

Compartment Review Presentation

Cadillac Forest Management Unit

Compartment 63023 Entry Year 2018 Acreage: 2,521 County Lake

Management Area: Lake County Moraines

Revision Date: 2016-06-07

Stand Examiner: Cheryl Nelson

Legal Description:

T18N, R11W, Sec. 17, 18, 19, and 30

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.

Soil and topography:

Mostly Rubicon-Montcalm-Graycalm: Nearly level to steep, somewhat excessively drained and well drained sandy soils on moraines, till plains, and outwash plains. Small area in northwest of compartment consists of Grayling-Graycalm: Nearly level to moderately steep, excessively drained and somewhat excessively drained sandy soils on outwash plains, till plains, and low moraines. Small area in center of compartment consists of Tawas-Croswell-Lupton: Nearly level and undulating, very poorly drained and moderately well drained mucky and sandy soils in bogs, depressions, and drainageways and on low flats and benches.

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

Large block of state-ownership. State land to the north, east, and western portions of the compartment. Private land intermittent along the compartment boundary.

Unique Natural Features:

Sanborn Creek flows through section 19.

The Eastern Box Turtle is listed as having occurred in the compartment. The Eastern Box Turtle, Great Plains Spittlebug, Karner Blue Butterfly, E. Massasauga Rattlesnake and a Great Blue Heron Rookery are listed as having occurred in sections surrounding the compartment. The compartment has the potential for the Goshawk, Red-shouldered Hawk, Eastern Box Turtle, Eagle, Osprey, Wood Turtle, and Great Blue Heron Rookeries.

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations:

The integrity of Sanborn Creek will be maintained.

Watershed and Fisheries Considerations:

Sanborn Creek flows through Compartment 23. Sanborn Creek is a tributary to the Baldwin River in the Pere Marquette River watershed. It is a Designated Trout Stream with naturally reproducing populations of brook trout, brown trout, and possibly steelhead, coho salmon, and Chinook salmon.

Wildlife Habitat Considerations:

Historically, there have been problems regenerating oak, especially in the higher quality stands in this compartment. Featured wildlife species are deer, turkey, hare, ruffed grouse and woodcock. Management emphasis for these species will include maintenance of lowland conifer complexes, aspen, and oak regeneration. Conifer components within stands will be encouraged, particularly in lowland and lowland adjacent areas. Timber sale specifications to benefit these featured species (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. (Victory, 5/24/16)

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 800 feet. Beneath the glacial drift is the Pennsylvanian Saginaw Formation. The Saginaw is quarried for clay/shale products in other areas of the State. A gravel pit is located in Section 28 and potential is considered good. The nearest production is at Peacock Field located ten miles to the northwest. The Field produced nearly 1,700,000 BO from the Traverse Limestone.

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:

The Tln Cup Springs Motorcycle, and Tin Cup Springs Route ORV trails are both within this compartment. Trail protection specifications should be considered if forest treatments will impact these trail systems. (T.N. 1/29/16)

Fire Protection:

This area would have the potential for moderate to large fire growth with the cover types. Terrain would allow for good access for suppression equipment. There are some urban interface areas within the compartment.

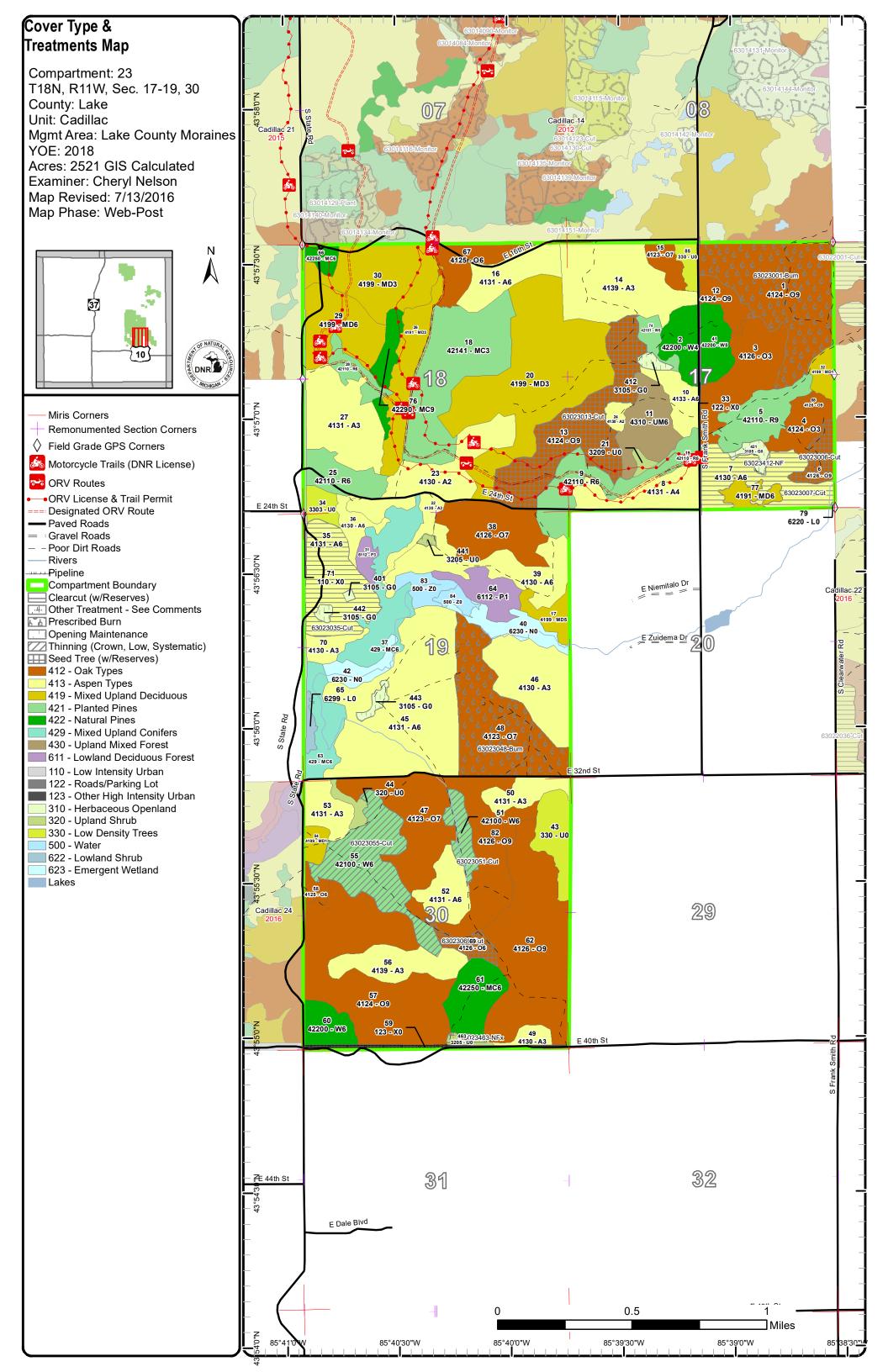
Additional Compartment Information:

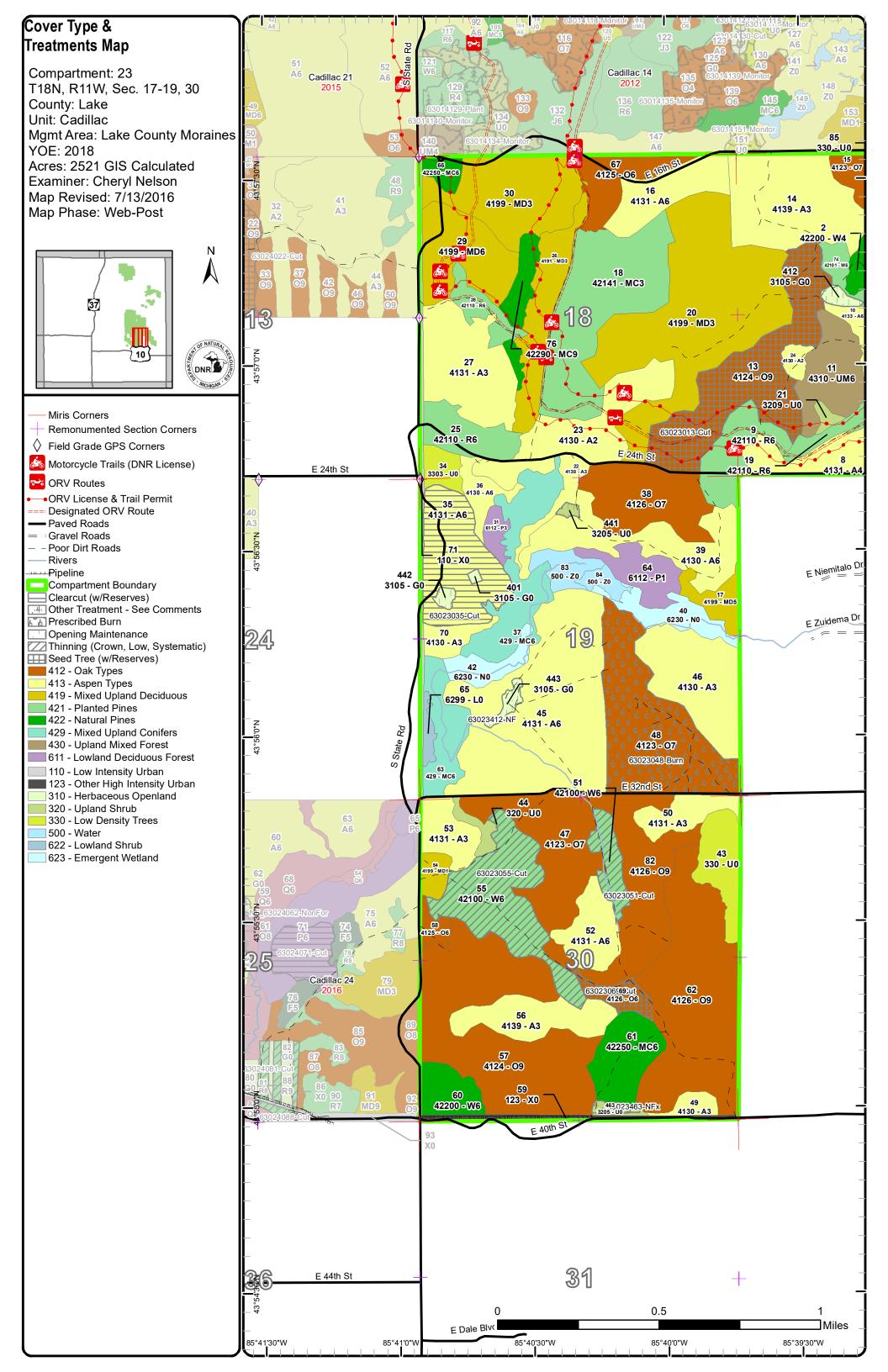
The following reports from the Inventory are attached:

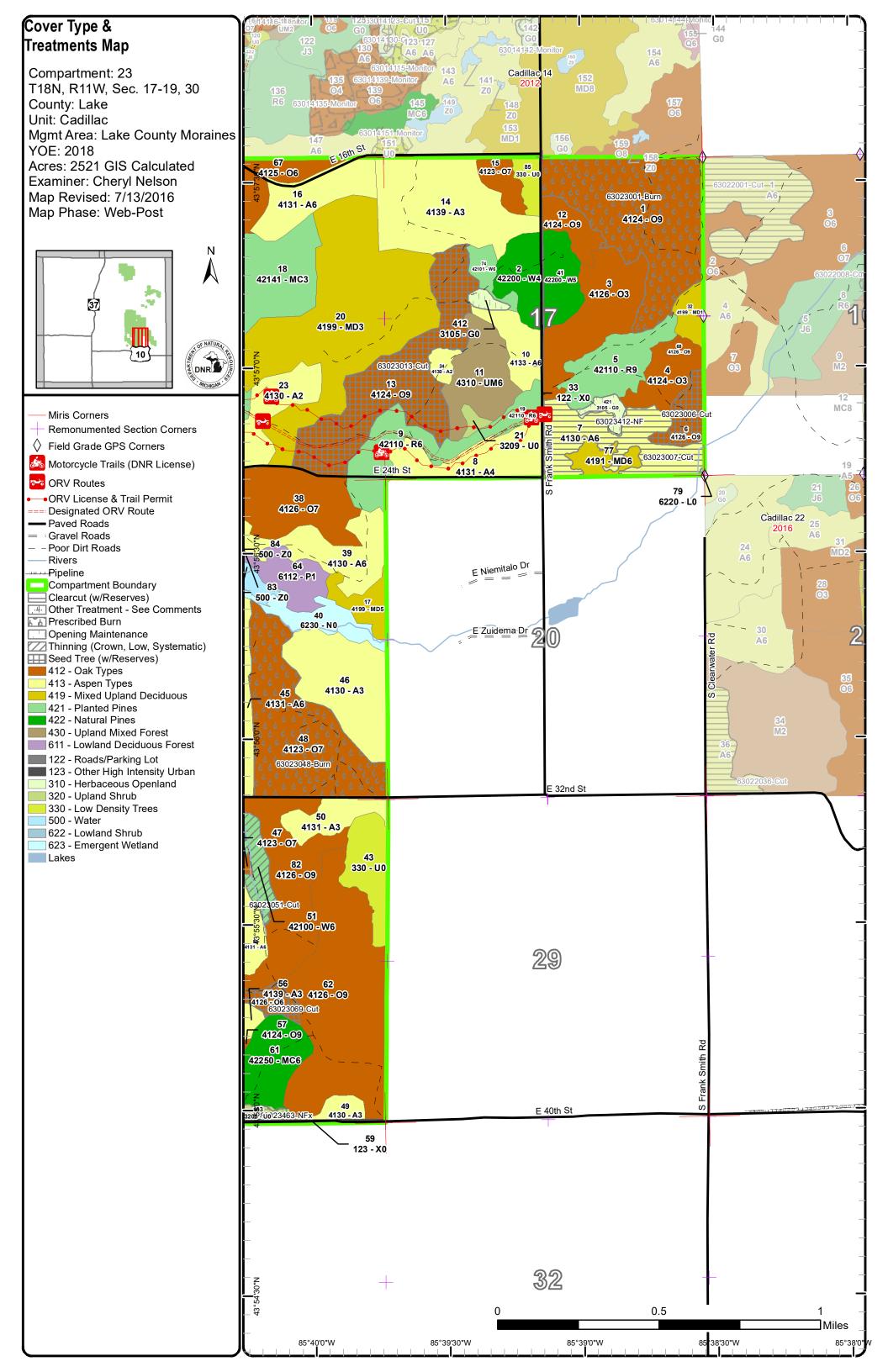
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

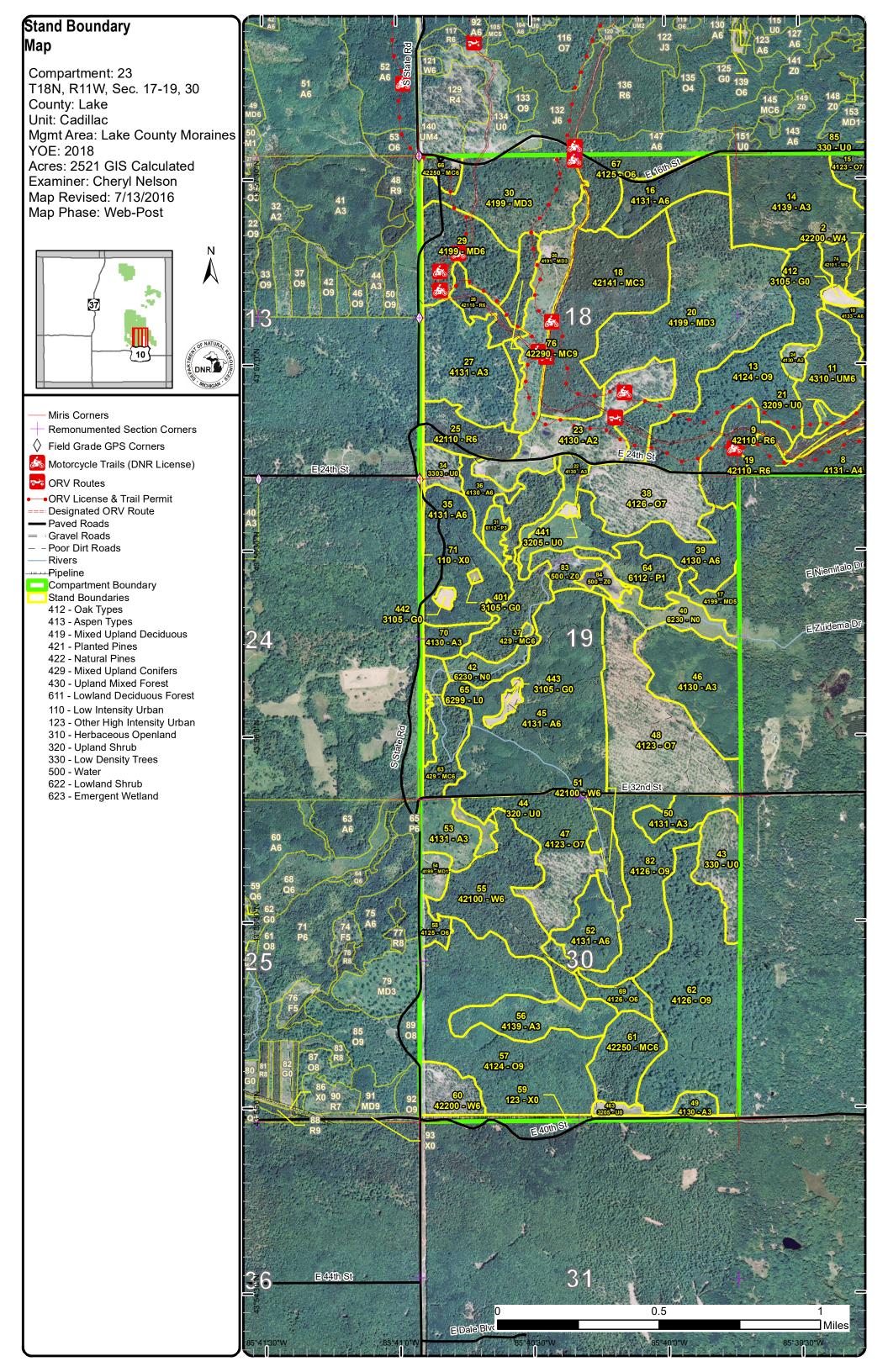
The following information is displayed, where pertinent, on the attached compartment maps:

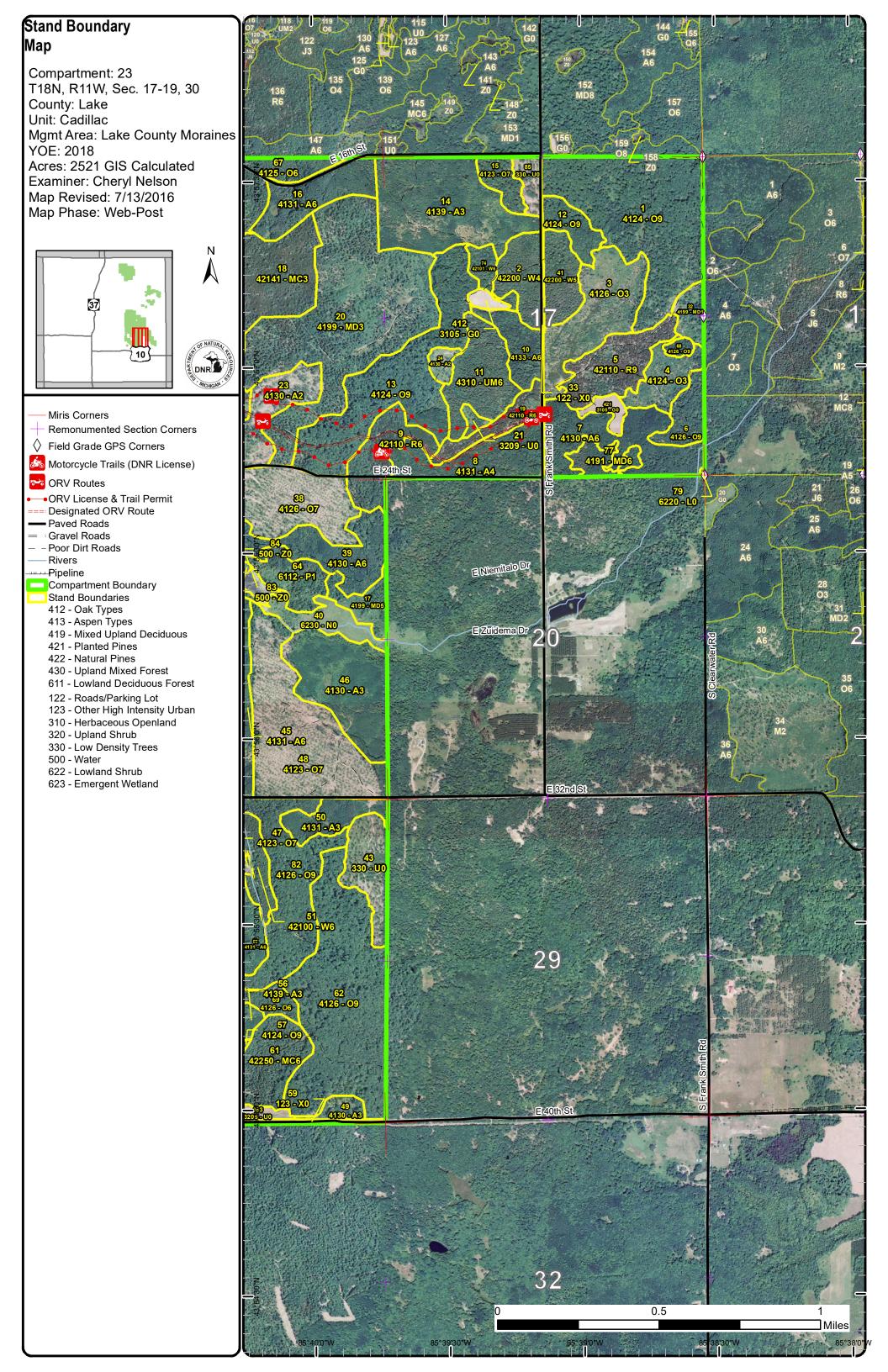
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

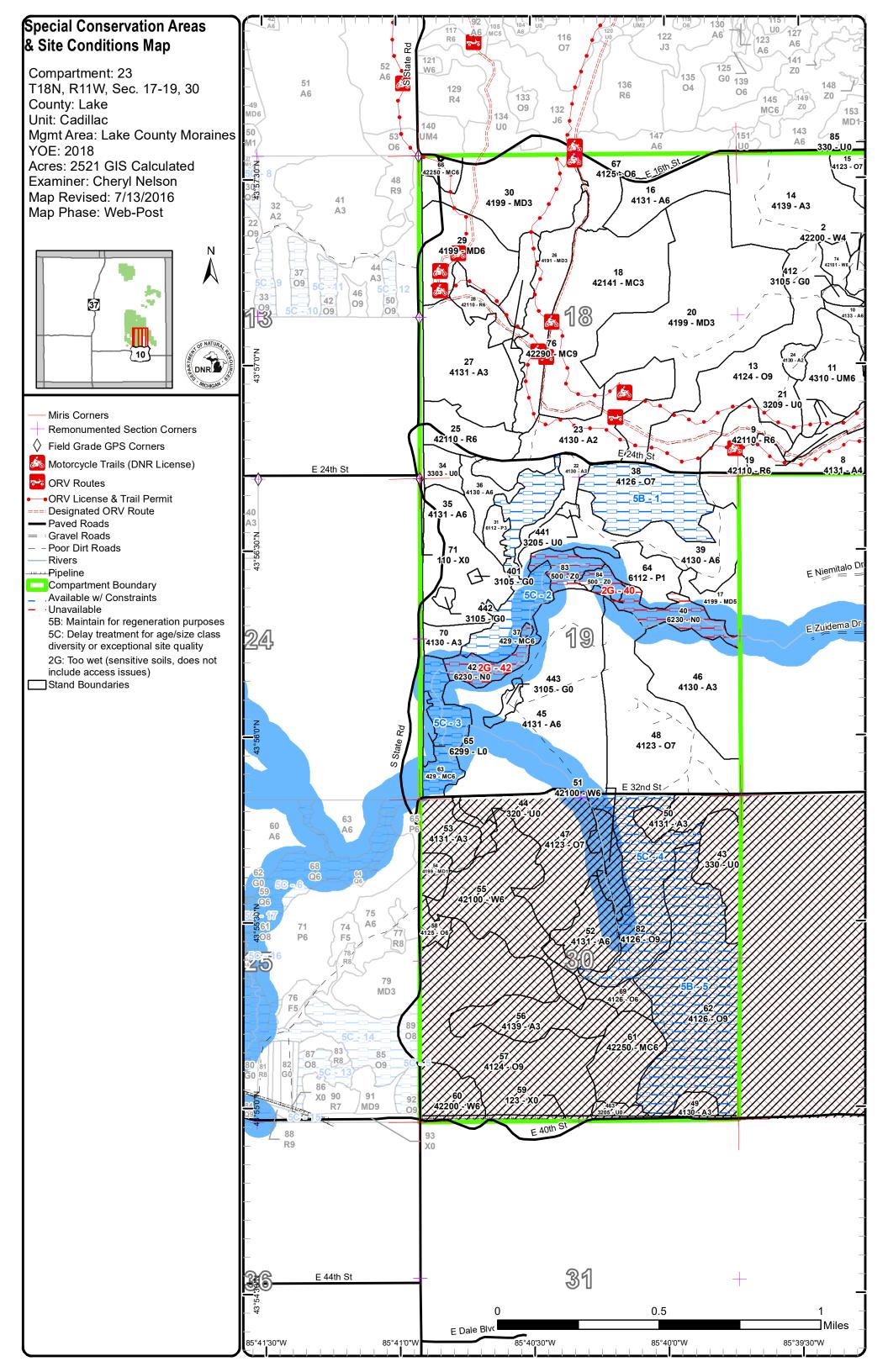


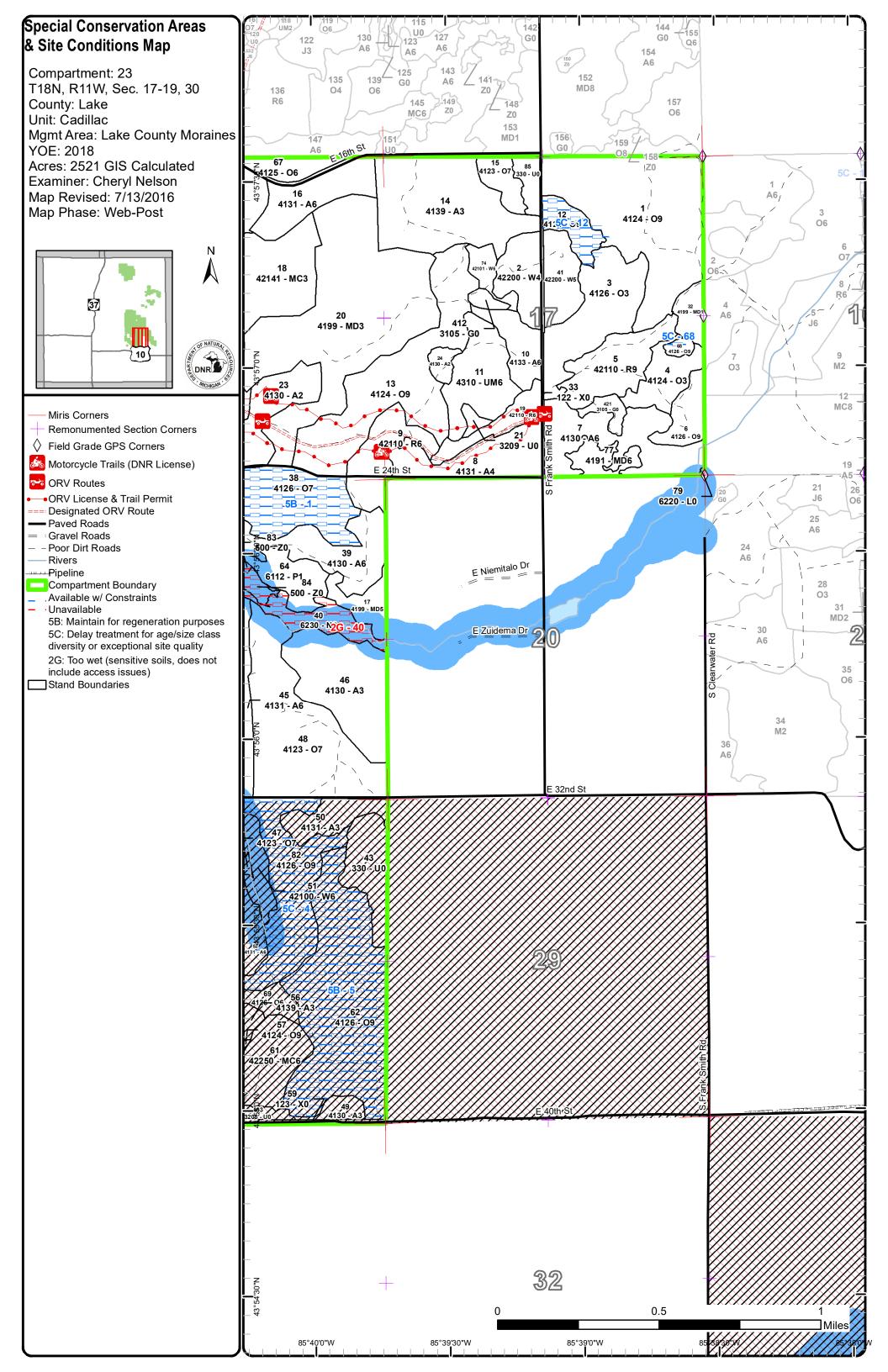












Compartment 23 Year of Entry 2018

Cheryl Nelson: Examiner

Cadillac Mgt. Unit



Age Class

	¥or	La San Carrier	3/2	87.05	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	8 /6	\$2.00°	3/8	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	18 / S	\$ 8 8	\$ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	70,00	,	N. S. S.	, S. J. W.	I A S	St. Tries	N. S.
Aspen	0	91	179	263	30	164	0	0	0	0	0	0	0	0	0	0	0	0	727
Herbaceous Openland	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Low-Density Trees	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
Lowland Aspen/Balsam Poplar	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Lowland Shrub	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Marsh	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Mixed Upland Deciduous	0	53	244	0	10	0	13	0	0	0	0	0	0	0	0	0	0	0	320
Natural Mixed Pines	0	0	0	0	0	22	29	0	0	0	0	0	0	0	0	0	0	0	51
Oak	0	0	65	0	31	0	0	0	0	0	138	495	86	0	0	0	0	0	814
Planted Mixed Pines	0	0	0	0	88	0	0	0	0	0	0	0	0	0	0	0	0	0	88
Red Pine	0	0	0	0	0	26	81	0	0	0	0	0	0	0	0	0	0	0	106
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	68	0	0	0	0	0	0	68
Upland Mixed Forest	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	34
Upland Shrub	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Urban	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
Water	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
White Pine	0	0	0	8	39	17	75	0	0	0	0	0	0	0	0	0	0	0	138
Total	149	170	488	271	198	263	198	0	0	0	138	563	86	0	0	0	0	0	2521



Report 2 – Treatment Summary

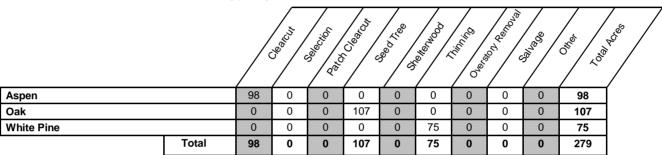
Cadillac Mgt. Unit Year of Entry: 2018

Acres of Harvest

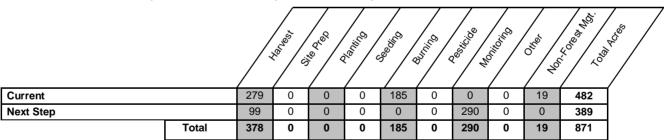
Compartment 23
Total Compartment Acres: 2,521

Commercial Harvest - 279 Harvests with Site Condition - 0 Next Step Harvest - 99 Habitat Cut - 99

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Cadillac Mgt. Unit Report 3 -- Treatments Compartment: 23 s Year of Entry: 2018 а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Approval n Age Density Method Objective Name Structure **Status** ч CoverType Aae Range Type 63023001-4124 - Red with 1 99 2 Sawtimber 100 81-110 Burn Understory 412 - Oak Types Even-Aged Proposal White Oak Burn Well **Habitat Cut: No** Site Condition: Prescription Prescribe burn to set back red maple. Specs: Next Step Harvest, Seed Tree with Retention Treatments: Acceptable Mix of oak species. Regen: Other 1 4 1 See "Next Step Treatments" for harvest prescription post-burn. Comment: Proposed Start Date: 10/01/2017 63023006-Cut 14.0 4126 - White, Black, Sawtimber 81-110 Harvest Seed Tree with 4129 - Mixed Two-Aged Proposal N. Pin Oak Well Retention Oak **Site Condition: Habitat Cut: No** Prescription Mark a mix of species to leave averaging 20-40 basal area. Open up around oak regeneration. Focus retention along the boundary with stand 4. Specs: 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. Use understory shrub protection spec in timber sale. Protect regen. Acceptable regen is oak with a mix of upland deciduous and coniferous species. Monitoring, Natural Regen (Intermediate) Next Step Treatments: Acceptable Oak species with a mix of upland deciduous and coniferous species. Regen: Decline in area may reduce overall basal area when sale is being set up. **Other** Comment: 10/01/2017 **Proposed Start Date:** 63023007-Cut 4130 - Aspen 46.0 Poletimber 45 51-80 Harvest Clearcut with 4139 - Aspen, Even-Aged Proposal Mixed Deciduous Well Retention **Habitat Cut: No Site Condition:** Cut all species except oak and black cherry. Retention in the form of patches scattered throughout stand. Use Grouse Spec. 5.2.4.4 - Leave one, 8" <u>Prescription</u> 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 Specs: one pile per acre. Use understory shrub protection spec in timber sale. Protect regen. Use timber sale to remove autumn olive from adjacent wildlife opening. Next Step Monitoring, Natural Regen (Re-Inventory) **Treatments:** Acceptable Aspen with mixed deciduous species. Regen: Other Comment:

Proposed Start Date: 10/01/2017

4124 - Red with Sawtimber 105 81-110 Harvest Seed Tree with 4199 - Other 63023013-Cut Even-Aged Proposal White Oak Well Retention Mixed Upland Deciduous

Habitat Cut: No Site Condition:

Prescription Mark to leave a mix of species averaging 20-30 basal area. Retention in the form of patches throughout. 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 Specs: one pile per acre. Use understory shrub protection spec in timber sale. Protect regen. Use ORV Route and Trail protection spec in timber sale.

Use timber sale to remove autumn olive from adjacent wildlife opening.

Monitoring, Natural Regen (Intermediate) Next Step Treatments:

Acceptable Oak with a mix of upland deciduous species.

Regen:

Other Comment:

Proposed Start Date: 10/01/2017

S t		C	adillac Mgt. Unit		Re	port 3	Treatme	nts	Compart Year of E	ment: 23 Entry: 2018	DNR DNR
••	atment ame	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
35 63023	3035-Cut	51.5	4131 - Aspen, Oak	Poletimber Well	46	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
Habitat Conference of Prescription Specs:	Cut all s 5.2.4.4 single p	- Leave o	Site Condition: xcept an occasional rone, 8" diameter or la least one pile per acopening.	mix of specie	gth (8 fc	ot minimu	um) piece on the	e ground for every 2	2 acres, also leave	at least six (6)	large tops in a
Next Step Treatments:		ing, Natu	ral Regen (Re-Invent	ory)							
Acceptable Regen:	_ Aspen										
Other Comment:											
Proposed S	Start Date:	10/0	1/2017								
	23048- Burn	85.7	4123 - Red Oak	Sawtimber Poor	110	1-50	Burn	Understory	412 - Oak Types	Even-Aged	Proposal
Habitat Conference Prescription Specs:		oe burn to	Site Condition: o set back red maple								
Next Step Treatments:		ing, Natu	ral Regen (Intermedi	ate)							
Acceptable Regen:	Oak wit	h mixed ι	upland species.								
Other Comment:	FTP #C	63-617									
Proposed S	Start Date:	10/0	1/2017								
51 63023	3051-Cut	13.7	42100 - Planted White Pine	Poletimber Well	54	141- 170	Harvest	Systematic Thinning	42201 - Natural White Pine, Mixed Deciduous	Even-Aged	Proposal
Habitat Conference Prescription Specs:		and using	Site Condition: a "leave two, take tw	o" row patte	ern.						
Next Step Treatments:	<u>:</u>										
Acceptable Regen:	-										
Other Comment:											
Proposed S	Start Date:	10/0	1/2017								
55 63023	3055-Cut	60.8	42100 - Planted White Pine	Poletimber Well	54	111- 140	Harvest	Systematic Thinning	42141 - Planted Mixed Pine, Mixed Deciduous	Even-Aged	Proposal

Habitat Cut: No Site Condition:

<u>Prescription</u> Thin stand using a "leave two, take two" row pattern.

Specs:

Next Step Treatments:

<u>Acceptable</u>

Regen:

<u>Other</u>

Comment:

Proposed Start Date: 10/01/2017

Cadillac Mgt. Unit Report 3 -- Treatments Compartment: 23 s Year of Entry: 2018 а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Approval n Age Density Method Objective Status Name Structure d CoverType Age Range Type 63023069-Cut 9.9 4126 - White, Black, Seed Tree with 4121 - Oak, 69 Poletimber 105 51-80 Harvest Even-Aged Proposal N. Pin Oak Well Retention Aspen **Habitat Cut: No Site Condition:** Prescription Mark to leave a mix of species averaging 20-30 basal area. Retention in the form of 2, 1/2 acre patches. 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 Specs: one pile per acre. Use understory shrub protection spec in timber sale. Next Step Monitoring, Natural Regen (Intermediate) Treatments: Acceptable Oak and aspen. Regen: Other Decline in area may reduce overall basal area when sale is being set up. Comment: **Proposed Start Date:** 10/01/2017 63023412-NF Herbaceous/Crop/ 15.8 3105 - Mixed Nonstocked Unspec NonForestMat 310 -Proposal **Upland Herbaceous** ified **Grass Planting** Herbaceous Openland **Site Condition: Habitat Cut: No** Prescription Plant forage and brood rearing herbaceous species. Till, fertilize, and plant annually. Specs: Next Step **Treatments: Acceptable** Regen: Other Comment: Proposed Start Date: 10/01/2007 63023463-NF 0.0 3205 - Mixed Other - Specify 310 -463 Nonstocked Unspec NonForestMgt Proposal Upland Shrub ified Herbaceous Openland **Habitat Cut: No Site Condition:** Prescription Plant forage and brood rearing herbaceous species. Till, fertilize, and plant annually. Specs: Next Step Treatments: <u>Acceptable</u> Regen: Other Comment: **Proposed Start Date:** 10/01/2007 463 63023463-NFx 2.7 3205 - Mixed 310 -Proposal Nonstocked Unspec NonForestMgt Other - Specify Upland Shrub Herbaceous ified Openland **Habitat Cut: No Site Condition:**

<u>Prescription</u> Plant forage and brood rearing herbaceous species annually.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Comment:

Proposed Start Date: 10/01/2007

Total Treatment 482.0 Acreage Proposed:

Cadillac Mgt. Unit

Cheryl Nelson : Examiner

Compartment: 23
Year of Entry: 2018

Availability for ManagementTotalAcresAcres AvailAcresDominant Site ConditionsAcresAvailableWith ConditionNot Available5B5C2G

Acres	Available	With Condition	NOT Available		5 B	5C	2G
727	727	0	0	Aspen			
16	16	0	0	Herbaceous Openland			
41	41	0	0	Low-Density Trees			
26	26	0	0	Lowland Aspen/Balsam Poplar			
4	4	0	0	Lowland Shrub			
30	0	0	30	Marsh			30
319	319	0	0	Mixed Upland Deciduous			
51	51	0	0	Natural Mixed Pines			
814	581	233	0	Oak	160	73	
88	88	0	0	Planted Mixed Pines			
107	107	0	0	Red Pine		0	
68	0	68	0	Upland Conifers		68	
34	34	0	0	Upland Mixed Forest			
14	14	0	0	Upland Shrub			
28	28	0	0	Urban		0	
17	0	0	17	Water			17
139	139	0	0	White Pine			
2,521	2,173	301	47	Total Forested Acres	160	141	47
	86%	12%	2%	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	5B: Maintain for regeneration purposes	46	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	44	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Cadillac Mgt. Unit
Cheryl Nelson: Examiner

Cor	mments:						
4							
•	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	58	Unspecified	Unspecified	Unspecified	Unspecified
Co	mments:						
5	Available	5B: Maintain for regeneration purposes	114	Unspecified	Unspecified	Unspecified	Unspecified
Co	mments:						
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14	Unspecified	Unspecified	Unspecified	Unspecified
Co	mments:						
40	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	34	Unspecified	Unspecified	Unspecified	Unspecified
Co	mments:						
42	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	13	Unspecified	Unspecified	Unspecified	Unspecified
Co	mments:						

Report 4 – Site Conditions

Cadillac Mgt. Unit
Cheryl Nelson: Examiner

68	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	2	Unspecified	Unspecified	Unspecified	Unspecified
Co	mments:						

Mgt. Unit

Compartment: #Type! Year of Entry:



Report 5 - 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				

Cadillac Mgt. Unit Compartment: 23
Year of Entry 2018





* 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.

Conservation 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 constocked trout populations and those of other coldwater fish specyear to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such stream designated as trout resources by Fisheries Order 210.	cies (e.g., slimy sculpin) to persist from ese conditions due to substantial				
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 l streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Ri communities are ecologically and socially significant in their effects on water quality and quantity as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodivers					

S	Cadillad	c Mgt. Unit		Report 7	– Forested	Stands Compartment: 23 Year of Entry: 2018
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4124 - Red with White Oak	Sawtimber Well	99.2	100	81-110	Stand burned 2nd time per FTP #C63-734 in June of 2015, and 1st time per FTP #C63-615 in April of 2009. Stand treated timber sale #63-208-98-01, "Tree Fort Oak".
2	42200 - Natural White Pine	Poletimber Poor	20.0	30	1-50	Sale closed 04/21/2015. Previous comments: White pine released in 1990. Large white pine scattered throughout stand. Cut all sawlog wp, mark to thin pulp. Open up around areas of oak seedlings/saplings. Do not cut red pine.
3	4126 - White, Black, N. Pin Oak	Sapling Well	46.1	16	Immature	Stand treated timber sale #63-028-99-01, "Downhome Mixed Wood". White pine was not cut during sale, some jack pine pulp left also.
4	4124 - Red with White Oak	Sapling Well	18.5	16	Immature	Stand treated timber sale #63-028-99-01, "Downhome Mixed Wood". Previous comments: Understory M2 = red maple. Stand in process of regeneration. Moderate to heavy amount of oak seedlings beginning to enter sapling stage. Moderate amount of red pine seedlings.
5	42110 - Planted Red Pine	Sawtimber Well	31.2	59	111-140	Stand thinned per timbersale #63-048-08-01, "Casting Bones". Previous Comments: Understory M2 = red maple. Stand is a Red Pine plantation (FTP #8, October 1957). Stand thinned t-sale 63-028-99-01, "Downhome Mixed Wood".
6	4126 - White, Black, N. Pin Oak	Sawtimber Well	14.0	90	81-110	Area has heavy amount of oak seedlings, moderate amount of oak saplings averaging 2-1/2 to 3 feet tall. Small amount of decline in stand as well as non-commercial removal of individual trees (possibly from illegal firewood cutting). The areas where the sunlight has been getting through have excellent oak seedlings/saplings. Small amount of black cherry and red maple.
7	4130 - Aspen	Poletimber Well	46.0	45	51-80	Stand treated timber sale #16-72 and 18-72 in 1973.
8	4131 - Aspen, Oak	Poletimber Poor	33.2	28	1-50	Occasional black oak. Some quaking aspen. Stand treated previously however the paperwork could not be found. Appears that aspen and black oak were removed.
9	42110 - Planted Red Pine	Poletimber Well	26.2	47	111-140	OPIC - FMD: FTP #127, May 1967. Occasional w/b oak.
10	4133 - Aspen, Mixed Pine	Poletimber Well	16.7	47	81-110	Small amount of mature white oak, mixed oak, and red maple sawlogs. One white oak sawlog = 22".
11	4310 - Pine, Oak Mix	Poletimber Well	33.6	48	81-110	Stand treated timber sale #63-218-98-01. White pine underplanted FTP #131, May 1967.
12	4124 - Red with White Oak	Sawtimber Well	13.1	100	111-140	High quality red oak stand.
13	4124 - Red with White Oak	Sawtimber Well	82.7	105	81-110	Stand thinned per timber sale #63-208-98-01.

S t	Cadillad	: Mgt. Unit		Report 7	Forested	Stands Compartment: 23 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	4139 - Aspen, Mixed Deciduous	Sapling Well	71.7	26	Immature	Stand treated sale #020-88-01. Some black cherry brush. Some quaking aspen in stand. Occasional white birch.
15	4123 - Red Oak	Sawtimber Poor	10.4	101	1-50	Stand treated timber sale #63-035-08-01, "North V South".
16	4131 - Aspen, Oak	Poletimber Well	29.7	37	1-50	Low, wet area on west side.
17	4199 - Other Mixed Upland Deciduous	Poletimber Medium	12.6	55	51-80	Nice pocket of hawthorn in stand.
18	42141 - Planted Mixed Pine, Mixed Deciduous	Sapling Well	87.6	34	1-50	Stand planted per FTP # C-63-210, in May 1982. Red pine planted to the north of stand, jack pine planted in the south of stand. Area of red pine planting being overtopped by natural jack pine.
19	42110 - Planted Red Pine	Poletimber Well	14.3	59	51-80	Stand thinned per timber sale #63-048-08-01, "Casting Bones". Stand planted per FTP #12, Sept. 1957.
20	4199 - Other Mixed Upland Deciduous	Sapling Well	142.8	18	1-50	Stand treated timber sale #63-011-98-01.
22	4130 - Aspen	Sapling Well	9.7	5	Immature	Stand treated timber sale #63-039-09-01, "24th Training".
23	4130 - Aspen	Sapling Medium	51.3	5	Immature	Stand treated timber sale #63-035-08-01, "North V South".
24	4130 - Aspen	Sapling Medium	4.9	2	Immature	Stand treated timber sale #63-009-09-01, "C23 Mix".
25	42110 - Planted Red Pine	Poletimber Well	22.2	59	111-140	Stand treated timber sale #63-048-08-01, "Casting Bones". Red pine planted per FTP #11, Sept. 1957.
26	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	35.7	5	Immature	Stand treated timber sale #63-035-09-01, "Dusyt Trails", completed 10/2011. Medium amount of pole sized scattered black oak, white oak, jack pine, black cherry, red maple, and white pine.
27	4131 - Aspen, Oak	Sapling Well	53.8	16	Immature	Stand treated timber sale #63-021-98-01, "Wicked Witch Hdwds". Occasional red pine logs.
28	42110 - Planted Red Pine	Poletimber Well	12.8	59	141-170	Stand treated timber sale #63-048-08-01, "Casting Bones". Red pine planted per FTP #4, 08-15-1957.
29	4199 - Other Mixed Upland Deciduous	Poletimber Well	42.0	18	1-50	Stand treated timber sale #63-021-98-01, "Wicked Witch Hdwds".
30	4199 - Other Mixed Upland Deciduous	Sapling Well	59.1	18	Immature	Merged two previous stands due to same stand type. Previous two stands were treated per timber sales #63-019-98-01 and #63-020-98-01.

S	Cadillad	c Mgt. Unit		Report 7	Forested	Stands Compartment: 23 Year of Entry: 2018
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
31	6112 - Lowland Aspen	Sapling Well	6.2	1	1-50	Stand treated via Wildlife habitat cut. Occasional cedar and hemlock in stand.
32	4199 - Other Mixed Upland Deciduous	Sapling Poor	9.2	5	Immature	Stand treated timber sale #63-048-08-01, "Casting Bones". Previous Year of Origin on oak was 1916.
35	4131 - Aspen, Oak	Poletimber Well	51.5	46	51-80	Stand treated timber sale #63-002-66-A. Cut in 1970.
36	4130 - Aspen	Poletimber Well	11.0	27	Immature	Stand treated timber sale in 1989. Occasional overstory XL red pine and Log jack pine.
37	429 - Mixed Upland Conifers	Poletimber Well	43.7	100	81-110	
38	4126 - White, Black, N. Pin Oak	Sawtimber Poor	45.5	100	1-50	Stand treated timber sale #63-025-09-01, "C23 Oak & Pine".
39	4130 - Aspen	Poletimber Well	50.1	42	1-50	Stand treated timber sale #63-039-09-01, "24th Training". Previous Year of Origin: 1975.
41	42200 - Natural White Pine	Poletimber Medium	18.9	30	51-80	Stand treated timber sale #63-009-09-01, "C23 Mix". Sale closed 04/21/2015. White pine released in 1990.
45	4131 - Aspen, Oak	Poletimber Well	137.3	26	Immature	Autumn olive planted around wildlife opening. Occasional jack pine and black cherry. Excellent hawthorn regeneration.
46	4130 - Aspen	Sapling Well	54.1	15	Immature	Stand treated timber sale #63-207-98-01 in 2001.
47	4123 - Red Oak	Sawtimber Poor	59.9	108	111-140	Stand treated timber sale #63-053-10-01, "Big Rock Oak".
48	4123 - Red Oak	Sawtimber Poor	85.7	110	1-50	Stand treated timber sale #63-009-09-01, "C23 Mix".
49	4130 - Aspen	Sapling Well	6.4	6	Immature	Stand treated timber sale #630390801, "32nd Street Mix". Cut summer of 2010. Previous year of origin = 1916 (on oak).
50	4131 - Aspen, Oak	Sapling Well	16.7	15	Immature	Stand treated timber sale #63-207-98-01 in 2001.
51	42100 - Planted White Pine	Poletimber Well	13.7	54	141-170	White pine planted per FTP# 63-85 in May 1962.
52	4131 - Aspen, Oak	Poletimber Well	23.0	15	Immature	Stand treated timber sale #63-207-98-01, "Sanborn Creek Aspen".
53	4131 - Aspen, Oak	Sapling Well	18.7	6	Immature	Stand treated timber sale #630390801, 32nd Street Mix. Cut summer of 2010. Previous year of origin = 1949.

S t	Cadillac	Mgt. Unit		Report 7	– Forested	Stands Compartment: 23 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
54	4199 - Other Mixed Upland Deciduous	Sapling Poor	7.6	6	Immature	Stand treated timber sale #630390801, "32nd Street Mix". Cut summer of 2010. Previous year of origin = 1957 on red pine.
55	42100 - Planted White Pine	Poletimber Well	60.8	54	111-140	Areas of red pine (1957) interplanted with white pine (1962). RP FTP #5, Sept. 1957. WP FTP #84, May 1962. Occasional black and white oak, Red mapleand aspen.
56	4139 - Aspen, Mixed Deciduous	Sapling Well	31.8	15	Immature	Stand treated 2001 sale #63-207-98-01.
57	4124 - Red with White Oak	Sawtimber Well	124.1	96	51-80	Stand treated timbersale #63-009-09-01, "C23 Mix". Occasionaloverstory white and Red Pine L-P.
58	4125 - Black, N. Pin Oak	Poletimber Well	6.2	35	1-50	Timber sale for firewood done between 1965 - 1977. Good stump sprouts as well as single stem regen.
60	42200 - Natural White Pine	Poletimber Well	17.4	46	1-50	Stand treated timber sale #63-025-09-01, "C23 Oak & Pine". Occasional overstory white and red pine.
61	42250 - Pine, Oak	Poletimber Well	29.1	50	1-50	Stand treated sale#63-218-98-01. Released heavy stocked understory of white pine.
62	4126 - White, Black, N. Pin Oak	Sawtimber Well	114.3	102	81-110	Stand treated timber sale #63-209-98-01 in 2001.
63	429 - Mixed Upland Conifers	Poletimber Well	24.0	100	81-110	
64	6112 - Lowland Aspen	Sapling Poor	20.2	5	1-50	Stand treated wildlifehabitat cut.
66	42250 - Pine, Oak	Poletimber Well	7.0	40	1-50	Stand treated sale# 63-220-98-01.
67	4125 - Black, N. Pin Oak	Poletimber Well	24.3	37	51-80	
68	4126 - White, Black, N. Pin Oak	Sawtimber Well	2.6	100	111-140	Do not treat. Leave for age class and species diversity.
69	4126 - White, Black, N. Pin Oak	Poletimber Well	9.9	105	51-80	
70	4130 - Aspen	Sapling Well	9.8	28	Immature	Stand treated timber sale#163-012-88-01.
74	42101 - Planted White Pine, Mixed Deciduous	Poletimber Well	7.9	26	1-50	White pine released in 1990 per timber sale #63.218-98-01. Stand planted per FTP #131 in May 1967.
76	42290 - Natural Mixed Pine	Sawtimber Well	14.7	45	81-110	Stand is mostly on steep side slope and loggers were not able to cut this area in adjacent timber sale. Pocket of overstory white pine, red pine, and white oak. Occasional jack pine pulp.

S t a n d	Cadillad		Report 7	- Forested	Stands Compartment: 23 Year of Entry: 2018	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
77	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	9.9	35	81-110	Stand treated timber sales #16-72 and 18-72 in 1973. Oak sapling ~3" dbh = 24 rings.
82	4126 - White, Black, N. Pin Oak	Sawtimber Well	57.6	108	111-140	Occasional white pine in the overstory. Understory white pine is heavierin the northern portion of thestand. Oak quality increases in the northern portion of the stand.

Report 8 - Nonforested Stands



Stand	Cover Type	Acres	Managed Site	General Comments:
21	3209 - Upland Shrub (OI)	2.9		OPIC - FMD: Stand treated timber sale #63-048-08-01, "Casting Bones". Previous Year of Origin: 1959.
33	122 - Road/Parking Lot	4.0	No	Frank Smith Road
34	3303 - Mixed Low Density Trees	8.9		Stand treated timber sale #63-025-09-01, "C23 Oak & Pine". Cut in 2013. Year of origin on oak is 1910.
40	6230 - Cattail	17.5	No	Sanborn Creek floodplain and swamp.Occasionalcedar, hemlock, and white pine.
42	6230 - Cattail	12.5	No	Sanborn Creek floodplain and swamp.Occasional cedar, hemlock, andwhite pine.
43	330 - Low-Density Trees	24.4		Stand treated timber sale #63-009-09-01, "C23 Mix". Occasional R/B oak, red maple, and white oak L-P.
44	320 - Upland Shrub	5.2		Stand treated timber sale #630390801, "32nd Street Mix". Cut summer of 2010. Previous information: red pine planted in 1957.
59	123 - Other High Intensity Urban	10.1	No	Powerline
65	6299 - Lowland Shrub (OI)	4.0		Wildlife habitat cut for lowland aspen.
71	110 - Low Intensity Urban	13.8	No	Powerline. Runs the full length of the compartment on the western edge.
79	6220 - Alder/willow	0.2	No	
83	500 - Water	11.1	No	Sanborn Creek floodplain and swamp.
84	500 - Water	5.5	No	Sanborn Creek flooding.Active beaver lodge.
85	330 - Low-Density Trees	7.6		Stand treated timber sale #63-035-08-01, "North V South". Overstory red oak, white oak, red maple, andwhite pine scattered throughoutstand.
401	3105 - Mixed Upland Herbaceous	0.8	No	Vacated exploratory well site. Created in the summer of 2006.
412	3105 - Mixed Upland Herbaceous	3.3	Yes	Maintained Wildlife Opening
421	3105 - Mixed Upland Herbaceous	5.5	Yes	Maintained Wildlife Opening

Cadillac Mgt. Unit

Report 8 - Nonforested Stands



Stand	Cover Type	Acres	Managed Site	General Comments:
441	3205 - Mixed Upland Shrub	1.5	Yes	Maintained Wildlife Opening
442	3105 - Mixed Upland Herbaceous	2.1	Yes	Maintained Wildlife Opening
443	3105 - Mixed Upland Herbaceous	4.1	Yes	Maintained Wildlife Opening
463	3205 - Mixed Upland Shrub	3.9	Yes	Maintained Wildlife Opening