



Newberry Forest Management Unit
Compartment Review Presentation
Compartment #42133 Entry Year: 2013
Compartment Acreage: 2830 County: Luce

Revision Date: 09/13/11

Stand Examiner: Jason A. Tokar

Legal Description: T45N R6W Section 13-15, 22-24

RMU (if applicable): This compartment is located within the Tahquamenon Basin Wetlands Management Area. For further description of this management area, go to the following web site:

http://www.midnr.com/publications/pdfs/forestslandwater/Ecosystem/EUP/final-MAsummaries/29_Tahquamenon_River_Basin_Wetlands_MA_summary_3_6.pdf

Management Goals: Timber and wildlife habitat are equally important management goals within the compartment, as the compartment lies within a winter deer yarding area. Treatments prescribed will help maintain forest productivity, forest health, species diversity, and age class diversity and continue to enhance the quality of the wildlife habitat. Maintain and/or improve the integrity of the deeryard and surrounding area.

Soil and Topography: The compartment is dominated by silt loam soil types. Millecoquins silt loam, Rudyard silt loam, Pickford silt loam, Ontonagon-Pickford, Sporley silt loam, and Rudyard-Pickford silt loam. These “heavy” soils support northern hardwoods, and aspen cover types. Lowland cover types such as mixed lowland conifers, cedar, lowland/swamp hardwoods, lowland white pine with hemlock, etc are found on Carbondale, Lupton and Tawas mucks, Gogomain muck, and Dawson, Greenwood and Loxley Peats. The terrain throughout the compartment is level to slightly rolling.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment is entirely State owned. The compartment is bordered to the north, west and south by State land. Adjacent to the east are two large non industrial private land owners. Development around the area is low. One permanent residence lies adjacent to the compartment along M-28. There are a few small camps within the vicinity of the compartment which are primarily used during hunting season. The main types of land use of the area are hunting snowmobile and ORV riding and timber production. The Toonerville Trolley is located north of the compartment.

Unique, Natural Features:

MNFI lists the potential for rare plants of rich mesic forests: assiniboia sedge, showy orchis, ginseng, and goblin fern. Slight potential for marsh plants including sweet coltsfoot, Wiegand's sedge, northern prostrate clubmoss, fir clubmoss, English sundew, black crowberry, American shoregrass, moor rush, panicked screw-stem, Hill's pondweed, alga pondweed, alternate-leaved water-milfoil, and autumnal water star-wort. Potential for satiny willow along streams. Potential for red-shouldered hawk, eagle, osprey, and great blue heron rookery. Potential for wood turtle in creeks. Potential for Blanding's turtle. Potential for incurvate emerald, frigga fritillary, freija fritillary and ebony boghaunter in bog habitat.

Archeological, Historical, and Cultural Features: None known.

Special Management Designations or Considerations: The compartment lies within the Sage River Deeryard and is designated as a Special Conservation Area (SCA). Management decisions shall be dictated by the promotion and enhancement of the desired characteristics associated with the winter yarding habitat. Conifer canopies should remain undisturbed. Harvesting in these areas will likely take place during winter months.

Watershed and Fisheries Considerations:

Fisheries Values: Moderate

Fisheries Concerns: This compartment contains small unnamed warm transitional streams. These streams are good for forage species movement during spawning. Prescribed treatments in this compartment appear to have necessary buffers already in place. In addition, the types of treatments would not impact these unnamed streams.

Wildlife Habitat Considerations: Compartment 133 lies in southeastern Luce county in the Seney Sand Lake Plain ecological sub-subsection. The compartment lies within the Sage River Deer yard which supports high numbers of deer during stressful winter periods. Numerous streams and drainages exist in the compartment and are important wildlife travel corridors. The northern portion of the compartment is dominated by northern hardwoods and aspen types while the more southern portions are primarily lowland types, both coniferous and deciduous. The Kneeland- Bigelow road is not drivable and serves as an important wildlife travel corridor.

Wildlife objectives will be achieved by harvests being timed to occur during winter months to benefit wintering deer (featured species). In addition, hemlock will be retained in harvested stands to provide crucial cover for wintering deer and black bear (featured species) refuge trees. Scattered large aspen will remain in final harvests to serve as food sources for ruffed grouse (featured species), future den and nest trees for marten (featured species) and flying squirrels and cavity nesting species such as woodpeckers, flycatchers, chickadees and saw-whet owls. Retained conifer in northern hardwoods will act as seed sources for birds and mammals, resting trees for fisher and marten as well as structural diversity for many species including deer and bobcat.

Mineral Resource and Development Concerns and/or Restrictions:

Sections 13 - 15 and 22 - 24, T45N-R8W, Luce County

Surface sediments consist of peat and muck and lacustrine (lake) clay and silt. 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. Hendricks Quarry is located four miles to the southwest. A clay (?) pit is located to the north. Gravel potential is considered limited. There is no economic oil and gas production in the UP.

Vehicle Access: This compartment is located approximately 14 miles east of Newberry. Highway M-28 borders the compartment on the north. The Kneeland Bigelow Road runs north/south through the compartment. Vehicle travel on this seasonal road is dictated by weather conditions. A few other two track roads access the compartment from M-28 but only extend a short distance south. There are several abandoned/closed roads throughout the compartment from previous timber sale activity.

Survey Needs: There is a need to establish corners around the NWNW of Section 15 in order to accomplish the adjacent prescribed treatment.

Recreational Facilities and Opportunities: There are no established recreational facilities within the compartment. Recreational opportunities would be primarily hunting as well as bird watching.

Fire Protection: The potential for large fire growth in this compartment is low because of the lowland of conifer and hardwood cover types. Much of the compartment is inaccessible with heavy equipment because of the heavier soils and soft ground. Most fires should be low intensity surface fires with slow rates of spread and may require modified suppression tactics.

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**

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Cover Type & Treatment Map

Compartment 133
 T45N, R08W, Sec. 13-15, 22-24
 County: Luce
 Unit: Newberry
 YOE: 2013
 Acres: 2,830 GIS Calculated
 Stand Examiner: Jason Tokar
 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
- Survey Corners
- Remunemented Section Corners
- Berms
- Railroads
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- State Highway
- Stream
- Intermittent Stream
- Lakes and Rivers

Treatments

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

Forest Stands

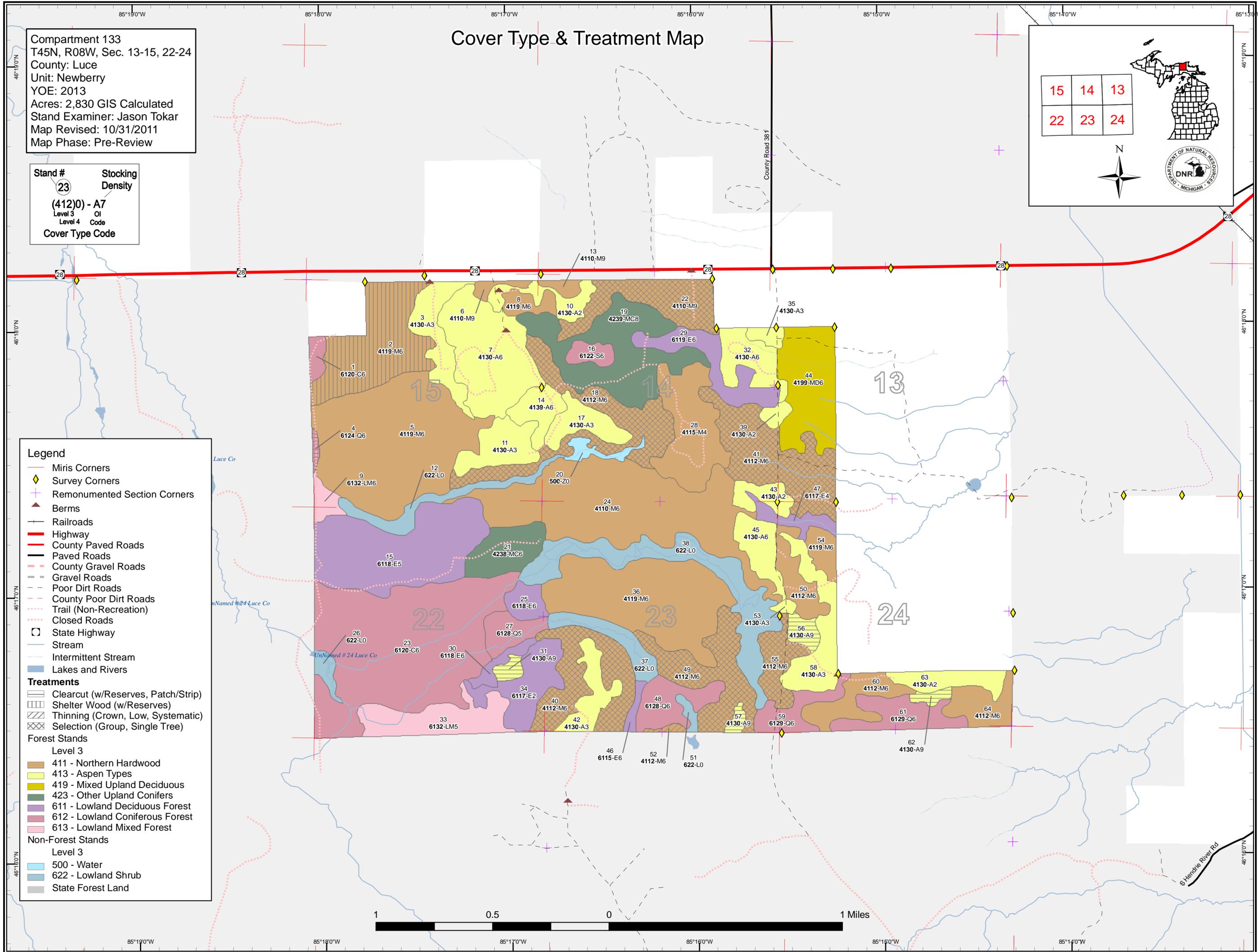
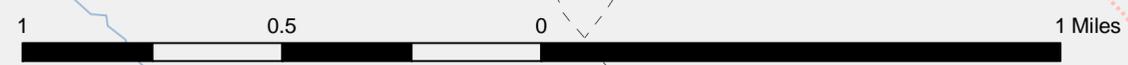
Level 3

- 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

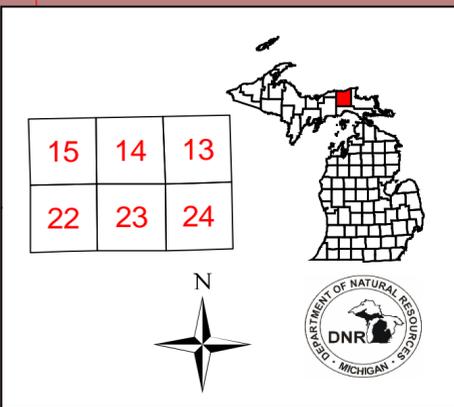
- 500 - Water
- 622 - Lowland Shrub
- State Forest Land



Dedicated & Proposed Special Conservation Area Map

Compartment 133
 T45N, R08W, Sec. 13-15, 22-24
 County: Luce
 Unit: Newberry
 YOE: 2013
 Acres: 2,830 GIS Calculated
 Stand Examiner: Jason Tokar
 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
 - ◆ Survey Corners
 - ⊕ Remonumented Section Corners
 - Stand Boundaries
 - Proposed Special Conservation Areas**
 - ▨ SCA - Special Conservation Area
 - ▩ SCA Removal
 - Dedicated Special Conservation Areas**
 - Deer Wintering Areas
 - Cold Water Streams
 - Forest Stands**
 - Level 3**
 - 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**
 - 500 - Water
 - 622 - Lowland Shrub

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	252	0	158	0	23	0	0	27	0	0	0	0	0	0	460
Cedar	0	0	0	0	0	0	0	0	0	0	266	0	0	0	0	266
Lowland Conifers	0	0	0	0	0	0	0	0	62	3	55	0	0	0	0	119
Lowland Deciduous	0	45	0	0	0	138	0	14	55	0	16	0	0	0	0	268
Lowland Mixed Forest	0	0	0	0	0	0	0	0	63	0	0	0	0	0	0	63
Lowland Shrub	157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157
Lowland Spruce/Fir	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	11
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	75	0	0	0	0	0	0	75
Northern Hardwood	0	0	0	0	0	0	0	0	150	1109	0	0	0	0	0	1259
Upland Conifers	0	0	0	0	37	0	0	0	105	0	0	0	0	0	0	142
Water	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Total	166	297	0	158	37	161	11	14	538	1111	336	0	0	0	0	2830



Table 2 – Proposed Treatment Summaries

Newberry Mgt. Unit
Year of Entry 2013

Compartment 133
Total Compartment Acres: 2830

Acres by Treatment Type

Commercial Harvest - 527	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

		<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
Aspen		27	0	0	0	0	0	27
Lowland Conifers		3	0	0	0	0	0	3
Northern Hardwood		0	397	0	98	3	0	498
Total		30	397	0	98	3	0	527



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	42133002-Cut	97.7	4119 - Mixed Northern Hardwoods	High Density Pole	80	Harvest	Shelter Wood with Reserves	4116 - Mixed N. Hardwood - Aspen	Cmpt. Review Proposal
<u>Prescription:</u> Shelterwood harvest. Residual basal area to average 60-70 sq ft. Lower residual BA in lower quality area with red maple. Leave BA higher in areas of better quality sugar maple. Retain a component of all species. Remove most of aspen but not all (mark to cut). Leave cedar on the west side. North half of stand can be harvested during summer months. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> Monitor for success of desired regeneration. Acceptable regeneration of maple, aspen, basswood, balsam, spruce, ash.									
4	42133004-Cut	2.8	6124 - Lowland Spruce-Fir	High Density Pole	88	Harvest	Clearcut with Reserves	6124 - Lowland Spruce-Fir	Cmpt. Review Proposal
<u>Prescription:</u> Clearcut with reserves. Leave all cedar for retention and seed source except as needed for operability. also leave 1 aspen, birch, maple or limby spruce for every 2 acres harvested and any hemlock. Stand is an extension of stand 55 of Comp 131. Stand will be treated with stand 55 of Comp 131. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> Monitor stand for success of desired regeneration.									
18	42133018-Cut	79.8	4112 - Maple, Beech, Cherry Association	High Density Pole	83	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<u>Prescription:</u> Selection harvest. Residual BA of 70-80 sq ft. Mark aspen to cut, leave a component. Remove overmature maple. Release better quality maple poles. Maintain component of all species present. Leave some scattered large conifer. Follow BMP guidelines, minimal fish concerns. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> Monitor for success of desired regeneration. Acceptable regen of maple, aspen, yellow birch, basswood.									
22	42133022-Cut	58.5	4110 - Sugar Maple Association	High Density Log	84	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<u>Prescription:</u> Selection harvest. Residual BA of 80-90 sq ft. Mark aspen and balsam poplar to cut, leave some in the stand. Create regeneration gaps. <u>Specs:</u> Remove most of the beech that is dying out. Access from M-28 via old roadbed. Driveway permit will be needed from MDOT. Possible to harvest in summer months. <u>Other Comments:</u> <u>Next Steps:</u> Monitor for success of maple regeneration. Acceptable regen also of white ash, aspen, and some cherry.									
31	42133031-Cut	6.5	4130 - Aspen	High Density Log	78	Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal
<u>Prescription:</u> Final harvest. Clearcut with no reserves. Small acreage, no retention needed. Plenty of retention left in adjacent harvest. Access via old road from adjacent harvest. Winter cut due to soil types. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> Monitor for success of aspen regeneration.									



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
40	42133040-Cut	69.6	4112 - Maple, Beech, Cherry Association	High Density Pole	83	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Thin stand. Selection harvest. Residual BA of 60-80. Mark aspen to cut. Leave cedar. Mark spruce to cut. Lower quality areas, residual BA of <u>Specs:</u> 60-70. Higher quality areas, residual BA of 70-80. Leave some large mature trees along stand 37. Winter harvest due to soil conditions.</p> <p><u>Other</u> <u>Comments:</u> Hardwood stand of hard maple with red maple, basswood, large diameter aspen, occasional spruce and cedar. East/west drainages/low areas within the stand with lower basal area. patchy balsam understory. Southeast corner of the stand is very nice maple.</p> <p><u>Next</u> <u>Steps:</u> Monitor for success of regeneration of maple. Acceptable mix of regen with maple, ash, aspen, and conifers.</p>									
41	42133041-Cut	93.2	4112 - Maple, Beech, Cherry Association	High Density Pole	78	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Selection harvest. Care to be taken to avoid steep slopes around drainages. Thin to a residual BA of 70-80 average. Open up canopy around <u>Specs:</u> hemlock. Create regeneration gaps. Mark aspen to cut, retain some.</p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u> Monitor for success of maple regeneration. Accpetable regen mix of mainly maple with ash, aspen, basswood, conifers.</p>									
49	42133049-Cut	68.7	4112 - Maple, Beech, Cherry Association	High Density Pole	83	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Thinning/selection harvest. Residual BA of 60-80 on average. mark aspen to cut, don't remove all aspen. Leave some large aspen along <u>Specs:</u> stands 38 & 57. Lower quality areas, thin to 60-70 sq ft residual. Higher quality areas, thin to 70-80 sq ft residual.</p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u> Monitor success of desireable regeneration. Acceptable regen of mainly maple, with a mix of ash, basswood, aspen, and conifers.</p>									
52	42133052-Cut	2.6	4112 - Maple, Beech, Cherry Association	High Density Pole	83	Harvest	Crown Thinning	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Thin stand. Selection harvest. Residual BA of 60-80. Mark aspen to cut. Leave cedar. Mark spruce to cut. Lower quality areas, residual BA of <u>Specs:</u> 60-70. Higher quality areas, residual BA of 70-80. Winter harvest due to soil conditions. Access will be through adjacent compartment to the south. Possible out of year of entry harvest. Set up as sale with treatments to the south. Stand should be set up as part of 2012 POW.</p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u> Monitor for success of desireable regeneration of maple with basswood, aspen and conifers.</p>									
55	42133055-Cut	27.7	4112 - Maple, Beech, Cherry Association	High Density Pole	83	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
<p><u>Prescription</u> Selection harvest. Mark to residual BA of 70-80. Leave some large aspen near stand 58. Buffer stand 38. <u>Specs:</u></p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u></p>									



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
56	42133056-Cut	10.5	4130 - Aspen	High Density Log	75	Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal

Prescription Clearcut with no reserves. Small acreage, no retention. Leave some large aspen as red line trees along stand 58.

Specs:

Other

Comments:

Next

Steps:

57	42133057-Cut	4.6	4130 - Aspen	High Density Log	70	Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal
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Prescription Clearcut. Small acreage, no retention needed. Can leave most of cedar and hemlock which may be present in stand. Best access is from the

Specs: east coming from the north.

Other

Comments:

Next

Steps:

62	42133062-Cut	5.4	4130 - Aspen	High Density Log	75	Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal
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Prescription Clearcut. No retention, small acreage. Can leave hemlock.

Specs:

Other

Comments:

Next

Steps:

**Total Treatment
Acreage Proposed: 527.4**

Table 4 -- Treatments Prescribed with a Limiting Factor



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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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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: 133	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2013	
1	6120 - Lowland Cedar	High Density Pole	7.7	95	111-140		
2	4119 - Mixed Northern Hardwoods	High Density Pole	97.7	80	81-110	Mix of red maple, hard maple, white ash, black ash, aspen, balsam, spruce, hemlock. Large diameter red maple and white ash with smaller diameter hard maple, etc.	
3	4130 - Aspen	High Density Sapling	38.7	6		Young aspen, cut as sale #044-03-01. Complete in 2005. Some areas still with sparse regeneration. Scattered residual overstory of white pine and hemlock.	
4	6124 - Lowland Spruce-Fir	High Density Pole	2.8	88			
5	4119 - Mixed Northern Hardwoods	High Density Pole	203.1	80	81-110		
6	4110 - Sugar Maple Association	High Density Log	5.8	78	51-80	Stand was thinned by selection cut in 2005 as sale #44-03-01. Narrow stand of hardwoods along M-28 ROW. Mainly sugar maple and beech.	
7	4130 - Aspen	High Density Pole	98.8	25	51-80	Young aspen. Transitioning from a sapling stand to a pole stand. Beech is dying out. Trace of hemlock. Lower areas.	
8	4119 - Mixed Northern Hardwoods	High Density Pole	12.5	70	81-110		
9	6132 - Mixed Lowland Forest with Cedar	High Density Pole	10.0	75			
10	4130 - Aspen	Medium Density	20.4	6		Young aspen. Cut in 2005 as sale #44-03-01. Open in areas, thick regeneration throughout most of the stand.	
11	4130 - Aspen	High Density Sapling	34.6	6		Stand was cut in 2005 as sale #44-03-01. Some scotch pine along the roads??	
13	4110 - Sugar Maple Association	High Density Log	6.1	78	51-80	Stand thinned via selection harvest in 2005 as sale #44-03-01. Narrow stand of hardwoods along M-28 ROW.	
14	4139 - Aspen, Mixed Deciduous	High Density Pole	23.0	46	51-80		
15	6118 - Lowland Deciduous with Cedar	Medium Density Pole	137.8	41		Very limited access. Scattered stand of spruce, balsam, hardwoods. Red maple and black ash saplings. Old records show sale #27-70.	
16	6122 - Black Spruce	High Density Pole	11.3	50	1-50		
17	4130 - Aspen	High Density Sapling	26.9	6		Stand was cut in 2005 as sale #44-03-01. Good aspen regeneration mixed with other species.	





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
18	4112 - Maple, Beech, Cherry Association	High Density Pole	79.8	83	81-110	Southern portion of the stand is more hard maple with red maple and yellow birch. Higher component of red maple in the northern portions of the stand. Large aspen throughout.
19	42390 - Mixed Non- Pine Upland Conifers	Medium Density Log	105.1	70		Stand cut via shelterwood harvest in 2005 as sale #44-03-01. All species removed except white pine, hemlock, cedar and small spruce. Some maple left as residual. Good regeneration throughout, mix of species. Mostly aspen and red maple. Some smaller white pine regen coming in as well.
21	42380 - Non Pine Upland Conifer, Mixed Deciduous	High Density Pole	37.3	35		Stand regenerating from harvest as sale #27-70. Check in 20 years.
22	4110 - Sugar Maple Association	High Density Log	58.5	84	141-170	Nice stand of hard maple with red maple, large diameter aspen, and white ash. Occasional hemlock. A few pockets of balsam poplar. Tall trees, not much understory. Beech component is dying out of the stand. Many areas of a true M9.
23	6120 - Lowland Cedar	High Density Pole	257.9	95	141-170	
24	4110 - Sugar Maple Association	High Density Pole	211.1	86	81-110	Primarily sugar maple. Fair amount of large diameter maple, but most of the maple is in the 8-10 inch diameter classes. Lots of basswood. Access could be questionable to this stand.
25	6118 - Lowland Deciduous with Cedar	High Density Pole	14.8	75		
27	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	21.2	90	1-50	
28	4115 - Y.Birch, Hemlock NH	Low Density Pole	73.0	80	1-50	Stand harvested as a shelterwood as sale #44-03-01, in 2005. Good regeneration of hard maple, red maple, aspen cherry and white ash. Slight amount of white pine regeneration as well. Fair amount of blowdown within the stand.
29	6119 - Mixed Lowland Deciduous Forest	High Density Pole	40.4	76		Small diameter maple and black ash. Component of balsam and spruce. Hemlock and yellow birch. Lower ground, wet.
30	6118 - Lowland Deciduous with Cedar	High Density Pole	10.2	95	81-110	
31	4130 - Aspen	High Density Log	6.5	78	111-140	Mature, large diameter aspen with red maple and white birch. Component of cedar. Some balsam and spruce. Mortality in some aspen.
32	4130 - Aspen	High Density Pole	32.2	27		Young aspen stand, transitioning from a sapling to pole size stand. Thick in many spots. Components of red maple, balsam, basswood, spruce, elm, ash.
33	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	53.4	76		



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
34	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density	44.9	2		Stand cut as sale #045-03-01, finished in 2012. Final harvest with residual overstory of hemlock, white pine, cedar and yellow birch. Good aspen and red maple regeneration. Some wetter areas with less regeneration yet.
35	4130 - Aspen	High Density Sapling	7.1	2		Stand was cut as sale #043-03-01 in 2009. Young aspen with red maple, basswood, beech, balsam and spruce. Scattered residual overstory of red maple and elm.
36	4119 - Mixed Northern Hardwoods	High Density Pole	148.0	83	81-110	Decent quality to the hard maple in the stand. Fingers of balsam and spruce through the middle of the stand. Possibly look at for management next inventory cycle.
39	4130 - Aspen	Medium Density	6.5	2		Stand was cut in 2009 as sale #043-03-01. Small clearcut with residual hemlock yellow birch and elm overstory. Regeneration of stand is patchy due to overstory and lower areas.
40	4112 - Maple, Beech, Cherry Association	High Density Pole	69.6	83	111-140	Hardwood stand of hard maple with red maple, basswood, large diameter aspen, occasional spruce and cedar. East/west drainages/low areas within the stand with lower basal area. patchy balsam understory. Southeast corner of the stand is very nice maple.
41	4112 - Maple, Beech, Cherry Association	High Density Pole	93.2	78	111-140	Hard maple with basswood and red maple. Good site. Decent quality. Areas of lower quality and lower basal area. Drainages and associated slopes within the stand. Scattered hemlock. Component of aspen. Lots of maple 2 inch dbh and 30 ft tall. Smaller diameters in spots.
42	4130 - Aspen	High Density Sapling	27.1	2		Stand cut as sale #45-03-01. Done in 2010. Stand was chipped. Good amount of dead and down material remaining. Good thick regeneration over 10 ft tall.
43	4130 - Aspen	Medium Density	16.9	2		Stand cut in 2009 as sale #043-03-01. Regeneration is coming in well but not yet fully stocked. Aspen with red maple, basswood, balsam.
44	4199 - Other Mixed Upland Deciduous	High Density Pole	75.4	75	81-110	Mixture of high and lower ground. Variable throughout. Higher percentage of "lower" areas in the northern portions of the stand. Low areas of black ash, elm, hemlock, red maple. Higher areas of red maple, hard maple, balsam, basswood, etc. Lower quality stand overall. Pockets of small diameter, low basal area.
45	4130 - Aspen	High Density Pole	26.7	25	1-50	Stand cut as sale #51-84. TSI'd in 1986. Young aspen stand moving from sapling size to pole size. Nice thick stand of aspen.
46	6115 - Lowland Ash	High Density Pole	5.4	95	81-110	
47	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Pole	14.4	66		Open, lowland stand with drainage through it.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	33.3	95		
49	4112 - Maple, Beech, Cherry Association	High Density Pole	68.7	83	111-140	Hardwood stand of hard maple with red maple, basswood, aspen and hemlock. Patchy balsam understory. Very nice stand in many spots. Some areas of lower quality and slightly lower ground.
50	4112 - Maple, Beech, Cherry Association	High Density Pole	25.7	83	81-110	
52	4112 - Maple, Beech, Cherry Association	High Density Pole	2.6	83	111-140	Hardwood stand of hard maple with red maple, basswood, large diameter aspen, occasional spruce and cedar. East/west drainages/low areas within the stand with lower basal area. patchy balsam understory. Southeast corner of the stand is very nice maple.
53	4130 - Aspen	High Density Sapling	3.1	2		Stand cut as sale #043-03-01 in 2009.
54	4119 - Mixed Northern Hardwoods	High Density Pole	14.4	83	81-110	
55	4112 - Maple, Beech, Cherry Association	High Density Pole	27.7	83	111-140	Hard maple stand. Medium quality. Component of spruce and yellow birch, hemlock. Beech is dying out of stand. Good site. Wild leeks as ground cover.
56	4130 - Aspen	High Density Log	10.5	75	111-140	Mature aspen, large diameters. Aspen showing signs of decline. Smaller diameter maple "underneath"...suppressed. Component of yellow birch.
57	4130 - Aspen	High Density Log	4.6	70		Small stand of mature aspen. Showing signs of decline. Large diameters. Stand continues into the compartment to the south.
58	4130 - Aspen	High Density Sapling	46.7	2		Stand cut in 2009 as sale #43-03-01. Young aspen regeneration with red maple. Fair amount of residual overstory, mostly in the southern half of the stand. Less quality in regeneration (sparse) in areas of residual hemlock and yellow birch. Good aspen regeneration in most areas.
59	6129 - Mixed Coniferous Lowland Forest	High Density Pole	25.4	72		Lowland conifers. Good cedar component in spots. Very mixed stand. Areas of lowland hardwoods.
60	4112 - Maple, Beech, Cherry Association	High Density Pole	32.8	78	81-110	Small diameter hard maple with large diameter red maple, white ash and hard maple. Pulp trees are still very small in diameter. Fair quality but some rot, seams, borer damage. Check in 10 years for harvest.
61	6129 - Mixed Coniferous Lowland Forest	High Density Pole	36.1	72		Lowland conifers. Good cedar component in spots. Very mixed stand. Areas of lowland hardwoods.

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Newberry Mgt. Unit

5 – Forested Stands

Compartment: 133
Year of Entry: 2013

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
62	4130 - Aspen	High Density Log	5.4	75	141-170	large diameter aspen, mature. Component of red maple, balsam, hemlock. Aspen showing mortality. Numerous aspen seedlings trying to establish under the canopy.
63	4130 - Aspen	Medium Density	24.5	2		Stand was cut in 2009 as sale #043-03-01. White pine and yellow birch residual left after harvest.
64	4112 - Maple, Beech, Cherry Association	High Density Pole	28.7	83	81-110	Drainage within the stand, wet areas. Small diameters in areas. Check in 10 years.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
12	6229 - Mixed lowland shrub	26.8	No	Unspecified	
20	50 - Water	9.1	No	Unspecified	
26	6229 - Mixed lowland shrub	8.0	No	Unspecified	
37	6229 - Mixed lowland shrub	24.4	No	Unspecified	Creek corridor with tag alder. Series of beaver ponds.
38	6229 - Mixed lowland shrub	93.2	No	Unspecified	
51	6229 - Mixed lowland shrub	4.6	No	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
multiple - see	SCA Removal	42133_SCA_Removal	841.2	This is proposed for removal because of redundant data with the SCA Deer Yard.



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.