

Compartment Review Presentation

Cadillac Forest Management Unit

Compartment 63137

Entry Year 2025

Acreage: 1,355

County Wexford

Management Area: Kalkaska Sandy Moraines

Stand Examiner: Matt Edison

Legal Description:

T24N, R9W Sections 7-9, 16, and 21

Identified Planning Goals:

This compartment is bound by the Manistee River on the north and has several tributary streams running through it, including Manton Creek. The primary emphasis along the Manistee River and it's immediate vicinity will be to preserve the associated visual aesthetics and recreational values. Those areas beyond the view of the river will be managed for dispersed recreation, wildlife, and timber. Major management emphasis on these setback areas will be on intolerant timber types.

Soil and topography:

Soil series found in the compartment include Rubicon-Montcalm-Graycalm, Tawas-Croswell-Lupton, and Nester-Kawkawlin-Manistee. Terrain is generally flat to slightly rolling. Very steep primary and secondary river bluffs follow the corridor along the Manistee River. Tributary streams are typically in narrow steep ravines.

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

Surrounding land ownership is a mix of state and private land. Private land is dispersed throughout the area but concentrated to the south. The private lands are a mix of fallow agricultural fields and small woodlots. Development pressure on private lands in this area is high due to the proximity to the major travel corridor. The town of Manton is four miles south of the compartment boundary. There is a relatively undeveloped corridor along the Manistee River. The north end of the recent US-131 construction abuts the east side of this compartment. Twenty-six acres (along the east boundary of the compartment) that were previously inventoried as State Forest Land are actually Department of Transportation owned (as part of the US-131 right-of-way). The forty acre parcel in the SWNE of Sec. 7 has been acquired since the last inventory of this compartment. It was purchased in 1995. Desirable land for acquisition: Sec. 7, SESE & ENESW; Sec. 8, SWSE.

Unique Natural Features:

The Manistee River winds along the northern boundary of this Compartment. Manton Creek, and several smaller unnamed tributaries of the Manistee flow through the northern portion of this compartment. Michigan Natural Features Inventory lists the potential for occurrences of wood turtles, great blue heron rookeries, red-shouldered hawks, goshawks and massasauga rattlesnakes.

Archeological, Historical, and Cultural Features:

There are known Archaelogical sites within the compartment. These concerns have been addressed and will not be affected by treatments.

Special Management Designations or Considerations:

Maintain the aesthetics integrity along the Manistee River and the major travel corridors through the Compartment. Preserve water quality through the implementation of Best Management Practices. The Manistee River is being reviewed for classification as a Natural River. Management proposals will follow the guidelines for this designation.

Watershed and Fisheries Considerations:

The Manistee River, Manton Creek, and several unnamed tributaries flow through Compartment 137. All are Designated Trout Streams. Manton Creek is a very high quality tributary to the Manistee River, with naturally reproducing populations of brook and brown trout. Manton Creek is also on the "Trout Streams Vulnerable to Beaver Damming" list. Therefore, future management of the riparian zone near Manton creek should be to manage for tree species other than aspen. (M. Tonello, 8/27/13)

Wildlife Habitat Considerations:

This compartment is in the Highplains Ecosystem, Grayling Outwash Plains Subsection, LTA 5211. Soils are characterized by deep, excessively drained, acidic sands. Historic vegetation included the entire spectrum of conifer dominated forests. Wildlife habitat objectives are to continue to maintain species and age-class diversity across the compartment, to promote within-stand structural diversity, and to encourage lowland conifers and mast-producing species. Featured species of special interest include bear, deer, woodcock, ruffed grouse, and snowshoe hare. (E. Victory,

8/21/13).

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of coarse-textured glacial till, glacial outwash sand and gravel and postglacial alluvium and end moraine of coarse-textured till. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift are the Mississippian Michigan and Marshall Formations. The Michigan is quarried for gypsum and the Marshall was previously used as a building stone elsewhere in the State. A gravel pit is located in section 16 and potential is considered to be good. This area lies seven miles southeast of the prolific Silurian Guelph (Niagaran) reef trend. There does not appear to be any potential for reefs in this area. Sections 16 and 21 are currently leased for oil and gas development. (T. Hoane, 3/6/2013).

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 closure. 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.

Recreational Facilities and Opportunities:

The Michigan Cross country cycle trail & snowmobile trail #6 are located along the county road in this compartment. There is heavy use of state lands for hunting, fishing, berry and mushroom picking in this compartment. Dispersed camping is also common within this compartment. (T.M.N. 7/10/13).

Fire Protection:

With the county roads and highway system, access within the compartment is good. Limiting factor for response to a wildfire would be inaccurate directions from the reporting parties, due to the Manistee River and US131 freeway. There are some private parcels and the abundance of recreational opportunities that cause most wildfires. Fuel types lend themselves to large fire potential. The railroad crosses the compartment limiting the response of wildfire equipment. Fire response time would be short being that Manton Field Office is close to the compartment. (B. Tower, 2013).

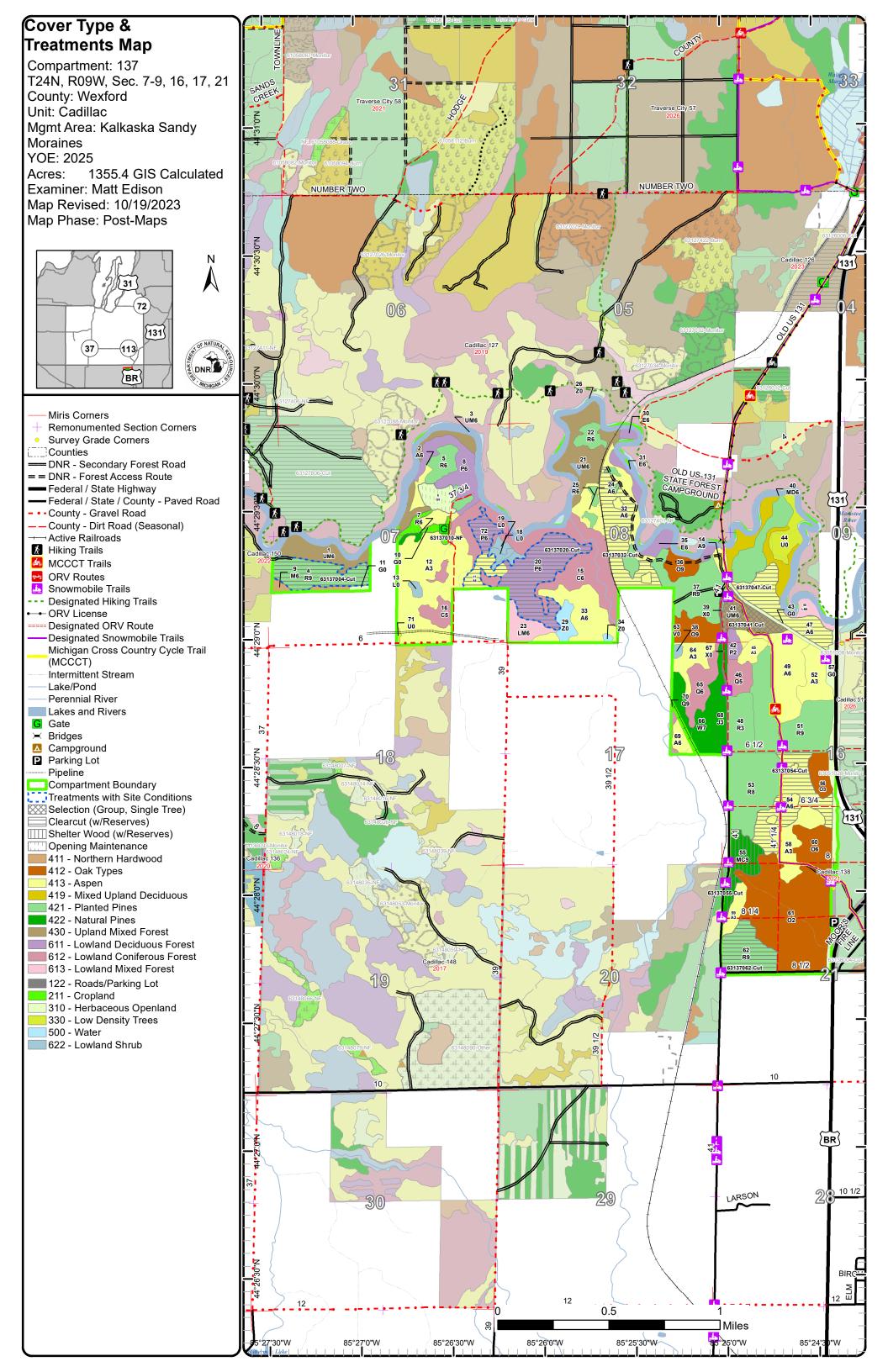
Additional Compartment Information:

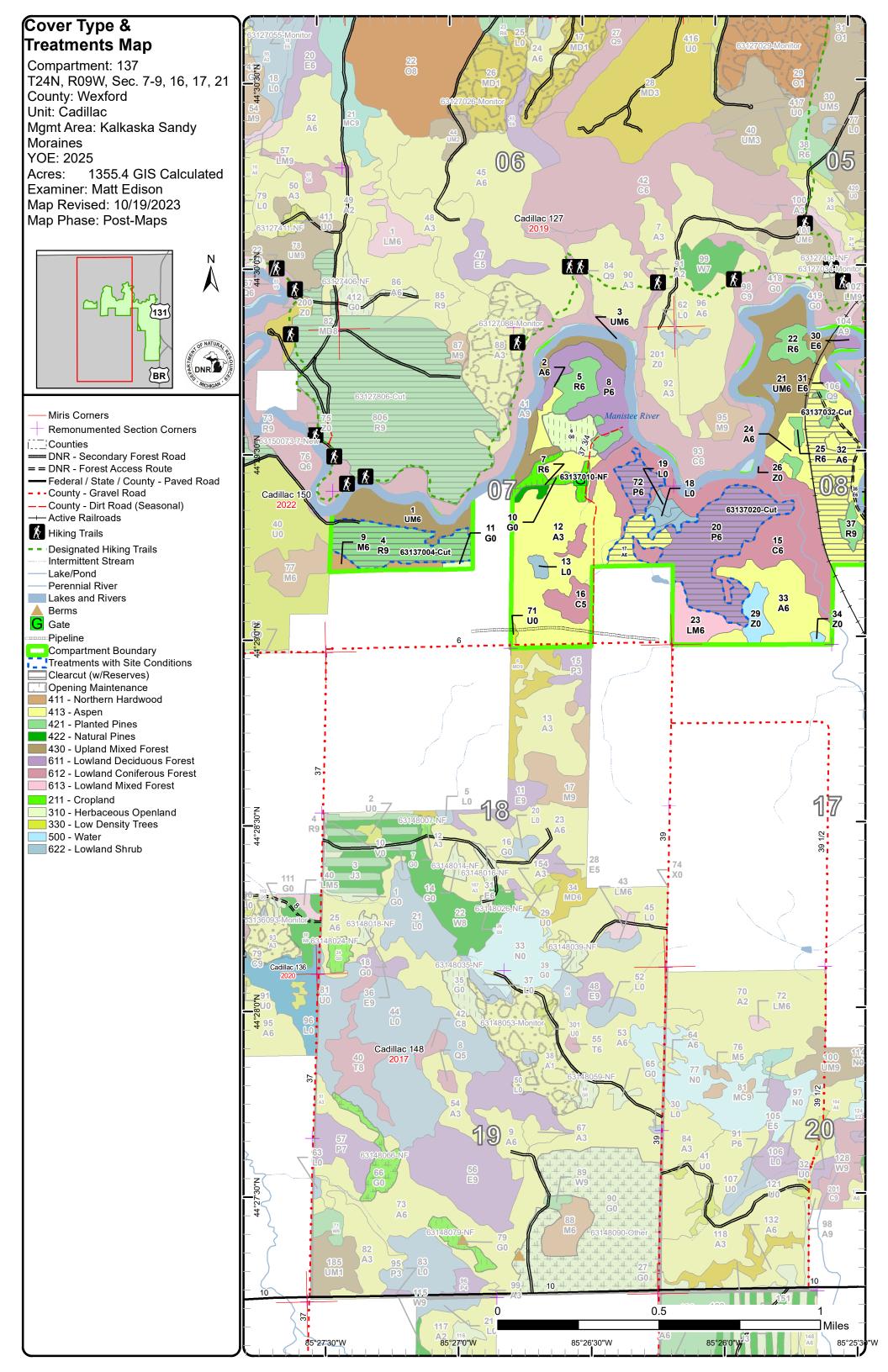
The following reports from the Inventory are attached:

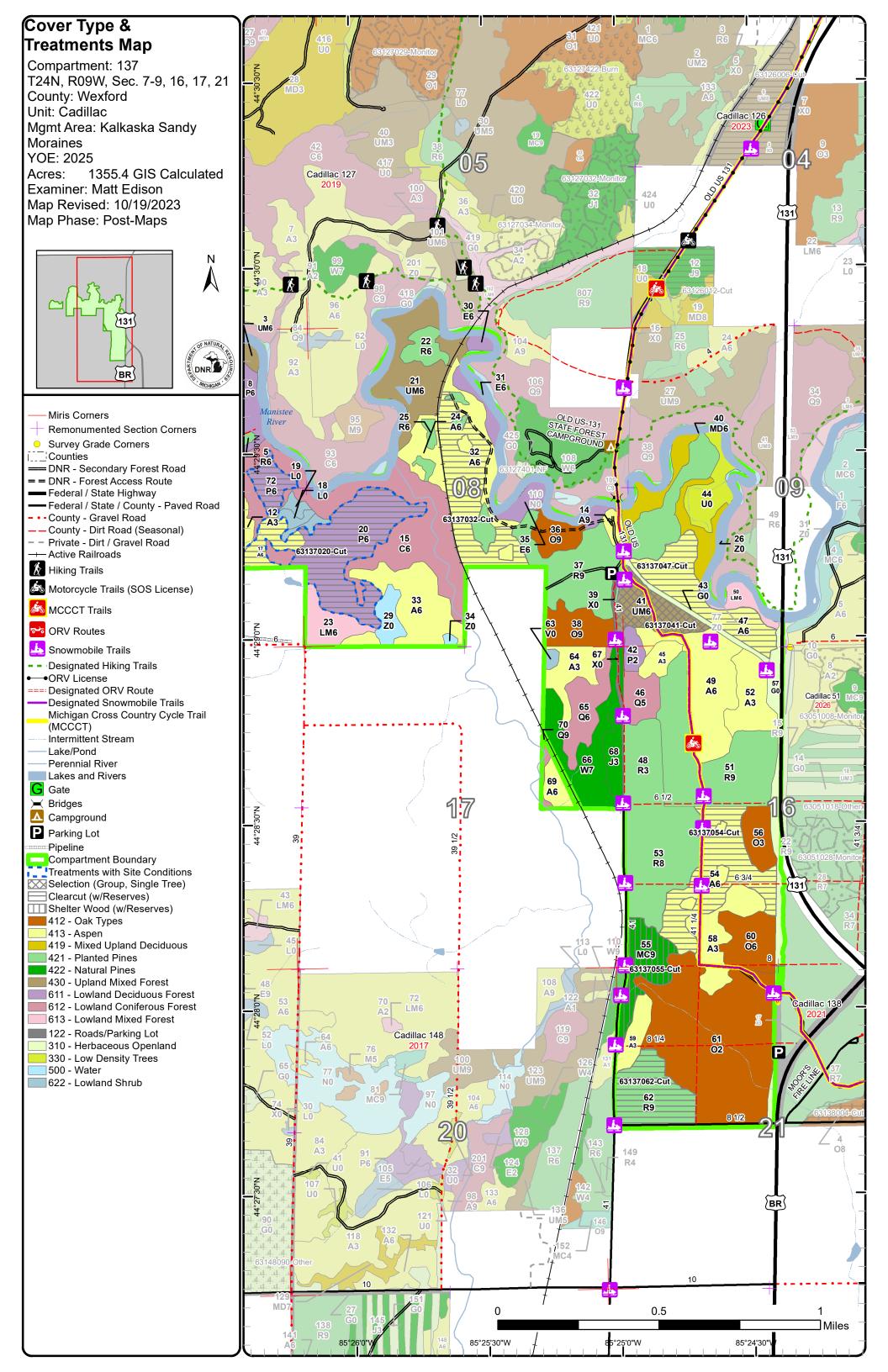
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

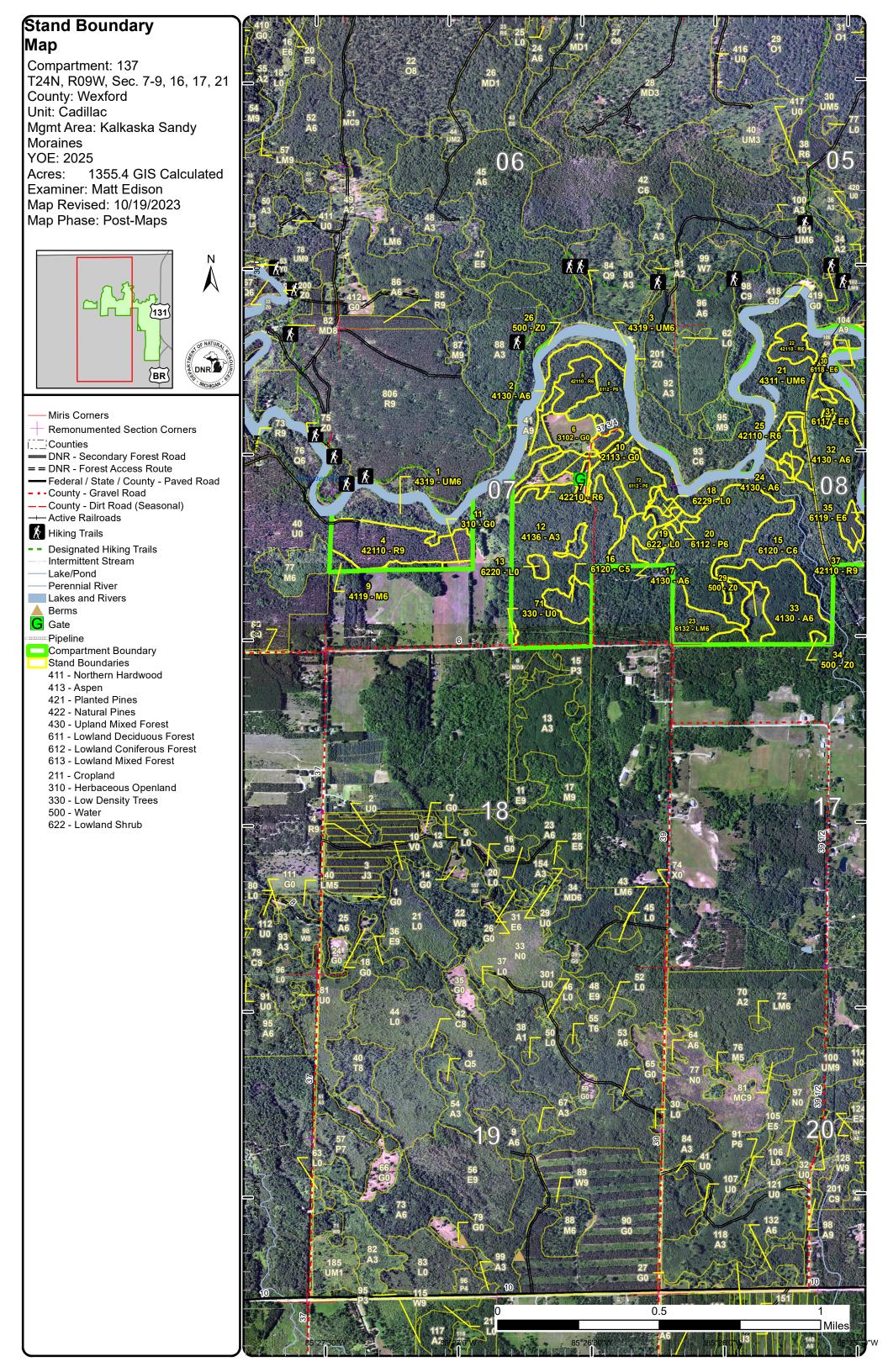
The following information is displayed, where pertinent, on the attached compartment maps:

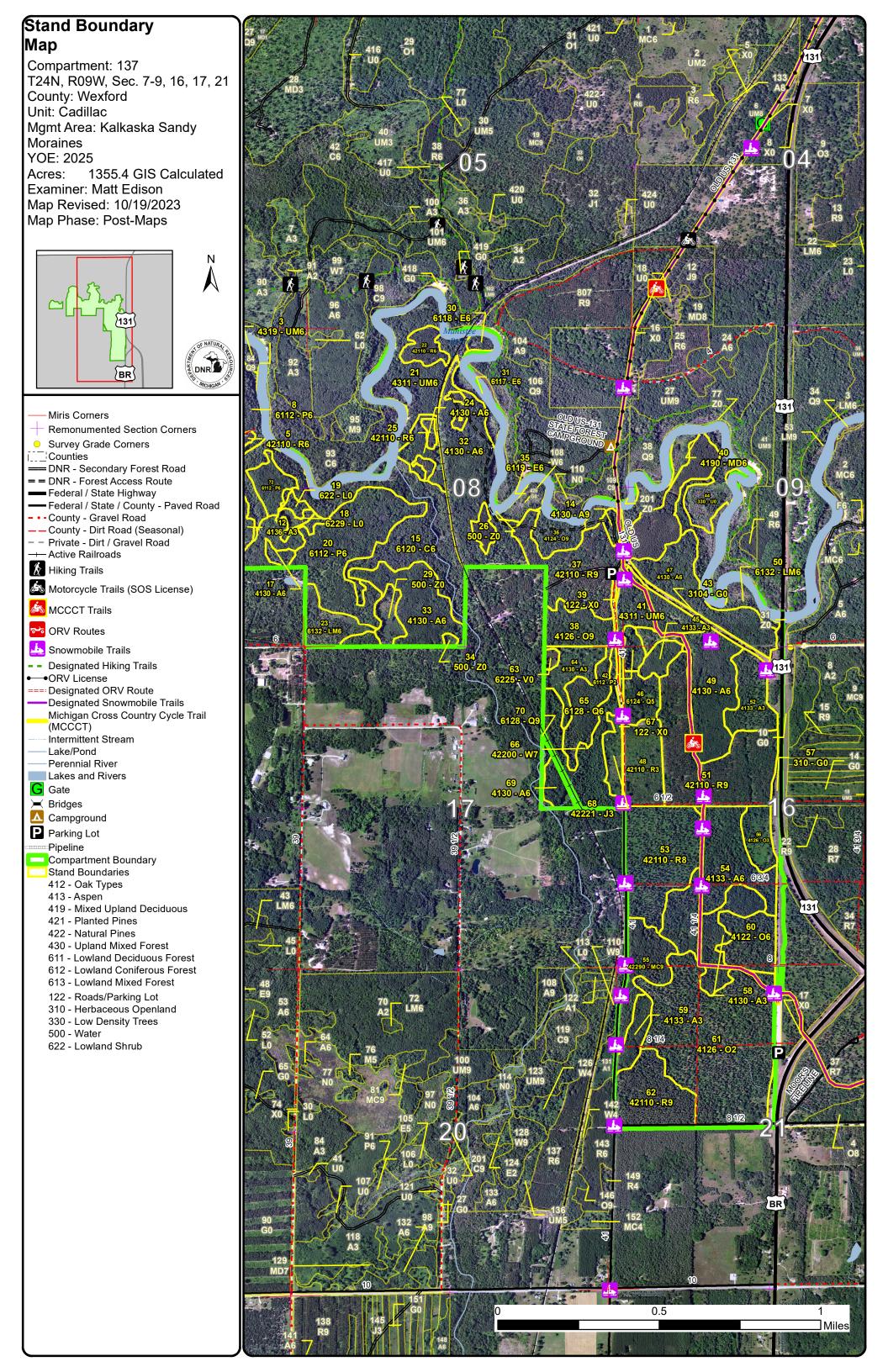
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

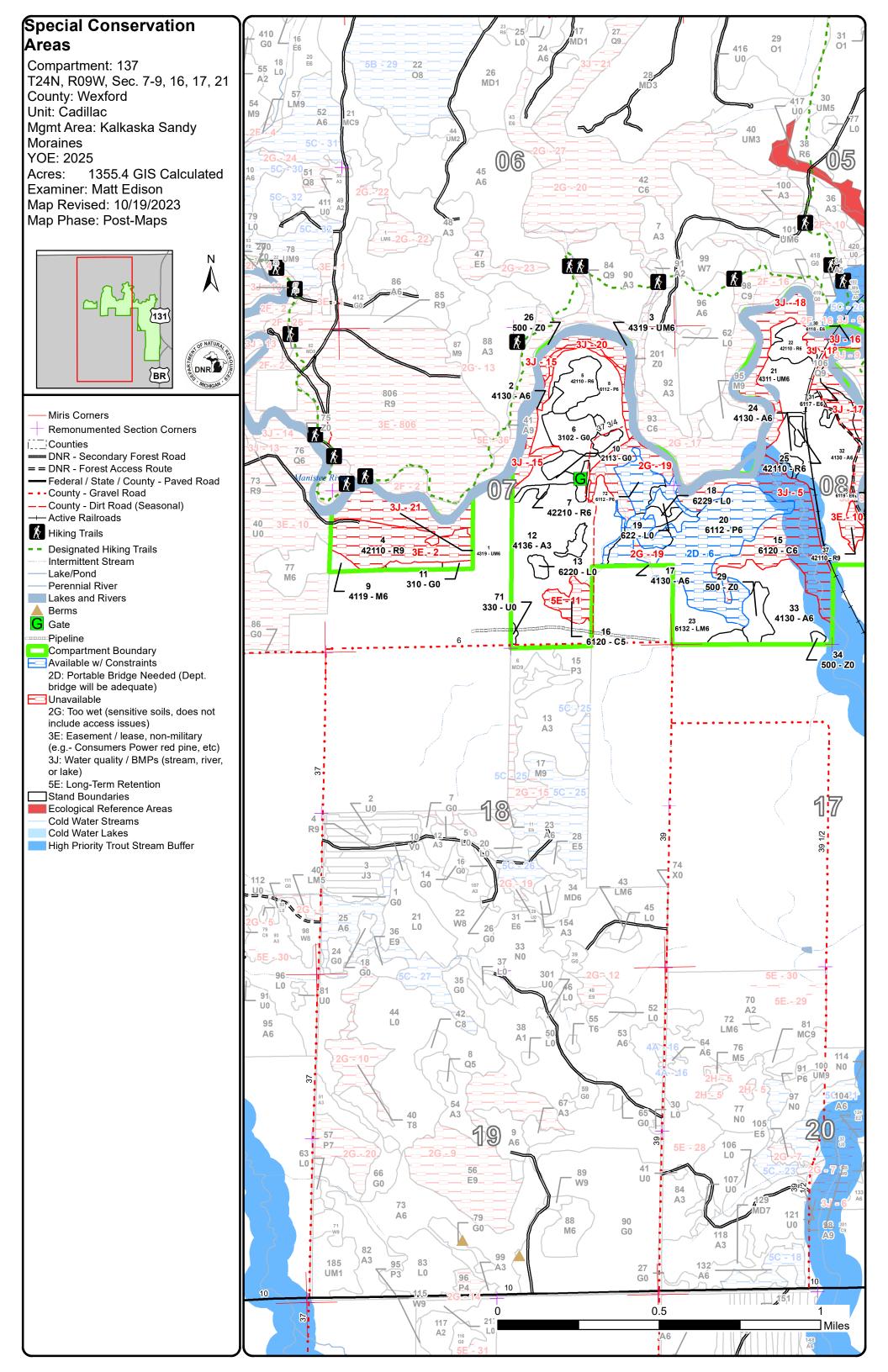


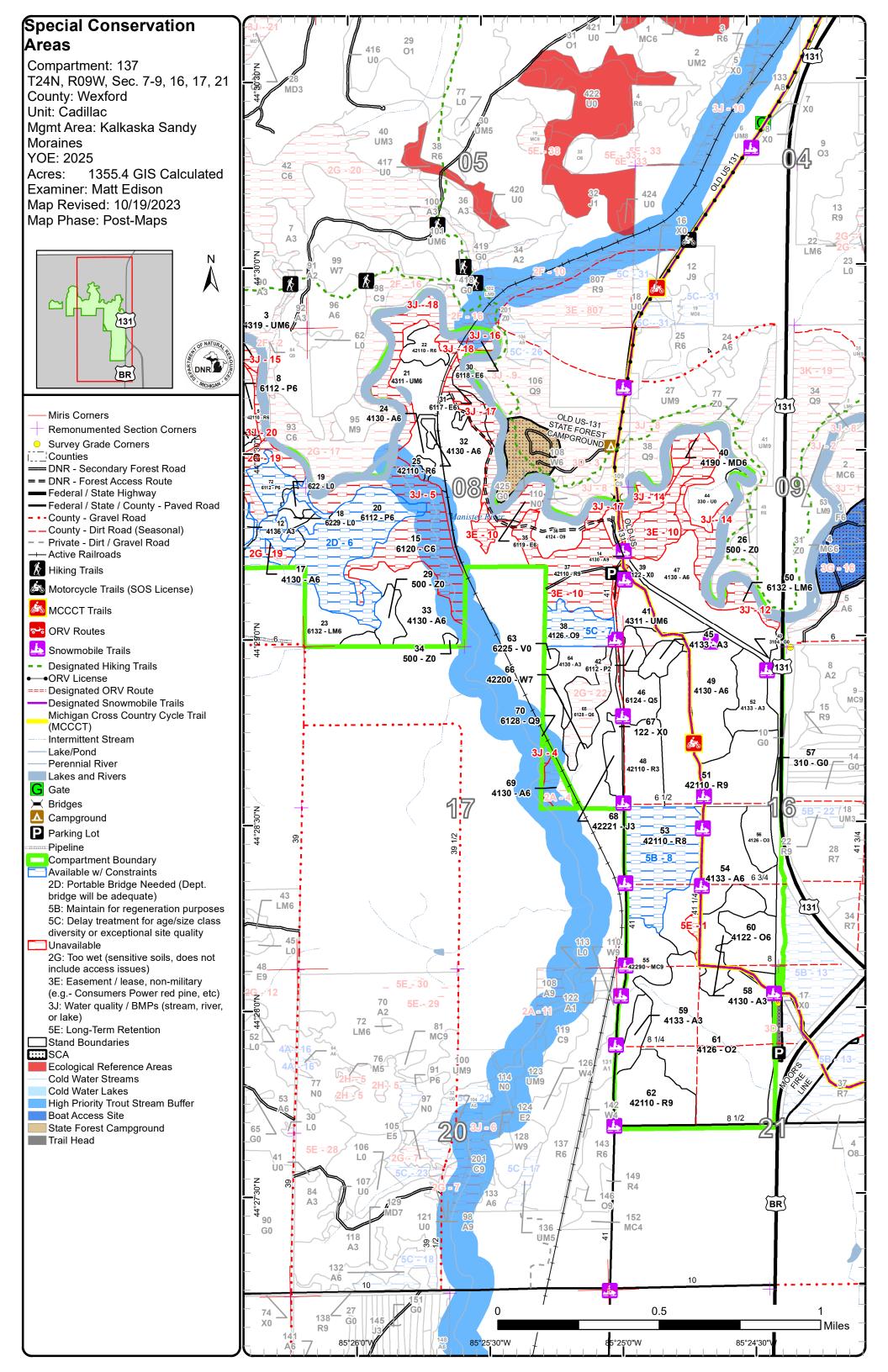












Cadillac Mgt. Unit

Matt Edison : Examiner

Compartment 137 Year of Entry 2025



Age Class

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	/	/ * /	/ /	/ /	/ /	/	/ /	/	/ /	/ /	/ /	′ /	_ /	_ /	/	/ /	/ /	/ /	LO L
	/ 2	Kor C	3 / 8		\$ \\ \&	3 /		3/8	8/8	\$ [\]	\$ \ &						, K. / E	š /	Exer Yag
	/ 🗞		/ ~	/ 'V	/ "5"	/ *	/ %	/ 6		/ &	/ %	/ %	/ 💯	/ 🌣	/ 💆	/ 💆	/ `	\ 3rt	
Aspen	0	113	31	0	79	46	98	9	0	0	0	0	0	0	0	0	0	0	376
Bog	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Cedar	0	0	0	0	0	0	0	0	0	0	0	11	72	0	0	0	0	0	83
Cropland	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Herbaceous Openland	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Jack Pine	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Low-Density Trees	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Lowland Aspen/Balsam Poplar	0	0	5	0	25	0	0	60	0	0	0	0	0	0	0	0	0	0	90
Lowland Conifers	0	0	0	0	0	0	0	17	11	0	2	0	0	0	0	0	0	0	29
Lowland Deciduous	0	0	0	0	0	0	12	6	0	0	0	0	0	0	0	0	0	0	18
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	13	0	0	7	0	0	0	0	0	20
Lowland Shrub	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	22
Natural Mixed Pines	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	21
Northern Hardwood	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
Oak	0	0	0	103	11	18	0	0	26	0	0	0	0	0	0	0	0	0	157
Red Pine	0	0	20	0	0	0	0	166	13	0	75	0	0	0	0	0	0	0	274
Upland Mixed Forest	0	0	0	0	36	0	0	0	20	0	0	22	16	0	0	0	0	0	94
Urban	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Water	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
White Pine	0	0	0	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0	29
Total	129	113	64	103	151	64	110	279	99	41	77	33	95	0	0	0	0	0	1355



Report 2 - Treatment Summary

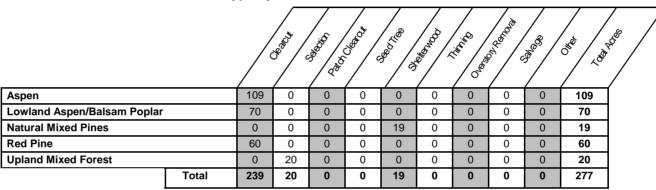
Cadillac Mgt. Unit Year of Entry: 2025

Acres of Harvest

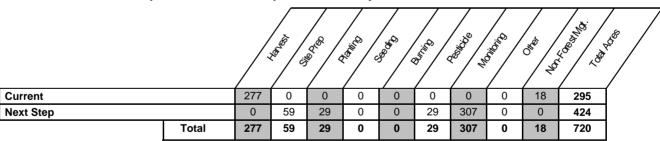
Compartment 137
Total Compartment Acres: 1,355

Commercial Harvest - 177
Harvests with Site Condition - 100
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Cadillac Mgt. Unit Report 3 -- Treatments S t

a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habit Cut
oose	ed Treatmen	ts:									
4	63137004-Cut	30.2	42110 - Planted Red Pine	Sawtimbe Well	r 69	141- 170	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	No
Pres Spec	scription Consur	ners red p	pine								
	t Step Monitor atments:	ing, Natu	ral Regen (Re-Inve	ntory)							
Acce Reg	eptable red pind en:	e									
Othe Com	er nment:										
Site	Condition Non	-Military L	ease/Easement								
Prop	osed Start Date:	10/1 /20	023								
6	63137006-NF	10.5	3102 - Grass	Nonstocke	ed	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	3102 - Grass		No
Pres Spec	scription Manage cs:	ed Wildlife	e Opening								
	t Step atments:										
Acce Reg	eptable en:										
Othe Com	<u>er</u> nment:										
Site	Condition										
Prop	osed Start Date:	10/1 /20)24								
10	63137010-NF	7.4 2	2113 - Forage Crop	s Nonstocke	ed	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	3102 - Grass		No
Pres Spec	scription Manage cs:	ed Wildlife	e Opening								
	t Step atments:										
	eptable_										
Acce Reg											
Reg	en:										
Othe Com	en: er										

Cadillac Mgt. Unit

6112 - Lowland

Aspen

Poletimber

Well

Report 3 -- Treatments

Compartment: 137 Year of Entry: 2025

Even-Aged

Nο

6112 - Lowland

Aspen

S t а

> d 20

Treatment Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat n Method Objective Name CoverType Density Age Range Type Structure Cut

141-

170

Specs:

Clear-Cut with pocket retention 3-6% of treatment area. Actual treatment will reflect on the ground conditions and acreage may vary from original proposed treatment. Harvest in frozen winter conditions and locate appropriate skidding and decking areas for Archaelogical

Harvest

Clearcut with

Retention

considerations.

70.0

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any Mix

63137020-Cut

Regen:

Other Comment:

Site Condition Portable Bridge Needed

Proposed Start Date: 10/1 /2024

63137032-Cut 37.4 4130 - Aspen Clearcut with Even-Aged 32 Poletimber 58 141-Harvest 4139 - Aspen, Nο Well 170 Retention Mixed Deciduous

Specs:

Prescription Clear-Cut with pocket retention 3-6% of treatment area. Actual treatment will reflect on the ground conditions and acreage may vary from original proposed treatment. Leave some large White or red Pine. Follow Natural River buffer guidelines. Harvest in frozen winter conditions and locate appropriate skidding and decking areas for Archaelogical considerations.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

63137041-Cut 19.7 4311 - Pine, Aspen Poletimber 141-Harvest **Group Selection** 4319 - Mixed Uneven-No Mix Well 170 **Upland Forest** Aged

Prescription Cut all trees except White Pine Greater than 10".

Actual treatment will reflect on the ground conditions and acreage may vary from original proposed treatment. Remove aspen and maple. Specs:

Select wp 10" and under. Harvest in frozen winter conditions and locate appropriate skidding and decking areas for Archaelogical

considerations

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

Compartment: 137

Year of Entry: 2025

Upland Forest

Retention

Sta

a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
47	63137047-Cut	31 0	4130 - Aspen	Poletimbe	r 53	141-	Harvest	Clearcut with	4310 - Miyed	Even-Aged	No

Prescription Clear-Cut with pocket retention 3-6% of treatment area. Do not cut White Pine.

Well

Specs: Actual treatment will reflect on the ground conditions and acreage may vary from original proposed treatment. Harvest in frozen winter

conditions and locate appropriate skidding and decking areas. Apply BMP and Natural River guidelines near River bluff.

170

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

54 63137054-Cut 40.7 4133 - Aspen, Poletimber 41 111- Harvest Clearcut with 4133 - Aspen, Even-Aged No Mixed Pine Well 140 Retention Mixed Pine

<u>Prescription</u> Clear-Cut with pocket retention 3-6% of treatment area. Actual treatment will reflect on the ground conditions and acreage may vary from

Specs: original proposed treatment.

Cut all trees except for any white oak or select white and red pine.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

55 63137055-Cut 19.0 42290 - Natural Sawtimber 141-Harvest Shelterwood with 4133 - Aspen, Uneven-No Mixed Pine Well 170 Retention Mixed Pine Aged

<u>Prescription</u> Select Cut White and Red Pine to leave approximately 50-60 basal area. Cut all other trees greater than 6 inches, except leave any white <u>Specs:</u> oak. Protect understory regeneration as best as possible. Provide for normal recreation trail protections. Leave uncut buffer along 41 rd. for

aesthetic considerations.

Actual treatment will reflect on the ground conditions and acreage may vary from original proposed treatment.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Acceptable regen will consist of any mix of Aspen, Oak, Maple, Birch, Beech, Cherry, White Pine, Red Pine, Balsam Fir, Spruce, or Cedar.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

Cadillac Mgt. Unit Report 3 -- Treatments

Compartment: 137

S t a									Year of Entry	y: 2025	DNR BOURGE
n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
62	63137062-Cut	29.4	42110 - Planted Red Pine	Sawtimbe Well	er 97	111- 140	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	No
Preso Spec		t with no	retention for regene	eration cons	ideratio	ns. Follov	v up with cultiva	tion treatments as	needed.		
Next : Treat		•	Chopping; SitePre cial Regen(3yr)	p, Trenchin	g; Pes	ticide, Ae	rial - Site Prep;	Planting, Initial Pl	lant; Monitoring,	Artificial Rege	n(1yr);
Accer Rege		Red Pine	е								
Other Comr	=										
Site C	<u>Condition</u>										
Propo	osed Start Date:	10/1 /20	024								

Total Treatment Acreage Proposed: 295.3

Compartment: 137

Cadillac Mgt. Unit

Matt Edison: Examiner Year of Entry: 2025

Availa	ability for	Managemer	nt									
Total	Acres	Acres Avail	Acres	D	omina	nt Site	Cond	dition	s			
Acres	Available	With Condition	Not Available		2D	5B	5C	2A	2G	3E	3J	5E
364	344	11	9	Aspen	11			6			0	2
2	2	0	0	Bog								
83	4	4	75	Cedar	4				17		50	8
7	7	0	0	Cropland								
40	40	0	0	Herbaceous Openland								
8	8	0	0	Jack Pine								
16	16	0	0	Low-Density Trees						0		
90	24	60	6	Lowland Aspen/Balsam Poplar	60						6	
30	10	0	19	Lowland Conifers				0	17		2	
18	0	0	18	Lowland Deciduous						0	18	
20	13	0	7	Lowland Mixed Forest							7	
9	9	0	0	Lowland Shrub								
22	0	0	22	Mixed Upland Deciduous						0	22	
21	21	0	0	Natural Mixed Pines								
5	5	0	0	Northern Hardwood								
157	141	15	0	Oak			15		0	0		0
274	136	46	93	Red Pine		46				93		
94	35	0	58	Upland Mixed Forest							58	
4	4	0	0	Urban						0		
52	52	0	0	Water						0		
29	29	0	0	White Pine					0			
1,344	901	135	307	Total Forested Acres	<i>7</i> 5	46	15	6	34	93	164	11
	67%	10%	23%	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.

	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Report 4 – Site Conditions

Cadillac Mgt. Unit
Matt Edison : Examiner

2	Unavailable	3E: Easement / lease, non- military (e.g Consumers Power red pine, etc)	30	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Consumers Red Pi	ine Expires 2030					
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	50	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	75	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
	Comments:						
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	15	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Available	5B: Maintain for regeneration purposes	46	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Cadillac Mgt. Unit
Matt Edison : Examiner

10	Unavailable	3E: Easement / lease, non- military (e.g Consumers Power red pine, etc)	63	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Consumers Pine						
11	Unavailable	5E: Long-Term Retention	9	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments: Portion of stand wa	as utilized as retention for stand	12 cut	in 2017.			
12	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
14	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	23	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
15	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	16	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
16	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Cadillac Mgt. Unit
Matt Edison : Examiner

17	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	27	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
18	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	21	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
19	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	17	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
20	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	6	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
21	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	22	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

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: 137
Year of Entry 2025





* 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	on Type	Description ERA = Ecological Reference HCVA = High Conservation SCA = Special Conservation						
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions stocked trout populations and those of other coldwater fish spec conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	ies to persist from year to year. Suitable ey are relatively deep, have substantial the state. Such lakes are established by					
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish spec 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.	ies (e.g., slimy sculpin) to persist from ese 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 effe as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, diversity of plants and wildlife. Riparian cts on water quality and quantity, as well					

Cadillac Mgt. Unit



tand	d Level 4 Cover Type Si			Size Density		Acres	Stand Age B	A Range	Managed Site		General Comments Michigan
1	4319 - Mixed	Upland Fo	prest P	oletimb	er Well	21.5	104	141-170	N/A		Stand occurs on the bluff face of the Manistee River. Very scenic and
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	diverse.
	Sugar Maple	15	Log/Pole	12		Re	ed Maple	Low	5 - 10 feet	Sapling	
	Hemlock	20	Log/Pole	10	104	W	hite Pine	Low	5 - 10 feet	Sapling	
	Red Maple	10	Pole	8		Ва	alsam Fir	Low	5 - 10 feet	Sapling	
	Black Ash	5	Pole/Sapling	5				,			•
	Basswood	10	Log/Pole	10							
	Paper Birch	10	Pole	8							
	Balsam Fir	5	Pole/Sapling	5							
No	rthern White Cedar	10	Pole/Sapling	6							
	White Pine	10	Log/Pole	12							
	Bigtooth Aspen	5	Pole/Sapling	6							
2	4130	- Aspen	P	oletimb	er Well	4.1	55	141-170	N/A		Aspen stand on top of bluff overlooking Manistee River. Good shape,
	Canopy Species	% Cover	Size Class	DBH	l Age						hold until adjacent red pine is treated.
	Red Maple	20	Pole	7							
	Quaking Aspen	75	Pole/Sap/Log	6	55						
	White Pine	5	Pole	9							
3	4319 - Mixed	Upland Fo	prest P	oletimb	er Well	16.0	112	51-80	N/A		Along steep shore of Manistee River. Scenic.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	15	Pole	5			Beech	Low	< 5 feet	Sapling	
	Balsam Fir	15	Pole	6		Ba	alsam Fir	Low	< 5 feet	Sapling	
No	rthern White Cedar	20	Pole/Log	8	112				II.		
	Red Maple	10	Pole	6							
	Hemlock	10	Log/Pole	10							
	Basswood	5	Log	14							
	Black Ash	5	Sapling	4							
	Paper Birch	5	Pole/Sapling	5							
	White Pine	10	Log	14							
	vviiite i iiie										
	Beech	5	Pole	7							
4					er Well	30.2	69	141-170	N/A		Consumers Stand
4	Beech	nted Red F		awtimb	er Well	30.2	69	141-170	N/A		Consumers Stand
4	Beech 42110 - Pla	nted Red F	rine S	awtimb	l Age	30.2	69	141-170	N/A		Consumers Stand
4 5	Beech 42110 - Pla Canopy Species	nted Red F % Cover	Pine S Size Class Log/Pole	awtimb DBH	l Age	30.2		141-170	N/A		Still open, let it add some size. Check for thin next entryPrevious
	Beech 42110 - Pla Canopy Species Red Pine	nted Red F % Cover 100 nted Red F	Pine S Size Class Log/Pole	awtimb DBH 11	Age 69						



Stand	Stand Level 4 Cover Type		;	Size Density		Acres	Stand Age	BA Range	Managed Site		General Comments
6	3102 -	- Grass		Nonsto	cked	10.5		Unspecified	Managed Op	ening	
7	42210 - Nati	ural Red P	ine P	oletimb	er Well	1.6	69	81-110	N/A		Small stand of natural/planted pine along edge of managed wildlife
	Canopy Species	% Cover	Size Class	DBH	Age						opening. Leave for diversity, will not be replanted.
	Red Pine	100	Pole/Log	8	69						
8	6112 - Low			oletimb	er Well	25.4	37	81-110	N/A		Wet stand with hummoky areas. Not much to see here.
	Canopy Species		Size Class		Age						
	Balsam Fir	20	Sapling/Pole								
	Balsam Poplar	20	Pole	5							
(Quaking Aspen	40	Sapling	4	37						
	Red Maple	20	Pole	5							
9	4119 - Mixed No	rthern Hard	dwoods P	oletimb		5.1	88	51-80	N/A		Good looking hardwoods. Basal area is within regulation still. Look at next entry for another thinning.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	
	Red Maple	15	Pole/Log	9		Re	ed Maple	Low	< 5 feet	Sapling	
	White Pine	10	Pole/Log	9							
	Black Cherry	7	Pole/Sapling	6							
	Basswood	20	Log/Pole	11							
	Sugar Maple	25	Log	10	88						
	Ironwood	15	Pole/Sapling	5							
	Beech	8	Pole	7							
10	2113 - Fo	rage Crops	5	Nonsto	cked	7.4		Unspecified	Managed Op	ening	
11	310 - Herbace	eous Open	land	Nonsto	cked	1.9			Managed Op	pening	
12	4136 - Aspen,	, Mixed Co	nifer	Sapling		80.1	7	Immature	N/A		Stand was final harvested in fall/winter of 2017. Islands were left in middle of stand as retention as well as to keep equipment out of the low
	Canopy Species	% Cover		DBH	Age						spots. Was a whole tree skid operation.
	Hemlock	3	Log/Pole	11							·
E	Bigtooth Aspen	67	Sapling	2	7						
	Balsam Fir	10	Sapling	3							
Nor	thern White Cedar	8	Log/Pole	12							
	Red Maple	12	Sapling	2							
13	6220 - AI	المامة المامية		Nonsto	alcad	2.1			No		



Stan	d Level 4 C	over Type		Size Density	Acres	Stand Age B	A Range	Managed \$	Site	General Comments
14	4130	- Aspen	5	Sawtimber Well	2.7	60	141-170	N/A		Small stand occurs along the top of the river bluff. Large mature aspen.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Consider harvesting portion of the stand that is outside river buffer.
	Bigtooth Aspen	80	Log	11 60	W	hite Oak	Low	5 - 10 feet	Sapling	
	White Pine	10	Log/Pole	12						
	Red Oak	10	Pole	8						
15	6120 - Lo	wland Ceda	ar F	Poletimber Well	71.7	114	111-140	N/A		Stand is mix of cedar and aspen along the edges of the creek and bluff face of the Manistee River, along with balsam fir. Leave as a buffer along
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	race of the Manistee River, along with barsannin. Leave as a buller along
	Balsam Poplar	30	Pole/Sapling	6	Ta	ag Alder	Low	5 - 10 feet	Tall Shrub	
	Balsam Fir	10	Pole/Sapling	6	Ва	alsam Fir	Low	< 5 feet	Sapling	
No	orthern White Cedar	60	Pole/Log	8 114			·			
16	6120 - Lo	wland Ceda	ar Po	letimber Medium	11.0	106	81-110	N/A		Stand is a mix of cedar and some hemlock with a scattering of aspen. Wet area within larger aspen stand. Was utilized as LTR for surrounding
	Canopy Species	% Cover	Size Class	DBH Age						cut.
	Quaking Aspen	25	Log/Pole	11						
No	orthern White Cedar	65	Pole/Log	8 106						
	Hemlock	10	Pole	7						
17	4130	- Aspen	F	Poletimber Well	10.4	57	141-170	N/A		Stand borders private land along the southern edge and contains some
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	drainages. Access seems possible just north of private. Bridge will be needed.
	Red Maple	15	Pole	8	Ва	alsam Fir	Low	< 5 feet	Sapling	
	Quaking Aspen	25	Pole/Sapling	6						
	Balsam Fir	5	Pole/Sapling							
	Bigtooth Aspen	55	Pole/Log	9 57						
18	6229 - Mixed	d lowland sh	nrub	Nonstocked	2.5			No		
					4.4			No		
19	622 - Lov	vland Shrub)	Nonstocked	7.7					
19		vland Shrub wland Aspe		Nonstocked Poletimber Well	50.3	69	141-170	N/A		Stand is located in the middle of a confluence of small streams and
		wland Aspe		Poletimber Well		69	141-170			Stand is located in the middle of a confluence of small streams and wetlands. Portable bridge would be needed to harvest.
	6112 - Lo	wland Aspe	n F			69	141-170			
	6112 - Lo	wland Aspe	n F	Poletimber Well DBH Age		69	141-170			
	6112 - Lor Canopy Species Bigtooth Aspen	wland Aspe	n F Size Class Pole/Log	Poletimber Well DBH Age 8 69		69	141-170			



Stand	Level 4 Cover Type			Size De	nsity	Acres	Stand Age B	A Range	Managed S	ite	General Comments
21	4311 - Pin	e, Aspen M	lix F	Poletimb	er Well	36.4	37	111-140	N/A		Stand is a mix of aspen clones and scattered pockets of red pine and
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	white pine.
	Red Pine	25	Pole	8		Ва	alsam Fir	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	45	Sapling	4	37	Ası	pen (spp.)	Low	10 - 20 feet	Sapling	
	White Pine	30	Pole	8							
22	42110 - Pla	nted Red P	ine F	Poletimb	er Well	7.5	71	111-140	N/A		Small stand of planted red pine thinned last entry. RR needs to be
	Canopy Species	% Cover	Size Class	DBH	l Age						crossed to access. Treat if possible next entry when other small patches on east side of tracks are ready.
	Red Pine	100	Pole/Log	9	71						on outside of made are ready.
23	6132 - Mixed Lowla			Poletimb		13.2	80	51-80	N/A		Small ash component is dead/dying due to EAB, wet stand with some areas of high ground. Very wet, access across a corner.
	Canopy Species		Size Class		l Age		nopy Species	Density	Avg. Height	Size	areas of high ground. Very wet, access across a corner.
	Quaking Aspen	25	Pole	6	75		alsam Fir	Low	5 - 10 feet	Sapling	
	Black Ash	5	Pole/Sapling			T	ag Alder	Low	5 - 10 feet	Tall Shrub	
	Balsam Fir	15	Pole	5							
No	orthern White Cedar	30	Pole	6	80						
	Red Maple	15	Pole	7							
	Paper Birch	5	Pole/Sapling								
	White Oak	5	Log	14							
24	4130	- Aspen	F	Poletimb	er Well	9.6	38	81-110	N/A		Just converting to pole class
	Canopy Species	% Cover	Size Class		l Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	
	Red Maple	15	Pole/Sapling			W	hite Pine	Low	< 5 feet	Sapling	
	White Pine	5	Pole/Sapling	7							
	Bigtooth Aspen	80	Pole/Sapling	6	38						
25	42110 - Pla	nted Red P	ine F	Poletimb	er Well	5.4	71	111-140	N/A		Various small areas of planted red pine. Treated with a thinning last entry. Still open. Check in 10 years.
	Canopy Species	% Cover	Size Class	DBH	l Age						entry. Still Open. Check in 10 years.
	Red Pine	100	Pole/Log	8	71						
26	500	- Water		Nonsto	ocked	44.2			No		Manistee River
29	500	- Water		Nonst	ocked	7.3			No		

Cadillac Mgt. Unit



Stand	d Level 4 Cover Type			Size Density			Stand Age	BA Range	Managed Site	General Comments	
30	6118 - Lowland De	eciduous w	ith Cedar F	Poletimb	er Well	3.0	58	51-80	N/A	Stand occurs on floodplain of the river. small acerage and limited access.	
	Canopy Species	% Cover	Size Class	DBH	H Age						
	White Oak	5	Log	14							
	Quaking Aspen	23	Pole	6							
No	orthern White Cedar	20	Pole	8							
	Red Maple	25	Pole	7	58						
	Paper Birch	10	Pole/Sapling	5							
	Black Ash	17	Pole/Sapling	6							
31	6117 - Lowland Coni	Deciduous, iferous	Mixed F	Poletimb	er Well	6.0	67	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH	H Age						
	Red Maple	35	Pole/Sapling	5	67						
	Quaking Aspen	20	Pole/Sapling	5							
	Black Ash	10	Pole/Sapling	5							
	Balsam Fir	35	Pole/Sapling	5							
32	4130	- Aspen	F	Poletimb	er Well	52.4	58	141-170	N/A	Final harvest according to river buffer requirements. Mature aspen. Treat	
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	anopy Speci	es Density	Avg. Height	Size entire stand or break up.	
	Quaking Aspen	20	Pole	9		Ва	alsam Fir	Low	< 5 feet	Sapling	
	Red Maple	15	Pole/Log	8							
	Bigtooth Aspen	50	Pole/Log/Sap	9	58						
	White Pine	10	Log	10							
	Balsam Fir	5	Pole/Sapling	6							
33	4130	- Aspen	F	Poletimb	er Well	32.1	38	111-140	N/A	Aspen stand with scattered white pine towards the northern portion of the	
	Canopy Species	% Cover	Size Class	DBH	H Age					stand.	
	White Pine	10	Log/Pole	11							
	Bigtooth Aspen	75	Pole	6	38						
	Red Maple	15	Pole/Sapling	6							
34	500 -	- Water		Nonst	ocked	0.9			No		
35	6119 - Mixed Lowla				per Well	9.2	51	51-80	N/A	Pockets of lowland hardwood that occur just abouve the level of the river. flood seasonaly. Ash is dying/dead due to EAB	
	Canopy Species				l Age						
	Balsam Poplar	15	Pole	6							
	Basswood	15	Log/Pole	11							
	Paper Birch	10	Pole/Sapling								
	Black Ash	25	Pole	7	51						
	White Ash	15	Pole/Sapling								
	Red Maple	20	Pole	6							

Report 7 – Stands



Stand	d Level 4 Co	Level 4 Cover Type			Size Density		Stand Age B	A ivalige	Managed Site		General Comments
36	4124 - Red v	vith White (Oak S		er Well	10.1	74	1-50	N/A		Stand occurs along the top of the river bluff. Do not treat due to Natural River Buffer.
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	River Duller.
	Red Oak	50	Log/Pole	12	74	Wh	hite Oak	Low	5 - 10 feet	Sapling	
	White Oak	30	Log/Pole	10							
	White Pine	10	Log/Pole	12							
	Bigtooth Aspen	10	Sapling/Pole	4							
37	42110 - Plar	nted Red P	ine S	awtimb	er Well	62.6	69	111-140	N/A		Consumers Pine
	Canopy Species	% Cover	Size Class	DBI	l Age						
	Red Pine	100	Log/Pole	11	69						
38	4126 - White, E	Black, N. Pi	n Oak S	awtimb	er Well	15.4	78	111-140	N/A		Healthy stand of smaller size yet. Hold for age class considerations.
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Bigtooth Aspen	15	Pole/Sapling	5		Asp	en (spp.)	Low	10 - 20 feet	Sapling	
	Red Oak	35	Log/Pole	10		Wh	hite Oak	Low	< 5 feet	Sapling	
	White Oak	45	Log/Pole	12	78						
	14/1 '/ D'	5	Pole/Log	8							
39	White Pine 122 - Road			Nonst	ocked	1.8			No		41 Rd
39	122 - Road 4190 - Mixed Upla	d/Parking L	ot	Nonst	ocked per Well	1.8	82	51-80	No N/A		41 Rd Mostly occurs on floodplains jsut a few feet above the river. Floods seasonly. Natural Rivers
	122 - Road 4190 - Mixed Upla	d/Parking L	ot ous with P	Nonst		22.5	82			Size	Mostly occurs on floodplains jsut a few feet above the river. Floods
	122 - Road 4190 - Mixed Upla Ce	d/Parking Land Decidured	ot ous with P	Nonst	er Well	22.5 Sub-Car			N/A		Mostly occurs on floodplains jsut a few feet above the river. Floods
	122 - Road 4190 - Mixed Upla Ce Canopy Species	d/Parking Land Deciduredar	ous with P	Nonste oletimb	er Well	22.5 Sub-Car	nopy Species	Density	N/A Avg. Height	Size Sapling	Mostly occurs on floodplains jsut a few feet above the river. Floods
	122 - Road 4190 - Mixed Upla Ce Canopy Species Paper Birch	M/Parking L and Deciduedar Cover 10	ous with P Size Class Pole/Sapling	Nonste	er Well	22.5 Sub-Car	nopy Species	Density	N/A Avg. Height		Mostly occurs on floodplains jsut a few feet above the river. Floods
	122 - Road 4190 - Mixed Upla Ce Canopy Species Paper Birch White Pine	Al/Parking Land Deciduedar Cover 10 5	ous with P Size Class Pole/Sapling Log/Pole	Nonsto	er Well	22.5 Sub-Car	nopy Species	Density	N/A Avg. Height		Mostly occurs on floodplains jsut a few feet above the river. Floods
	122 - Road 4190 - Mixed Upla Ce Canopy Species Paper Birch White Pine Beech	d/Parking Loand Deciduedar Cover 10 5 5	ous with P Size Class Pole/Sapling Log/Pole Pole	Nonsternation No	er Well	22.5 Sub-Car	nopy Species	Density	N/A Avg. Height		Mostly occurs on floodplains jsut a few feet above the river. Floods
	122 - Road 4190 - Mixed Upla Ce Canopy Species Paper Birch White Pine Beech Red Maple	A/Parking Land Deciduledar Cover 10 5 20	ous with P Size Class Pole/Sapling Log/Pole Pole Pole/Log	DBH 5 12 6 8	er Well	22.5 Sub-Car	nopy Species	Density	N/A Avg. Height		Mostly occurs on floodplains jsut a few feet above the river. Floods
	122 - Road 4190 - Mixed Upla Ce Canopy Species Paper Birch White Pine Beech Red Maple Black Ash	A/Parking Load Parking Load Par	ous with P Size Class Pole/Sapling Log/Pole Pole Pole/Log Sapling/Pole	Nonsteen	er Well	22.5 Sub-Car	nopy Species	Density	N/A Avg. Height		Mostly occurs on floodplains jsut a few feet above the river. Floods
40	122 - Road 4190 - Mixed Upla Ce Canopy Species Paper Birch White Pine Beech Red Maple Black Ash Balsam Fir	A/Parking Load Parking Load Par	ous with P Size Class Pole/Sapling Log/Pole Pole Pole/Log Sapling/Pole Sapling	Nonsteen	er Well	22.5 Sub-Car	nopy Species	Density	N/A Avg. Height		Mostly occurs on floodplains jsut a few feet above the river. Floods
40	122 - Road 4190 - Mixed Upla Ce Canopy Species Paper Birch White Pine Beech Red Maple Black Ash Balsam Fir Basswood	A/Parking Load Deciduredar Cover 10 5 20 10 10 5 5 20 5 10 5 5 5 6 7 7 8 8 8 8 8 8 8 8 8 8 8	ous with P Size Class Pole/Sapling Log/Pole Pole Pole/Log Sapling/Pole Sapling Log/Pole	Nonstr	er Well	22.5 Sub-Car	nopy Species	Density	N/A Avg. Height		Mostly occurs on floodplains jsut a few feet above the river. Floods
40	122 - Road 4190 - Mixed Upla Ce Canopy Species Paper Birch White Pine Beech Red Maple Black Ash Balsam Fir Basswood orthern White Cedar	A/Parking Load Parking Load Par	ous with P Size Class Pole/Sapling Log/Pole Pole/Log Sapling/Pole Sapling Log/Pole Pole/Log	DBH 5 12 6 8 3 4 12 8	er Well	22.5 Sub-Car	nopy Species	Density	N/A Avg. Height		Mostly occurs on floodplains jsut a few feet above the river. Floods
40	122 - Road 4190 - Mixed Upla Ce Canopy Species Paper Birch White Pine Beech Red Maple Black Ash Balsam Fir Basswood orthern White Cedar Sugar Maple	### Arking Load	ous with P Size Class Pole/Sapling Log/Pole Pole/Log Sapling/Pole Sapling Log/Pole Pole/Log Log/Pole Pole/Log Pole/Log	Nonstr	ser Well 82 82 ser Well	22.5 Sub-Car	nopy Species Isam Fir	Density	N/A Avg. Height		Mostly occurs on floodplains jsut a few feet above the river. Floods
40	122 - Road 4190 - Mixed Upla Ce Canopy Species Paper Birch White Pine Beech Red Maple Black Ash Balsam Fir Basswood orthern White Cedar Sugar Maple Hemlock	### Arking Load	ous with P Size Class Pole/Sapling Log/Pole Pole/Log Sapling/Pole Sapling Log/Pole Pole/Log Log/Pole Pole/Log Pole/Log	Nonstr	er Well I Age 82	22.5 Sub-Can Bal	nopy Species Isam Fir	Density Low	N/A Avg. Height < 5 feet		Mostly occurs on floodplains jsut a few feet above the river. Floods seasonly. Natural Rivers
40	122 - Road 4190 - Mixed Upla Ce Canopy Species Paper Birch White Pine Beech Red Maple Black Ash Balsam Fir Basswood orthern White Cedar Sugar Maple Hemlock	A/Parking Loand Deciduredar Cover 10 5 20 10 5 20 10 5 20 10 5 20 10 6 5 20 10 6 5 20 6 10 6 5 8 6 10 6 10 10 10 10 10 10 10 10 10 10 10 10 10	ous with P Size Class Pole/Sapling Log/Pole Pole/Log Sapling/Pole Sapling Log/Pole Pole/Log Log/Pole Pole/Log Pole/Log	Nonstr	ser Well 82 82 ser Well	22.5 Sub-Cal Bal 19.7 Sub-Cal	nopy Species Isam Fir	Density Low	N/A Avg. Height < 5 feet	Sapling	Mostly occurs on floodplains jsut a few feet above the river. Floods seasonly. Natural Rivers
40	122 - Road 4190 - Mixed Upla Ce Canopy Species Paper Birch White Pine Beech Red Maple Black Ash Balsam Fir Basswood orthern White Cedar Sugar Maple Hemlock 4311 - Pine Canopy Species	A/Parking Loand Deciduredar Cover 10 5 20 10 5 20 10 5 20 4 0 5 20 7 0 7 0 7 0 7 0 7 0 7 0 7 0 7 0 7 0	ous with P Size Class Pole/Sapling Log/Pole Pole/Log Sapling/Pole Sapling Log/Pole Pole/Log Log/Pole Pole/Log Pole/Log Sapling Saplin	Nonstreet	er Well 82 82 er Well 1 Age	22.5 Sub-Cal Bal 19.7 Sub-Cal	nopy Species Isam Fir 77 nopy Species	Density Low 141-170 Density	N/A Avg. Height < 5 feet N/A Avg. Height	Sapling	Mostly occurs on floodplains jsut a few feet above the river. Floods seasonly. Natural Rivers

Cadillac Mgt. Unit Report 7 - Stands



Stan	d Level 4 C	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
42	6112 - Lo	wland Aspe	n	Sapling	Medium	4.8	17	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBI	l Age						
	Balsam Fir	20	Sapling	1							
	Quaking Aspen	60	Sapling	1	17						
	Red Maple	20	Sapling	1							
43	3104 -	Degraded		Nonst	ocked	6.6		Unspecified	No		Old ORV trail and portion of current ORV trail to the Manistee River.
44	330 - Low-	Density Tree	es	Nonst	ocked	14.9			No		
45	4133 - Aspe	en, Mixed Pi	ine	Saplin	g Well	6.1	6	Immature	N/A		Stand is a mix of white pine and aspen. Harvested in 2018 Brian's Pine
	Canopy Species	% Cover	Size Class	DBI	l Age						630351501
	Red Maple	10	Sapling	1							
	White Oak	5	Sapling	1							
	Bigtooth Aspen	45	Sapling	1	6						
	White Pine	40	Sapling	1							
46				oletimbe			72	51-80	N/A		Wet stand with a wet hole along 41 rd. Stand was left following previous cuts in the area. Allow to progress naturaly. Mix of Balsam, spruce white
	Canopy Species		Size Class		l Age		nopy Spec		Avg. Height	Size	pine and paper birch. A few scattered aspen.
	Hemlock	5	Log	11			ag Alder	Low	5 - 10 feet	Tall Shrub	
	Quaking Aspen	10	Pole	6		Ва	alsam Fir	Low	< 5 feet	Sapling	
	Black Spruce	20	Log/Pole	11							
	White Pine	20	Log	14							
	Balsam Fir	30	Pole/Sapling	_	72						
	Paper Birch	15	Pole/Sapling	g 7							
47		- Aspen		Poletimb		31.0	53	141-170	N/A		Stand is along the northern edge of the old ORV trail.
	Canopy Species	% Cover	Size Class		l Age						
	Red Maple	15	Pole	6							
	Bigtooth Aspen	40	Log/Pole	10	53						
i .	Quaking Aspen	35	Pole/Log	9							
	White Pine	10	Pole	1							
48	White Pine			Saplin	g Well	20.3	14	Immature	N/A		
48	White Pine 42110 - Pla Canopy Species	nted Red Pi		Saplin	g Well	20.3	14	Immature	N/A		
48	White Pine 42110 - Pla Canopy Species Jack Pine	nted Red Pi	ine Size Class Sapling	Sapline DBI	l Age	20.3	14	Immature	N/A		
48	White Pine 42110 - Pla Canopy Species	nted Red Pi	ine Size Class	Saplin		20.3	14	Immature	N/A		



Stand	d Level 4 C	Size Density			Acres	Stand Age	BA Range	Managed S	ite	General Comments	
49	4130	- Aspen	Po	oletimb	er Well	37.0	37	81-110	N/A		Aspen stand just transitioning into pole class. a few scattered log red pine.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Bigtooth Aspen	90	Pole/Sapling	6	37						
	Red Maple	5	Pole/Sapling	5							
	Black Cherry	5	Sapling/Pole	4							
50	6132 - Mixed Lowla	and Forest	with Cedar Po	oletimb	er Well	6.7	115	111-140	N/A		Stand occurs along the floodplain of the manistee river. Adjacent to
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	US131 to the east.
No	orthern White Cedar	30	Pole/Log	8	115	Ва	ılsam Fir	Low	< 5 feet	Sapling	
	White Pine	15	Log/Pole	11				1		1	•
	Hemlock	10	Log/Pole	11							
	Red Maple	15	Pole	6							
	Bigtooth Aspen	10	Pole	6							
	White Oak	10	Log/Pole	13							
	Beech	10	Pole	7							
51	42110 - Pla Canopy Species Red Pine		Size Class Log/Pole		er Well Age 67	58.6	67	111-140	N/A		Stand marked thinned in 2016. Looks good for now.
			- 9								
52	4133 - Aspe	en, Mixed P		Sapling		17.5	16	1-50	N/A		Stand was thinned 16 years ago 40-50 ba of red pine was left to seed in
52	4133 - Aspe			Saplin			16 nopy Species		N/A Avg. Height	Size	Stand was thinned 16 years ago 40-50 ba of red pine was left to seed in and understory of oak and aspen. Understory is now fully stocked with sapling/ borderline pole aspen and some oak.
52			ine S	Saplin	g Well	Sub-Ca				Size Sapling	and understory of oak and aspen. Understory is now fully stocked with
52	Canopy Species	% Cover	ine Size Class	Sapling	g Well	Sub-Ca	nopy Species	Density	Avg. Height		and understory of oak and aspen. Understory is now fully stocked with
52	Canopy Species Red Pine	% Cover 20	ine Size Class	Sapline DBH	g Well	Sub-Ca	nopy Species	Density	Avg. Height		and understory of oak and aspen. Understory is now fully stocked with
52 53	Canopy Species Red Pine Red Oak	% Cover 20 25 55	ine Size Class Log Sapling/Pole Sapling/Pole	DBH 14 4	g Well I Age	Sub-Ca	nopy Species	Density	Avg. Height		and understory of oak and aspen. Understory is now fully stocked with sapling/ borderline pole aspen and some oak. Very nice mixed pine stand. Large overstory RP with very nice 6-10' white
	Canopy Species Red Pine Red Oak Bigtooth Aspen	% Cover 20 25 55	ine Size Class Log Sapling/Pole Sapling/Pole	Sapling DBH 14 4 4 4 timbe	g Well I Age 97 16	Sub-Ca W 45.5	nopy Species hite Oak	Low 1-50	Avg. Height < 5 feet		and understory of oak and aspen. Understory is now fully stocked with sapling/ borderline pole aspen and some oak. Very nice mixed pine stand. Large overstory RP with very nice 6-10' white pine uniform underneath. Oak scattered throughoutPrevious
	Canopy Species Red Pine Red Oak Bigtooth Aspen 42110 - Pla	% Cover 20 25 55	ine Size Class Log Sapling/Pole Sapling/Pole ine Saw	Sapling DBH 14 4 4 4 timbe	g Well I Age 97 16 Medium	Sub-Ca W 45.5 Sub-Ca	nopy Species hite Oak	Low 1-50	Avg. Height < 5 feet N/A	Sapling	and understory of oak and aspen. Understory is now fully stocked with sapling/ borderline pole aspen and some oak. Very nice mixed pine stand. Large overstory RP with very nice 6-10' white
53	Canopy Species Red Pine Red Oak Bigtooth Aspen 42110 - Pla Canopy Species	% Cover 20 25 55 steed Red P % Cover	ine Size Class Log Sapling/Pole Sapling/Pole ine Saw Size Class	Sapling DBH 14 4 4 ttimbe DBH	g Well I Age 97 16 r Medium	Sub-Ca 45.5 Sub-Ca	nopy Species hite Oak 97 nopy Species	Low 1-50 Density	Avg. Height < 5 feet N/A Avg. Height	Sapling	and understory of oak and aspen. Understory is now fully stocked with sapling/ borderline pole aspen and some oak. Very nice mixed pine stand. Large overstory RP with very nice 6-10' white pine uniform underneath. Oak scattered throughoutPrevious
53	Canopy Species Red Pine Red Oak Bigtooth Aspen 42110 - Pla Canopy Species Red Pine	% Cover 20 25 55 steel 25 Cover 85 15	ine Size Class Log Sapling/Pole Sapling/Pole ine Saw Size Class Log Pole	Sapling DBH 14 4 4 vtimbe DBH 15 6	g Well I Age 97 16 r Medium	Sub-Ca 45.5 Sub-Ca	hite Oak 97 nopy Species pen (spp.)	Low 1-50 Density Low Low	Avg. Height < 5 feet N/A Avg. Height 5 - 10 feet	Sapling Size Sapling	and understory of oak and aspen. Understory is now fully stocked with sapling/ borderline pole aspen and some oak. Very nice mixed pine stand. Large overstory RP with very nice 6-10' white pine uniform underneath. Oak scattered throughoutPrevious
53	Canopy Species Red Pine Red Oak Bigtooth Aspen 42110 - Pla Canopy Species Red Pine ck/Red (Hybrid) Oak	% Cover	ine Size Class Log Sapling/Pole Sapling/Pole ine Saw Size Class Log Pole	Sapling DBH 14 4 4 4 Timbe DBH 15 6	g Well Age 97 16 r Medium Age 97	45.5 Sub-Ca Asp W 46.1	phite Oak 97 phopy Species pen (spp.) phite Pine	1-50 S Density Low High	N/A Avg. Height N/A Avg. Height 5 - 10 feet < 5 feet	Sapling Size Sapling	and understory of oak and aspen. Understory is now fully stocked with sapling/ borderline pole aspen and some oak. Very nice mixed pine stand. Large overstory RP with very nice 6-10' white pine uniform underneath. Oak scattered throughoutPrevious Entry:Old red pine plantation with a new 4yo planting of white pine.
53	Canopy Species Red Pine Red Oak Bigtooth Aspen 42110 - Pla Canopy Species Red Pine ck/Red (Hybrid) Oak 4133 - Aspe	% Cover	ine Size Class Log Sapling/Pole Sapling/Pole ine Saw Size Class Log Pole ine Po	Sapling DBH 14 4 4 4 Timbe DBH 15 6	g Well I Age 97 16 r Medium I Age 97 per Well	Sub-Ca 45.5 Sub-Ca Asp Wi 46.1 Sub-Ca	97 nopy Species en (spp.) hite Pine	1-50 S Density Low High	N/A Avg. Height 5 - 10 feet 5 feet N/A	Sapling Size Sapling Sapling	and understory of oak and aspen. Understory is now fully stocked with sapling/ borderline pole aspen and some oak. Very nice mixed pine stand. Large overstory RP with very nice 6-10' white pine uniform underneath. Oak scattered throughoutPrevious Entry:Old red pine plantation with a new 4yo planting of white pine.
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53	Canopy Species Red Pine Red Oak Bigtooth Aspen 42110 - Pla Canopy Species Red Pine ck/Red (Hybrid) Oak 4133 - Aspe Canopy Species White Oak Quaking Aspen	% Cover 20 25 55 15 25 25 25 25 25 25 25 25 25 25 25 25 25	ine Size Class Log Sapling/Pole Sapling/Pole ine Saw Size Class Log Pole ine Pole Size Class Pole Pole	Sapling DBH 14 4 4 Vitimbe DBH 15 6 DBH BBH 8 8	g Well i Age 97 16 r Medium i Age 97 er Well i Age 41	Sub-Ca 45.5 Sub-Ca Asp WI 46.1 Sub-Ca	97 nopy Species pen (spp.) hite Pine 41 nopy Species ack Pine	1-50 S Density Low High 111-140 S Density Medium	N/A Avg. Height 5 - 10 feet < 5 feet N/A Avg. Height Variable	Size Sapling Sapling Sapling Size Sapling	and understory of oak and aspen. Understory is now fully stocked with sapling/ borderline pole aspen and some oak. Very nice mixed pine stand. Large overstory RP with very nice 6-10' white pine uniform underneath. Oak scattered throughoutPrevious Entry:Old red pine plantation with a new 4yo planting of white pine.



Stand	Level 4 Cover Type			Size Density	Acres	Acres Stand Age BA Range		Managed Site		General Comments	
55	42290 - Natu	ural Mixed F	Pine	Sawtimber Wel	1 20.7	61	141-170	N/A		White pine and Red Pine mixed with aspen and some JP. Some balsam	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	in understory. Remove aspe and poorer WP as well as some of largest rpPrevious Entry:pole sized aspen with scattered pine and	
	Jack Pine	5	Pole	7	WI	nite Pine	Low	5 - 10 feet	Sapling	heavier to pine along 41 Rd.	
	Bigtooth Aspen	20	Pole	8 45							
	White Pine	40	Log	12 61							
	Red Pine	35	Log	13 82							
56	4126 - White, E	Black, N. Pi	n Oak	Sapling Well	10.5	32	81-110	N/A		Stand is the result of a red pine final harvest to release the residual oak	
	Canopy Species	% Cover	Size Class	DBH Age						understory. Oak is doing well, a few islands of pine were left following harvest.	
	Red Oak	35	Sapling	3						naivest.	
	Red Pine	10	Log	14							
	White Oak	55	Sapling/Pole	3 32							
57	310 - Herbac	eous Open	land	Nonstocked	20.5			No		ROW along US 131 including the current and past ORV/Snowmobile Trailheads.	
58	4130	- Aspen		Sapling Well	18.3	6	Immature	N/A		Stand harvested in spring 2018, ORV Aspen.	
	Canopy Species	% Cover	Size Class	DBH Age							
	Red Pine	5	Sapling	1							
	Jack Pine	5	Sapling	1							
	Red Maple	15	Sapling	1							
	White Oak	5	Sapling	1							
	Quaking Aspen	20	Sapling	1							
	Bigtooth Aspen	50	Sapling	1 6							
59	4133 - Aspe	en, Mixed P	ine	Sapling Well	8.6	6	Immature	N/A		Stand was harvested in winter/spring 2018. ORV aspen 630351501	
	Canopy Species	% Cover	Size Class	DBH Age							
	White Pine	10	Sapling	1							
	Bigtooth Aspen	80	Sapling	1 6							
	Red Pine	10	Sapling	1							
60	4122 -	Oak, Pine		Poletimber Wel	l 18.0	40	111-140	N/A		Hold for next entry and assess then.Stand is a mix of regenerating	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	oak and a small overstory of oak and pine.	
	Red Pine	40	Log/Pole	11	WI	hite Oak	Low	< 5 feet	Sapling		
	White Oak	60	Pole/Log/Sa	p 6 40						•	



	Level 4 Co	4 Cover Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
61	4126 - White, E	Black, N. Pi	n Oak	Sapling N	/ledium	102.9	21	Immature	N/A		Stand Rx was changed to protect regeneration, let convert. Stand was cut in winter/spring 2018. Brian's Pine 630011501. Estimated stand age
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	reflects present and advanced regeneration during harvest.
	Quaking Aspen	5	Sapling	1		R	ed Pine	Low	< 5 feet	Seeding	
	Red Maple	20	Sapling	3							
	Red Oak	5	Sapling	3							
	White Oak	70	Sapling	3	21						
62	42110 - Plar	nted Red Pi	ine	Sawtimb	er Well	29.4	97	111-140	N/A		Final Harvest-Previous NotesStand was thinned in winter/spring
	Canopy Species	% Cover	Size Class	DBH	Age						2018. Brian's Pine 630011501
Blad	ck/Red (Hybrid) Oak	5	Pole	6							
	Jack Pine	5	Pole	6							
	Red Pine	90	Log	15	97						
63	6225	i - Bog		Nonsto	cked	1.6			No		
						Sub-Ca	nopy Species	s Density	Avg. Height	Size	
						Ta	amarack	Trace		Pole	
						Spha	gnum Moss	Full		Non-Wood	
						WI	hite Pine	Low		Pole	
						Le	atherleaf	Full		Tall Shrub	
						Blad	ck Spruce	Trace		Pole	
64	4130	- Aspen		Sapling	Well	13.3	15	Immature	N/A		Stand was final harvested in 2008. Any oak was left. Stand was
	Canopy Species	% Cover	Size Class	DBH	Age						transferred in C137 in 2014.
	Quaking Aspen	65	Sapling	2	15						
	Red Maple	15	Sapling	2							
	Bigtooth Aspen	20	Sapling	2							
65	6128 - Lowland (Deci	Coniferous, duous	Mixed	Poletimb	er Well	16.8	69	141-170	N/A		Trace of balsam poplar
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	
No	rthern White Cedar	35	Pole	8		Ва	alsam Fir	Medium	>20 feet	Pole	
	Tamarack	40	Pole	8	69	Ta	ag Alder	Low	10 - 20 feet	Tall Shrub	
	Red Maple	10	Pole	7		Northern	n White Cedar	Low	>20 feet	Pole	
	Quaking Aspen	5	Log	10				'			
	Paper Birch	10	Pole	8							

Cadillac Mgt. Unit



Stan	and Level 4 Cover Type		5	Size Density		Acres	Acres Stand Age BA		Managed Site		General Comments
66	42200 - Natu	ural White F	Pine Sa	awtimb	er Poor	29.1	72	1-50	N/A		Nice natural WP stand with lots of A3 stems filling in under.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	-Previous Entry:
	White Pine	100	Log/XLog/Pole	14	72	Quak	ing Aspen	High	5 - 10 feet	Sapling	2nd age is for the aspen regeneration layer.
						Wh	nite Pine	Low	Variable	Sapling	
						Re	d Maple	Low	< 5 feet	Sapling	
						Bigto	oth Aspen	Low	5 - 10 feet	Sapling	
						Blad	ck Cherry	Low	5 - 10 feet	Sapling	
67	122 - Road	d/Parking L	ot	Nonst	ocked	2.1			No		
68	42221 - Natural Dec	Jack Pine,	Mixed	Saplin	g Well	7.9	17 I	mmature	N/A		Good mix of JP, aspen, and oak.
	Canopy Species		Size Class	DBI	l Age						-Previous Entry:
	Bigtooth Aspen	30	Sapling	3	Age						aspen w/oak is the cover type objective.
	Red Oak	5	Sapling	2							
	Black Cherry	5	Pole/Sapling	5							
	, , , , , , , , , , , , , , , , , , ,										
69	4130	- Aspen	P	oletimb	er Well	6.2	66	111-140	N/A		White ash is near opening. Trace of SM present. Major access issues.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	5	Pole/Log	9			hite Ash	Low	>20 feet	Pole	
	Quaking Aspen	95	Pole/Log	9	66	Re	d Maple	Low	>20 feet	Pole	
						Wh	nite Pine	Medium	10 - 20 feet	Sapling	
						Blad	ck Cherry	Low	5 - 10 feet	Sapling	
70	6128 - Lowland Dec	Coniferous, iduous	Mixed S	awtimb	er Well	2.3	90	111-140	N/A		Manton Crk corridor. 50 ft bluff on east edge. Trace of RM, SM, and birch. Scattered Supercanopy WP.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Hemlock	25	Pole	8	70	WI	nite Pine	Medium	10 - 20 feet	Sapling	
	Black Ash	20	Pole	6		Н	emlock	Low	>20 feet	Pole	
		10	Log	10		Northern	White Cedar	Low	>20 feet	Pole	
	Quaking Aspen	10									
No	Quaking Aspen orthern White Cedar White Pine	25 20	Pole	8	90						

Cadillac Mgt. Unit Repo

Report 7 – Stands

Compartment: 137

Year of Entry: 2025



Stand	Level 4 C	over Type		Size D	ensity	Acres	Stand Age	e BA Range	Managed Site	General Comments
72	6112 - Lov	wland Aspe	n	Poletim	ber Well	9.3	69	141-170	N/A	Stand is located in the middle of a confluence of small streams and
	Canopy Species	% Cover	Size Class	s DB	H Age					wetlands. Portable bridge would be needed to havest. Harvest when frozen or dry.
	Bigtooth Aspen	60	Pole/Log	8	69					
	Red Maple	18	Pole/Log	9						
	White Pine	2	Log/Pole	11						
	Quaking Aspen	20	Pole/Log	8						