



# Compartment Review Presentation

## Newberry Forest Management Unit

Compartment 136

Entry Year 2015

Acreage: 1,218

County Chippewa

Management Area: Tahquamenon Basin Wetlands

**Revision Date:** 09/04/2013

**Stand Examiner:** Scott Kentner

### Legal Description:

T46N R07W Section(s) 10,15,22,25,27,34,36

### Identified Planning Goals:

To maintain a healthy, sustainable forest ecosystem with special emphasis on wildlife habitat.

### Soil and topography:

Most of the compartment falls on very deep, nearly level, very poorly drained mucky and peaty soils of a Markey - Dawson association. The forest type on this association is lowland conifers, lowland brush, marshes and treed bogs. The northern portion of the compartment falls on a Pickford-Rudyard-Ontonagon association which is mostly level and somewhat poorly drained heavy loamy soils. The forest type on this association is poor quality hardwoods, aspen, mixed lowland conifers and white pine. A small portion of the compartment occurs on the Kalkaska - Rubicon association of well drained uplands. The forest type on this association is typically upland hardwoods.

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

The compartment is centered around the town of Hulbert. The land ownership in this compartment is fragmented. Private and state land is intermingled. Much of the state land has very limited access because private land must first be crossed. There are some roads on private land which lead to state land, but nearly every one of them is gated including an abandoned railroad grade that runs east / west across the compartment. There are very few roads on the state land due to the fact that most of it occurs on lowland areas. Land use in the compartment is mostly recreational. Land is used extensively for hunting. Snowmobiling is also a very popular activity in the area of the compartment with a designated trail running through it.

### Unique Natural Features:

The Hulbert Deer Yard and the East Branch of the Tahquamenon River.

### Archeological, Historical, and Cultural Features:

There are known concerns within the compartment. All proposed management activities have taken these concerns into consideration.

### Special Management Designations or Considerations:

Ownership patterns, accessibility, lowland soils, deer yard, land use and limited established survey corners should be factored in when making land management decisions within the compartment.

### Watershed and Fisheries Considerations:

Fisheries Values: Good to Excellent

Fisheries Concerns: In the northern section along the eastern edge the East Branch Tahquamenon River flows in an out of the compartment boundary. The East Branch Tahquamenon River is a Wild and Scenic River. Designation as a Wild and Scenic River regulates the management and control of development on the river through the federal government. There are no predetermined setbacks in place with this designation, but at a minimum, state BMP's should be followed accordingly. The East Branch Tahquamenon River is a warm transitional small river (in this reach) with a width of <50 feet. Because the stream width is less than 50 feet, a minimum 200 foot setback should be adhered to when cutting in Stand 3, which contains aspen. The prescribed treatment in Stand 3 is a thinning, resulting in some potential for aspen regeneration near the river. Known beaver activity in this area is high which could impact the river which supports walleye, black bass, yellow perch, northern pike, and muskie. The other sections of this compartment contain treatments that are not prescribed near any waterbodies.

### Wildlife Habitat Considerations:

This small compartment is situated in the Seney Sand Lake Plain ecological sub-subsection. It is also located in the Hulbert deer yard which supports high numbers of deer during difficult winter periods. More than half of the compartment is dominated by swamp conifers with the majority of the remaining area in lowland habitat types. A small amount of aspen

and upland hardwood stands exist. The current vegetative patterns are consistent with presettlement data. The compartment is highly fragmented by private parcels.

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 the management area include black bear, gray jay, snowshoe hare, and white-tailed deer.

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

Surface sediments consist of peat and muck, an end moraine of coarse-textured till and minor lacustrine (lake) silt and clay. There is insufficient data to determine the glacial drift thickness. The Ordovician Utica and Collingwood Shales and Trenton Formation subcrop below the glacial drift. The Trenton is quarried for stone. The nearest gravel pit is located in Section 35 and potential is considered good on this upland area. There is no economic oil and gas production in the UP.

### **Vehicle Access:**

The compartment is centered around the town of Hulbert. The main access to the compartment is the North Hulbert Road which leads north from M-28. There are a few two track roads branching from the North Hulbert Road (see compartment map) that lead to state land. Most of these roads cross private land and are gated.

### **Survey Needs:**

This compartment and the entire township for that matter, currently has little to offer in the way of registered survey corners. In the past, survey work has been done using old fence lines and blazed trees. The Chippewa County Remonumentation Survey has recently been doing some work in the area and there have been a few new corners established and registered. The documentation of which corners have been established in the area of this compartment should be obtained.

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

There are no developed recreational facilities within this compartment. Hunting, fishing and snowmobiling are activities that take place here.

### **Fire Protection:**

Potential for large fire runs would be low, because of swamp conifers and upland hardwood types in this compartment. Very few areas are accessible with wheeled heavy equipment. Modified suppression tactics may need to be considered in these areas. 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**

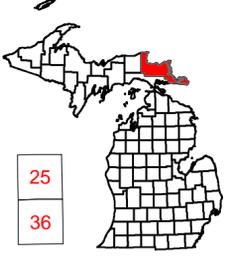
#### **The following information is displayed, where pertinent, on the attached compartment maps:**

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



# Stand Boundary Map

Compartment: 136  
 T46N R07W Sections 10, 15, 22, 25, 27, 34, 36  
 County: Chippewa  
 Unit: Newberry  
 YOY: 2015  
 Acres: 1,218 GIS Calculated  
 Examiner: Scott Kentner  
 Map Revised: 10/02/2013  
 Map Phase: Pre-Review



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**Stand #**  
 23  
**Stocking Density**  
 (4120) - A7  
 Level 3 OI  
 Level 4 Code  
**Cover Type Code**

### Legend

- ✚ Remonumented Section Corners
- ✚ Miris Corners
- ◆ PLSS Corner
- 🚙 Snowmobile Trails
- 🛣 Highway
- 🛣 Paved Roads
- == Gravel Roads
- - - Poor Dirt Roads
- ⚡ Powerline
- 🚙 Snowmobile Trail
- 🌊 Stream
- 🌊 Intermittent Stream
- 🟡 Stand Boundaries

### Forest Stands

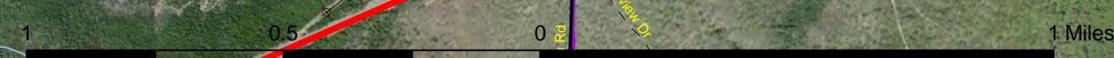
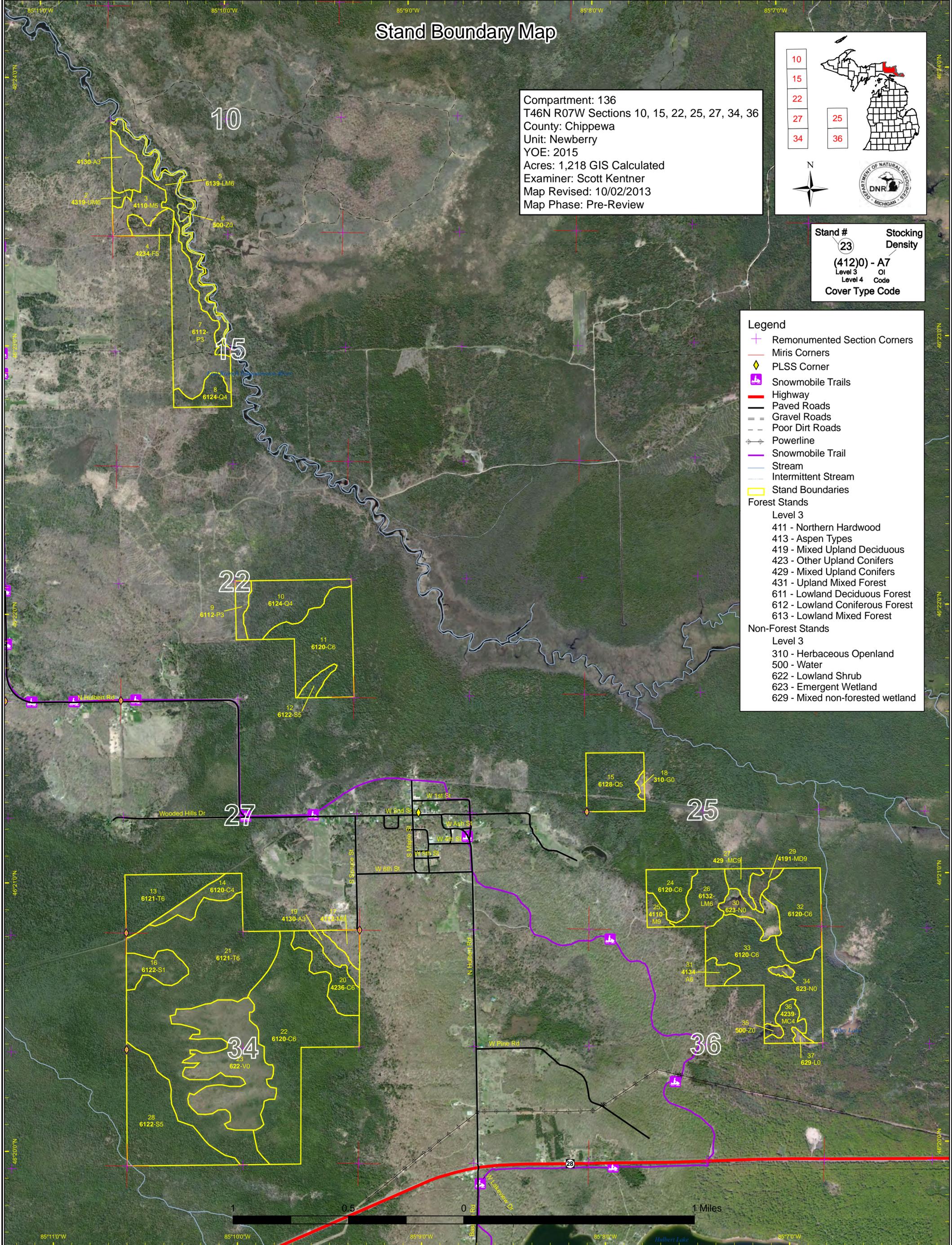
Level 3

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

### Non-Forest Stands

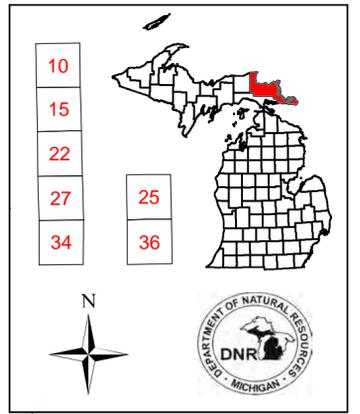
Level 3

- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland



# Special Conservation Areas & Site Conditions Map

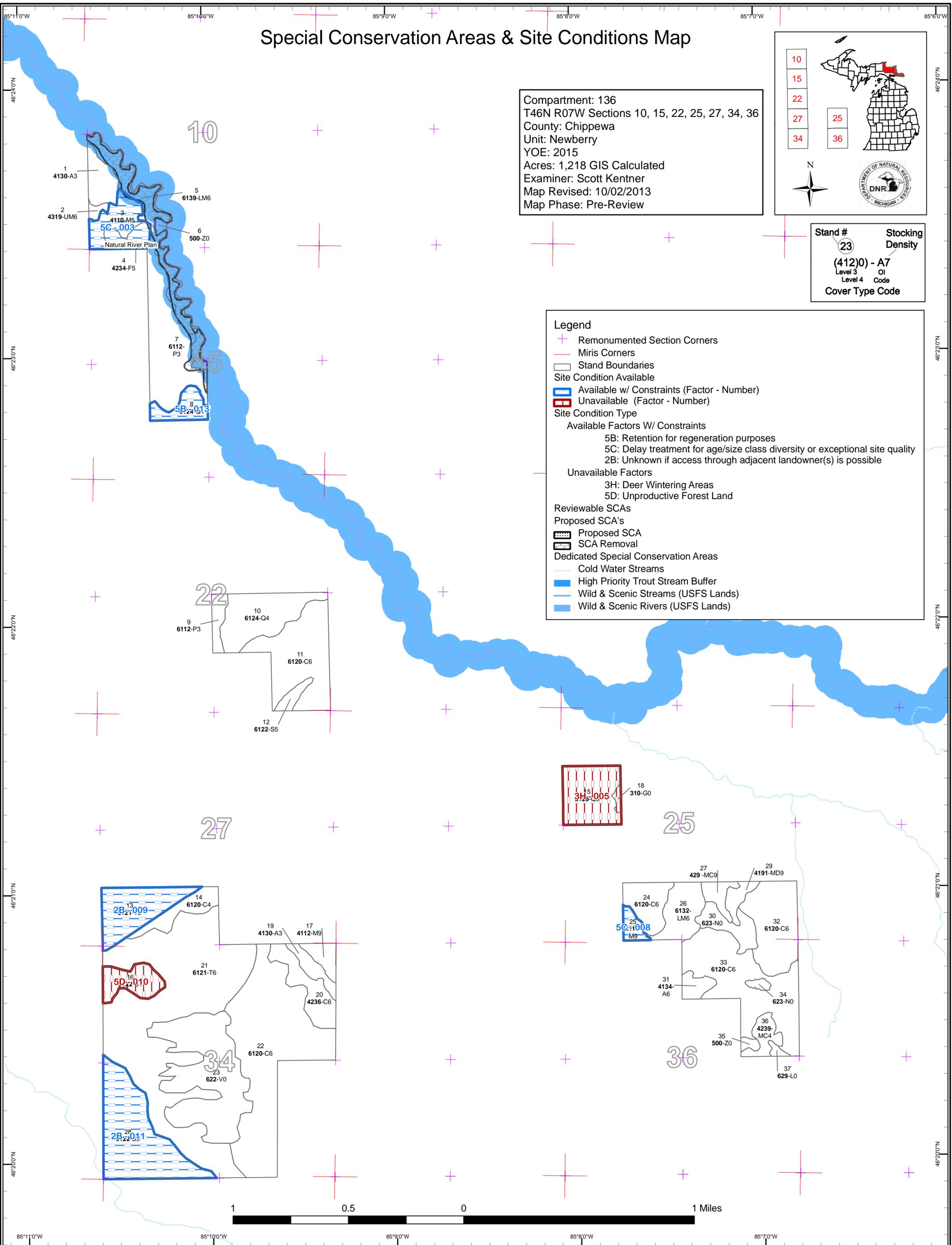
Compartment: 136  
 T46N R07W Sections 10, 15, 22, 25, 27, 34, 36  
 County: Chippewa  
 Unit: Newberry  
 YOE: 2015  
 Acres: 1,218 GIS Calculated  
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 Map Revised: 10/02/2013  
 Map Phase: Pre-Review



**Stand #**  
 23  
**Stocking Density**  
 (4120) - 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
    - 5B: Retention for regeneration purposes
    - 5C: Delay treatment for age/size class diversity or exceptional site quality
    - 2B: Unknown if access through adjacent landowner(s) is possible
  - Unavailable Factors
    - 3H: Deer Wintering Areas
    - 5D: Unproductive Forest Land
- Reviewable SCAs
- Proposed SCAs
  - Proposed SCA
  - SCA Removal
- Dedicated Special Conservation Areas
  - Cold Water Streams
  - High Priority Trout Stream Buffer
  - Wild & Scenic Streams (USFS Lands)
  - Wild & Scenic Rivers (USFS Lands)



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	0	25	8	0	0	0	0	0	0	0	0	0	0	0	33
Bog	94	0	0	0	0	0	0	0	0	0	0	0	0	0	94
Cedar	0	0	0	0	0	0	24	65	38	142	49	83	0	0	400
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lowland Aspen/Balsam Poplar	8	63	0	0	0	0	0	0	0	0	0	0	0	0	71
Lowland Conifers	0	0	0	0	39	0	0	43	14	0	0	0	0	0	96
Lowland Mixed Forest	0	0	0	0	0	0	0	35	0	24	0	0	0	0	59
Lowland Shrub	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lowland Spruce/Fir	0	0	0	0	0	0	0	6	96	0	0	0	0	0	102
Marsh	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Mixed Upland Deciduous	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
Northern Hardwood	0	0	0	0	0	9	20	7	0	0	0	0	0	0	36
Tamarack	0	0	0	0	0	214	0	0	39	0	0	0	0	0	253
Upland Conifers	0	0	0	0	0	11	0	0	0	8	0	0	0	0	19
Upland Mixed Forest	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
Upland Spruce/Fir	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10
Water	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
<b>Total</b>	<b>137</b>	<b>88</b>	<b>8</b>	<b>3</b>	<b>39</b>	<b>234</b>	<b>62</b>	<b>156</b>	<b>187</b>	<b>175</b>	<b>49</b>	<b>83</b>	<b>0</b>	<b>0</b>	<b>1218</b>



## Report 2 – Proposed Treatment Summaries

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

**Compartment 136**  
**Total Compartment Acres: 1,218**

### Acres by Treatment Type

Commercial Harvest - 46	Tree Planting - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 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>
<b>Lowland Coniferous Forest</b>	39	0	0	0	0	0	39
<b>Northern Hardwood</b>	0	0	0	0	7	0	7
<b>Total</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>46</b>



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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!

Prescription  
Specs:

Other  
Comments:

Next  
Steps:

Proposed  
Start Date: #Type!

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**Total Treatment  
Acreage Proposed: 0.0**

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
13 42136013-Cut	38.7	6121 - Tamarack	High Density Pole	85		Harvest	Clearcut with Reserves	6121 - Tamarack	Cmpt. Review Proposal

Prescription Clear-cut Tamarack and Black Spruce. Leave two retention pockets ranging 2 to 5 acres in size within stand as well as scattered trees of large Spruce. Winter Cut due to deer wintering complex, leave any small cedar clumps that might exist and all hemlock.

Other Comment:

Next Steps: Monitor the success of regeneration the next treatment period. Acceptable regeneration: Tamarack, Black Spruce, Cedar.

Proposed Start Date: 10/01/2014

Limiting Factor 2B: Unknown if access through adjacent landowner(s) is possible

25 42136025-Cut	6.9	4110 - Sugar Maple Association	High Density Log	75	171-200	Harvest	Crown Thinning	4110 - Sugar Maple Association	Cmpt. Review Proposal
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Prescription Thin stand to 80 BA, maintaining species diversity. Retain all conifer. Winter harvest, due to deer wintering complex.

Other Comment:

Next Steps:

Proposed Start Date: 10/01/2014

Limiting Factor 5C: Delay treatment for age/size class diversity or exceptional site quality

**Total Treatment  
Acreage Proposed: 45.6**

## Report 5 – Site Conditions

Newberry Mgt. Unit  
Scott Kentner : Examiner

Compartment 136  
Year of Entry 2015

### Availability for Management

Total Acres	Acres		Dominant Site Conditions	No	5D	5C	5B	3H	2B
	Available	Not Available							
33	33		<b>Aspen</b>	33					
400	400		<b>Cedar</b>	400					
71	71		<b>Lowland Aspen/Balsam Poplar</b>	71					
96	57	39	<b>Lowland Conifers</b>	43			14	39	
59	59		<b>Lowland Mixed Forest</b>	59					
102	82	20	<b>Lowland Spruce/Fir</b>	6	20				77
8	8		<b>Mixed Upland Deciduous</b>	8					
36	36		<b>Northern Hardwood</b>	9		27			
253	253		<b>Tamarack</b>	214					39
19	19		<b>Upland Conifers</b>	19					
3	3		<b>Upland Mixed Forest</b>	3					
10	10		<b>Upland Spruce/Fir</b>			10			
1,089	1,031	58	Total Forested Acres	865	20	37	14	39	116
	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 Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
003	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	30				
<b>Comments:</b>							
005	Not Available	3H: Deer Wintering Areas	40	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)			
<b>Comments:</b>							

Report 5 – Site Conditions

Newberry Mgt. Unit  
 Scott Kentner : Examiner

Compartment 136  
 Year of Entry 2015

008	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7
<b>Comments:</b> Hold stand until adjacent stands are ready to harvest.			
009	Available	2B: Unknown if access through adjacent landowner(s) is possible	39
<b>Comments:</b>			
010	Not Available	5D: Unproductive Forest Land	20
<b>Comments:</b> Treed Bog			
011	Available	2B: Unknown if access through adjacent landowner(s) is possible	77
<b>Comments:</b>			
013	Available	5B: Retention for regeneration purposes	14
<b>Comments:</b>			



**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.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Natural River Plan	Other SCA		SCA Removal	35.9
<b>Comments</b>				
Covered Under Natural Rivers Cover				



## 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	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
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.
SCA	Wild and Scenic Rivers	Wild and Scenic Rivers are established under authority of the National Wild and Scenic Rivers Act, Public Law 90-542, as amended. Each Wild and Scenic River has a river specific Federal management plan, and State agencies may enter into written cooperative agreements with the administering Federal agency for the management of Wild and Scenic Rivers that are upon State-owned lands. There are 18 miles of Federal designated Wild and Scenic Rivers that are located within the State Forest.

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## Newberry Mgt. Unit

## Report 8 – Forested Stands

Compartment: 136  
Year of Entry: 2015

Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4130 - Aspen	High Density Sapling	15.7	14		Very young Aspen, cut in 1999.
4319 - Mixed Upland Forest	High Density Pole	2.8	30		Aspen and Balsam fir mix.
4110 - Sugar Maple Association	Medium Density Pole	19.7	64	141-170	Pole size, low quality, sugar maple stand.
42340 - Upland Spruce/Fir	Medium Density Pole	10.1	64		Variable Balsam fir stand with pockets of other species intermixed.
6139 - Mixed Lowland Forest	High Density Pole	35.0	77		Riparian Zone that runs along side the Tahquamenon river and is well within the natural rivers buffer.
6112 - Lowland Aspen	High Density Sapling	62.7	12		Young aspen stand with some tag alder mixed in.
6124 - Lowland Spruce- Fir	Low Density Pole	13.9	80		Lowland, Dominate species is spruce within the overstory. Aspen is very prevalent within the subcanopy as well as Tag alder. Lots of Blowdown and windfall.
6112 - Lowland Aspen	High Density Sapling	8.2	9		Young aspen, dog-hair thick with some tag alder mixed in.
6124 - Lowland Spruce- Fir	Low Density Pole	43.4	74		Lowland some Paper birch scattered. Wet soil, with older Aspen in the canopy.
6120 - Lowland Cedar	High Density Pole	65.1	74		Cedar Swamp, wet soils.
6122 - Black Spruce	Medium Density Pole	5.5	74		Lots of blowdown/windthrow.
6121 - Tamarack	High Density Pole	38.7	85		Black spruce with tamarack both species evenly distributed.
6120 - Lowland Cedar	Low Density Pole	16.9	85		Open bog like with many trees spaced evenly apart.
6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	38.5	43		Lots of deer wintering. Tamarack stand with black spruce, lowland soils.
6122 - Black Spruce	Low Density Sapling	19.6	85		Treed bog, black spruce stand.
4112 - Maple, Beech, Cherry Association	High Density Log	9.1	53	81-110	Mixed sugar maple stand with lower Basal area. Selection harvest done in 1995.
4130 - Aspen	High Density Sapling	9.2	14		Young aspen stand, copice cut in 1999.

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## Newberry Mgt. Unit

## Report 8 – Forested Stands

Compartment: 136  
Year of Entry: 2015

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	42360 - Upland Cedar	High Density Pole	24.3	60		Upland cedar stand with large aspen. Heavy deer yarding.
21	6121 - Tamarack	High Density Pole	213.8	55		Mostly tamarack, but pockets of black spruce with cedar mixed in occasionally.
22	6120 - Lowland Cedar	High Density Pole	141.7	99		Deer yard, cedar swamp.
24	6120 - Lowland Cedar	High Density Pole	21.3	85		Cedar stand. Deer yarding not as heavy as adjacent stands.
25	4110 - Sugar Maple Association	High Density Log	6.9	75	171-200	Northern hardwood stand dominate species is sugar maple.
26	6132 - Mixed Lowland Forest with Cedar	High Density Pole	24.4	93		Cedar stand with a yellow birch component.
27	429 - Mixed Upland Conifers	High Density Log	8.5	95		Very mature white pine, aspen. Spruce in the understory.
28	6122 - Black Spruce	Medium Density Pole	76.8	82		Black spruce with some tamerack and cedar.
29	4191 - Mixed Upland Deciduous with Conifer	High Density Log	7.6	62	51-80	Llarge super canopy yellow birch, white pine and aspen. Spruce and cedar are common under the massive trees. Sugar maple dominate in pockets.
31	4134 - Aspen, Spruce/Fir	High Density Pole	7.8	24		Younger aspen stand with spruce mixed in. Typical spruce aspen stand .
32	6120 - Lowland Cedar	High Density Pole	48.6	103		Cedar swamp with deer yarding under cedar trees.
33	6120 - Lowland Cedar	High Density Pole	82.6	110		Ceder stand, definition of a deer yard.
36	42390 - Mixed Non- Pine Upland Conifers	Low Density Pole	10.9	52		Mix of upland cedar with hemlock and paper birch.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
6	50 - Water	9.8	No	Low	Go fish in it!
18	3102 - Grass	1.8	No	Unspecified	
23	6225 - Bog	94.3	No	Unspecified	
30	6239 - Mixed Emergent Wetland	16.2	No	Unspecified	
34	6239 - Mixed Emergent Wetland	2.5	No	Unspecified	
35	50 - Water	2.5	No	Unspecified	
37	629 - Mixed non-forested wetland	2.0	No	Unspecified	