



Compartment Review Presentation

Cadillac Forest Management Unit

Compartment 121

Entry Year 2016

Acreage: 1,823

County Missaukee

Management Area: Manistee River Valley

Revision Date: 03/19/2014

Stand Examiner: Derek Cross

Legal Description:

T24N R07W, Sections 13-18

Identified Planning Goals:

Vegetation management in the Manistee River Valley Management Area (MA) will provide timber products; maintain or enhance wildlife habitat; protect areas of unique character including the Manistee River and its tributaries, a designated natural river; threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year planning period includes continuing aspen management to maintain early successional habitat for hunting and other wildlife-related recreational opportunities; increasing regeneration of oak; focusing on balancing the red pine age class structure through final harvests and re-planting; and on improving red pine quality through partial harvests. Expected trends within this 10-year planning period are increased recreational pressure, especially on the established trails and along the Manistee River and its tributaries; an increased wildland/urban interface and a need to restore barrens communities through prescribed fire; and invasive plant control.

Soil and topography:

Rubicon-Montcalm-Graycalm association: Nearly level to steep, well drained and somewhat excessively drained sandy soils on till plains and moraines. The steepest terrain is located in the parcels bordering Old-66 and in the southwest and northeast quarters of section 18 and the northwest and southwest quarters of section 17.

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

Most neighboring private lands are forested, some of which are large parcels. Desirable acquisitions would be the nwnw quarter of section 13 and the 315 acre parcel that would block in state ownership of section 16.

Unique Natural Features:

There is a red shouldered hawk nest in the vicinity and the compartment also provides potential habitat for goshawk and eastern box turtle.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

No water or Fisheries concerns in compartment.

Wildlife Habitat Considerations:

Greater emphasis should be placed on promoting larger stands of older age and mixed age classes to provide diversity in vertical and horizontal structure in this compartment. Particularly given the potential for red-shouldered hawk. Generally, wildlife cover type goals are no net loss in aspen or oak acres, to protect mast bearing shrubs, to create brush piles adjacent to wetlands, to preferably leave retention in the form of islands or corridors, and to provide coarse woody debris. Featured species of special interest are deer, ruffed grouse, golden-winged warbler and pileated woodpecker. (E. Victory

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact outwash sand and gravel, an end moraine of coarse-textured till and minor coarse-textured till. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Mississippian Michigan Formation. The Michigan Formation is quarried for gypsum in other areas of the State. Gravel pits are located in Section 13 & 18 and potential is good. The compartment is located southwest of Cannon Creek Field. The field has produced from the Stray Sandstone and Detroit River Sour Zone. There are no State leases currently in the Compartment, but State land to the northeast is leased.

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 abandonment. 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:**Recreational Facilities and Opportunities:**

There are approximately 1.8 miles of snowmobile trail (trail #651) running through section 17 and 18, and 0.3 miles of North Missaukee ORV route in the Northwest corner of section 18. Trail protection specifications should be included in any timber sale which potentially impacts these recreational trails. Excellent ruffed grouse, deer, and mushroom hunting opportunities are provided within this compartment. (T.M.N. 3/14).

Fire Protection:

The fuels as managed in this compartment is conducive to moderate fire potential. Human activities in the area would add to fire ignition potential. Area has not had fire activities in recent past history. BET 4-14

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**

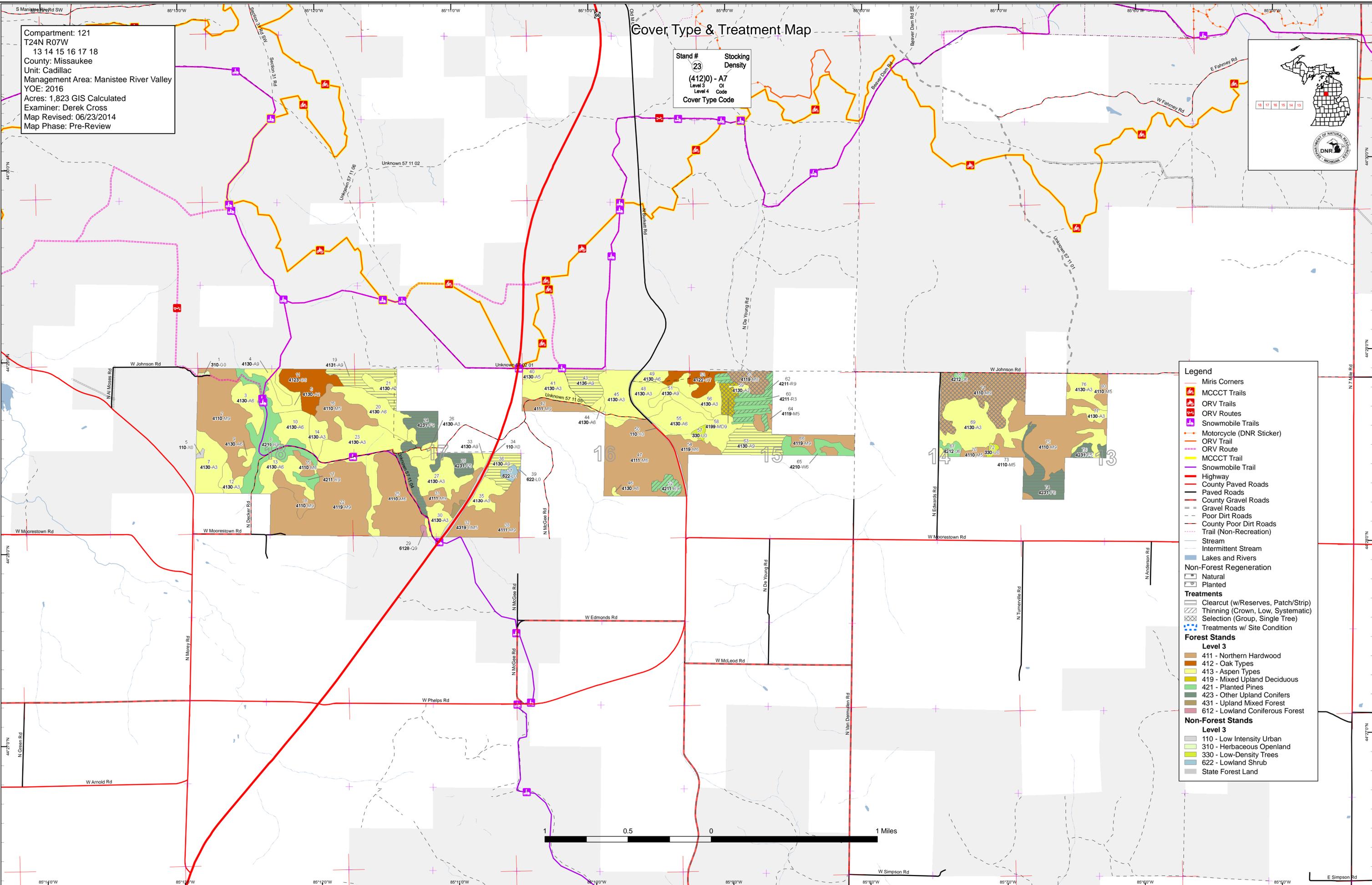
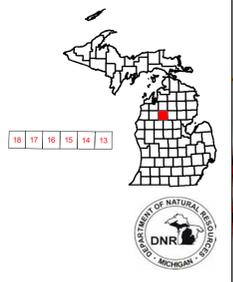
The following information is displayed, where pertinent, on the attached compartment maps:

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

Compartment: 121
 T24N R07W
 13 14 15 16 17 18
 County: Missaukee
 Unit: Cadillac
 Management Area: Manistee River Valley
 YOE: 2016
 Acres: 1,823 GIS Calculated
 Examiner: Derek Cross
 Map Revised: 06/23/2014
 Map Phase: Pre-Review

Cover Type & Treatment Map

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



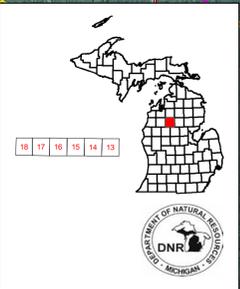
Legend

- Miris Corners
- MCCCT Trails
- ORV Trails
- ORV Routes
- Snowmobile Trails
- Motorcycle (DNR Sticker)
- ORV Trail
- ORV Route
- MCCCT Trail
- Snowmobile Trail
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Stream
- Intermittent Stream
- Lakes and Rivers
- Non-Forest Regeneration
 - Natural
 - Planted
- Treatments
 - Clearcut (w/Reserves, Patch/Strip)
 - Thinning (Crown, Low, Systematic)
 - Selection (Group, Single Tree)
 - Treatments w/ Site Condition
- Forest Stands**
 - Level 3
 - 411 - Northern Hardwood
 - 412 - Oak Types
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 423 - Other Upland Conifers
 - 431 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
 - Non-Forest Stands
 - Level 3
 - 110 - Low Intensity Urban
 - 310 - Herbaceous Openland
 - 330 - Low-Density Trees
 - 622 - Lowland Shrub
 - State Forest Land

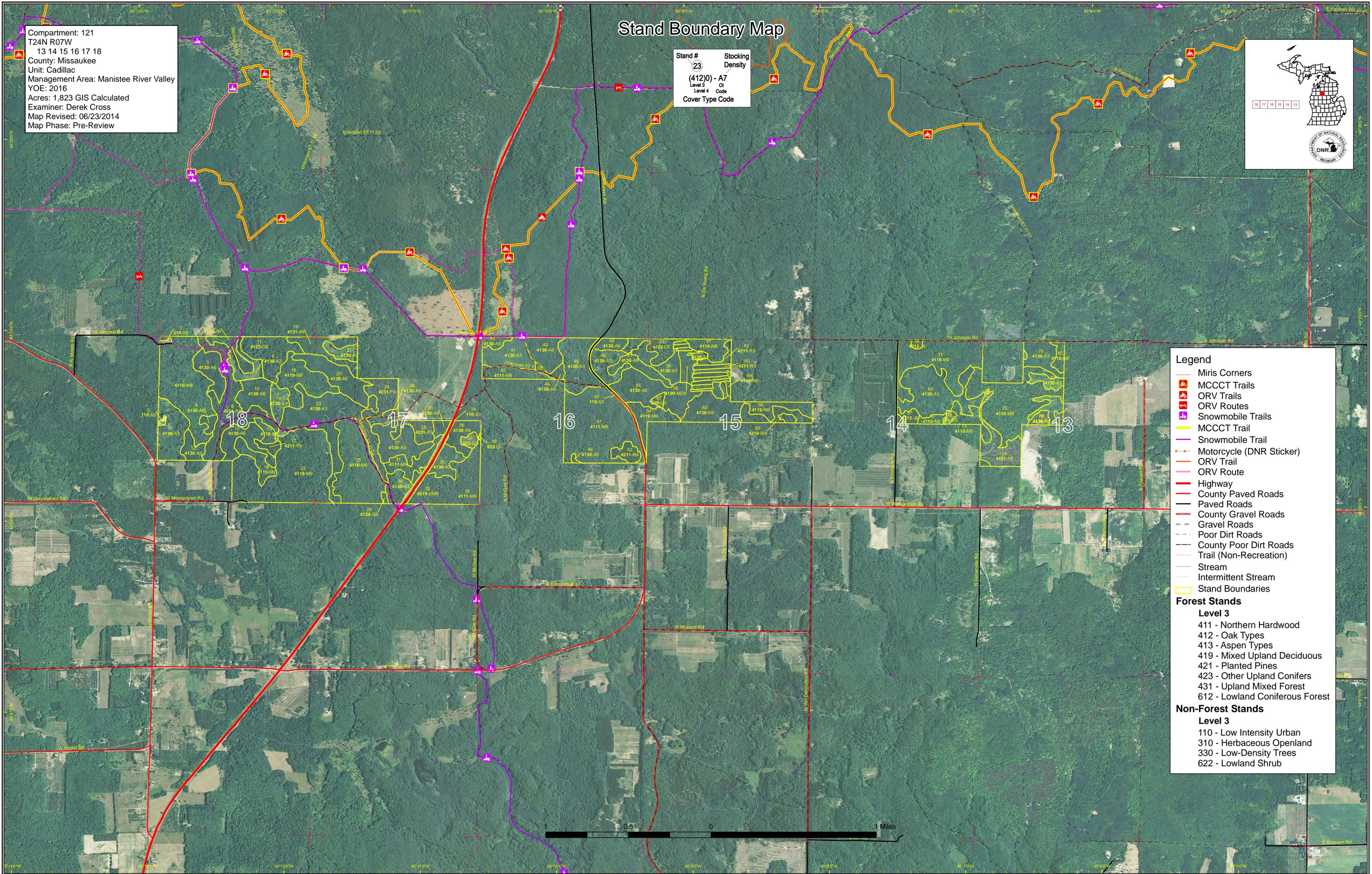
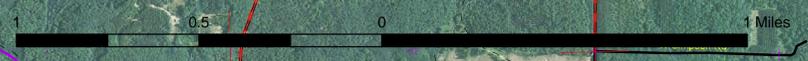
Stand Boundary Map

Compartment: 121
 T24N R07W
 13 14 15 16 17 18
 County: Missaukee
 Unit: Cadillac
 Management Area: Manistee River Valley
 YOE: 2016
 Acres: 1,823 GIS Calculated
 Examiner: Derek Cross
 Map Revised: 06/23/2014
 Map Phase: Pre-Review

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



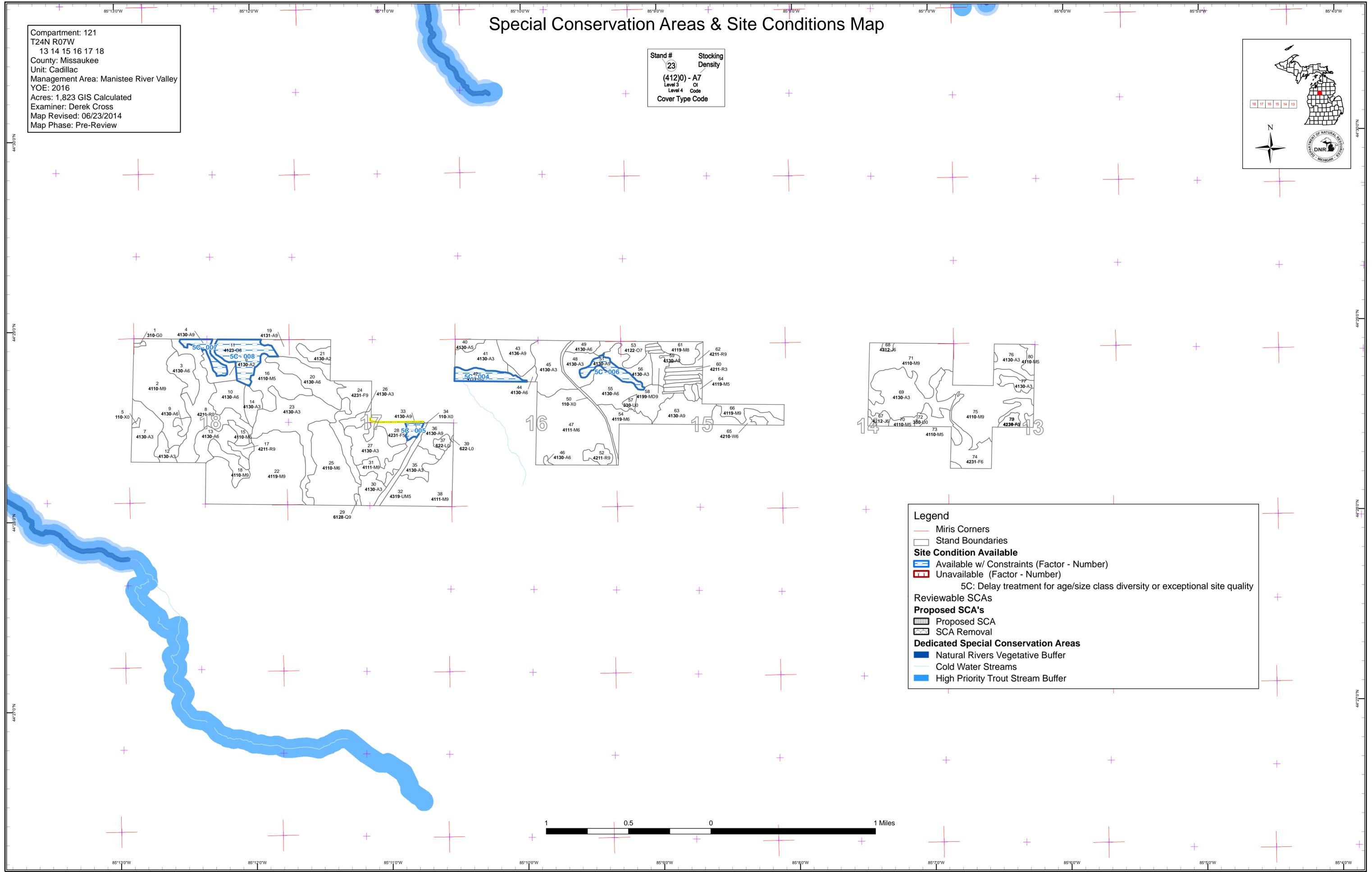
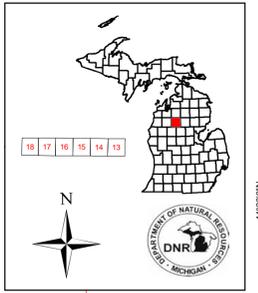
- Legend**
- Miris Corners
 - MCCCT Trails
 - ORV Trails
 - ORV Routes
 - Snowmobile Trails
 - Snowmobile Trail
 - Motorcycle (DNR Sticker)
 - ORV Trail
 - ORV Route
 - Highway
 - County Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trail (Non-Recreation)
 - Stream
 - Intermittent Stream
 - Stand Boundaries
- Forest Stands**
- Level 3**
- 411 - Northern Hardwood
 - 412 - Oak Types
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 - 419 - Mixed Upland Deciduous
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 - 423 - Other Upland Conifers
 - 431 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3**
- 110 - Low Intensity Urban
 - 310 - Herbaceous Openland
 - 330 - Low-Density Trees
 - 622 - Lowland Shrub



Special Conservation Areas & Site Conditions Map

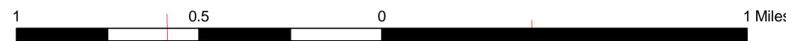
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Stand #
 23
 Stacking
 Density
 (412)0 - A7
 Level 3
 Level 4
 Code
 Cover Type Code



Legend

- Miris Corners
- Stand Boundaries
- Site Condition Available**
- ▨ Available w/ Constraints (Factor - Number)
- ▩ Unavailable (Factor - Number)
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Reviewable SCAs**
- Proposed SCA's**
- ▨ Proposed SCA
- ▩ SCA Removal
- Dedicated Special Conservation Areas**
- Natural Rivers Vegetative Buffer
- Cold Water Streams
- 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 +		Uneten Age
Aspen	215	228	155	14	0	127	0	0	0	0	0	0	0	0	739
Herbaceous Openland	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Jack Pine	0	0	0	0	0	8	0	0	0	0	0	0	0	0	8
Low-Density Trees	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Lowland Conifers	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Lowland Shrub	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Mixed Upland Deciduous	0	0	0	0	0	0	11	0	0	0	0	0	0	0	11
Northern Hardwood	0	0	0	0	5	186	189	200	193	0	0	0	0	0	773
Oak	0	0	0	0	0	18	0	0	35	0	0	0	0	0	53
Red Pine	0	12	0	0	0	93	0	0	0	0	0	0	0	0	105
Upland Mixed Forest	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Upland Spruce/Fir	0	0	0	0	0	87	0	0	0	0	0	0	0	0	87
Urban	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
White Pine	0	0	0	0	0	15	0	0	0	0	0	0	0	0	15
Total	244	240	155	14	5	536	189	211	228	0	1	0	0	0	1823



Report 2 – Proposed Treatment Summaries

Cadillac Mgt. Unit
Year of Entry 2016

Compartment 121
Total Compartment Acres: 1,823

Acres by Treatment Type

Commercial Harvest - 303 Tree Planting - 0 Other - 0
 Habitat Cut - 0 Opening Maintenance - 2

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen Types	96	0	0	0	0	0	96
Mixed Upland Deciduous	0	11	0	0	0	0	11
Northern Hardwood	0	82	0	0	0	0	82
Other Upland Conifers	87	0	0	0	0	0	87
Planted Pines	0	0	0	0	27	0	27
Total	183	93	0	0	27	0	303

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S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
19	63121019-Cut	24.0	4131 - Aspen, Oak	High Density Log	58	111-140	Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
<u>Prescription.</u> Final harvest aspen retaining an oak component scattered throughout the harvest area. Leave small pockets of aspen for retention.										
<u>Specs:</u>										
<u>Other</u> Include grouse drumming log and top retention/brush pile creation specs in the sale write up.										
<u>Comments:</u>										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2015										
24	63121024-Cut	36.8	42310 - Planted Spruce	High Density Log	57	81-110	Harvest	Clearcut	413 - Aspen	Cmpt. Review Proposal
<u>Prescription.</u> Remove all spruce leaving all deciduous trees except aspen. Create brush piles along apen edge.										
<u>Specs:</u>										
<u>Other</u> No retention due to bark beetle.										
<u>Comments:</u>										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 05/01/2014										
28	63121028-Cut	14.1	42310 - Planted Spruce	Medium Density Pole	57		Harvest	Clearcut	413 - Aspen	Cmpt. Review Proposal
<u>Prescription.</u> Remove all spruce leaving all deciduous trees except aspen. Create brush piles along aspen edge.										
<u>Specs:</u>										
<u>Other</u> No retention due to bark beetles.										
<u>Comments:</u>										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 05/01/2014										
36	63121036-Cut	16.6	4130 - Aspen	High Density Log	57		Harvest	Clearcut with Reserves	412 - Oak	Cmpt. Review Proposal
<u>Prescription.</u> Cut all aspen and red maple leaving oak, hemlock and small pines. Buffer the wetland areas dropping several trees into the edges for herp habitat. Focus retention along the southern edge of the stand.										
<u>Specs:</u>										
<u>Other</u> Include grouse drumming log and top retention/brush pile creation specs in the sale write up.										
<u>Comments:</u>										
<u>Next</u>										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2015										

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S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
43	63121043-Cut	22.7	4136 - Aspen, Mixed Conifer	High Density Log	54		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Cut all aspen and red maple leave scattered oak trees for mast. Leave all hemlock and small pines. Incorporate the small band of hemlock on the western edge of the stand into a retention area also place a retention pocket in the north east corner of the stand.										
<u>Specs:</u>										
<u>Other</u> Include grouse drumming log and top retention/brush pile creation specs in the sale write up.										
<u>Comments:</u> Include trail protection specs for snowmobile trail if used as a haul route in winter.										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										
52	63121052-Cut	9.5	42110 - Planted Red Pine	High Density Log	57	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Thin red pine down to 80-100 BA. Focus on removing low quality and stressed trees first.										
<u>Specs:</u>										
<u>Other</u> <u>Comments:</u>										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										
58	63121058-Cut	10.5	4199 - Other Mixed Upland Deciduous	High Density Log	77	111-140	Harvest	Group Selection	4116 - Mixed N. Hardwood - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Mark 30-50 BA of oak, sugar maple and beech to leave where available. Remove all aspen and red maple.										
<u>Specs:</u>										
<u>Other</u> Include grouse drumming log and top retention/brushpile specs in sale write up.										
<u>Comments:</u>										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										
61	63121061-Cut	14.9	4119 - Mixed Northern Hardwoods	Medium Density Log	73	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal
<u>Prescription</u> Thin hardwoods to 60-80 BA. Focus on removing poor formed poles and providing crown spacing for crop trees. Harvest over mature trees as well creating some large canopy gaps for regeneration.										
<u>Specs:</u>										
<u>Other</u> <u>Comments:</u>										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										
62	63121062-Cut	17.8	42110 - Planted Red Pine	High Density Log	57	171-200	Harvest	Crown Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Thin red pine strips down to 100-120 BA										
<u>Specs:</u>										
<u>Other</u> <u>Comments:</u>										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										

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S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
63	63121063-Cut	32.9	4130 - Aspen	High Density Log	51		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal

Prescription Remove all aspen and red maple leaving oak, small pines and hemlock.

Specs:

Other Include grouse drumming log and top retention/brush pile specs in the sale write up.

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015

71	63121071-Cut	67.4	4110 - Sugar Maple Association	High Density Log	87	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal
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Prescription Thin hardwood to 60-90 BA focus on removing beech and low quality stems. Create canopy gaps to aid in regeneration.

Specs:

Other

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015

74	63121074-Cut	28.6	42310 - Planted Spruce	High Density Pole	57	81-110	Harvest	Clearcut	413 - Aspen	Cmpt. Review Proposal
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Prescription Remove all spruce leaving any deciduous trees.

Specs:

Other No retention due to bark beetles.

Comments:

Next

Steps:

Proposed

Start Date: 05/01/2014

78	63121078-Cut	7.6	42310 - Planted Spruce	Medium Density Pole	57		Harvest	Clearcut	413 - Aspen	Cmpt. Review Proposal
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Prescription Cut all spruce trees leaving all deciduous trees.

Specs:

Other No retention due to bark beetle. Create brush piles along aspen edges.

Comments:

Next

Steps:

Proposed

Start Date: 05/01/2014

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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
72 NF_63121072-NonFor	2.5	3303 - Mixed Low Density Trees				Non-Forest Management	Other - Specify	3105 - Mixed Upland Herbaceous	Cmpt. Review Decision - Incomplete

Prescription General habitat manipulation for non-forested, herbaceous type. Treatments may include manual or mechanical removal/manipulation of woody plants, mowing, prescribed fire, use of herbicides, tillage, and planting herbaceous and or mast producing plants.

Specs:

Other

Comments:

Next

Steps:

Proposed

Start Date: Unspecified

**Total Treatment
Acreage Proposed: 305.9**



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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
Derek Cross : Examiner

Compartment 121
Year of Entry 2016

Availability for Management

Availability for Management			Dominant Site Conditions		
Total Acres	Acres Available	Acres Not Available			
			No	5C	
738	738		Aspen	708	30
8	8		Jack Pine	8	
1	1		Lowland Conifers	1	
11	11		Mixed Upland Deciduous	11	
773	773		Northern Hardwood	757	16
53	53		Oak	18	35
105	105		Red Pine	105	
2	2		Upland Mixed Forest	2	
87	87		Upland Spruce/Fir	87	
15	15		White Pine	15	
1,793	1,793		Total Forested Acres	1,712	82
	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 Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
004	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	16				
Comments: Exceptional site quality retain for ten years treating next rotation.							
005	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5				
Comments:							

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Report 5 – Site Conditions

Cadillac Mgt. Unit
Derek Cross : Examiner

Compartment 121
Year of Entry 2016

006	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14
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Comments:

007	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11
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Comments:

This is the only older aspen in this area. Hold for age class diversity.

008	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	35
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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.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				



Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

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.



S t a n d	Cadillac Mgt. Unit		Report 8 – Forested Stands			Compartment: 121 Year of Entry: 2016
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	4110 - Sugar Maple Association	High Density Log	85.6	67	81-110	Good looking hardwood lots of saplings in the understory.
3	4130 - Aspen	High Density Pole	21.1	27		Good looking aspen poles.
4	4130 - Aspen	High Density Log	11.2	59		Snowmobile trail passes thru stand. Avoid winter harvest
6	4130 - Aspen	Medium Density	14.7	7		Young aspen regen
7	4130 - Aspen	High Density Sapling	34.2	7		Well stocked aspen regen stand. There are large oaks scattered throughout the stand. The aspen regen looks good.
8	42110 - Planted Red Pine	High Density Log	60.3	57	141-170	Deciduous regen heavily browsed. Trace of red oak in canopy.
9	4130 - Aspen	High Density Pole	5.0	16		Good looking aspen regen.
10	4130 - Aspen	High Density Pole	23.2	27		Good looking aspen poles.
11	4123 - Red Oak	Medium Density Log	35.4	87	81-110	Large oaks with mixed regen underneath. Looks good at this time no entry needed.
12	4130 - Aspen	High Density Sapling	10.7	16		Well stocked aspen regen stand. There is no oak in the over story but there are overstory oaks along the edges.
13	4130 - Aspen	High Density Pole	25.3	27		Good looking aspen poles
14	4130 - Aspen	High Density Sapling	12.4	7		Aspen regen with mature oaks scatterd throughout the stand.
15	4110 - Sugar Maple Association	High Density Pole	6.3	51	81-110	Small hardwood stand with EAB and BBD present. Low density beech and ash would not make entry viable.
16	4110 - Sugar Maple Association	Medium Density Pole	37.6	54	51-80	Good looking hardwood pole stand. There will be some nice sugar maple saw logs here in the future.
17	42110 - Planted Red Pine	High Density Log	5.0	57	141-170	
18	4110 - Sugar Maple Association	High Density Log	14.2	64	51-80	Hardwood ridge thinned last entry period.
19	4131 - Aspen, Oak	High Density Log	24.0	58	111-140	



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	4130 - Aspen	High Density Pole	34.2	27		New stand added. Aspen pole stand varies in size and age compared to stand 20.
21	4130 - Aspen	Medium Density	9.7	7		Aspen and oak regen. Scattered large oaks remain from previous stand.
22	4119 - Mixed Northern Hardwoods	High Density Log	125.5	86	51-80	Good looking hardwood. Stand contains a good amount of oak. Thinned last rotation.
23	4130 - Aspen	High Density Sapling	71.9	16		Aspen regen looks good at this time. Large oaks scattered throughout the stand.
24	42310 - Planted Spruce	High Density Log	36.8	57	81-110	Pockets of mortality present
25	4110 - Sugar Maple Association	High Density Pole	70.2	73	81-110	Good looking hardwood pole stand.
26	4130 - Aspen	High Density Sapling	7.3	4		Aspen regen with mature oaks scattered throughout.
27	4130 - Aspen	High Density Sapling	33.2	16		Good looking aspen regen. Lots of cottontail rabbit tracks.
28	42310 - Planted Spruce	Medium Density Pole	14.1	57		There are numerous pockets of mortality in the white spruce strips. The aspen regen that has sprouted in the pockets and in the cut strips looks very good. Trace of red oak and cherry scattered throughout the stand.
29	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	1.4	107	81-110	Small pocket of hemlock and yellow birch with a trace of cedar there is also a small stream/spring in stand.
30	4130 - Aspen	High Density Sapling	15.0	7		Regenerating aspen stand looks good at this time.
31	4111 - S.Maple, Hard Mast Association	High Density Log	18.3	74	51-80	Good looking hardwood stand. Was thinned last rotation good regeneration present.
32	4319 - Mixed Upland Forest	Medium Density Pole	2.3	57	81-110	This is a planted pocket of white spruce with scattered large red oaks.
33	4130 - Aspen	High Density Log	5.1	57		Rifle range borders north edge of stand. This land owner will have to be contacted for access when cutting stands 27 and 33.
35	4130 - Aspen	High Density Sapling	15.4	7		Good looking aspen regen with mature oaks scattered throughout stand.
36	4130 - Aspen	High Density Log	16.6	57		Include grouse drumming log and/or coarse woody debris specs in the sale write up.

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Cadillac Mgt. Unit

Report 8 – Forested Stands

Compartment: 121
Year of Entry: 2016

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
38	4111 - S.Maple, Hard Mast Association	High Density Log	56.0	77	81-110	There was no white wash present on the beech. The ash in this stand is on its way out.
40	4130 - Aspen	Medium Density Pole	6.1	32	81-110	This is a well stocked aspen pole stand with some scattered oaks present.
41	4130 - Aspen	High Density Sapling	27.4	7		This stand was harvested last rotation and is regenerating nicely.
42	4111 - S.Maple, Hard Mast Association	High Density Log	16.4	79	111-140	There is little to no regeneration in the western portion of this stand. Hemlock focused in the eastern end of the stand. This area was being heavily used by deer as a bedding area.
43	4136 - Aspen, Mixed Conifer	High Density Log	22.7	54		Band of Hemlock on the west side of stand forms a buffer strip between two age classes of aspen.
44	4130 - Aspen	High Density Pole	5.3	17		Well stacked aspen pole stand with scattered red oaks in the overstory.
45	4130 - Aspen	High Density Sapling	37.8	7		Aspen regen with mature oaks scattered throughout
46	4130 - Aspen	High Density Pole	1.0	20		Aspen pole stand looks good at this time. Lots of deer activity in the drainage to the west of this stand.
47	4111 - S.Maple, Hard Mast Association	High Density Pole	108.1	57	51-80	EAB and BBD present in stand. Ash trees have been heavily worked on by woodpeckers.
48	4130 - Aspen	High Density Sapling	20.0	3		Aspen regen with mature oaks scattered and older aspen present in retention pockets.
49	4130 - Aspen	High Density Pole	8.0	32		Good looking aspen poles.
51	4130 - Aspen	High Density Log	14.4	56	141-170	Young aspen surrounds stand.
52	42110 - Planted Red Pine	High Density Log	9.5	57	141-170	Good looking red pine
53	4122 - Oak, Pine	Low Density Log	17.6	57	1-50	Fairly open pine oak mix surrounded by young aspen
54	4119 - Mixed Northern Hardwoods	High Density Pole	19.5	53	51-80	Oak is mainly grouped on the ridges. Good looking pole stand will not need a treatment this entry period.
55	4130 - Aspen	High Density Pole	49.8	23		Aspen pole stand heavier to big tooth on the east end.
56	4130 - Aspen	High Density Sapling	19.3	17		Aspen regen stand approximately 20 ft tall at this time.

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Cadillac Mgt. Unit

Report 8 – Forested Stands

Compartment: 121
Year of Entry: 2016

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
58	4199 - Other Mixed Upland Deciduous	High Density Log	10.5	77	111-140	
59	4130 - Aspen	Medium Density	2.5	3		
60	42110 - Planted Red Pine	High Density Sapling	12.2	17		Red Pine saplings approximately 20 ft tall. Oak saplings mixed in sporadically.
61	4119 - Mixed Northern Hardwoods	Medium Density Log	14.9	73	111-140	EAB present in stand
62	42110 - Planted Red Pine	High Density Log	17.8	57	171-200	Red Pine planation that is in narrow strips younger red pine between strips.
63	4130 - Aspen	High Density Log	32.9	51		Mature aspen stand 6-7 stick average. Trace amount of mature white pine there are also scattered hemlock saplings also present.
64	4119 - Mixed Northern Hardwoods	Medium Density Pole	5.3	73	51-80	
65	42100 - Planted White Pine	High Density Pole	15.4	52	111-140	
66	4119 - Mixed Northern Hardwoods	High Density Log	19.1	71	81-110	This stand was thinned last rotation and looks good.
67	42120 - Planted Jack Pine	High Density Pole	5.5	53		The understory of this stand is thick with hardwood whips.
68	42120 - Planted Jack Pine	High Density Pole	2.0	53		treat w 68
69	4130 - Aspen	High Density Sapling	62.4	14		Good looking aspen regen
70	4110 - Sugar Maple Association	Medium Density Pole	5.2	49	51-80	This stand was thinned last rotation no management needed at this time.
71	4110 - Sugar Maple Association	High Density Log	67.4	87	111-140	Good looking hardwood, the BA is variable depending on location within the stand.
73	4110 - Sugar Maple Association	Medium Density Pole	14.8	56	51-80	This stand was thinned last rotation no management needed at this time.
74	42310 - Planted Spruce	High Density Pole	28.6	57	81-110	Pockets of mortality from bark beetles after last thinning. There is a trace of deciduous trees present less than 2%. Maple, cherry and some aspen.

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Cadillac Mgt. Unit

Report 8 – Forested Stands

Compartment: 121
Year of Entry: 2016

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
75	4110 - Sugar Maple Association	High Density Log	82.3	63	81-110	This stand was thinned last rotation. There are a lot of beech whips coming up in the understory.
76	4130 - Aspen	High Density Sapling	20.3	14		Aspen regen looking good
77	4130 - Aspen	High Density Sapling	8.1	3		This stand is young aspen regen that is coming in nicely.
78	42310 - Planted Spruce	Medium Density Pole	7.6	57		This stand was row thinned last rotation. There are areas of pocket mortality from bark beetle. The strips that were removed are filling in nicely with aspen.
79	4130 - Aspen	High Density Sapling	10.5	3		Young aspen regen stand that appears to be coming in nicely.
80	4110 - Sugar Maple Association	Medium Density Pole	6.7	63	51-80	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	3102 - Grass	1.0	No	Unspecified	
5	11 - Low Intensity Urban	1.2	No	Unspecified	Old gravel pit
34	11 - Low Intensity Urban	10.2	No	Unspecified	
37	6229 - Mixed lowland shrub	4.5	No	Low	grass on edge some lab tea visible
39	6229 - Mixed lowland shrub	0.3	No	Low	brush visible on edge along with some tall grasses
50	11 - Low Intensity Urban	6.4	No	Unspecified	
57	3303 - Mixed Low Density Trees	3.1	No	Unspecified	Stand swapped from Forested to Non-Forested. Tag alder with cattails in pockets. Trees concentrated along edges.
72	3303 - Mixed Low Density Trees	2.5	No	Low	Aspen clone in center of opening and encroaching on edges.

