COMPARTMENT REVIEW PRESENTATION

GAYLORD FOREST MANAGEMENT UNIT

COMPARTMENT: 120

ENTRY YEAR: 2013
ACREAGE: 3,065
COUNTY: Emmet

Revision Date: 05/09/2011

Stand Examiner: John Scheele

Legal Description: T38N-R04W Sections 04-06, 08, 09, 16-18, 20, and 21

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 fairly level to gently sloping and contains both lowland and upland forested and non-forested vegetation. There are 3 general soil type associations in the compartment. The Carbondale-Tawas-Roscommon Association soils are deep, poorly drained and very poorly drained, organic and sandy soils in broad glacial drainageways and on outwash plains and lake plains. These soils are throughout the compartment. The Thomas-Brevort-Iosco Association soils are deep, somewhat poorly well-drained and poorly drained, nearly level to gently sloping, loamy and sandy soils on lake plains. These soils are located in the northern portion of the compartment. The East Lake-Blue Lake-Kalkaska Association soils are deep, well drained, nearly level, sandy soils on lake beaches and outwash plains. These soils are scattered along Munger Road in the southern part of the compartment.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The state ownership within this compartment consists of 2 relatively large contiguous blocks. There is a significant amount of common boundaries between state and private ownership. The private ownership consists of relatively large-sized parcels. The northern boundary of the compartment is adjacent to other larger state ownership.

Unique, Natural Features: Hungerford's crawling water beetle, eastern pondmussel, grizzled skipper, migrant loggerhead shrike, and red-shoulder hawk have all been documented in the compartment. A Bald eagle occurrence has been record east of the compartment.

Archeological, Historical, and Cultural Features: A search of the Archeological Concerns database indicates an archeological concern in Section 16.

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

Watershed and Fisheries Considerations: The Carp River, a Type 1 designated trout stream, flows through this compartment. Since this is a high quality stream it is not stocked and its trout population is supported only by natural reproduction. Sufficient buffers should be left near riparian areas in order to discourage beaver activity and dams, as well as to provide shade and thermal refugia. Please adhere to all appropriate BMP's and avoid wetland areas.

Wildlife Habitat Considerations: This compartment consists of a mixture of upland and lowland types. The lowland areas are utilized by black bear, beaver, otter, white-tailed deer and various amphibians. The upland areas are a mixture of red pine, aspen and hardwoods. Stands 40 and 42 are going to be treated which will provide some structural diversity within these stands. Stands17, 22, 23, 25, 29, 37, 40, and 56 are going to be clear cut to provide early successional habitat for woodcock, grouse, and white-tailed deer. The majority of these stands are more of the lowland type which are a priority due to the decline of woodcock populations.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of coarse textured glacial till (highlands in the southwest), and lacustrine (lake) sand and gravel. The glacial drift thickness varies between 100 and 400 feet, thickening to the south. The Devonian Detroit River Group and Mackinac Breccia subcrop below the glacial drift. These formations are used for stone elsewhere in the State. The nearest gravel pit is located in the SW of Section 8. 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 34 miles to the south. The Collingwood Formation may have oil and gas potential in the area, as these lands were nominated for the October 2010 auction, but went no bid.

Vehicle Access: The southern portion of the compartment is fairly accessible by Munger and East Gill Road, as well as scattered state two-tracks. The northern portion of the compartment has very limited access due to surrounding private ownership and lowland soil types. Oliver Road and Linsley Road do provide some access along the northern boundary of the compartment.

Survey Needs: A significant amount of survey work is required within this compartment to establish boundary lines for prescribed treatments. Section corners and property corners need to be established and/or located for sections 4, 5, 8, 9, 17, 20, and 21. Wildlife Division will put in a request to assist with the survey needs for this compartment.

Recreational Facilities and Opportunities: No known at this time.

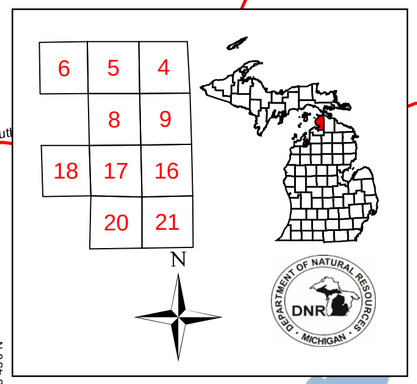
Fire Protection: No foreseen problems

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



Stand # 23 — Stocking Density

(412)0) - A7

Level 3 | Level 4 | OI Code

Cover Type Code

Compartment 120
T38N, R04W, Sec. 4-6, 8, 9, 16-18, 20, 21
County: Emmet
Unit: Gaylord
YOE: 2013
Acres: 3,065 GIS Calculated
Stand Examiner: John Scheele
Map Revised: 5/26/2011
Map Phase: Pre-Review

Legend

- Miris Corners
- Remonumented Section Corners
- Berm
- Gate
- Unknown
- Bridges
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- US Highway
- Hiking Trail
- Ski Trail
- Snowmobile Trail

Streams

Type

- Intermittent Stream/Drain
- Stream
- Lakes and Rivers

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Thinning (Crown, Low, Systematic)
- Selection (Group, Single Tree)

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

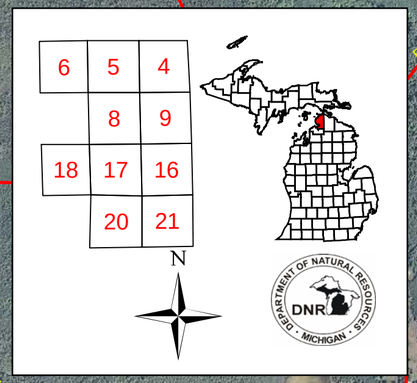
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland

1 0.5 0 1 Miles

84°53'0"W 84°52'0"W 84°51'0"W 84°50'0"W 84°49'0"W 84°48'0"W 84°47'0"W

45°43'0"N 45°42'0"N 45°41'0"N 45°40'0"N

Stand Boundary Map



Stand # 23 — Stocking Density

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Level 3 Level 4 OI Code

Cover Type Code

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Legend

- Miris Corners
- Remonumented Section Corners
- Intermittent Stream/Drain
- Stream
- Bridges
- Berm
- Gate
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Hiking Trail
- Ski Trail
- Snowmobile Trail
- Stand Boundaries

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

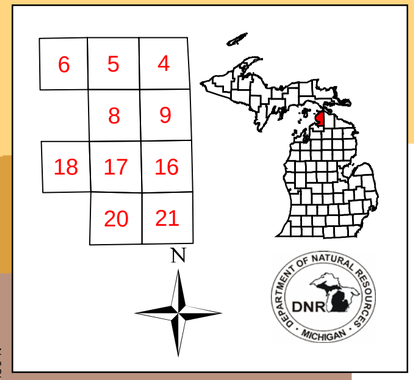
Non-Forest Stands

Level 3

310 - Herbaceous Openland
320 - Upland Shrub
330 - Low-Density Trees
500 - Water
622 - Lowland Shrub
623 - Emergent Wetland

1 0.5 0 1 Miles

Dedicated & Proposed Special Conservation Area Map



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Map Phase: Pre-Review

Legend

- Miris Corners
- Remonumented Section Corners
- Stand Boundaries

Dedicated Special Conservation Areas

- Boat Access Sites
- Non_Dedicated Natural Areas and National Natural Landmarks
- Cold Water Streams
- Wildlife Management Areas

Forest Stands

Level 3

411 - Northern Hardwood
413 - Aspen Types
419 - Mixed Upland Deciduous
421 - Planted Pines
611 - Lowland Deciduous Forest
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Non-Forest Stands

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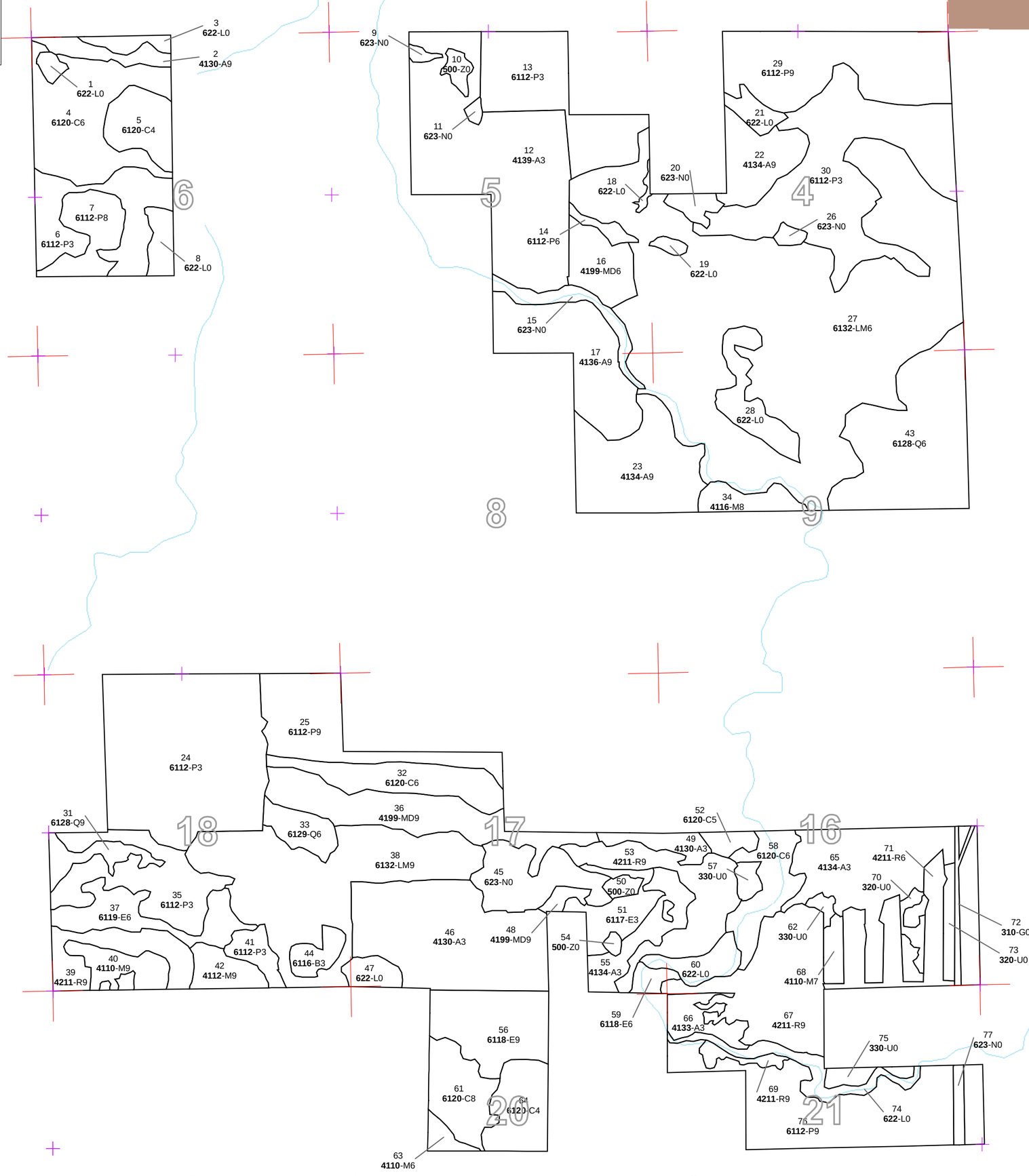

Table 1 – Total Acres by Cover Type and Age Class

Gaylord Mgt. Unit **Compartment 120 Year of Entry 2013**

John Scheele : Examiner

Age Class

	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	Total
Aspen	0	0	26	379	0	0	0	0	0	170	13	0	0	0	0	**588**
Cedar	0	0	0	0	0	0	0	0	0	39	163	38	0	0	0	**240**
Herbaceous Openland	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Low-Density Trees	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**14**
Lowland Aspen/Balsam Poplar	0	0	187	300	0	5	0	0	95	57	138	0	0	0	0	**782**
Lowland Conifers	0	0	0	0	0	0	0	16	0	106	0	0	0	14	0	**136**
Lowland Deciduous	0	0	22	0	0	0	0	0	35	6	51	0	0	0	0	**114**
Lowland Mixed Forest	0	0	0	0	0	0	0	0	451	0	0	134	0	0	0	**586**
Lowland Shrub	106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**106**
Marsh	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**74**
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	26	65	5	0	0	0	0	**96**
Northern Hardwood	0	0	0	0	0	0	0	0	8	25	15	0	16	0	0	**63**
Paper Birch	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	**11**
Red Pine	0	0	0	0	0	0	226	0	0	0	0	0	0	0	0	**226**
Upland Shrub	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**14**
Water	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
Total	**224**	**0**	**246**	**679**	**0**	**5**	**226**	**16**	**615**	**468**	**384**	**172**	**16**	**14**	**0**	**3065**

Data updated yesterday after 6:00 PM

Table 2 – Proposed Treatment Summaries

Gaylord Mgt. Unit
Year of Entry 2013

Compartment 120
Total Compartment Acres: 3065

Acres by Treatment Type

Commercial Harvest - 746	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
Aspen	170	0	0	0	0	0	**170**
Lowland Aspen/Balsam Poplar	263	0	0	0	0	0	**263**
Lowland Deciduous	86	0	0	0	0	0	**86**
Northern Hardwood	0	41	0	0	0	0	**41**
Red Pine	0	0	0	0	187	0	**187**
Total	**518**	**41**	**0**	**0**	**187**	**0**	**746**

Data updated yesterday after 6:00 PM

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
25	52120025-CCWR	57.3	6112 - Lowland Aspen	High Density Log	85	Harvest	Clearcut with Reserves	6112 - Lowland Aspen	Cmpt. Review Proposal

Prescription Specs: Final harvest stand. Winter harvest only. Do not cut White Pine, Cedar, and Hemlock. Leave retention area along East Gill Rd. Stay out of areas with high amount of Cedar.

Other Comments: Aspen dying out. Southern boundary of stand has a higher concentration of Cedar. Old survey line on south of one of the private properties. May need additional survey work to establish sale lines. Wildlife Division will be requesting a survey to establish property corners.

Next Steps: Monitor the success of regeneration during next inventory. Acceptable regeneration includes a mix of Aspen, and conifer.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
29	52120029-CCWR	94.8	6112 - Lowland Aspen	High Density Log	70	Harvest	Clearcut with Reserves	6112 - Lowland Aspen	Cmpt. Review Proposal

Prescription Specs: Final harvest stand. Cut in winter or dry summer. Leave retention areas around drainages or wetter areas where found. Stay out of low lying wet areas when cutting.

Other Comments: Overall health of stand is beginning to decline with trees starting to fall over, especially Balsam Fir. Pockets of windthrow and wet areas. Also may be some drainages flowing to the north. Wildlife Division will be requesting a survey to establish property corners.

Next Steps: Monitor success of regeneration during next inventory. Acceptable regeneration includes a mix of Aspen, Maple, Birch, and conifer.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
37	52120037-CCWR	34.6	6119 - Mixed Lowland Deciduous Forest	High Density Pole	75	Harvest	Clearcut with Reserves	6119 - Mixed Lowland Deciduous Forest	Cmpt. Review Proposal

Prescription Specs: Final harvest stand in winter. Do not cut Cedar or Yellow Birch. Put retention pockets in area with high BA of Sugar Maple and Basswood.

Other Comments: Transition stand between upland and lowland.

Next Steps: Monitor success of regeneration during next inventory. Acceptable regeneration includes mix of Maple, Aspen, and conifers.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
40	52120040-STS	18.9	4110 - Sugar Maple Association	High Density Log	80	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal

Prescription Specs: Mark stand to 80 BA.

Other Comments: Current Basal Area is 130. Individual Beech trees with heavy beech scale.

Next Steps: Check Residual Basa Area during next inventory.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
42	52120042-STS	15.7	4112 - Maple, Beech, Cherry Association	High Density Log	110	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal

Prescription Specs: Mark to 80 BA. Concentrate marking on multi-stemmed, lower quality trees. Do not species cut Aspen.

Other Comments: Current Basal Area is 110. Heavy beech scale on individual trees.

Next Steps: Check Residual Basal Area during next inventory.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
53	52120053-Thin	52.7	42110 - Planted Red Pine	High Density Log	55	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Mark to 120 BA. Mark light in areas that have a lower BA.

Other Comments: Current Basal Area is 176. Small drainage flows through the south part of the stand to the Carp River.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
56	52120056-CCWR	51.0	6118 - Lowland Deciduous with Cedar	High Density Log	90	Harvest	Clearcut with Reserves	6118 - Lowland Deciduous with Cedar	Cmpt. Review Proposal

Prescription Specs: Final harvest stand. Larger timber on higher ground appears to be in northern part of stand, along Munger Rd. Stay out of low lying areas to minimize rutting. Cut in winter or dry summer. Do not cut Cedar. Put retention pocket in area with high Cedar or in area that is low lying.

Other Comments: Aspen is over mature with trunk rot and is falling over. Pockets of excessive blow down and pockets of lowland shrub/Black Ash within the stand. Wildlife Division will be requesting a survey to establish property corners.

Next Steps: Monitor success or regeneration during next inventory. Acceptable regeneration includes a mix of Aspen, Maple, and conifers.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
67	52120067-Thin	78.2	42110 - Planted Red Pine	High Density Log	51	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Thin to 120 BA. Maintain a higher residual basal area along the Carp River.

Other Comments: Current Basal Area is 190. Wildlife Division will be requesting a survey to establish property corners.

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
71	52120071-Thin	56.3	42110 - Planted Red Pine	High Density Pole	54	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Thin stand to 120 BA.

Other Comments: Current Basal Area is 170.

Next Steps:

Total Treatment Acreage Proposed: 459.6

Table 4 -- Treatments Prescribed with a Limiting Factor

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
17	52120017-CCWR	67.3	4136 - Aspen, Mixed Conifer	High Density Log	80	Harvest	Clearcut with Reserves	4136 - Aspen, Mixed Conifer	Cmpt. Review Proposal

Prescription Specs: Final harvest stand. Leave 100 feet buffer along Carp River or along top of ridge that follows river. This buffer area may also serve as retention. No cut Cedar, Hemlock, or White Pine for tree species and stand structure diversity. Dense conifer area near corner of private property may be left as recommend retention also.

Other Comment: Private property to the south and west was clearcut in 2010. Heavy deer presence seen during inventory. May be result of current cutting. See access to stand information from Stand 23 comments.

Next Steps: Monitor the success of regeneration during next inventory. Acceptable regeneration includes a mix of Aspen, Maple, Birch and conifer speices.

Limiting Factor and No Treatment Reason: 2H: Survey needed
Wildlife Division will be requesting a survey to establish property corners.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
22	52120022-CCWR	33.1	4134 - Aspen, Spruce/Fir	High Density Log	80	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal

Prescription Specs: Final harvest stand. Do not cut White Spruce for tree species and stand structure diversity.

Other Comment: Access to stand is only through private property to the west. Contact landowner about getting access to stand when setting up Stand 29 for harvest.

Next Steps: Monitor success of regeneration during next inventory. Acceptable regeneration includes a mix of Aspen, Maple, Birch, and conifer.

Limiting Factor and No Treatment Reason: 2A: Adjacent landowner denies access
Was not able to contact landowner to discuss possible access during inventory. Contact landowner about including stand when setting up Stand 29 for harvest. Wildlife Division will be requesting a survey to establish property corners.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
23	52120023-CCWR	69.6	4134 - Aspen, Spruce/Fir	High Density Log	80	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal

Prescription Specs: Final harvest stand. Do not cut White Spruce for tree species diversity and stand structure diversity. Leave 100 Foot buffer strip along the Carp River or along the top of the ridge that follows the river. This area may also represent retention area.

Other Comment: Private survey work may be needed to establish lines. Private property to the west was clearcut in 2010.

Next Steps: Monitor success of regeneration during next inventory. Acceptable regeneration includes a mix of Aspen and confier.

Limiting Factor and No Treatment Reason: 2H: Survey needed
Wildlife Division will be requesting a survey to establish property corners.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
63	52120063-STS	6.1	4110 - Sugar Maple Association	High Density Pole	80	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal

Prescription Specs: Mark to 80 BA.

Other Comment:

Next Steps:

Limiting Factor and No Treatment Reason: 2H: Survey needed
Wildlife Division will be requesting a survey to establish property corners. Also need accces through private property.

Table 4 -- Treatments Prescribed with a Limiting Factor

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
76	52120076-CCWR	110.6	6112 - Lowland Aspen	High Density Log	90	Harvest	Clearcut with Reserves	6112 - Lowland Aspen	Cmpt. Review Proposal

Prescription Specs: Final harvest stand in winter. Leave an approximate 100 feet buffer along the Carp River. This retention area may include the west part of stand (from stand 69 west) and the portion of the stand on the north side of the Carp River. Do not cut Cedar.

Other Comment: Low quality, over mature Aspen with Balsam Fir dying out. Pockets of wetter areas with low volume timber. Old survey line is evident along portions of south boundary line.

Next Steps: Monitor success of regeneration during next inventory. Acceptable regeneration includes mix of Aspen and conifer.

Limiting Factor and No Treatment Reason: 2H: Survey needed

Wildlife Division will be requesting a survey to establish property corners. If sale can not be sold commercially, Wildlife Division will try and treat non-commercially.

Total Treatment Acreage Proposed: **286.7**

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

Prescription Specs:

Other Comments:

Next Steps:

Total Treatment Acreage Proposed: **0**

Data updated yesterday after 6:00 PM

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	4130 - Aspen	High Density Log	12.7	90		Aspen is over mature and falling over. Old survey corner found in northwest corner of section. Only access to stand would be from private property to the east. Small drainage on east side of stand near boundary edge. May want to factor limit stand because of access issues.
4	6120 - Lowland Cedar	High Density Pole	72.9	90		
5	6120 - Lowland Cedar	Low Density Pole	26.1	90		Significant blowdown and overstory mortality.
6	6112 - Lowland Aspen	High Density Sapling	49.7	10		Heavy blowdown, Aspen regenerating into new stand.
7	6112 - Lowland Aspen	Medium Density Log	27.2	90		Lowland Aspen is over mature, dead, dying and falling over. Access to stand only through private proeprty. Factor limit stand because of access issues.
12	4139 - Aspen, Mixed Deciduous	High Density Sapling	155.1	28		
13	6112 - Lowland Aspen	High Density Sapling	69.5	18		
14	6112 - Lowland Aspen	High Density Pole	5.1	45		
16	4199 - Other Mixed Upland Deciduous	High Density Pole	26.4	70		Low quality timber with Aspen, Balsam Fir, and White Birch dying out. Converting to a Red Maple stand. Poor access to stand.
17	4136 - Aspen, Mixed Conifer	High Density Log	67.3	80		Private property to the south was clearcut in 2010. Heavy deer presence seen during inventory. May be result of current cutting. See access information from Stand 76 comments.
22	4134 - Aspen, Spruce/Fir	High Density Log	33.1	80		Aspen over maturing and dying out. Access to stand only through private property. Look into cutting when setting up Stand 27 for harvest.
23	4134 - Aspen, Spruce/Fir	High Density Log	69.6	80		Private survey work may be needed to establish lines. Private property to the west was clearcut in 2010. Final harvest stand. Leave 300 Feet buffer strip along the Carp River or along the top of the ridge that follows the river.
24	6112 - Lowland Aspen	High Density Sapling	162.3	28		
25	6112 - Lowland Aspen	High Density Log	57.3	85		Aspen dying out. South boundary has a higher concentration of Cedar. Old survey line on south of one of the private properties. May need additional survey work to establish sale lines.
27	6132 - Mixed Lowland Forest with Cedar	High Density Pole	451.4	75		

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
29	6112 - Lowland Aspen	High Density Log	94.8	70		Over health of stand is beginning to decline with trees starting to fall over, incuding Balsam Fir. Pockets of windthrow and wet areas. Also may be some drainages flowing to the north.
30	6112 - Lowland Aspen	High Density Sapling	137.2	20		
31	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	13.8	145		Nice pocket of hemlock in the east part of this stand.
32	6120 - Lowland Cedar	High Density Pole	39.2	85		
33	6129 - Mixed Coniferous Lowland Forest	High Density Pole	16.4	60		
34	4116 - Mixed N. Hardwood - Aspen	Medium Density Log	14.7	90	1-50	Stand has branchy, multi-stemmed Sugar Maple on hilly terrian, with steep slopes leading down to the Carp River.
35	6112 - Lowland Aspen	High Density Sapling	56.5	18		
36	4199 - Other Mixed Upland Deciduous	High Density Log	64.5	83	81-110	Multi-stemmed, low quality hardwood.
37	6119 - Mixed Lowland Deciduous Forest	High Density Pole	34.6	75		Transition stand between upland and lowland.
38	6132 - Mixed Lowland Forest with Cedar	High Density Log	134.4	100		
39	42110 - Planted Red Pine	High Density Log	32.8	59	141-170	
40	4110 - Sugar Maple Association	High Density Log	18.9	80	111-140	Individual Beech trees with heavy beech scale.
41	6112 - Lowland Aspen	High Density Sapling	11.5	15		
42	4112 - Maple, Beech, Cherry Association	High Density Log	15.7	110		Heavy beech scale on individual trees.
43	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	105.5	80		Stand converting to a Cedar stand with Aspen and Balsam Fir dying out. Pockets of blowdown.
44	6116 - Lowland Birch	High Density Sapling	10.8	18		
46	4130 - Aspen	High Density Sapling	112.9	28		

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	4199 - Other Mixed Upland Deciduous	High Density Log	4.6	90		High ground with steep slopes surround be lowland. No access to stand.
49	4130 - Aspen	High Density Sapling	11.8	28		
51	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	22.2	18		
52	6120 - Lowland Cedar	Medium Density Pole	6.9	100		Heavy blowdown.
53	42110 - Planted Red Pine	High Density Log	52.7	55	171-200	Small drainage flows through the south part of the stand to the Carp River.
55	4134 - Aspen, Spruce/Fir	High Density Sapling	25.6	18		
56	6118 - Lowland Deciduous with Cedar	High Density Log	51.0	90		Aspen is over mature with trunk rot and is falling over. Pockets of excessive blow down and pockets of lowland shrub/Black Ash within the stand.
58	6120 - Lowland Cedar	High Density Pole	31.1	100		
59	6118 - Lowland Deciduous with Cedar	High Density Pole	6.0	80		Carp River runs through stand.
61	6120 - Lowland Cedar	Medium Density Log	32.6	95		
63	4110 - Sugar Maple Association	High Density Pole	6.0	80	111-140	Small acreage stand. Need private access and private boundary line work.
64	6120 - Lowland Cedar	Low Density Pole	31.6	95		Excessive Cedar blow down.
65	4134 - Aspen, Spruce/Fir	High Density Sapling	83.0	29		Southern part of stand between Red Pine strips has larger diameter Aspen and Sugar Maple. West side of stand also has larger diameter trees along the Carp River.
66	4133 - Aspen, Mixed Pine	High Density Sapling	16.5	28		
67	42110 - Planted Red Pine	High Density Log	78.2	51	171-200	
68	4110 - Sugar Maple Association	Low Density Log	8.1	70		Poor quality, open grown, branchy Sugar Maple trees with a couple seperate aspen pockets.
69	42110 - Planted Red Pine	High Density Log	5.9	51		Stand is unaccessable because of the Carp River.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
71	42110 - Planted Red Pine	High Density Pole	56.3	54	141-170	
76	6112 - Lowland Aspen	High Density Log	110.6	90		Low quality, over mature Aspen with Balsam Fir dying out. Pockets of wetter areas with low volume timber. Old survey line is evident along portions of south boundary line.

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	622 - Lowland Shrub	3.8	N\A	Unspecified	
3	622 - Lowland Shrub	7.4	N\A	Unspecified	
8	622 - Lowland Shrub	10.7	N\A	Unspecified	
9	623 - Emergent Wetland	2.2	N\A	Unspecified	
10	50 - Water	5.3	N\A	Unspecified	
11	623 - Emergent Wetland	2.0	N\A	Unspecified	
15	623 - Emergent Wetland	15.2	N\A	Unspecified	
18	622 - Lowland Shrub	1.7	N\A	Unspecified	
19	622 - Lowland Shrub	2.8	N\A	Unspecified	
20	623 - Emergent Wetland	7.5	N\A	Unspecified	
21	622 - Lowland Shrub	9.0	N\A	Unspecified	
26	623 - Emergent Wetland	3.3	N\A	Unspecified	
28	622 - Lowland Shrub	25.9	N\A	Unspecified	
45	623 - Emergent Wetland	38.4	N\A	Unspecified	
47	622 - Lowland Shrub	9.8	N\A	Unspecified	
50	50 - Water	4.2	N\A	Unspecified	
54	50 - Water	2.0	N\A	Unspecified	
57	330 - Low-Density Trees	5.2	N\A	Unspecified	

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
60	622 - Lowland Shrub	15.0	N\A	Unspecified	
62	330 - Low-Density Trees	3.2	N\A	Unspecified	
70	320 - Upland Shrub	6.1	N\A	Unspecified	
72	310 - Herbaceous Openland	5.7	N\A	Unspecified	
73	320 - Upland Shrub	8.1	N\A	Unspecified	
74	622 - Lowland Shrub	19.6	N\A	Unspecified	
75	330 - Low-Density Trees	5.2	N\A	Unspecified	
77	623 - Emergent Wetland	5.4	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
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	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.