	0	0	0	0	0	114
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	66	0	0	0	0	66
Lowland Shrub	132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	116	11	0	0	0	0	127
Marsh	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	6	0	11	0	0	0	0	17
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	20	7	0	0	0	26
Red Pine	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	34
Tamarack	0	0	0	0	0	0	5	0	143	175	152	0	15	0	0	490
Upland Shrub	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Urban	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Water	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	185	0	42	125	2	34	32	44	195	483	542	148	37	6	71	1946



Table 2 – Proposed Treatment Summaries

Gaylord Mgt. Unit
Year of Entry 2013

Compartment 162
Total Compartment Acres: 1946

Acres by Treatment Type

Commercial Harvest - 82	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
Lowland Deciduous	32	0	0	0	0	0	32
Mixed Upland Deciduous	16	0	0	0	0	0	16
Red Pine	0	0	0	0	34	0	34
Total	48	0	0	0	34	0	82



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	52162001-CC	11.1	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	90	Harvest	Clearcut	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<u>Prescription</u> Final harvest. Include Stand 12 with sale. No retention because of small stand size. <u>Specs:</u> <u>Other Comments:</u> Poor quality, multi-stemmed Red Maple with Aspen and Birch dying out. Private cabin is located just across boundary line on north side of stand. <u>Next Steps:</u> Monitor success of regeneration during next inventory. Acceptable regeneration includes a mix of Aspen, Red Maple, Birch and conifers.									
12	52162012-CC	4.9	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	70	Harvest	Clearcut	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<u>Prescription</u> Final harvest. Include Stand 1 with sale. No retention because of small stand size. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> Monitor success or regeneration during next inventory. Acceptable regeneration includes a mix of Maple, Aspen, Birch and conifers.									
14	52162014-Thin	17.4	42110 - Planted Red Pine	High Density Pole	49	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Thin stand to 120 residual basal area. <u>Specs:</u> <u>Other Comments:</u> Current Basal Area is 197. Do not cut witness Red Pine tree in northwest corner of stand. <u>Next Steps:</u> Check basal area during next inventory.									
20	52162020-Thin	16.7	42110 - Planted Red Pine	High Density Log	49	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Thin to 120 BA. <u>Specs:</u> <u>Other Comments:</u> Current Basal Area is 166. <u>Next Steps:</u>									
68	52162068-CCWR_exp-0	31.8	6118 - Lowland Deciduous with Cedar	High Density Log	80	Harvest	Clearcut with Reserves	6118 - Lowland Deciduous with Cedar	Cmpt. Review Proposal
<u>Prescription</u> Final harvest stand in winter. Do not cut Cedar or White Spruce for tree species diversity. Leave retention pockets where there is a higher component of Cedar. <u>Specs:</u> <u>Other Comments:</u> Verbal permission was granted to access the stand from the south by adjacent landowner during inventory. Verify permission before setting up sale. May want to include Stands 17, 27, and 29 from Compartment 166 in the sale. These stands were prescribed for YOE 2011, but were factor limited because of access. <u>Next Steps:</u> Monitor success of regeneration in next inventory. Acceptable regeneration includes a mix of Aspen, conifer, and lowland deciduous species.									

**Total Treatment
Acreage Proposed: 81.9**

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

Out of YOE -- Treatments
Prescribed with No Limiting Factor

Year of Entry: 2013



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
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 0**



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	11.1	90		Poor quality, multi-stemmed Red Maple with aspen and birch dying out. Private cabin is located just across boundary line on north side of stand.
3	4110 - Sugar Maple Association	High Density Pole	2.4	90	1-50	
4	4139 - Aspen, Mixed Deciduous	High Density Sapling	9.6	27		
5	4110 - Sugar Maple Association	High Density Pole	17.2	90	81-110	Low quality hardwood. Leave for next inventory.
6	6112 - Lowland Aspen	High Density Sapling	39.0	10		
10	4130 - Aspen	High Density Sapling	34.4	28		
12	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	4.9	70		Low quality Red Maple with Aspen and Birch dying out.
13	6120 - Lowland Cedar	High Density Pole	8.0	90		Good quality Cedar.
14	42110 - Planted Red Pine	High Density Pole	17.4	49	171-200	Light to no understory.
16	6120 - Lowland Cedar	High Density Sapling	144.3	90		Poor quality, unhealthy Cedar.
19	4130 - Aspen	High Density Sapling	31.7	28		
20	42110 - Planted Red Pine	High Density Log	16.7	49	141-170	Heavy understory of Sugar Maple in areas of stand.
21	6121 - Tamarack	High Density Pole	60.7	80		Stand does not look to healthy.
22	6120 - Lowland Cedar	Low Density Pole	40.8	105		Mostly dead cedar with the overstory starting to blow over.
25	4191 - Mixed Upland Deciduous with Conifer	High Density Log	1.5	75		Multi-stemmed Red Maple stand with the Balsam Fir breaking off.
27	6120 - Lowland Cedar	Medium Density Pole	4.6	100		Mostly dead cedar that is starting to blow over.
28	6121 - Tamarack	High Density Pole	7.7	90		Stand is not very healthy and the cedar is dying out.
29	6121 - Tamarack	High Density Pole	16.9	90		



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	6120 - Lowland Cedar	High Density Log	36.8	100		
31	6122 - Black Spruce	Low Density Pole	11.5	95		Poor quality stand.
33	6132 - Mixed Lowland Forest with Cedar	High Density Log	23.6	93		
34	4111 - S.Maple, Hard Mast Association	High Density Log	6.9	100	81-110	Large, poor quality Sugar Maple and Beech trees. Aspen also over mature. Spring in center of stand flowing northeast into stand 32.
35	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	2.2	30		A previous stand of balsam poplar has died and falling over. Current stand is 20 - 30 feet tall.
36	6120 - Lowland Cedar	High Density Pole	32.4	95		Poor quality cedar.
37	6121 - Tamarack	Medium Density Pole	127.1	95		Appears to be wetter than the surrounding stands. Heavier understory of tag alder and cedar.
38	6120 - Lowland Cedar	High Density Pole	16.5	77		
39	4130 - Aspen	High Density Sapling	2.9	14		
40	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	43.9	67		Cedar in overstory and understory is alive and healthier than Stand 42 to the east.
41	6132 - Mixed Lowland Forest with Cedar	High Density Log	41.9	90		Low quality, large aspen is dying out in stand. Lowland soil type with limited access to the stand. Let stand convert to cedar.
42	6120 - Lowland Cedar	Low Density Pole	24.1	Uneven Age		Significant blow down of canopy.
43	6129 - Mixed Coniferous Lowland Forest	Low Density Pole	46.8	Uneven Age		Mostly thick, dead cedar that is 20 to 30 feet tall. Pockets of cedar blowdown.
44	6122 - Black Spruce	High Density Pole	116.0	80		
45	6120 - Lowland Cedar	High Density Pole	25.7	90		Low quality cedar stand with balsam fir and aspen dying out.
46	6120 - Lowland Cedar	High Density Pole	21.7	110		
47	6120 - Lowland Cedar	Low Density Pole	25.1	90		Significant blow down of cedar.

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Gaylord Mgt. Unit

5 – Forested Stands

Compartment: 162
Year of Entry: 2013

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	6118 - Lowland Deciduous with Cedar	High Density Pole	29.6	70		Low quality stand with the birch dying out.
49	6120 - Lowland Cedar	High Density Pole	59.3	100		
50	6121 - Tamarack	High Density Pole	104.1	70		
51	6121 - Tamarack	Medium Density Pole	20.2	75		Stand is not very healthy with die back in the tamarack and cedar.
52	6121 - Tamarack	High Density Pole	24.1	85		
53	6120 - Lowland Cedar	High Density Pole	25.7	81		Stand is not very healthy with canopy dieback. Beginning to blow down.
54	6120 - Lowland Cedar	High Density Pole	5.8	120		Very unhealthy stand with the cedar dying out.
55	6121 - Tamarack	Medium Density	5.2	55		Tamarack and cedar is almost dead or dead.
56	6120 - Lowland Cedar	High Density Pole	42.3	90		
58	6120 - Lowland Cedar	Medium Density	26.6	50		20 - 30 foot tall stand which is either dead or dying out.
59	6121 - Tamarack	High Density Pole	18.3	70		
62	6121 - Tamarack	High Density Pole	15.2	110		
63	6120 - Lowland Cedar	Medium Density Pole	27.5	80		Stand has significant blow down of cedar.
64	6119 - Mixed Lowland Deciduous Forest	High Density Sapling	49.0	20		
65	6120 - Lowland Cedar	Low Density Sapling	13.8	80		
66	6120 - Lowland Cedar	Low Density Pole	14.1	82		Very unhealthy stand with Cedar dying out. Part of stand across Weadock Rd. has a higher component of Tamarack.
67	6120 - Lowland Cedar	High Density Pole	4.9	90		Aspen dying out and falling over. Cedar is also blowing over.
68	6118 - Lowland Deciduous with Cedar	High Density Log	33.3	80		Low quality aspen that is dying out. Stand has individual trees and pockets of cedar. Higher and drier soil in the southeast corner and east side of stand.

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Gaylord Mgt. Unit

5 – Forested Stands

Compartment: 162
Year of Entry: 2013



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
71	6120 - Lowland Cedar	High Density Pole	20.1	80		
72	6129 - Mixed Coniferous Lowland Forest	High Density Pole	57.7	80		
73	6121 - Tamarack	High Density Log	90.2	80		



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	622 - Lowland Shrub	2.1	N/A	Unspecified	
7	790 - Other Bare/Sparsely Vegetate	11.4	No	Unspecified	
8	3205 - Mixed Upland Shrub	5.7	No	Unspecified	
9	3301 - Low Density Deciduous Tree	5.6	No	Unspecified	
11	310 - Herbaceous Openland	3.9	N/A	Unspecified	
15	310 - Herbaceous Openland	1.4	No	Unspecified	
17	3205 - Mixed Upland Shrub	1.4	No	Unspecified	
18	3303 - Mixed Low Density Trees	2.7	N/A	Unspecified	
23	3303 - Mixed Low Density Trees	7.5	No	Unspecified	
24	622 - Lowland Shrub	14.7	N/A	Unspecified	
26	622 - Lowland Shrub	107.9	N/A	Unspecified	
32	3301 - Low Density Deciduous Tree	1.4	N/A	Unspecified	
57	50 - Water	1.1	N/A	Unspecified	
60	623 - Emergent Wetland	5.5	N/A	Unspecified	
61	122 - Road/Parking Lot	2.3	N/A	Unspecified	
69	622 - Lowland Shrub	7.4	N/A	Unspecified	
70	122 - Road/Parking Lot	3.3	N/A	Unspecified	



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



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
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