



Compartment Review Presentation

Cadillac Forest Management Unit

Compartment 37

Entry Year 2016

Acreage: 1,875

County Lake

Management Area: Lake County Outwash

Revision Date: 06/03/2014

Stand Examiner: Cheryl Nelson

Legal Description:

T19N R12W Sections 20, 29, 32

Identified Planning Goals:

Vegetation management in the Lake County Outwash Management Area will provide forest 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 will focus on harvesting older jack pine and balancing the age-class distribution of aspen. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests for hunting and other wildlife-related recreation; maintaining soft and hard mast sources including oak; and preserving related recreational opportunity.

Expected trends within this 10-year planning period are the need to minimize jack pine budworm damage by reducing the amount of more susceptible older jack pine; the need to regenerate oak and red pine; the need to target some accessible aspen in older age-classes for harvest; and increased recreational pressure.

Soil and topography:

Graycalm-Grayling sands: Nearly level and undulating, somewhat excessively drained Graycalm soils and excessively drained Grayling soils. The steepest terrain including the Graycalm-Grayling sands is located on the west side of the compartment. Tawas-Roscommon association: Nearly level, very poorly drained soils in drainage-ways and bogs generally found on the east side of the compartment.

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

The compartment is surrounded by other state lands with the exception of one small private parcel in the NWNW of section 32.

Unique Natural Features:

E. Massasauga just west of the southwest corner of section 20, E. Massasauga to south. Great blue heron rookery just east of compartment. Wood turtle to northwest, Karner blue butterfly to west, Eagle to northwest, Loon to northeast and northwest, Hill's thistle to west. Potential for Karner blue butterfly, persius duskywing, frosted elfin, dusted skipper, grizzled skipper and red legged spittlebug in grassy openings. Potential for E. massasauga, Blanding's turtle, eastern box turtle and great blue heron rookery.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

The headwaters of the Baldwin River are in this Compartment. The Baldwin River is a Designated Trout Stream, and supports populations of brown trout, brook trout, rainbow trout (steelhead), coho salmon, and chinook salmon. BMPs should be followed for any treatments near flowing water in the Compartment.

Wildlife Habitat Considerations:

The Baldwin-Luther Swamp is a large component of this Management Area and comprises the eastern part of this compartment. This swamp is a core area for bear populations in the southern part of the Baldwin Bear Management Unit and is an important deeryard area. In addition, it is a proposed eastern massasauga rattlesnake (EMR) management area. Heavy concentrations of deer during the winter and spring cause serious regeneration problems for oak and aspen management surrounding the swamp. High water tables and windthrow have created problems with the regenerating of swamp conifers and desirable hardwoods within the swamp. Treatments within the proposed EMR area should follow those guidelines. Overall, wildlife goals are to maintain lowland conifer and to promote oak and aspen adjacent to lowlands.

Creation of brush piles near lowlands, protection of mast bearing shrubs and provision of coarse woody debris are also

desired. Seek opportunities to promote a mix of cover types including non-forested or barrens areas in addition to larger stands of older age and variable age classes with vertical structure. Featured species of special interest are marten, eastern massasauga rattlesnake, snowshoe hare, deer, black bear, and red-headed woodpecker. (E. Victory 7/18/14)

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of an end moraine of coarse-textured till and minor glacial outwash sand and gravel and postglacial alluvium. 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 found two miles to the east and potential is considered good on the upland areas. This compartment is located in an area sparsely drilled for oil and gas. The nearest good production is Peacock Field located five miles to the west. Peacock Field has produced over 1.6 million BO from the Devonian Traverse Limestone. None of the compartment 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 needed.

Recreational Facilities and Opportunities:

A variety of motorsport recreational trails track North/South through the center of this compartment. For winter use, there is 3.3 miles of snowmobile trail (#344E). Summer use includes 3.3 miles of Little Manistee ORV route, which is adjacent/intertwined with 4 miles of Little Manistee motorcycle trail. Due to the wet nature of this compartment, along with centralized location of the ORV route and snowmobile trail--both these recreational trails are likely the most suitable haul routes for timber harvest activities. Timber sale specifications should include trail protection provisions that address both summer and winter motorized recreational activities. The motorcycle trail is designed to be narrow (24 inches at ground level, 40 inches at handlebar height) to provide a unique motorcycling experience, as well as deter larger unwanted ORV's from accessing state lands. Where practical, recommend leaving or protecting trees that provide a narrow corridor to dissuade larger vehicles from entering the motorcycle trail. Hunting and fishing opportunities exist within this compartment. (T.M.N. 3/14)

Fire Protection:

Numerous conifer stands mixed with lowland fuel types can create control problems for suppression forces. Fuel types in this compartment would support large fire within this area. With several miles of off road vehicle trails, the potential for a wildfire occurrence is increased. 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**

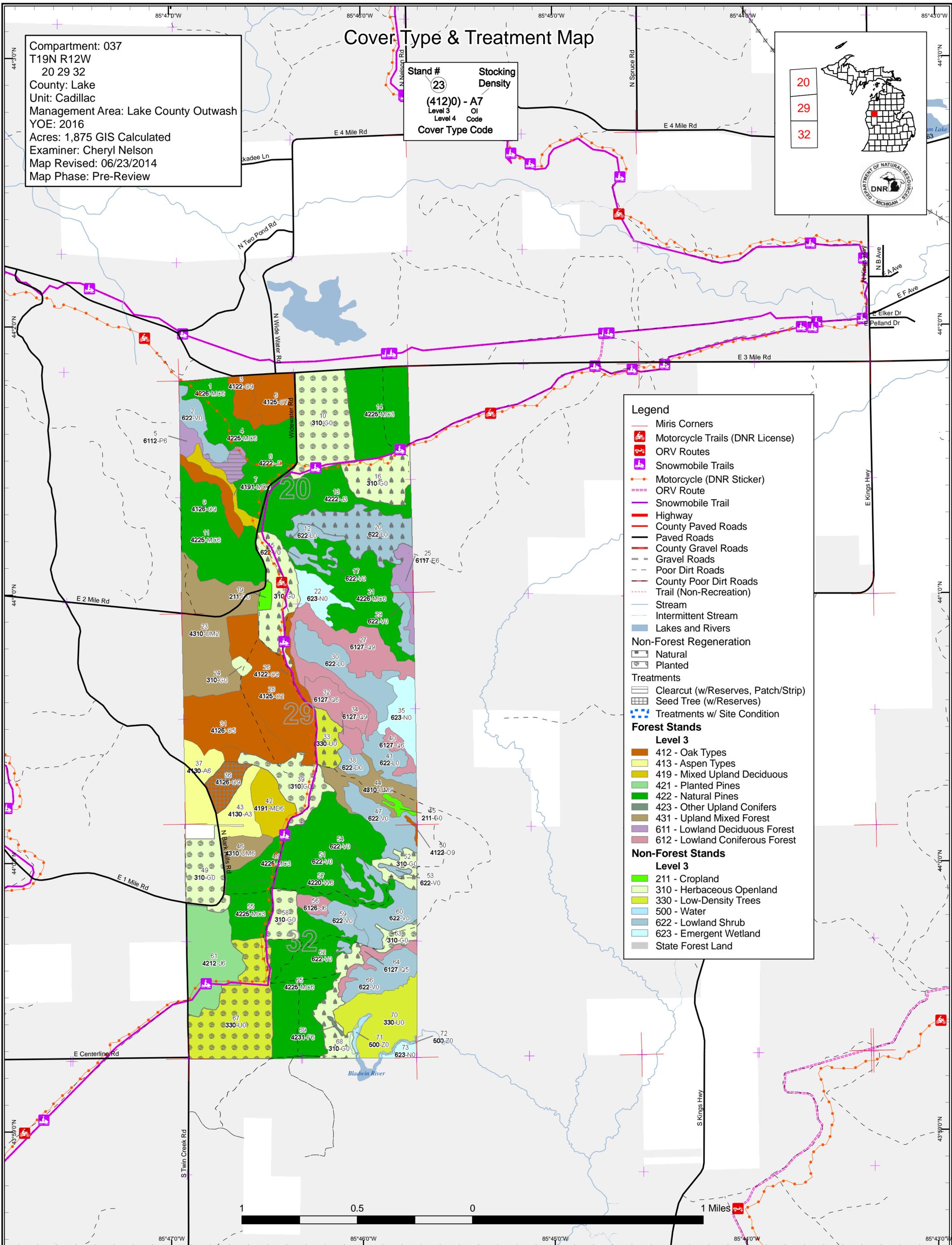
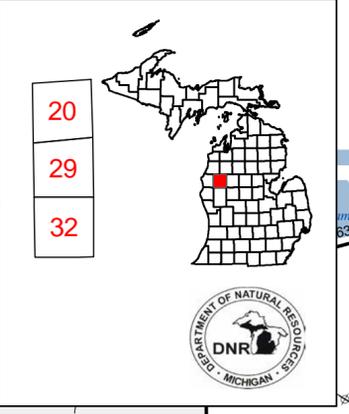
The following information is displayed, where pertinent, on the attached compartment maps:

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

Cover Type & Treatment Map

Compartment: 037
 T19N R12W
 20 29 32
 County: Lake
 Unit: Cadillac
 Management Area: Lake County Outwash
 YOE: 2016
 Acres: 1,875 GIS Calculated
 Examiner: Cheryl Nelson
 Map Revised: 06/23/2014
 Map Phase: Pre-Review

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



Legend

- Miris Corners
- Motorcycle Trails (DNR License)
- ORV Routes
- Snowmobile Trails
- Motorcycle (DNR Sticker)
- ORV Route
- 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)
- Seed Tree (w/Reserves)
- Treatments w/ Site Condition

Forest Stands

Level 3

- 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

Non-Forest Stands

Level 3

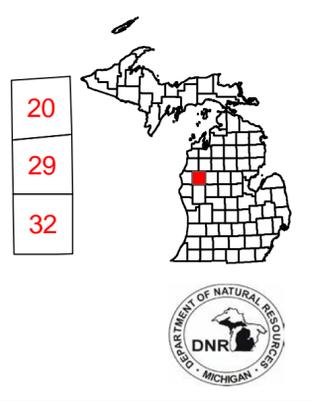
- 211 - Cropland
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- State Forest Land



Stand Boundary Map

Compartment: 037
 T19N R12W
 20 29 32
 County: Lake
 Unit: Cadillac
 Management Area: Lake County Outwash
 YOE: 2016
 Acres: 1,875 GIS Calculated
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Stand #
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Stocking Density
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Legend

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- Stand Boundaries
- Stream
- Intermittent Stream

Forest Stands

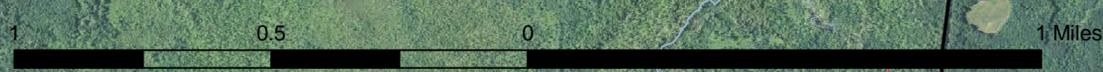
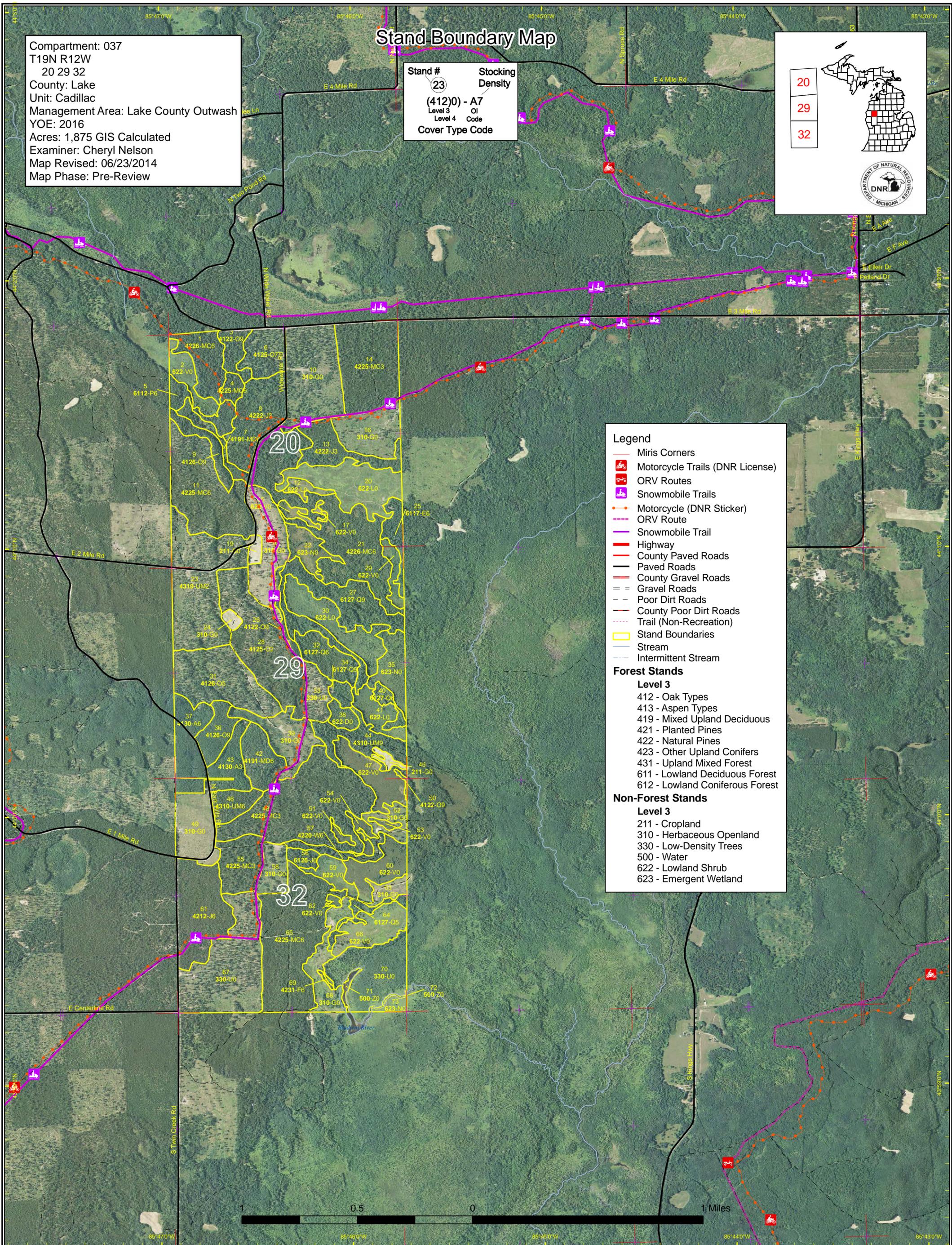
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Non-Forest Stands

Level 3

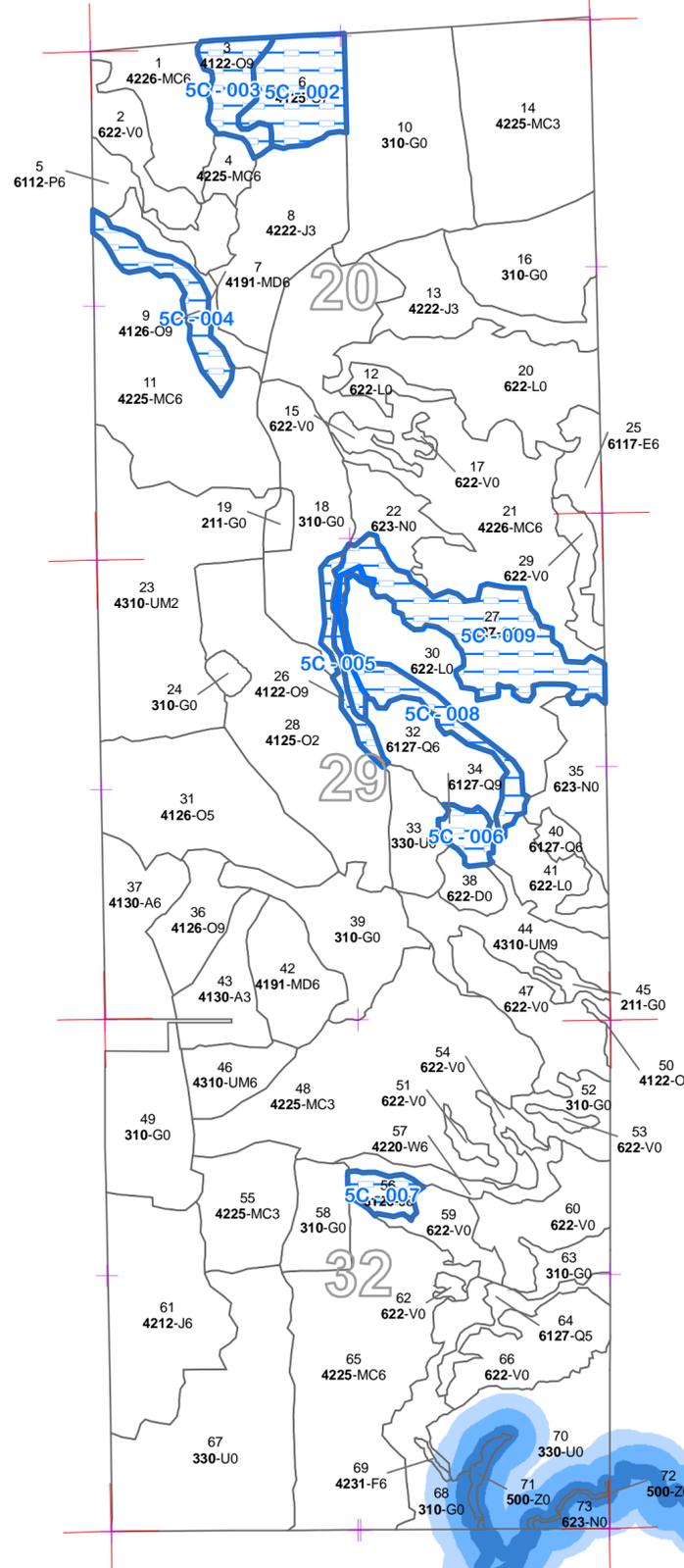
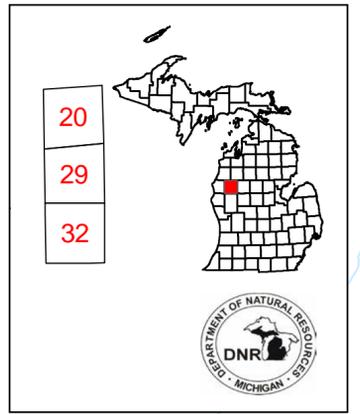
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Special Conservation Areas & Site Conditions Map

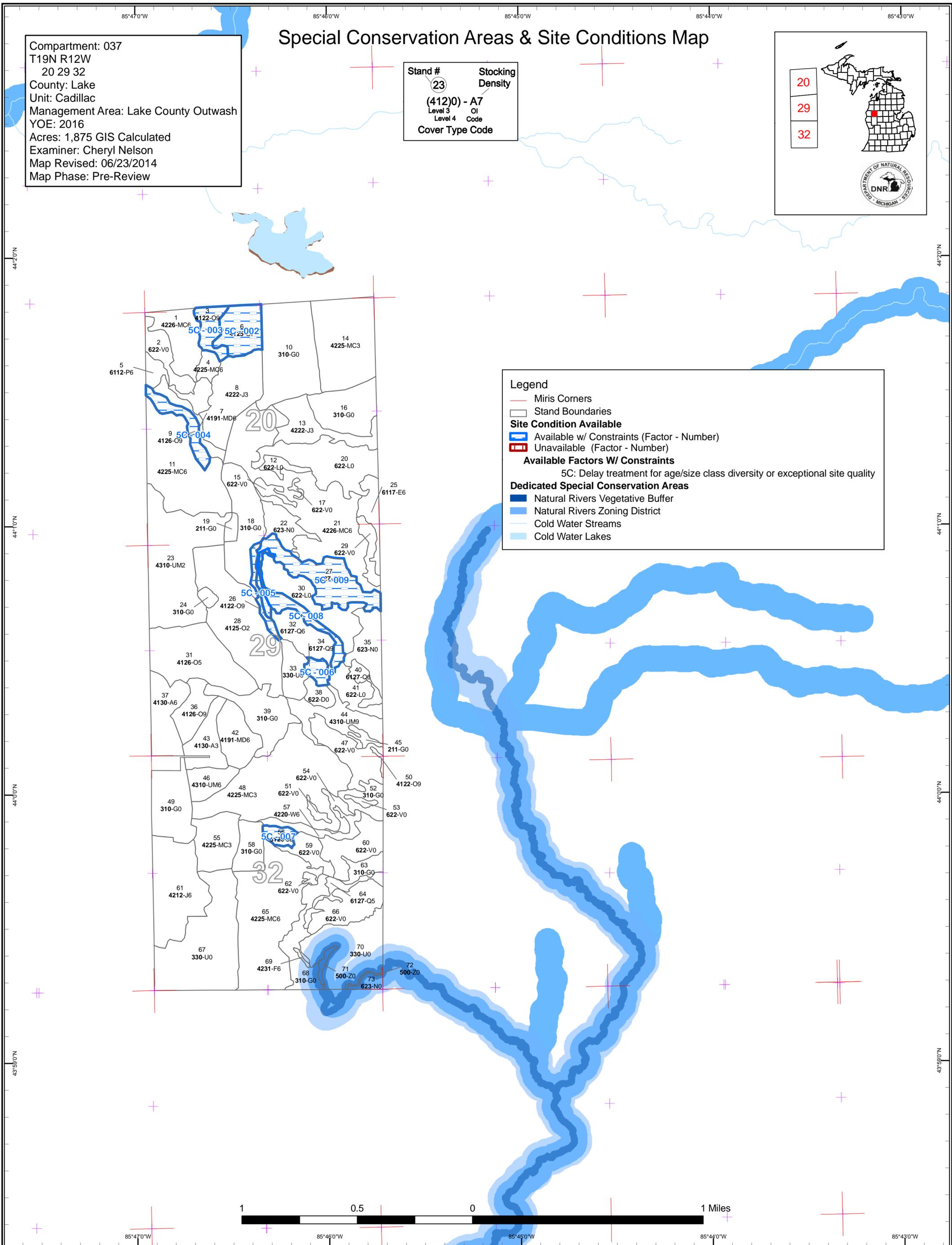
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 Map Revised: 06/23/2014
 Map Phase: Pre-Review

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



Legend

- Miris Corners
- Stand Boundaries
- Site Condition Available**
 - Available w/ Constraints (Factor - Number)
 - Unavailable (Factor - Number)
- Available Factors W/ Constraints**
 - 5C: Delay treatment for age/size class diversity or exceptional site quality
- Dedicated Special Conservation Areas**
 - Natural Rivers Vegetative Buffer
 - Natural Rivers Zoning District
 - Cold Water Streams
 - Cold Water Lakes



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	0	0	49	0	0	0	0	0	0	0	0	0	0	49
Bog	133	0	0	0	0	0	0	0	0	0	0	0	0	0	133
Cropland	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Herbaceous Openland	263	0	0	0	0	0	0	0	0	0	0	0	0	0	263
Jack Pine	0	0	126	0	0	0	6	0	0	0	0	0	0	0	132
Low-Density Trees	144	0	0	0	0	0	0	0	0	0	0	0	0	0	144
Lowland Aspen/Balsam Poplar	0	0	0	15	0	0	0	0	0	0	0	0	0	0	15
Lowland Conifers	0	0	0	0	0	15	22	0	59	0	0	0	0	0	97
Lowland Deciduous	0	0	0	0	0	0	13	0	0	0	0	0	0	0	13
Lowland Shrub	104	0	0	0	0	0	0	0	0	0	0	0	0	0	104
Marsh	42	0	0	0	0	0	0	0	0	0	0	0	0	0	42
Mixed Upland Deciduous	0	0	0	23	0	0	0	0	10	0	0	0	0	0	33
Natural Mixed Pines	0	201	166	98	0	0	27	0	0	0	0	0	0	0	493
Oak	0	74	0	0	0	0	0	0	75	54	0	0	0	0	204
Treed Bog	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Upland Mixed Forest	84	0	0	14	0	0	0	26	0	0	0	0	0	0	124
Upland Spruce/Fir	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Water	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
White Pine	0	0	0	0	0	11	0	0	0	0	0	0	0	0	11
Total	788	275	292	200	0	26	68	26	145	54	0	0	0	0	1875



Report 2 – Proposed Treatment Summaries

Cadillac Mgt. Unit
Year of Entry 2016

Compartment 037
Total Compartment Acres: 1,875

Acres by Treatment Type

Commercial Harvest - 22	Tree Planting - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 7	

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>
Lowland Deciduous Forest	8	0	0	0	0	0	8
Oak Types	0	0	15	0	0	0	15
Total	8	0	15	0	0	0	22



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
5	63037005-Cut	7.6	6112 - Lowland Aspen	High Density Pole	38	1-50	Harvest	Clearcut with Reserves	6112 - Lowland Aspen	Cmpt. Review Proposal

Prescription Cut all aspen and red maple. Use Grouse Spec. 5.2.4.4 - Leave one, 8" diameter or larger log-length (8 foot minimum) piece on the ground for every 2 acres, also leave at least six (6) large tops in a single pile and at least one pile per acre. Keep the boundary to the south of the ORV Trail. Use the area between the boundary line and the ORV Trail as retention.

Other Commercial or Habitat cut.

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015

36	63037036-Cut	14.6	4126 - White, Black, N. Pin Oak	High Density Log	85	111-140	Harvest	Seed Tree with Reserves	4129 - Mixed Oak	Cmpt. Review Proposal
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Prescription Cut all species. Mark to leave a mix of species averaging 20-30 BA. Use Grouse Spec. 5.2.4.4 - Leave one, 8" diameter or larger log-length (8 foot minimum) piece on the ground for every 2 acres, also leave at least six (6) large tops in a single pile and at least one pile per acre. Focus retention along Bark Hills Road. Acceptable regen is a mix of upland deciduous species.

Other

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015

19	NF_63037019- NonFor	3.7	2113 - Forage Crops				Non-Forest Management	Other - Specify	310 - Herbaceous Openland	Cmpt. Review Decision - Incomplete
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Prescription General habitat manipulation for non-forested, herbaceous type. Treatments may include manual or mechanical removal/manipulation of woody plants, prescribed fire, use of herbicides, tillage, and planting herbaceous and or mast producing plants.

Other

Comments:

Next

Steps:

Proposed

Start Date: Unspecified

24	NF_63037024- NonFor	3.2	31021 - Cool Season Grass				Non-Forest Management	Other - Specify	310 - Herbaceous Openland	Cmpt. Review Decision - Incomplete
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Prescription General habitat manipulation for non-forested, herbaceous type. Treatments may include manual or mechanical removal/manipulation of woody plants, prescribed fire, use of herbicides, tillage, and planting herbaceous and or mast producing plants.

Other

Comments:

Next

Steps:

Proposed

Start Date: Unspecified

**Total Treatment
Acreage Proposed: 29.1**



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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
Cheryl Nelson : Examiner

Compartment 037
Year of Entry 2016

Availability for Management

Availability for Management			Dominant Site Conditions		
Total Acres	Acres Available	Acres Not Available			
			No	5C	
49	49		Aspen	49	
132	132		Jack Pine	126	6
15	15		Lowland Aspen/Balsam Poplar	15	
96	96		Lowland Conifers	37	59
13	13		Lowland Deciduous	13	
33	33		Mixed Upland Deciduous	33	0
493	493		Natural Mixed Pines	492	0
204	204		Oak	149	54
124	124		Upland Mixed Forest	124	
1	1		Upland Spruce/Fir	1	
11	11		White Pine	11	
1,170	1,170		Total Forested Acres	1,050	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	23				
Comments:							
003	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	13				
Comments:							

Report 5 – Site Conditions

Cadillac Mgt. Unit
Cheryl Nelson : Examiner

Compartment 037
Year of Entry 2016

004	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	13
Comments:			
005	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6
Comments:			
006	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6
Comments:			
007	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6
Comments:			
008	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14
Comments:			
009	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	41
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 Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.
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.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42260 - Natural Pine, Mixed Deciduous	High Density Pole	26.9	65	81-110	W6 stand with both pockets and individually scattered oak and red maple. Few overstory red and white pine approximately 20" DBH and a very small amount of aspen.
3	4122 - Oak, Pine	High Density Log	12.8	94	51-80	Scattered pockets of oak and pine with open areas throughout. Overall a mixed oak and pine stand.
4	42250 - Pine, Oak	High Density Pole	6.4	37	51-80	Stand varies in species densities with scattered pockets throughout. Small amount of aspen not in plots.
5	6112 - Lowland Aspen	High Density Pole	14.5	38	1-50	
6	4125 - Black, N. Pin Oak	Low Density Log	23.2	90	1-50	Stand treated timber sale #63-024-06-01, "Jungle Jack". All oak left in stand. Previous year of origin for treated jack pine was 1954.
7	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	10.0	87	51-80	
8	42221 - Natural Jack Pine, Mixed Deciduous	High Density Sapling	43.2	21	1-50	Stand treated timber sale #63-005-93-01, "Trail Corners Sale". Sale Spec: Do not cut any oak. Leave one mature jack pine every 75', approx. 8 trees per acre.
9	4126 - White, Black, N. Pin Oak	High Density Log	12.8	90	51-80	Ridgetop and north facing slope. Do not treat.
11	42250 - Pine, Oak	High Density Pole	70.2	19	1-50	Stand treated timber sale #63-007-93-01.
13	42220 - Natural Jack Pine	High Density Sapling	27.5	20		Stand treated timber sale #63-005-93-01, "Trail Corners". Cut in 1994.
14	42250 - Pine, Oak	High Density Sapling	62.2	21		Stand treated timber sale #63-002-93-01, "Deer Skull Sale". Cut in 1993. Excellent regen.
21	42260 - Natural Pine, Mixed Deciduous	High Density Pole	104.0	26	1-50	
23	4310 - Pine, Oak Mix	Medium Density	83.6	7		Stand treated timber sale #63-020-06-01, Bark Hills. Cut in 2007. All oak was left. Good regen north of Bark Hills Rd.
25	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	12.6	65	1-50	
26	4122 - Oak, Pine	High Density Log	5.6	95	1-50	Ridge top and side hill. Slopes to lowland.
27	6127 - Lowland Pine	High Density Log	53.5	85	1-50	



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	4125 - Black, N. Pin Oak	Medium Density	74.0	19		Stand treated timber sale #63-012-93-01, "Bear Paw Jack Pine". Sale spec: Cut all jack pine.
31	4126 - White, Black, N. Pin Oak	Medium Density Pole	56.9	81	1-50	Stand treated timber sale #63-063-07-01, The Bark Boot. Cut in 2009. Jack pine regeneration is low.
32	6127 - Lowland Pine	High Density Pole	22.3	60	1-50	
34	6127 - Lowland Pine	High Density Log	5.8	85	1-50	
36	4126 - White, Black, N. Pin Oak	High Density Log	17.5	85	111-140	Moderate amount of smaller, suppressed oak.
37	4130 - Aspen	High Density Pole	28.0	39	1-50	Previous inventory listed treatment in 1975 however, paperwork could not be found.
40	6127 - Lowland Pine	High Density Pole	6.7	50		
42	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	23.2	30	1-50	Previous inventory shows a treatment for stand in 1984. Current tree core confirms this age.
43	4130 - Aspen	High Density Sapling	20.8	31	1-50	Stand treated timber sale #63-011-83-01, "Barkhill Oak". Cut in 1983.
44	4310 - Pine, Oak Mix	High Density Log	26.4	75	51-80	Some low, wet areas in stand.
46	4310 - Pine, Oak Mix	High Density Pole	14.5	31	1-50	Stand treated timber sale #63-011-83-01, "Barkhill Oak". Cut in 1983.
48	42250 - Pine, Oak	High Density Sapling	103.7	18		Stand treated timber sale #63-018-93-01, "Flying MJP". Cut in 1996.
50	4122 - Oak, Pine	High Density Log	1.0	85		Upland ridge.
55	42250 - Pine, Oak	High Density Sapling	27.5	18		Stand treated timber sale #63-018-93-01, "Flying MJP". Cut in 1996.
56	6126 - Lowland Jack Pine	High Density Pole	6.4	65	1-50	
57	42200 - Natural White Pine	High Density Pole	11.1	52	1-50	Upland ridge of white pine pulpwood with some mature oak, white, red, and jack pine. Do not treat for age class and species diversity.
61	42121 - Planted Jack Pine, Mixed Deciduous	High Density Pole	55.2	29	1-50	Stand planted per FTP #C63-231, 1985. Wildfire burned through area in 1981 (exact location not known).

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Cadillac Mgt. Unit

Report 8 – Forested Stands

Compartment: 037
Year of Entry: 2016

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
64	6127 - Lowland Pine	Medium Density Pole	8.4	55	1-50	Stand in good condition. Small amount of jack pine falling out of stand.
65	42250 - Pine, Oak	High Density Pole	91.9	35	1-50	Stand trenched and planted to jack pine per FTP #C63-17 in 1979. Jack pine sizes and densities vary somewhat throughout stand. Stand mostly small pole with some large diameters in more open areas.
69	42310 - Planted Spruce	High Density Pole	0.8	32	1-50	Stand planted to white spruce per FTP #W63-185 in 1982. Stand is slightly upland but surrounded by lowland areas.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	6225 - Bog	15.3	Unspecified	Unspecified	
10	3105 - Mixed Upland Herbaceous	63.2	Plantation	Jack Pine	Stand planted to jack pine per FTP #C63-704 in 2011. Stand treated timber sale "63-024-06-01, "Jungle Jack". Treated in 2009. Specs read: Do not cut oak and green painted trees. Good amount of seedling jack pine and oak. Oak stump sprouts. Overstory oak from treatment.
12	6229 - Mixed lowland shrub	6.0	No	Unspecified	
15	6225 - Bog	4.7	No	Unspecified	
16	3105 - Mixed Upland Herbaceous	32.8	Natural Regen	Jack Pine	Stand treated timber sale #63-024-006-01, "Jungle Jack". Sale specs: Do not cut any oak greater than 10" DBH. Do not cut any green painted trees. Jack pine in overstory is falling out. Occasional black oak log.
17	6225 - Bog	1.4	No	Unspecified	
18	3105 - Mixed Upland Herbaceous	38.8	Natural Regen	Oak	Stand treated timber sale #63-007-11-01, "Little M Jack". Cut in 2011. Cut all trees except oak 10" DBH and greater. Do not cut green painted trees. Good amount of oak seedlings above snow. Occasional overstory jack pine.
19	2113 - Forage Crops	3.7	Unspecified	Unspecified	
20	6229 - Mixed lowland shrub	45.4	Natural Regen	Jack Pine	Stand treated timber sale #63-039-06-01, Skeeter Holler. Cut in 2009.
22	6230 - Cattail	16.0	No	Unspecified	Lowland complex comprised of cattails, tag alder, leatherleaf, and scattered conifer trees.
24	31021 - Cool Season Grass	3.2	Unspecified	Unspecified	
29	6225 - Bog	8.7	No	Unspecified	
30	6229 - Mixed lowland shrub	36.6	No	Unspecified	Lowland complex comprised of cattails, tag alder, leatherleaf, and scattered conifer trees.
33	3301 - Low Density Deciduous Tree	14.8	Natural Regen	Jack Pine	Stand treated timber sale #63-007-11-01, "Little M Jack". Cut in 2011. Sale specs: Do not cut any green painted trees and do not cut any oak. Overstory oak approximately 8-9" DBH.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
35	6230 - Cattail	21.4	No	Unspecified	Lowland complex comprised of cattails, leatherleaf, mixed shrubs, and scattered deciduous and coniferous tree species.
38	6224 - Treed Bog	7.5	No	Unspecified	Leatherleaf bog with scattered white pine, occasional black spruce.
39	3105 - Mixed Upland Herbaceous	31.2	Plantation	Oak	Regen looks good. Trenched and planted red pine using 75% oak weave per FTP #C63-707. Stand treated timber sale #63-004-07-01, "Trouble Shooting Oak". Cut in 2010. Cut all trees except oak 4.5" DBH and under. Do not cut any green painted trees.
41	6229 - Mixed lowland shrub	16.5	No	Unspecified	
45	2113 - Forage Crops	3.4	Yes	High	Maintained Wildlife opening.
47	6225 - Bog	26.4	No	Unspecified	
49	3105 - Mixed Upland Herbaceous	33.3	Plantation	Red Pine	Stand treated timber sale #63-022-10-01, "Little M Jack". Cut in 2011.
51	6225 - Bog	2.6	No	Unspecified	
52	3105 - Mixed Upland Herbaceous	11.4	Natural Regen	Oak	Regen looks good. Trenched and planted red pine using 75% oak weave per FTP #C63-707. Stand treated timber sale #63-004-07-01, "Trouble Shooting Oak". Cut in 2010. Sale specs: Do not cut any oak 4.5" DBH and smaller. Do not cut any green painted trees.
53	6225 - Bog	2.2	No	Unspecified	
54	6225 - Bog	5.9	No	Unspecified	
58	3105 - Mixed Upland Herbaceous	15.9	Plantation	Jack Pine	Regen looks good. Trenched and planted jack pine per FTP #C63-708 in 2010. Stand treated timber sale #63-017-06-01, "Furrows and Feathers". Cut in 2009. Sale specs: Do not cut any green painted trees. Do not cut any oak.
59	6225 - Bog	12.0	No	Unspecified	Leatherleaf, cattails, and shrubs.
60	6225 - Bog	25.1	No	Unspecified	Leatherleaf bog with some areas of white pine and spruce.
62	6225 - Bog	1.6	No	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
63	3105 - Mixed Upland Herbaceous	8.2	Plantation	White Pine	Stand treated timber sale #63-032-06-01, "Springtime Pine & Aspen". Cut in 2011.
66	6225 - Bog	26.7	No	Unspecified	Leatherleaf bog with cattails, shrubs, and a small patch of open water.
67	3301 - Low Density Deciduous Tree	80.0	Plantation	Jack Pine	Stand trenched and planted to jack pine per FTP #C63-708 in 2010. Stand treated per timber sale #63-017-06-01, "Furrows & Feathers". Cut in 2009. Sale specs: Do not cut any green ringed trees. Do not cut oak.
68	3102 - Grass	24.5	Natural Regen	White Pine	Stand treated timber sale #63-032-06-01, "Springtime Pine & Aspen". Cut in late December of 2010.
70	3303 - Mixed Low Density Trees	49.5	No	Unspecified	Lowland complex comprised of cattails, leatherleaf, mixed shrubs, and scattered deciduous and coniferous tree species.
71	50 - Water	2.5	No	Unspecified	
72	50 - Water	1.1	No	Unspecified	
73	6230 - Cattail	4.4	No	Unspecified	Lowland complex comprised of cattails, leatherleaf, and mixed shrubs.