

COMPARTMENT REVIEW PRESENTATION

GAYLORD FOREST MANAGEMENT UNIT

COMPARTMENT: 126

ENTRY YEAR: 2012 ACREAGE: 2,409 COUNTY: Emmet

Revision Date: 05/28/2010

Stand Examiner: Don Stacks

Legal Description: T34N R04W Secs. 7, 16, 17, 19 – 21. T34N R05W Secs. 12, 24.

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: Leelanau loamy sand and Kalkaska sand. The eastern 1/3 and western 1/3 of the compartment are very hilly with numerous high steep hills that would be inoperable for logging equipment. The middle 1/3 of the compartment is very flat.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Numerous permanent residences exist in and around this somewhat fragmented compartment. Several small horse farms operate in this area. Development of the private parcels adjacent to the compartment is on the rise.

Unique, Natural Features: Red-shouldered hawks have been listed in the last decade as nesting in the area of Compartment 126.

Archeological, Historical, and Cultural Features: None listed.

Special Management Designations or Considerations: None listed.

Watershed and Fisheries Considerations: This compartment contains portions of West Branch Minnehaha Creek and Minnehaha Creek, both of which are designated trout streams within the Cheboygan River watershed. Both of these streams are classified as coldwater streams. No treatments are planned near these streams.

Wildlife Habitat Considerations: This compartment contains mostly upland habitat with the majority being upland hardwoods with a mixture of red pine and aspen. A portion of stand 54 will be treated which will add some structural diversity. Stand 40 and a portion of stand 29 will be clear cut to add some early successional habitat. This area has a variety of upland species including white-tailed deer, wild turkey, grouse, red shouldered hawks and various upland song birds. This compartment receives moderate to high hunting pressure due to its proximity to Petoskey.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of coarse textured till, ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 10 and 400 feet. The Devonian Traverse Group subcrops below the glacial drift. The Traverse is quarried for limestone in other areas of the state. Gravel pits are located on the uplands in Section 8. The uplands have good gravel potential. The nearest oil and gas production, the Antrim Shale gas play, is located 10 miles to the south in Charlevoix County. There is limited oil and gas potential for the Antrim Shale in the area, however there has been recent leasing in this Compartment.

Vehicle Access: Access is good throughout the compartment by means of multiple county and seasonal county roads, and forest two-track roads.

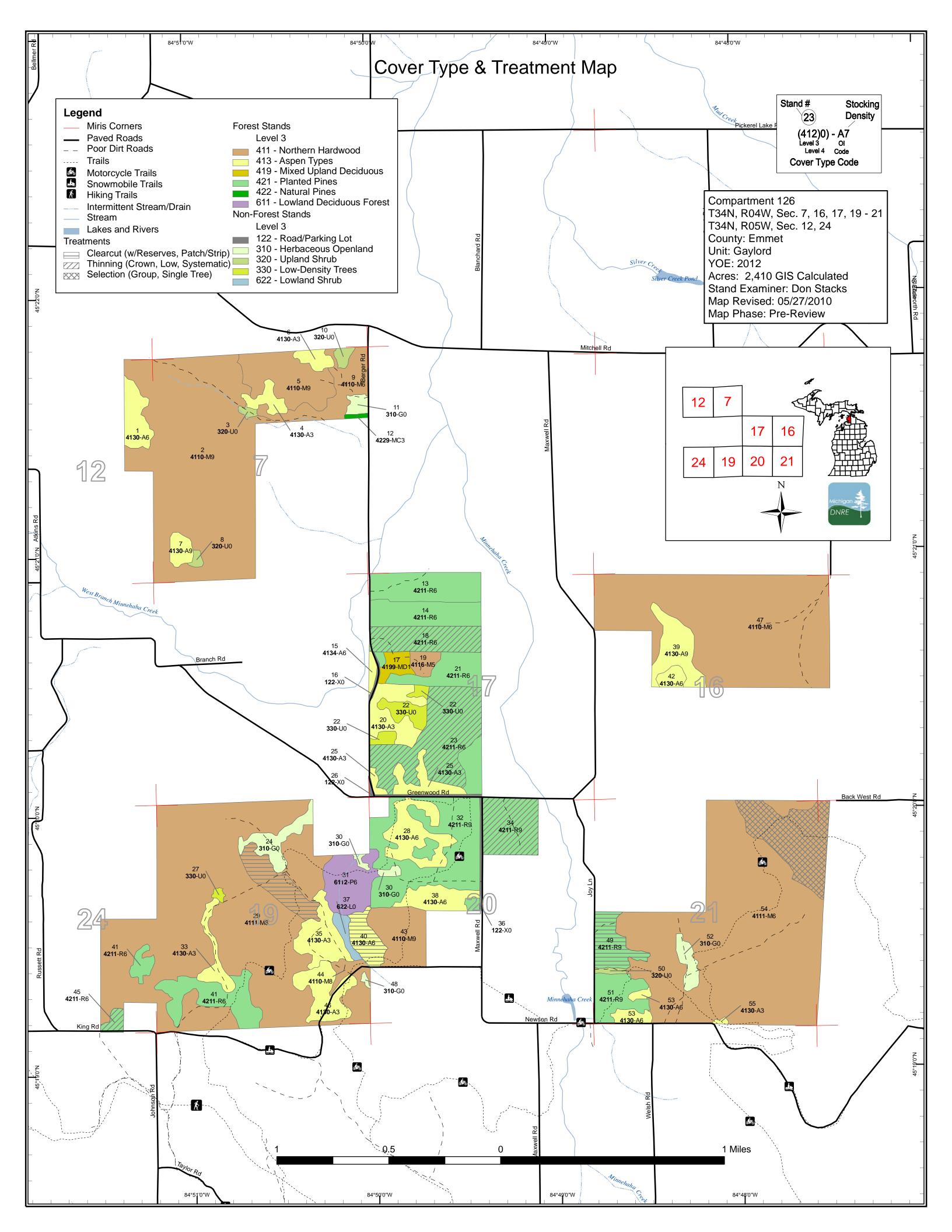
Survey Needs: About ¾ mile of prescribed treatments may require the assistance of the DNRE survey crew.

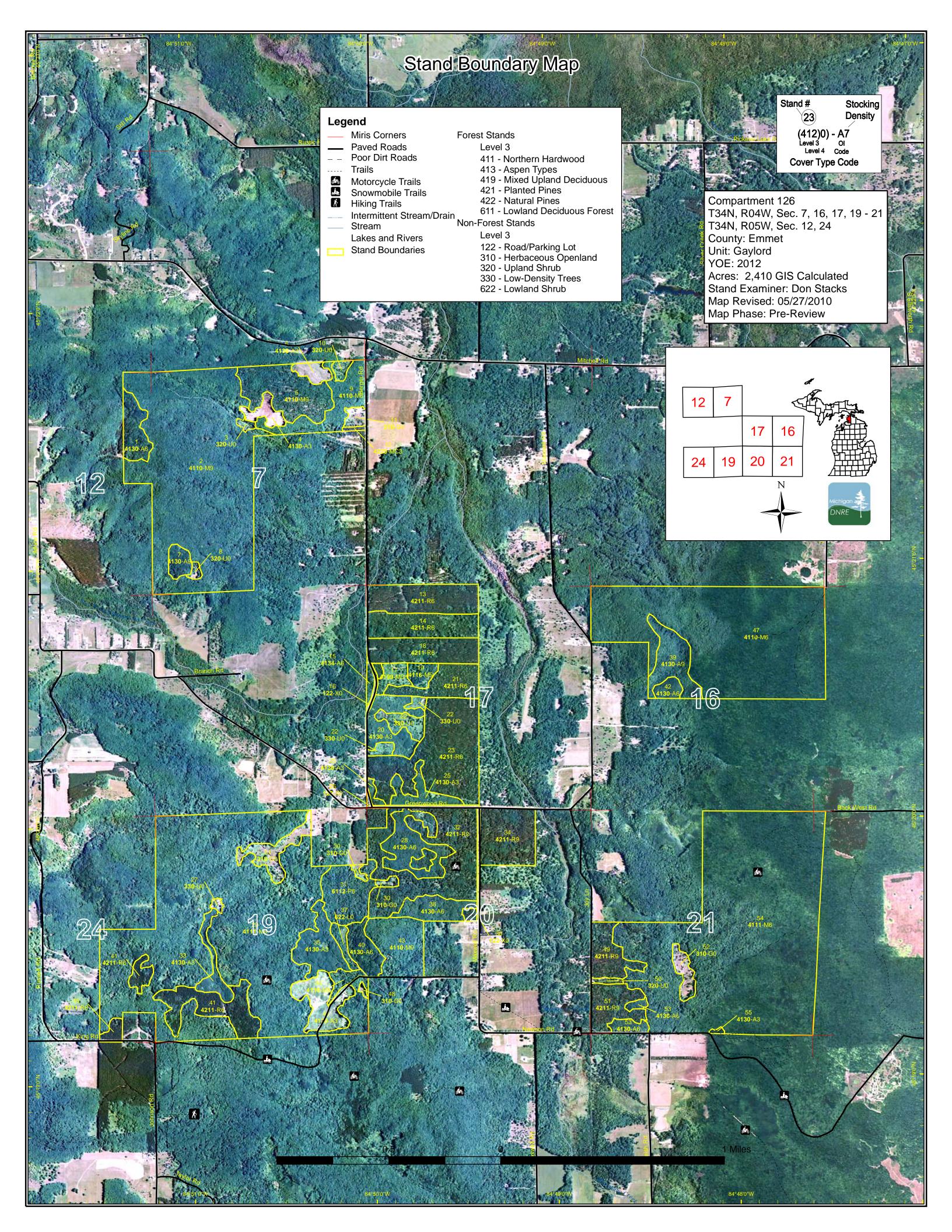
Recreational Facilities and Opportunities: An ORV trail and designated snowmobile trail are available for public use in the southern 1/3 of the compartment.

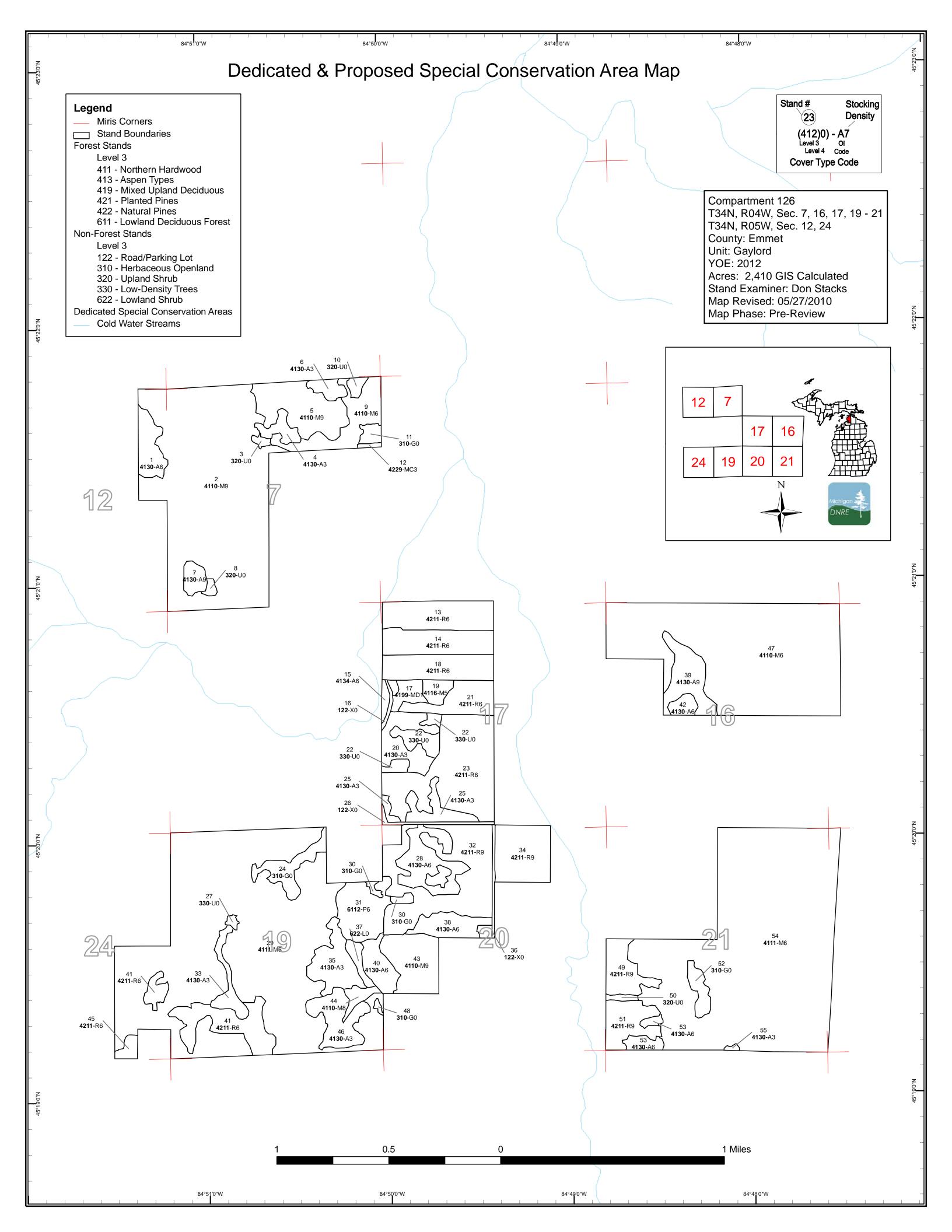
Fire Protection: The Indian River Field Office is located about 12 miles to the northeast for wildfire protection, as well as the Springvale Township VFD which is located about 2 miles to the northeast.

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







Gaylord Mgt. Unit

(Level 3 Cover Type)

Compartment 126 Year of Entry 2012



							Age	Class									
	No.	De Joseph J	6.7	0,70	Por Port		D. C.	\$5.05	80.00	, N. P.	\$ 6	86.30	00,00	70,70	* 0° / 3°	A A	, s ^{to}
Aspen Types	0	44	43	102	6	0	0	20	55	0	0	0	0	0	0	270	
Herbaceous Openland	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	
Low-Density Trees	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	
Lowland Deciduous Forest	0	0	0	0	0	0	0	0	33	0	0	0	0	0	0	33	
Lowland Shrub	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
Mixed Upland Deciduous	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	9	
Natural Pines	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
Northern Hardwood	0	0	0	0	0	0	0	0	747	511	293	0	0	0	0	1552	
Planted Pines	0	0	0	62	0	77	142	0	182	0	0	0	0	0	0	462	
Road/Parking Lot	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
Upland Shrub	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	

Total



Table 2 – Proposed Treatment Summaries

Gaylord Mgt. Unit

Compartment 126

Year of Entry 2012

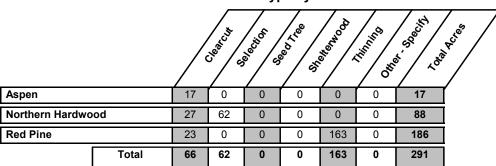
Total Compartment Acres: 2410

Acres by Treatment Type

Commercial Harvest - 291 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



Compartment: 126 Gaylord Mgt. Unit Table 3 -- Treatments Prescribed with No Limiting Factor Year of Entry 2012 s t а **Treatment** Acres Size Stand **Treatment Treatment** Cover Type n Stage1 **Approval** Name CoverType Method Objective d Density Age Type Status 18 52126018-36.0 42111 - Planted High Density Pole 49 Harvest Crown Thinning Planted Red Pine. Cmpt. Review Mixed Deciduous Mark Thin Red Pine, Mixed Proposal Deciduous Prescription Mark and cut red pine trees, mostly poletimber, to reduce residual BA to about 120sq. ft. Leave hardwood and aspen stems unless they restrict the movement of equipment throughout the stand. In this case, hardwood and aspen stems should be felled and left on site. Specs: Other_ Comments: <u>Next</u> Steps: 23 52126023-81.5 42110 - Planted High Density Pole 53 Harvest Crown Thinning Planted Red Pine Cmpt. Review THIN Red Pine Mixed Deciduous Proposal Prescription Mark and thin red pine to about 120 sq. ft. of BA. Hardwood or aspen trees that obstruct the movement of harvesting equipment may be felled Specs: and left on-site. Exclude the SE corner of the stand from harvest this Y.O.E. because it is not adequatley stocked to justify thinning. Stand consists of mostly red pine poletimber, with a few sawtimber trees present. Northeast corner of stand was row-thinned in 2003. Other_ Southeast corner is currently lesser stocked with scattered white pine poletimber and sawlog trees present. Southwest porton of stand has nver Comments: been treated, resulting in higher present BA. Next Re-examine next Y.O.E. Steps: 29 52126029 sm 26.7 4111 - S.Maple. High Density Pole 75 Harvest Clearcut with Mixed N. Hardwood -Cmpt. Review all-CC Hard Mast Reserves Proposal Aspen Association Prescription Final harvest stand. Leave one or two uncut retention islands. Non-winter harvest only because of designated snowmobile trail on King Rd. Specs: Other_ Wildlife Division has requested this treatment. Comments: **Next** Monitor hardwood/aspen regen. Steps: 42110 - Planted Cmpt. Review 52126034-40 2 Crown Thinning 34 High Density Log 73 Harvest Planted Red Pine. Red Pine Mixed Deciduous THIN Proposal Prescription Prescribe thinning this Y.O.E. to remove larger diameter red pine and utility pole size class trees, which will release smaller diameter red pine trees also. Mark stand to about 90-100 sq. ft. of BA. Remove all jack pine poletimber during this harvest. Protect emerging white pine in understory.

Specs:

40 acre stand of mostly red pine sawtimber, some of which are 18 -20 inch DBH in size, adjacent to private residences on three sides. Sparse

Comments: amounts of jack pine poletimber, white pine, and aspen clones also present. Stand is adjacent to county roads on the north and west sides.

<u>Next</u> Steps:

52126040-CC High Density Pole 65 Aspen, Mixed 40 16 7 4130 - Aspen Harvest Clearcut Cmpt Review Deciduous Proposal

Prescription Final harvest this Y.O.E. Protect lowland brush stand located to west of this stand during sale prep. Small acreage requires no retention areas. Specs:

Other Big-toothed, quaking aspen, and a lesser amount of mixed hardwood on side of west-facing slope. Fairly vigorous at this time. Topography and Comments: aethetics are considerations. Limited amount of aspen in this compartment.

<u>Next</u> Steps:

Gaylord Mgt. Unit S

Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 126
Year of Entry 2012

Michigan DNRE

a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
45	52126045- THIN	5.0	42110 - Planted Red Pine	High Density Pole	50	Harvest	Crown Thinning	Planted Red Pine	Cmpt. Review Proposal

<u>Prescription</u> Prescribe a marked thinning this Y.O.E. Mark stand down to about 120 sq. ft. Mark suppressed and poor quality trees to help release crop trees. <u>Specs:</u>

Other Small acreage red pine poletimber. Stand was row-thinned in 1995. Part of stand is now under lease with adjacent tower site. Possibly include Comments: this stand for harvest with stand adjacent to south of King Rd. out of this entry year.

Next Steps:

49 52126049- 22.9 42110 - Planted High Density Log 73 Harvest Clearcut with Reserves Mixed Deciduous Proposal

<u>Prescription</u> Wildlife Division has requested a final harvest of this stand. Clumps and/or scattered red pine trees should be left for aesthetics. Specs:

Other Stand consists of mostly red pine sawtimber with lesser amounts of red pine poletimber. Stand was thinned in 2004. Many utility poles present comments: at this time. Stand is located adjacent to county road and multiple residences. Fairly dense hardwood understory outside of recent skid roads.

at this time. Stand is located adjacent to county road and multiple residences. Fairly dense hardwood understory outside of recent skid roads. Stand should be allowed to convert to northern hardwoods over time. Leave a remnant amount of red pine for aethetics.

Natural regen and conversion to northern hardwoods. Steps:

оторо.

54 52126054_sm 61.7 4111 - S.Maple, High Density Pole 80 Harvest Single Tree Selection S.Maple, Hard Mast Cmpt. Review Association Association Proposal

Prescription Prescribe a selection harvest this Y.O.E. for the very NE portion of the stand. Mark and cut northern hardwood to a residual BA of 75-80 sq. ft. Specs: to help promote harwood sapling regeneration and to help release crop trees.

Other Large stand of lesser quality northern hardwood, mostly understocked poletimber, on extremely steep, hilly terrain. The very northeast corner of Comments: the stand is a more level plateau area that has a higher BA stocking density, larger diameters, and better quality.

Next Steps:

Total Treatment

Acreage Proposed: 290.8

Gaylord Mgt. Unit Table 4 -- Treatments Prescribed with a Limiting Factor

Size

Density

Stage1

CoverType

Treatment

Type

Stand

Age

Treatment

Method

Compartment: 126 Year of Entry 2012

Cover Type

Objective

Michigon DNRE DNRE

Status

Prescription

Specs:

n

Other Comment:

Next Steps:

<u>Limiting Factor and No</u> <u>Treatment Reason</u>

Treatment

Name

Acres

Total Treatment Acreage Proposed:

0

S t	Gaylord Mgt. Unit				orested Sta	Victorian
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	High Density Pole	18.3	70	111-140	BTA, with mixed northern hardwood poletimber, on west facing slope, accessable only through private property.
2	4110 - Sugar Maple Association	High Density Log	293.0	90	81-110	Northern hardwood stand, a mix of sawtimber/poletimber located on extremely hilly terrain with many steep slopes. Variable BA's found throughout stand. Curent ave. BA is about 110.
4	4130 - Aspen	High Density Sapling	9.0	5		Young aspen regen on rolling hills, some steep slopes. Final harvested 5 years ago.
5	4110 - Sugar Maple Association	High Density Log	47.1	85	81-110	Fairly high quality northern hardwood stand, a mix of sawtimber and poletimber. Stand received a selection harvest 5 years ago. Rolling hills with some steep slopes.
6	4130 - Aspen	High Density Sapling	7.4	5		Young aspen regen on rolling hills, some steep slopes. Stand was harvested 5 years ago.
7	4130 - Aspen	High Density Log	8.2	70	111-140	Small BTA stand on on steep west-facing slope. Mix of pulpwood and sawtimber. Still fairly vigorous.
9	4110 - Sugar Maple Association	High Density Pole	34.0	70	81-110	Stand consists of northern hardwood, mostly poletimber, adjacent to county road.
12	42290 - Natural Mixed Pine	High Density Sapling	1.2	15		Stand consists of scotch pine saplings and small poletimber that have encroached across private property line to the south from a planted scotch pine windbreak. Adjacent to county road.
13	42110 - Planted Red Pine	High Density Pole	40.7	49	111-140	Red pine plantation made up of mostly poletimber with a few small sawtimber trees. Stand received a marked thinning in 2003. Slightly lower BA at present. Marked thinning next Y.O.E.
14	42110 - Planted Red Pine	High Density Pole	35.2	28	81-110	Young,1-2 stick red pine pole timber, with scattered black cherry saps and poles throughout stand.
15	4134 - Aspen, Spruce/Fir	High Density Pole	3.1	60	51-80	Small stand of aspen adjacent to county road and private property. Converting to balsam fir.
17	4199 - Other Mixed Upland Deciduous	Low Density Sapling	9.0	15		Sparse stand of mixed hardwood and aspen regen form 1995 final harvest.
18	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	36.0	49	171-200	Red pine poletimber stand, 3-5 sticks, was row-thinned about 20 years ago but did not receive marked thinning last Y.O.E. Pockets of regenerating hardwood from initial row-thinning throughout stand.
19	4116 - Mixed N. Hardwood - Aspen	Medium Density Pole	7.7	70	51-80	Sparse stand of lesser quality hardwood and aspen.
20	4130 - Aspen	High Density Sapling	25.3	18		Aspen regen in transition from saplings to poletimber, adjacent to county road.

S t	Gaylord Mgt. Unit			_	orested Sta	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	42110 - Planted Red Pine	High Density Pole	27.2	28	81-110	Stand consists of 1-2 stick planted red pine.
23	42110 - Planted Red Pine	High Density Pole	93.8	53	141-170	Stand consists of mostly red pine poletimber, with a few sawtimber trees present. Northeast corner of stand was rowthinned in 2003. Southeast corner is currently lesser stocked with scattered white pine poletimber and sawlog trees present. Southwest porton of stand has nver been treated.
25	4130 - Aspen	High Density Sapling	17.7	18		Aspen stand in transition from saplings to small poletimber from 1992 final harvest.
28	4130 - Aspen	High Density Pole	33.1	29	51-80	Aspen and northern hardwood regen in transition from saps to smaller diameter poletimber. Scattered large diameter red pine sawtimber also present in stand.
29	4111 - S.Maple, Hard Mast Association	High Density Pole	446.1	75	51-80	Stand consists of lesser to poor quality northern hardwoods on steep terrain. Lower BA found throughut most of the stand. Occasional quaking and big-toothed aspen in lesser amounts. There is not enough aspen within stand to justify a final harvest with a MO of aspen. ORV trail runs through stand. Beech scale found in stand.
31	6112 - Lowland Aspen	High Density Pole	33.4	75	81-110	Mixed swamp aspen with a fairly well stocked sugar maple poletimber in understory. Aspen old, falling out of stand. Too wet to harvest without excessive soil damage. Let stand convert to northern hardwood.
32	42110 - Planted Red Pine	High Density Log	93.3	75	81-110	Large and very large diameter red pine sawtimber adjacent to county roads on the north and east sides. Most, if not all, of the red pine is very large and limby. Not utility pole quality. Advanced aspen and hardwood regen in understory. At this point, it doesn't make sense to damage or set back this understory to harvest lesser quality red pine sawtimber. Other red pine stands in this compartment are being thinned, including the stand adjacent to the east of this stand. Some or all this red pine could be harvested when aspen/hardwood component is harvested in about 30 years.
33	4130 - Aspen	High Density Sapling	12.4	20		Young aspen stand in transition from saplings to poletimber.
34	42110 - Planted Red Pine	High Density Log	40.2	73	111-140	40 acre stand of mostly red pine sawtimber, some of which are 18 -20 inch DBH in size, adjacent to private residences on three sides. Sparse amounts of jack pine poletimber, white pine, and aspen clones also present. Stand is adjacent to county roads on the north and west sides. Prescribe thinning this Y.O.E. to remove larger diameter red pine and utility pole size class trees, which will release smaller diameter red pine trees also. Mark stand down to about 90-100 sq. ft. of BA. Remove all jack pine poletimber during this harvest. Protect emerging white pine in understory.
35	4130 - Aspen	High Density Sapling	27.5	20		Young aspen stand in transition from saplings to small poletimber. Final harvest took place in 1990.

S t	Gaylord Mgt. Unit				orested Sta	Nichiology S
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
38	4130 - Aspen	High Density Pole	19.4	29	51-80	Big- toothed aspen and lesser amounts of hardwood regen in transition from saps to small diameter poletimber from 1981 final harvest. Scattered large diameter red pine sawtimber present in stand also.
39	4130 - Aspen	High Density Log	28.4	74	81-110	Stand consists of big-toothed aspen and mixed northern hardwood, poletimber and sawlogs, on very hilly terrain with numerous severe slopes. West slopes visible from Petoskey. Terrain and acceess limitiations make this stand impractical to harverst.
40	4130 - Aspen	High Density Pole	16.7	65	81-110	Big-toothed and quaking aspen on side of west-facing slope. Fairly vigorous at present time. Final harvest this Y.O.E.
41	42110 - Planted Red Pine	High Density Pole	43.0	53	111-140	Red pine poletimber with a few scattered sawlog trees. Scattered northern hardwood poletimber and sawlog trees found within stand. Stand was row-thinned in 2005. Lower BA at present time. Stand will be ready for a marked thinning next Y.O.E. ORV trail runs through stand.
42	4130 - Aspen	High Density Pole	6.2	34	51-80	Young aspen poletimber on steep, visible west-facing sideslope, from 1976 final harvest.
43	4110 - Sugar Maple Association	High Density Log	36.9	80	81-110	Northern hardwood stand, mostly sugar maple poletimber. West side of stand is a fairly steep slope, which will be hard for equipment to operate. Smaller diameters and lesser stocked at present.
44	4110 - Sugar Maple Association	Medium Density Log	6.3	88	51-80	Small stand of mostly sugar maple sawtimber adjacent to county road/snowmobile trail. Stand was thinned in 2003 along with adjacent aspen stand.
45	42110 - Planted Red Pine	High Density Pole	5.0	50	171-200	Small acreage red pine poletimber. Stand was row-thinned in 1995. Prescribe a marked thinning this Y.O.E. Mark stand down to about 120 sq. ft. Part of stand is now under lease with adjacent tower site. Possibly include this stand for harvest with stand adjacent to south of King Rd. out of this entry year.
46	4130 - Aspen	High Density Sapling	27.5	7		High quality aspen regen from 2003 final harvest.
47	4110 - Sugar Maple Association	High Density Pole	259.6	75	81-110	Stand consists of northern hardwood poletimber/sawtimber on many extremely high, steep slopes. Very difficult, if not impossible to operate equipment in this stand. West slopes of this stand visible from Petoskey. Slightly lower BA at present. A few of the lower accessible valleys have been thinned about 20 years ago.

s t				•	orested Sta	V 47 4 2010 Michigan
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
49	42110 - Planted Red Pine	High Density Log	22.9	73	81-110	Stand consists of mostly red pine sawtimber with lesser amounts of red pine poletimber. Stand was thinned in 2004. Many utility poles present at this time. Stand is located adjacent to county road and multiple residences. Prescribe a treatment to remove utility poles and larger diameter red pine this Y.O.E. Leave a residual amount of smaller diameter (10-12") red pine (about 60-70 sq. ft.). Fairly dense hardwood understory outside of recent skid roads. Stand should be allowed to convert to northern hardwoods over time. Leave a remnant amount of red pine for aethetics.
51	42110 - Planted Red Pine	High Density Log	25.1	73	81-110	See comments for stand #35.
53	4130 - Aspen	High Density Pole	8.6	29	51-80	Young aspen stand in transition from saps to small poletimber from1981 final harvest.
54	4111 - S.Maple, Hard Mast Association	High Density Pole	421.1	80	81-110	Large stand of lesser quality northern hardwood, mostly understocked poletimber, on extremely steep, hilly terrain. The very northeast corner of the stand is a more level plateau area that has a higher BA stocking density, larger diameters, and better quality. Prescribe a selection harvest this Y.O.E. for this portion of the stand. Beech scale found in this stand.
55	4130 - Aspen	High Density Sapling	0.9	20		Young aspen in transition from saps to small poletimber, from 1990 final harvest.

Gaylord Mgt. Unit

6 - Nonforested Stands Inventory Method: IFMAP

Compartment: 126 Year of Entry: 2012



Stand	Cover Type	Acres	Gen Cmts:
3	320 - Upland Shrub	2.0	
8	320 - Upland Shrub	2.1	
10	3205 - Mixed Upland Shrub	3.6	
11	3105 - Mixed Upland Herbaceous	4.9	Grass opening with scattered, encroaching hardwood saps and scattered scotch pine saps along south half of stand.
16	122 - Road/Parking Lot	2.0	Berger Rd.
22	3303 - Mixed Low Density Trees	16.6	Sparse scattered black cherry and pin cherry, with a few rows of planted red pine.
24	3105 - Mixed Upland Herbaceous	18.3	Grass stand with encroaching hardwood saplings and small poletimber. Scattered juniper present also.
26	122 - Road/Parking Lot	4.6	Greenwood Rd.
27	3301 - Low Density Deciduous Tree	1.6	Very high, steep hillside that has become a scramble area for ORV's and snowmobiles. Fair amount of exposed soil/sand with significant erosion occurring.
30	3105 - Mixed Upland Herbaceous	4.0	Small grass openings with encroaching hardwood and aspen saplings and small poletimber.
36	122 - Road/Parking Lot	3.6	
37	6220 - Alder/willow	6.2	
48	3102 - Grass	1.0	
50	3205 - Mixed Upland Shrub	2.3	Upland brush stand between two R9 stands to the north and south, adjacent to county road. Has been used as a landing for decked wood in the past.
52	3105 - Mixed Upland Herbaceous	9.5	

Gaylord Mgt. Unit Compartment: 126

Year of Entry: 2012

Michigan DNRE

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

Gaylord Mgt. Unit Compartment: 126
Year of Entry 2012





* 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	Туре	Description ERA = Ecological Reference HCVA = High Conservation V SCA = Special Conservation					
SCA	Cold Water Stream	stocked trout populations and those of other cold year to year. Coldwater streams in Michigan typic	s. Such streams are established by Director's action and				