



# Compartment Review Presentation

Cadillac Forest Management Unit

Compartment 125

Entry Year 2015

Acreage: 2,074

County Missaukee

Management Area: Manistee River Valley

**Revision Date:** 07/01/2013

**Stand Examiner:** Steve Eisele

**Legal Description:**

T24, R8W, Sections 1,2,12,13,14

**Identified Planning Goals:**

Maintain a variety of cover types and age classes. Protect cold water habitats along Ham Creek and Boiling Springs.

**Soil and topography:**

Ribicon and Crowell Sands. Some areas of Mucky sands and Mucky peat. Some steep areas in section 1. Wet areas in Section 13.

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

Mixed blocks of private and state. The private land is mostly timbered with some agriculture land involving Christmas tree plantations. Scattered dwellings some seasonal some year round. Hunting, snowmobiling and orv use throughout the compartment.

**Unique Natural Features:**

Boiling Springs. Common loon and bald eagle to the west. Red-shouldered hawk to the east. Potential for secretive locust, great blue heron rookery and osprey. Potential for dusted skipper, grizzled skipper, and red-legged spittlebug in grassy openings. Potential for dry prairie plants in grassy openings. Hill's thistle, rough fescue.

**Archeological, Historical, and Cultural Features:**

No Archeological, Historical, or Cultural Features known.

**Special Management Designations or Considerations:**

Maintain water quality of Ham creek and Boiling springs. Monitor Miss-Kal snowmobile trail and North Missaukee ORV trail. Wood turtle to the west.

**Watershed and Fisheries Considerations:**

Ham creek flows through this compartment, it is a designated trout stream with naturally reproducing populations of brown and brook trout. Coho salmon were documented as successfully reproducing in ham creek in the late 1960's. Salmon were also trapped and transported around Tippy and Hodenpyl Dams. Ham creek has a history of being degraded by beavers. Timber management in the riparian zone within 300 feet of the creeks in this compartment should be restricted to tree species other than aspen. (M. Tonello, 8/27/2013).

**Wildlife Habitat Considerations:**

This compartment is in the Highplains Ecosystem, one third in the Cadillac Subsection, LTA 1111, two-thirds in the Grayling Outwash Plain Subsection, of which 1/3 is in LTA 5149 and the other 1/3 in LTA 5211. In LTA 1111, soils, while variable, are usually sandy, excessively drained, low to moderate in fertility. Historically, forests were northern hardwood, white pine/beechn/red maple, and beech/hemlock. In LTA 5211, soils are characterized by deep, excessively drained, acidic sands. Historic vegetation covered the entire spectrum of conifer dominated forests. In LTA 5149, soils are predominately poorly drained peats and mucks. Historic vegetation was primarily conifer dominated wetlands. Management goals are to maintain the current timber types with a slight increase in the aspen and oak types and a slight decrease in red and white pine in order to maintain the mixed upland and lowland hardwoods and conifer that currently exists. Featured species of special interest include bear, deer, woodcock, ruffed grouse, and pileated woodpecker. (E. Victory, 8/21/13)

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

Surface sediments consist of glacial outwash sand and gravel and post glacial alluvium and an end morain of coarse textured till. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift is the Missisipian Michigan Formation. The Michigan is quarried for gypsum in other areas of the State. A gravel pit is located just to the east and gravel potential is considered good, especially on the uplands. This area lies 5 miles west of Cannon Creek Field which produced 870,00 Mcf gas from the Devonian Traverse Formation. The entire compartment is leased for oil and gas

development. (T. Hoane, 3/6/2013).

#### **Vehicle Access:**

A forest road access plan is detailed on the compartment map. Identified are state and county roads as well as forest roads and trails under the jurisdiction of the DNR. Also indicated are forest roads and trails under the jurisdiction of the DNR that are proposed for closure. These roads were determined to be in excess of the access needs in the area, are a threat to the resources, or are a concern environmentally.

#### **Survey Needs:**

None.

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

A variety of motorsport trails are located within this compartment. The North Missaukee Route, North Missaukee ORV Trail, Michigan Cross-Country Cycle Trail, and Snowmobile trail #6 are located within sections 1,2, &12 of this compartment. Proposed timber management activities should include trail protection specifications to reduce user impacts, as well as serve as an example of how silviculturally sound timber management practices can co-exist, and often improve recreation and wildlife experiences for future generations. A non-winter harvest along the snowmobile trail, coupled with avoiding the use of the trail as a haul route are suggested considerations. Ham Creek offers fishing opportunities, and there are many opportunities for hunting within this compartment. (T.M.N. 7/10/13)

#### **Fire Protection:**

The road system is adequate for access to most of the compartment. The recreation trail system allows for displaced camping opportunities which would allow a wildfire start to go undetected, until the fire was of larger size. During dry periods the fuels would have the potential for large fire growth. There are several private parcel ownerships that would be of a concern during a wildfire. (B. Tower, 2013).

#### **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: 125  
 T24N R07W  
 06 07 18  
 T24N R08W  
 01 02 12 13 14  
 T25N R07W  
 31  
 T25N R08W  
 35 36  
 County: Missaukee  
 Unit: Cadillac  
 YOE: 2015  
 Acres: 2,074 GIS Calculated  
 Examiner: Steve Eisele  
 Map Revised: 10/04/2013  
 Map Phase: Pre-Review

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



**Legend**

- Miris Corners
- + Remonumented Section Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- MCCCT Trails
- ORV Trails
- ORV Routes
- Snowmobile Trails
- MCCCT Trail
- Snowmobile Trail
- Motorcycle (DNR Sticker)
- ORV Trail
- Stream
- Intermittent Stream
- Stand Boundaries

**Forest Stands**

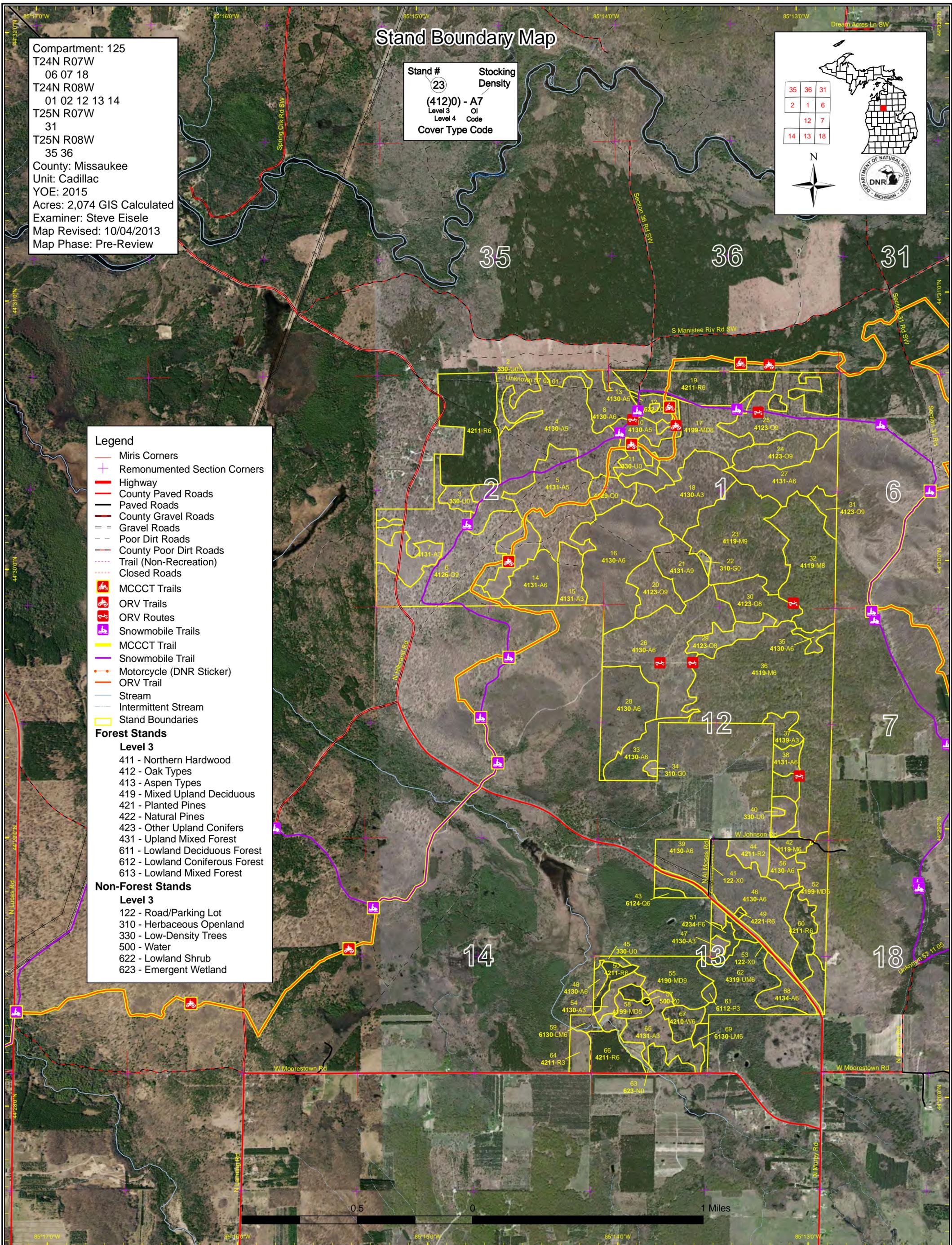
**Level 3**

- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

**Non-Forest Stands**

**Level 3**

- 122 - Road/Parking Lot
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland

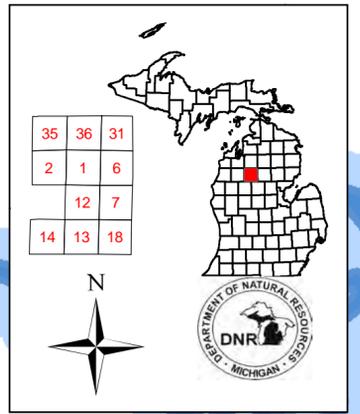


0.5 0 1 Miles

# Special Conservation Areas & Site Conditions Map

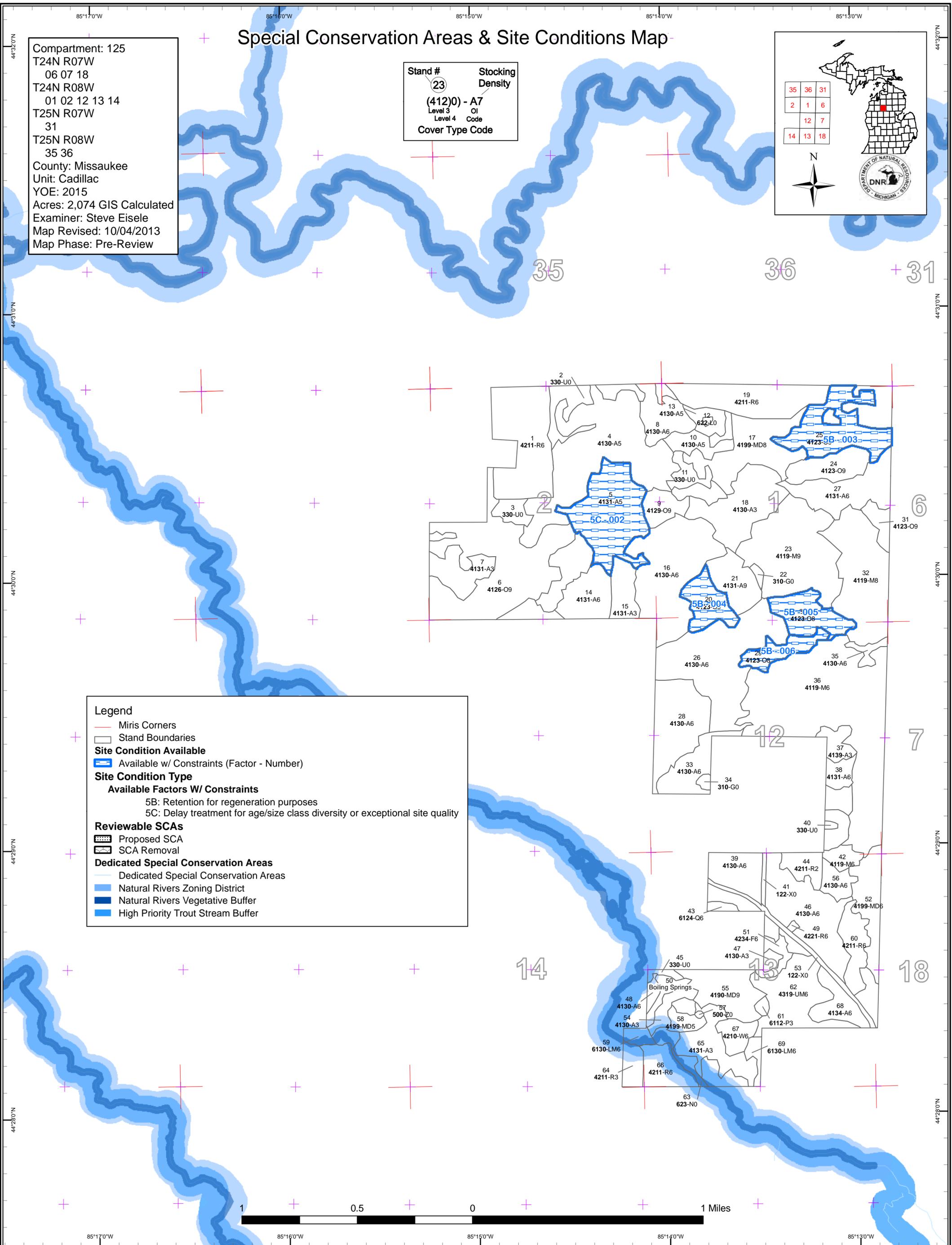
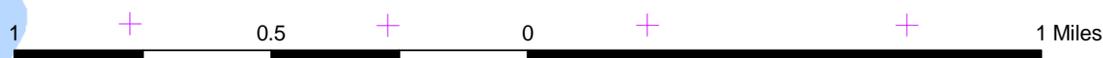
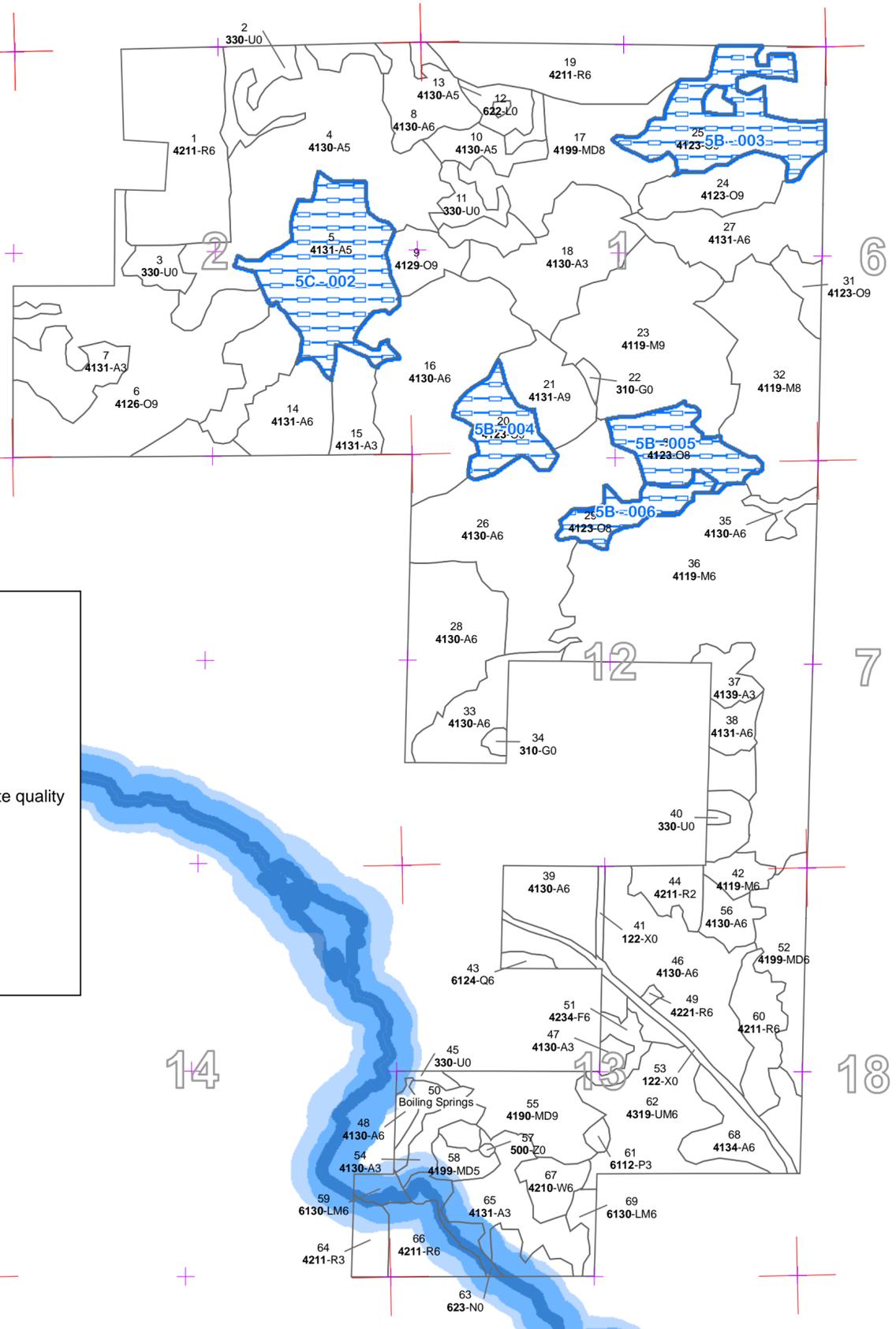
Compartment: 125  
 T24N R07W  
 06 07 18  
 T24N R08W  
 01 02 12 13 14  
 T25N R07W  
 31  
 T25N R08W  
 35 36  
 County: Missaukee  
 Unit: Cadillac  
 YOY: 2015  
 Acres: 2,074 GIS Calculated  
 Examiner: Steve Eisele  
 Map Revised: 10/04/2013  
 Map Phase: Pre-Review

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



**Legend**

- Miris Corners
- Stand Boundaries
- Site Condition Available**
- ▨ Available w/ Constraints (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
- Reviewable SCAs**
- ▨ Proposed SCA
- ▨ SCA Removal
- Dedicated Special Conservation Areas**
- Dedicated Special Conservation Areas
- Natural Rivers Zoning District
- Natural Rivers Vegetative Buffer
- High Priority Trout Stream Buffer



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	95	178	235	0	59	322	25	0	0	0	0	0	0	0	915
Herbaceous Openland	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Low-Density Trees	51	0	0	0	0	0	0	0	0	0	0	0	0	0	51
Lowland Aspen/Balsam Poplar	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Lowland Conifers	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
Lowland Mixed Forest	0	0	0	0	5	0	5	0	0	0	0	0	0	0	11
Lowland Shrub	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Marsh	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Mixed Upland Deciduous	0	0	0	0	0	0	7	0	81	0	0	0	0	34	123
Northern Hardwood	0	0	0	0	0	16	72	180	87	0	0	0	0	0	356
Oak	0	0	0	0	0	0	0	9	168	0	0	0	0	112	289
Red Pine	23	0	0	0	0	196	0	0	0	0	0	0	0	0	219
Upland Mixed Forest	0	0	0	0	48	0	0	0	0	0	0	0	0	0	48
Upland Spruce/Fir	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
Urban	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Water	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
White Pine	0	0	0	0	0	21	0	0	0	0	0	0	0	0	21
<b>Total</b>	<b>197</b>	<b>180</b>	<b>235</b>	<b>0</b>	<b>113</b>	<b>555</b>	<b>118</b>	<b>189</b>	<b>340</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>146</b>	<b>2074</b>



## Report 2 – Proposed Treatment Summaries

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

**Compartment 125**  
**Total Compartment Acres: 2,074**

### Acres by Treatment Type

Commercial Harvest - 595    Tree Planting - 25    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>Aspen Types</b>	290	0	0	0	0	0	290
<b>Mixed Upland Deciduous</b>	71	0	0	0	0	0	71
<b>Northern Hardwood</b>	87	0	0	0	0	0	87
<b>Oak Types</b>	48	0	0	0	0	0	48
<b>Other Upland Conifers</b>	8	0	0	0	0	0	8
<b>Planted Pines</b>	0	0	0	0	91	0	91
<b>Total</b>	<b>504</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>91</b>	<b>0</b>	<b>595</b>



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	63125001-Cut	70.0	42110 - Planted Red Pine	High Density Pole	50	171-200	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal

Prescription Third row thin  
Specs:

Other  
Comments:

Next  
Steps:

Proposed  
Start Date: 10/01/2014

4	63125004-Cut	116.9	4130 - Aspen	Medium Density Pole	50		Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
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Prescription Harvest areas of larger diameters. Leave oak and cherry. Leave "islands or patches" Buffer snow trail. Add grouse spec  
Specs:

Other Alot of open areas within stand.  
Comments:

Next  
Steps:

Proposed  
Start Date: 10/01/2014

9	63125009-Cut	23.0	4129 - Mixed Oak	High Density Log	80	81-110	Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
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Prescription Mark green to leave healthy red oak. Final harvest the rest. Buffer ORV trail.  
Specs:

Other Small acreage.  
Comments:

Next  
Steps:

Proposed  
Start Date: 10/01/2014

13	63125013-Cut	9.6	4130 - Aspen	Medium Density Pole	45		Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
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Prescription Buffer wet area in middle. Clearcut the rest. Add grouse spec  
Specs:

Other Low quality needs to be restarted.  
Comments:

Next  
Steps:

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
21	63125021-Cut	25.4	4131 - Aspen, Oak	High Density Log	60		Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Mark healthy oak green to leave. Approx 30 basal area. Leave surgar maple. Clear cut the rest. Add grouse spec.										
<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										
23	63125023-Cut	87.5	4119 - Mixed Northern Hardwoods	High Density Log	85	81-110	Harvest	Clearcut with Reserves	4119 - Mixed Northern Hardwoods	Cmpt. Review Proposal
<u>Prescription</u> Remove all oak beech and ash. Pockets of mortality, boundary will vary. Mark some islands and snags to leave.										
<u>Specs:</u>										
<u>Other</u>										
<u>Comments:</u> Filling in with maple from previous cut. Ash and beech dieing from pest. Oak mortality from a "variety" of reasons.										
<u>Next</u>										
<u>Steps:</u> Cut before year of entry one year sale with no extension										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
24	63125024-Cut	24.8	4123 - Red Oak	High Density Log	80	51-80	Harvest	Clearcut	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Clearcut and plant to red pine. Mark some islands to leave										
<u>Specs:</u>										
<u>Other</u>										
<u>Comments:</u> Oak dieing from factors of defoliation and stress. Cut before year of entry and plant. One year sale with no extension										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2014										
33	63125033-Cut	24.3	4130 - Aspen	High Density Pole	53		Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Clearcut with reserves. Leave some islands for retention. Winter cut Add grouse spec to sale										
<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										
39	63125039-Cut	31.8	4130 - Aspen	High Density Pole	50		Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Clearcut with reserves. Leave some islands or edge areas. Add grouse spec to sale										
<u>Specs:</u>										
<u>Other</u>										
<u>Comments:</u> Power line.										
<u>Next</u>										
<u>Steps:</u>										
<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
46	63125046-Cut	60.1	4130 - Aspen	High Density Pole	53		Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Clear cut with reserves. Leave islands and oak. Add grouse spec.										
<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										
48	63125048-Cut	3.7	4130 - Aspen	High Density Pole	53		Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Clear cut with reserves. Leave oak and wet areas. Buffer Boiling springs. Add herps. spec to sale										
<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										
51	63125051-Cut	7.6	42340 - Upland Spruce/Fir	High Density Pole	60	111-140	Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<u>Prescription</u> This is a wet area but not lowland. Clearcut with reserves. leave cedar. Add herp spec to sale										
<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										
52	63125052-Cut	29.2	4199 - Other Mixed Upland Deciduous	High Density Pole	85	81-110	Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Clear cut with reserves mark some oak and sugar maple green to leave. Add grouse spec buffer trail										
<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										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
55	63125055-Cut	34.0	4190 - Mixed Upland Deciduous with Cedar	High Density Log	68	81-110	Harvest	Clearcut with Reserves	4190 - Mixed Upland Deciduous with Cedar	Cmpt. Review Proposal

Prescription Clearcut ares of maple and aspen north of Ham creek. Leave cedar. Buffer creek, add herp spec to sale  
Specs:

Other Very wet!  
Comments:

Next  
Steps:

Proposed  
Start Date: 10/01/2014

58	63125058-Cut	7.4	4199 - Other Mixed Upland Deciduous	Medium Density Pole	60		Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
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Prescription Clear cut with reserves. Leave Oak. Some areas with standing water.add herp spec  
Specs:

Other  
Comments:

Next  
Steps:

Proposed  
Start Date: 10/01/2014

60	63125060-Cut	21.2	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	52	141-170	Harvest	Low Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
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Prescription Has been third row thinned. Do a second thin remove defect down to approx 120 BA  
Specs:

Other  
Comments:

Next  
Steps:

Proposed  
Start Date: 10/01/2014

68	63125068-Cut	18.5	4134 - Aspen, Spruce/Fir	High Density Pole	55		Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
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Prescription Clear cut with reserves leave oak and wet areas. Add grouse and herps spec  
Specs:

Other  
Comments:

Next  
Steps:

Proposed  
Start Date: 10/01/2014

**Total Treatment  
Acreage Proposed: 595.0**



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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  
Comment:

Next  
Steps:

Proposed  
Start Date: #Type!

Limiting Factor

**Total Treatment**  
**Acreage Proposed: 0.0**

## Report 5 – Site Conditions

Cadillac Mgt. Unit  
Steve Eisele : Examiner

Compartment 125  
Year of Entry 2015

### Availability for Management

Total Acres	Acres		Dominant Site Conditions	No	5C	5B
	Available	Not Available				
915	915		Aspen	848	67	
2	2		Lowland Aspen/Balsam Poplar	2		
3	3		Lowland Conifers	3		
11	11		Lowland Mixed Forest	11		
123	123		Mixed Upland Deciduous	123		
356	356		Northern Hardwood	356		
289	289		Oak	169		120
219	219		Red Pine	219		
48	48		Upland Mixed Forest	48		
8	8		Upland Spruce/Fir	8		
21	21		White Pine	21		
1,995	1,995		Total Forested Acres	1,808	67	120
	100%		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
002	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	67				
<b>Comments:</b>							
003	Available	5B: Retention for regeneration purposes	51				
<b>Comments:</b>							
004	Available	5B: Retention for regeneration purposes	23				
<b>Comments:</b>							

**Report 5 – Site Conditions**

**Cadillac Mgt. Unit**  
**Steve Eisele : Examiner**

**Compartment 125**  
**Year of Entry 2015**

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005	Available	5B: Retention for regeneration purposes	29
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**Comments:**

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006	Available	5B: Retention for regeneration purposes	17
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**Comments:**

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**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
<b>Boiling Springs</b>	Spring-Seeps, Riparian Areas	Spring Seep	<b>SCA</b>	
<b>Comments</b>				
Spring with concrete foundation				



**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 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	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.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.

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## Cadillac Mgt. Unit

## Report 8 – Forested Stands

Compartment: 125  
Year of Entry: 2015

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42110 - Planted Red Pine	High Density Pole	70.0	50	171-200	
4	4130 - Aspen	Medium Density Pole	116.9	50		open scattered diameters vary snow trail
5	4131 - Aspen, Oak	Medium Density Pole	66.9	50		New stand added. scattered aspen clumpy red maple low quality
6	4126 - White, Black, N. Pin Oak	High Density Log	112.3	Uneven Age	51-80	low quality treat next year of entry nearby stand has been cut
7	4131 - Aspen, Oak	High Density Sapling	47.2	8		recently treated
8	4130 - Aspen	High Density Pole	23.9	25		
9	4129 - Mixed Oak	High Density Log	23.0	80	81-110	New stand added. small acreage not previously treated could expand into stand 7 in spots
10	4130 - Aspen	Medium Density Pole	13.0	20		has been treated look up cut records
13	4130 - Aspen	Medium Density Pole	9.6	45		low quality low basal area falling apart
14	4131 - Aspen, Oak	High Density Pole	26.7	23		recently treated look up cut records
15	4131 - Aspen, Oak	High Density Sapling	17.5	16		New stand added. recently treated look up cut records
16	4130 - Aspen	High Density Pole	92.5	23		look up cut records
17	4199 - Other Mixed Upland Deciduous	Medium Density Log	52.1	85	51-80	open scattered
18	4130 - Aspen	High Density Sapling	51.0	16		recently treated look up cut records
19	42110 - Planted Red Pine	High Density Pole	69.1	52	81-110	treated last year of entry
20	4123 - Red Oak	High Density Log	23.1	80	81-110	still healthy
21	4131 - Aspen, Oak	High Density Log	25.4	60		New stand added.
23	4119 - Mixed Northern Hardwoods	High Density Log	87.5	85	81-110	pockets of dead oak boundary will vary depending on how far it has spread

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## Cadillac Mgt. Unit

## Report 8 – Forested Stands

Compartment: 125  
Year of Entry: 2015

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
24	4123 - Red Oak	High Density Log	24.8	80	51-80	dead and dying oak
25	4123 - Red Oak	High Density Log	50.9	80	51-80	this oak still healthy leave
26	4130 - Aspen	High Density Pole	94.2	15		
27	4131 - Aspen, Oak	High Density Pole	40.5	25		look up cut records
28	4130 - Aspen	High Density Pole	49.7	40		hold till next year of entry
29	4123 - Red Oak	Medium Density Log	17.4	85	1-50	Stand swapped from Non-Forested to Forested.
30	4123 - Red Oak	Medium Density Log	28.6	85	51-80	treated last year of entry
31	4123 - Red Oak	High Density Log	8.9	75	81-110	ridge top hard access oak still healthy
32	4119 - Mixed Northern Hardwoods	Medium Density Log	72.5	60	51-80	
33	4130 - Aspen	High Density Pole	24.3	53		
35	4130 - Aspen	High Density Pole	5.2	16		
36	4119 - Mixed Northern Hardwoods	High Density Pole	180.3	75	51-80	treated last year of entry
37	4139 - Aspen, Mixed Deciduous	High Density Sapling	10.3	16		clearcut within hardwood stand from previous cut
38	4131 - Aspen, Oak	High Density Pole	18.1	25		treated in 90s look up cut records
39	4130 - Aspen	High Density Pole	31.8	50		low quality
42	4119 - Mixed Northern Hardwoods	High Density Pole	15.8	50	81-110	small hardwood stand not treated last time small diameters leave until next year of entry
43	6124 - Lowland Spruce- Fir	High Density Pole	3.1	80		wet areas
44	42110 - Planted Red Pine	Medium Density	12.8	5		old jp stand that was clearcut and planted to red pine



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
46	4130 - Aspen	High Density Pole	60.1	53		
47	4130 - Aspen	High Density Sapling	6.6	6		Stand swapped from Non-Forested to Forested. treated last year of entry
48	4130 - Aspen	High Density Pole	3.7	53		buffer boiling spring
49	42210 - Natural Red Pine	High Density Pole	4.4	55	81-110	treated last year of entry
50	42110 - Planted Red Pine	High Density Pole	11.0	58	111-140	
51	42340 - Upland Spruce/Fir	High Density Pole	7.6	60	111-140	wet areas
52	4199 - Other Mixed Upland Deciduous	High Density Pole	29.2	85	81-110	
54	4130 - Aspen	High Density Sapling	9.1	7		Stand swapped from Non-Forested to Forested. treated last year of entry
55	4190 - Mixed Upland Deciduous with Cedar	High Density Log	34.0	Uneven Age	81-110	find aspen maple areas north of creek majority of stand is wet
56	4130 - Aspen	High Density Pole	20.2	27		
58	4199 - Other Mixed Upland Deciduous	Medium Density Pole	7.4	60		some holes with standing water
59	6130 - Fir, Aspen, Maple	High Density Pole	5.4	45		creek corridor
60	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	21.2	52	141-170	
61	6112 - Lowland Aspen	High Density Sapling	2.3	15		Stand swapped from Non-Forested to Forested. old habit cut
62	4319 - Mixed Upland Forest	High Density Pole	48.3	45		wet areas small diameter aspen deer yard
64	42110 - Planted Red Pine	High Density Sapling	10.4	6		Stand swapped from Non-Forested to Forested.
65	4131 - Aspen, Oak	High Density Sapling	31.7	6		Stand swapped from Non-Forested to Forested. treated last year of entry look up cut records wet areas
66	42110 - Planted Red Pine	High Density Pole	20.4	58	111-140	final harvest next year of entry

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Cadillac Mgt. Unit

Report 8 – Forested Stands

Compartment: 125  
Year of Entry: 2015



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
67	42100 - Planted White Pine	High Density Pole	21.1	52	51-80	treated last year of entry
68	4134 - Aspen, Spruce/Fir	High Density Pole	18.5	55		final harvest with reserves leave oak and along wet areas winter cut
69	6130 - Fir, Aspen, Maple	High Density Pole	5.3	68		uncut portion from last year of entry wet no access



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	3301 - Low Density Deciduous Tree	24.2	No	Mixed Upland Deciduous	
3	3303 - Mixed Low Density Trees	8.9	No	Unspecified	
11	3301 - Low Density Deciduous Tree	13.6	Unspecified	Unspecified	
12	6220 - Alder/willow	0.8	No	Unspecified	
22	3105 - Mixed Upland Herbaceous	2.0	No	Unspecified	
34	3102 - Grass	2.1	No	Unspecified	
40	3303 - Mixed Low Density Trees	1.1	No	Unspecified	
41	122 - Road/Parking Lot	2.5	Yes	Unspecified	al mores rd gravel
45	3301 - Low Density Deciduous Tree	2.9	No	Unspecified	creek on edge
53	122 - Road/Parking Lot	11.1	Yes	Unspecified	morey rd pavement
57	50 - Water	0.6	Unspecified	Unspecified	
63	6239 - Mixed Emergent Wetland	9.0	No	Lowland Conifers	New stand added.