Sault Ste Marie Forest Management Unit
Compartment Review Presentation
Compartment #107 Entry Year: 2014
Compartment Acreage: 1,900 County: Mackinac

Revision Date: 7/5/2012

Stand Examiner: Cory Luoto

Legal Description: T43N-R6W, Sections 10 – 12, Moran Township

RMU (if applicable): Carp River Red Pine

Management Goals: The compartment is located south of Trout Lake approximately three and one half miles. This compartment is composed of a variety of lowland and upland types and species. The eastern half of the compartment is mostly upland types of red pine, aspen, upland brush and grassy openings. The western half of the compartment is mostly lowland types of black spruce, cedar, tamarack, balsam fir, lowland brush and bogs with a few ridges of aspen and birch. Proposed timber management within the compartment consists of a red pine thinning and black spruce clearcut with reserves. The Carp River and Ozark Creek flow through Section 12. The Carp River is designated as a wild and scenic river in the stretch downstream on the Hiawatha National Forest. This area is heavily used by recreationists.

Soil and Topography: The terrain is level to rolling with steep banks to the river and creek drainages. The compartment is higher ground on the east side and grades to lower ground on the west side. The higher ground soils are mostly Wallace Sand with Paquin Sand, and Paquin-Finch complex on the ridges in the lowland areas. The transition areas have Spot-Finch Complex. The lowland areas mostly have the Markey-Spot-Finch Complex with some higher transition areas to the Paquin Sand and Wallace Sand. The other lowland soil types are Markey and Carbondale Muck, Finch-Dawson-Pullup Complex and the Dinkey Muck in the Carp River and Ozark Creek drainages.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The north, west and south sections surrounding the compartment are in state ownership. The sections to the east are in federal ownership on the Hiawatha National Forest. A private 40 abuts the southeast side of Section 12 with the rest of Section 7 being in federal ownership.

Unique, Natural Features: Potential for raptors to nest in the compartment exists and care will be taken to check stands for nests. Stands in compartment were identified as Hardwood Conifer Swamp community; there are northern wet meadow, muskeg, and bog communities within the compartment. There is a potential for some rare plant and animal species to inhabit the compartment.

Archeological, Historical, and Cultural Features: No obvious features were found when doing inventory.

Special Management Designations or Considerations: Potential for raptors to nest in the compartment exists and care will be taken to check stands for nests with buffers placed when necessary.

Watershed and Fisheries Considerations: This compartment contains a portion of the Carp River, a trout stream with Type 4 regulations. The treatment layer shows cutting right to the river's edge. Since this is just a thinning, it's okay to selectively harvest up to 25' from the river's edge. Riparian zone should be managed for coniferous species to reduce the potential for beaver damming.

Wildlife Habitat Considerations: This compartment is located in the Carp River Red Pine Management Area, and is characterized by lowland conifers, aspen, and pines influenced by muck and sandy soils. The western third is dominated by lowland black spruce and cedar with occurrences of rich conifer swamp, bog, and muskeg natural community types. White pine, white spruce, and white birch are common subdominant components in some stands. Further east, aspen and pine dominate. Most of the aspen is young. Part of a large aspen stand was influenced by a fire in 1999. Cherry and tamarack are also common components in parts of these stands, while white pine can also be found. Around the Carp River, red pine plantations of varying age classes exist with some aspen around the red pine in the northeastern corner. The northern wet meadow natural community has been identified along the Carp River in this compartment.
Wildlife management objectives include providing conifer cover low to the ground for snowshoe hare through regeneration of young lowland conifer, leaving mature conifer for birds such as the blackburnian warbler and other wildilfe, and allowing young aspen to mature for ruffed grouse and other species dependent upon young early successional growth. Stand diversity will be encouraged in red pine stands by leaving other species, particularly deciduous species, during stand thinning. The riverine and riparian communities will be protected by placing a no-cut buffer along the river. All natural community types will be protected; no harvesting will occur within these identified areas.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel and peat and muck. There is insufficient data to determine the glacial drift thickness. The Silurian Engadine and Manistique Groups subcrop below the glacial drift. The Engadine is quarried for stone/limestone elsewhere in the UP. An Engadine (?) quarry is located one mile to the east. A gravel pit is located to the east, but potential appears to be limited in the compartment. There is no economic oil and gas production in the UP.

Vehicle Access: The compartment has good vehicle access. The JT Camp Road is deteriorating to undriveable conditions most of the year in the west portion of Section 10. The Carp River Truck Trail provides good access. The access into Section 12 is the Huckleberry Lake Road from the north and the Ozark Creek Road to the east. The bridge over Ozark Creek has an 8 ton limit, which will not support any traffic larger than a pickup. The Ozark Creek Road to the east on the Federal lands is in very poor shape and undriveable most of the time. Any new timber sale roads will be blocked or planted after management activities occur.

Survey Needs: No new survey projects are required for this compartment with adequate corners present.

Recreational Facilities and Opportunities: The Carp River Truck Trail is used as a snowmobile trail and part of the ORV trail runs on it. The JT Camp Road is also an ORV trail. The compartment is heavily used for all types of recreational activities including motorized vehicle use, fishing, hunting, trapping and nature viewing.

Fire Protection: The eastern half of the compartment has a potential for a moderate to higher intensity fire. The Thunder Alley Fire burned through portions of section 11 in 1999. The west portion of the compartment has lower fire intensity potential. The problem of ground fire does exist in this portion of the compartment. The response time to a fire in this area will be longer due to the distance from the field office and the road conditions in the area.

Additional Compartment Information:

- **The following reports from the Inventory are attached:**
  - **Total Acres by Cover Type and Age Class**
  - **Proposed Treatment Summary**
  - **Proposed Treatments – No Limiting Factors**

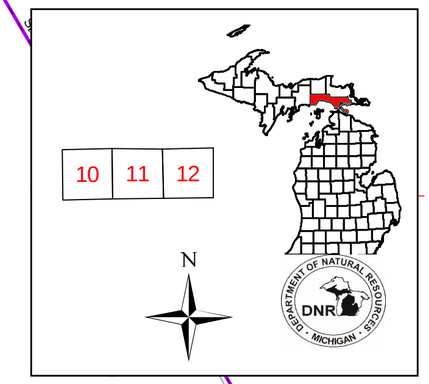
- **Proposed Treatments – With Limiting Factors**
- **Stand Details (Forested and Nonforested)**
- **Dedicated and Proposed Special Conservation Areas**

- **The following information is displayed, where pertinent, on the attached compartment maps:**
  - **Base feature information, stand boundaries, cover types, and numbers**
  - **Proposed treatments**
  - **Details on the road access system**
-

Cover Type & Treatment Map

Compartment: 107
T43N R06W Sec. 10 - 12
County: Mackinac
Unit: Sault Ste. Marie
YOE: 2014
Acres: 1,900 GIS Calculated
Examiner: Cory Luoto
Map Revised: 08/08/2012
Map Phase: Pre-Review

Stand # 23 — Stocking Density
(412)0) - A7
Level 3 / Level 4 / OI Code
Cover Type Code



Huckleberry Lake
Carp River Truck Trail
Ozark Rd
Jackson Tindle Camp Rd
South Branch Carp River
Caffey Truck Trl

1 0.5 0 1 Miles

Legend

- Remonumented Section Corners
- Miris Corners
- PLSS Corner
- Powerline
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Motorcycle (DNR Sticker)
- Snowmobile Trail
- Stream
- Intermittent Stream
- Lakes and Rivers
- Natural
- Planted

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

Forest Stands
Level 3
- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands
Level 3
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland
- State Forest Land

Stand Boundary Map

Compartment: 107
T43N R06W Sec. 10 - 12
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Map Revised: 08/08/2012
Map Phase: Pre-Review

Stand # 23 — Stocking Density

(412)0) - A7
Level 3 / Level 4 — OI Code
Cover Type Code

10 | 11 | 12

N

DEPARTMENT OF NATURAL RESOURCES · MICHIGAN · DNR

Carp River Truck Trail

Ozark Rd

Jackson Tindle Camp Rd

Caffey Truck Trail

10

1 6117-E6
2 6117-E6
3 4130-A2
4 6122-S5
5 623-N0
6 6122-S5
7 622-D0
8 6120-C6
9 623-N0
11 622-L0
12 622-L0
13 4191-MD6
14 6122-S5
15 6122-S6
16 622-L0
17 4137-A3
20 6122-S6

11

19 623-N0
21 4113-M6
22 622-L0
23 6120-C5
24 4134-A3
25 4134-A6
26 4220-W7
27 629-L0
28 429-MC9
29 4222-J2
30 310-G0
31 6122-S6
32 310-G0
33 4232-F2
34 4211-R3
35 4211-R9
36 3204-U0
37 4130
38 310-G0
39 330-U0
40 4222-J2

12

41 4134-A3
42 6122-S6
43 500-Z0
44 4214-MC9
45 4212-J3
46 4211-R3
47 4134-A3
48 4234-F3
49 622-L0
50 4234-F5
51 4234-F6
52 4130-A3
53 310-G0
54 622-L0

1 0.5 0 1 Miles

Legend

- Remonumented Section Corners
- Miris Corners
- PLSS Corner
- Powerline
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
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- Closed Roads
- Stream
- Intermittent Stream
- Motorcycle (DNR Sticker)
- Snowmobile Trail
- Stand Boundaries

Forest Stands
Level 3
- 411 - Northern Hardwood
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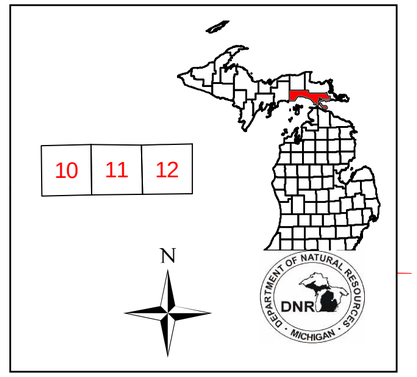
Dedicated & Proposed Special Conservation Area Map

Compartment: 107
T43N R06W Sec. 10 - 12
County: Mackinac
Unit: Sault Ste. Marie
YOE: 2014
Acres: 1,900 GIS Calculated
Examiner: Cory Luoto
Map Revised: 08/08/2012
Map Phase: Pre-Review

Stand # 23 — Stocking Density: (412)0) - A7
Level 3 / Level 4 / OI Code
Cover Type Code



Legend

- Remonumented Section Corners
- Miris Corners
- Stand Boundaries

Dedicated Special Conservation Areas
- Ecological Reference Areas
- Cold Water Streams
- Deer Wintering Areas

Forest Stands
Level 3
- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
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- 422 - Natural Pines
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- 429 - Mixed Upland Conifers
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Non-Forest Stands
Level 3
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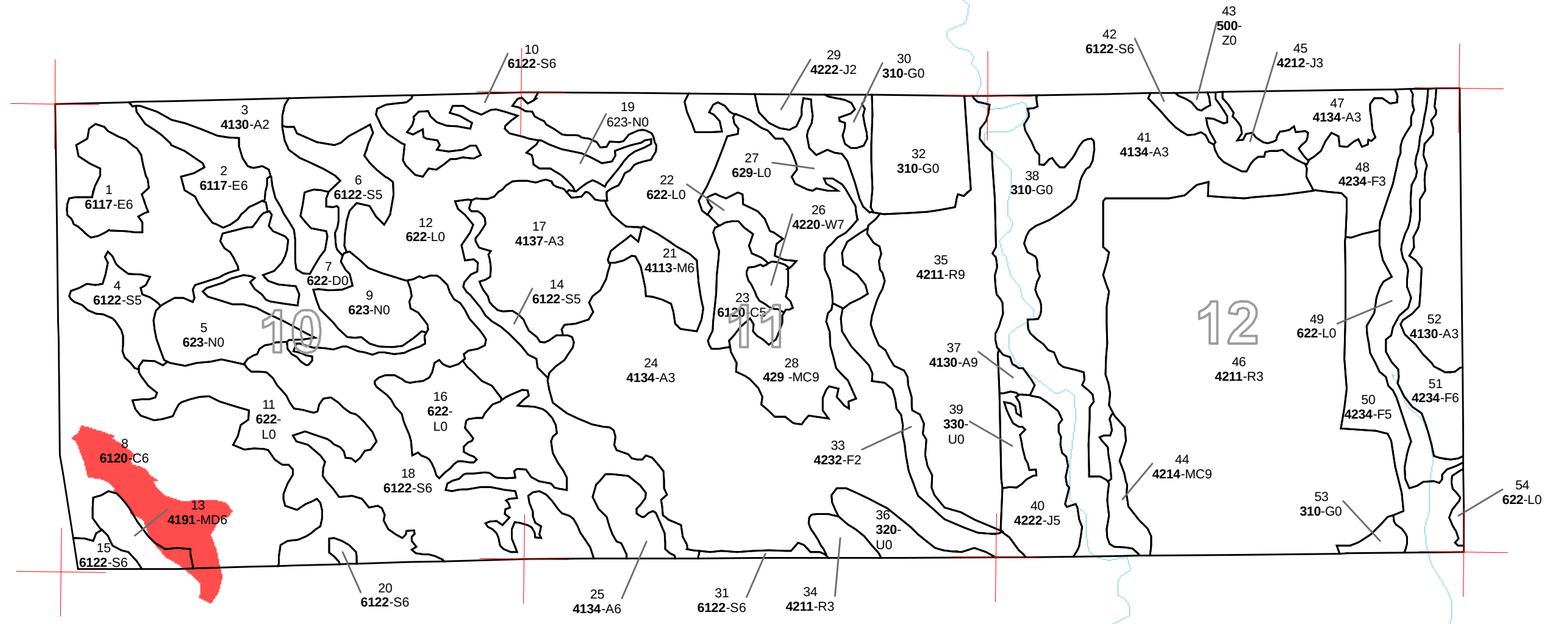

1 0.5 0 1 Miles

85°4'0"W 85°3'0"W 85°2'0"W 85°1'0"W 85°0'0"W 84°59'0"W 84°58'0"W
46°10'0"N 46°9'0"N 46°8'0"N 46°7'0"N

Table 1 – Total Acres by Cover Type and Age Class

Sault Ste. Marie Mgt. Unit **Compartment 107 Year of Entry 2014**

Cory Luoto : Examiner

Age Class

	0-9	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	49	276	112	0	3	0	0	0	11	0	0	0	0	0	**450**
Cedar	0	0	0	0	0	0	0	0	0	165	0	15	0	0	**180**
Herbaceous Openland	100	0	0	0	0	0	0	0	0	0	0	0	0	0	**100**
Jack Pine	0	8	14	0	25	0	0	0	0	0	0	0	0	0	**47**
Low-Density Trees	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Lowland Deciduous	0	0	0	0	0	36	0	0	0	0	0	0	0	0	**36**
Lowland Shrub	245	0	0	0	0	0	0	0	0	0	0	0	0	0	**245**
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	145	41	0	0	0	0	**186**
Marsh	57	0	0	0	0	0	0	0	0	0	0	0	0	0	**57**
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	10	0	0	0	0	**10**
Northern Hardwood	0	0	0	0	0	0	13	0	0	0	0	0	0	0	**13**
Planted Mixed Pines	0	0	0	0	0	0	0	9	0	0	0	0	0	0	**9**
Red Pine	0	261	0	0	0	0	0	96	0	0	0	0	0	0	**357**
Treed Bog	26	0	0	0	0	0	0	0	0	0	0	0	0	0	**26**
Upland Conifers	0	0	0	0	0	0	0	0	0	0	62	0	0	0	**62**
Upland Shrub	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
Upland Spruce/Fir	0	0	43	0	57	0	0	0	0	0	0	0	0	0	**101**
Water	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	5	0	**5**
Total	**494**	**545**	**169**	**0**	**85**	**36**	**13**	**104**	**156**	**216**	**62**	**15**	**5**	**0**	**1900**

Table 2 – Proposed Treatment Summaries

Sault Ste. Marie Mgt. Unit
Year of Entry 2014

Compartment 107
Total Compartment Acres: 1900

Acres by Treatment Type

Commercial Harvest - 149	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 306	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	11	0	0	0	0	0	**11**
Lowland Spruce/Fir	42	0	0	0	0	0	**42**
Red Pine	0	0	0	0	96	0	**96**
Total	**53**	**0**	**0**	**0**	**96**	**0**	**149**

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
18	45107018-Cut	42.3	6122 - Black Spruce	High Density Pole	87		Harvest	Clearcut with Reserves	6122 - Black Spruce	Cmpt. Review Proposal

Prescription Specs: Clearcut with reserves following the retention guideline. Retain patch or patches of greater than 2.4 acres for the treatment area and leave conifer 4" and smaller on the site. Some paper birch and white pine should be retained for seed trees and future snags. Buffer muskeg, and do not cut within it. Leave some scattered trees representative of the stand.

Other Comments: ORV trail goes through the stand. Leave trail marker trees where possible if cut then must be cut above 8 feet to mark the trail.

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is black spruce, aspen, maple, cherry, cedar, yellow and paper birch, balsam fir, white spruce and white pine.

Proposed Start Date: 10/01/2012

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
35	45107035-Cut	95.5	42110 - Planted Red Pine	High Density Log	75	111-140	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Thin to around 120 Basal Area. Leave species diversity within the stand were present. Buffer river appropriately.

Other Comments: ORV trail goes through the stand. Leave trail marker trees where possible if cut then must be cut above 8 feet to mark the trail.

Next Steps: No followup treatment necessary.

Proposed Start Date: 10/01/2013

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
34	45107034-Spray	5.7	42110 - Planted Red Pine	High Density Sapling	11		Pesticide	Aerial	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Monitor for RHPS and if monitoring shows that treatment is recommended, then spray when/if necessary with appropriate insecticide recommended by Forest Health Specialist/TMS.

Other Comments:

Next Steps: Continue to monitor site and the effects of spraying if treated.

Proposed Start Date: Unspecified

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
45	45107045-Spray	8.3	42120 - Planted Jack Pine	High Density Sapling	12		Pesticide	Aerial	42220 - Natural Jack Pine	Cmpt. Review Proposal

Prescription Specs: Monitor for pests.

Other Comments:

Next Steps: Continue to monitor.

Proposed Start Date: Unspecified

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
46	45107046-Spray	255.6	42110 - Planted Red Pine	High Density Sapling	15		Pesticide	Aerial	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Monitor for RHPS and if monitoring shows that treatment is recommended, then spray when/if necessary with appropriate insecticide recommended by Forest Health Specialist/TMS.

Other Comments:

Next Steps: Continue to monitor site and the effects of spraying if treated.

Proposed Start Date: Unspecified

32	NF_45107032-Spray	32.0	3105 - Mixed Upland Herbaceous				Pesticide	Aerial	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Monitor for RHPS and vegetative competion. If monitoring shows that treatment is recommended, then spray when/if necessary with appropriate incecticide/herbicide recommended by Forest Health Specialist/TMS.

Other Comments:

Next Steps: Continue to monitor site and the effects of spraying if treated.

Proposed Start Date: Unspecified

53	NF_45107053-Spray	4.0	3105 - Mixed Upland Herbaceous				Pesticide	Aerial	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Monitor for RHPS and vegetative competion. If monitoring shows that treatment is recommended, then spray when/if necessary with appropriate incecticide/herbicide recommended by Forest Health Specialist/TMS.

Other Comments:

Next Steps: Continue to monitor site and the effects of spraying if treated.

Proposed Start Date: Unspecified

Total Treatment Acreage Proposed: 443.3

Table 4 -- Treatments Prescribed with a Limiting Factor

Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
25	45107025-Cut	11.2	4134 - Aspen, Spruce/Fir	High Density Pole	85		Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal

Prescription Specs: Clearcut with reserves following the retention guideline. Retain patch within the treatment area for retention and leave conifer 4" and smaller on the site. Some paper birch and white pine should be retained for seed trees and future snags.

Other Comment:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, cedar, yellow and paper birch, balsam fir, white spruce, black spruce and white pine.

Proposed Start Date: 10/01/2012

Limiting Factor and No Treatment Reason: 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)

Total Treatment Acreage Proposed: 11.2

Data updated before 2:00 PM

Out of YOE -- Treatments
Prescribed with No Limiting Factor

Year of Entry: 2014

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
45104_OutOfY OE-Cut	19.8					Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Thin to around 120 Basal Area. Leave species diversity within the stand were present.

Other Comments: This was a buffer left along the creek from a sale called Golden Eagle.

Next Steps:

Proposed Start Date: 10/01/2013

45152062-Cut	5.5	4115 - Y.Birch, Hemlock NH	High Density Log	76		Harvest	Clearcut with Reserves	4115 - Y.Birch, Hemlock NH	Cmpt. Review Proposal

Prescription Specs: Clear Cut the stand leaving all white pine, hemlock, cedar and yellow birch. Also, leave one healthy, mature red maple, black cherry, spruce, fir, paper birch or sugar maple in order to retain a representation of the stand.

Other Comments: cut with adjacent compartment.

Next Steps: Check for regeneration in 4-5 years. Acceptable regeneration will include red maple, yellow birch, hemlock, white pine, black cherry, sugar maple, aspen, ash, beech, and balsam fir.

Proposed Start Date: 10/01/2011

45157_OutOfY OE-Cut	0.7					Harvest	Low Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Specs: Thin to around 120 Basal Area. Leave species diversity within the stand where present.

Other Comments: cut with stand 1 in comp 158.

Next Steps:

Proposed Start Date: 10/01/2013

45195_OutOfY OE-Cut	27.3					Harvest	Single Tree Selection	4111 - S.Maple, Hard Mast Association	Cmpt. Review Proposal

Prescription Specs: Cut all of the beech in the stand. Mark 2-3 beech to leave when cruising.

Other Comments: Beech bark disease is affecting the beech within this stand.

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, beech, yellow and paper birch, ironwood, balsam fir, white spruce and white pine.

Proposed Start Date: 10/01/2013

45202_OutOfY OE-Cut	449.6					Harvest	Single Tree Selection	4111 - S.Maple, Hard Mast Association	Cmpt. Review Proposal

Prescription Specs: Cut all beech in the stand. While cruising mark 2-3 beech per acre to leave.

Other Comments: Beech bark disease is present in the stand.

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, beech, yellow and paper birch, ironwood, balsam fir, white spruce and white pine.

Proposed Start Date: 10/01/2012

Out of YOE -- Treatments Prescribed with No Limiting Factor

Year of Entry: 2014

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
Total Treatment Acreage Proposed:	**502.9**								

Data updated before 2:00 PM

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	17.2	56		Decent Mackinac mix stand. Wait ten years to harvest. This will allow stand to the east to get a little taller giving a better edge effect between stands.
2	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	18.5	56		Decent Mackinac mix stand. Wait ten years to harvest. This will allow stand to the east to get a little taller giving a better edge effect between stands.
3	4130 - Aspen	Medium Density	26.6	15		Regen is adequate but not as good as the aspen to the west. Very steep hill.
4	6122 - Black Spruce	Medium Density Pole	13.6	81		Poor quality black spruce stand. small diameters and wet. Look at clear cutting next entry with the stand to the north.
6	6122 - Black Spruce	Medium Density Pole	15.3	81		Poor quality black spruce, small diameters and wet.
8	6120 - Lowland Cedar	High Density Pole	165.0	95		Variable cedar stand. Some areas have younger cedar but unable to pick out on the imagery.
10	6122 - Black Spruce	High Density Pole	25.2	91		Look at harvesting this stand next entry. Green up issues with the stand to the north.
13	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	9.6	92		Data taken from adjacent compartment. Hardwood conifer swamp identified by MNFI.
14	6122 - Black Spruce	Medium Density Pole	11.0	90		Very wet black spruce stand. Was not set up last entry due to small size and poor stocking. Provides a decent buffer between new regen and the lowland shrub type.
15	6122 - Black Spruce	High Density Pole	4.7	93		No access to this stand. This stand goes into two other compartments and wasn't accessible from any of those either.
17	4137 - Aspen, Birch	High Density Sapling	48.7	5		The regen in this stand is doing great. More birch in the north while great aspen in the south.
18	6122 - Black Spruce	High Density Pole	106.1	87		Variable black spruce-jack pine stand. Harvest the southern portion with the stand to the south. Actual treated area is going to vary greatly with the stand boundary.
20	6122 - Black Spruce	High Density Pole	1.5	87		Info taken from adjacent compartment. Black Spruce with some maple, aspen, birch, tamarack and fir. Stand has boggy wet area within it.
21	4113 - R.Maple, Conifer	High Density Pole	13.5	63	51-80	This stand was thinned last entry.
23	6120 - Lowland Cedar	Medium Density Pole	15.1	117		Very wet, somewhat sparce cedar stand. Barely makes pole size.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
24	4134 - Aspen, Spruce/Fir	High Density Sapling	216.6	12		This is a variable stand. Primarily aspen but lower areas have nice tamarack, spruce and balsam. Portions of stand were burned over in 1999 by the Thunder Alley Fire.
25	4134 - Aspen, Spruce/Fir	High Density Pole	11.2	85		Mixed stand of aspen, fir, spruce, maple and birch. Stand data taken from adjacent compartment. Stand is inaccessible.
26	42200 - Natural White Pine	Low Density Log	4.5	133		This stand was burned in 2002, the Thunder Alley Two fire. Most of the white pine is now dead.
28	429 - Mixed Upland Conifers	High Density Log	62.0	108		Mixed white pine stand. Pockets of low ground with cedar in the stand.
29	42221 - Natural Jack Pine, Mixed Deciduous	Medium Density	14.3	23		Last entry this stand was typed as an aspen stand. It is now predominately jack pine.
31	6122 - Black Spruce	High Density Pole	2.8	87		Data taken from adjacent stand. This is only a small part of main stand. Black Spruce with a mix of some conifer and deciduous. Stand was wet. Adjacent red pine stand had been harvested and not regenerated at this time.
33	42320 - Upland Spruce	Medium Density	21.1	25		Grassy opening that has grown in.
34	42110 - Planted Red Pine	High Density Sapling	5.7	11		Burned in August 1999 on Thunder Alley Fire. Salvaged on the Thunder Alley Fire Salvage #44-17-00-02. Planted on FTP #C44-518 by trenching and hand planting in April 2001.
35	42110 - Planted Red Pine	High Density Log	95.5	75	111-140	Could thin this stand one more time before final harvest.
37	4130 - Aspen	High Density Log	2.9	48		Nice clone of aspen. It is right along the river.
40	42220 - Natural Jack Pine	Medium Density Pole	24.7	43	1-50	Decent jack pine regen. Just makes a pole stand. Lots of sapling sized trees.
41	4134 - Aspen, Spruce/Fir	High Density Sapling	90.5	24		Nice aspen stand. Really pretty along river.
42	6122 - Black Spruce	High Density Pole	5.6	83		Nice black spruce stand. Decent amounts of white pine and tamarack. Surround a small bog/pond.
44	42140 - Planted Mixed Pine	High Density Log	8.7	74	81-110	Stand left as a buffer for Carp River. Nice red pine stand.
45	42120 - Planted Jack Pine	High Density Sapling	8.3	12		Monitor for pests. Looks real healthy now.
46	42110 - Planted Red Pine	High Density Sapling	255.6	15		West half of stand was planted in 1997 and the east was planted in 200. Red pine is doing great.

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
47	4134 - Aspen, Spruce/Fir	High Density Sapling	21.0	24		Stand is doing great. Pretty open. No understory.
48	42340 - Upland Spruce/Fir	High Density Sapling	22.0	24		This stand was cut the same time as the stand to the north. This one came back much heavier with conifer.
50	42340 - Upland Spruce/Fir	Medium Density Pole	35.1	43		Nice buffer along the river. Somne signs of beaver activity but nothing fresh. More cedar in the south.
51	42340 - Upland Spruce/Fir	High Density Pole	22.3	43		Nice buffer along the river.
52	4130 - Aspen	High Density Sapling	32.4	14		Awesome aspen stand, super open. Very little conifer.

Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
5	623 - Emergent Wetland	32.1	N\A	Unspecified	
7	6224 - Treed Bog	26.0	N\A	Unspecified	
9	623 - Emergent Wetland	17.4	N\A	Unspecified	
11	622 - Lowland Shrub	55.0	N\A	Unspecified	
12	622 - Lowland Shrub	113.6	N\A	Unspecified	
16	622 - Lowland Shrub	21.4	N\A	Unspecified	
19	623 - Emergent Wetland	7.5	N\A	Unspecified	
22	622 - Lowland Shrub	6.4	N\A	Unspecified	
27	629 - Mixed non-forested wetland	21.1	N\A	Unspecified	
30	310 - Herbaceous Openland	3.0	N\A	Unspecified	
32	3105 - Mixed Upland Herbaceous	32.0	Planted	Red Pine	
36	320 - Upland Shrub	11.5	N\A	Unspecified	
38	310 - Herbaceous Openland	60.7	N\A	Unspecified	
39	330 - Low-Density Trees	5.7	N\A	Unspecified	
43	50 - Water	1.0	N\A	Unspecified	
49	622 - Lowland Shrub	25.1	N\A	Unspecified	
53	3105 - Mixed Upland Herbaceous	4.0	Planted	Red Pine	
54	622 - Lowland Shrub	2.0	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.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.