



# Compartment Review Presentation

## Newberry Forest Management Unit

Compartment 135

Entry Year 2015

Acreage: 3,038

County Luce

Management Area: Sage Truck Trail

**Revision Date:** 08/29/2013

**Stand Examiner:** Ryan Mattila

### Legal Description:

T45N R8W Sections 32, 33, 34, 35 & 36

### Identified Planning Goals:

Maintain or improve the forest health, productivity, and diversity of the area through proper management. Timber management, wildlife habitat, and recreational opportunities such as hunting are the main uses of the compartment.

### Soil and topography:

The compartment is situated on the southern edge of the Sage River swamp complex and is comprised of a mix of upland and lowland types. The topography in the upland areas is level to rolling. There is one steep, rocky escarpment along the Sage Truck Trail through Section 35. Soils typical of the upland areas include Wallace, Paquin, Liminga, and Alcona sands. Along the steep ridge is a rocky complex of Amadon-Longrie soil. The forest cover types on the upland soils are primarily northern hardwoods and aspen. The lowland, swamp areas are level and are comprised of wet soils such as Carbondale, Lupton, and Tawas Mucks along with Hendrie Mucky Peat. Forest cover types on these lowland soils include cedar, swamp conifers, and some lowland aspen.

### Ownership Patterns, Development, and Land Use in and Around the Compartment:

With the exception of a privately owned 80 acre parcel, located in Section 36, the entire compartment is under State of Michigan ownership. The compartment is bounded by state land on all sides. Since the compartment is primarily state land along with the surrounding land base, development in and around the compartment is almost non-existent. Land use in the compartment entails various forms of outdoor recreation including hunting, fishing, wildlife viewing and hiking. Timber production also is a major use of the compartment.

### Unique Natural Features:

No Unique Natural Features known.

### Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

### Special Management Designations or Considerations:

The compartment is primarily one large, continuous block of state land. The wildlife habitat lends itself to high use for various types of hunting in the compartment. Management decisions should promote and enhance characteristics such as age class diversity and species diversity to sustain these recreational opportunities in the compartment. Any management activity near the Sage River should follow BMP guidelines.

### Watershed and Fisheries Considerations:

Fisheries Values: Good to Excellent

Fisheries Concerns: This compartment contains forks of the East Branch Sage River. All of the forks are designated trout streams. Fisheries surveys in 2012 at various locations along these forks found brook trout scattered. Similar to the Hendrie River drainage, these forks are "marginal" native brook trout habitat and need to be protected. They still provide spawning and nursery areas for brook trout, as well as other fish species. The majority of the treatments are not located near the streams with the exception of stand 26. In stand 26 a clear-cut is proposed in this lowland conifer cover type. If treatment does occur, a 200 foot buffer should be maintained along the stream.

### Wildlife Habitat Considerations:

This large compartment is located in the Seney Sand Lake Plain ecological sub-subsection. It is also within the Sage River deer yard and supports high numbers of deer during demanding winter periods. This compartment is relatively diverse in plant community composition with aspen and upland hardwoods dominating. A significant portion of the compartment is occupied by lowland conifers which is consistent with presettlement data although the upland hardwood component has likely increased in the current day landscape.

Conifer canopies should not be disturbed in this compartment to maintain the wildlife values of those stands. No hemlock or cedar should be harvested to retain thermal cover within stands. Forested corridors should be maintained to facilitate ease of movement between upland and lowland areas. Buffer zones along streams and rivers should be sustained to preserve travel corridors and wetland wildlife values and habitats. Wildlife objectives will be achieved by the retention of conifers, hard and soft mast producing trees, wildlife den and nest trees and snags in hardwoods stands and the preservation of conifer components of aspen stands. In addition, harvests should occur during winter months and tops should not be chipped to provide a food source for wintering deer. Wildlife featured species in this management area include American marten, black bear, ruffed grouse, white-tailed deer and snowshoe hare.

### **Mineral Resource and Development Concerns and/or Restrictions**

Surface sediments consist of peat and muck, lacustrine clay and silt and coarse-textured till. There is insufficient data to determine the glacial drift thickness. The Silurian Burnt Bluff Group and Cabothead Shale subcrop below the glacial drift. The Burnt Bluff is quarried at Hendricks quarry just to the southwest. There should be gravel potential in Sections 35 and 36. There is no economic oil and gas production in the UP.

### **Vehicle Access:**

This compartment is located southeast of Newberry where the Luce, Mackinac, and Chippewa County lines all meet. Access to the compartment is via the Dinkey Line Road through Mackinac County to the south of the compartment boundary. From the Dinkey Line, the Kneeland Bigelow Road and the Sage Truck Trail enter the compartment boundary with the Sage Truck Trail providing the main access to most of the compartment. The Hendricks Quarry Truck Trail enters the very western portion of the compartment. There are several two track roads leading to different areas of the compartment.

### **Survey Needs:**

None

### **Recreational Facilities and Opportunities:**

There are no developed recreational facilities within the compartment. Recreational opportunities would include hunting, fishing, hiking, berry picking, and wildlife viewing.

### **Fire Protection:**

Potential for large fire runs would be low, because of swamp conifers and upland hardwood types in this compartment. Heavy equipment access may be marginal in some areas for suppression activities. Wildfire risk to private properties would be low.

### **Additional Compartment Information:**

#### **The following reports from the Inventory are attached:**

- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

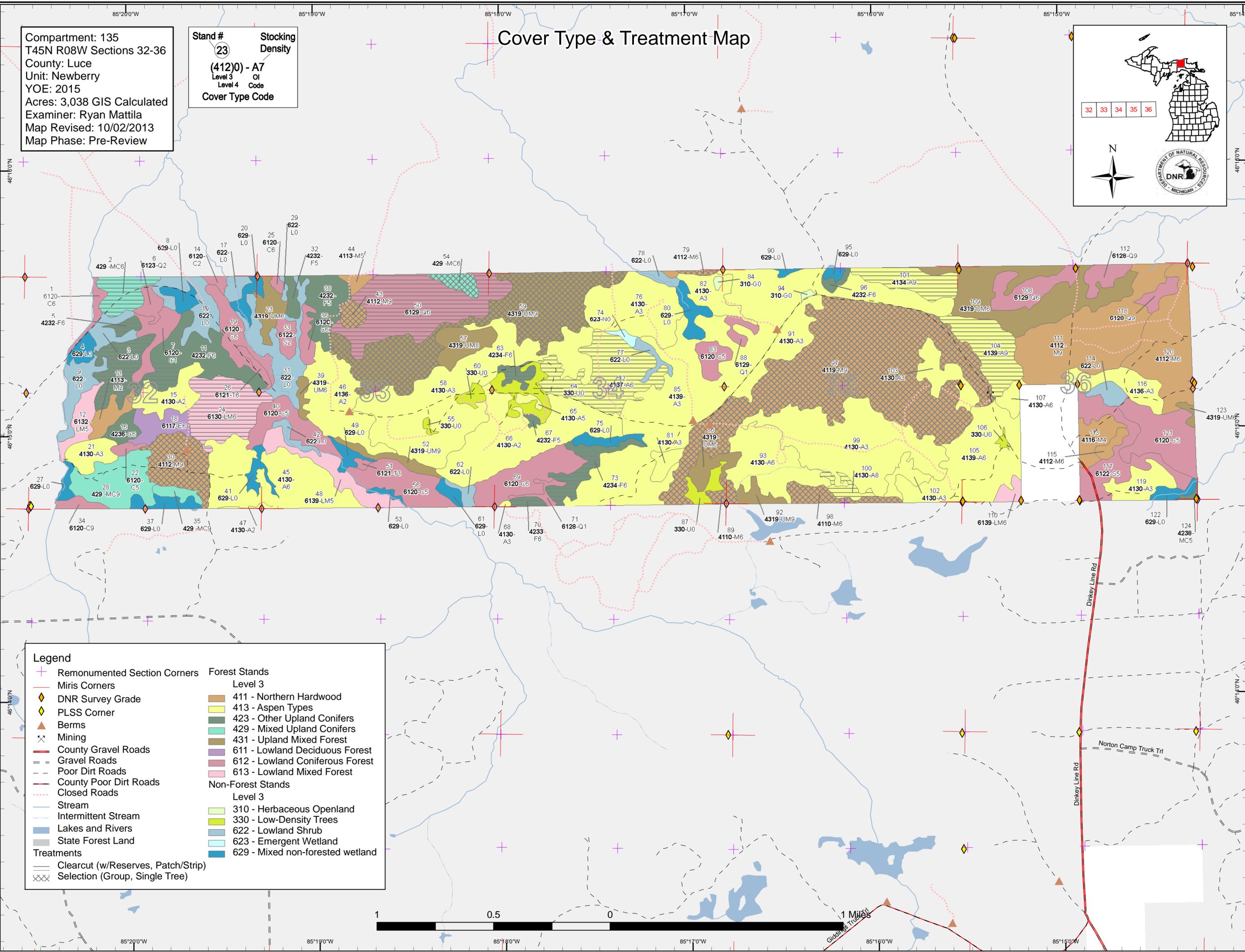
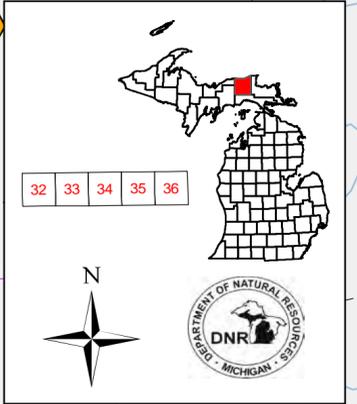
#### **The following information is displayed, where pertinent, on the attached compartment maps:**

- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatment Map

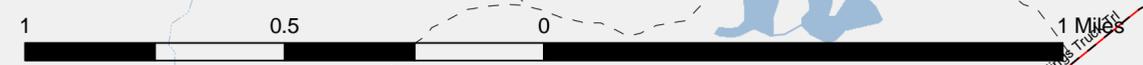
Compartment: 135  
 T45N R08W Sections 32-36  
 County: Luce  
 Unit: Newberry  
 YOE: 2015  
 Acres: 3,038 GIS Calculated  
 Examiner: Ryan Mattila  
 Map Revised: 10/02/2013  
 Map Phase: Pre-Review

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



**Legend**

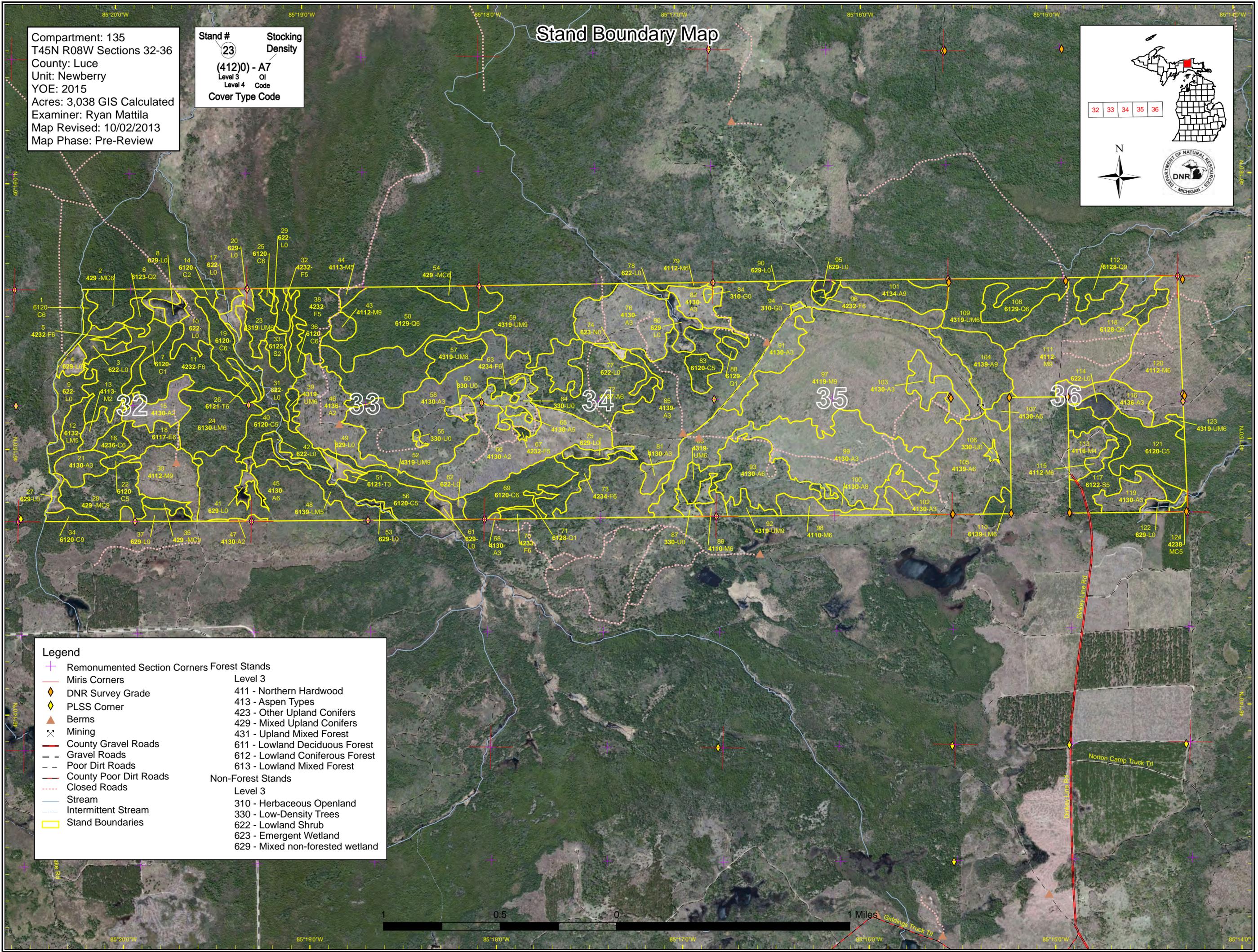
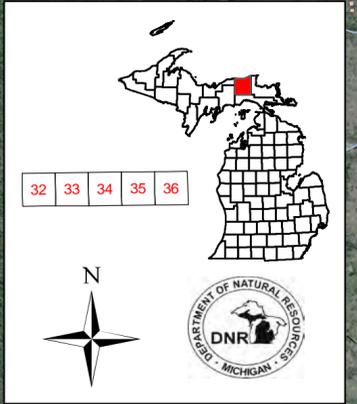
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# Stand Boundary Map

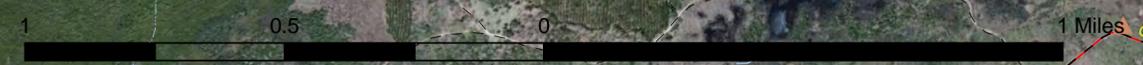
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 T45N R08W Sections 32-36  
 County: Luce  
 Unit: Newberry  
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 Examiner: Ryan Mattila  
 Map Revised: 10/02/2013  
 Map Phase: Pre-Review

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



**Legend**

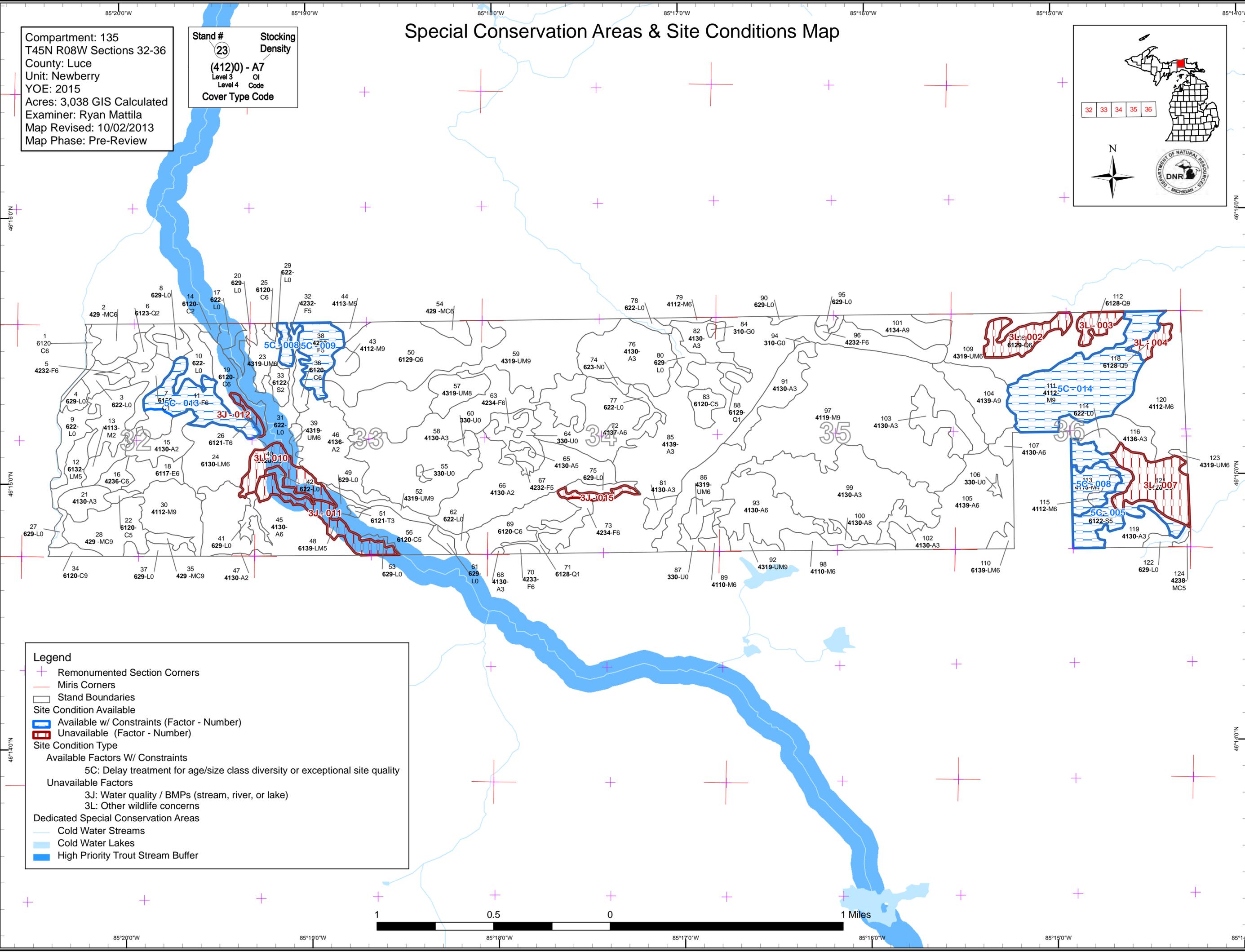
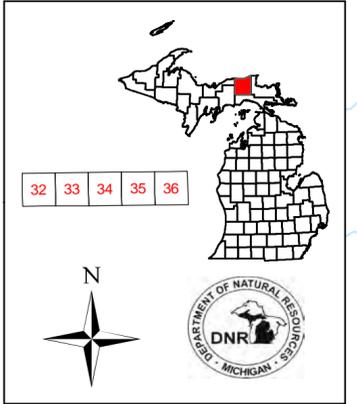
+	Remonumented Section Corners Forest Stands		
+	Miris Corners		
◆	DNR Survey Grade	◆	Level 3
◆	PLSS Corner	◆	411 - Northern Hardwood
▲	Berms	◆	413 - Aspen Types
⊗	Mining	◆	423 - Other Upland Conifers
—	County Gravel Roads	◆	429 - Mixed Upland Conifers
—	Gravel Roads	◆	431 - Upland Mixed Forest
—	Poor Dirt Roads	◆	611 - Lowland Deciduous Forest
—	County Poor Dirt Roads	◆	612 - Lowland Coniferous Forest
—	Closed Roads	◆	613 - Lowland Mixed Forest
—	Stream	◆	Non-Forest Stands
—	Intermittent Stream	◆	Level 3
▭	Stand Boundaries	◆	310 - Herbaceous Openland
		◆	330 - Low-Density Trees
		◆	622 - Lowland Shrub
		◆	623 - Emergent Wetland
		◆	629 - Mixed non-forested wetland



# Special Conservation Areas & Site Conditions Map

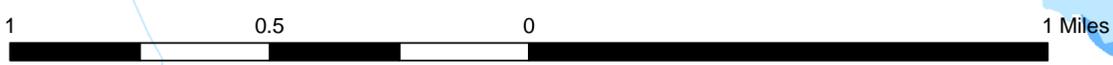
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 Acres: 3,038 GIS Calculated  
 Examiner: Ryan Mattila  
 Map Revised: 10/02/2013  
 Map Phase: Pre-Review

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



**Legend**

- + Remonumented Section Corners
- Miris Corners
- Stand Boundaries
- Site Condition Available
- Available w/ Constraints (Factor - Number)
- Unavailable (Factor - Number)
- Site Condition Type
- Available Factors W/ Constraints
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable Factors
- 3J: Water quality / BMPs (stream, river, or lake)
- 3L: Other wildlife concerns
- Dedicated Special Conservation Areas
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer



85°20'0"W 85°19'0"W 85°18'0"W 85°17'0"W 85°16'0"W 85°15'0"W 85°14'0"W

46°15'0"N 46°14'0"N 46°13'0"N 46°12'0"N

Report 1 – Total Acres by Cover Type and Age Class



	Age Class														Total
	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	
Aspen	438	171	466	10	7	3	8	38	90	0	0	0	0	0	1230
Cedar	0	0	0	0	0	0	0	6	48	0	54	6	108	0	221
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Low-Density Trees	34	0	0	0	0	0	0	0	0	0	0	0	0	0	34
Lowland Conifers	0	0	0	4	7	6	0	0	90	0	0	0	42	0	149
Lowland Deciduous	0	0	0	0	0	0	0	17	0	0	0	0	0	0	17
Lowland Mixed Forest	0	0	0	0	5	0	0	0	86	0	0	0	0	0	92
Lowland Shrub	197	0	0	0	0	0	0	0	0	0	0	0	0	0	197
Lowland Spruce/Fir	0	0	8	0	0	0	0	0	41	0	0	0	0	0	49
Marsh	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Northern Hardwood	11	0	0	0	16	0	14	14	487	0	0	0	0	0	542
Tamarack	0	0	0	2	0	0	0	0	0	0	4	0	0	0	5
Upland Conifers	0	0	0	0	0	19	40	1	6	8	0	0	0	0	74
Upland Mixed Forest	0	0	0	0	0	39	21	0	215	0	0	0	0	0	274
Upland Spruce/Fir	0	0	0	3	0	55	9	0	82	0	0	0	0	0	150
<b>Total</b>	<b>684</b>	<b>171</b>	<b>474</b>	<b>19</b>	<b>36</b>	<b>122</b>	<b>91</b>	<b>75</b>	<b>1145</b>	<b>8</b>	<b>58</b>	<b>6</b>	<b>149</b>	<b>0</b>	<b>3038</b>



## Report 2 – Proposed Treatment Summaries

**Newberry Mgt. Unit**  
**Year of Entry 2015**

**Compartment 135**  
**Total Compartment Acres: 3,038**

### Acres by Treatment Type

Commercial Harvest - 835    Tree Planting - 0    Other - 0  
 Habitat Cut - 0    Opening Maintenance - 0

### Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
<b>Aspen Types</b>	135	0	0	0	0	0	135
<b>Lowland Coniferous Forest</b>	90	0	0	0	0	0	90
<b>Lowland Mixed Forest</b>	48	0	0	0	0	0	48
<b>Mixed Upland Conifers</b>	19	8	0	0	0	0	27
<b>Northern Hardwood</b>	0	338	0	0	0	0	338
<b>Other Upland Conifers</b>	68	0	0	0	0	0	68
<b>Upland Mixed Forest</b>	0	128	0	0	0	0	128
<b>Total</b>	<b>360</b>	<b>474</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>835</b>



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	42135002-Cut	19.2	429 - Mixed Upland Conifers	High Density Pole	56		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal

Prescription set up as part of sale #42-006-13-01 Wishful Thinking

Specs:

Other

Comments:

Next Steps: Follow-up treatment with a regeneration survey as per the work instructions. acceptable regeneration includes any mix of spruce, fir, cedar, tamarack, aspen, red maple or birch

Proposed

Start Date: 10/01/2012

5	42135005-Cut	4.4	42320 - Upland Spruce	High Density Pole	84		Harvest	Clearcut with Reserves	4319 - Mixed Upland Forest	Cmpt. Review Proposal
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Prescription Clearcut to regenerate, leave all cedar and hemlock for retention, Winter cut deer yard . No chipping of tops and limbs as per VMS cutting specification 2.2.10

Specs:

Other Leave all hemlock in the stand for the benefit of wintering deer and bear refuge trees. Cedar will be retained post-harvest for the benefit of wintering deer. Harvest will occur during winter so the tops of desirable browse species will benefit deer as a winter food source.

Comments:

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, basswood, balsam fir, white spruce, black spruce, hemlock, red pine, and white pine.

Proposed

Start Date: 10/01/2014

11	42135011-Cut	39.3	42320 - Upland Spruce	High Density Pole	82		Harvest	Clearcut with Reserves	4319 - Mixed Upland Forest	Cmpt. Review Proposal
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Prescription Clearcut to regenerate, leave all cedar and hemlock for retention, winter cut

Specs:

Other Leave all hemlock in the stand for the benefit of wintering deer and bear refuge trees. Cedar will be retained post-harvest for the benefit of wintering deer. Harvest will occur during winter so the tops of desirable browse species will benefit deer as a winter food source.

Comments:

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, basswood, balsam fir, white spruce, black spruce, hemlock, red pine, and white pine.

Proposed

Start Date: 10/01/2014

24	42135024-Cut	47.8	6130 - Fir, Aspen, Maple	High Density Pole	84		Harvest	Clearcut with Reserves	6112 - Lowland Aspen	Cmpt. Review Proposal
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Prescription Clearcut to regenerate leave some Black Cherry, Paper Birch, large White Spruce, large White Pine, and mature aspen for retention 1 tree for every 2 acres harvested and all Cedar and Hemlock No chipping of tops and limbs as per VMS cutting specification 2.2.10

Specs:

Other Stand will be harvested during winter to benefit wintering deer and no chipping of tops will be allowed. Leave species will include some cherry (soft mast source for bear), paper birch(soft snags for food resources and nesting/denning habitat), all cedar and hemlock (for wintering deer), large white spruce (for structural diversity and nesting and resting sites) and large white pine for bear refuge trees. Some large mature aspen will be retained for grouse.

Comments:

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, basswood, balsam fir, white spruce, black spruce, hemlock, red pine, and white pine.

Proposed

Start Date: 10/01/2014



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
30	42135030-Cut	37.4	4112 - Maple, Beech, Cherry Association	High Density Log	83	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal
<u>Prescription</u> mark to harvest, target ba of 80 sq ft leave any hemlock										
<u>Specs:</u>										
<u>Other</u> Leave all hemlock for the benefit of wintering deer and bear refuge trees and leave a diversity of other conifers that occur.										
<u>Comments:</u>										
<u>Next</u> Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, cedar, yellow and										
<u>Steps:</u> paper birch, basswood, balsam fir, white spruce, black spruce, hemlock, red pine, and white pine.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
43	42135043-Cut	7.0	4112 - Maple, Beech, Cherry Association	High Density Log	85	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal
<u>Prescription</u> mark to harvest stand in areas of hardwood, target 80 sq ft ba, leave all hemlock, multi treed cedar pockets, and cherry. cut spruce/fir ware										
<u>Specs:</u> needed for operatability. Deer yard winter cut No chipping of tops and limbs as per VMS cutting specification 2.2.10.										
<u>Other</u> Leave all hemlock and cedar pockets (3 or more cedar) for the benefit of wintering deer. Harvest stand during winter and retain all tops on site										
<u>Comments:</u> during the winter period for food sources for deer.										
<u>Next</u> Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, cedar, yellow and										
<u>Steps:</u> paper birch, basswood, balsam fir, white spruce, black spruce, hemlock, red pine, and white pine.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
50	42135050-Cut	89.7	6129 - Mixed Coniferous Lowland Forest	High Density Pole	85		Harvest	Clearcut with Reserves	612 - Lowland Coniferous Forest	Cmpt. Review Proposal
<u>Prescription</u> clear cut stand leaving all hemlock, cedar, and some white pine. also leave 1 aspen, birch, maple or limby spruce for every 2 acres harvested,										
<u>Specs:</u> Deer yard winter cut No chipping of tops and limbs as per VMS cutting specification 2.2.10.										
<u>Other</u> Leave all hemlock and cedar for the benefit of wintering deer. Harvest stand during winter and retain all tops on site during the winter period for										
<u>Comments:</u> food sources for deer. Retain some large white pine for bear refuge trees, and retain other species (aspen, birch, maple or limby spruce) at a minimum rate of 1 per 2 acres for soft snags and mid story nesting locations.										
<u>Next</u> Follow-up treatment with a regeneration survey as per the work instructions. acceptable regeneration includes any mix of spruce, fir, cedar,										
<u>Steps:</u> tamarack, aspen, red maple or birch										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
54	42135054-Cut	8.2	429 - Mixed Upland Conifers	High Density Pole	90	171-200	Harvest	Single Tree Selection	429 - Mixed Upland Conifers	Cmpt. Review Proposal
<u>Prescription</u> mark to cut white pine and red maple cut most of the aspen and white birch leaving some for diversity, leave all hemlock and cedar. Deer yard										
<u>Specs:</u> winter cut No chipping of tops and limbs as per VMS cutting specification 2.2.10.										
<u>Other</u>										
<u>Comments:</u>										
<u>Next</u> Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, cedar, yellow and										
<u>Steps:</u> paper birch, basswood, balsam fir, white spruce, black spruce, hemlock, red pine, and white pine.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
59	42135059-Cut	127.7	4319 - Mixed Upland Forest	High Density Log	85	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal
<u>Prescription</u> mark to harvest stand in areas of hardwood, target 80 sq ft ba, leave hemlock, multi treed cedar pockets, white pine, and cherry. cut spruce/fir										
<u>Specs:</u> ware needed for operatability. Deer yard winter cut No chipping of tops and limbs as per VMS cutting specification 2.2.10.										
<u>Other</u> Leave all hemlock and cedar pockets (3 or more cedar) for the benefit of wintering deer. Harvest stand during winter and retain all tops on site										
<u>Comments:</u> during the winter period for food sources for deer. Leave cherry as a soft mast source for bear, spruce/fir(unless needed for operability) for grouse and species diversity in the stand and white pine for bear refuge trees.										
<u>Next</u> Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, cedar, yellow and										
<u>Steps:</u> paper birch, basswood, balsam fir, white spruce, black spruce, hemlock, red pine, and white pine.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
63	42135063-Cut	6.8	42340 - Upland Spruce/Fir	High Density Pole	57		Harvest	Clearcut	310 - Herbaceous Openland	Cmpt. Review Proposal
<u>Prescription</u> Clearcut to remove trees from opening										
<u>Specs:</u>										
<u>Other</u>										
<u>Comments:</u>										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
70	42135070-Cut	3.8	42330 - Upland Fir	High Density Pole	68		Harvest	Clearcut with Reserves	42340 - Upland Spruce/Fir	Cmpt. Review Proposal
<u>Prescription</u> Clearcut to regenerate, leave a mix of species and size classes in redline trees for retention and any hemlock										
<u>Specs:</u>										
<u>Other</u>										
<u>Comments:</u>										
<u>Next</u> Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, beech, paper and										
<u>Steps:</u> yellow birch, basswood, white and black spruce, balsam fir, white pine, and ironwood.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
72	42135072-Cut	64.9	4137 - Aspen, Birch	High Density Pole	85		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Clearcut to regenerate, leave large (relative) diameter aspen throughout the red line and scattered through stand leave 1 conifer for every 2 ac										
<u>Specs:</u> harvested, leave all hemlock winter cut No chipping of tops and limbs as per VMS cutting specification 2.2.10										
<u>Other</u> Stand will be harvested after October 1st or during winter to allow deer to benefit from buds on trees and tops and will not be chipped.										
<u>Comments:</u>										
<u>Next</u> Follow-up treatment with a regeneration survey as per the work instructions. Acceptable regeneration is aspen, maple, cherry, beech, paper and										
<u>Steps:</u> yellow birch, basswood, white and black spruce, balsam fir, white pine, and ironwood.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2017										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
73	42135073-Cut	14.1	42340 - Upland Spruce/Fir	High Density Pole	53		Harvest	Clearcut with Reserves	42340 - Upland Spruce/Fir	Cmpt. Review Proposal

Prescription Clearcut to regenerate leave buffer along beaver dams to north and mark a mix of species and size classes in redline trees for retention, leave all  
Specs: hemlock

Other  
Comments:

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

Proposed  
Start Date: 10/01/2014

79	42135079-Cut	2.0	4112 - Maple, Beech, Cherry Association	High Density Pole	75	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal
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Prescription Set up as part of sale #42-048-12-01 with compartment to north  
Specs:

Other  
Comments:

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

Proposed  
Start Date: 10/01/2011

89	42135089-Cut	6.0	4110 - Sugar Maple Association	High Density Pole	70	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal
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Prescription mark to harvest to 80 sq ft BA, leave some spruce and white pine, leave all hemlock  
Specs:

Other  
Comments:

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

Proposed  
Start Date: 10/01/2014

97	42135097-Cut	272.3	4119 - Mixed Northern Hardwoods	High Density Log	85	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal
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Prescription mark to harvest to 80 sq ft BA, open up around marked aspen pockets to create larger canopy gaps, leave all conifer for species diversity, don't  
Specs: mark all birch and aspen favor leaving around edges, leave all hemlock

Other  
Comments:

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

Proposed  
Start Date: 10/01/2014



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
98	42135098-Cut	13.7	4110 - Sugar Maple Association	High Density Pole	69	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal

Prescription mark to harvest to 80 sqft ba target beech with scale, leave some spruce and white pine if it exists, leave all hemlock

Specs:

Other

Comments:

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

Proposed

Start Date: 10/01/2017

100	42135100-Cut	7.6	4130 - Aspen	Medium Density Log	69		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
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Prescription Clearcut to regenerate, leave large (relative) diameter aspen throughout the red line and scattered through stand leave 1 conifer for every 2 ac  
Specs: harvested (spruce and white pine if it exists) leave all hemlock,

Other

Comments:

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

Proposed

Start Date: 10/01/2017

101	42135101-Cut	25.3	4134 - Aspen, Spruce/Fir	High Density Log	80		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
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Prescription Clearcut to regenerate, leave large (relative) diameter aspen throughout the red line and scattered through stand leave 1 conifer for every 2 ac  
Specs: harvested (mature spruce), leave all hemlock

Other

Comments:

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

Proposed

Start Date: 10/01/2017

104	42135104-Cut	37.5	4139 - Aspen, Mixed Deciduous	High Density Log	79		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
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Prescription Clearcut to regenerate, leave large (relative) diameter aspen throughout the red line and scattered through stand leave 1 conifer for every 2 ac  
Specs: harvested (mature spruce), winter cut leave all hemlock No chipping of tops and limbs as per VMS cutting specification 2.2.10

Other

Comments: Leave all hemlock in the stand for the benefit of wintering deer and bear refuge trees. Scattered aspen will be left in the stand to benefit grouse as well as one scattered conifer every two acres. Mature aspen trees will also be left in the red line of the stand to benefit grouse. Stand will be harvested after October 1st or during winter and will not be chipped to allow deer to benefit from buds on trees.

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

Proposed

Start Date: 10/01/2014

**Total Treatment  
Acreage Proposed: 834.8**

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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	#Type!	#Type!							
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Prescription  
Specs:

Other  
Comment:

Next  
Steps:

Proposed  
Start Date: #Type!

Limiting Factor

<b>Total Treatment Acreage Proposed:</b>	<b>0.0</b>
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## Report 5 – Site Conditions

Newberry Mgt. Unit  
Ryan Mattila : Examiner

Compartment 135  
Year of Entry 2015

### Availability for Management

Total Acres	Acres Available	Acres Not Available		Dominant Site Conditions			
				No	5C	3L	3J
1230	1230		<b>Aspen</b>	1,230			
221	153	68	<b>Cedar</b>	153		68	
149	107	42	<b>Lowland Conifers</b>	107		42	
17	17		<b>Lowland Deciduous</b>	17			
92	67	24	<b>Lowland Mixed Forest</b>	67			24
49	49		<b>Lowland Spruce/Fir</b>	8	41		
542	542		<b>Northern Hardwood</b>	420	122		
5	2	4	<b>Tamarack</b>	2			4
74	74		<b>Upland Conifers</b>	74			
274	274		<b>Upland Mixed Forest</b>	274			
150	144	6	<b>Upland Spruce/Fir</b>	73	71		6
2,802	2,658	144	Total Forested Acres	2,424	233	110	34
	95%	5%	Relative Percent				

*\*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
002	Not Available	3L: Other wildlife concerns	24	5A: Not able to obtain desirable regeneration			
<b>Comments:</b>							
003	Not Available	3L: Other wildlife concerns	11	5A: Not able to obtain desirable regeneration			
<b>Comments:</b>							
004	Not Available	3L: Other wildlife concerns	8	5A: Not able to obtain desirable regeneration			
<b>Comments:</b>							

Report 5 – Site Conditions

Newberry Mgt. Unit  
 Ryan Mattila : Examiner

Compartment 135  
 Year of Entry 2015

005	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	41		
Comments:					
007	Not Available	3L: Other wildlife concerns	42		
Comments:					
008	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	27		
Comments:					
009	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	27		
Comments:					
010	Not Available	3L: Other wildlife concerns	26	2G: Too wet (sensitive soils, does not include access issues)	3J: Water quality / BMPs (stream, river, or lake)
Comments:					
011	Not Available	3J: Water quality / BMPs (stream, river, or lake)	25		
Comments:					

Report 5 – Site Conditions

Newberry Mgt. Unit  
Ryan Mattila : Examiner

Compartment 135  
Year of Entry 2015

012 Not Available 3J: Water quality / BMPs (stream, river, or lake) 4

Comments:

013 Available 5C: Delay treatment for age/size class diversity or exceptional site quality 39

Comments:

014 Available 5C: Delay treatment for age/size class diversity or exceptional site quality 100

Comments:

015 Not Available 3J: Water quality / BMPs (stream, river, or lake) 6

Comments:



**Report 6 – 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.

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SCA Name	SCA Category	Detail Type	Recommendation	Acres
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**Comments**

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## Report 7 – 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 Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
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	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.

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## Newberry Mgt. Unit

## Report 8 – Forested Stands

Compartment: 135  
Year of Entry: 2015

Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
6120 - Lowland Cedar	High Density Pole	5.6	111		
429 - Mixed Upland Conifers	High Density Pole	19.2	56		
42320 - Upland Spruce	High Density Pole	4.4	84		
6123 - Lowland Fir	Medium Density	7.2	40		
6120 - Lowland Cedar	Low Density Sapling	15.9	80		
42320 - Upland Spruce	High Density Pole	77.8	82		
6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	13.9	83		
4113 - R.Maple, Conifer	Medium Density	11.0	4		
6120 - Lowland Cedar	Medium Density	2.8	140		
4130 - Aspen	Medium Density	21.8	4		
42360 - Upland Cedar	High Density Pole	8.5	101		
6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	16.6	72		
6120 - Lowland Cedar	High Density Pole	21.5	100		
4130 - Aspen	High Density Sapling	15.0	28		
6120 - Lowland Cedar	Medium Density Pole	3.3	101		
4319 - Mixed Upland Forest	High Density Pole	14.2	60	81-110	
6130 - Fir, Aspen, Maple	High Density Pole	47.8	84		
6120 - Lowland Cedar	High Density Pole	1.9	100		

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## Newberry Mgt. Unit

## Report 8 – Forested Stands

Compartment: 135  
Year of Entry: 2015

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
26	6121 - Tamarack	High Density Pole	3.9	102		
28	429 - Mixed Upland Conifers	High Density Log	39.6	61		
30	4112 - Maple, Beech, Cherry Association	High Density Log	37.4	83	111-140	
32	42320 - Upland Spruce	Medium Density Pole	5.6	60		
33	6122 - Black Spruce	Medium Density	7.6	25		
34	6120 - Lowland Cedar	High Density Log	5.5	78		
35	429 - Mixed Upland Conifers	High Density Log	5.8	83	81-110	
36	6120 - Lowland Cedar	High Density Pole	8.0	100		
38	42320 - Upland Spruce	Medium Density Pole	26.8	57		
39	4319 - Mixed Upland Forest	High Density Pole	4.4	60		
40	6120 - Lowland Cedar	Medium Density Pole	25.7	153		
43	4112 - Maple, Beech, Cherry Association	High Density Log	7.0	85	111-140	
44	4113 - R.Maple, Conifer	Medium Density Pole	4.3	82	1-50	
45	4130 - Aspen	High Density Pole	83.3	26		
46	4136 - Aspen, Mixed Conifer	Medium Density	54.3	5		
47	4130 - Aspen	Medium Density	1.9	5		
48	6139 - Mixed Lowland Forest	Medium Density Pole	24.5	84		
50	6129 - Mixed Coniferous Lowland Forest	High Density Pole	89.7	85		

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## Newberry Mgt. Unit

## Report 8 – Forested Stands

Compartment: 135  
Year of Entry: 2015

Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
6121 - Tamarack	High Density Sapling	1.6	30		
4319 - Mixed Upland Forest	High Density Log	9.3	81		
429 - Mixed Upland Conifers	High Density Pole	8.2	90	171-200	
6120 - Lowland Cedar	Medium Density Pole	32.1	85		
4319 - Mixed Upland Forest	Medium Density Log	19.4	58	81-110	
4130 - Aspen	High Density Sapling	143.3	13		
4319 - Mixed Upland Forest	High Density Log	127.7	85	111-140	
42340 - Upland Spruce/Fir	High Density Pole	6.8	57		
4130 - Aspen	Medium Density Pole	2.5	57		
4130 - Aspen	Medium Density	93.9	4		
42320 - Upland Spruce	Medium Density Pole	1.7	57		
4130 - Aspen	High Density Sapling	0.8	13		
6120 - Lowland Cedar	High Density Pole	36.8	145		
42330 - Upland Fir	High Density Pole	3.8	68		
6128 - Lowland Coniferous, Mixed Deciduous	Low Density Sapling	4.3	30		
4137 - Aspen, Birch	High Density Pole	64.9	85		
42340 - Upland Spruce/Fir	High Density Pole	20.1	53		
4130 - Aspen	High Density Sapling	59.7	4		

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## Newberry Mgt. Unit

## Report 8 – Forested Stands

Compartment: 135  
Year of Entry: 2015

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
79	4112 - Maple, Beech, Cherry Association	High Density Pole	3.0	75	111-140	
81	4130 - Aspen	High Density Sapling	7.7	13		
82	4130 - Aspen	High Density Sapling	18.9	4		
83	6120 - Lowland Cedar	Medium Density Pole	11.1	100		
85	4139 - Aspen, Mixed Deciduous	High Density Sapling	236.0	20		
86	4319 - Mixed Upland Forest	High Density Pole	12.1	57		
88	6129 - Mixed Coniferous Lowland Forest	Low Density Sapling	5.7	59		
89	4110 - Sugar Maple Association	High Density Pole	6.0	70	111-140	
91	4130 - Aspen	High Density Sapling	27.5	4		
92	4319 - Mixed Upland Forest	High Density Log	7.4	50		
93	4130 - Aspen	High Density Pole	51.1	22		
96	42320 - Upland Spruce	High Density Pole	3.5	35		
97	4119 - Mixed Northern Hardwoods	High Density Log	272.3	85	111-140	
98	4110 - Sugar Maple Association	High Density Pole	13.7	69	111-140	
99	4130 - Aspen	High Density Sapling	115.0	4		
100	4130 - Aspen	Medium Density Log	7.6	69		
101	4134 - Aspen, Spruce/Fir	High Density Log	25.3	80		
102	4130 - Aspen	High Density Sapling	9.5	36		

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## Newberry Mgt. Unit

## Report 8 – Forested Stands

Compartment: 135  
Year of Entry: 2015

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
103	4130 - Aspen	High Density Sapling	21.3	4		
104	4139 - Aspen, Mixed Deciduous	High Density Log	37.5	79		
105	4139 - Aspen, Mixed Deciduous	High Density Pole	80.9	25		
107	4130 - Aspen	High Density Pole	7.0	47		
108	6129 - Mixed Coniferous Lowland Forest	High Density Pole	23.5	175		
109	4319 - Mixed Upland Forest	High Density Pole	77.4	85	81-110	
110	6139 - Mixed Lowland Forest	High Density Pole	5.5	41		
111	4112 - Maple, Beech, Cherry Association	High Density Log	100.4	85	111-140	
112	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	10.7	175		
113	4116 - Mixed N. Hardwood - Aspen	Low Density Pole	16.2	49	1-50	
115	4112 - Maple, Beech, Cherry Association	High Density Pole	5.1	70	81-110	
116	4136 - Aspen, Mixed Conifer	High Density Sapling	24.1	6		
117	6122 - Black Spruce	Medium Density Pole	41.0	85		
118	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	7.5	175		
119	4130 - Aspen	High Density Sapling	19.2	15		
120	4112 - Maple, Beech, Cherry Association	High Density Pole	65.5	85	51-80	
121	6120 - Lowland Cedar	Medium Density Pole	42.2	150		
123	4319 - Mixed Upland Forest	High Density Pole	2.3	60		

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Newberry Mgt. Unit

Report 8 – Forested Stands

Compartment: 135  
Year of Entry: 2015



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S t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
124	42380 - Non Pine Upland Conifer, Mixed Deciduous	Medium Density Pole	1.4	70		

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Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	622 - Lowland Shrub	11.2	Unspecified	Unspecified	
4	629 - Mixed non-forested wetland	6.7	Unspecified	Unspecified	
8	629 - Mixed non-forested wetland	6.8	Unspecified	Unspecified	
9	622 - Lowland Shrub	17.5	Unspecified	Unspecified	
10	622 - Lowland Shrub	22.8	Unspecified	Unspecified	
17	622 - Lowland Shrub	5.5	Unspecified	Unspecified	
20	629 - Mixed non-forested wetland	7.3	Unspecified	Unspecified	
27	629 - Mixed non-forested wetland	4.1	Unspecified	Unspecified	
29	622 - Lowland Shrub	1.3	Unspecified	Unspecified	
31	622 - Lowland Shrub	32.9	Unspecified	Unspecified	
37	629 - Mixed non-forested wetland	8.6	Unspecified	Unspecified	
41	629 - Mixed non-forested wetland	6.4	Unspecified	Unspecified	
42	622 - Lowland Shrub	5.1	Unspecified	Unspecified	
49	629 - Mixed non-forested wetland	5.7	Unspecified	Unspecified	
53	629 - Mixed non-forested wetland	2.4	Unspecified	Unspecified	
55	330 - Low-Density Trees	1.4	Unspecified	Unspecified	
60	330 - Low-Density Trees	5.0	Unspecified	Unspecified	
61	629 - Mixed non-forested wetland	4.3	Unspecified	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
62	622 - Lowland Shrub	4.2	Unspecified	Unspecified	
64	330 - Low-Density Trees	17.8	Unspecified	Unspecified	
74	623 - Emergent Wetland	2.5	Unspecified	Unspecified	
75	629 - Mixed non-forested wetland	6.9	Unspecified	Unspecified	
77	622 - Lowland Shrub	5.3	Unspecified	Unspecified	
78	622 - Lowland Shrub	4.0	Unspecified	Unspecified	
80	629 - Mixed non-forested wetland	10.7	Unspecified	Unspecified	
84	310 - Herbaceous Openland	1.2	Unspecified	Unspecified	
87	330 - Low-Density Trees	8.1	Unspecified	Unspecified	
90	629 - Mixed non-forested wetland	1.5	Unspecified	Unspecified	
94	310 - Herbaceous Openland	1.0	Unspecified	Unspecified	
95	629 - Mixed non-forested wetland	2.5	Unspecified	Unspecified	
106	330 - Low-Density Trees	1.4	Unspecified	Unspecified	
114	622 - Lowland Shrub	7.4	Unspecified	Unspecified	
122	629 - Mixed non-forested wetland	5.8	Unspecified	Unspecified	