



Compartment Review Presentation

Cadillac Forest Management Unit

Compartment 34

Entry Year 2016

Acreage: 1,898

County Osceola

Management Area: Evart Block

Revision Date: 06/06/2014

Stand Examiner: Mike Lesinski

Legal Description:

T18N R9W, Sections 21, 26, 27, 34 & 35 and T17N R9W, Sections 2 & 3

Identified Planning Goals:

Vegetation management in the Evart Block Management Area (MA) will provide timber products; maintain or enhance wildlife habitat; protect areas of unique threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year planning period years will focus on balancing the age-class distributions for aspen and regenerating oak. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests for hunting and other wildlife-related recreation opportunity. Expected trends within this 10-year planning period are the need to regenerate oak, the need to continue to balance aspen age classes, the need to diversify forest cover types and an increase in recreation pressure.

Soil and topography:

The soils within this compartment are primarily Chelsea, Rubicon, and Montcalm association. The terrain is rolling.

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

The ownership surrounding this compartment is mainly private and varies in parcel size. The majority of surrounding properties around the compartment are recreational forestland.

Unique Natural Features:

This compartment has the potential to contain Eastern Box Turtles and/or Wood Turtles.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

No Fisheries or watershed concerns.

Wildlife Habitat Considerations:

Maintain aspen habitat type and continue establish mixed age classes. Maintain oak communities and when possible integrate age class diversity across the compartment to retain oak component. Continue to propagate hard and soft mast tree species (oak, beech, Hawthorne, raspberry, blueberry, dogwoods, etc...) to provided adequate food and browse resources. Continue to provide wildlife habitat corridors by linking forested stands when identifying within stand retention guidelines.

Maintain herbaceous openland stands as wildlife openings; focus on stands > 5 acres. Remove encroaching woody debris by hand cutting and brush hog mowing. Encourage forb production by frost seeding as well as fertilizer application.

Establish clearing and seeding of all decking/landing sites to promote wildlife herbaceous openings.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of an end moraine of coarse-textured till. The glacial drift thickness varies between 600 and 1,000 feet. Beneath the glacial drift are the Jurassic Red Beds and the Pennsylvanian Grand River and Saginaw Formations. The Saginaw is quarried for clay/shale in other parts of the State. The nearest gravel pit is three miles to the east, but gravel potential is considered to be good. The compartment lies next to Cedar Field. The field has produced over 1.2 million BO from the Devonian Detroit River Formation and over 1.4 Bcf gas from the Stray sandstone. None of the State land is currently leased for oil and gas development.

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:

None known.

Recreational Facilities and Opportunities:

There are no developed recreational facilities within this compartment. Dispersed camping occurs within this compartment throughout the year (T.M.N. 3/14)

Fire Protection:

Access is good with the forest road system and county roads. There is no history of large fires in the compartment. Dispersed camping and off road vehicles can be a potential fire starts. BET5-14

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**

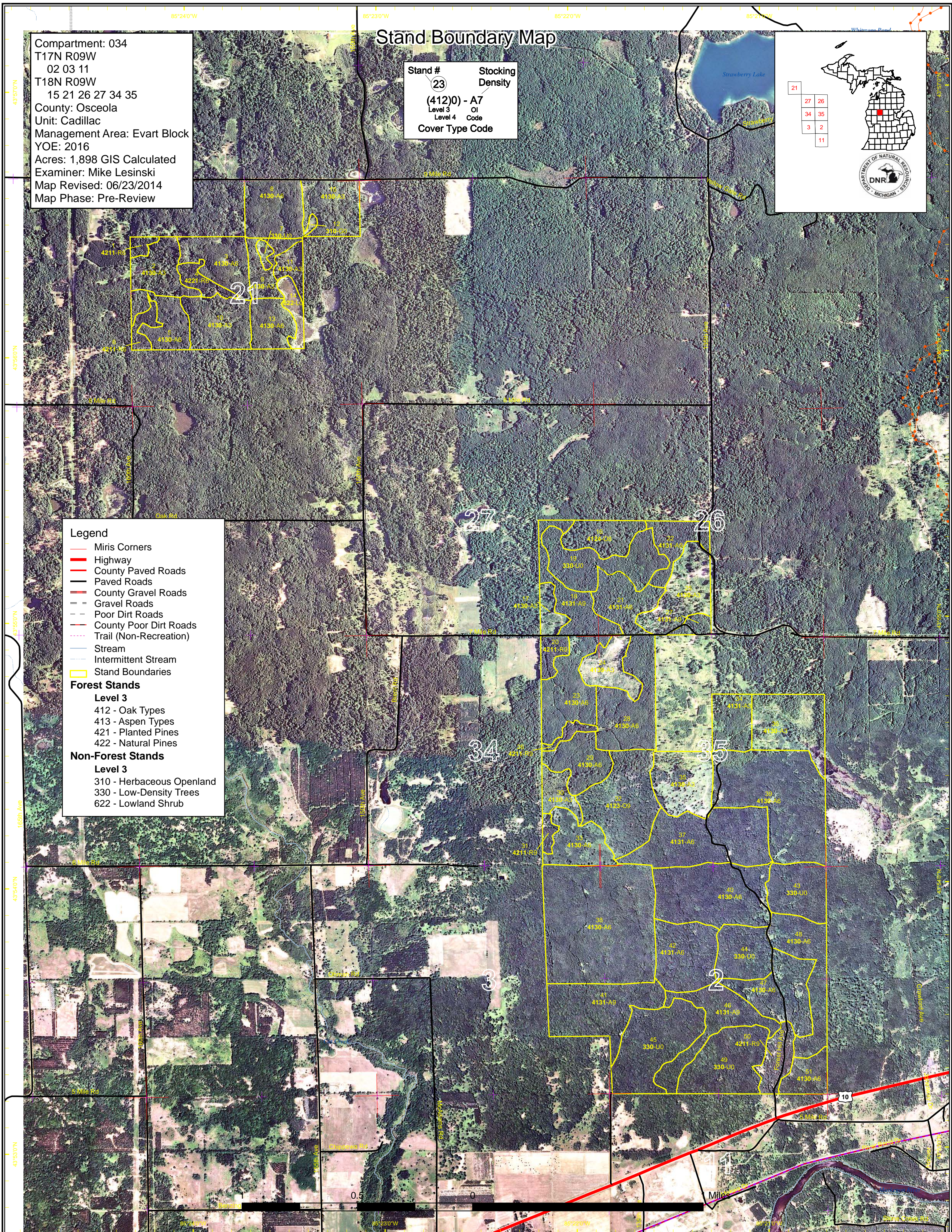
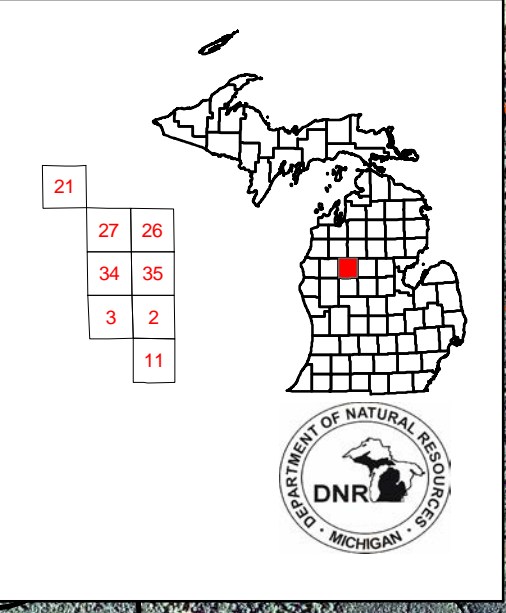
The following information is displayed, where pertinent, on the attached compartment maps:

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

Stand Boundary Map

Compartment: 034
 T17N R09W
 02 03 11
 T18N R09W
 15 21 26 27 34 35
 County: Osceola
 Unit: Cadillac
 Management Area: Evert Block
 YOE: 2016
 Acres: 1,898 GIS Calculated
 Examiner: Mike Lesinski
 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
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Stream
- Intermittent Stream
- Stand Boundaries

Forest Stands

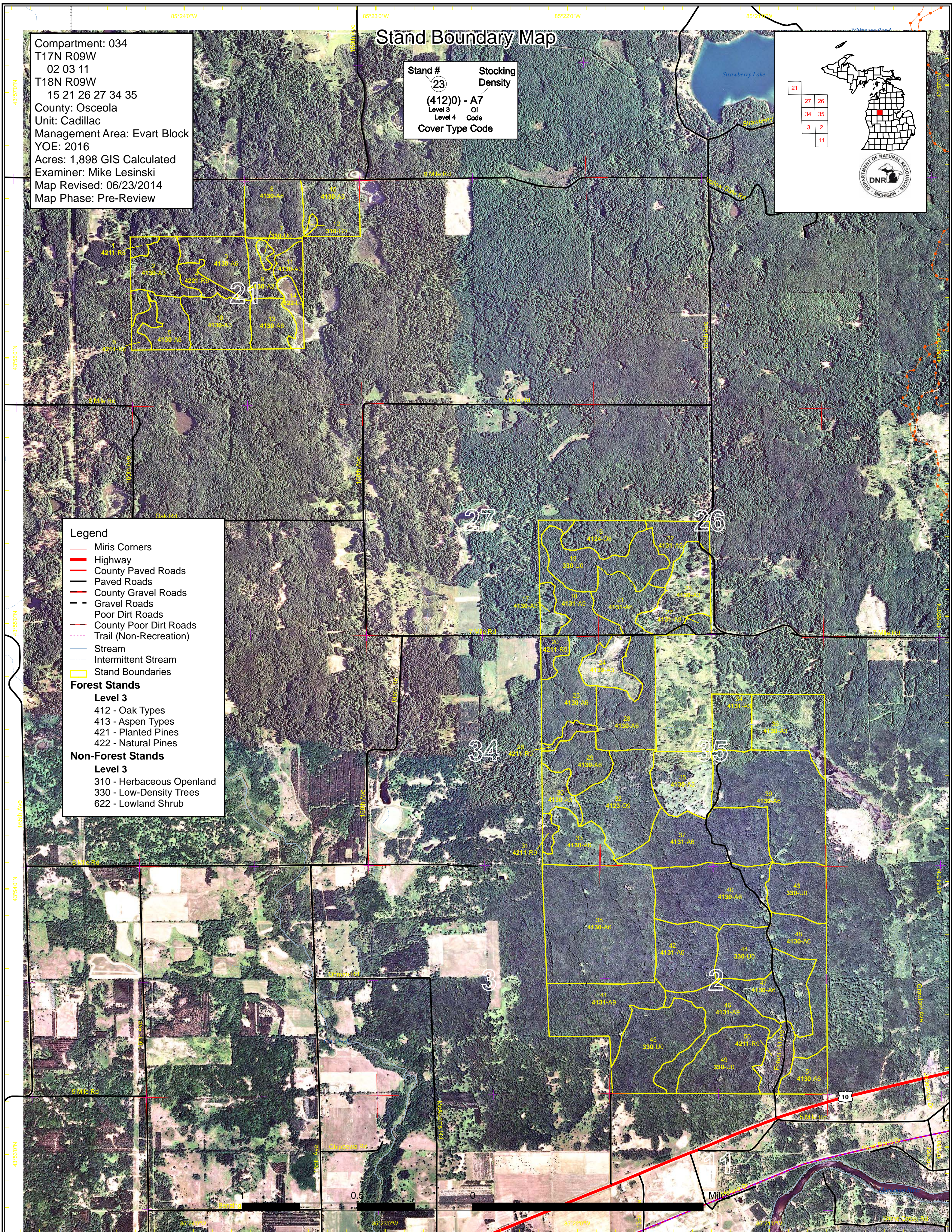
Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 421 - Planted Pines
- 422 - Natural Pines

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 622 - Lowland Shrub





	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	234	352	399	0	343	142	0	0	0	0	0	0	0	0	1469
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Low-Density Trees	250	0	0	0	0	0	0	0	0	0	0	0	0	0	250
Lowland Shrub	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Oak	0	0	0	0	0	0	68	0	28	0	0	0	0	0	96
Red Pine	0	0	0	26	43	0	0	0	0	0	0	0	0	0	69
Total	497	352	399	26	386	142	68	0	28	0	0	0	0	0	1898



Report 2 – Proposed Treatment Summaries

Cadillac Mgt. Unit
Year of Entry 2016

Compartment 034
Total Compartment Acres: 1,898

Acres by Treatment Type

Commercial Harvest - 119	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
Aspen Types	119	0	0	0	0	0	119
Total	119	0	0	0	0	0	119



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
40 63034040-Cut	66.2	4130 - Aspen	High Density Pole	44	111-140	Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal

Prescription Final harvest aspen. Leave some scattered mast trees where applicable. Apply grouse specs to timber sale. Follow retention guidelines through island creation.

Other Comments: Retention: Reserve islands and scattered mast trees. Acceptable alternate regen: Aspen/oak/mixed upland deciduous stand.

Next Steps:

Proposed Start Date: 10/01/2015

41 63034041-Cut	52.3	4131 - Aspen, Oak	High Density Log	54	81-110	Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
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Prescription Final harvest aspen. Leave some scattered mast trees where applicable. Apply grouse specs to timber sale. Follow retention guidelines through island creation.

Other Comments: Retention: Reserve island and scattered mas trees. Acceptable alternate regen: Aspen/oak/upland deciduous mix.

Next Steps:

Proposed Start Date: 10/01/2015

Total Treatment Acreage Proposed: 118.5



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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
Mike Lesinski : Examiner

Compartment 034
Year of Entry 2016

Availability for Management

Total Acres	Acres			Dominant Site Conditions		
	Available	Not Available		No	5C	5B
1468	1468		Aspen	1,378	90	0
96	96		Oak	68		28
69	69		Red Pine	69	0	
1,633	1,633		Total Forested Acres	1,515	90	28
	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
003	Available	5B: Maintain for regeneration purposes	28				
Comments:							
004	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	26				
Comments:							
005	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	8				
Comments:							
006	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	61				
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	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.

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Cadillac Mgt. Unit

Report 8 – Forested Stands

Compartment: 034
Year of Entry: 2016

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42110 - Planted Red Pine	High Density Pole	5.0	34	141-170	Thinned 1997.
2	4130 - Aspen	High Density Sapling	30.4	18		Scattered vernal ponds in stand.
3	4130 - Aspen	High Density Pole	36.4	27	111-140	Not ready for commercial harvest.
4	42210 - Natural Red Pine	High Density Pole	11.7	34	141-170	Scattered red pine pockets. Thinned 1997.
5	4130 - Aspen	High Density Pole	28.6	26	111-140	Not ready for commercial harvest.
6	42110 - Planted Red Pine	High Density Pole	8.9	34	141-170	
8	4130 - Aspen	High Density Pole	40.9	24	81-110	
9	4130 - Aspen	High Density Sapling	19.8	18		
10	4130 - Aspen	High Density Sapling	39.5	18		Two pockets of larger timber in stand.
11	4130 - Aspen	High Density Sapling	11.7	7		Scattered overstory oak.
13	4130 - Aspen	High Density Pole	24.3	26	81-110	Not ready for commercial harvest.
15	4130 - Aspen	High Density Sapling	37.1	18		CC 1996. Some scattered overstory oak and cherry.
16	4124 - Red with White Oak	Medium Density Log	27.7	81	51-80	Shelterwood cut 1996. heavy red maple understory.
17	4130 - Aspen	High Density Sapling	11.8	8		
18	4131 - Aspen, Oak	High Density Log	33.5	44	111-140	Adjoins 2013 CC.
20	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	10.7	47	141-170	Thinned 1996. Small pocket of aspen on north end of stand.
21	4131 - Aspen, Oak	High Density Pole	33.2	29	51-80	Pockets of larger and smaller aspen.
22	4131 - Aspen, Oak	High Density Log	24.8	54	111-140	Could be harvested, but adjoins 2013 CC. Will hold 10 years.

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Cadillac Mgt. Unit

Report 8 – Forested Stands

Compartment: 034
Year of Entry: 2016

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	4130 - Aspen	High Density Pole	48.4	18	51-80	
24	4139 - Aspen, Mixed Deciduous	High Density Sapling	26.5	7		Stand CC 2006.
25	4130 - Aspen	High Density Sapling	44.9	7		Stand harvested 2007. Scattered overstory oak.
26	42110 - Planted Red Pine	High Density Log	6.2	47	141-170	Thinned 1996.
27	4131 - Aspen, Oak	High Density Log	7.5	53	111-140	Small stand. Could be harvested. Adjoins A3 to the north.
28	4130 - Aspen	High Density Pole	59.2	28	81-110	just entering pole size.
29	4130 - Aspen	High Density Pole	31.8	18	51-80	Just entering pole class.
30	4130 - Aspen	High Density Sapling	15.7	6		Scattered overstory oak.
31	42110 - Planted Red Pine	High Density Log	5.3	47	141-170	Thinned 1996.
32	4123 - Red Oak	High Density Log	68.4	61	81-110	Quality oak stand. Some pockets of aspen. Variable age and diameter.
33	4130 - Aspen	High Density Pole	32.9	18	51-80	Just entering pole class.
34	4131 - Aspen, Oak	High Density Sapling	27.1	8		
35	4130 - Aspen	High Density Sapling	43.7	8		Scattered overstory oak.
36	4130 - Aspen	High Density Sapling	52.4	8		Scattered overstory oak.
37	4131 - Aspen, Oak	High Density Pole	82.4	44	81-110	Pockets of stand are heavy to oak.
38	4130 - Aspen	High Density Pole	157.1	26	81-110	Not ready for harvest.
39	4130 - Aspen	High Density Pole	112.2	18	51-80	Just entering pole class,
40	4130 - Aspen	High Density Pole	81.3	44	111-140	

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Cadillac Mgt. Unit

Report 8 – Forested Stands

Compartment: 034
Year of Entry: 2016

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
41	4131 - Aspen, Oak	High Density Log	64.3	54	81-110	
42	4131 - Aspen, Oak	High Density Pole	48.4	44	81-110	
46	4131 - Aspen, Oak	High Density Log	45.3	54	111-140	Stand separates two 2013 CC stands. Heavier to mixed hardwood towards the south.
47	4130 - Aspen	High Density Pole	48.4	44	81-110	
48	4130 - Aspen	High Density Pole	48.6	44	81-110	Poorer quality aspen.
50	42110 - Planted Red Pine	High Density Log	21.1	44	141-170	
51	4130 - Aspen	High Density Pole	19.4	26	51-80	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
7	3301 - Low Density Deciduous Tree	3.7	No	Unspecified	
12	3105 - Mixed Upland Herbaceous	1.7	No	Unspecified	
14	6223 - Inundated Shrub Swamp	12.0	No	Unspecified	
19	3301 - Low Density Deciduous Tree	51.6	Natural Regen	Aspen	Harvested 2013
43	3301 - Low Density Deciduous Tree	37.5	Natural Regen	Aspen	Harvested 2013
44	3301 - Low Density Deciduous Tree	34.1	Natural Regen	Aspen	Harvested 2013
45	3301 - Low Density Deciduous Tree	66.9	Natural Regen	Aspen	Harvested 2013
49	3301 - Low Density Deciduous Tree	55.9	Natural Regen	Aspen	Harvested 2013.