

Compartment Review Presentation

Cadillac Forest Management Unit

Compartment 63026 Entry Year 2017 Acreage: 2,438 County Lake

Management Area: Lake County Outwash

Revision Date: 2015-06-12

Stand Examiner: Cheryl Nelson

Legal Description:

T18N R12W sections 18, 30-32

T18N R13W sections 13-15, 22-26, 35, 36

Identified Planning Goals:

Vegetation management 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 use.

Soil and topography:

Graycalm-Grayling sands: Nearly level to moderately steep, excessively drained Grayling soils and somewhat excessively drained Graycalm soils on outwash plains, till plains, and low moraines. Kalkaska: Nearly level to steep, somewhat excessively drained and well drained sandy soils on outwash plains, till plains, and moraines. Both the Graycalm-Grayling sands and the Kalkaska soils are located throughout the compartment. Tawas-Croswell-Lupton: Nearly level and undulating, very poorly drained and moderately well drained mucky and sandy soils in bogs, depressions, and drainage ways and on low flats and benches. This soil complex is located in the southern part of the compartment.

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

Blocks of state ownership widely divided by private lots and acreages.

Unique Natural Features:

This area includes Bray Lake, Big Leverentz Lake, and Little Leverentz Lake. The Baldwin River, Cole Creek, Sanborn Creek, and Bray Creek flow through the compartment. The Michigan Natural Features Inventory lists the following as occurring/having occurred in the compartment: Spotted turtle, Eastern box turtle, Karner blue butterfly, Great Plains spittlebug, Massasauga rattlesnake, Oak-pine barrens, Hill's thistle, Alleghany plum, and Bog bluegrass. The compartment has the potential for the Persius duskywing, Frosted elfin, Dusted skipper, Grizzled skipper, red legged spittlebug, Pine tree cricket, Great blue heron rookery, Rough fescue, Pale agoseris, and Prairie smoke.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

Maintain BMP's along rivers and streams.

Watershed and Fisheries Considerations:

Bray Creek, Leverentz Creek, Sanborn Creek and the Baldwin River all lie within this compartment and are designated tributaries to the Pere Marquette River, a state natural river. Also within the compartment are Bray Lake, Big and Little Leverentz Lakes, and Whelan Lake. Under the natural river zoning rules, a vegetative buffer of 75 feet along the Baldwin River and 50 feet along the tributaries is maintained. Any cutting within this area requires a permit from the river zoning administrator, Dan Pearson. Fisheries Division requests a 100 foot buffer be maintained on all of the listed water bodies.

Wildlife Habitat Considerations:

This compartment falls within the Newaygo Outwash Plain Ecosystem. Historically, regenerating the oak component has been a problem. The river and creek corridors provide valuable habitat to bobcat and bear. Featured species of special interest are eastern massasauga rattlesnake, deer, turkey, woodcock, and bear. Timber sale specifications to benefit wildlife (where applicable) will include brush pile creation along lowland edges, protection of mast-bearing wildlife shrubs and ironwood, protection of standing dead snags, and creation of drumming logs (1-2 per acre) and woody debris (tops or whole trees) in aspen cuts. (E. Victory 6/2015)

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift are the Pennsylvanian Saginaw Formation and the Mississippian Bayport Limestone. The Saginaw is quarried for clay/shale products and the Bayport for limestone in other areas of the

State. Gravel pits are located in Section 23 and potential is considered good. The nearest production is at Peacock Field located eight miles to the southwest. The Field produced nearly 1,700,000 BO from the Traverse Limestone. None of the compartment is currently leased for oil and gas exploration.

There is a Michigan-Wisconsin Gas pipeline that runs through the northwest part of the compartment.

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 a variety of recreational opportunities located within this compartment. Bray Creek and Leverentz Lake rustic campgrounds are both located within this compartment. Timber treatments potentially negatively impacting campers should be taken into consideration. Providing a tree'd buffer adjacent to the campground, and harvesting during the winter months are two potential mitigating practices. The Pine Forest, and Sheep Ranch non-motorized pathways are also within this compartment. Trail protection specifications should be included in any timber sale potentially impacting these non-motorized pathways. Specifically, appropriate measures identified in DNR Policy & Procedures "32.22XX" (Best Management Practices for Forest and Wildlife Management Adjacent to Recreation Trails) should be taken into consideration when setting up timber sales. VERIFY LOCATION OF VETERANS PATHWAY (T.M.N. 12/16/14)

Fire Protection:

Fairly good access to the compartment by county and forest roads. Area has numerous urban interface issues with cottages and local campgrounds being mixed throughout the compartment. Wildfire ignitions are a concern.

Additional Compartment Information:

The following reports from the Inventory are attached:

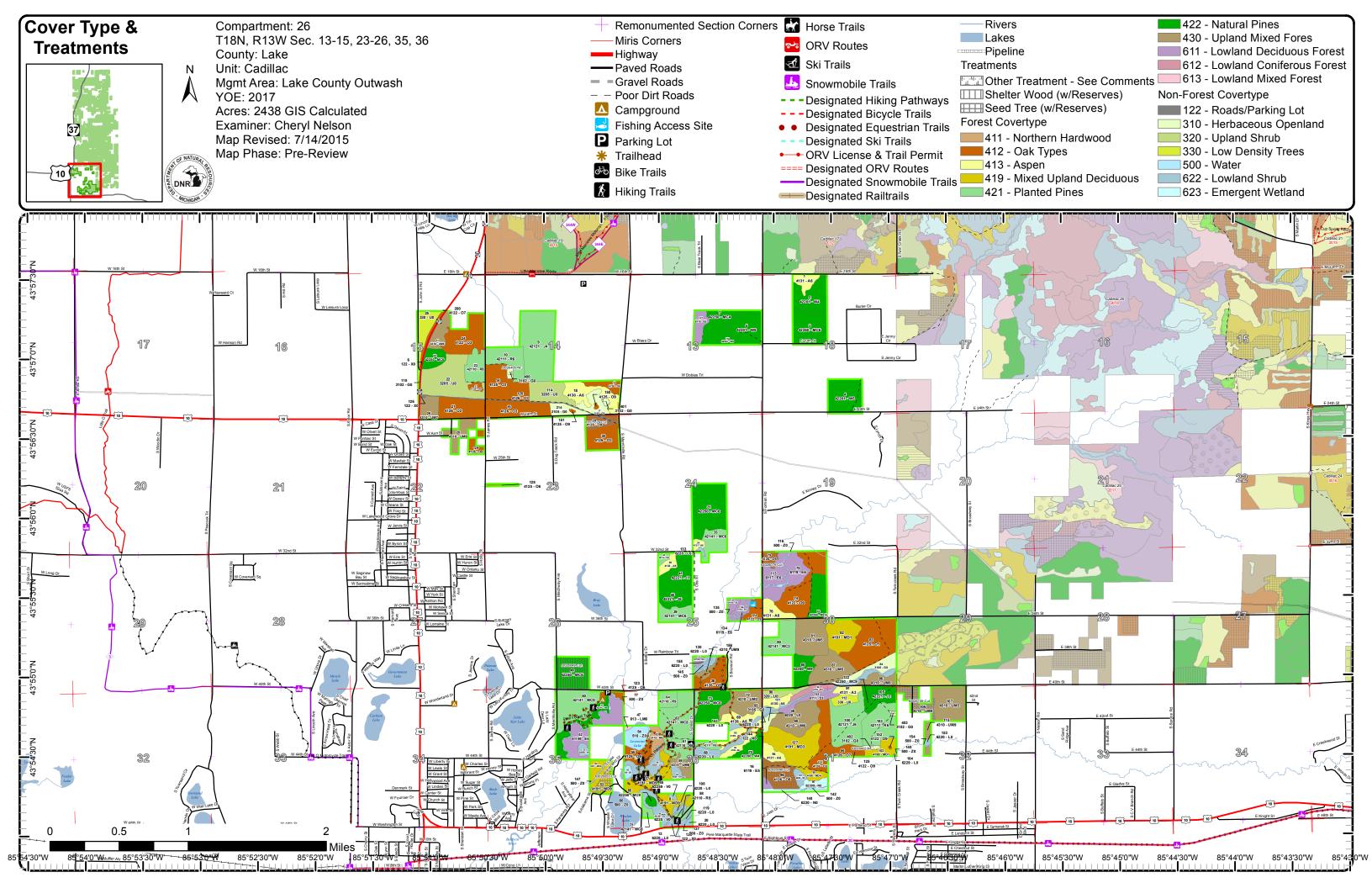
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

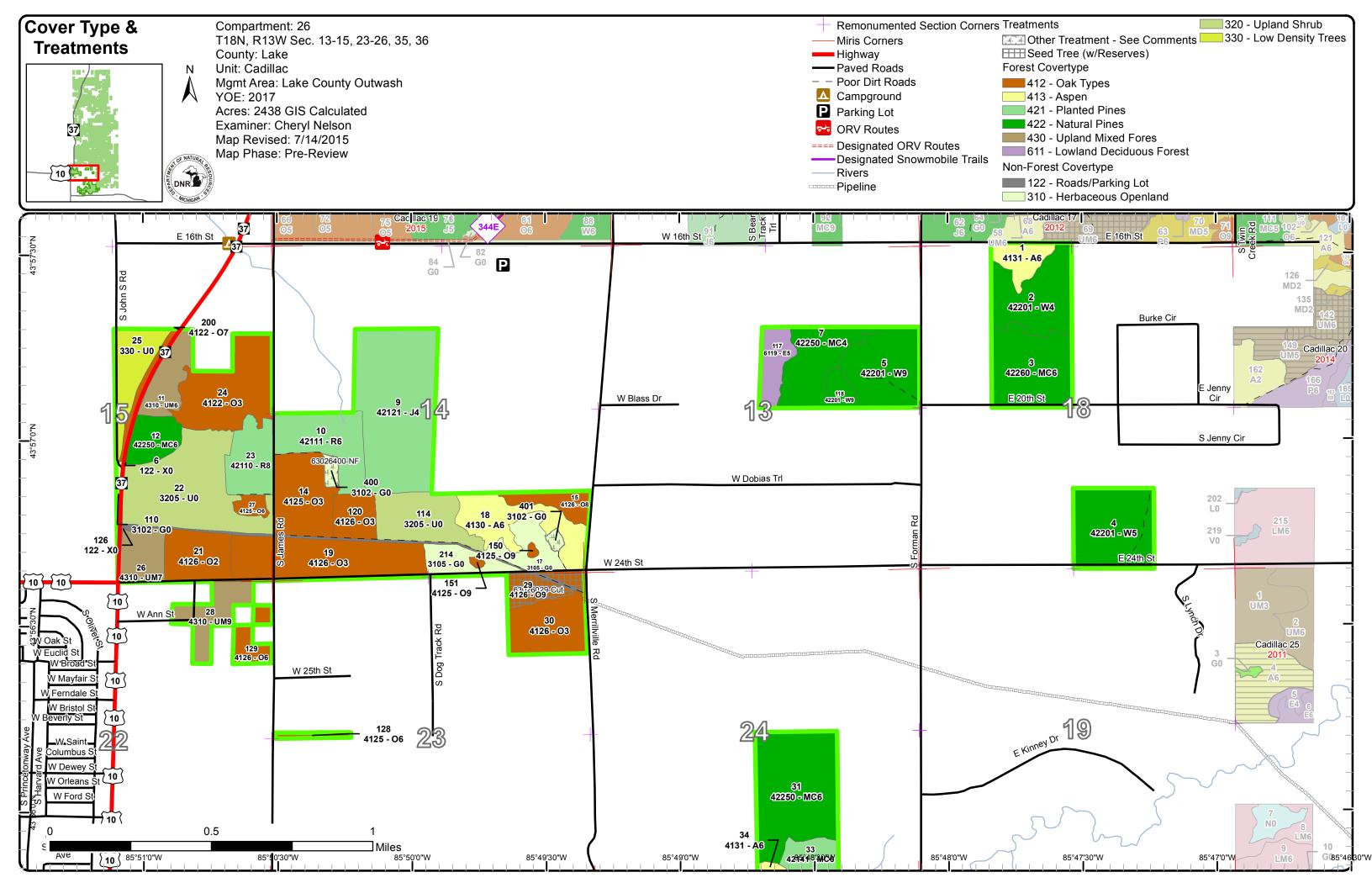
The following information is displayed, where pertinent, on the attached compartment maps:

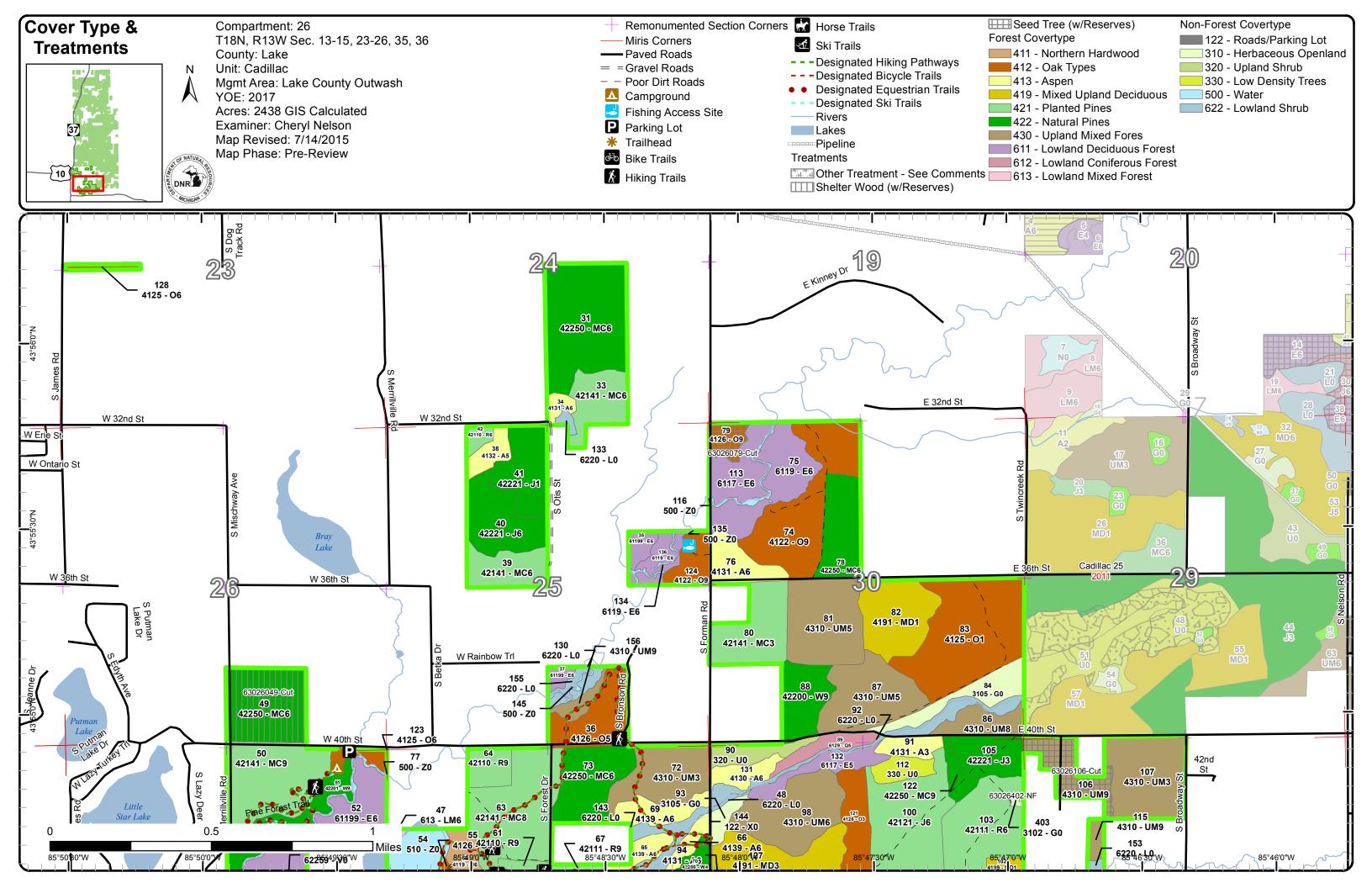
Base feature information, stand boundaries, cover types, and numbers Proposed treatments

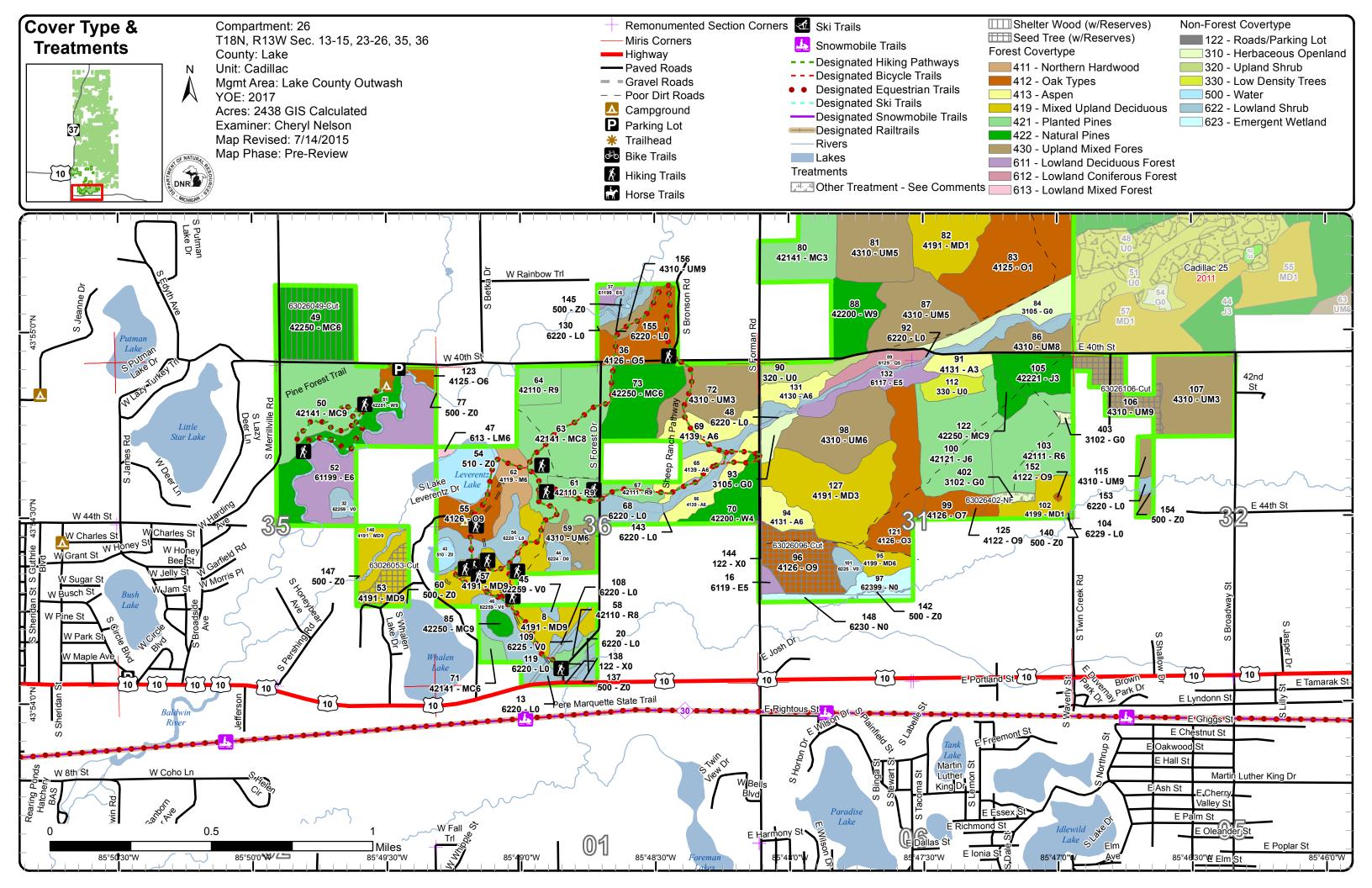
Site condition boundaries

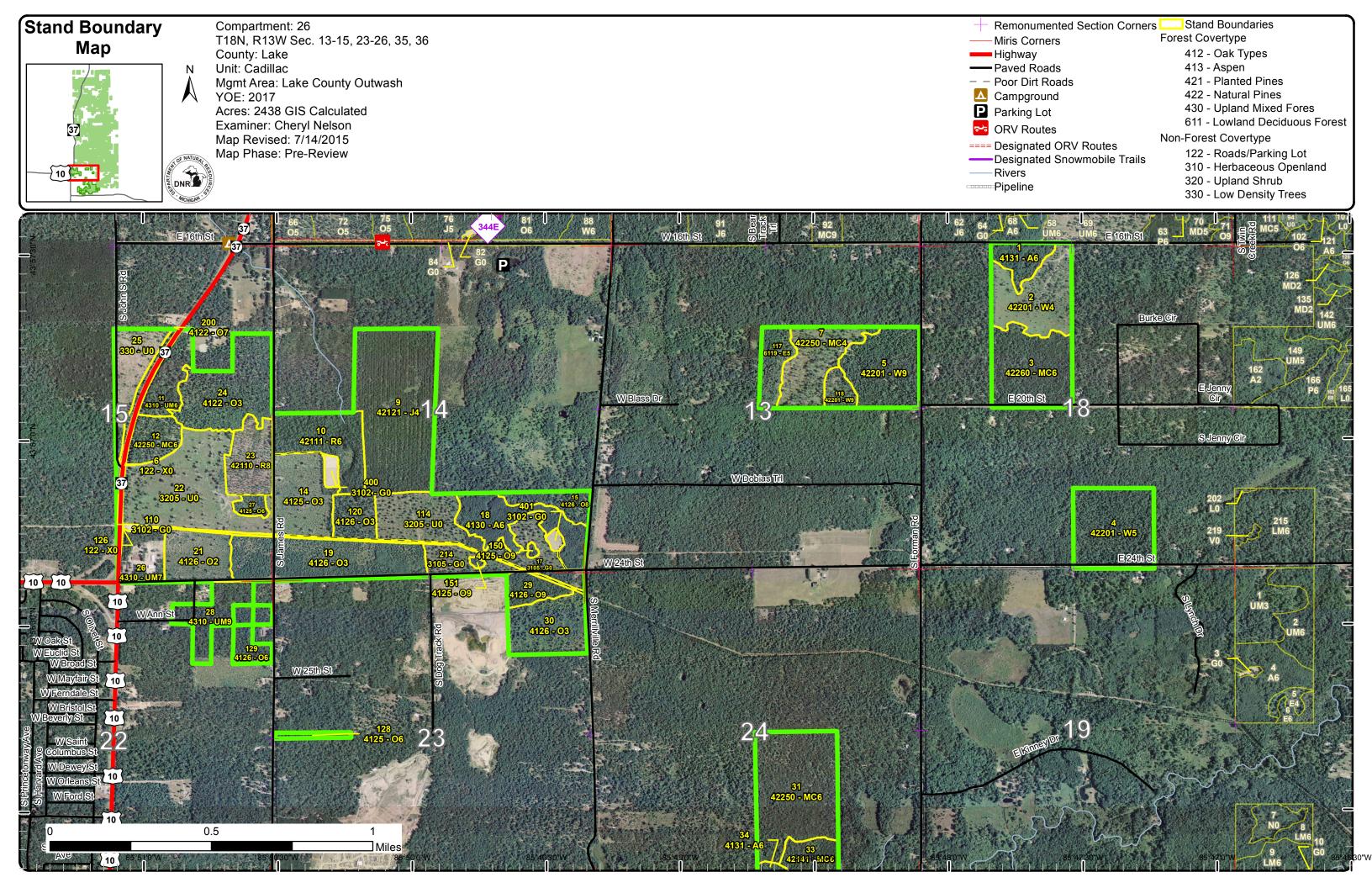
Details on the road access system

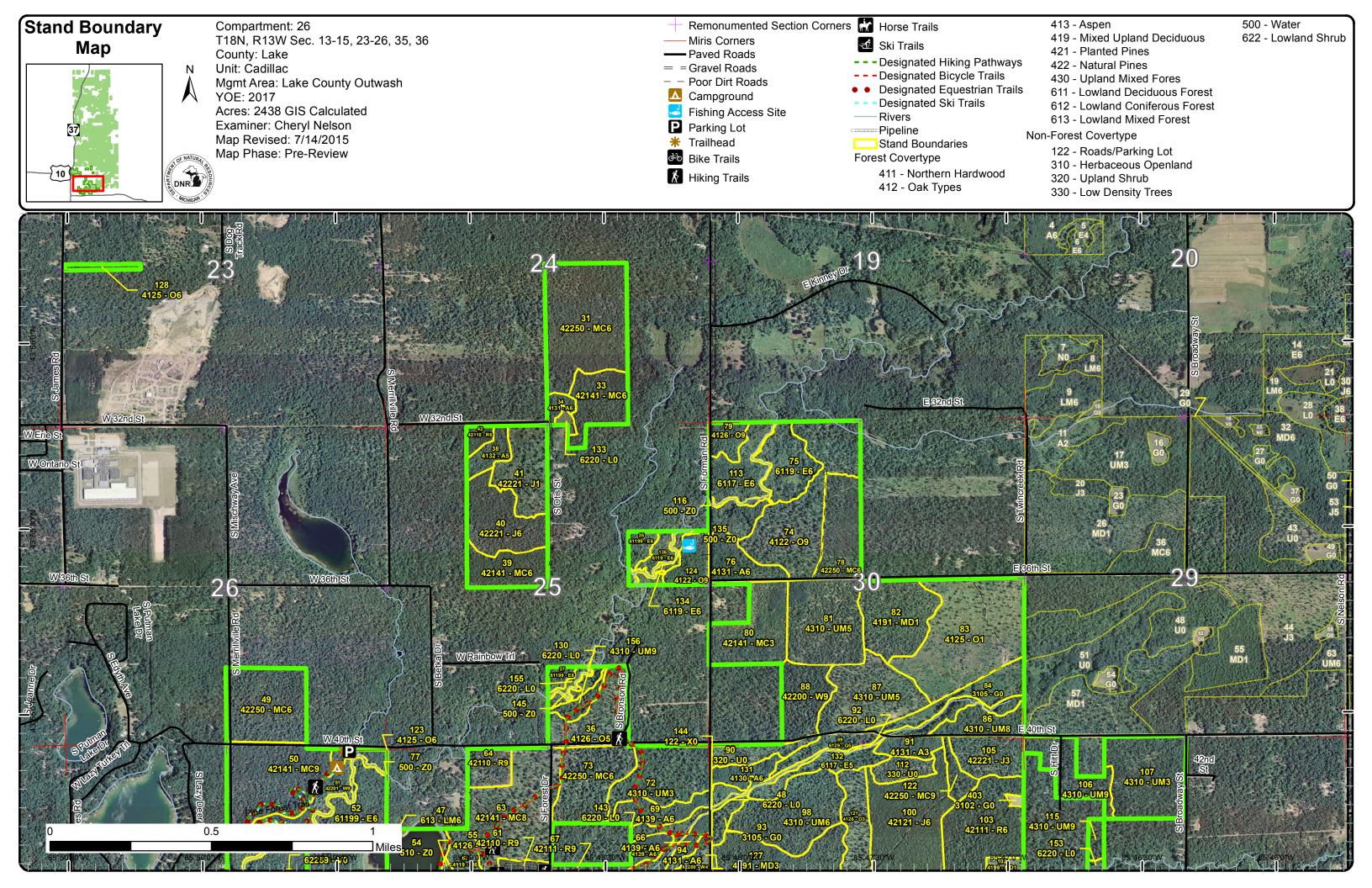


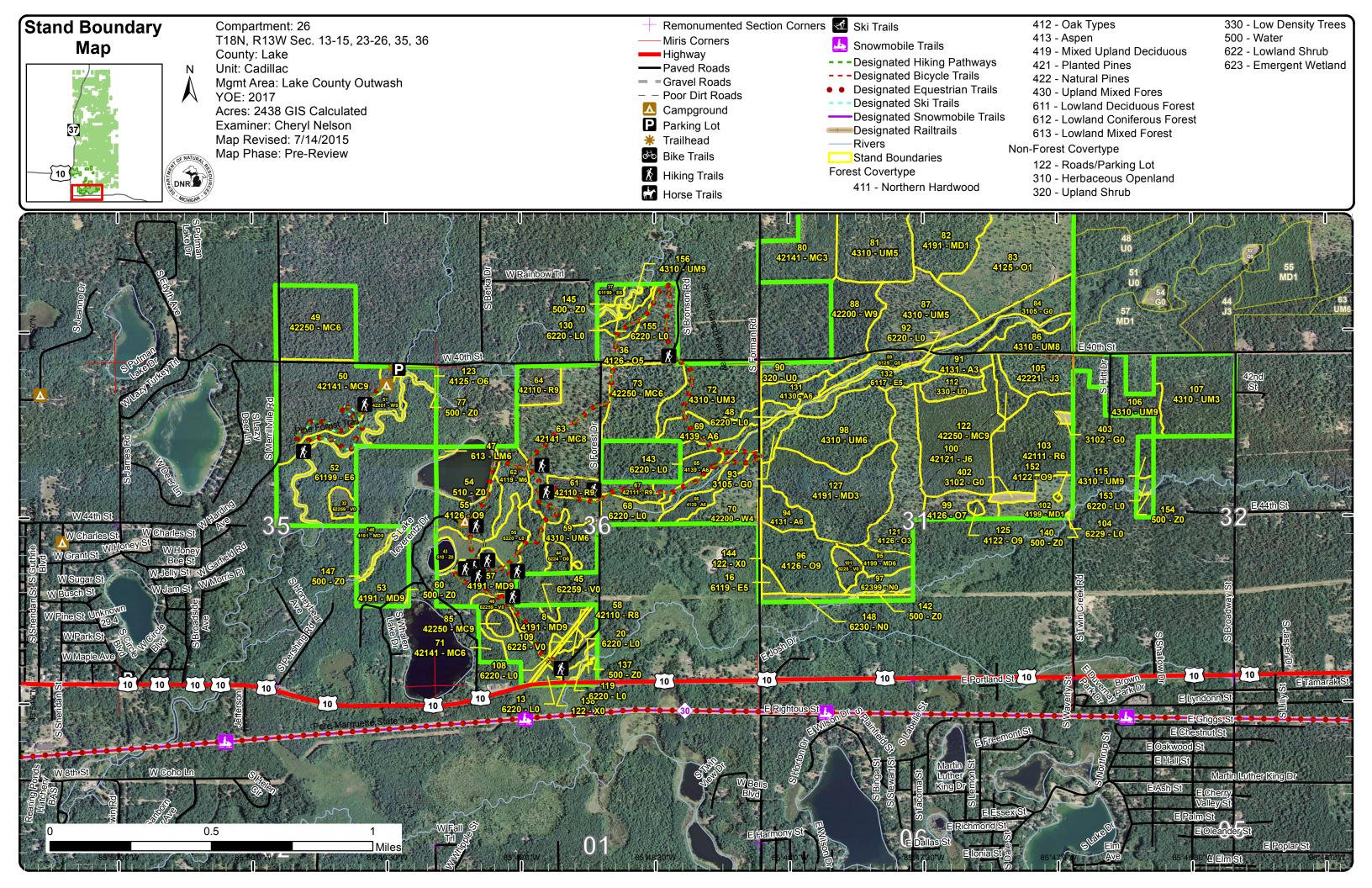


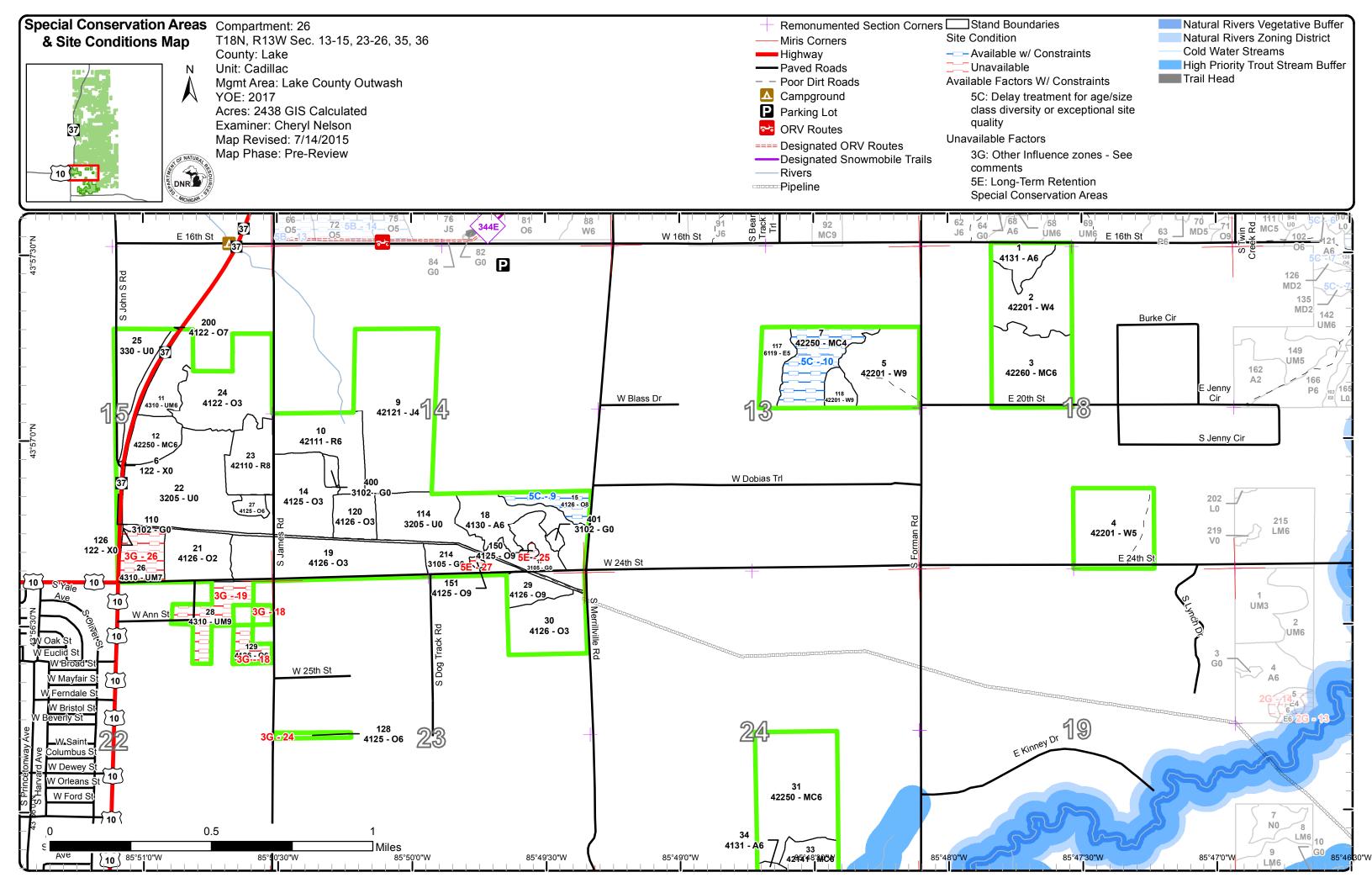


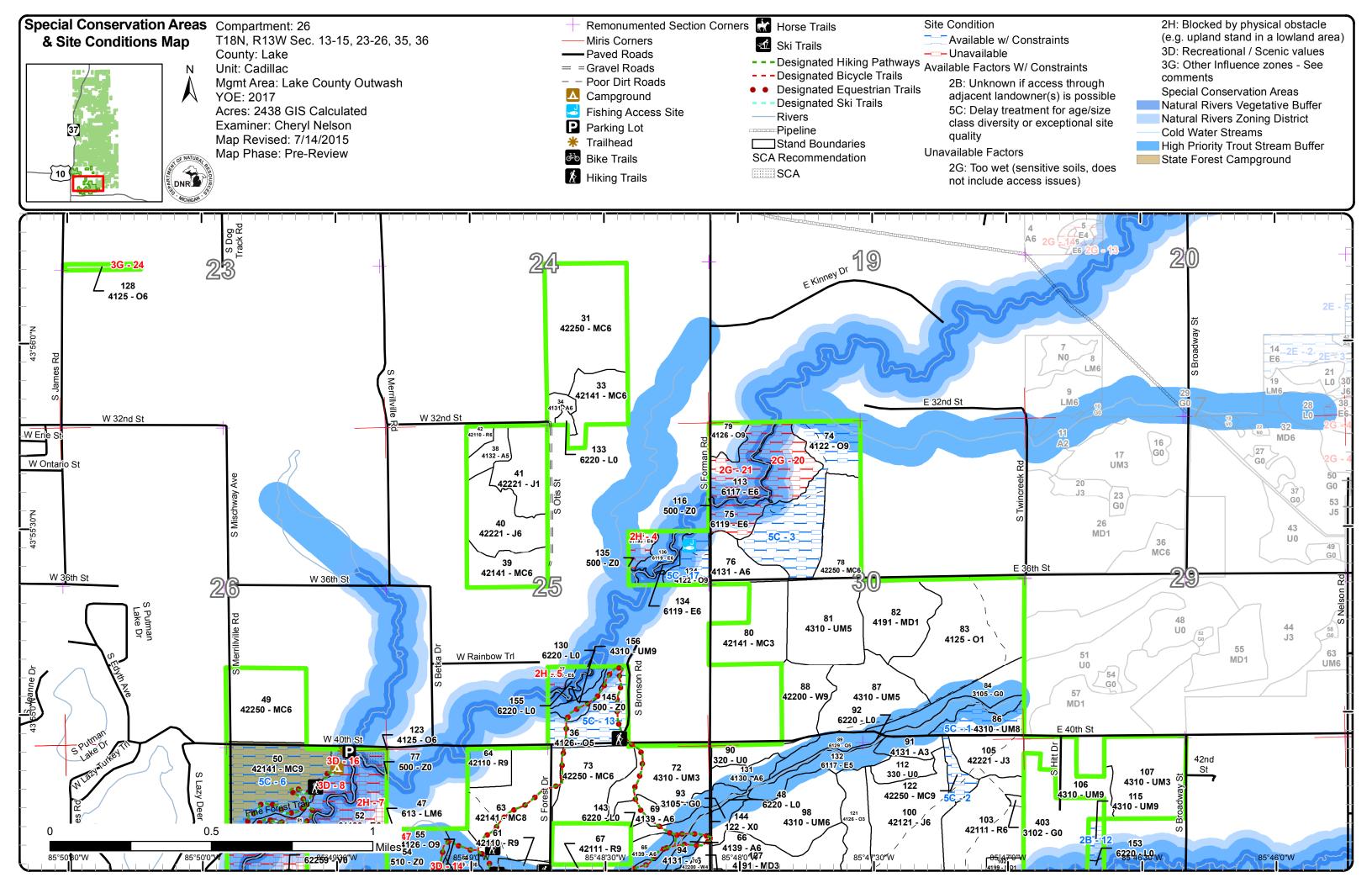


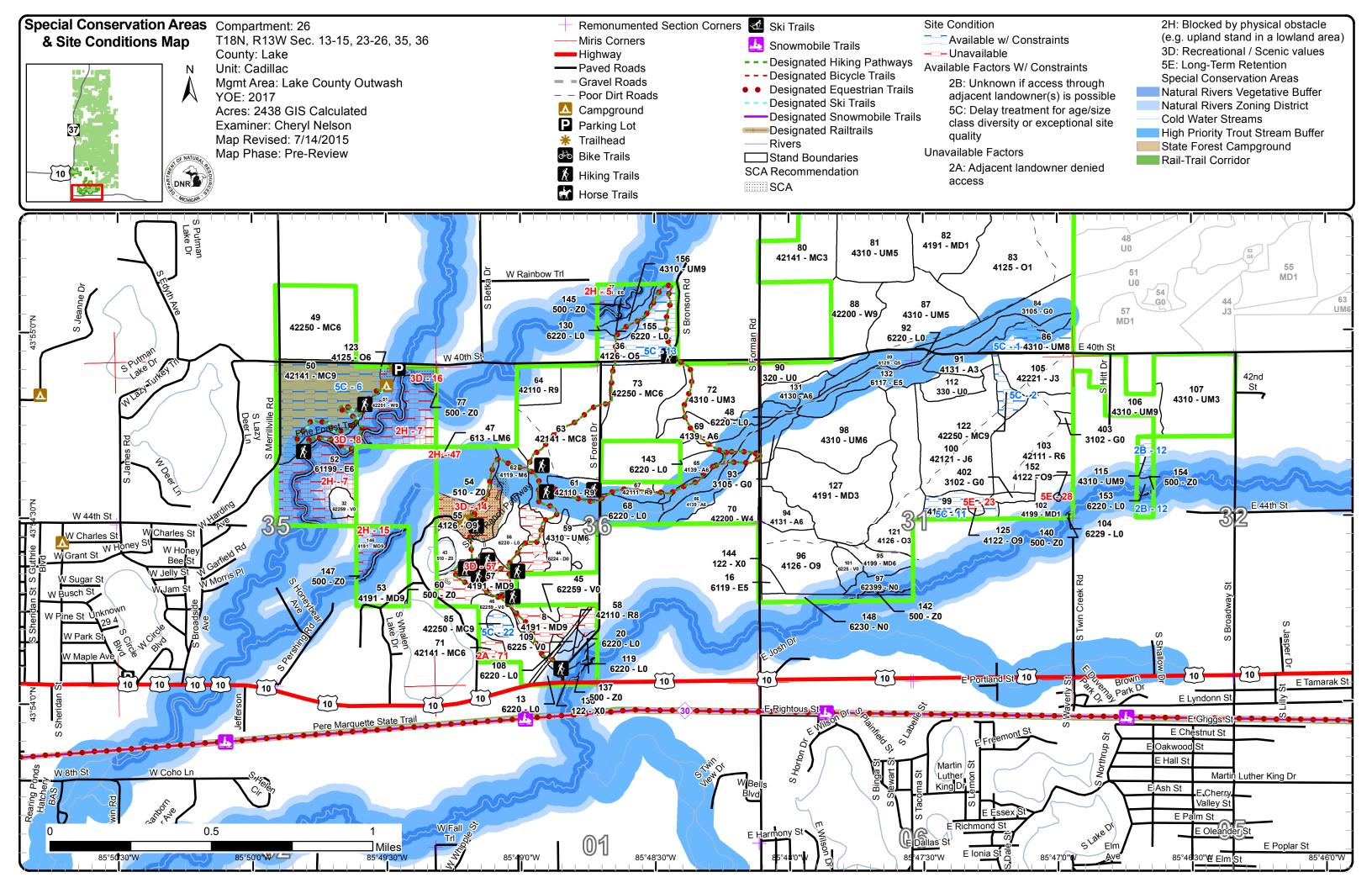












Compartment 26

Year of Entry 2017

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Cadillac Mgt. Unit
Cheryl Nelson : Examiner

Age Class

		LA CONTRACTOR CONTRACT	3 / 5	,	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	8 / 12	r v	, % /		/ % /		, } /	70,	§ / «½	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	/ § /	N. A. A.	* /	N. S.
	\signature		, / &	\$ / %	, \	1 %	, \	/ &	s / ^s	\$ / &	s / &	/%	2 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1.25	\$ 	s / 'r	No.	3 / Jr. 2	
Aspen	0	0	0	31	53	38	0	0	0	0	0	0	0	0	0	0	0	0	122
Bog	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Herbaceous Openland	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
Jack Pine	0	0	40	124	28	0	0	0	0	0	0	0	0	0	0	0	0	0	192
Low-Density Trees	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
Lowland Conifers	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9
Lowland Deciduous	0	0	0	0	0	0	0	85	46	0	0	0	0	0	0	0	0	0	131
Lowland Mixed Forest	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Lowland Shrub	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
Marsh	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Mixed Upland Deciduous	0	13	82	0	8	0	0	0	0	0	43	24	0	0	0	0	0	0	170
Natural Mixed Pines	0	0	0	0	58	63	0	42	37	9	27	0	0	0	0	0	0	0	236
Northern Hardwood	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	12
Oak	0	115	118	41	4	0	0	0	0	26	156	9	0	0	0	0	0	0	469
Planted Mixed Pines	0	0	30	0	38	0	0	111	0	0	0	0	0	0	0	0	0	0	179
Red Pine	0	0	0	0	72	0	0	48	0	0	0	0	0	0	0	0	0	0	120
Treed Bog	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Upland Mixed Forest	0	0	66	77	0	0	52	45	24	7	13	0	0	0	0	0	0	0	284
Upland Shrub	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96
Urban	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Water	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
White Pine	0	0	0	0	0	73	17	20	0	0	40	0	23	0	0	0	0	0	173
Total	346	128	336	273	261	174	69	372	108	42	279	33	23	0	0	0	0	0	2444



Report 2 – Treatment Summary

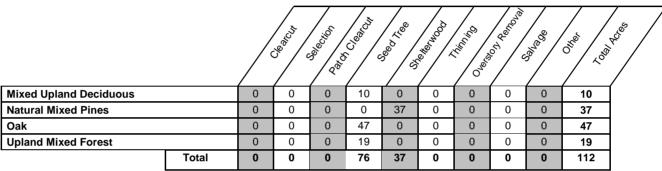
Cadillac Mgt. Unit Year of Entry: 2017

Acres of Harvest

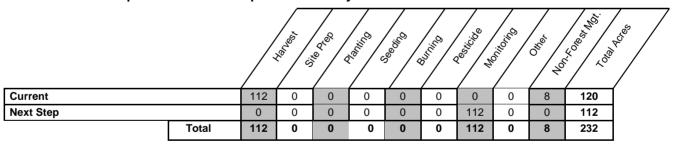
Compartment 26
Total Compartment Acres: 2,438

Commercial Harvest - 0 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 8

Cover Type by Harvest Method



Proposed and Next Step Treatments by Harvest Method



Cadillac Mgt. Unit Report 4 -- Treatments

Compartment: 26 s Year of Entry: 2017 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure **Status** d 63026029-Cut 12.9 4126 - White. 81-110 Seed Tree with 4122 - Oak, Pine Two-Aged 29 Sawtimber 95 Harvest Proposal Black, N. Pin Oak Well Retention **Habitat Cut: No Site Condition:** Prescription Cut all trees. Mark a mix of oak and pine to leave averaging 10-20 BA. Specs:

Next Step **Treatments:**

Acceptable Mix of upland species.

Regen:

Other Use understory shrub protection spec in timber sale. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

49 63026049-Cut 36.6 42250 - Pine, Oak Poletimber 75 51-80 Harvest Shelterwood with 42250 - Pine. Two-Aged Proposal Well Retention Oak

Habitat Cut: No Site Condition:

Prescription Cut all trees except white pine under 14" DBH. Mark to keep white pine over 14" DBH and oak averaging 30-40 BA. Do not cut regen 4.5" DBH

and under except where needed for equipment maneuverability. Specs:

Next Step **Treatments:**

Acceptable Mix of upland species.

Regen:

Use understory shrub protection spec in timber sale. Old next step comments: Other

Comment:

Proposed Start Date: 10/1 /2016

63026053-Cut 4191 - Mixed Sawtimber 105 51-80 Seed Tree with 4199 - Other Proposal 10.3 Harvest Two-Aged **Upland Deciduous** Mixed Upland Well Retention

with Conifer

Deciduous

Habitat Cut: No Site Condition:

Prescription Cut all trees except mark a mix of species to leave averaging 30-40 BA. Do not cut regen 4.5" DBH and under except where needed for

Specs: equipment maneuverability. Expand aspen zones.

Next Step Treatments:

Acceptable A mix of upland and lowland species.

Regen: Other

Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

79 63026079-Cut 7.4 4126 - White. Sawtimber 90 81-110 Harvest Seed Tree with 4122 - Oak, Pine Two-Aged Proposal

> Black, N. Pin Oak Well Retention

Habitat Cut: No Site Condition:

Prescription Cut all trees except white oak 10" DBH and larger. Do not cut any white or red pine. Mark to leave a mix of species averaging 20-30 BA.

Specs:

Next Step **Treatments:**

Acceptable A mix of upland species.

Regen:

Other There are very few red pine in the stand. Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

Cadillac Mgt. Unit Report 4 -- Treatments Compartment: 26 s Year of Entry: 2017 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure **Status** d 96 63026096-Cut 26.3 4126 - White. 81-110 Seed Tree with 4122 - Oak, Pine Two-Aged Sawtimber 95 Harvest Proposal Black, N. Pin Oak Well Retention **Site Condition: Habitat Cut: No** Prescription Cut all trees. Do not cut white pine 8" and under at DBH. Mark to leave a mix of species averaging 20-30 BA. Do not cut regen 4.5" DBH and under except where needed for equipment maneuverability. Focus on retaining large canopy white oaks for mast production and seed source. Specs: Next Step **Treatments:** Acceptable Mix of upland species. Regen: Other Old next step comments: Comment: **Proposed Start Date:** 10/1 /2016 4310 - Pine, 106 63026106-Cut 18.8 4310 - Pine, Oak Sawtimber 75 81-110 Harvest Seed Tree with Two-Aged Proposal Mix Well Retention Oak Mix **Habitat Cut:** No **Site Condition:** Prescription Cut all trees except do not cut any red pine. Mark a mix of species to leave averaging 10-20 BA. Do not cut any regen under 4.5" DBH except where necessary for maneuverability. Specs: Next Step **Treatments:** Acceptable Mix of upland species. Regen: Survey needed. Old next step comments: Other Comment: 10/1 /2016 **Proposed Start Date:** 63026400-NF 310 -42 3102 - Grass Unspec NonForestMgt Proposal Nonstocked Other - Specify Herbaceous ified Openland **Habitat Cut: Yes Site Condition:** Prescription Plant forage and brood rearing herbaceous species. Till, fertilize, and plant annually. Specs: Next Step Treatments: <u>Acceptable</u> Regen:

Old next step comments:

Other Comment:

10/1 /2015 **Proposed Start Date:**

402 63026402-NF 3.6 3102 - Grass Nonstocked Unspec NonForestMgt Other - Specify 310 -

ified

Herbaceous Openland

Habitat Cut: Yes Site Condition:

Prescription Plant forage and brood rearing herbaceous species. Till, fertilize, and plant annually.

Specs:

Next Step **Treatments:**

<u>Acceptable</u> Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

Total Treatment 120.1 **Acreage Proposed:**

Proposal

Compartment: 26

Cadillac Mgt. Unit

Cheryl Nelson : Examiner Year of Entry: 2017

Availa	ability for I	Management									
Total	Acres	Acres	ı	Domina	nt Site	e Con	dition	s			
Acres	Available	Not Available		2A	2B	2G	2H	3D	3G	5C	5E
121	121	0	Aspen								
27	27	0	Bog								
58	58	0	Herbaceous Openland								
192	192	0	Jack Pine								
28	28	0	Low-Density Trees								
9	9	0	Lowland Conifers								
131	37	94	Lowland Deciduous			48	46				
1	0	1	Lowland Mixed Forest				1				
69	68	1	Lowland Shrub					1			
14	14	0	Marsh								
170	119	51	Mixed Upland Deciduous				8	43			
235	199	36	Natural Mixed Pines							36	
12	12	0	Northern Hardwood								
470	333	136	Oak					20	12	102	3
178	128	50	Planted Mixed Pines	4				0		46	
119	119	0	Red Pine								
5	5	0	Treed Bog								
283	230	52	Upland Mixed Forest		7				33	13	
96	96	0	Upland Shrub								
16	16	0	Urban								
33	33	0	Water								
172	149	23	White Pine					23			
2,438	1,993	444	Total Forested Acres	4	7	48	55	86	45	197	3
	82%	18%	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
1	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	13	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Cadillac Mgt. Unit

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2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	46	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Blocked by the Bal	ldwin River.					
5	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Blocked by the Bal	ldwin River.					
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	46	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Walking pathway v	within stand and proximity to can	npground.				
7	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	38	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Blocked by the Bal	ldwin River, Leverentz Lake, and	l private la	and.			

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8	Unavailable	3D: Recreational / Scenic values	23	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: A part of the Pine I	Forest Pathway runs through the	stand.				
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
10	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	27	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
11	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
12	Available	2B: Unknown if access through adjacent landowner(s) is possible	7	2I: Survey needed	Unspecified	Unspecified	Unspecified
C	Comments:						
13	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	24	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

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14	Unavailable	3D: Recreational / Scenic values	15	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
15	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	8	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
16	Unavailable	3D: Recreational / Scenic values	5	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
17	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
18	Unavailable	3G: Other Influence zones - See comments	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Dispose.						
19	Unavailable	3G: Other Influence zones - See comments	18	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Dispose						

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20	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	29	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
21	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	19	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
22	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	3	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
23	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
24	Unavailable	3G: Other Influence zones - See comments	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Dispose						
25	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

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26	Unavailable	3G: Other Influence zones - See comments	15	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Baldwin Field Office	e grounds.					
27	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
28	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
47	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Blocked by Leverer	ntz Lake.					
57	Unavailable	3D: Recreational / Scenic values	44	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
71	Unavailable	2A: Adjacent landowner denied access	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Cadillac Mgt. Unit

Compartment: 026
Year of Entry: 2017

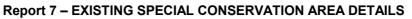


Report 6 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* 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
Bray Creek Campground Comments	Concentrated Recreation Area	State Forest Campground	Proposed SCA	5
Leverentz Lake Campground Comments	Concentrated Recreation Area	State Forest Campground	Proposed SCA	17
Comments boat launch, fishing pier				

Cadillac Mgt. Unit Compartment: 26
Year of Entry 2017





* 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.

Conservatio Area	n Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish speci year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their effects as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from sp approved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 10 and Vegetative Buffers for each Natural River see the table locat folder.	S Zoning District is a 400 foot buffer for 00 feet. To view specific Zoning Districts

S	Cadillac	: Mgt. Unit		Report 8	- Forested	Stands Compartment: 26 Year of Entry: 2017
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4131 - Aspen, Oak	Poletimber Well	10.8	40	1-50	Stand is a mix of 25 year old aspen and 40 year old aspen according to past timber sales. 5 acres were treated in timber sale #63-002-90-02 and the remaining acreage was treated in timber sale #63-014-76-01. The 40 year old aspen dominates at this time with the 25 year old aspen filling in nicely. 16th Street runs along the northern edge of the stand.
2	42201 - Natural White Pine, Mixed Deciduous	Poletimber Poor	32.7	45	1-50	Stand treated timber sale #63-027-08-01, "Little Bear Mix". Cut in fall/winter of 2012-2013. Previous treatment was a release of white pine in timber sale #63-014-76-01.
3	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	38.1	48	1-50	Stand treated timber sale circa 1965. West side is heavier to older jack and red pine. Occassional overstory, mature white and red pine scattered throughout stand.
4	42201 - Natural White Pine, Mixed Deciduous	Poletimber Medium	39.9	45	81-110	Stand treated timber sale #63-218-97-01, thinned in 1962 per timber sale #63-021-62-01. There are a few super-canopy white pine and oak. Occasional pole-log red pine. 24th Street runs along the southern edge of the stand.
5	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	33.3	95	51-80	Stand treated timber sale #63-046-99-02, "Roughline Jack Pine" in 2001. Forman Rd. runs along the eastern edge of the stand.
7	42250 - Pine, Oak	Poletimber Poor	26.7	95	1-50	Stand treated timber sale #63-027-08-01, "Little Bear Mix". Cut in fall/winter 2012-2013. There is a wet area to the west of the stand. Some hemlock, ash, and cedar that did not show up in cruise.
8	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	15.1	95	81-110	Leverentz Lake Campground.
9	42121 - Planted Jack Pine, Mixed Deciduous	Poletimber Poor	76.3	26	1-50	Stand planted to jack pine per FTP#C-63-353 in 1989.
10	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	29.1	32	81-110	Stand planted red pine in 1983. FTP could not be found.
11	4310 - Pine, Oak Mix	Poletimber Well	15.6	50	51-80	Stand treated timber sale # 63-207-97-01.
12	42250 - Pine, Oak	Poletimber Well	13.0	60	1-50	Stand treated timber sale #63-070-07-01, "Scenic 37".
14	4125 - Black, N. Pin Oak	Sapling Well	29.2	6	Immature	Stand treated timber sale #630610701, "Jamestown Jack" during summer/fall of 2009. Previous year of origin = 1926. James Rd. runs along the western edge of the stand. Occasional overstory mature oak and pulp white pine.
15	4126 - White, Black, N. Pin Oak	Sawtimber Medium	10.2	95	1-50	Stand treated timber sale #630610701, "Jamestown Jack", during summer/fall of 2009.
16	6119 - Mixed Lowland Deciduous Forest	Poletimber Medium	2.6	65	51-80	

S	Cadillad	: Mgt. Unit		Report 8	Forested	Stands Compartment: 26 Year of Entry: 2017
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
18	4130 - Aspen	Poletimber Well	27.6	36	51-80	Stand treated timber sale #20-78A in 1979.
19	4126 - White, Black, N. Pin Oak	Sapling Well	47.8	16	Immature	Stand treated timber sale #63-207-97-01, "Amvet Pine & Hdwd".
21	4126 - White, Black, N. Pin Oak	Sapling Medium	20.8	8	Immature	Stand treated timber sale #63-061-07-01, "Jamestown Jack". Northwest corner was trenched during a fire training exercise.
23	42110 - Planted Red Pine	Sawtimber Medium	19.6	65	51-80	Stand treated timber sale #63-052-11-01, "Red Jack Green Attack". Planted per FTP#46 in 1950.
24	4122 - Oak, Pine	Sapling Well	40.7	20	Immature	Stand treated timber sale #63-007-97-01, "AMVET Pine & Hardwood" in 2001.
26	4310 - Pine, Oak Mix	Sawtimber Poor	14.7	65	51-80	BALDWIN FIELD OFFICE AND GROUNDS
27	4125 - Black, N. Pin Oak	Poletimber Well	3.9	30	1-50	
28	4310 - Pine, Oak Mix	Sawtimber Well	18.2	60	51-80	Dispose
29	4126 - White, Black, N. Pin Oak	Sawtimber Well	12.9	95	81-110	Pocket of small to medium pulp jack pine in the northeast corner. Small amount of tag alder in stand.
30	4126 - White, Black, N. Pin Oak	Sapling Well	26.4	17	Immature	Stand treated 1999 sale #63-217-98-01, "Miracle Corner Jack Pine".
31	42250 - Pine, Oak	Poletimber Well	57.9	35	51-80	Stand treated timber sale #15-79A in 1980.
33	42141 - Planted Mixed Pine, Mixed Deciduous	Poletimber Well	19.9	32	51-80	Stand planted to red pine per FTP#F-63-106 in 1983. There is a small portion (approximately 2.5acres) in the southwestern part of the stand that wasn't treated previously. This area contains mature jack pine and oak.
34	4131 - Aspen, Oak	Poletimber Well	3.7	40	51-80	Stand treated timber sale #11-75A.
35	61199 - Lowland Hardwood (OI)	Poletimber Well	4.9	70	51-80	Appears to be an area of transition from lowland to upland. Mixed softwood with white pine.
36	4126 - White, Black, N. Pin Oak	Poletimber Medium	24.2	85	1-50	Stand treated timber sale #63-075-09-01, "C26 Oak, Pine Mix". Previous year of origin = 1930. Ski trail runs through stand.
37	61199 - Lowland Hardwood (OI)	Poletimber Well	3.1	75	1-50	Lowland hardwoods with some conifer component. Aerial appears to show small upland area in northwest part of stand.

S t	Cadillac	Mgt. Unit		Report 8	- Forested	Stands Compartment: 26 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
38	4132 - Aspen, Jack Pine	Poletimber Medium	7.6	40	51-80	Stand treated timber sale #1-75 in 1975. Heavy J3 in wet area in the central part of the stand.
39	42141 - Planted Mixed Pine, Mixed Deciduous	Poletimber Well	18.0	33	81-110	Stand planted to red pine per FTP#C-63-71 in 1982. There are some rows of planted jack pine that were not mentioned in the FTP. Southern boundary has a small edge of mature jack pine but not enough to make a harvest worthwhile.
40	42221 - Natural Jack Pine, Mixed Deciduous	Poletimber Well	27.7	38	51-80	Stand treated timber sale #18-77 in 1977.
41	42221 - Natural Jack Pine, Mixed Deciduous	Sapling Poor	22.9	16	Immature	Stand treated #63-217-98-01, "Miracle Corner Jack Pine".
42	42110 - Planted Red Pine	Poletimber Well	3.7	33	81-110	Stand planted per FTP #C-63-71 in 1982.
47	613 - Lowland Mixed Forest	Poletimber Well	1.1	75	1-50	
49	42250 - Pine, Oak	Poletimber Well	36.6	75	51-80	Occasional super-canopy white and red pine.
50	42141 - Planted Mixed Pine, Mixed Deciduous	Sawtimber Well	46.1	65	111-140	Stand planted per FTP #1 in 1950. Planted mix of red and white pine. Evidence of past fire.
51	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	22.8	110	141-170	A portion of the Pine Forest Pathway runs through the stand. Small pockets of super-canopy white pine.
52	61199 - Lowland Hardwood (OI)	Poletimber Well	38.1	75	1-50	Lowland hardwoods with conifer component.
53	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	16.5	105	51-80	
55	4126 - White, Black, N. Pin Oak	Sawtimber Well	15.0	99	81-110	Leverentz Lake Campground.
57	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	28.1	95	81-110	Leverentz Lake Campground.
58	42110 - Planted Red Pine	Sawtimber Medium	5.3	66	111-140	Stand treated timber sale #63-044-07-01, "Forest & 40th". Stand planted in 1950 but FTP could not be found. Other red pine plantings in area were all planted in 1950. Stand pruned per FTP# 73.
59	4310 - Pine, Oak Mix	Poletimber Well	11.6	65	51-80	Stand treated 1997 timber sale #63-16-97-01.
61	42110 - Planted Red Pine	Sawtimber Well	6.5	65	141-170	Stand treated 1997 Sale #63-016-97-01. Stand planted red pine per FTP #41 in 1950.

S t	Cadillac		Report 8	- Forested	Stands Compartment: 26 Year of Entry: 2017	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
62	4119 - Mixed Northern Hardwoods	Poletimber Well	11.8	65	51-80	
63	42141 - Planted Mixed Pine, Mixed Deciduous	Sawtimber Medium	60.7	65	51-80	Stand treated timber sale # 63-044-07-01 "Forest & 40th".
64	42110 - Planted Red Pine	Sawtimber Well	10.4	65	51-80	Stand treated timber sale #63-044-07-01 "Forest & 40th". Stand planted red pine per FTP #126 in 1950.
65	4139 - Aspen, Mixed Deciduous	Poletimber Well	7.6	28	Immature	Stand treated timber sale in 1987, "Forman Road Sale".
66	4139 - Aspen, Mixed Deciduous	Poletimber Well	11.1	28	Immature	Stand treated timber sale in 1987, "Forman Road Sale".
67	42111 - Planted Red Pine, Mixed Deciduous	Sawtimber Well	5.8	65	51-80	Stand treated timber sale #63-044-07-01 "Forest & 40th". Stand planted red planting red pine per FTP #42 in 1950. Cross-country ski trail runs through stand. Private land along the northern boundary.
69	4139 - Aspen, Mixed Deciduous	Poletimber Well	12.3	26	1-50	Stand treated timber sale in 1987, "Forman Road Sale".
70	42200 - Natural White Pine	Poletimber Poor	16.5	50	1-50	Stand treated timber sale #63-075-09-01, "C26 Oak, Pine Mix". Previous year of origin = 1930. Private property runs along the southern boundary. Forman road runs along the east.
71	42141 - Planted Mixed Pine, Mixed Deciduous	Poletimber Well	4.1	65	81-110	Southern portion of stand planted red pine per FTP# 40 in 1950. Combined red pine with deciduous to the north due to stand size.
72	4310 - Pine, Oak Mix	Sapling Well	28.9	18	Immature	Stand treated 1997 sale #63-016-97-01. Pine Forest Pathway runs through stand.
73	42250 - Pine, Oak	Poletimber Well	29.0	60	51-80	Stand treated timber sale #63-016-97-01 in 1997. Pine Forest Pathway runs through stand.
74	4122 - Oak, Pine	Sawtimber Well	50.8	95	1-50	Stand treated timber sale #63-017-97-01, "Townline Bridge Sale". Occasional red pine log tree.
75	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	29.3	65	111-140	Dead and dying ash.
76	4131 - Aspen, Oak	Poletimber Well	15.2	45	81-110	Stand treated timber sale #41-63-A in 1972. East side is heavier to oak. Occasional pole and sapling red pine.
78	42250 - Pine, Oak	Poletimber Well	24.6	45	1-50	Stand treated timber sale #63-010-98-02, "Leeson's release sale". Overstory is comprised of trees that were released in the timber sale.
79	4126 - White, Black, N. Pin Oak	Sawtimber Well	7.4	90	81-110	

S	Cadillac Mgt. Unit			Report 8	Forested	Stands Compartment: 26 Year of Entry: 2017
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
80	42141 - Planted Mixed Pine, Mixed Deciduous	Sapling Well	29.6	14	Immature	Stand treated timber sale #63-017-97-01, "Townline Bridge Sale". Cut in 2001. Stand planted per FTP #C 63-481 Trenched, then hand planted in 2001. 14,900 2-0 bare root red pine seedlings were planted by a crew from express forestry. Red pine were planted along western boundaries and extended approximately to the middle of the stand. Timber sale landing was heavily planted to red pine. Few occasional overstory red and white pine.
81	4310 - Pine, Oak Mix	Poletimber Medium	39.2	26	Immature	Stand treated timber sale #63-026-88-01, "36th St. Pine". Cut in 1989. The northwestern part of the stand (about 3 acres) was left as a buffer when the stand was cut.
82	4191 - Mixed Upland Deciduous with Conifer	Sapling Poor	31.1	14	1-50	Stand treated timber sale #63-017-97-01, "Townline Bridge Sale". Small amount aspen saplings.
83	4125 - Black, N. Pin Oak	Sapling Poor	65.3	5	Immature	Stand treated timber sale #63-020-07-01, "2nd Time Mix". Cut in 2010.
85	42250 - Pine, Oak	Sawtimber Well	3.2	85	81-110	
86	4310 - Pine, Oak Mix	Sawtimber Medium	13.0	90	111-140	Red maple regeneration is heavier to the north of the stand. Occassional scattered overstory red pine sawlog trees.
87	4310 - Pine, Oak Mix	Poletimber Medium	35.7	50	1-50	Stand treated timber sale #63-020-07-01, "2nd Time Mix". Cut spring/summer of 2010.
88	42200 - Natural White Pine	Sawtimber Well	20.2	65	51-80	
89	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	8.9	65	1-50	Stand treated timber sale #63-003-08-01, "26 Mix". Stand was treated to focus on hemlock regeneration by selectively marking white pine and red pine to be removed. In hemlock areas, selectively marked white pine and red pine using green paint with the amount of top to be left in stand (1/3 to 1/2).
91	4131 - Aspen, Oak	Sapling Well	7.7	34	Immature	Stand treated timber sale #27-78A. Cut in 1981.
94	4131 - Aspen, Oak	Poletimber Well	9.3	34	1-50	Stand treated timber sale #27-78A. Cut in 1981.
95	4199 - Other Mixed Upland Deciduous	Poletimber Well	8.0	34	1-50	Stand treated timber sale #27-78A. Cut in 1981.
96	4126 - White, Black, N. Pin Oak	Sawtimber Well	26.3	95	81-110	Occasional log red pine.
98	4310 - Pine, Oak Mix	Poletimber Well	36.7	17	Immature	Stand treated sale #63-008-97-01. Some overstory log to pole white and red pine.
99	4126 - White, Black, N. Pin Oak	Sawtimber Poor	10.5	95	1-50	Stand treated timber sale "63-010-09-01, "C26 Small Pieces".

S t	Cadillac Mgt. Unit			Report 8	Forested	Stands Compartment: 26 Year of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
100	42121 - Planted Jack Pine, Mixed Deciduous	Poletimber Well	47.6	22	1-50	Stand treated per FTP #C63-394. Whole tree harvest followed by scarification via roller chopper and chains and broadcast seeding to jack pine. Seeding was done in May of 1993. Notes say: The east 1/2 of the area was seeded, the west 1/2 was not.
102	4199 - Other Mixed Upland Deciduous	Sapling Poor	13.0	4	Immature	Stand treated timber sale "63-010-09-01, "C26 Small Pieces".
103	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	38.8	35	1-50	Stand planted FTP #C63-7 in 1980.
105	42221 - Natural Jack Pine, Mixed Deciduous	Sapling Well	17.0	16	Immature	Stand treated timber sale #63-008-97-01, "Forman & 40th Sale". Cut in 1999.
106	4310 - Pine, Oak Mix	Sawtimber Well	18.8	75	81-110	Few pulp red maple.
107	4310 - Pine, Oak Mix	Sapling Well	38.5	27	1-50	Stand treated timber sale #63-024-88-01 in 1988. Occassional overstory red and white pine sawlog trees.
113	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	18.5	60	111-140	Dead and dying ash.
115	4310 - Pine, Oak Mix	Sawtimber Well	6.5	86	51-80	White pine L-XL and red pine logs heavy along edges of tag alder.
117	6119 - Mixed Lowland Deciduous Forest	Poletimber Medium	12.6	65	1-50	
118	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	6.4	95	51-80	Stand treated timber sale #63-027-08-01, "Little Bear Mix". Stand thinned fall/winter 2012-2013.
120	4126 - White, Black, N. Pin Oak	Sapling Well	12.0	14	Immature	Stand treated timber sale #63-207-97-01, "Amvet Pine & Hdwd". Oak was not cut during timber sale.
121	4126 - White, Black, N. Pin Oak	Sapling Well	32.1	15	Immature	Stand treated timber sale #63-003-08-01, "26 Mix". Overstory mature oak and pine scatter throughout.
122	42250 - Pine, Oak	Sawtimber Well	6.1	85	51-80	
123	4125 - Black, N. Pin Oak	Poletimber Well	4.6	95	81-110	Bray Creek Campground. Area planted white pine and a few red pine per FTP #2 in 1950.
124	4122 - Oak, Pine	Sawtimber Well	10.6	95	111-140	Baldwin River access site. Small amount of cedar and hemlock on edges and slopes.
125	4122 - Oak, Pine	Sawtimber Well	1.1	95	51-80	Retention zone for stand 99.



t						rear of Entry: 2017
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
127	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	50.8	17	Immature	Stand treated timber sale #63-008-97-01.
128	4125 - Black, N. Pin Oak	Poletimber Well	2.6	95	1-50	Dispose. Could not identify this stand in the field due to the small amount of road frontage.
129	4126 - White, Black, N. Pin Oak	Poletimber Well	9.2	105	1-50	Dispose.
131	4130 - Aspen	Poletimber Well	8.1	35	1-50	Stand treated timber sale #27-78A in 1980.
132	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	12.6	60	1-50	Stand treated timber sale #63-003-08-01, "26 Mix".
134	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	4.3	65	51-80	
136	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	5.0	65	51-80	
146	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	7.8	105	51-80	
150	4125 - Black, N. Pin Oak	Sawtimber Well	0.8	85	51-80	Retention zone for stand 17.
151	4125 - Black, N. Pin Oak	Sawtimber Well	0.8	85	51-80	Retention zone for stand 214.
152	4122 - Oak, Pine	Sawtimber Well	0.3	95	51-80	Retention zone for stand 102.
156	4310 - Pine, Oak Mix	Sawtimber Well	5.2	75	51-80	Pine Valley Pathway runs through stand.
200	4122 - Oak, Pine	Sawtimber Poor	4.1	94	81-110	Stand runs between Powerline and M-37.

Report 9 - Nonforested Stands



Stand	Cover Type	Acres	Managed Site	General Comments:
6	122 - Road/Parking Lot	5.1	No	M-37
13	6220 - Alder/willow	1.6	No	Tag alder with cattails.
17	3105 - Mixed Upland Herbaceous	14.0		Stand treated timber sale "63-010-09-01, "C26 Small Pieces". Stand replanted to jack pine in 2014 due to low survival rate of planting in 2012.
20	6220 - Alder/willow	2.0	No	Tag Alder
22	3205 - Mixed Upland Shrub	59.4		Stand treated timber sale #63-070-07-01, "Scenic 37". Treated 2012. Good amount of oak stump sprouts.
25	330 - Low-Density Trees	19.9		Stand treated timber sale #63-052-11-01, "Red Jack Green Attack". Scattered log to pulp, low density black oak, jack pine, and white pine. Medium amount of jack pine and white pine saplings. Retention from timber sale is located on the southern portion of stand and along M-37.
32	62259 - Bog (OI)	4.2	No	Few white pine trees.
43	510- Water (OI)	3.4	No	Little Leverentz Lake
44	6224 - Treed Bog	4.6	No	Leatherleaf Bog
45	62259 - Bog (OI)	1.4	No	Leatherleaf Bog
46	62259 - Bog (OI)	14.8	No	Cattails, leatherleaf, with conifers filling in.
48	6220 - Alder/willow	0.9	No	Tag alder, willow, cattails, low density lowland hardwoods.
54	510- Water (OI)	17.4	No	Leverentz Lake
56	6220 - Alder/willow	14.5	No	Tag alder and cattails.
60	500 - Water	0.2	No	Whalen Lake
68	6220 - Alder/willow	9.5		Stand treated Wildlife habitat cut.
77	500 - Water	4.9	No	Baldwin River

Report 9 - Nonforested Stands



Stand	Cover Type	Acres	Managed Site	General Comments:
84	3105 - Mixed Upland Herbaceous	16.7		Stand treated timber sale #630200701, "2nd Time Mix". Cut spring/summer 2010.
90	320 - Upland Shrub	9.7		Stand treated timber sale #63-003-08-01, "26 Mix". Occasional overstory black oak, white oak, red pine, and jack pine.
92	6220 - Alder/willow	14.7	No	Tag alder, willow, cattails, low density lowland hardwoods.
93	3105 - Mixed Upland Herbaceous	4.9		Stand treated timber sale #63-003-08-01, "26 Mix". Few overstory oak and pine.
97	62399 - Marsh (OI)	7.7	No	White pine in northwest portion of stand.
101	6225 - Bog	5.1	No	Leatherleaf Bog
104	6229 - Mixed lowland shrub	0.3	No	
108	6220 - Alder/willow	1.9	No	Overhead powerline. Tag alder, willow, cattails with upland portions.
109	6225 - Bog	1.8	No	Leatherleaf Bog
110	3102 - Grass	1.8	No	Mowed portion of M-37 Right Of Way.
112	330 - Low-Density Trees	7.9		
114	3205 - Mixed Upland Shrub	26.6		Stand planted to jack pine per FTP# C63-625 in 2014. Stand treated timber sale #63-061-07-01, Jamestown Jack, during summer/fall of 2009. Previous year of origin = 1926.
116	500 - Water	2.5	No	Baldwin River
119	6220 - Alder/willow	2.4	No	Tag Alder
126	122 - Road/Parking Lot	6.1	No	Buried pipeline
130	6220 - Alder/willow	4.1	No	Tag alder.
133	6220 - Alder/willow	1.9	No	
135	500 - Water	1.6	No	Baldwin River

Report 9 - Nonforested Stands



Stand	Cover Type	Acres	Managed Site	General Comments:
137	500 - Water	0.3	No	Sanborn Creek
138	122 - Road/Parking Lot	1.3	No	US-10
140	500 - Water	0.1	No	Sanborn Creek
142	500 - Water	0.6	No	Sanborn Creek
143	6220 - Alder/willow	11.7	No	Tag alder, willow, cattails with some lowland hardwoods.
144	122 - Road/Parking Lot	3.4	No	Forman Road
145	500 - Water	1.0	No	Baldwin River
147	500 - Water	1.2	No	
148	6230 - Cattail	6.4	No	Overhead powerline with lowland and upland areas.
153	6220 - Alder/willow	1.5	No	
154	500 - Water	0.1	No	Sanborn Creek
155	6220 - Alder/willow	2.0	No	Tag alder.
214	3105 - Mixed Upland Herbaceous	12.5		Stand treated timber sale "63-010-09-01, "C26 Small Pieces".
400	3102 - Grass	2.6	Yes	
401	3102 - Grass	1.6	Yes	
402	3102 - Grass	2.6	No	
403	3102 - Grass	1.0	Yes	OPIC - FMD: OI Stand Year Origin was