

# **Compartment Review Presentation**

**Cadillac Forest Management Unit** 

Compartment 63099 Entry Year 2022 Acreage: 1,520

County Missaukee

Management Area: Upper Muskegon

Revision Date: 2020-06-03

Stand Examiner: Matt Edison

**Legal Description:** 

T21N, R5W, Sections 9, 10, 11 and 12.

### **Identified Planning Goals:**

Maintain species and age diversity. Continue to buffer river corridors.

### Soil and topography:

Mostly Rubicon and Croswell sands with Lupton muck along the river.

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

Scattered private blocks along river corridor, with seasonal cabins. Section 10 is solid state ownership.

# **Unique Natural Features:**

Muskegon River runs through sections 11 and 12.

Osprey\* documented within compartment in sections 11 and 12; more records to NE. Eastern massasauga\* records in SW 1/4 of section 12 and NE 1/4 of section 13. Wood turtle\* recorded in NE 1/4 of section 21 and NW 1/4 of section 7; additional records to SE and NW. Kirtland's warbler to SE. Bald eagle within 1 mile to E in sections 5 and 6; more occurrences to NE. Great blue heron rookeries to E. Boreal brachionyncha to E. Secretive locust to SW. Slippershell mussel to SE. Bigmouth shiner records to SE and NE.

Potential for osprey, bald eagle, red-shouldered hawk, and great blue heron rookery. Potential for massasauga, wood turtle, and Blanding's turtle.

#### Archeological, Historical, and Cultural Features:

#### **Special Management Designations or Considerations:**

#### **Watershed and Fisheries Considerations:**

Muskegon River

#### Wildlife Habitat Considerations:

Featured wildlife species in this Management Area are diverse reflecting the wide range of habitat types present. Featured Species of wildlife include american bittern, american woodcock, beaver, black bear, eastern massasuga rattlesnake, mallard, golden-winged warbler, pileated woodpecker, red-headed woodpecker, ruffed grouse, snowshoe hare, wild turkey, and white-tailed deer. Most of these species benefit from young forest and open types while some require some old trees for foraging and nest/den sites. Maintaining the opening types and balancing harvests with a diverse assortment of age classes in the timber types will meet the goals for these species.

#### Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 800 feet. Beneath the glacial drift are the Pennsylvanian Grand River and Saginaw Formations. The Saginaw is quarried for clay/shale in other parts of the State. Gravel pits are located within two miles of this compartment and potential is considered good. This area is located three miles southeast of South Prosper Field. Production of over 1 million BO is primarily from the Devonian Dundee Limestone. All state lands are leased for oil and gas development, or are nominated for the May 2010 auction.

#### **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:**

Corners in SW1/4 for timber sale prep.

### **Recreational Facilities and Opportunities:**

Hunting and fishing opportunities within the compartment as well as designated ORV and snowmobile trails.

#### Fire Protection:

Access to this compartment is limited to a few 2 tracks. Use of fire equipment may be limited to light weight vehicle in the east portion of the compartment. Fuel types would not support large fires. In the west portion of the compartment is dryer and would make fire suppression with wheeled fire units useful along with the roads within. Orv use and dispersed camping could increase the wildfire causes.

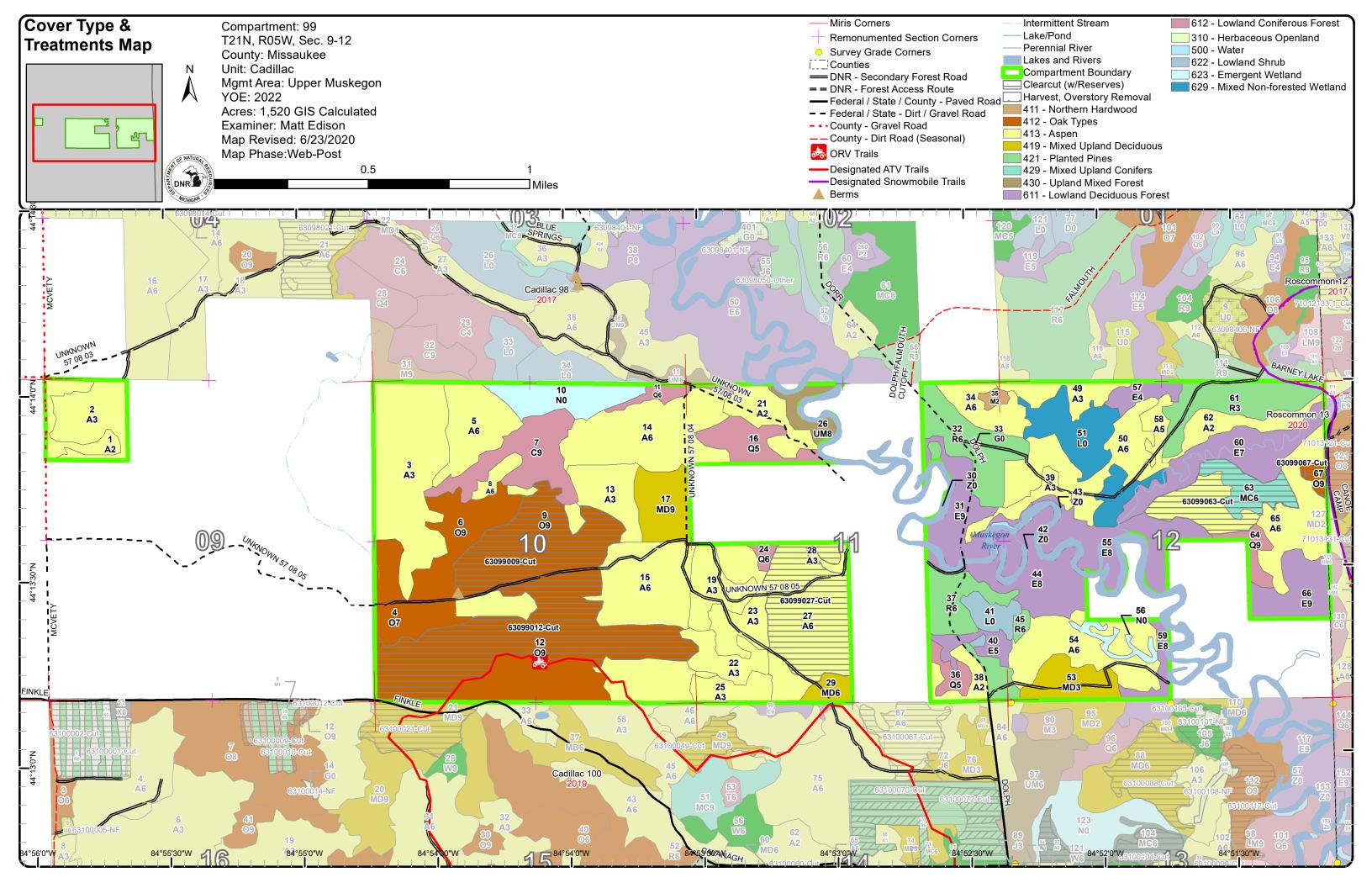
#### **Additional Compartment Information:**

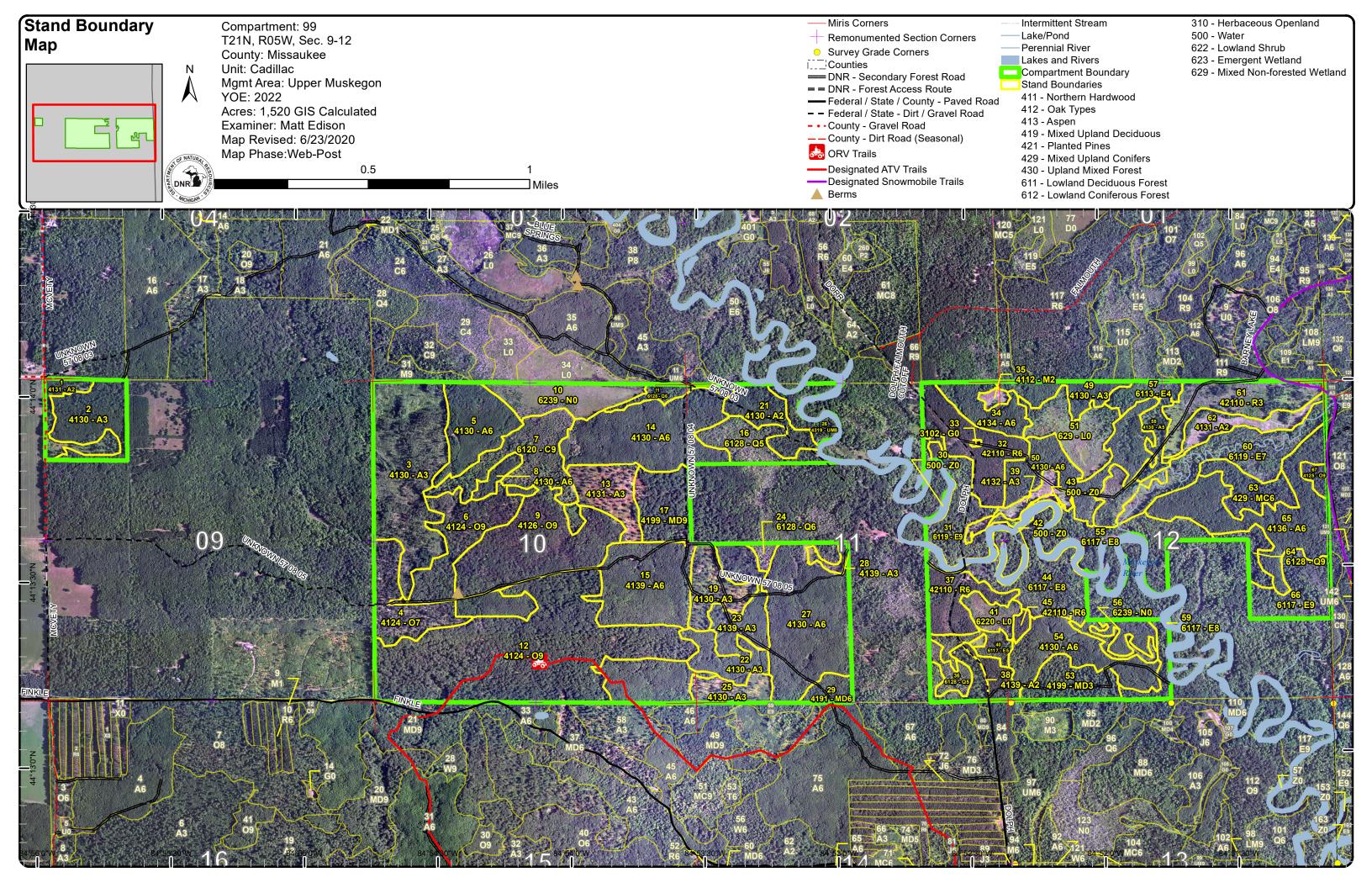
The following reports from the Inventory are attached:

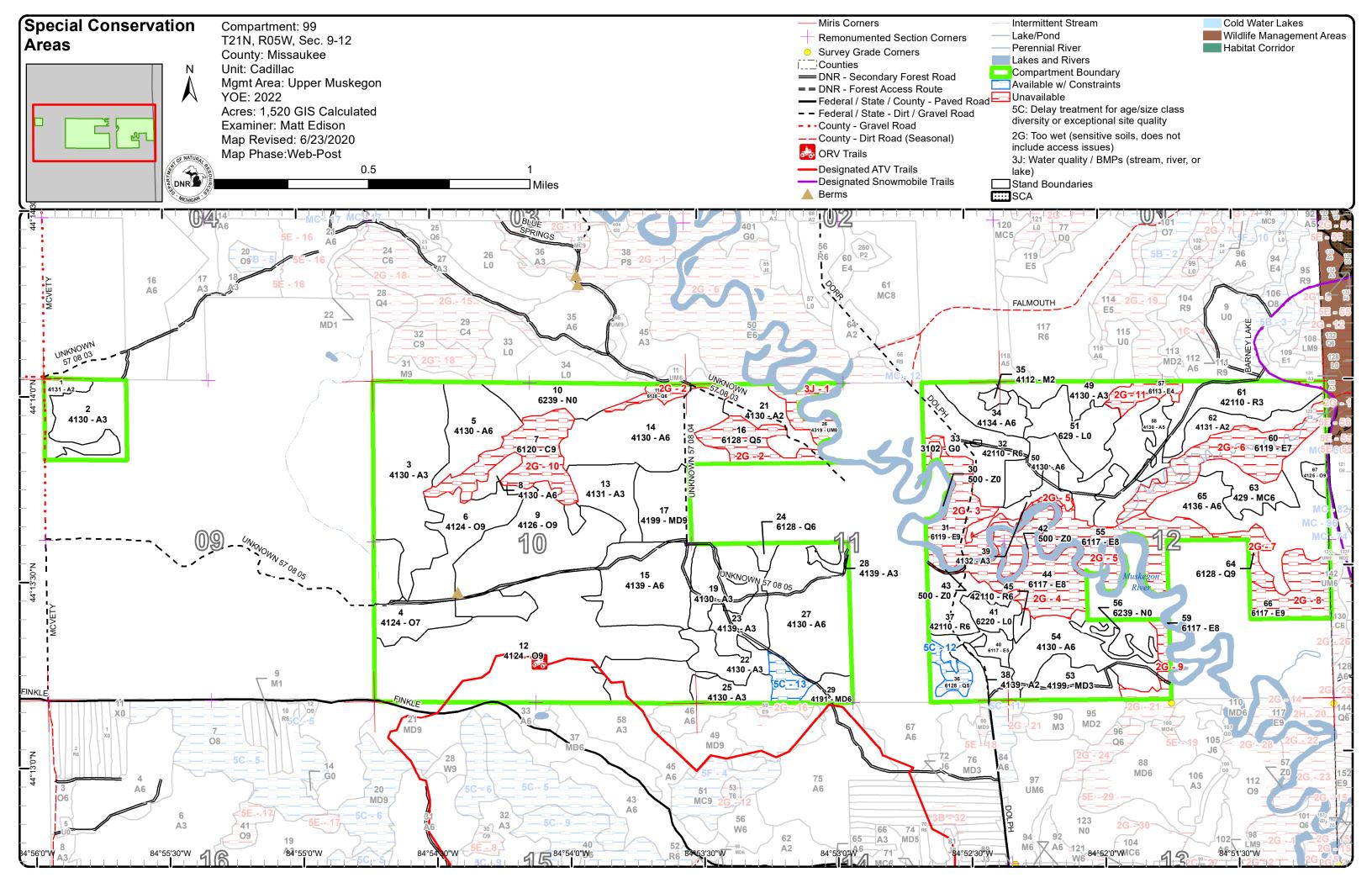
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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 99 Year of Entry 2022

Cadillac Mgt. Unit



Matt Edison : Examiner

## Age Class

			,	,	,	,	,	,	,	,	,	,	,	,	,	,	,	,	, ,
	¥g.	Kog /				\$ /\$							\$ ZZ Z			\$ \ <b>\$</b>		*   Jr. 18	L'O'S
Aspen	0	156	48	129	236	0	127	0	0	0	0	0	0	0	0	0	0	0	695
Cedar	0	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	35
Herbaceous Openland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lowland Conifers	0	0	0	0	0	0	0	0	0	7	30	0	8	0	0	0	0	0	45
Lowland Deciduous	0	0	0	0	9	0	0	9	8	64	0	0	38	0	0	0	0	67	195
Lowland Shrub	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
Marsh	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Mixed Upland Deciduous	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	31	50
Northern Hardwood	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Oak	0	0	0	0	0	0	0	27	148	0	66	0	0	0	0	0	0	34	275
Red Pine	0	32	0	0	0	0	0	65	0	0	0	0	0	0	0	0	0	0	97
Upland Conifers	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	17
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	12
Water	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Total	96	191	48	148	245	17	127	101	156	71	96	35	46	0	0	0	0	144	1520



## **Report 2 – Treatment Summary**

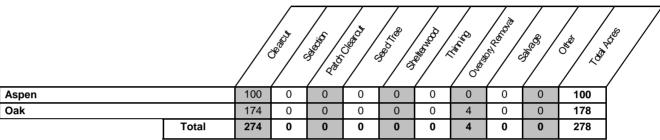
# Cadillac Mgt. Unit Year of Entry: 2022

#### **Acres of Harvest**

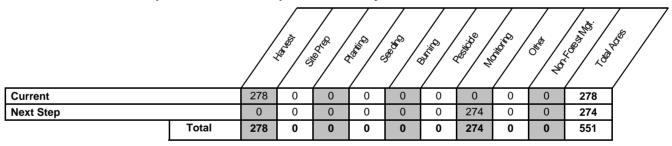
Compartment 99
Total Compartment Acres: 1,520

Commercial Harvest - 278
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 0

## **Cover Type by Harvest Method**



## **Proposed and Next Step Treatments by Method**



Cadillac Mat. Unit

Report 3 -- Treatments

Compartment: 99 Year of Entry: 2022



S ŧ а n

d

**Treatment** Acres Stand Size Stand BA **Treatment Treatment** Name CoverType Density Age Range Type

Method

**Cover Type** Objective

Age Structure Habitat Cut

## **Proposed Treatments:**

63099009-Cut 61.8 4126 - White, Sawtimber 90 81-110 Harvest Clearcut with 4121 - Oak, Even-Aged No Black, N. Pin Oak Well Retention Aspen

Prescription Final Harvest. Leave retention islands = to 3 to 5 percent of total acreage. Cut all deciduous trees down to 2" Diameter. Cut all conifer down to 4" diameter, except do not cut any legacy white pine over 20" or any potential lave trees later identified and marked accordingly. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Regen:

Any mix of Jack Pine, Aspen, Spruce, Balsam Fir, Birch, Red Pine, White Pine, Maple, Oak, Cherry, Cedar, or Hemlock

Other Actual treatment size may vary and will directly reflect on the ground conditions during timber sale prep

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

63099012-Cut 112.2 4124 - Red with Sawtimber 70 51-80 Harvest Clearcut with 4121 - Oak, Even-Aged No White Oak Well Retention Aspen

Prescription Final Harvest, Leave retention islands = to 3 to 5 percent of total acreage. Cut all deciduous trees down to 2" Diameter, Cut all conifer down to 4" diameter, except do not cut any legacy white pine over 20" or any potential lave trees later identified and marked accordingly. Use Specs: ORV trail as southern boundary of cut, protect trail appropriately.

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Any mix of Jack Pine, Aspen, Spruce, Balsam Fir, Birch, Red Pine, White Pine, Maple, Oak, Cherry, Cedar, or Hemlock

Regen:

Other Actual treatment size may vary and will directly reflect on the ground conditions during timber sale prep

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

63099027-Cut 4130 - Aspen 4139 - Aspen, 61.2 Poletimber 50 141-Harvest Clearcut with Even-Aged Nο Well 170 Retention Mixed Deciduous

<u>Prescription</u> Treat the area North of road and leave the portion south of road for next entry with adjacent stand. Final Harvest. Leave retention islands = to 3 to 5 percent of total acreage. Cut all trees down to 2" Diameter, except do not cut any legacy white pine over 20" or any potential lave Specs:

trees later identified and marked accordingly.

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Any mix of Jack Pine, Aspen, Spruce, Balsam Fir, Birch, Red Pine, White Pine, Maple, Oak, Cherry, Cedar, or Hemlock

Regen:

Actual treatment size may vary and will directly reflect on the ground conditions during timber sale prep. Use Road as boundary in SW <u>Other</u>

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

Cadillac Mgt. Unit

Report 3 -- Treatments

ompartment: 99	
ear of Entry: 2022	

OF NATURAL BEST OF NATURA BEST OF NATURAL BEST

t 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
65	63099063-Cut	38.5	4136 - Aspen, Mixed Conifer	Poletimbe Well	er 53	141- 170	Harvest	Clearcut with Retention	4133 - Aspen, Mixed Pine	Even-Aged	No
Pres Spec			eave retention island other conifer down								
	t Step Monito atments:	ring, Natu	ral Regen (Re-Inve	ntory)							
Acce Reg		x of Jack	Pine, Aspen, Sprud	e, Balsam f	Fir, Bircl	h, Red Pi	ne, White Pine,	Maple, Oak, Cherry	y, Cedar, or Heml	ock	
Othe Com	er Actual nment:	treatment	size may vary and	will directly	reflect o	on the gro	ound conditions	during timber sale p	orep.		
	Condition  oosed Start Date	· 10/1 /20	121								
67	63099067-Cut		1125 - Black, N. Pir	n Sawtimbe	r 90	1-50	Harvest	Overstory	4319 - Mixed	Even-Aged	No

Oak Well Removal Upland Forest

Prescription Remove overstory Oak and any other species over 10" DBH, ecxept leave any White Pine over 16" or marked leave trees if identified.

Specs: Protect residual as best as possible with specs.

Apply snowmobile considerations.

Next Step Treatments:

Acceptable Any mix of Jack Pine, Aspen, Spruce, Balsam Fir, Birch, Red Pine, White Pine, Maple, Oak, Cherry, Cedar, or Hemlock

Regen:

s

Other Actual treatment size may vary and will directly reflect on the ground conditions during timber sale prep

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

Total Treatment Acreage Proposed: 277.6

Cadillac Mgt. Unit

Matt Edison : Examiner

Compartment: 99
Year of Entry: 2022

Availa	ability for	Managemer	nt					
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Cond	ditions
Acres	Available	With Condition	Not Available		5C	2G	3J	
695	687	8	0	Aspen	8	0	0	
35	0	0	35	Cedar		35		
0	0	0	0	Herbaceous Openland				
45	3	7	35	Lowland Conifers	7	35		
196	9	0	187	Lowland Deciduous		187		
49	49	0	0	Lowland Shrub		0		
31	31	0	0	Marsh		0		
50	50	0	0	Mixed Upland Deciduous				
3	3	0	0	Northern Hardwood				
275	275	0	0	Oak				
97	97	0	0	Red Pine				
17	17	0	0	Upland Conifers		0		
12	0	0	12	Upland Mixed Forest		0	12	
17	17	0	0	Water		0		
1,520	1,237	15	268	Total Forested Acres	15	257	12	
	81%	1%	18%	Relative Percent				•

\*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	12	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: buffer along Muskeç	gon River					
2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	27	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

# Report 4 – Site Conditions

Cadillac Mgt. Unit

Matt Edison : Examiner

3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	28	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	39	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	39	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	38	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

# Report 4 – Site Conditions

Cadillac Mgt. Unit
Matt Edison: Examiner

8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	25	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
9	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	35	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
11	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

# Report 4 – Site Conditions

Cadillac Mgt. Unit

Matt Edison : Examiner

Compartment: 99 Year of Entry: 2022

13	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	8	Unspecified	Unspecified	Unspecified	Unspecified
	omments: ave and treat with	n adjacent next entry					

6/23/2020 10:15:01 AM - Page 4 of 4 POLEYN

Mgt. Unit

Compartment: #Type! Year of Entry:

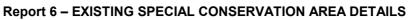


## Report 5 - PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

\* 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: 99
Year of Entry 2022





\* 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	HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	stocked trout populations and those of other colds conditions for coldwater fishes may occur in Mich	oxygen conditions that allow naturally-reproduced or water fish species to persist from year to year. Suitable igan lakes if they are relatively deep, have substantial thern) areas of the state. Such lakes are established by es by Fisheries Order 200.



Compartment: 99

Year of Entry: 2022

Stand	d Level 4 C	over Type		Size Densi	ty	Acres	Stand Age E	BA Range	Managed S	ite	General Comments
1	4131 - A	spen, Oak	;	Sapling Med	lium	13.1	16	Immature	N/A		Somewhat sparse mixed regeneration with scattered residual large Oak.
	Canopy Species	% Cover	Size Class	DBH A	ge	Sub-Can	opy Species	Density	Avg. Height	Size	
	Red Oak	20	Log/Pole	12		Norther	n Pin Oak	Low	< 5 feet	Sapling	
	Bigtooth Aspen	50	Sapling	2 1	6			,			•
	Beech	15	Sapling	3							
	Green Ash	15	Sapling	3							
2	4130	- Aspen		Sapling W	ell	27.5	26	Immature	N/A		Thick regeneration, mostly Aspen.
	Canopy Species	% Cover	Size Class	DBH A	ge	Sub-Can	opy Species	Density	Avg. Height	Size	
	Red Maple	10	Sapling	3		Norther	n Pin Oak	Low	< 5 feet	Sapling	
	Red Oak	10	Log/Pole	12				,			•
	Bigtooth Aspen	80	Sapling	4 2	26						
3	4130	- Aspen		Sapling W	ell	74.8	6	Immature	N/A		Stand harvested with sale #63-009-12-01 Wayback Mix. Aspen/mix regeneration with scattered residual oak. Some of the large residual oak
	Canopy Species	% Cover	Size Class	DBH A	ge						have blown down.
	Red Maple	20	Sapling	1 6	6						
	Red Oak	5	Log/Pole	10							
	Bigtooth Aspen	75	Sapling	1 6	3						
4	4124 - Red v	with White (	Oak	Sawtimber F	oor	27.0	65	1-50	N/A		Cut in 2012 #63-009-12-01 Wayback Mix.
	Canopy Species	% Cover	Size Class	DBH A	ge	Sub-Can	opy Species	Density	Avg. Height	Size	
	Red Oak	80	Log/Pole	10 6	5	Whi	te Pine	High	10 - 20 feet	Sapling	
	White Oak	20	Pole	8							•
5	4130	- Aspen		Poletimber \	Nell	29.6	38	111-140	N/A		Pole size Aspen, looks good. Check next entry for possible treatment.
	Canopy Species	% Cover	Size Class	DBH A	ge	Sub-Can	opy Species	Density	Avg. Height	Size	
	Red Maple	20	Pole/Sapling	g 7		Red	Maple	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	80	Pole/Sapling	g 7 3	8	Bals	am Fir	Low	5 - 10 feet	Sapling	
6	4124 - Red v	with White (	Oak	Sawtimber V	Nell	34.2	90	81-110	N/A		Treated last entry. Log sized oak over aspen maple sprouts. Some white pine scattered. Hold and check next entry.
	Canopy Species	% Cover	Size Class	DBH A		Sub-Can	opy Species	Density	Avg. Height	Size	with pine scallered. Floid and Greek flext etitly.
	Red Oak	60	Log/Pole	12 9	0		Maple	Medium	10 - 20 feet	Sapling	
	White Oak	30	Log/Pole	10		Bigtoo	th Aspen	Low	10 - 20 feet	Sapling	
	Red Pine	10	Log/Pole/XLo	og 14		Whi	te Pine	Medium	5 - 10 feet	Sapling	



Stand	d Level 4 Co	over Type	s	ize De	ensity	Acres S	tand Age B	A Range	Managed S	ite	General Comments
7	6120 - Lov	wland Ceda	ır Sa	awtimb	er Well	35.3	100	141-170	N/A		Shorter height trees. Mixed with tag alder brush in open wet pockets.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Cano	py Species	Density	Avg. Height	Size	Lots of deer sign during inventory 1/2020.
	Red Maple	10	Log/Pole	10		Balsa	am Fir	Low	< 5 feet	Sapling	
	Bigtooth Aspen	10	Log/Pole	10							
	Balsam Fir	5	Pole/Sapling	6							
No	orthern White Cedar	55	Pole/Log	8	100						
	White Pine	10	Log/Pole/XLog	14							
	Hemlock	10	Log/Pole	10							
8	4130	- Aspen	Po	oletimb	er Well	9.5	22	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Cano	py Species	Density	Avg. Height	Size	
	Red Maple	30	Pole/Sapling	5		Red	Maple	Medium	< 5 feet	Sapling	
	Bigtooth Aspen	70	Pole/Sapling	5	22						
9	4126 - White, E	Black, N. Pi	n Oak Sa	awtimb	er Well	61.8	90	81-110	N/A		Dead oak has been salvaged and stolen in past. Consider final harve
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Cano	py Species	Density	Avg. Height	Size	treatment.
	Red Maple	20	Pole	8		Red	Maple	Low	< 5 feet	Sapling	
	Red Oak	20	Log/Pole	12		Northern	Pin Oak	Low	< 5 feet	Sapling	
	White Oak	20	Pole	9		Red	Oak	Low	< 5 feet	Sapling	
	Bigtooth Aspen	10	Log/Pole	10							•
	Northern Pin Oak	30	Log	12	90						
10	6239 - Mixed E	mergent W	etland	Nonst	ocked	24.9			No		Cattails and water.
						Sub-Cano	py Species	Density	Avg. Height	Size	
						Northern V	/hite Cedar	Low		Pole	
11	6128 - Lowland (	Coniferous,	Mixed Po	oletimb	er Well	7.2	95	81-110	N/A		Corridor along creek and marsh. Wet ground, poorer quality site and
	Deci	duoue				1.2	50	01-110	IN/A		Contact diong crook and materi. Wet greater, poorer quanty one and
		luuuus				7.2	30	01-110	IN/A		growth.
	Canopy Species		Size Class	DBH	l Age		py Species	Density	Avg. Height	Size	
	Canopy Species Red Maple		Size Class Log/Pole	<b>DB</b> I 10		Sub-Cano				<b>Size</b> Sapling	
	Red Maple Bigtooth Aspen	% Cover	Log/Pole Log/Pole	10 10		Sub-Cano Balsa	py Species	Density	Avg. Height		
	Red Maple	<b>% Cover</b>	Log/Pole	10 10 6		Sub-Cano Balsa	py Species am Fir	<b>Density</b> Medium	Avg. Height 5 - 10 feet	Sapling	
No	Red Maple Bigtooth Aspen Balsam Fir orthern White Cedar	% Cover 10 5 20 30	Log/Pole Log/Pole Pole Pole/Log	10 10 6 8		Sub-Cano Balsa	py Species am Fir	<b>Density</b> Medium	Avg. Height 5 - 10 feet	Sapling	
No	Red Maple Bigtooth Aspen Balsam Fir	% Cover 10 5 20 30 25	Log/Pole Log/Pole Pole	10 10 6 8 10	I Age	Sub-Cano Balsa	py Species am Fir	<b>Density</b> Medium	Avg. Height 5 - 10 feet	Sapling	
No	Red Maple Bigtooth Aspen Balsam Fir orthern White Cedar	% Cover 10 5 20 30 25 5	Log/Pole Log/Pole Pole Pole/Log	10 10 6 8 10	I Age	Sub-Cano Balsa	py Species am Fir	<b>Density</b> Medium	Avg. Height 5 - 10 feet	Sapling	
No	Red Maple Bigtooth Aspen Balsam Fir orthern White Cedar White Pine	% Cover 10 5 20 30 25	Log/Pole Log/Pole Pole Pole/Log Log/Pole	10 10 6 8 10	I Age	Sub-Cano Balsa	py Species am Fir	<b>Density</b> Medium	Avg. Height 5 - 10 feet	Sapling	
	Red Maple Bigtooth Aspen Balsam Fir orthern White Cedar White Pine Hemlock	% Cover  10 5 20 30 25 5 5	Log/Pole Log/Pole Pole Pole/Log Log/Pole Log/Pole Pole	10 10 6 8 10 10	I Age	Sub-Cano Balsa	py Species am Fir	<b>Density</b> Medium	Avg. Height 5 - 10 feet	Sapling	Treated last year of entry log size oak over aspen maple sprouts. Training
	Red Maple Bigtooth Aspen Balsam Fir orthern White Cedar White Pine Hemlock Green Ash	% Cover  10 5 20 30 25 5 5 vith White C	Log/Pole Log/Pole Pole Pole/Log Log/Pole Log/Pole Pole	10 10 6 8 10 10 6	95	Sub-Cano Balsa White	py Species am Fir e Pine	Density Medium Medium	Avg. Height 5 - 10 feet 5 - 10 feet	Sapling	growth.
12	Red Maple Bigtooth Aspen Balsam Fir orthern White Cedar White Pine Hemlock Green Ash	% Cover  10 5 20 30 25 5 5 vith White C	Log/Pole Log/Pole Pole Pole/Log Log/Pole Log/Pole Pole Pole	10 10 6 8 10 10 6	95 er Well	Sub-Cano Balsa White	py Species am Fir Pine Pine	Density Medium Medium	Avg. Height 5 - 10 feet 5 - 10 feet N/A	Sapling Sapling	Treated last year of entry log size oak over aspen maple sprouts. Training

7 - Stands Compartment: 99
Year of Entry: 2022

DNR MICHIGAN
--------------

Stand	d Level 4 Co	over Type	5	Size De	nsity	Acres	Stand Age B	A Range	Managed S	ite	General Comments
13	4131 - A	spen, Oak		Sapling Well		21.2	8 I	mmature	N/A		Treated with sale #63-009-12-01/ Final harvest with reserves, left oak
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	less than 6 inches. Aspen mixed regeneration looks ok.
	Red Oak	10	Pole	6		Bal	sam Fir	Low	< 5 feet	Sapling	
	White Oak	10	Pole	6							
	Bigtooth Aspen	75	Sapling	1	8						
	Red Maple	5	Sapling	1							
14	4130	- Aspen	P	oletimb	er Well	58.7	38	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Red Maple	20	Pole/Sapling	6		Re	d Maple	Low	5 - 10 feet	Sapling	
	Red Oak	5	Pole/Sapling	6		Bal	sam Fir	Low	< 5 feet	Sapling	
	Bigtooth Aspen	70	Pole/Sapling	6	38						
	Balsam Fir	5	Pole/Sapling	5							
15	4139 - Aspen,	Mixed Decid	duous P	oletimb		80.9	38	81-110	N/A		Decent aspen, check next entry for added growth.
	Canopy Species	% Cover	Size Class		Age		nopy Species	Density	Avg. Height	Size	
	Red Maple	40	Pole/Sapling	6		Re	d Maple	Low	< 5 feet	Sapling	
	Red Oak	10	Sapling	4		Re	ed Oak	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	50	Pole/Sapling	6	38						
16	6128 - Lowland ( Deci	Coniferous, iduous	Mixed Pol	etimber	Medium	n 19.7	95	1-50	N/A		Wet/ Low stand. Some tag alder in places.
16		iduous	Mixed Pol		Medium <b>Age</b>	n 19.7	95	1-50	N/A		Wet/ Low stand. Some tag alder in places.
16	Deci	iduous				າ 19.7	95	1-50	N/A		Wet/ Low stand. Some tag alder in places.
	Canopy Species	% Cover	Size Class Pole Log/Pole	DBH		า 19.7	95	1-50	N/A		Wet/ Low stand. Some tag alder in places.
	Canopy Species Red Maple	% Cover	Size Class Pole	<b>DBH</b>		າ 19.7	95	1-50	N/A		Wet/ Low stand. Some tag alder in places.
	Canopy Species Red Maple Bigtooth Aspen	% Cover	Size Class Pole Log/Pole	<b>DBH</b> 8  10  6  8		n 19.7	95	1-50	N/A		Wet/ Low stand. Some tag alder in places.
	Canopy Species Red Maple Bigtooth Aspen Balsam Fir	**Cover   15   5   20	Size Class Pole Log/Pole Pole	<b>DBH</b> 8 10 6	Age	n 19.7	95	1-50	N/A		Wet/ Low stand. Some tag alder in places.
	Canopy Species Red Maple Bigtooth Aspen Balsam Fir orthern White Cedar	% Cover 15 5 20 25 25 5	Pole Log/Pole Pole/Log Log/Pole Log/Pole Log/Pole Log/Pole	<b>DBH</b> 8  10  6  8	Age	n 19.7	95	1-50	N/A		Wet/ Low stand. Some tag alder in places.
	Canopy Species Red Maple Bigtooth Aspen Balsam Fir orthern White Cedar White Pine	% Cover 15 5 20 25 25	Size Class Pole Log/Pole Pole Pole/Log Log/Pole	<b>DBH</b> 8  10  6  8  10	Age	n 19.7	95	1-50	N/A		Wet/ Low stand. Some tag alder in places.
No	Canopy Species Red Maple Bigtooth Aspen Balsam Fir orthern White Cedar White Pine Hemlock	% Cover 15 5 20 25 25 5 5 5	Pole Log/Pole Pole/Log Log/Pole Log/Pole Log/Pole Pole	BH 8 10 6 8 10 10	<b>Age</b> 95	23.5	95 95	1-50 51-80	N/A		Wet/ Low stand. Some tag alder in places.  Log size oak over aspen/ maple. Oak salvage in 1994.
No	Canopy Species Red Maple Bigtooth Aspen Balsam Fir orthern White Cedar White Pine Hemlock Green Ash	% Cover 15 5 20 25 5 5 5 d Upland D	Pole Log/Pole Pole/Log Log/Pole Log/Pole Log/Pole Pole	DBH      8     10     6     8     10     10     6  awtimb	<b>Age</b> 95	23.5		51-80		Size	
	Canopy Species Red Maple Bigtooth Aspen Balsam Fir orthern White Cedar White Pine Hemlock Green Ash 4199 - Other Mixe	% Cover 15 5 20 25 5 5 5 d Upland D	Pole Log/Pole Pole/Log Log/Pole Log/Pole Log/Pole Log/Pole Pole	DBH      8     10     6     8     10     10     6  awtimb	Age 95 er Well	23.5 <b>Sub-Ca</b> i	95	51-80	N/A	Size Sapling	
No	Canopy Species  Red Maple  Bigtooth Aspen  Balsam Fir orthern White Cedar  White Pine  Hemlock  Green Ash  4199 - Other Mixe  Canopy Species	% Cover 15 5 20 25 5 5 5 d Upland D % Cover	Pole Log/Pole Pole/Log Log/Pole Log/Pole Log/Pole Pole Size Class	DBH      8     10     6     8     10     10     6  awtimb	Age 95 er Well	23.5 Sub-Car	95 n <b>opy Species</b>	51-80  Density	N/A Avg. Height		

Bigtooth Aspen

30

Sapling/Pole

4



Stand	Level 4 Co	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments
19	4130	- Aspen		Sapling	y Well	19.5	8	Immature	N/A		Treated with sale 63-024-12-01 Halfway Back. Aspen regen with scattered residual oak.
	Canopy Species	% Cover	Size Class		Age						Scattered residual car.
	Red Maple	30	Sapling	2							
	Red Oak	5	Log/Pole	12							
	White Oak	5	Pole/Log	8							
	Bigtooth Aspen	60	Sapling	2	8						
21	4130	- Aspen	;	Sapling I	/ledium	n 18.6	26	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	
	Red Maple	20	Sapling/Pole	9 3		WI	hite Oak	Low	< 5 feet	Sapling	
	White Oak	10	Log/Pole	10		Ва	lsam Fir	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	70	Sapling/Pole	9 3	26			,			
22	4130	- Aspen		Sapling	ı Well	15.6	24	Immature	N/A		Treated in 1996. Aspen mix regen.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	
	Red Maple	30	Sapling/Pole	9 4		Blad	ck Cherry	Low	< 5 feet	Sapling	
	Red Oak	5	Log/Pole	10		Wit	ch Hazel	Medium	5 - 10 feet	Tall Shrub	
	White Oak	5	Log/Pole	10		Servicebe	erry (Juneber	ry) Low	5 - 10 feet	Tall Shrub	
	Bigtooth Aspen	60	Sapling/Pole	9 4	24						
23	4139 - Aspen,	Mixed Deci	duous	Sapling	y Well	25.1	14	Immature	N/A		Treated in 2006. Aspen mix regen. with scattered oak.
	Canopy Species	% Cover	Size Class	DBH	Age						
	Red Maple	40	Sapling	2							
	Red Oak	10	Log/Pole	10							
	Bigtooth Aspen	50	Sapling	3	14						
24	6128 - Lowland ( Deci	Coniferous, duous	Mixed	Poletimb	er Wel	l 3.1	90	111-140	N/A		Wet with dead standing cedar.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
	Red Maple	20	Pole	8		Ame	erican Elm	Low	10 - 20 feet	Sapling	
	Balsam Fir	30	Pole	6		Ва	lsam Fir	Medium	10 - 20 feet	Sapling	
No	rthern White Cedar	30	Log/Pole	11	90		Alder	Medium	10 - 20 feet	Tall Shrub	
	Green Ash	20	Sapling	4							
25	4130	- Aspen		Sapling	ı Well	12.4	8	Immature	N/A		Treated with sale 63-024-12-01 Halfway Back.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	
	Red Maple	30	Sapling	1		WI	nite Pine	Low	5 - 10 feet	Sapling	
	Red Oak	5	Log/Pole	12		Blac	ck Cherry	Low	5 - 10 feet	Sapling	
	White Oak	5	Log/Pole	12		Wit	ch Hazel	Medium	5 - 10 feet	Tall Shrub	



Stanc	Level 4 Cover Type			Size Density			Stand Age B	A Range	Managed S	Site	General Comments
26	4319 - Mixed	Upland Fo	orest Sa	awtimbe	r Medium	11.6	90	1-50	N/A		Corridor along river.
	Canopy Species	% Cover	Size Class	DBH	l Age		nopy Species	Density	Avg. Height	Size	
	Red Maple	20	Log/Pole	10		Ba	ılsam Fir	High	5 - 10 feet	Sapling	
	Red Oak	30	Log/Pole	12		W	hite Pine	Medium	5 - 10 feet	Sapling	
	Balsam Fir	20	Pole	6							
	White Pine	30	Log/Pole	11	90						
27	4130	- Aspen	F	Poletimb	er Well	69.3	50	141-170	N/A		Treat this entry. Final harvest all. Consider splitting stand/ treatment for
	Canopy Species	% Cover	Size Class	DBH	l Age						age class diversity.
	Red Maple	20	Pole	9							
	Bigtooth Aspen	70	Pole	9	50						
	Balsam Fir	5	Pole	6							
	Black Cherry	5	Pole	6							
28	4139 - Aspen,	Mixed Dec	iduous	Sapling	g Well	3.1	8 I	mmature	N/A		Sale #63-024-12.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Red Maple	30	Sapling	1	8						
	Bigtooth Aspen	55	Sapling	1	8						
No	rthern White Cedar	5	Pole	6							
	Tamarack	5	Pole/Log	8							
	White Pine	5	Log/Pole	12							
29	4191 - Mixed Upla Co	and Decidu onifer	ous with F	Poletimb	er Well	7.3	50	81-110	N/A		Save and harvest with portion of stand to west next entry.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	15	Pole	6		Re	ed Maple	Low	< 5 feet	Sapling	
	Bigtooth Aspen	35	Pole	9		Ва	ılsam Fir	Low	5 - 10 feet	Sapling	
I	Northern Pin Oak	10	Pole	6		W	hite Pine	Medium	10 - 20 feet	Sapling	
	White Pine	40	Pole	9	50						-
30	500 -	- Water		Nonsto	ocked	1.8			No		Muskegon river
31	6119 - Mixed Lo	wland Dec	iduous S	Sawtimb	er Well	28.1	80	81-110	N/A		River corridor/ Floodplain. Hardwoods with tanding water throughout. Poorer quality and serious accessibility questions.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	40	Log/Pole	12	80	Re	ed Maple	Low	5 - 10 feet	Sapling	
	Red Oak	10	Log/Pole/XLo	g 14		Ва	ılsam Fir	Low	5 - 10 feet	Sapling	
	Paper Birch	10	Pole	6				1			•
	Bigtooth Aspen	10	Log/Pole	12	80						
	Balsam Fir	10	Pole	6							
	Green Ash	20	Pole/Sapling	6							



Stand	d Level 4 Cover Type			Size Density		Acres	Stand Age B	BA Range	Managed Site		General Comments
32	42110 - Pla	nted Red P	ine Po	letimb	er Well	33.9	64	111-140	N/A		This was second row thinned in 2014
	Canopy Species	% Cover	Size Class	DBH	Age						
	Red Pine	100	Pole/Log	9	64						
33	3102	- Grass	1	Nonst	cked	0.4			No		old landing in pine plantation
						Sub-Ca	nopy Species	Density	Avg. Height	Size	
						R	ed Pine	Trace		Seeding	
						Commo	on Blackberry	Low		Tall Shrub	
34	4134 - Asp	en, Spruce/	Fir Po	letimb	er Well	17.0	37	141-170	N/A		Aspen/mix. Some areas are poorer quality than others. Was treated as
	Canopy Species	% Cover	Size Class	DBH	Age						one stand in the past Wet pockets throughout.
	Red Maple	10	Pole/Sapling	6							
	Quaking Aspen	40	Pole/Sapling	6	37						
	Northern Pin Oak	10	Pole/Sapling	5							
	Balsam Fir	20	Pole/Sapling	5							
	White Pine	10	Pole/Sapling	5							
	Black Cherry	10	Pole/Sapling	5							
35	4112 - Maple Asso	, Beech, Ch ociation	erry Sa	pling I	Medium	2.6	5	Immature	N/A		Wet on edges. Cut with sale 63-011-12-01 Muskegon Mix.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	90	Sapling	1	5	Lea	atherleaf	Low	< 5 feet	Tall Shrub	
	White Pine	10	Sapling	2							
36	6128 - Lowland Dec	Coniferous, iduous	Mixed Pole	timbe	Medium	7.0	85	81-110	N/A		
	Canopy Species	0/ 0									
	D 114 1	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	% Cover	Size Class Log/Pole	<b>DB-</b>	Age		nopy Species	<b>Density</b> Medium	Avg. Height 5 - 10 feet	<b>Size</b> Sapling	
	Balsam Fir			_	Age						
No	'	20	Log/Pole	10	<b>Age</b> 85						
No	Balsam Fir	20	Log/Pole Pole/Sap/Log	10							
No.	Balsam Fir	20 20 40 20	Log/Pole Pole/Sap/Log Pole/Log Pole/Sapling	10 6 8 5			lsam Fir				This was second thinned in 2014
	Balsam Fir orthern White Cedar Green Ash	20 20 40 20 nted Red P	Log/Pole Pole/Sap/Log Pole/Log Pole/Sapling	10 6 8 5	85	28.3	lsam Fir	Medium 111-140	5 - 10 feet		This was second thinned in 2014
	Balsam Fir orthern White Cedar Green Ash 42110 - Pla	20 20 40 20 nted Red P	Log/Pole Pole/Sap/Log Pole/Log Pole/Sapling ine Po	10 6 8 5	85 er Well	28.3 Sub-Ca	lsam Fir	Medium 111-140	5 - 10 feet N/A	Sapling	This was second thinned in 2014
	Balsam Fir orthern White Cedar Green Ash 42110 - Pla Canopy Species	20 20 40 20 nted Red P	Log/Pole Pole/Sap/Log Pole/Log Pole/Sapling ine Po	10 6 8 5	85 er Well	28.3  Sub-Ca	64 nopy Species	Medium  111-140  Density	5 - 10 feet  N/A  Avg. Height	Sapling	This was second thinned in 2014
37	Balsam Fir orthern White Cedar Green Ash  42110 - Pla  Canopy Species White Pine	20 40 20 nted Red P % Cover 5 95	Log/Pole Pole/Sap/Log Pole/Sapling Pole/Sapling ine Pole/Size Class Pole/Log Log/Pole	10 6 8 5 letimb <b>DBH</b> 8 10	85 er Well	28.3  Sub-Ca	64 nopy Species ed Maple elsam Fir	Medium  111-140  Density  Low	N/A Avg. Height < 5 feet	Sapling  Size  Sapling	This was second thinned in 2014  Aspen mix regen. with scattered oak residual.
37	Balsam Fir orthern White Cedar Green Ash  42110 - Pla  Canopy Species White Pine Red Pine	20 40 20 nted Red P % Cover 5 95	Log/Pole Pole/Sap/Log Pole/Sapling Pole/Sapling ine Pole/Size Class Pole/Log Log/Pole	10 6 8 5 letimb <b>DBH</b> 8 10	er Well Age 64	28.3  Sub-Ca  Re  Ba	64 nopy Species ed Maple	Medium  111-140  Density  Low  Low	N/A  Avg. Height  < 5 feet  < 5 feet	Sapling  Size  Sapling	
	Balsam Fir orthern White Cedar Green Ash  42110 - Pla  Canopy Species White Pine Red Pine  4139 - Aspen,	20 40 20 nted Red P % Cover 5 95	Log/Pole Pole/Sap/Log Pole/Sapling  ine Po Size Class Pole/Log Log/Pole  duous Sa	10 6 8 5 letimb <b>DBH</b> 8 10	er Well Age 64 Medium	28.3  Sub-Ca  Re  Ba	64 nopy Species ed Maple	Medium  111-140  Density  Low  Low	N/A  Avg. Height  < 5 feet  < 5 feet	Sapling  Size  Sapling	
37	Balsam Fir orthern White Cedar Green Ash  42110 - Pla  Canopy Species White Pine Red Pine  4139 - Aspen, Canopy Species	20 40 20 nted Red P % Cover 5 95 Mixed Deci	Log/Pole Pole/Sap/Log Pole/Sapling  ine Po Size Class Pole/Log Log/Pole  duous Sa Size Class	10 6 8 5 letimb DBH 8 10	85 er Well Age 64 Medium	28.3  Sub-Ca  Re  Ba	64 nopy Species ed Maple	Medium  111-140  Density  Low  Low	N/A  Avg. Height  < 5 feet  < 5 feet	Sapling  Size  Sapling	



Stand	d Level 4 C	Si	ize De	nsity	Acres S	Stand Age B	A Range	Managed Site		General Comments	
39	4132 - Asp	en, Jack P	ine S	Sapling	y Well	9.3	5 I	mmature	N/A		Cut with sale 63-011-12-01 Muskegon Mix./ final harvest with reserves.  East and Western ends have most of jack pine.
	Canopy Species		Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size	Last and Western ends have most or jack pine.
	Red Maple	20	Sapling	1	5	Red	Maple	Low	5 - 10 feet	Sapling	
	Red Oak	10	Log/Pole/XLog	14		Bals	am Fir	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	50	Sapling	1	5						
	Jack Pine	20	Sapling	1	5						
40	6117 - Lowland Con	Deciduous iiferous	, Mixed Pole	timbe	Mediun	m 9.4	35	51-80	N/A		Very wet and poor site.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size	
	Red Maple	10	Pole/Sapling	6		Red	Maple	Medium	5 - 10 feet	Sapling	
	Paper Birch	10	Sapling/Pole	4		Bals	am Fir	Medium	5 - 10 feet	Sapling	
	Balsam Poplar	10	Sapling/Pole	4		А	lder	High	5 - 10 feet	Tall Shrub	
	Balsam Fir	30	Sapling/Pole	4							
	Green Ash	40	Pole/Sapling	5	35						
41	6220 - A	Alder/willow	, <u> </u>	Nonsto	ocked	10.2			No		
						Sub-Can	opy Species	Density	Avg. Height	Size	
							-   -   -	Density	Avg. Height		
							lder	Full	Avg. Height	Tall Shrub	
42	500	- Water	1	Nonsto	ocked				No No		
42		- Water - Water		Nonsto		A					
	500 -	- Water	1	Nonsto		2.9 12.2			No		River corridor and floodplain. Very wet and standing water in places.
43	500 -	- Water Deciduous iferous	1	Nonsto	ocked	2.9 12.2 m 39.4	lder	Full 51-80	No No		
43	500 6117 - Lowland Con	- Water Deciduous iferous	r, Mixed Saw	Nonsto	ocked Medium	2.9 12.2 m 39.4 Sub-Cane	lder 85	Full 51-80	No No N/A	Tall Shrub	
43	6117 - Lowland Con Canopy Species	- Water  Deciduous iferous  % Cover	, Mixed Saw	Nonsto	Medium	2.9 12.2 m 39.4 Sub-Can	85 opy Species	Full 51-80 Density	No No N/A Avg. Height	Tall Shrub	
43	6117 - Lowland Con Canopy Species Red Maple	- Water  Deciduous iferous  **Cover*  30	, Mixed Saw Size Class Log/Pole	Nonsto	Medium	2.9 12.2 m 39.4 Sub-Cane Red Bigtoo	85 opy Species Maple	Full  51-80  Density  Medium	No No N/A Avg. Height 10 - 20 feet	Size Sapling	
43	6117 - Lowland Con Canopy Species Red Maple White Ash	- Water  Deciduous iferous  **Cover* 30 5	Size Class Log/Pole Log/Pole	Nonsto	Medium	2.9 12.2 m 39.4 Sub-Cane Red Bigtoo Bals	85 opy Species Maple th Aspen	51-80  Density  Medium Low	No No N/A Avg. Height 10 - 20 feet 10 - 20 feet	Size Sapling Sapling	River corridor and floodplain. Very wet and standing water in places.
43	6117 - Lowland Con Canopy Species Red Maple White Ash Bigtooth Aspen	- Water  Deciduous iferous  % Cover  30 5 20	Size Class Log/Pole Log/Pole Log/Pole	Nonsto	Medium	2.9 12.2 m 39.4 Sub-Cane Red Bigtoo Bals	85  opy Species  Maple th Aspen am Fir	51-80  Density  Medium  Low  Medium	No No N/A  Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet	Size Sapling Sapling Sapling	River corridor and floodplain. Very wet and standing water in places.
43	6117 - Lowland Con Canopy Species Red Maple White Ash Bigtooth Aspen Balsam Poplar	- Water  Deciduous iferous  % Cover  30 5 20 5	Size Class Log/Pole Log/Pole Log/Pole Log/Pole	DBH 12 10 12 10	Medium	2.9 12.2 m 39.4 Sub-Cane Red Bigtoo Bals	85  opy Species  Maple th Aspen am Fir	51-80  Density  Medium  Low  Medium	No No N/A  Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet	Size Sapling Sapling Sapling	River corridor and floodplain. Very wet and standing water in places.
43	6117 - Lowland Con Canopy Species Red Maple White Ash Bigtooth Aspen Balsam Poplar Balsam Fir	- Water  Deciduous iferous  % Cover  30 5 20 5 20 20 20	s, Mixed Saw Size Class Log/Pole Log/Pole Log/Pole Log/Pole Pole Sapling/Pole	DBH 12 10 12 10 6 4	Medium	2.9 12.2 m 39.4 Sub-Cane Red Bigtoo Bals	85 opy Species Maple th Aspen am Fir	51-80  Density  Medium  Low  Medium	No No N/A  Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet	Size Sapling Sapling Sapling	River corridor and floodplain. Very wet and standing water in places.
44	6117 - Lowland Con Canopy Species Red Maple White Ash Bigtooth Aspen Balsam Poplar Balsam Fir Green Ash	- Water  Deciduous iferous  % Cover  30 5 20 5 20 20 anted Red F	s, Mixed Saw Size Class Log/Pole Log/Pole Log/Pole Log/Pole Pole Sapling/Pole	DBH 12 10 12 10 6 4	Medium  I Age  85	2.9 12.2 m 39.4 Sub-Cane Red Bigtoo Bals A	85 opy Species Maple th Aspen am Fir	51-80  Density  Medium  Low  Medium  High	No No N/A Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet 10 - 20 feet	Size Sapling Sapling Sapling	River corridor and floodplain. Very wet and standing water in places.
43 44 45	6117 - Lowland Con  Canopy Species  Red Maple  White Ash  Bigtooth Aspen  Balsam Poplar  Balsam Fir  Green Ash	- Water  Deciduous iferous  % Cover  30 5 20 5 20 20 anted Red F	Size Class Log/Pole Log/Pole Log/Pole Log/Pole Sapling/Pole Pole Sapling/Pole	DBH 12 10 12 10 6 4	Medium  Age 85  er Well	2.9 12.2 m 39.4 Sub-Cane Red Bigtoo Bals A	85  opy Species  Maple th Aspen am Fir Ider	51-80  Density  Medium  Low  Medium  High	No No N/A  Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet 10 - 20 feet	Size Sapling Sapling Sapling Sapling Tall Shrub	River corridor and floodplain. Very wet and standing water in places.



Stand Level 4 Co		over Type		Size Density		Acres	Stand Age	BA Range	Managed Site		General Comments	MICHIGAN .
49	4130	- Aspen	;	Saplin	g Well	14.5	24	Immature	N/A			
Can	nopy Species	% Cover	Size Class	DBH	l Age							
Re	ed Maple	20	Sapling	3								
Bigto	tooth Aspen	60	Sapling	3	24							
North	nern Pin Oak	10	Sapling	3								
Ва	alsam Fir	10	Sapling	3								
50	4130	- Aspen	Po	oletimb	er Wel	ll 40.3	37	111-140	N/A		Diameters are still small, check in 10 years.	
Can	nopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Speci	es Density	Avg. Height	Size		
Re	ed Maple	5	Pole/Sapling	5		Servicebe	erry (Junebe	rry) Low	5 - 10 feet	Tall Shrub		
Bigto	tooth Aspen	70	Pole/Sapling	6	37							
North	nern Pin Oak	10	Pole/Sapling	5								
Ва	alsam Fir	10	Pole	6								
W	/hite Pine	5	Pole/Sapling	5								
51	629 - Mixed non	n-forested w	vetland	Nonst	ocked		nopy Speci	Unspecified  es Density  Medium	No Avg. Height	Size Non-Wood	Wet area with scattered dead ash cattails and alder.	
51	629 - Mixed non	n-forested w	vetland	Nonst	ocked	Sub-Ca Ca Gr Red Os	ttail spp. een Ash sier Dogwoo	es Density  Medium  Low  d Low		Non-Wood Pole Tall Shrub		
	629 - Mixed non			Nonsto		Sub-Ca Ca Gr Red Os	ttail spp. een Ash	es Density  Medium  Low		Pole Tall Shrub Tall Shrub		
<b>53</b> 41	199 - Other Mixe	d Upland D	eciduous	Saplin	g Well	Sub-Ca Ca Gr Red Os	een Ash sier Dogwoo ag Alder	Medium Low Low Medium Medium	Avg. Height	Pole Tall Shrub Tall Shrub		
53 41 Can	199 - Other Mixed	d Upland D	Deciduous Size Class	Saplin		Sub-Ca Ca Gr Red Os	een Ash sier Dogwoo ag Alder	Medium Low Low Medium Medium	Avg. Height	Pole Tall Shrub Tall Shrub		
53 41 Can	199 - Other Mixed nopy Species led Maple	d Upland D <b>% Cove</b> r	peciduous Size Class Sapling/Pole	Saplin(	g Well	Sub-Ca Ca Gr Red Os	een Ash sier Dogwoo ag Alder	Medium Low Low Medium Medium	Avg. Height	Pole Tall Shrub Tall Shrub		
53 41 Can Re	199 - Other Mixed	d Upland D <b>% Cover</b> 45	Deciduous Size Class	Sapline DBH	g Well	Sub-Ca Ca Gr Red Os	ttail spp. een Ash sier Dogwoo ag Alder	Medium Low Low Medium Medium	Avg. Height	Pole Tall Shrub Tall Shrub		
53 41 Can Re  Bigte  North	199 - Other Mixed nopy Species led Maple tooth Aspen	d Upland D  **Cover  45  35	Deciduous  Size Class Sapling/Pole Sapling/Pole	Sapling  DBH  4	g Well	Sub-Ca Ca Gr Red Os	ttail spp. een Ash sier Dogwoo ag Alder	Medium Low Low Medium Medium	Avg. Height	Pole Tall Shrub Tall Shrub		
53 41 Can Re  Bigte  North	199 - Other Mixed nopy Species led Maple sooth Aspen nern Pin Oak /hite Pine	d Upland D  **Cover  45  35  5	Size Class Sapling/Pole Sapling/Pole Log/Pole Log/Pole	Sapling  DBH  4  40  10	g Well	Sub-Ca Ca Gr Red Os Ta	ttail spp. een Ash sier Dogwoo ag Alder	Medium Low Low Medium Medium	Avg. Height	Non-Wood Pole Tall Shrub Tall Shrub		
53 41  Car  Re  Bigte  North  W	199 - Other Mixed nopy Species led Maple sooth Aspen nern Pin Oak /hite Pine	d Upland D  **Cover  45  35  5  15	Deciduous Size Class Sapling/Pole Sapling/Pole Log/Pole Log/Pole	Sapling  DBH  4 4 10 10	g Well  I Age  26	Sub-Ca Ca Gr Red Os Ta	attail spp. een Ash sier Dogwoo ag Alder 26	Medium Low Low Medium Immature	Avg. Height	Non-Wood Pole Tall Shrub Tall Shrub	Aspen/maple regen. with white pine and oak residual.	
53 41  Can  Re  Bigte  North  W  54	199 - Other Mixed nopy Species led Maple tooth Aspen hern Pin Oak /hite Pine	d Upland D % Cover 45 35 5 15	Deciduous Size Class Sapling/Pole Sapling/Pole Log/Pole Log/Pole	Sapling  DBH  4 4 10 10	g Well  I Age 26 26 Der Wel	Sub-Ca Ca Gr Red Os Ta	attail spp. een Ash sier Dogwoo ag Alder 26	Medium Low Low Medium Immature	Avg. Height	Non-Wood Pole Tall Shrub Tall Shrub	Aspen/maple regen. with white pine and oak residual.	
53 41  Can  Re  Bigte  North  W  54  Can	199 - Other Mixed nopy Species ed Maple tooth Aspen nern Pin Oak /hite Pine 4130 nopy Species	d Upland D % Cover	Size Class Sapling/Pole Sapling/Pole Log/Pole Log/Pole Size Class	Sapling  DBH  4  4  10  10  DBH  DBH	g Well  I Age 26 26 Der Wel	Sub-Ca Ca Gr Red Os Ta	attail spp. een Ash sier Dogwoo ag Alder 26	Medium Low Low Medium Immature	Avg. Height	Non-Wood Pole Tall Shrub Tall Shrub	Aspen/maple regen. with white pine and oak residual.	
53 41  Can  Re  Bigto  North  W  54  Can  Re  Bigto	199 - Other Mixed nopy Species ed Maple sooth Aspen nern Pin Oak /hite Pine 4130 nopy Species ed Maple	d Upland D  **Cover* 45 35 5 15 - Aspen  **Cover* 20	Size Class Sapling/Pole Sapling/Pole Log/Pole Log/Pole Size Class Pole/Sapling	Sapling  DBH  4  40  10  10  DBH  DBH  5	g Well  I Age  26  Der Wel	Sub-Ca Ca Gr Red Os Ta	attail spp. een Ash sier Dogwoo ag Alder 26	Medium Low Low Medium Immature	Avg. Height	Non-Wood Pole Tall Shrub Tall Shrub	Aspen/maple regen. with white pine and oak residual.	



Stand	Level 4 C	over Type	:	Size De	ensity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
55	6117 - Lowland Con	Deciduous, ferous	Mixed Sa	wtimbe	r Medium	39.3	85	51-80	N/A		Lowland mix of poorer quality, low ground deciduous. Standing water in some places.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	30	Log/Pole	10	85	Re	ed Maple	Medium	10 - 20 feet	Sapling	
	White Ash	10	Log/Pole	8		Ba	alsam Fir	Medium	5 - 10 feet	Sapling	
	Bigtooth Aspen	20	Log/Pole	10			Alder	High	5 - 10 feet	Tall Shrub	
	Balsam Fir	20	Pole	6		Bigto	ooth Aspen	Low	5 - 10 feet	Sapling	
	Green Ash	20	Pole	4				1			
56	6239 - Mixed E	mergent W	etland	Nonst	ocked	5.9	Uı	nspecified	No		beaver activity cutting aspen saplings
						Sub-Ca	nopy Species	Density	Avg. Height	Size	
							ittail spp.	Low	<u> </u>	Non-Wood	
						Gr	een Ash	Low		Sapling	
							Alder	Medium		Tall Shrub	
							ed Maple	Low		Sapling	
						Bigtooth Aspen		Low	Unspecified	Sapling	
57	6113 - Lowland Maple Poletimb				8.8	60	1-50	N/A		Very wet stand with lots of standing dead trees. Standing water in general. Poor site could be non-forested next entry.	
	Canopy Species	% Cover	Size Class	DBH	l Age						general. Foor site could be non-lorested flext entry.
	American Elm	10	Pole	6							
	Red Maple	60	Pole/Log	8	60						
	White Ash	5	Pole/Log	8							
	Balsam Fir	10	Pole	6							
	Green Ash	15	Pole	6							
58	4130	- Aspen	Pol	letimbe	r Medium	8.9	37	81-110	N/A		Aspen mix regen. with oak and pine residual.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Red Maple	10	Pole/Sapling	5							
	Bigtooth Aspen	70	Pole/Sapling	5	37						
١	Northern Pin Oak	10	Pole/Sapling	4							
	White Pine	10	Pole/Sapling	6							
59	6117 - Lowland Con	ferous			r Medium	8.4	70	51-80	N/A		Wet. fringe area adjacent to river. Bufer area.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	50	Log/Pole	12	70	Re	ed Maple	Low	5 - 10 feet	Sapling	
	Paper Birch	10	Pole	6		Ba	alsam Fir	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	10	Log/Pole	12							
	Balsam Fir	10	Pole/Sapling	6							
No	rthern White Cedar	10	Pole	6							
	Green Ash	10	Pole	5							

Cadillac Mgt. Unit



Stand	Level 4 C	Size De	ensity	Acres	Stand Age I	BA Range	Managed S	Site	General Comments		
60	6119 - Mixed Lowland Deciduous Forest			Sawtimber Poor		38.0	110	1-50 N/A			Mostly dead standing snags creek meanders throughout stand.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	30	Log/Pole	12		Re	ed Maple	Low	< 5 feet	Sapling	
	White Ash	40	Log/Pole	10	110	W	hite Ash	Low	10 - 20 feet	Sapling	
	Balsam Poplar	20	Log/Pole	12							
	White Pine	10	Log/Pole	12							
61	42110 - Pla	nted Red P	ine	Sapling	g Well	32.4	8	Immature	N/A		Cut as part of TS# 63-043-09. "C-99 RPP". Planted in 2012.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Red Pine	100	Sapling	1	8						
62	4131 - A	spen, Oak	(	Sapling l		15.8	7	Immature	N/A		Patchy regeneration from cut on 2013. Cut as part of 63-011-12-01 Muskegon Mix Sale. The larger WP and RP are on the perimeter border
	Canopy Species	% Cover	Size Class	DBH	l Age						edge of the stand.
	Bigtooth Aspen	50	Sapling	1	7						
	White Pine	5	Log/Pole	10							
	Red Pine	2	Log	12							
	Red Maple	15	Sapling	1							
	Red Oak	20	Sapling	1							
1	Northern Pin Oak	8	Sapling	1							
63	429 - Mixed l	Jpland Con	ifers I	Poletimb	er Well	16.8	44	141-170	N/A		Nice White Pine mixed with mature Aspen. Harvest Aspen and other, but
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	leave some large White Pine.
	Bigtooth Aspen	30	Pole	9	44	Ва	ılsam Fir	Medium	5 - 10 feet	Sapling	
١	Northern Pin Oak	10	Pole	8		W	hite Pine	Low	< 5 feet	Sapling	
	Balsam Fir	10	Pole/Sapling	g 6							
	Black Spruce	10	Pole	6							
	White Pine	30	Log/Pole	10							
	Jack Pine	10	Pole/Log	8							
64	6128 - Lowland Dec	Coniferous, iduous	Mixed	Sawtimb	er Well	7.9	110	81-110	N/A		Wet stand. heavy deer activity in winter.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	20	Pole/Log	10		Re	ed Maple	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	10	Log/Pole	12		Ва	Isam Fir	Medium	5 - 10 feet	Sapling	
	Balsam Fir	30	Pole	6		Bla	ck Spruce	Low	5 - 10 feet	Sapling	
	White Pine	30	Log/Pole	14	110					1	



Stand	d Level 4 C	over Type	s	Size De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments
65	4136 - Asper	n, Mixed Co	nifer Po	Poletimber Well		57.3	53	141-170	N/A		Nice Aspen, some pockets of smaller. Harvest this entry.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Oak	10	Log	14		Ba	alsam Fir	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	70	Pole/Sapling	6	53	W	hite Pine	Low	5 - 10 feet	Sapling	
	Balsam Fir	10	Pole	6							-
	White Pine	10	Pole/Log	8							
66	6117 - Lowland Con	Deciduous, iferous	Mixed S	awtimb	er Well	24.7	80	81-110	N/A		Low and wet. No access
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	25	Log/Pole	10		Ва	alsam Fir	High	5 - 10 feet	Sapling	
	Bigtooth Aspen	25	Log/Pole	12	80	W	hite Pine	High	10 - 20 feet	Sapling	
	Balsam Fir	15	Pole	8							-
No	orthern White Cedar	10	Pole	8							
	White Pine	10	Log/Pole	14							
	Hemlock	5	Pole/Log	8							
	Green Ash	10	Pole/Sapling	5							
67	4125 - Blac	ck, N. Pin O	ak S	awtimb	er Well	3.9	90	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	10	Pole	6		Re	ed Maple	Low	5 - 10 feet	Sapling	
	Northern Pin Oak	60	Log/Pole	14	90	Ва	alsam Fir	Low	< 5 feet	Sapling	
	Balsam Fir	10	Pole	7		W	hite Pine	Low	5 - 10 feet	Tall Shrub	
	White Pine	20	Pole	6							-