DNR DNR

Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 207 Entry Year 2015 Acreage: 1,941

County Cheboygan

Management Area: Cheboygan Lake Plain

Revision Date: 03/11/2013

Stand Examiner: Shannon Harig

Legal Description:

T35N-R01E, Sections 4,9,16

Identified Planning 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:

The topography in this compartment is very level. Most of this compartment is comprised of Grayling-Rubicon and Cheboygan-Blue Lake Association soils.

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

This compartment is contiguous state ownership and surrounded by state land. There is very little residential development in the area. This compartment gets a lot of use from hunters and mushroom pickers as well as motorized recreation on the motorcycle trail.

Unique Natural Features:

Potential for northern goshawk, bald eagle, and osprey, ram's head lady's-slipper, limestone oak fern, round-leaved orchis, and calypso orchid in mixed conifer swamps.

Archeological, Historical, and Cultural Features:

There is a limited potential for archeological concerns in this compartment.

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations:

This compartment is in the Black River watershed, near the Upper Black River and important lake sturgeon spawning grounds. Prescribed management activities are far enough away from the river that Fisheries has no concerns at this time.

Wildlife Habitat Considerations:

This compartment consists mostly of upland habitat consisting of red and jack pine, mixed oak, and aspen. Harvest will concentrate on the harvest and regeneration of mix habitat of jack pine, oak, and aspen. Some mature oak will be left in these treatments for current hard mast production. These treatments will benefit white-tailed deer, wild turkey, ruffed grouse, and various songbirds.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 100 and 200 feet. The Devonian Traverse Group subcrops below the glacial drift. The Traverse is used for cement and stone elsewhere in the State. Gravel pits are located just to the east and the compartment should have some potential. The nearest oil and gas production, the Niagaran Reef Trend, is located 12 miles to the south. The Compartment is leased for oil and gas development for the Collingwood Formation.

Vehicle Access:

Good access to most of the compartment.

Survey Needs:

None

Recreational Facilities and Opportunities:

Red Bridge ORV Trail and Route runs through the compartment.

Fire Protection:

Some potential for a large wildfire.

Additional Compartment Information:

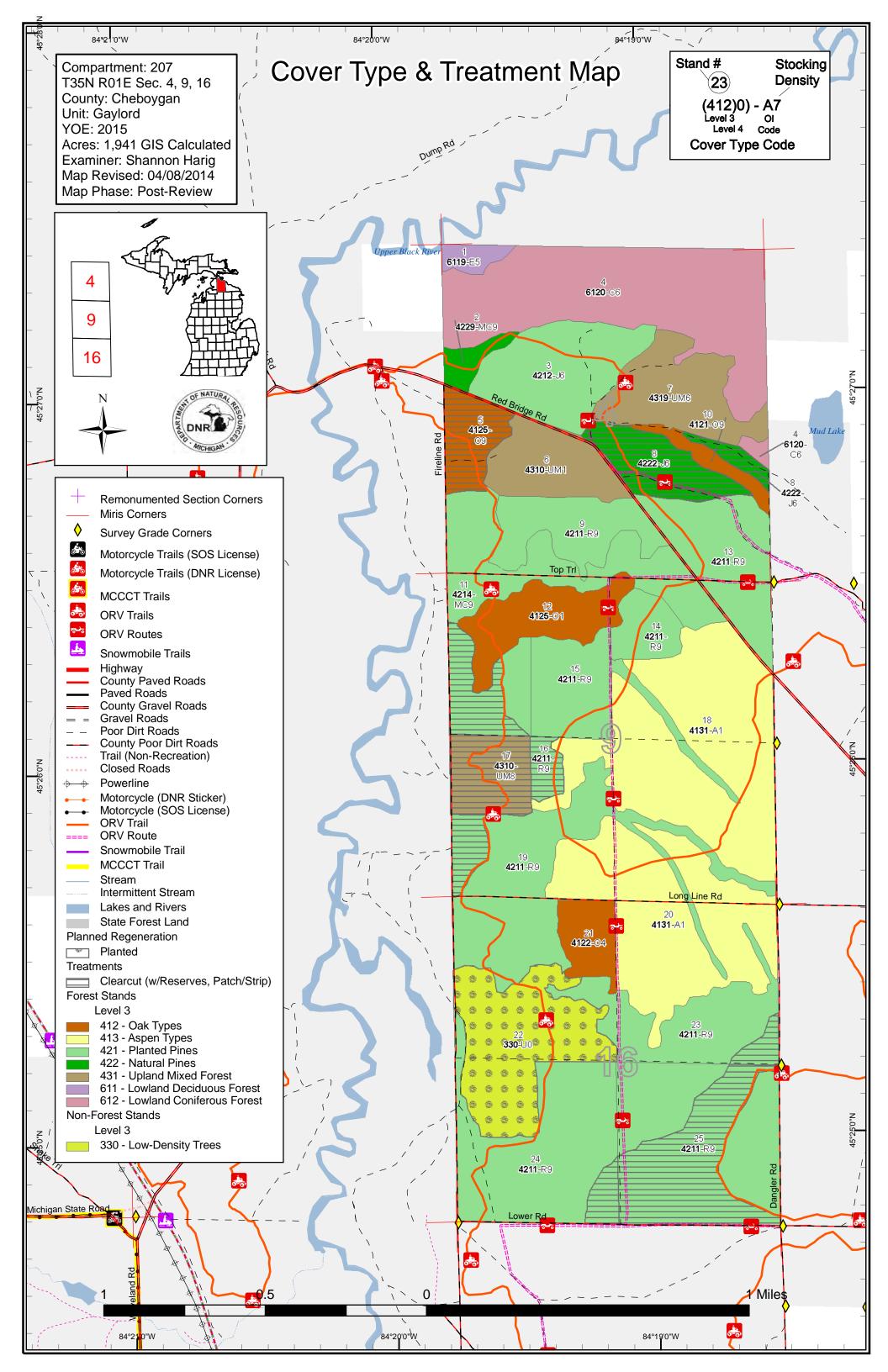
The following reports from the Inventory are attached:

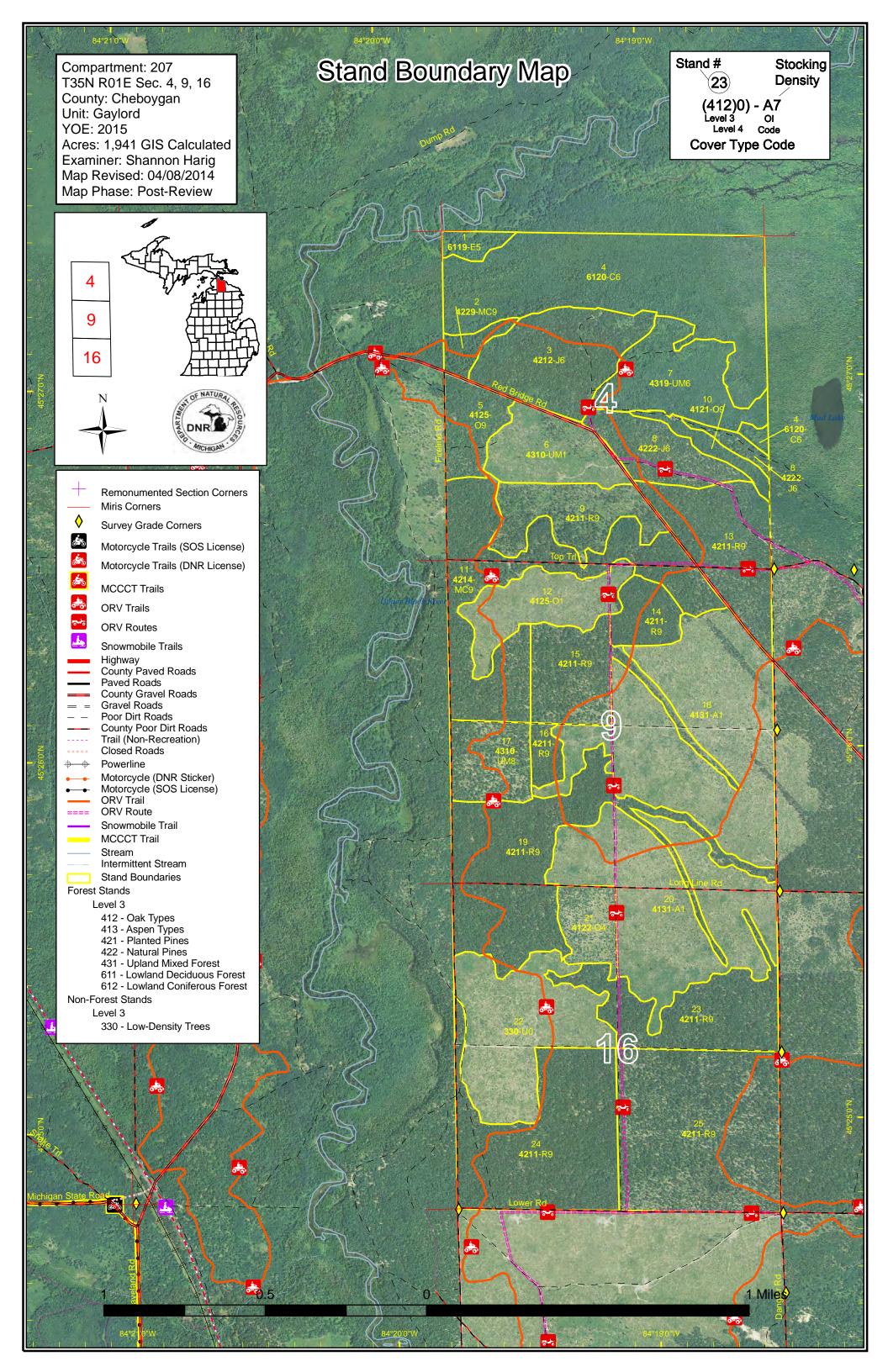
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

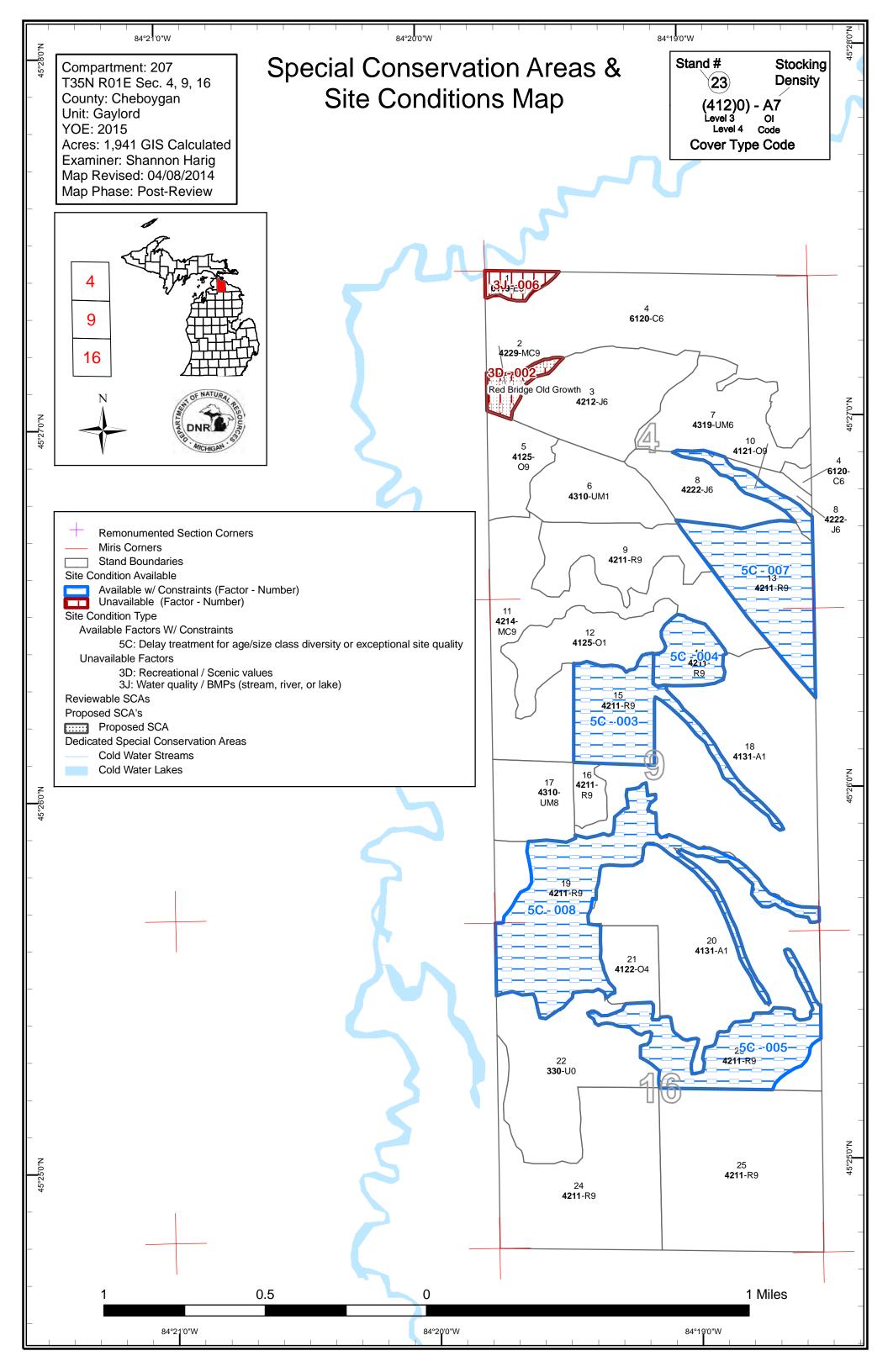
The following information is displayed, where pertinent, on the attached compartment maps:

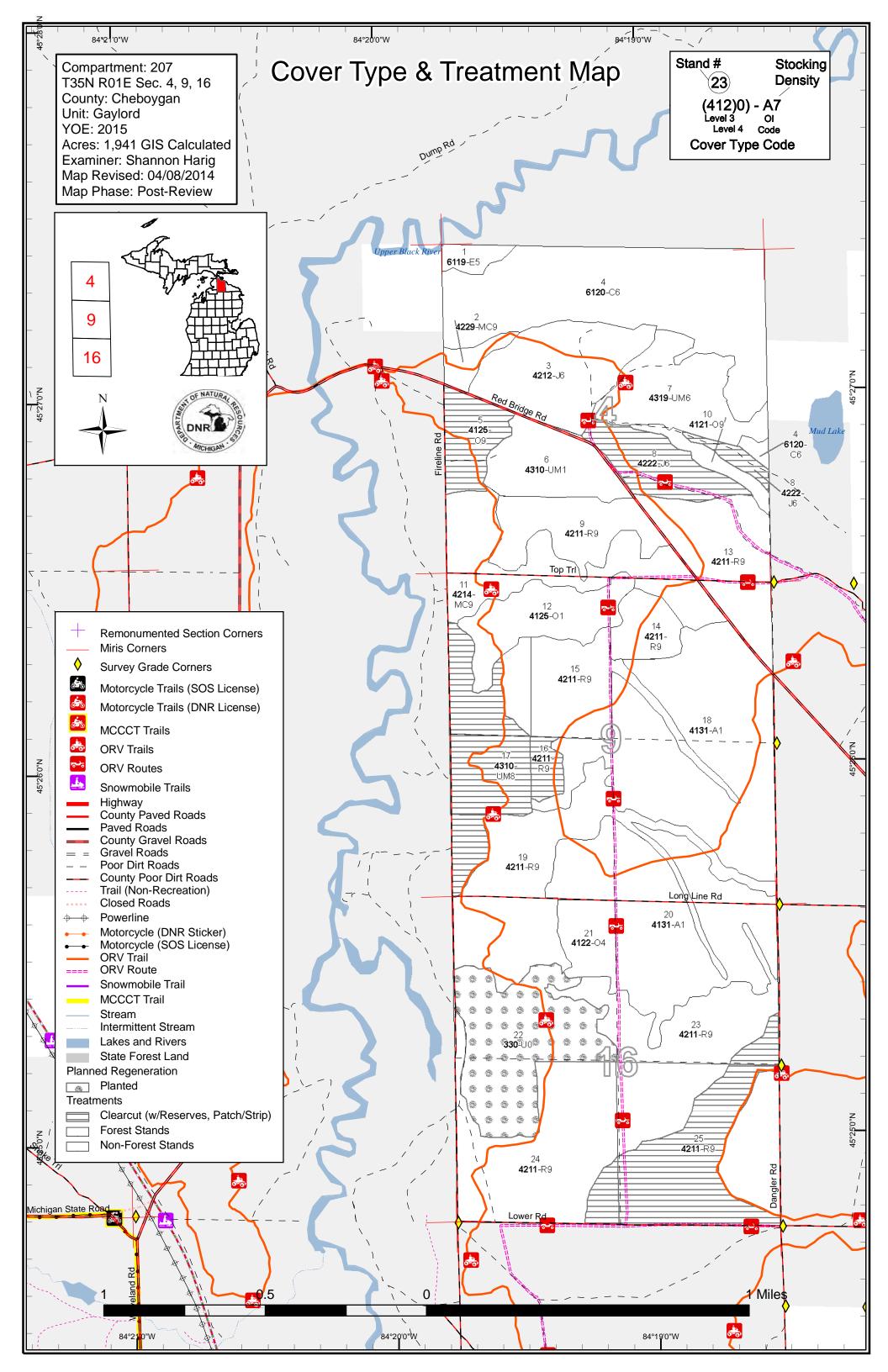
Base feature information, stand boundaries, cover types, and numbers

Proposed treatments
Site condition boundaries
Details on the road access system









Shannon Harig: Examiner

Compartment 207 Year of Entry 2015



						Age (Class									
		6.0	70,70	Se S	w w	AD AS	S. S	00 / S	'a 'a	80 80 80 B	88 /	00,00	70,70	70 [×] / 30°	A A A	, do
Aspen	361	0	0	0	0	0	0	0	0	0	0	0	0	0	361	
Cedar	0	0	0	0	0	0	0	0	0	186	0	0	0	0	186	
Jack Pine	0	0	0	79	0	0	0	48	0	0	0	0	0	0	128	
Low-Density Trees	105	0	0	0	0	0	0	0	0	0	0	0	0	0	105	
Lowland Deciduous	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10	
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	0	0	11	0	11	
Oak	54	27	0	0	0	0	0	0	0	44	0	0	0	0	125	
Planted Mixed Pines	0	0	0	0	0	0	0	0	131	0	0	0	0	0	131	
Red Pine	0	0	0	0	0	0	0	579	150	0	0	0	0	0	729	
Upland Mixed Forest	51	0	0	66	0	0	0	0	40	0	0	0	0	0	157	
Total	571	27	0	146	0	0	0	627	321	230	10	0	11	0	1941	



Report 2 – Proposed Treatment Summaries

Gaylord Mgt. Unit Year of Entry 2015

Compartment 207 **Total Compartment Acres: 1,941**

Acres by Treatment Type

Commercial Harvest - 272 Tree Planting - 82

Other - 0

Habitat Cut - 0 Opening Maintenance - 0

			Cov	er Ty	oe by F	larves	st Meth	nod	
			See of	, 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	No. S. S. S.	No O	Cinting Off	S. J. S.	So pro
Natural Pines		48	0	0	0	0	0	48	
Oak Types		31	0	0	0	0	0	31	
Planted Pines			0	0	0	0	0	153	
Upland Mixed Forest		40	0	0	0	0	0	40	
	Total	272	0	0	0	0	0	272	

Compartment: 207 Gaylord Mgt. Unit Report 3 -- Treatments Prescribed Year of Entry 2015 with No Limiting Factor s t а **Treatment** Size BA **Treatment Treatment Cover Type** Acres CoverType Stand Approval n Method Objective d Name Density Age Range Type **Status** 52207005-CC 31.1 4125 - Black, N. Pin High 95 51-80 Harvest Clearcut 4125 - Black, N. Pin Fld. Tr. Bdy. -5 Density Log Oak Oak Incomplete Prescription Clearcut with no reserves. The lack of vigor in the stand will result in most of the retention dying or blowing over before next entry. Protect recreational trail. Specs: Other Comments: Oak, aspen and pine regeneration is acceptable. Next Steps: Proposed 10/01/2014 Start Date: 48 2 42221 - Natural High 74 51-80 42221 - Natural 8 52207008-CC Harvest Clearcut with Fld. Tr. Bdy. -Jack Pine, Mixed Density Reserves Jack Pine, Mixed Incomplete w/ reserves Deciduous Pole Deciduous Prescription Clearcut with reserves. Leave retention in 1 or 2 islands. Tree length skid during non-snow months to scarify and distribute jack pine seed to promote natural regeneration. Mark several clumps of oak to leave. Protect recreational trail. Orient leave trees around trail where possible. Specs: <u>Other</u> Comments: **Next** Jack pine, oak and aspen regeneration is acceptable. If stocking level is too low, trench and plant jack pine seedlings to reach minimum Steps: standards. <u>Proposed</u> Start Date: 10/01/2014 52207011-CC 27.9 42141 - Planted 81-110 Harvest Clearcut with 42221 - Natural Fld. Tr. Bdy. -High 86 Mixed Pine, Mixed Density Log Reserves Jack Pine, Mixed Incomplete w/ reserves Deciduous Deciduous natural regeneration. Cut up to motorcycle trail, taking care to protect trail during harvest. Leave clumps of 2-3 oak per acre oriented along trail Specs: where possible. Protect recreational trail. Comments:

Prescription Clearcut with reserves. Leave retention in islands. Tree length skid during non-winter months to scarify and distribute jack pine seed to promote

Other

Pine, oak and aspen regeneration is acceptable. If regeneration does not meet minimum standards, plant jack pine in areas of no regen.

<u>Next</u> Steps:

Proposed

10/01/2014 Start Date:

42110 - Planted High 111-140 16 52207016-CC 113 79 Harvest Clearcut with 42221 - Natural Fld. Tr. Bdy. -Red Pine Density Log Reserves Jack Pine, Mixed Incomplete w/ reserves Deciduous

Prescription Clearcut with reserves, leave retention in islands. Tree length skid during non-winter months to scarify and distribute jack pine seed to promote natural regeneration. Take care to protect trail during harvest. Leave clumps of 2-3 oak per acre oriented around trail where possible. Specs:

Other

Comments:

Next Pine, oak and aspen regeneration is acceptable. If regeneration does not meet minimum standards, plant jack pine in areas of no regen.

Steps:

Proposed

10/01/2014 Start Date:

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 207
Year of Entry 2015

DEPARTME	DNR DNR
`	MICHIGAN

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
17	52207017-CC w/ reserves	39.6	4310 - Pine, Oak Mix	Medium Density Log	86 I	51-80	Harvest	Clearcut with Reserves	42221 - Natural Jack Pine, Mixed Deciduous	Fld. Tr. Bdy Incomplete

<u>Prescription</u> Clearcut with reserves, leave retention in islands. Tree length skid during non-winter months to scarify and distribute jack pine seed to promote <u>Specs:</u> natural regeneration. Take care to protect trail during harvest. Leave clumps of 2-3 oak per acre oriented around trail where possible.

Other Comments:

Pine, oak and aspen regeneration is acceptable. If regeneration does not meet minimum standards, plant jack pine in areas of no regen.

Next Steps:

Proposed

Start Date: 10/01/2014

19 52207019-CC 14.0 42110 - Planted High 111-140 Harvest Clearcut with 42221 - Natural Fld. Tr. Bdy. -Red Pine Jack Pine, Mixed Incomplete **Density Log** Reserves w/ reserves Deciduous

Prescription Clearcut with reserves. Leave retention in islands. Cut up to motorcycle trail. Tree length skid during non-winter months to scarify and distribute jack pine seed to promote natural regeneration. Cut up to trail, taking care to protect trail during harvest. Leave clumps of 2-3 oak per acre oriented arournd trail where possible.

Other Comments:

Next Pine, oak and aspen regeneration is acceptable. If regeneration does not meet minimum standards, plant jack pine in areas of no regen.

Steps:

Proposed 10

Start Date: 10/01/2014

42110 - Planted High 42221 - Natural Fld. Tr. Bdy. -23 52207023-CC 8 0 86 111-140 Harvest Clearcut Red Pine Jack Pine, Mixed Incomplete Density Log Deciduous

<u>Prescription</u> Clearcut, no retention due to small size. Tree length skid during non-winter months to scarify and distribute jack pine seed to promote natural <u>Specs:</u> regeneration. Leave clumps of 2-3 oak per acre.

<u>Other</u>

Comments:

Next Pine, oak and aspen regeneration is acceptable. If regeneration does not meet minimum standards, plant jack pine in areas of no regen.

Steps:

Proposed

Start Date: 10/01/2014

24 52207024-Cut 9.9 42110 - Planted High 78 111-140 Harvest Clearcut 42221 - Natural Fld. Tr. Bdy. -Red Pine **Density Log** Jack Pine, Mixed Incomplete Deciduous

<u>Prescription</u> Clearcut, no retention due to small size. Tree length skid during non-winter months to scarify and distribute jack pine seed to promote natural <u>Specs:</u> regeneration. Take care to protect trail during harvest. Leave clumps of 2-3 oak per acre oriented around trail where possible.

Other Comments:

Next Pine, oak and aspen regeneration is acceptable. If regeneration does not meet minimum standards, plant jack pine in areas of no regen.

Steps:

<u>Proposed</u>

Start Date: 10/01/2014

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 207 Year of Entry 2015

DEPARTME	DNR DNR	1
`	MICHIGAN	

t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
25	52207025-CC w/ reserves	82.4	42110 - Planted Red Pine	High Density Loc	77	81-110	Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Fld. Tr. Bdy

Prescription Clearcut with reserves, leave retention in islands. Tree length skid and chip tops to prepare site for trenching and planting. Take care to protect Specs: trail during harvest. Leave clumps of 2-3 oak per acre oriented arournd trail where possible.

Other Comments:

Next Pine, oak and aspen regeneration is acceptable. If regeneration does not meet minimum standards, plant jack pine in areas of no regen.

Steps:

s

Proposed Start Date:

10/01/2014

Total Treatment

272.5 Acreage Proposed:

Gaylord Mgt. Unit Report 4 -- Treatments Prescribed with Compartment: 207 a Site Condition s Year of Entry 2015 t **Treatment** Acres CoverType Size Stand ВА **Treatment Treatment Cover Type Approval** n Objective Method Status Name Range Density Age Type #Type! #Type! **Prescription** Specs: Other Comment: **Next** Steps: <u>Proposed</u> #Type! Start Date:

Total Treatment

Limiting Factor

Acreage Proposed: 0.0

Report 5 – Site Conditions

Gaylord Mgt. Unit

Shannon Harig: Examiner

Compartment 207 Year of Entry 2015

Availa	ability for I	Management					
Total	Acres	Acres		Domina	nt Site	Cond	ditions
Acres	Available	Not Available		No	5C	3J	3D
359	359		Aspen	359	0		
185	185	0	Cedar	185		0	
127	127		Jack Pine	127			
10		10	Lowland Deciduous			10	
11		11	Natural Mixed Pines				11
124	124		Oak	112	13		
131	131		Planted Mixed Pines	131	0		
727	727		Red Pine	380	347		
157	157		Upland Mixed Forest	157	0		
1,832	1,811	21	Total Forested Acres	1,451	360	10	11
	99%	1%	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.

Commo		3D: Recreational / Scenic values	11		
003 A	vailable				
		5C: Delay treatment for age/size class diversity or exceptional site quality	59		
Comme	ents:				
004 A	vailable	5C: Delay treatment for age/size class diversity or exceptional site quality	24		
Comme	ents:				

Report 5 – Site Conditions

Gaylord Mgt. Unit
Shannon Harig: Examiner

Compartment 207 Year of Entry 2015

005	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	69
С	omments:		
006	Not Available	3J: Water quality / BMPs (stream, river, or lake)	10
С	omments:		
007	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	86
С	omments:		
008	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	124
С	omments:		

Compartment: 207 Year of Entry: 2015

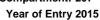


Report 6 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* 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
Red Bridge Old Growth	Type 1 or Type 2 Old Growth	Verified Type 1 Old Growth Area	SCA	11.3
Comments				
Old Red Pine and White Pin	ne			

Gaylord Mgt. Unit Compartment: 207





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.

Conservati Area	ion Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen constocked trout populations and those of other coldwater fishes conditions for coldwater fishes may occur in Michigan lakes groundwater inflows, or are located in colder (northern) area Director's action and designated as trout resources by Fisher	species to persist from year to year. Suitable if they are relatively deep, have substantial as of the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen stocked trout populations and those of other coldwater fish syear to year. Coldwater streams in Michigan typically provid contributions of groundwater to their stream flows. Such streaming designated as trout resources by Fisheries Order 210.	species (e.g., slimy sculpin) to persist from e these conditions due to substantial

S t	Gaylord	l Mgt. Unit		Report 8	– Forested	Stands Compartment: 207 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6119 - Mixed Lowland Deciduous Forest	Medium Density Pole	9.6	102		
2	42290 - Natural Mixed Pine	High Density Log	11.4	144	111-140	Large red and white pine. Look very healthy. Cored a smaller red pine that was 143 years old. Did not see any old stumps, it doesn't appear that this stand was ever logged.
3	42120 - Planted Jack Pine	High Density Pole	79.3	37	81-110	
4	6120 - Lowland Cedar	High Density Pole	185.5	98	1-50	
5	4125 - Black, N. Pin Oak	High Density Log	31.1	95	51-80	The oak in this stand is dying. The aspen and jack pine are in fair health. I don't know how much longer this stand will hold.
6	4310 - Pine, Oak Mix	Low Density Sapling	51.0	6		
7	4319 - Mixed Upland Forest	High Density Pole	66.2	35	51-80	
8	42221 - Natural Jack Pine, Mixed Deciduous	High Density Pole	48.2	74	51-80	Jack pine is fairly healthy. Aspen and oak showing signs of decline.
9	42110 - Planted Red Pine	High Density Log	53.6	75	81-110	
10	4121 - Oak, Aspen	High Density Log	13.0	90	51-80	Stand looks healthy.
11	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Log	131.4	86	81-110	Red pine looks good, jack pine and oak are showing signs of decline.
12	4125 - Black, N. Pin Oak	Low Density Sapling	54.0	6		Mixed regen looks good.
13	42110 - Planted Red Pine	High Density Log	73.4	86	81-110	Red pine looks healthy.
14	42110 - Planted Red Pine	High Density Log	24.4	79	141-170	Red pine less vigorous than in most adjacent stands, smaller diameters and heights.
15	42110 - Planted Red Pine	High Density Log	58.9	79	81-110	Red pine looks healthy and vigorous, oak is dead and dying.
16	42110 - Planted Red Pine	High Density Log	11.3	79	111-140	Red pine looks healthy. Diameters are smaller than in adjacent stands.
<u> </u>	4310 - Pine, Oak Mix	Medium Density Log	39.6	86	51-80	Looks like aspen and jack pine were harvested in 1996. Some patchy aspen, pine and oak regen where larger canopy gaps exist.

S t a n	Gaylord Mgt. Unit			Report 8 – Forested Stands			Compartment: 207 Year of Entry: 2015	OF NATURAL PRODUCTION OF NATURAL PROPURTY OF N
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	MICHIGAN .
18	4131 - Aspen, Oak	Low Density Sapling	200.6	7			lack Pine planted in 2011.	
19	42110 - Planted Red Pine	High Density Log	138.5	79	111-140	Red Pine looks healthy, oak is showing signs of decline. Large white pine and a lot of white pine regen in NE finger of the stand.		
20	4131 - Aspen, Oak	Low Density Sapling	160.0	6		Jack Pine p	anted in 2010 and re-planted in	2011.
21	4122 - Oak, Pine	Low Density Pole	26.6	17	1-50			
23	42110 - Planted Red Pine	High Density Log	76.5	86	111-140			
24	42110 - Planted Red Pine	High Density Log	130.9	78	111-140	Red and Jack Pine	e look healthy, oak showing sign	s of decline.
25	42110 - Planted Red Pine	High Density Log	161.1	77	81-110	entries ago. Oak is	Everything but Red Pine and or not very vigorous. Red Pine ove ny appreciable regeneration of ar originally present.	erstory is too

Report 9 - Nonforested Stands

Compartment: 207 Year of Entry: 2015



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
22	3303 - Mixed Low Density Trees	105.3	Plantation	Jack Pine	