



Newberry Forest Management Unit
Compartment Review Presentation
Compartment: 108 Entry Year: 2013
Compartment Acreage: 2796 County: Luce

Revision Date: 9/14/2011

Stand Examiner: Jason Darling

Legal Description: T45N, R11W. Sections 23, 25, 26, 35, and 36.

RMU (if applicable): Compartment located within the County Line Hardwoods Management Unit.

Management Goals: Maintain forest health, forest resource protection, forest recreation, timber production, forest diversity and forest sustainability while considering wildlife, fisheries and environmental needs and concerns.

Soil and Topography: Kalkaska, Springlake loamy sand, Menominee Graveraet; Carbondale and Dawson on low sites; primarily rolling upland.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Ownership pattern consists of a large, contiguous block of state ownership. The State of Michigan has leased 720 acres of this compartment to Luce County. Luce County is managing the forest stands on this acreage. This lease expires January 12, 2014.

Unique, Natural Features: Within the compartment MNFI shows the potential for osprey, eagle, great blue heron rookery, red-shouldered hawk, and goshawk as well as the potential for incurvate emerald, frigga fritillary, freija fritillary and ebony boghaunter in bog habitat. MNFI also shows the potential for rare plants of rich mesic forests: assiniboia sedge, showy orchis, ginseng, and goblin fern. Potential for rare plants of marshes and bogs including widgeon-grass, Farwell's water-milfoil, alga pondweed, and autumnal water star-wort.

Archeological, Historical, and Cultural Features: None known.

Special Management Designations or Considerations: A large proportion of the state land within this compartment is held under a management lease by Luce County until January 12th, 2014.

Watershed and Fisheries Considerations:

Fisheries Values: None

Fisheries Concerns: There are no water-bodies in this compartment, so Fisheries has no concerns at this time.

Wildlife Habitat Considerations: Compartment 108 lies in southern Luce county in the St. Ignace ecological sub-subsection. Northern hardwoods and aspen stands dominate the compartment with a few small various lowland types primarily on the west side. Species diversity in forested stands is low overall. The compartment is heavily used by hunters.

The conifer component of stands is very low and thus conifers will be retained in harvested stands to provide species and structural diversity and to serve as nesting habitat for warblers, nesting trees for hawk species

(featured species), and vertical structure for deer (featured species). Scattered aspen will be retained in aspen final harvests to provide food sources for ruffed grouse (featured species) and coarse woody debris for small mammals and black bear (featured species) forage sites. Some existing openings are scheduled to have scattered large oak planted to replace lost mast as food sources for wildlife.

Mineral Resource and Development Concerns and/or Restrictions:

Sections 23, 25, 26, 35 and 36, T45N-R11W, Luce County

Surface sediments consist of lacustrine sand and gravel and coarse-textured glacial till. There is insufficient data to determine the glacial drift thickness. The Silurian Manitoulin Dolomite and Cabothead Shale subcrop below the glacial drift. The Manitoulin could be used for stone. A gravel pit is located in Section 24 and potential may be good in Section 25. There is no economic oil and gas production in the UP.

Vehicle Access: The compartment can be accessed by county roads 431 and 468, both which are primary routs that run through a majority of the compartment. These roads are maintained by the Luce County Road Commission. The County has designated this road as seasonal and they do not routinely maintain it as they do other county roads. These roads provide great public access throughout the compartment. There are also a good number of small forest roads/logging roads that run through a majority of the stands, making access easy to the entire compartment.

Survey Needs: None

Recreational Facilities and Opportunities: The Sandtown ORV/Motorcycle Trail meanders through a good portion of the compartment. FMD snowmobile trails 457 and 45 run through the compartment as well. Hunting, wildlife viewing and trapping opportunities are also present.

Fire Protection: The potential for large fire growth in this compartment is low because of the low acres of conifer types and the network of two tracks. Most of the compartment is accessible with heavy equipment. Most fires should be low intensity surface fires with slow rates of spread because of the hardwood fuel types.

Additional Compartment Information: None.

➤ **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 108
 T45N, R11W, Sec. 23, 25, 26, 35, 36
 County: Luce
 Unit: Newberry
 YOE: 2013
 Acres: 2,796 GIS Calculated
 Stand Examiner: Jason Darling
 Map Revised: 10/31/2011
 Map Phase: Pre-Review

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

23	
26	25
35	36

N

Legend

- Miris Corners
- Remonumented Section Corners
- Berms
- 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)
- Motorcycle (SOS License)
- ORV Trail
- ORV Route
- Snowmobile Trail
- Stream
- Intermittent Stream
- Lakes and Rivers

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Selection (Group, Single Tree)
- Planting (tree species)
- Pesticide

Forest Stands

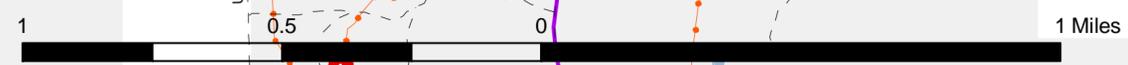
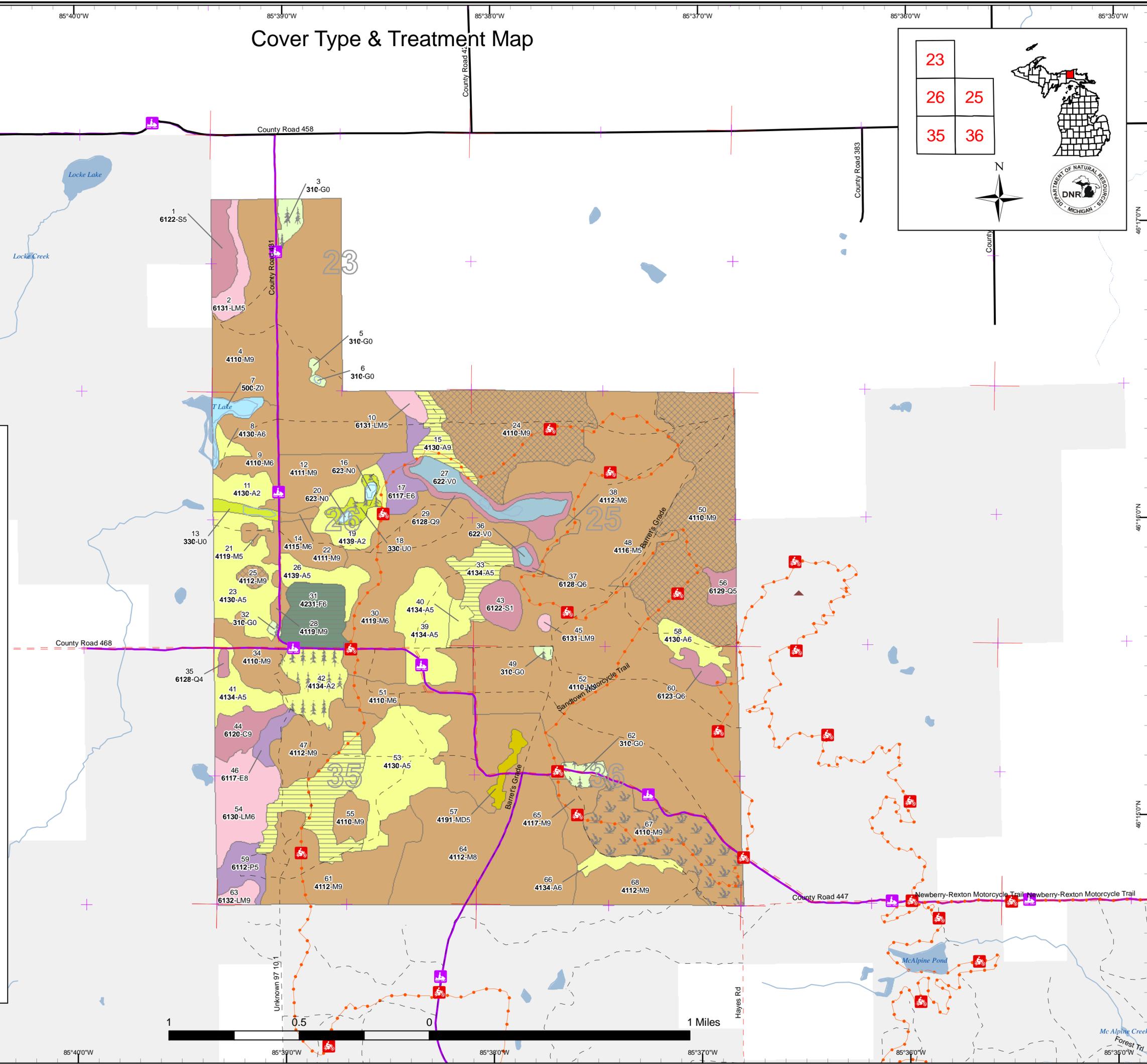
LVL3COVER

- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 423 - Other Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- State Forest Land



Stand Boundary Map

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- + Remonumented Section Corners
- ▲ Berms
- Highway
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- Closed Roads
- Motorcycle (DNR Sticker)
- Motorcycle (SOS License)
- ORV Trail
- ORV Route
- Snowmobile Trail
- Stream
- Intermittent Stream
- Stand Boundaries

Forest Stands

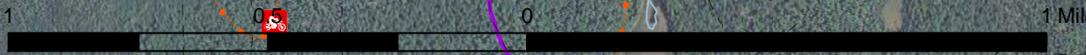
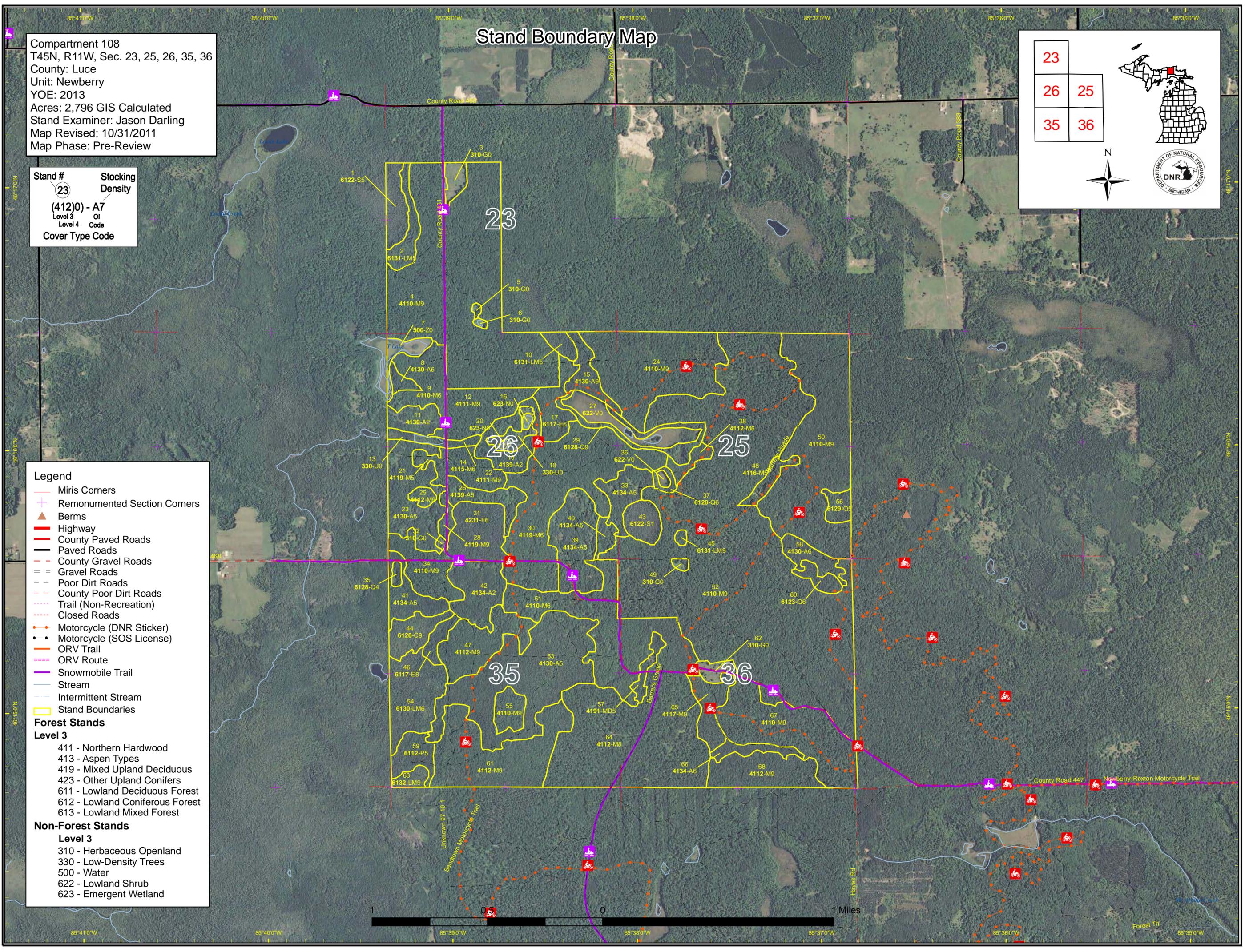
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Non-Forest Stands

Level 3

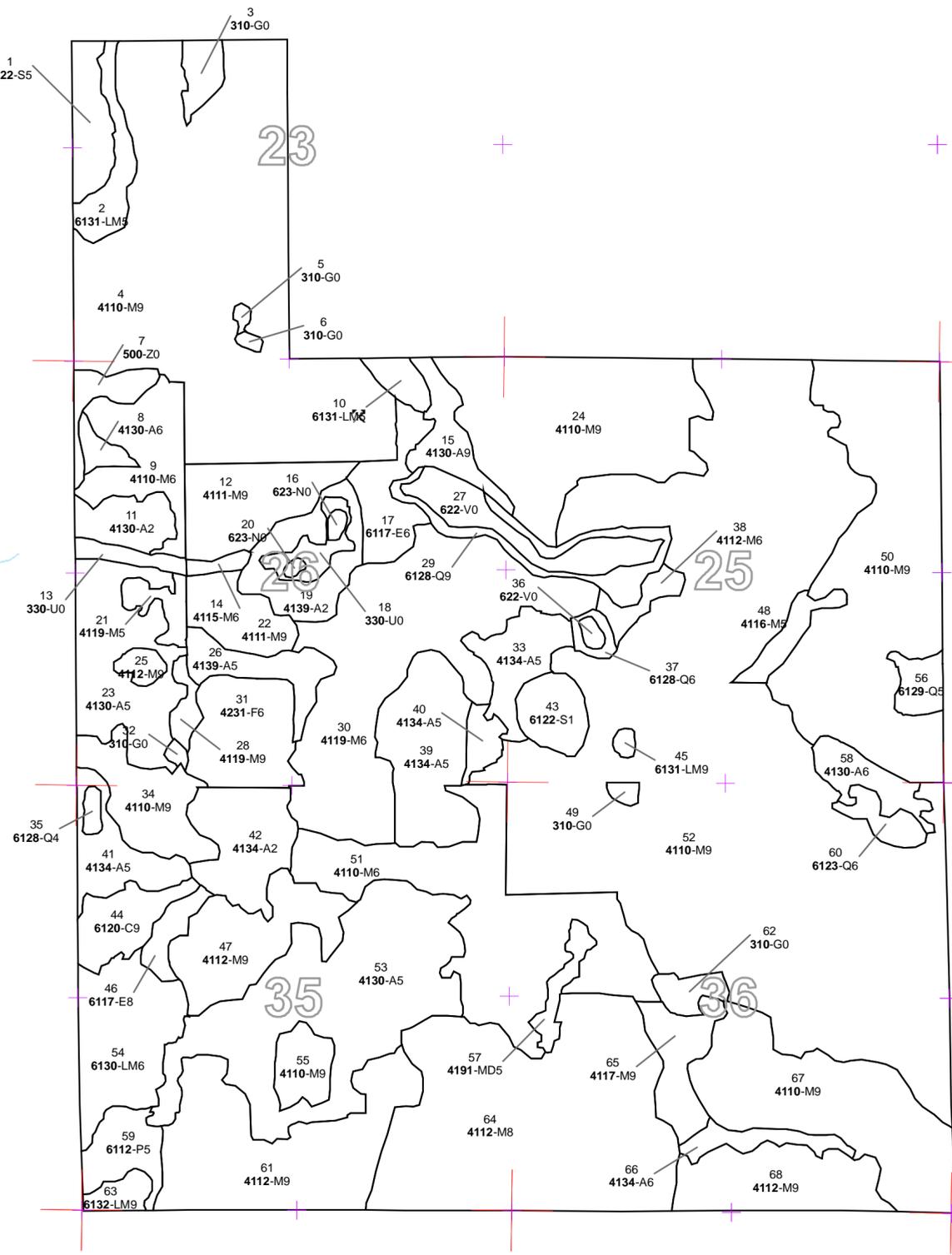
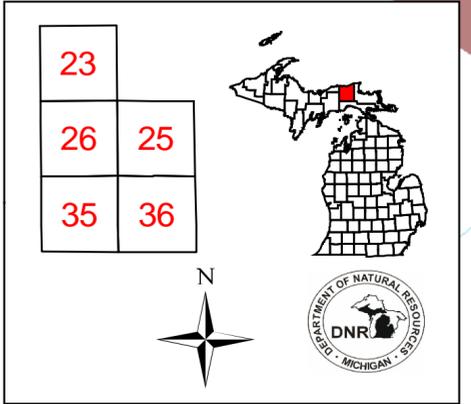
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- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland



Dedicated & Proposed Special Conservation Area Map

Compartment 108
 T45N, R11W, Sec. 23, 25, 26, 35, 36
 County: Luce
 Unit: Newberry
 YOE: 2013
 Acres: 2,796 GIS Calculated
 Stand Examiner: Jason Darling
 Map Revised: 10/31/2011
 Map Phase: Pre-Review

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



- Legend**
- Miris Corners
 - + Remonumented Section Corners
 - Stand Boundaries
 - Dedicated Special Conservation Areas**
 - Deer Wintering Areas
 - Wildlife Management Areas
 - Cold Water Streams
 - ⊗ Mineral Resource Points
 - ⊗ Boat Access Sites
 - Forest Stands**
 - Level 3**
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 423 - Other Upland Conifers
 - 611 - Lowland Deciduous Forest
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 - 613 - Lowland Mixed Forest
 - Non-Forest Stands**
 - Level 3**
 - 310 - Herbaceous Openland
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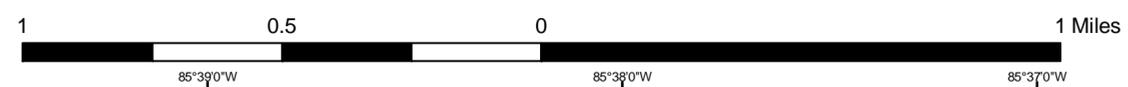


Table 1 – Total Acres by Cover Type and Age Class



	Age Class														Total	
	Non-Forested	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Unretn Age
Aspen	0	16	0	0	57	11	74	47	0	0	0	0	0	0	223	428
Bog	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Cedar	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	20
Herbaceous Openland	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Low-Density Trees	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	18
Lowland Conifers	0	0	0	0	0	0	9	6	0	0	20	0	0	9	0	45
Lowland Deciduous	0	0	0	0	0	0	0	9	0	0	0	0	0	0	22	31
Lowland Mixed Forest	0	0	0	0	0	0	7	0	17	9	0	0	0	0	49	81
Lowland Spruce/Fir	0	0	0	0	0	16	0	0	0	0	19	0	0	0	0	35
Marsh	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8
Northern Hardwood	0	0	0	0	0	3	0	14	49	1329	269	0	0	0	348	2014
Upland Spruce/Fir	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	38
Water	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Total	78	16	0	0	57	30	128	77	66	1338	328	0	0	9	669	2796



Table 2 – Proposed Treatment Summaries

Newberry Mgt. Unit
Year of Entry 2013

Compartment 108
Total Compartment Acres: 2796

Acres by Treatment Type

Commercial Harvest - 404	Site Prep - 0	Tree Planting - 64	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 88	

Cover Type by Harvest Method

		Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	93	0	0	0	0	0	0	93
Northern Hardwood	0	273	0	0	0	0	0	273
Upland Spruce/Fir	38	0	0	0	0	0	0	38
Total	131	273	0	0	0	0	0	404



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
15	42108015 Final Harvest-Cut	17.5	4130 - Aspen	High Density Log	62	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Clearcut Aspen.									
<u>Specs:</u>									
<u>Other</u> See OFS for more information.									
<u>Comments:</u> Buffer lowland to the south by not cutting south of the ORV trail. ORV trail runs through the stand. Be sure to keep the trail in tact and to keep the trail debris free during and after the cut. If needed place carsonite signs in areas where signed trees were removed. Acceptable Aspen/ Conifer retention will be located within the buffer areas.									
<u>Next Steps:</u> A regeneration check will be needed to ensure adequate Aspen regeneration. Acceptable regeneration is Aspen with a component of Balsam Fir.									
24	42108024 Crown Thinning	109.6	4110 - Sugar Maple Association	High Density Log	83	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<u>Prescription</u> Thin oversized/damaged hardwoods and create gaps to promote regeneration and to release intermediate stems. Maintain a BA of 80-90.									
<u>Specs:</u> Maintain species diversity; specifically make sure to leave several large yellow birch. Leave a conifer component when present.									
<u>Other</u> See OFS notes for more information.									
<u>Comments:</u> ORV trail runs through the stand. Be sure to keep the trail in tact and to keep the trail debris free during and after the cut. If needed place carsonite signs in areas where signed trees were removed.									
<u>Next Steps:</u> Acceptable regeneration of Sugar Maple Association.									
25	42108025-Cut	4.7	4112 - Maple, Beech, Cherry Association	High Density Log	74	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<u>Prescription</u> Remove trees from a variety of diameter classes. Remove some large diameter, overstory Maple/Beech to create gap openings for regeneration.									
<u>Specs:</u> Thin pole size trees to promote residual growth. Target BA: 90									
<u>Other</u>									
<u>Comments:</u>									
<u>Next Steps:</u> Regeneration check needed 2-3 years after harvest to ensure hardwood regeneration is adequate. Acceptable regeneration is Sugar Maple association.									
31	42108031 Final Harvest-Cut	37.6	42311 - Planted Spruce, Mixed Deciduous	High Density Pole	50	Harvest	Clearcut with Reserves	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Clearcut Spruce. Retain a few large Aspen in the NE corner and a few large spruce to maintain species diversity. Also maintain a small component of the hardwood ridges that are present in the stand. Spruce tops must be chipped.									
<u>Specs:</u>									
<u>Other</u> Pine will help maintain diversity at a compartment level due to the low numbers of conifers present. Protect the bearing trees and survey corner that is in the south east corner of the stand.									
<u>Comments:</u>									
<u>Next Steps:</u> Scarify to reduce hardwood regeneration, trench and plant with a mix of Red pine and White pine. When trenching/planting try to replicate a natural pine setting. Regeneration check will be needed to ensure pine establishment. Acceptable regeneration is Red/White Pine.									
33	42108033 Final Harvest-Cut	22.3	4134 - Aspen, Spruce/Fir	Medium Density Pole	60	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<u>Prescription</u> Clearcut Aspen and B. Fir. Retain 1 large Aspen or B. Fir per 5 acres to maintain diversity. Cut during winter to promote Aspen regeneration and to protect wet areas in the southern half of the stand.									
<u>Specs:</u>									
<u>Other</u> Leave a few trees of various species (white pine, spruce and cherry) along the edges of the opening - wildlife request.									
<u>Comments:</u>									
<u>Next Steps:</u> Regeneration check to ensure adequate stocking. Plant large Oak in the openings. Acceptable regeneration is Aspen with a component of Balsam Fir and planted Oak.									



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
50	42108050 Hardwood Thinning-Cut	159.1	4110 - Sugar Maple Association	High Density Log	82	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<u>Prescription</u> Remove some large diameter, overstory Maple/Beech to create gap openings for regeneration and thin to release pole size timber. B.C. stems <u>Specs:</u> dominate in small groups and have black knot, remove them or thin. Possibly cut all B.C. trees in pockets to promote stump sprouting. Thin maple poles to stimulate residual growth. Maintain species and size class diversity. Overall DO NOT be aggressive and cut the stand too hard; leave BA at least 90ft^2 to reduce elderberry and raspberry growth.									
<u>Other</u> <u>Comments:</u> ORV trail runs through the stand. Be sure to keep the trail in tact and to keep the trail debris free during and after the cut. If needed place carsonite signs in areas where signed trees were removed.									
Luce County Lease Land bleeds into the southern portion of the prescribed area; exclude this area from the sale (see paper map in Compartment folder).									
<u>Next</u> <u>Steps:</u> Regeneration check needed 2-3 years after harvest to ensure hardwood regeneration is adequate. Acceptable regeneration is Sugar Maple association.									
53	42108053 Final Harvest West	53.2	4130 - Aspen	Medium Density Pole	60	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Clearcut Aspen. Leave 1 large Aspen, B. fir or Paper birch per 5 acres scattered throughout the stand as residuals. Do not leave green trees <u>Specs:</u> within a tree length of the ORV trail.									
<u>Other</u> <u>Comments:</u> Cut during winter to promote Aspen regeneration and to protect wet areas in the west finger of the stand. Some roadwork/culvert will need to be done to get into the stand.									
ORV trail runs through the stand. Be sure to keep the trail in tact and to keep the trail debris free during and after the cut. If needed place carsonite signs in areas where signed trees were removed.									
<u>Next</u> <u>Steps:</u> A regeneration check will be needed to ensure adequate Aspen regeneration. Acceptable regeneration is Aspen with a component of Balsam Fir.									
42	42108042- Plant	34.9	4134 - Aspen, Spruce/Fir	Medium Density Saplin	36	Tree Planting	Hand Plant	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<u>Prescription</u> Plant Oak throughout the opening along Co Rd 468.									
<u>Specs:</u>									
<u>Other</u> <u>Comments:</u>									
<u>Next</u> <u>Steps:</u>									
3	NF_42108003- Plant	8.8	Non-Forested		0	Tree Planting	Hand Plant	3102 - Grass	Cmpt. Review Proposal
<u>Prescription</u> Plant Oak throughout the stand.									
<u>Specs:</u>									
<u>Other</u> <u>Comments:</u>									
<u>Next</u> <u>Steps:</u> Contact Grossman Forestry Co. about getting the planting approved through Luce County Lease lands authorities.									
18	NF_42108018- Plant	8.7	Non-Forested		0	Tree Planting	Hand Plant	4131 - Aspen, Oak	Cmpt. Review Proposal
<u>Prescription</u> Plan Oak throughout the opening.									
<u>Specs:</u>									
<u>Other</u> <u>Comments:</u>									
<u>Next</u> <u>Steps:</u>									



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
32	NF_42108032-Plant	1.5	Non-Forested		0	Tree Planting	Hand Plant	4121 - Oak, Aspen	Cmpt. Review Proposal
<u>Prescription</u> Plant Oak throughout the opening. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u>									
49	NF_42108049-Plant	2.1	Non-Forested		0	Tree Planting	Hand Plant	3102 - Grass	Cmpt. Review Proposal
<u>Prescription</u> Plant Oak throughout the opening. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> Contact Grossman Forestry Co. about getting the planting approved through Luce County Lease lands authorities.									
62	NF_42108062-Plant	7.8	Non-Forested		0	Tree Planting	Unspecified	3102 - Grass	Cmpt. Review Proposal
<u>Prescription</u> Plant Oak throughout the stand. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> Contact Grossman Forestry Co. about getting the planting approved through Luce County Lease lands authorities.									
67	42108067 Herbicide-Spray	88.5	4110 - Sugar Maple Association	High Density Log	85	Pesticide	Skidder	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<u>Prescription</u> Summer herbicide application. <u>Specs:</u> <u>Other Comments:</u> The stand is not regenerating. Raspberry and Elderberry dominate the stand. <u>Next Steps:</u> Regeneration check is needed 2-3 years after the treatment. Acceptable regeneration is Maple, Beech and Cherry association.									

**Total Treatment
Acreage Proposed: 556.2**

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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#Error

Prescription
Specs:

Other
Comment:

Next
Steps:

Limiting Factor and No
Treatment Reason

Total Treatment
Acreage Proposed: 0

**Out of YOE -- Treatments
Prescribed with No Limiting Factor**

Year of Entry: 2013



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
42045001-Cut	3.9	42210 - Natural Red Pine	High Density Log	89	Harvest	Seed Tree	42210 - Natural Red Pine	Cmpt. Review Proposal
<p><u>Prescription:</u> Harvest site to imitate a catastrophic crown fire by "clear-cutting all but a patchy mosaic of pine trees and clumps of trees to serve as seed trees"</p> <p><u>Specs:</u> (MNFI). Focus on the 8-18 inch DBH class. Residual BA 10-20 to allow for successful pine regeneration.</p> <p><u>Other Comments:</u> This stand is identified by MNFI as a Dry Northern Forest. Move some of the Hemlock and Yellow Birch logs into stand 34 for Hemlock regeneration nurse logs.</p> <p><u>Next Steps:</u> Burn the harvested area in the spring to reduce slash, hardwood competition, and to expose the mineral soil. This should be done within 2-3 years after the completion of any harvesting activities. If the site is not burned within the time frame, scarify site to promote pine regeneration. If scarification fails, plant red pine. Acceptable regeneration mix is RP and a small component of WP.</p>								

**Total Treatment
Acreage Proposed: 3.9**

Stand	Newberry Mgt. Unit		5 – Forested Stands			Compartment: 108
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2013
						General Comments:
1	6122 - Black Spruce	Medium Density Pole	18.8	90		Luce county lease land. Medium quality/stocking black spruce.
2	6131 - Hemlock, White Pine, Maple, Birch	Medium Density Pole	16.5	72	81-110	Luce county lease land. Southern half of the stand has more W.P and Hemlock as well as a few small wet openings with alder.
4	4110 - Sugar Maple Association	High Density Log	269.4	90	51-80	County lease land. Very nice hardwood stand. Lower basal area in some areas. Good SM regeneration throughout the stand, however deer browse is heavy in some areas.
8	4130 - Aspen	High Density Pole	5.4	51		Aspen starting to degrade. Other hardwood poles mixed in the stand. Luce County Lease Land will cut this stand before 2013.
9	4110 - Sugar Maple Association	High Density Pole	35.0	88	81-110	Good SM regeneration in spots throughout the stand, however deer browse is very heavy. Beech is degrading quickly due to BBD. B. Cherry has black knot. More than half (north) of the stand is part of Luce County Lease land and will be cut before 2013.
10	6131 - Hemlock, White Pine, Maple, Birch	Medium Density Pole	7.5	50		Low area with mixed species. Intermittent water drainage.
11	4130 - Aspen	Medium Density	16.1	8		T-Lake aspen sale 007-03-01, completed 10/22/03. Good QA stocking in most of the stand. Large grass openings throughout the stand. Road into the stand is blocked. Low/wet area in the western edge of the stand, consists of spruce, fir and some cedar.
12	4111 - S.Maple, Hard Mast Association	High Density Log	38.0	85	51-80	Raspberry growth is heavy since the stand was cut as 431 Hardwoods, sale# 002-03-01 completed 4/21/2004.
14	4115 - Y.Birch, Hemlock NH	High Density Pole	3.3	42	51-80	Hardwood stand is limited by topography and is part of a drainage. Similar HW stands were harvested north and south of the drainage.
15	4130 - Aspen	High Density Log	17.5	62		Nice aspen stand. Sale proposed last YOE. Will have to use BMP's when establishing cutting boundaries to buffer wet area to the south. Reation trail runs through the south.
17	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	22.5	Uneven Age	51-80	Intermittent stream runs through the northern half of the stand and creates a significant pool of standing water. Culvert in the road in good shape. Overall is a nice mixed hardwood/softwood stand and should be left in tact to protect the intermittent stream.
19	4139 - Aspen, Mixed Deciduous	Medium Density	27.0	Uneven Age		Stand was part of multiple cuts. Sale #: 53-95, 36-94. Variable stand: several openings with scrub BC, some pockets of hardwoods. Mainly consists of young aspen saplings.
21	4119 - Mixed Northern Hardwoods	Medium Density Pole	8.6	64	51-80	Marginal pole stand. Canopy is open in small areas throughout the stand and SM is coming through.





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	4111 - S.Maple, Hard Mast Association	High Density Log	21.5	85	51-80	Raspberry growth is heavy. Stand was managed by selection as 431 Hardwoods sale# 002-03-01 completed 4/21/2003.
23	4130 - Aspen	Medium Density Pole	53.6	53		Nice aspen throughout the stand but it is variable. Quite a few grass/reindeer moss openings with scrub BC scattered throughout the stand.
24	4110 - Sugar Maple Association	High Density Log	109.6	83	81-110	This stand was cut: #027-93. Elderberry presence can be high throughout the stand; however it is finally starting to die out. SM regeneration is scattered in high density pockets throughout. QD collection was done, check compartment folder for more information. Herbaceous vegetation consisting of: trillium, trout lily, leek, occasional sweet cicely and some maiden hair fern.
25	4112 - Maple, Beech, Cherry Association	High Density Log	4.7	74	111-140	Nice ridge of hardwoods. Pick up some quaking aspen on the edge of the stand. Openings with small aspen and scrub BC surrounds the stand.
26	4139 - Aspen, Mixed Deciduous	Medium Density Pole	19.2	Uneven Age		Multistoried stand: Small changes in topography generates small hardwood pockets, aspen poles scattered throughout the stand.
28	4119 - Mixed Northern Hardwoods	High Density Log	5.8	68	111-140	Beech has BBD and Basswood is getting large and beginning to degrade. Deer browse is very heavy.
29	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	20.3	90		Mixed conifer stand that acts as a buffer for low area to the northwest.
30	4119 - Mixed Northern Hardwoods	High Density Pole	135.8	Uneven Age	81-110	Large scattered wolf SM scattered throughout the stand. Maple borer in some of the SM poles. BC dominates in some areas to the east (heavy black knot disease). There is a small pocket of dense, young SM in the southern finger of the stand, aspen poles are scattered throughout this area also. Herbaceous vegetation consisting of: trillium, trout lily, leek, occasional sweet cicely and some maiden hair fern.
31	42311 - Planted Spruce, Mixed Deciduous	High Density Pole	37.6	50		Hardwoods are spread throughout the stand but higher #'s in the NW corner of the stand, mostly aspen and SM. Protect berring trees and survey corner that is in the south east corner of the stand.
33	4134 - Aspen, Spruce/Fir	Medium Density Pole	22.3	60		Nice aspen stand, however it is starting to degrade.
34	4110 - Sugar Maple Association	High Density Log	32.1	84	51-80	Stand was thinned as "Eight Line Hardwoods" 041-03-01 and completed 2/9/2006. Regeneration is poor due to the abundance of raspberry. Rolling topography. Good northern hardwood log stand.
35	6128 - Lowland Coniferous, Mixed Deciduous	Low Density Pole	2.7	63		Lowland area within aspen stand. Poor dirt road runs along the west edge of the low area.
37	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	3.7	68		This stand acts as a buffer for the low area within. There is a mix of species leading down to open water.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
38	4112 - Maple, Beech, Cherry Association	High Density Pole	8.1	72	111-140	High density of BC which has quite a bit of black knot on it. Hardwood stand to the east was cut in 2008.
39	4134 - Aspen, Spruce/Fir	Medium Density Pole	49.6	Uneven Age		Multistory Stand; Nice aspen poles in clumps throughout the stand. Very strong SM undergrowth throughout. Several openings scattered throughout with scrub BC. Undergrowth of alder in low pockets.
40	4134 - Aspen, Spruce/Fir	Medium Density Pole	7.3	62		This is a mixed stand: mainly consists of aspen clones spread throughout the stand. SM and BF mixed throughout the stand. Road enters stand and dead ends with a small turn around at the end.
41	4134 - Aspen, Spruce/Fir	Medium Density Pole	22.1	36		Good quality young aspen stand. Quite a bit of BF mixed within the aspen. Good road runs along wet area into the stand, the road continues into the stand along a ridge, however it is overgrown.
42	4134 - Aspen, Spruce/Fir	Medium Density	34.9	36		Good young aspen stand. Some large poles throughout but most of the stand is 3-5" stems. Openings throughout with scrub BC. Some other hardwoods mixed in. Sale #'s: 5-76, 85-81.
43	6122 - Black Spruce	Low Density Sapling	16.0	43		OI labeled this stand as a treed bog; the stand meets the IFMAP standard for a forested stand (greater than 25% canopy closure). The perimeter has some larger spruce and tamarack; however trees decrease in size drastically as you move towards the center of the stand.
44	6120 - Lowland Cedar	High Density Log	20.0	98	171-200	Drainage runs through the stand.
45	6131 - Hemlock, White Pine, Maple, Birch	High Density Log	1.8	85	141-170	Low area retention pocket within a hardwood stand. RM overtop Hemlock.
46	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Log	8.8	67		Mixed lowland deciduous/conifer stand. Drainage runs on the western edge of the stand. Some of the aspen is very large and degraded/falling down and is creating small openings.
47	4112 - Maple, Beech, Cherry Association	High Density Log	44.1	82	81-110	Good sugar maple pole stand. Some cherry, yellow birch, balsam fir and aspen scattered throughout the stand. A lot of deer activity and browse on small seedlings. More red maple in western portion of the stand. Small stick nest in the west end right next to the road; possibly just a crow nest, it is very small. QD collection done, check compartment folder for more information. Herbaceous vegetation consisting of: trillium, trout lily, leek, occasional sweet cicely and some maiden hair fern.
48	4116 - Mixed N. Hardwood - Aspen	Medium Density Pole	9.8	Uneven Age	51-80	There are big openings in the north and south portions of the stand. Barrett's Grade runs through the stand. Variable size classes throughout the stand. Some openings are producing good SM regeneration. ORV trail runs through the east edge of the stand.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
50	4110 - Sugar Maple Association	High Density Log	159.1	82	111-140	Quality hardwood stand. High component of B. Cherry in some places, black knot is heavy and should be removed. A small component of Beech is in this stand and is degrading due to BBD. SM poles and logs are in good shape but need to be thinned to release crop trees and improve overall health of the SM logs. ORV trail runs through the stand. Luce County Lease land is in the south west corner of the stand has lines around it and will be cut before 2013. Herbaceous vegetation consisting of: trillium, trout lily, leek, occasional sweet cicely and some maiden hair fern.
51	4110 - Sugar Maple Association	High Density Pole	113.2	Uneven Age	81-110	Variable stand: Several pockets of small SM regeneration. Part of the stand is Luce County Lease Land. B. cherry has heavy black knot.
52	4110 - Sugar Maple Association	High Density Log	579.6	85	81-110	Portions of this stand are part of the Luce county lease lands. Stand was cut; Barrett Grade Hardwoods, 014-03-01 completed 5/15/2008, many areas throughout the lease land has been cut as well. Areas that have been cut have raspberry and elderberry growing in very thick and are causing regeneration to be very poor. OI Green Sheet states that a regeneration check is needed in 2012 for sale 014-03-01. Areas in this stand that have not been cut are still nice log stands; however the component of poles is greater. Herbaceous vegetation consisting of: trillium, trout lily, leek, occasional sweet cicely and some maiden hair fern.
53	4130 - Aspen	Medium Density Pole	127.2	Uneven Age		West half of the stand is very nice and stocking is much higher than the rest of the stand. Good HM regeneration throughout the portions of the stand. East half of the stand has several openings. Northern portions of the stand have higher concentrations of BF.
54	6130 - Fir, Aspen, Maple	High Density Pole	48.6	Uneven Age	111-140	Mixed stand. Large cedar spread throughout the stand. The canopy consists of pockets of small BF, red maple throughout, pockets of large BF and scattered BT. Aspen throughout the stand.
55	4110 - Sugar Maple Association	High Density Log	13.9	71	51-80	Some good wildlife snags throughout the stand. Hard maple poles are in good condition, some of the large logs, especially beech are starting to degrade. Canopy closure is on the lower end of 75-100.
56	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	9.3	199	51-80	Perimeter has a mix of species with large WP, interior has small tamarack/WP. Center of the stand seems to be wet year round. Standing water/low area extends into the hardwoods.
57	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	8.3	Uneven Age		Mixed stand: Aspen poles are poor quality. Nice SM poles throughout the stand.
58	4130 - Aspen	High Density Pole	15.4	55	81-110	Nice aspen poles and logs; they are starting to decline. An array of deciduous species mixed into the stand as well as B. Fir. Luce County Lease lands will have cut a portion of the stand before 2013.
59	6112 - Lowland Aspen	Medium Density Pole	18.0	Uneven Age	51-80	Multistoried aspen stand. Mostly small poles 3-6", there are quite a few large aspen logs scattered throughout the stand.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
60	6123 - Lowland Fir	High Density Pole	8.9	55		Luce County Lease lands will have cut most of the stand before 2013.
61	4112 - Maple, Beech, Cherry Association	High Density Log	89.7	Uneven Age		Part of this stand was marked and put up for sale#: 037-94. It was not cut due to producer going out of business. Beech numbers are high in this stand and they are degrading quickly. B. cherry is also in very poor shape; black knot is severe and form is poor. B. cherry numbers are higher in the east half of the stand. SM regeneration is variable throughout the stand. Deer browse is heavy and raspberry is thick in some places underneath the degraded beech.
63	6132 - Mixed Lowland Forest with Cedar	High Density Log	7.0	88	200+	Drainage runs through the SE corner of the stand. Good mix of cedar and mixed lowland deciduous trees.
64	4112 - Maple, Beech, Cherry Association	Medium Density Log	179.1	82	51-80	Stand was thinned as: 108 Hardwoods #012-03-01 and was completed 5/15/2008. Raspberry dominates the forest floor, hardwood regeneration is very poor. Basal area is very low in spots throughout the stand.
65	4117 - Mixed N. Hardwood - Pine	High Density Log	22.4	72	141-170	BC has black knot. Basal area is high throughout the stand, however there are l/xlarge WP logs that get picked up in BA swings.
66	4134 - Aspen, Spruce/Fir	High Density Pole	10.7	40		Cut #: 5-76. Nice aspen stand, might be ready in 10 years, revisit next YOE.
67	4110 - Sugar Maple Association	High Density Log	88.5	85	51-80	Stand was thinned as 468 Hardwoods sale #013-03-01 and was completed 10/4/2005. Hardwood regeneration is poor due to abundance of raspberry.
68	4112 - Maple, Beech, Cherry Association	High Density Log	42.3	82	111-140	Medium quality hardwood stand. Large component of b. cherry and b. fir throughout the stand. B. cherry has severe black knot and poor form. There are nice SM poles throughout the stand, there are also several SM wolf trees throughout that should be removed for regeneration gaps. QD collection was done, check compartment folder for more information.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	3102 - Grass	8.8	No	Unspecified	Luce County Lease Lands. Lease management recommendation is to plant RP. Site contains a lot of Spotted Knapweed.
5	3102 - Grass	1.2	No	Unspecified	
6	3102 - Grass	1.3	No	Unspecified	Small depression surrounded by hardwoods.
7	50 - Water	10.3	No	Unspecified	T-Lake. Luce County Lease Land.
13	3303 - Mixed Low Density Trees	6.5	No	Unspecified	
16	6233 - Wet Meadow	1.7	No	Unspecified	
18	3301 - Low Density Deciduous Tree	8.7	Yes	Low (NonForested)	
20	6233 - Wet Meadow	1.0	No	Unspecified	
27	6225 - Bog	25.3	No	Unspecified	Contains some Tamarack and B. spruce on the edges. Leatherleaf throughout.
32	3102 - Grass	1.5	Yes	Low (NonForested)	Small grassy opening. Aspen and Black cherry is slowly filling in the opening. Site was KG'ed in 1974. Newberry fire spot map (1928-25) indicates activity. Look at old OI map to get an idea of what the opening used to look like.
36	6225 - Bog	2.0	No	Unspecified	
49	3102 - Grass	2.1	No	Unspecified	Grass opening with B. Cherry and SM scattered throughout.
62	3102 - Grass	7.8	No	Unspecified	Grass opening with scattered BC.



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.
SCA	Mineral Resource Area	Areas that are primarily managed for mineral resource extraction, on a permanent or temporary basis. They include both metallic and non-metallic mineral mines as well as oil and natural gas sites.