DNR MICHIGAN

Compartment Review Presentation

Cadillac Forest Management Unit

Compartment 63087 Entry Year 2022 Acreage: 2,422

County Missaukee

Management Area: Manistee River Valley

Revision Date: 2020-06-10

Stand Examiner: Blair Tweedale

Legal Description:

T24N, R6W, Sections 4,5,6,8,9.

Identified Planning Goals:

Vegetation management in the Manistee River Valley management area (MA) will provide timber products; maintain or enhance wildlife habitat; protect areas of unique character including the Manistee River and its tributaries, a designated natural river; threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year planning period includes continuing aspen management to maintain early successional habitat for hunting and other wildlife-related recreational opportunities; increasing regeneration of oak; focusing on balancing the red pine age class structure through final harvests and re-planting; and on improving red pine quality through partial harvests. Expected trends within this 10-year planning period are increased recreational pressure, especially on the established trails and along the Manistee River and its tributaries; an increased wildland/urban interface and a need to restore barrens communities through prescribed fire; and invasive plant control.

Soil and topography:

Roscommon muck sand poorly drained. Rubicon, Graycalm well drained.

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

Mostly continuous state ownership within compartment, with small private in holdings. Adjacent land of the compartment to the North, East and West is mostly state ownership, with the Southern boundary almost entirely private land.

Unique Natural Features:

There are no unique natural features listed in the MNFI inventory.

Archeological, Historical, and Cultural Features:

No historical features are listed with the Bureau of History, Department of State.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

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, golden-winged warbler, mallard, pileated woodpecker, ruffed grouse, snowshoe hare, white-tailed deer, and wood duck. 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 Developm	ent Concerns :	and/or Restrictions
Willielai Nesculce	aliu Develobii:	ieni Concenta (anu/oi Neanichona

Vehicle Access:

Survey Needs:

Recreational Facilities and Opportunities:

The Miss Kal Snowmobile Trail runs east west through the northern portion of sections 4,5,6. The North Missaukee ORV Trail also runs through the compartment south of the snowmobile trail. There is evidence of hunting activity throughout the compartment.

Fire Protection:

Most of this compartment has good access and soil types will sustain access to wheeled fire equipment. ORV trail is within the compartment. ORV use and dispersed camping could cause wildfires ignitions.

Additional Compartment Information:

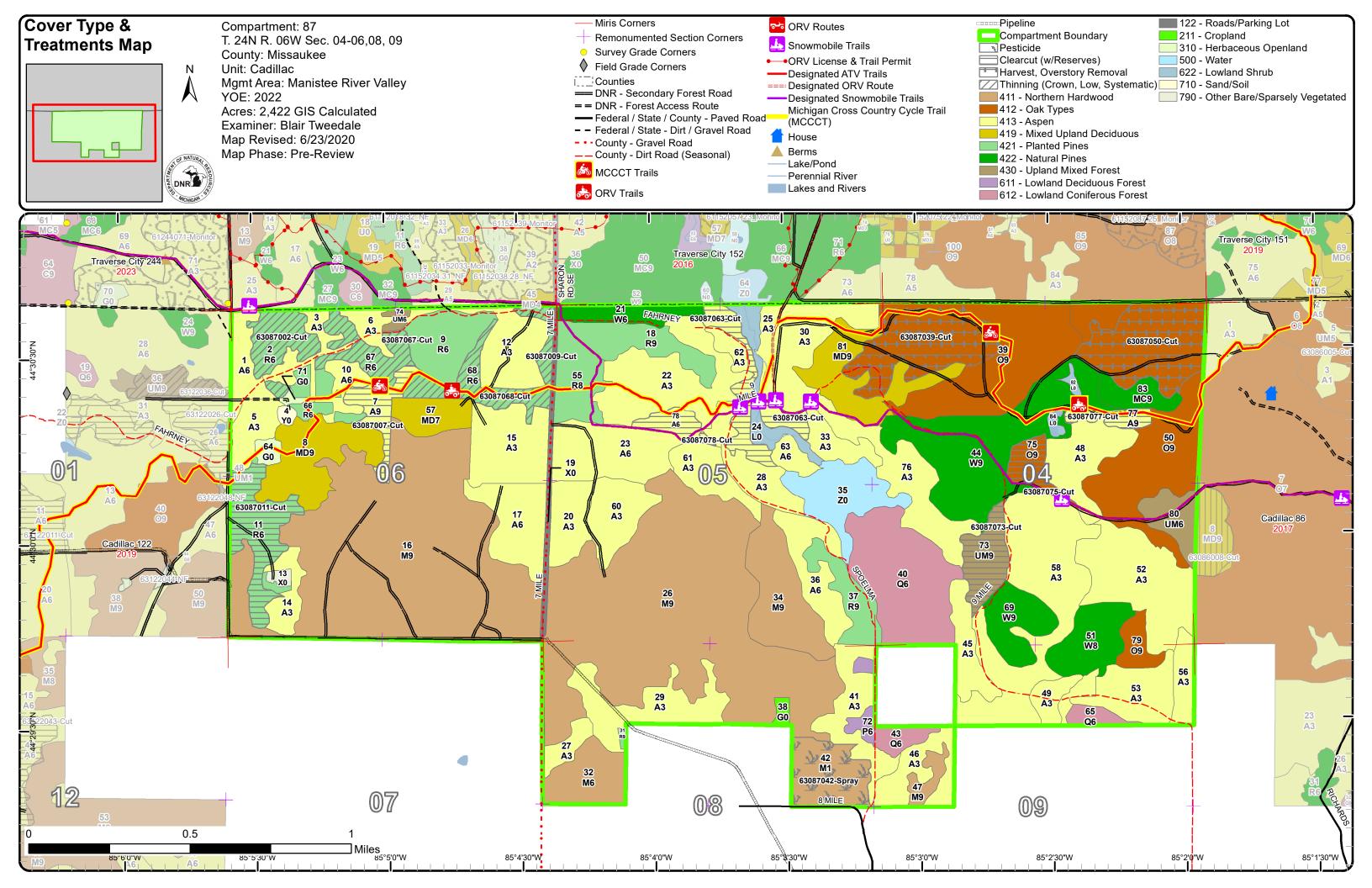
The following reports from the Inventory are attached:

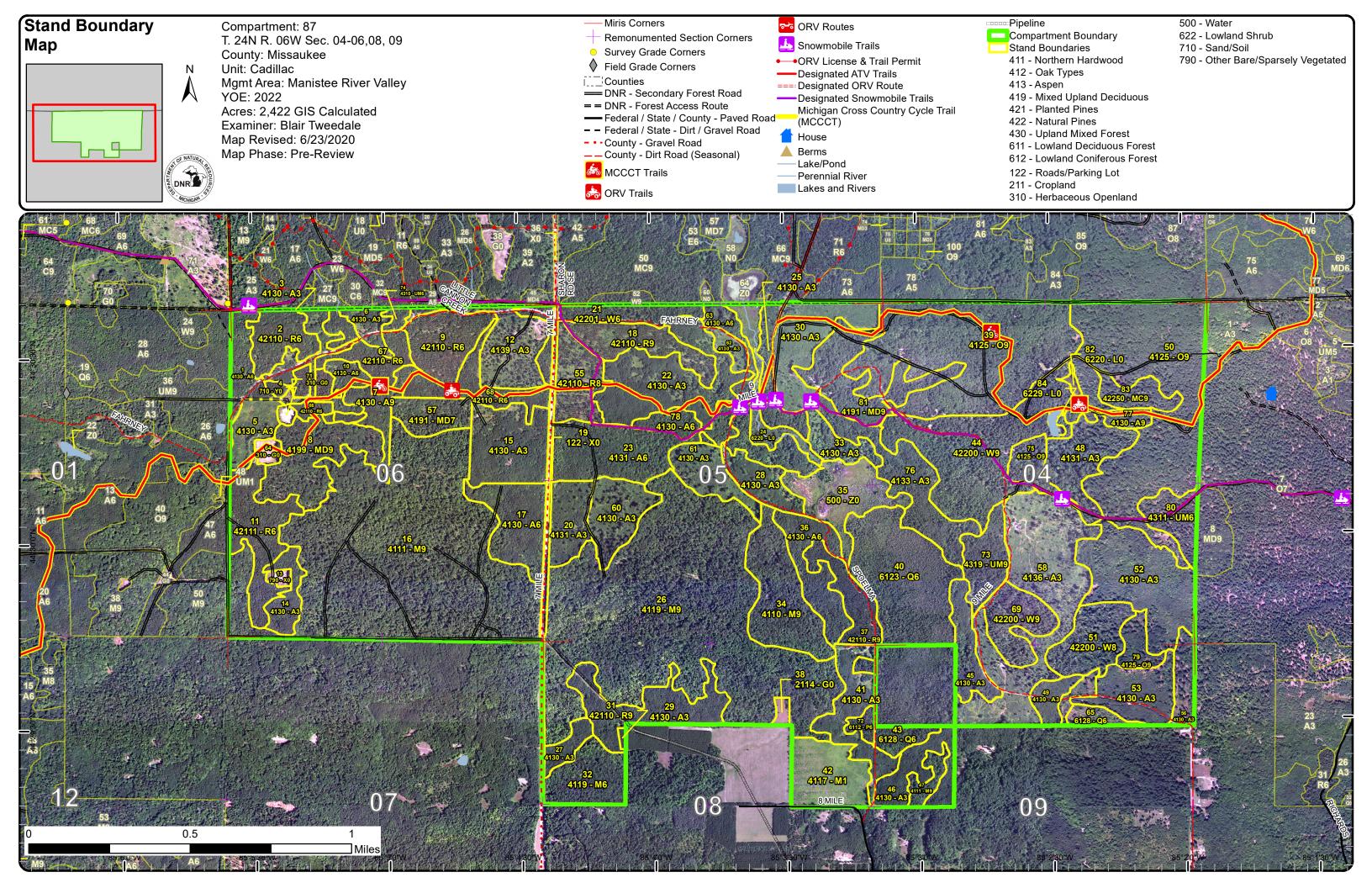
Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

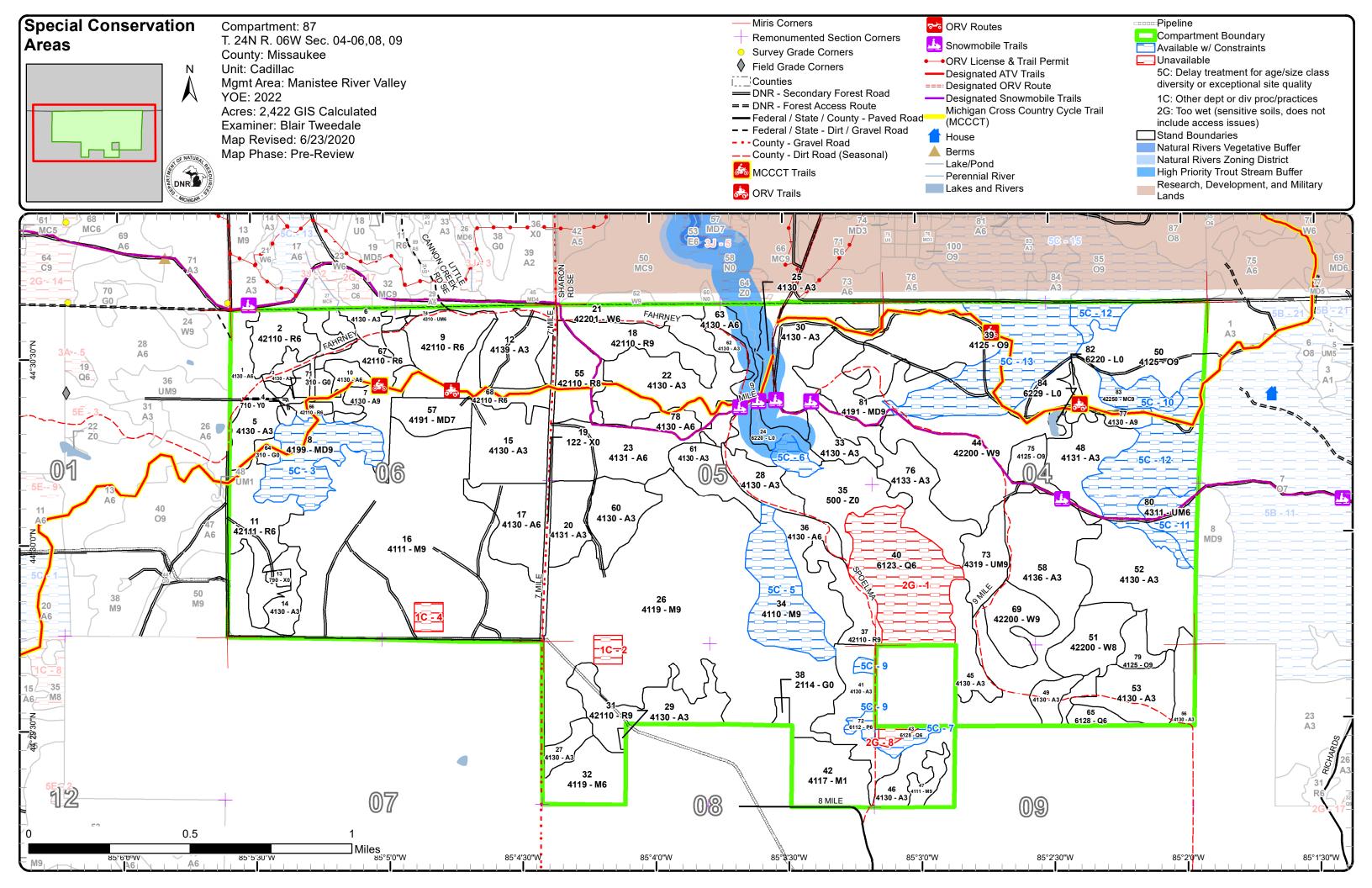
The following information is displayed, where pertinent, on the attached compartment maps:

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

Details on the road access system







Compartment 87 Year of Entry 2022

Blair Tweedale: Examiner

Cadillac Mgt. Unit



Age Class

	\	A CONTRACTOR OF THE PROPERTY O	\$ / Q	_%		3 / 6		3/8					70,7			No.		* July	A LOS
Aspen	0	232	144	223	107	46	54	7	0	0	0	0	0	0	0	0	0	55	868
Bare/Sparsely Vegetated	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Cropland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Herbaceous Openland	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6
Lowland Conifers	0	0	0	0	0	6	67	0	0	8	0	0	0	0	0	0	0	0	81
Lowland Shrub	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Mixed Upland Deciduous	0	0	0	0	0	0	16	0	0	40	0	0	0	0	0	0	0	38	94
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	12
Northern Hardwood	0	30	0	0	0	0	0	0	43	299	252	0	0	0	0	0	0	0	623
Oak	0	0	0	0	0	0	0	0	10	133	0	0	0	0	0	0	0	121	263
Red Pine	0	0	0	0	0	0	208	1	0	0	0	0	0	0	0	0	0	0	209
Sand, Soil	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Upland Mixed Forest	0	0	0	0	0	0	23	0	16	0	0	0	0	0	0	0	0	0	39
Urban	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Water	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
White Pine	0	0	0	0	0	0	0	125	0	0	0	0	0	0	0	0	0	26	151
Total	77	262	144	223	107	52	374	133	69	492	252	0	0	0	0	0	0	240	2422



Report 2 – Treatment Summary

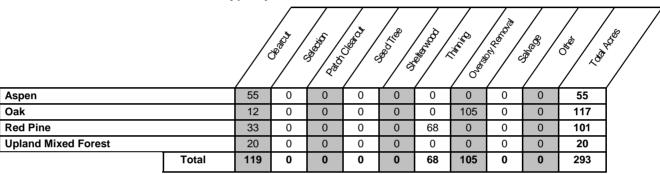
Cadillac Mgt. Unit Year of Entry: 2022

Acres of Harvest

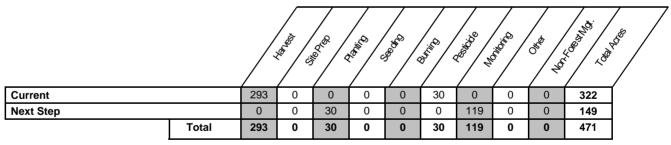
Compartment 87
Total Compartment Acres: 2,422

Commercial Harvest - 293 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 Mgt. Unit

Report 3 -- Treatments

Compartment: 87 Year of Entry: 2022

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

Proposed Treatments:

63087002-Cut 42110 - Planted 4211 - Planted 20.8 Poletimber 171-Harvest Systematic Even-Aged No Red Pine Well 200 Thinning Red Pine

Prescription Third row thin. Remove deciduous trees where possible.

Specs:

Next Step

Treatments:

Acceptable Regen:

If rows are hard to follow in areas, systematically remove 1/3 of the volume. This can be accomplished by removing a 16 ft wide swath, Other

Comment: leaving 32 ft in between the "take" rows. When taking

Site Condition

Proposed Start Date: 10/1 /2021

63087007-Cut 14.9 4130 - Aspen Sawtimber Harvest Clearcut 413 - Aspen Even-Aged No 56 111-Well 140

Prescription Final harvest. No retention.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen and mixed deciduous

Regen:

<u>Other</u> No retention due to size, shape and diversity of adjacent timber types.

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

63087009-Cut 6.6 42110 - Planted Poletimber 59 141-Harvest Low Thinning 4211 - Planted Even-Aged No Red Pine Well

170 Red Pine

Prescription Thin pine to an average residual BA of 110.

Specs:

Next Step

Treatments:

<u>Acceptable</u>

Regen:

Other Comment:

Site Condition

Proposed Start Date: 6 /23/2020

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Compartment: 87

S t			3		Моро				Year of Entr		DNR
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habita Cut
11	63087011-Cut	33.0	42111 - Planted Red Pine, Mixed Deciduous	Poletimbe Well	er 59	171- 200	Harvest	Clearcut	413 - Aspen	Even-Aged	No
Pres Spe		arvest. Le	eave larger scattered	d red pine v	vhere as	spen is do	ominate.				
<u>Nex</u>		ring, Natu	ral Regen (Re-Inver	ntory)							
	<u>eptable</u> aspen,	maple, m	ixed deciduous alor	ng with pine	€.						
<u>Oth</u>		should be	sufficient deciduous	s regenerat	ion in th	ne pine do	minated areas,	along with a flush	of aspen sprouts t	o regenerated	the entire
	Condition										
	oosed Start Date										
39	63087039-Cut	53.1	4125 - Black, N. Pin Oak	Sawtimbe Well	er 86	81-110	Harvest	Overstory Removal	412 - Oak Types	s Even-Aged	No
Pres Spe	scription Overstocs:	ory remov	al.								
	t Step atments:										
Acc Reg	eptable mixed o	deciduous	and mixed pine								
Oth Con			es are approximate a ion on the landscap		adjuste	ed as nee	ded (topography). Treatment repre	esents % of acreag	e to be treated	d more
Site	Condition										
Pro	oosed Start Date	<u>:</u> 1 /29/2	020								
50	63087050-Cut	52.3	4125 - Black, N. Pin Oak	Sawtimbe Well	er 88	51-80	Harvest	Overstory Removal	412 - Oak Types	s Even-Aged	No
Pres Spe	scription Oversto	ory remov	al.								
	t Step atments:										
Acc Reg		ixed decid	luous and mixed pir	ne							
Oth Con			es are approximate a ion on the landscap		adjuste	ed as nee	ded (topography). Treatment repre	esents % of acreag	ge to be treated	d more
Site	Condition										
Pro	oosed Start Date	<u>:</u> 10/1 /2	021								
63	63087063-Cut	23.8	4130 - Aspen	Poletimbe Well	er 58	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	No
Pres Spe	•	arvest. Le	eave scattered white	pine and t	rees alc	ong the lov	wland area to the	e East.			
	t Step Monito atments:	ring, Natu	ral Regen (Re-Inver	ntory)							
Acc Reg	eptable aspen, en:	pine, mix	ed deciduous								
Oth Con	e <u>r</u> nment:										
Site	Condition										

Proposed Start Date: 10/1 /2021

n d	Treatment Name	Acres	Stand CoverType	Size S Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
67	63087067-Cut	19.5	42110 - Planted Red Pine	Poletimber Well	- 59	171- 200	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	No
	scription Third re	ow thin.									

Next Step Treatments:

S

t

Acceptable Regen:

Other If rows are hard to follow in areas, systematically remove 1/3 of the volume. This can be accomplished by removing a 16 ft wide swath,

Comment: leaving 32 ft in between the "take" rows. When taking

Site Condition

Proposed Start Date: 10/1 /2021

Systematic 63087068-Cut 21.5 42110 - Planted Poletimber 59 171-Harvest 4211 - Planted Even-Aged No Red Pine Well 200 **Thinning** Red Pine

Prescription Third row thin.

Specs:

Next Step Treatments:

Acceptable Regen:

Other Protect ORV trail.

Comment: If rows are hard to follow in areas, systematically remove 1/3 of the volume. This can be accomplished by removing a 16 ft wide swath,

leaving 32 ft in between the "take" rows.

Site Condition

Proposed Start Date: 10/1 /2021

73 63087073-Cut 19.9 4319 - Mixed Sawtimber 52 81-110 Harvest Clearcut with 4319 - Mixed Even-Aged No Upland Forest Well Retention Upland Forest

<u>Prescription</u> Final harvest. Avoid harvest in wet areas. Leave large white pine when available. Do not leave more than 5 BA of overstory white pine.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable mixed deciduous and mixed conifer

Regen:
Other
Comment:

Site Condition

Proposed Start Date: 10/1 /2021

75 63087075-Cut 11.5 4125 - Black, N. Pin Sawtimber 85 81-110 Harvest Clearcut 4319 - Mixed Even-Aged No Oak Well Upland Forest

Prescription Final harvest. Leave scattered pine, not to exceed 10 BA.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable oak, mixed deciduous and mixed conifer

Regen:
Other
Comment:

0.. 0 1...

Site Condition

Proposed Start Date: 10/1 /2021

Cadillac Mgt. Unit Report 3 -- Treatments Compartment: 87 S Year of Entry: 2022 t а Treatment **Cover Type Treatment** Acres Stand Size Stand BA **Treatment** Age Habitat n Method Objective Name Density Structure CoverType Age Range Type Cut d 63087077-Cut 7.2 4130 - Aspen Sawtimber Unspec Harvest Clearcut 413 - Aspen Even-Aged No Well ified Prescription Final Harvest. avoid wet areas. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) **Treatments:** Acceptable aspen with mixed deciduous Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2021 63087078-Cut Poletimber 81-110 8.6 4130 - Aspen 51 Harvest Clearcut 413 - Aspen Even-Aged No Well Prescription Final harvest. No retention due to small acreage. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable mixed deciduous Regen: **Other** May leave a few super canopy pines Comment:

Approved Treatments:

Proposed Start Date: 10/1 /2021

Site Condition

42	63087042- Spray	29.6	4117 - Mixed N. Hardwood - Pine	Sapling Poor	5	Immatu re	Pesticide	ERROR	4211 - Planted Red Pine	Even-Aged	No
Preso Specs	ription spray S:										
Next :	Step Planting ments:	, Replan	t								
Accer Rege	otable planted n:										
Other Comr		to Treat	= 100%								
Site C	<u>Condition</u>										
Propo	sed Start Date:	1 /1 /20	20								

Total Treatment 322.3 Acreage Proposed:

Cadillac Mgt. Unit

Compartment: 87 Year of Entry: 2022 Blair Tweedale: Examiner

Availa	ability for	Managemer	nt						
Total	Acres	Acres Avail	Acres	D	omina	nt Site	e Con	dition	s
Acres	Available	With Condition	Not Available		5B	5C	1C	2G	3J
870	863	7	0	Aspen	0	7			0
2	2	0	0	Bare/Sparsely Vegetated					
2	2	0	0	Cropland					
5	5	0	0	Herbaceous Openland					
6	0	6	0	Lowland Aspen/Balsam Poplar		6			
81	6	5	70	Lowland Conifers		5		70	
19	19	0	0	Lowland Shrub					
94	54	40	0	Mixed Upland Deciduous		40			
12	0	12	0	Natural Mixed Pines		12			
623	570	43	10	Northern Hardwood		43	10		
262	126	136	0	Oak		136			
209	209	0	0	Red Pine					
2	2	0	0	Sand, Soil					
39	23	16	0	Upland Mixed Forest		16			
13	13	0	0	Urban					
33	33	0	0	Water					
150	150	0	0	White Pine					
2,422	2,077	265	80	Total Forested Acres	0	265	10	70	0
	86%	11%	3%	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.

1 Unavailable 2G: Too wet (sensitive 67 Unspecified
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Report 4 – Site Conditions

Cadillac Mgt. Unit

Blair Tweedale: Examiner

2	Unavailable	1C: Other dept or div proc/practices	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Walters Research	Project: Long-term beech regen	eration r	monitoring, up to 20 years	s (through 2039)		
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	40	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	1C: Other dept or div proc/practices	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Walters Research	Project: Long-term beech regen	eration r	monitoring, up to 20 years	s (through 2039)		
5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	43	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Cadillac Mgt. Unit
Blair Tweedale: Examiner

8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
10	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
11	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	16	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	68	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

Report 4 – Site Conditions

Cadillac Mgt. Unit
Blair Tweedale: Examiner

Compartment: 87
Year of Entry: 2022

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

6/23/2020 8:45:56 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: 87
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	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated for include the 5,847 acre Forest Fire Experiment Station, the 12,00 Area, the Beaver Islands Archipelago Wildlife Research Area (the High and Hog Islands, all state owned land on Beaver, South For Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research, and over 144,000 acres of Military Lands.	00 acre Houghton Lake Wildlife Research nat includes most of Garden Island, all of ox and North Fox Islands), the Cusino
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their effects as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, diversity of plants and wildlife. Riparian cts on water quality and quantity, as well
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spapproved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 1 and Vegetative Buffers for each Natural River see the table loca folder.	s Zoning District is a 400 foot buffer for 00 feet. To view specific Zoning Districts



Stan	d Level 4 Co	over Type	s	ize De	nsity	Acres	Stand Age	BA Range	Managed :	Site	General Comments
1	4130	- Aspen	Po	oletimb	er Well	15.8	45		N/A		mostly small diameter aspen with scattered pine throughout stand.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	15	Sapling/Pole	4		Re	d Maple	Medium	10 - 20 feet	Sapling	
	Red Oak	3	Pole	6							
	Quaking Aspen	30	Pole/Sapling	7	45						
	White Pine	12	Log/Pole	10							
	Bigtooth Aspen	40	Pole	8	45						
2	42110 - Plai	nted Red P	ine Po	oletimb	er Well	20.8	59	171-200	N/A		Planted red pine.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	White Pine	3	Pole	7							
	Red Pine	90	Pole	8	59						
	Red Maple	3	Pole	6							
	Red Oak	2	Pole/Log	9							
	Quaking Aspen	2	Pole	6							
3	4130	- Aspen		Sapling	g Well	12.4	17	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	5	Sapling/Pole	4			nite Pine	Low	5 - 10 feet	Sapling	
	Red Oak	5	Log	13							
	Bigtooth Aspen	85	Sapling/Pole	3	17						
	Red Pine	5	Sapling/Pole	4							
4	710 - S	and, Soil		Nonsto	cked	1.9		Immature	No		former well site. sand and ferns.
						Sub-Ca	nopy Species	Density	Avg. Height	Size	
							ken Fern	High		Non-Wood	
5	4130	- Aspen	Ş	Sapling	y Well	14.5	7	Immature	N/A		Stand was final harvested in winter of 2013, chipped.
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Red Maple	30	Sapling	1	7						
	Quaking Aspen	70	Sapling	2	7						
6	4130	- Aspen	Ş	Sapling	y Well	8.0	27	Immature	N/A		stand was cut in previous entry.
-	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	10	Sapling	2			nite Pine	Low	< 5 feet	Seeding	
	White Oak	10	Sapling/Pole	3				1			ı
	Quaking Aspen	75	Sapling/Pole	3	27						



Stand	Level 4 Co	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
7	4130 -	- Aspen	;	Sawtimb	er Well	14.9	56	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Red Maple	5	Pole/Log	9							
	Bigtooth Aspen	75	Log/Pole	13	56						
	Red Oak	10	Log	16							
	Beech	10	Pole/Log	9							
8	4199 - Other Mixed	d Upland D	eciduous :	Sawtimb	er Well	40.0	83	81-110	N/A		Stand was thinned in 2015, was a marked thinning. Was cut in Feb and
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Specie	s Density	Avg. Height	Size	March.
	Beech	10	Log	10		Re	ed Maple	Trace	Variable	Sapling	
	Sugar Maple	25	Log	14			Beech	Full	< 5 feet	Seeding	
	Red Oak	55	Log	16	83						
	Red Maple	10	Pole	8							
9	42110 - Plar	nted Red Pi	ine I	Poletimb	er Well	33.4	59	141-170	N/A		Stand was third row thinned early 2000's. Portion along 7 mile has not been thinned. Small pocket of stand along 7 mile rd is dominated by
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Specie	s Density	Avg. Height	Size	white pine, but feature was too small to meet mapping standards.
	Quaking Aspen	3	Pole	7		W	hite Oak	Trace	< 5 feet	Seeding	, ,, ., ., ., ., ., ., ., ., ., ., ., .,
	Red Oak	4	Log/Pole	11		R	Red Pine	Trace	< 5 feet	Seeding	
	Red Maple	3	Pole/Sapling	5							
	White Pine	5	Log	10							
	Red Pine	85	Pole/Log	8	59						
10	4130 -	Aspen	ı	Poletimb	er Well	9.8	37	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Red Maple	5	Pole/Sapling	5							
	Bigtooth Aspen	80	Pole/Sapling	9 6	37						
	Red Oak	10	Pole/Sapling	9 6							
	Beech	5	Sapling/Pole	9 4							
11	42111 - Planted Deci	Red Pine, duous	Mixed I	Poletimb	er Well	34.7	59	171-200	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Specie	s Density	Avg. Height	Size	
	Red Maple	10	Pole	6		Re	ed Maple	Medium	10 - 20 feet	Sapling	
	Quaking Aspen	30	Pole/Log	9				'			•
	Red Pine	60	Pole/Log	9	59						

Cadillac Mgt. Unit Report 7 – Stands



Stand	Level 4 Co	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments	MICHIGAN .
12	4139 - Aspen, N			Sapling		30.4	6	1-50	N/A		Stand was final harvested in 2014, chipping operation. Scatered pi oak were left. North end of stand is popular unoffical horse campin	
	Canopy Species		Size Class		Age							Ū
	Red Maple	20	Sapling	1	6							
	White Oak	10	Log/XLog	16								
	Quaking Aspen	51	Sapling	1	6							
Bla	ck/Red (Hybrid) Oak	9	Log/XLog	16								
	White Pine	10	Log/Pole	10								
13	790 - Other Bare/S	Sparsely V	egetated	Nonsto	cked	2.2		Unspecified			old gas well. poison gas signs posted.	
14	4130 -	- Aspen		Sapling	Well	12.1	38	51-80	N/A		small diameter stand.	
	Canopy Species	% Cover	Size Class	DBH	Age							
	Red Maple	12	Pole/Sapling	g 5								
	Quaking Aspen	65	Pole/Sapling	5	38							
	Black Cherry	13	Sapling	3								
	Red Oak	10	Pole/Sapling	9 6								
15	4130 -	- Aspen		Sapling	Well	36.6	24	Immature	N/A			
	Canopy Species	% Cover	Size Class		Age	Sub-Ca	nopy Speci	es Density	Avg. Height	Size		
	Red Maple	20	Sapling	3	7.90		ite Pine	Low	5 - 10 feet	Sapling		
	Quaking Aspen	60	Sapling	3	24							
	Bigtooth Aspen	20	Sapling	3								
16	4111 - S.Maple, Ha	ard Mast As		Sawtimb	er Wel	252.1	97	51-80	N/A		Western potion of stand was not thinned last entry. Higher BA.	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Speci	es Density	Avg. Height	Size		
	Sugar Maple	48	Log/Pole	11	97		Beech	High	5 - 10 feet	Sapling		
	Red Maple	15	Log/Pole	10		Iro	nwood	Low	5 - 10 feet	Sapling		
	Basswood	20	Log	11		Blackbe	rry/Raspber	ry Medium	< 5 feet	Tall Shrub		
	Beech	1	Log	12						1		
	Red Oak	16	Log/XLog	15								
17	4130 -	- Aspen	F	Poletimb	er Wel	30.6	46	141-170	N/A		mix of maple, aspen and beech. Trace of sugar maple.	
	Canopy Species	% Cover	Size Class	DBH	Age							
	Sugar Maple	5	Pole	5								
	Red Maple	10	Pole	6								
	Red Oak	5	Log/Pole	12								
	Quaking Aspen	65	Pole	8	46							
	Bigtooth Aspen	10	Pole	7								



Stand	d Level 4 Co	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
18	42110 - Plar	nted Red P	Pine	Sawtimb	er Well	24.5	58	81-110	N/A		Stand is a mix of red pine and white pine plantation. Red pine was thinned with all aspen and white pine being final harvested within
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	plantation. Sale occurred in winter 2013.
	Red Pine	100	Log/Pole	10	58	Re	d Maple	Low	< 5 feet	Sapling	
						WI	nite Pine	High	< 5 feet	Sapling	
19	122 - Road	l/Parking L	ot	Nonst	ocked	12.5			No		
20	4131 - A	spen, Oak		Sapling	g Well	18.9	17	Immature	N/A		Recent Aspen Cut with scattered overstory oaks
	Canopy Species	% Cover	Size Class	DBH	I Age						
	Red Maple	10	Sapling	2							
	Red Oak	20	Log	10							
	Quaking Aspen	70	Sapling	2	17						
21	42201 - Natural \ Deci	White Pine duous	, Mixed	Poletimb	er Well	15.6	63	81-110	N/A		1/10/20: Diameters and densities of white pine vary greatly throughout stand.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	
	Red Maple	4	Sapling	1		WI	nite Pine	Low	< 5 feet	Sapling	
	Bigtooth Aspen	20	Sapling	2	18				I	-	
Bla	ack/Red (Hybrid) Oak	6	Pole/Log/Sa	p 9							
	White Pine	70	Pole/Log/Sa	p 8	63						
22	4130	- Aspen		Sapling	g Well	53.5	24	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	
	Red Maple	20	Sapling	3		WI	nite Pine	Low	< 5 feet	Sapling	
	White Oak	5	Sapling/Pole	e 3					1		
	Bigtooth Aspen	65	Sapling	3	24						
	Red Oak	5	Sapling	3							
	White Pine	5	Log	16							
23		spen, Oak		Poletimb		46.6	38	81-110	N/A		
	Canopy Species		Size Class		l Age						
	Red Maple	5	Pole	5							
	Red Oak	3	Log/Pole	11							
	Bigtooth Aspen	55	Pole	6	38						
Bla	ack/Red (Hybrid) Oak	22	Pole/Log	8							
	White Pine	15	Log/Pole	12							
24	6220 - A	lder/willow		Nonst	ocked	15.2		Unspecified	No		aspen and tag alder surrounding beaver ponds.
							nopy Specie		Avg. Height	Size	
							ing Aspen	Low	Unspecified	Sapling	
						Ta	ig Alder	Low		Tall Shrub	



Stand	Level 4 Co	over Type	;	Size De	nsity	Acres	Stand Age	BA Range	Managed Si	te	General Comments	MICHIGAN .
25	4130 -	- Aspen		Sapling	Well	9.3	17	Immature	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age							
	Red Maple	5	Sapling	1								
	Bigtooth Aspen	92	Sapling	4	17							
	Northern Pin Oak	3	Pole/Sap/Log	6								
26	4119 - Mixed No	rthern Hard	dwoods S	Sawtimb	er Well	266.2	89	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size		
	Sugar Maple	35	Pole/Log	8	89	Re	ed Maple	Low	5 - 10 feet	Sapling		
	Red Maple	15	Pole/Log/Sap	7		R	led Oak	Low	< 5 feet	Sapling		
	Basswood	10	Log/Pole	10			Beech	Medium	5 - 10 feet	Sapling		
	Beech	10	Pole/Log	7					"			
	Red Oak	25	Log/Pole	11	107							
	White Oak	5	Log	11								
27	4130 -	- Aspen		Sapling	Well	7.6	17	Immature	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age							
	Red Maple	7	Sapling	1								
	Bigtooth Aspen	90	Sapling	2	17							
	Black Cherry	3	Pole/Sapling	6								
28	4130 -	- Aspen		Sapling	Well	16.0	17	Immature	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age							
	Red Oak	10	Log	13								
	Bigtooth Aspen	80	Sapling	3	17							
	Red Maple	5	Sapling	2								
	Red Oak	5	Sapling	3								
	4120	- Aspen		Sapling	10/011	35.5	24	Immature	N/A		aspen mixed with red maple. cut last entry.	
29	Canopy Species				Age	33.3	24	IIIIIIaluie	IN/A		aspen mixed with red maple. Cut last entry.	
	Red Maple	% Cover	Sapling/Pole		24							
	Bigtooth Aspen	5 85	Sapling/Pole Sapling/Pole		24							
					24							
	Red Oak	10	Sapling/Pole	4								
30		- Aspen		Sapling		34.7	7	Immature	N/A		sale was cut in 2013.	
	Canopy Species	% Cover			Age							
	Red Maple	20	Sapling	1								
	Quaking Aspen	40	Sapling	1	7							
	Bigtooth Aspen	40	Sapling	1								





Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments
31	42110 - Pla	nted Red P	ine S	Sawtimb	er Well	0.9	69	141-170	N/A		small portion of pine plantation that extends onto private
	Canopy Species	% Cover	Size Class	DBH	Age						
	Red Pine	100	Log/Pole	10	69						
32	4119 - Mixed No	orthern Har	dwoods F	Poletimb	er Well	25.2	88	81-110	N/A		hold 10 more years to increase diameters.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
	Sugar Maple	43	Pole/Log	8	88		Beech	Low	5 - 10 feet	Sapling	
	Red Maple	10	Pole	6		Ir	onwood	Low	5 - 10 feet	Sapling	
	Basswood	15	Log/Pole	12		Su	gar Maple	Low	5 - 10 feet	Sapling	
	Beech	15	Log/Pole	10		Bla	ck Cherry	Low	5 - 10 feet	Sapling	
	Red Oak	10	Log	11					1		•
	Black Cherry	5	Log/Pole	11							
	Yellow Birch	2	Log/Pole	10							
33		- Aspen		Sapling		12.5	26	Immature	N/A		Young aspen mixed with scattered pine. Lowland wet pocket located within stand boundaries.
	Canopy Species	% Cover			Age						
	Red Maple	10	Sapling/Pole								
	White Oak	5	Sapling/Pole								
	Quaking Aspen	70	Sapling/Pole		26						
	White Pine	15	Pole/Log	8							
34	4110 - Sugar N	•		Sawtimb		42.9	77	111-140	N/A		Areas are hilly. Thinned in 2000.
	Canopy Species	% Cover			Age	Sub-Ca	nopy Specie		Avg. Height	Size	
	Sugar Maple	40	Log/Pole	11	77		Beech	Low	5 - 10 feet	Sapling	
	Basswood	35	Log/Pole	10			ronwood	Low	5 - 10 feet	Sapling	
	Beech	5	Log/Pole	10			ed Maple	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	5	Log/Pole	12		Bla	ck Cherry	Low	5 - 10 feet	Sapling	
	Black Cherry	5	Pole	6							
	Red Oak	10	Log/Pole	13							
35	500	- Water		Nonsto	cked	32.8			No		
						Sub-Ca	anopy Specie	s Density	Avg. Height	Size	
						T	ag Alder	Medium		Tall Shrub	
36		- Aspen		Poletimb		26.1	38	171-200	N/A		
	Canopy Species	% Cover	Size Class		Age						
	Red Oak	10	Log	10							
	Bigtooth Aspen	80	Pole/Sapling	6	38						
	Red Maple	5	Pole/Sapling								
	Sugar Maple	5	Pole/Sapling	5							



Stand	Level 4 Co	over Type	;	Size De	nsity	Acres	Stand Age I	BA Range	Managed S	Site	General Comments
37	42110 - Plar	nted Red P	ine S	Sawtimbe	er Well	18.8	59	111-140	N/A		Stand was second thinned in winter 2013. Appears it was marked light.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Pine	100	Log/Pole	10	59	Re	ed Maple	High	10 - 20 feet	Sapling	
							Beech	Low	5 - 10 feet	Sapling	
38	2114 - Oth	ner Croplan	d	Nonsto	cked	2.4			No		open field. looks to be hay or alfala
39	4125 - Blac	k, N. Pin O	ak S	Sawtimbe	er Well	120.8	86	81-110	N/A		poor quality oak with multiple aged white pine, maple and young aspen
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	clones.
	Red Maple	5	Pole/Log/Sap	5			ed Maple	Low	5 - 10 feet	Sapling	
Blad	ck/Red (Hybrid) Oak	75	Log/Pole	11	86	Bigto	oth Aspen	Low	10 - 20 feet	Sapling	
	Quaking Aspen	5	Pole/Log	9		Black/Re	d (Hybrid) Oal	c Low	10 - 20 feet	Sapling	
	White Pine	10	Pole/Log/Sap	6		WI	nite Pine	Medium	5 - 10 feet	Sapling	
	White Oak	5	Pole/Log	9				'		1	_
40		owland Fir		oletimb		66.6	59	51-80	N/A		7
	Canopy Species	% Cover			Age		nopy Species		Avg. Height	Size	
	Quaking Aspen	15	Pole	8			lsam Fir	Low	10 - 20 feet	Sapling	
	Balsam Fir	60	Pole	7	59	Ta	ag Alder	Low	5 - 10 feet	Tall Shrub	
	Black Spruce	5	Pole/Log	9							
No	rthern White Cedar	5	Pole/Log/Sap		102						
	White Pine	5	Log/Pole	12							
	Paper Birch	5	Pole	6							
	Tamarack	5	Log	12							
41	4130	- Aspen		Sapling	Well	27.1	17	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age						
	Red Maple	10	Sapling	2							
	Bigtooth Aspen	90	Sapling	2	17						
42	4117 - Mixed N.			Sapling		29.6	5	Immature	N/A		Stand was final harvested in Dec 2012. Stand was chipped. FTP create in replant red pine.
	Canopy Species		Size Class	DBH							
	Red Pine	40	Sapling	1	5						Stand was trenched and 2013 and planted in 2015. Hardwood overtool
	Red Maple	30	Sapling	1	7						seedlings. Regen check performed in 2016. Stand was sprayed in summer 2017.
	Black Cherry	30	Sapling	1	7						Julillion 2011.



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments	MICHIGAN
43	6128 - Lowland Dec	Coniferous, iduous	Mixed	Poletimb	er Well	8.1	89	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size		
(Quaking Aspen	10	Pole/Log	9	55	Ва	lsam Fir	Medium	10 - 20 feet	Sapling		
	Balsam Fir	25	Pole	8	55	Re	ed Maple	Low	10 - 20 feet	Sapling		
Nor	thern White Cedar	35	Pole	9	89							
	Paper Birch	5	Pole	6								
	Red Maple	15	Pole	8								
	White Pine	10	XLog/Log	18								
44	42200 - Natu	ural White F	Pine	Sawtimb	er Well	85.2	64	111-140	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size		
	Red Maple	10	Pole/Log	8		Ва	lsam Fir	Low	10 - 20 feet	Sapling		
	Paper Birch	3	Pole/Sapling	g 5								
-	Bigtooth Aspen	10	Log/Pole	10								
	Balsam Fir	5	Pole	7								
	White Pine	72	Log/Pole	11	64							
45	4130	- Aspen		Saplin	y Well	17.9	15	Immature	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age							
	Red Maple	5	Sapling	1								
-	Bigtooth Aspen	85	Sapling	1	15							
	White Pine	5	Pole/Sapling	g 6								
	Balsam Fir	5	Sapling	3								
46	4130	- Aspen		Saplin	y Well	21.1	27	Immature	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age							
	Red Maple	15	Sapling	3								
E	Bigtooth Aspen	75	Sapling	4	27							
	Black Cherry	5	Sapling	4								
	Red Oak	5	Sapling	4								
47	4111 - S.Maple, H	ard Mast As	ssociation	Sawtimb	er Well	7.1	88	81-110	N/A		Small hardwood stand. East portion is on a slope.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size		
	Sugar Maple	40	Log/Pole	11	88		ed Maple	Low	Variable	Sapling		
									\	0 1'	1	
	Red Maple	15	Log/Pole	10		Ir	onwood	Low	Variable	Sapling		
	Red Maple Basswood	15 30	Log/Pole Log/Pole	10			onwood gar Maple	Low	Variable	Sapling		
	·											
	Basswood	30	Log/Pole	12								



Stand	d Level 4 C	over Type	•	Size Density	Acres	Stand Age	BA Range	Managed S	ite	General Comments
48	4131 - A	spen, Oak	(Sapling Well	29.1	12	Immature	N/A		Stand had aspen, maple and some oak removed in the past. Overall a regenerating stand with overstory oak scattered. Some pockets may have
	Canopy Species	% Cove	r Size Class	DBH Age						40 BA.
	Red Maple	15	Sapling	2						
	Quaking Aspen	30	Sapling	2 12						
	Bigtooth Aspen	20	Sapling	2						
Bla	ack/Red (Hybrid) Oak	28	Log	11						
	White Pine	4	Log	12						
	White Pine	3	Sapling	2						
49	4130	- Aspen		Sapling Well	8.7	15		N/A		
	Canopy Species	% Cove	r Size Class	DBH Age						
	Red Maple	7	Sapling	2						
	Red Oak	3	Pole	4						
	Quaking Aspen	75	Sapling	2 15						
	Bigtooth Aspen	15	Sapling	2						
50	4125 - Blac	k, N. Pin (Dak	Sawtimber Well	120.5	88	51-80	N/A		stand was cut early 2000s. all aspen was removed. overstory oak. Some
	Canopy Species	% Cove	r Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	areas have a fair amount of advanced aspen and maple regeneration, others are sparse. Some areas have a nice white pine understory.
	Red Maple	15	Pole/Log/Sa	p 7	W	hite Pine	Medium	10 - 20 feet	Sapling	direction and operation. Control and de navo a mile will be pinte an action.
Bla	ack/Red (Hybrid) Oak	75	Log/Pole	11 88	Re	ed Maple	Low	10 - 20 feet	Sapling	
	White Pine	5	Pole/Log	8	Bigto	ooth Aspen	Medium	10 - 20 feet	Sapling	
	White Oak	5	Log/Pole	10			'			_
51	42200 - Natu	ural White	Pine Sa	awtimber Mediun	n 26.1	79	51-80	N/A		
	Canopy Species	% Cove	r Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
Bla	nck/Red (Hybrid) Oak	15	Log/Pole	10	W	hite Pine	Medium	5 - 10 feet	Sapling	
	White Pine	75	Log/Pole	11 79	Re	ed Maple	Low	>20 feet	Sapling	
	Red Pine	10	Log	11	Qual	king Aspen	Medium	>20 feet	Sapling	
52	4130	- Aspen		Sapling Well	56.0	27	Immature	N/A		
	Canopy Species	% Cove	r Size Class	DBH Age						
	Red Maple	10	Sapling	3						
	Bigtooth Aspen	70	Sapling	3 27						
	White Pine	10	Log/Pole	16						
	Red Oak	10	Sapling	3						
53	4130	- Aspen		Sapling Well	26.4	15	Immature	N/A		
	Canopy Species	% Cove	r Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	10	Sapling	2	Re	ed Maple	Medium	Variable	Sapling	
	Red Oak	5	Pole/Log	9		Beech	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	85	Sapling	2 15						



Stand	d Level 4 Co	over Type		Size De	nsity	Acres	Stand Age I	BA Range	Managed S	ite	General Comments
55	42110 - Plar	nted Red P	ine S	awtimber	Medium	23.1	58	51-80	N/A		stand was a mix of red pine and white pine plantation. All white pine,
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	aspen, and maple was final harvested with red pine being thinned. Red pine was not contiguous thoughout. Sale occured in winter 2013, and was
	White Pine	5	Log/XLog	15		Re	d Maple	Medium	10 - 20 feet	Sapling	shortwooded.
	Red Pine	95	Log/Pole	10	58	Quak	king Aspen	High	5 - 10 feet	Sapling	
						R	ed Oak	Medium	< 5 feet	Seeding	
						WI	nite Pine	Medium	< 5 feet	Seeding	
56	4130 -	- Aspen		Sapling	Well	11.8	7	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	20	Sapling	1	11	WI	hite Oak	Low	< 5 feet	Sapling	
	Red Oak	5	Log	13		ı	Beech	Low	Variable	Sapling	
	Bigtooth Aspen	75	Sapling	1	7						
57	4191 - Mixed Upla Co	and Decidu	ous with	Sawtimbe	er Poor	16.0	59	1-50	N/A		Mixed stand. Property was acquired in 2012.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Pine	20	Log	10		WI	nite Pine	Medium	Variable	Sapling	
	White Pine	20	Log	12		Re	d Maple	Medium	Variable	Sapling	
	Red Oak	25	Log	10		R	ed Oak	Medium	Variable	Sapling	
	Red Maple	25	Pole/Log	9	59	Quak	king Aspen	Medium	>20 feet	Sapling	
	Beech	10	Log/Pole	12							
58	4136 - Aspen	, Mixed Co	nifer	Sapling	Well	92.5	7	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age						
	Red Maple	7	Sapling	1	7						
	Red Oak	3	Pole/Log	9							
	Bigtooth Aspen	70	Sapling	1	7						
	Balsam Fir	5	Sapling	1							
	White Pine	15	Log/Pole	11							
60	4130 -	- Aspen		Sapling	Well	23.7	7	Immature	N/A		sale cut in 2013.
	Canopy Species	% Cover		DBH	Age						
	Red Maple	20	Sapling	1							
	Red Oak	3	Log	11							
	Bigtooth Aspen	65	Sapling	1	7						
Bla	ack/Red (Hybrid) Oak	7	Pole/Log	9							
	White Pine	5	Pole/Log	8							

Compartment: 87 Year of Entry: 2022 DNR MICHIGAN

Stand	Level 4 Co	over Type	s	ize De	ensity	Acres	Stand Age	BA Range	Managed S	ite	General Comments	MICHIGAN .
61	4130 -	- Aspen	(Sapling	g Well	18.7	7	1-50	N/A		sale cut 2013.	
	Canopy Species	% Cover	Size Class	DBH	l Age							
	Red Maple	20	Sapling	1	7							
	Red Oak	3	Log	11								
	Bigtooth Aspen	65	Sapling	1	7							
Blad	ck/Red (Hybrid) Oak	7	Log	13								
	White Pine	5	Pole/Log	8								
62	4130 -	Aspen		Sapling	g Well	5.7	7	1-50	N/A		harvested in 2013	
	Canopy Species	% Cover	Size Class	DBH	l Age							
	Red Maple	20	Sapling	1	7							
	Bigtooth Aspen	65	Sapling	1	7							
	ck/Red (Hybrid) Oak	10	Log	12								
	White Pine	5	Pole/Sap/Log	7								
63	4130 -	- Aspen	Po	oletimb	er Well	30.8	58	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	s Density	Avg. Height	Size		
	Red Maple	10	Pole	8		Wh	ite Pine	Low	< 5 feet	Sapling		
	Bigtooth Aspen	75	Log/Pole	10	58						-	
	Red Oak	10	Pole	8								
	White Pine	5	Pole	8								
64	310 - Herbace	eous Open	land	Nonsto	ocked	3.8	0		No		old well site. Rehabilitation has taken place. Planted trees.	
65	6128 - Lowland (Deci	Coniferous duous	, Mixed Po	oletimb	er Well	6.2	47	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	s Density	Avg. Height	Size		
	Red Maple	15	Pole	7		Bal	sam Fir	High	>20 feet	Sapling		
	Paper Birch	5	Pole	7							-	
	Bigtooth Aspen	15	Log/Pole	11	62							
	Balsam Fir	30	Pole	7	47							
	White Pine	15	Log	16								
No	rthern White Cedar	15	Pole	9								
	Hemlock	5	Pole	8								
66	42110 - Plar	nted Red P	ine Po	oletimb	er Well	11.4	59	141-170	N/A			
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Car	nopy Species	s Density	Avg. Height	Size		
	Red Maple	5	Pole/Log	7		Wh	nite Oak	Low	< 5 feet	Seeding		
	White Oak	2	Log/Pole	11							-	
	Bigtooth Aspen	3	Pole/Sapling	5								



Stanc	Level 4 C	over Type	s	ize De	nsity	Acres	Stand Age E	BA Range	Managed S	ite	General Comments
67	42110 - Pla	nted Red Pi	ne Po	oletimb	er Well	19.5	59	171-200	N/A		stand is a mix of red pine and white pine plantation with scattered small
	Canopy Species	% Cover	Size Class	DBH	Age						aspen clones and oaks.
	Red Maple	5	Pole/Log	7							
	White Oak	2	Log/Pole	11							
	Bigtooth Aspen	3	Pole/Sapling	5							
	White Pine	5	Pole	6							
	Red Pine	85	Pole	8	59						
68	42110 - Pla	nted Red Pi	ne Po	oletimb	er Well	21.5	59	171-200	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	5	Pole/Log	7		Wh	nite Oak	Low	Variable	Sapling	
	White Oak	2	Log/Pole	11		Re	d Maple	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	3	Pole/Sapling	5							•
	White Pine	3	Pole/Sap/Log	6							
	Red Pine	87	Pole	8	59						
69	42200 - Natu	ural White F	ine Sa	awtimb	er Well	23.4	67	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Mile it - Dise						. 1. 2	,	, g o. g	0120	
	White Pine	100	Log/Pole	11	67		ing Aspen	High	5 - 10 feet	Sapling	
71	310 - Herbac			11 Nonsto							
71 72	310 - Herbac		and I	Nonsto		Quak	ing Aspen		5 - 10 feet		
	310 - Herbac	eous Openi wland Aspe	and I	Nonsto	ocked	Quak 1.7 6.1	ing Aspen 0	High	5 - 10 feet No		
	310 - Herbac	eous Openi wland Aspe	and I	Nonsto	er Well	1.7 6.1 Sub-Ca	0 55	High	5 - 10 feet No N/A	Sapling	
	310 - Herbac 6112 - Lov Canopy Species	eeous Openi wland Asper % Cover	and Po	Nonsto bletimb	er Well	Quak 1.7 6.1 Sub-Car	0 55 nopy Species	High 111-140 Density	5 - 10 feet No N/A Avg. Height	Sapling	
	310 - Herbac 6112 - Lov Canopy Species Quaking Aspen	wland Asper	and Posize Class Pole/Log Pole	Nonsto	er Well	Quak 1.7 6.1 Sub-Car	0 55 nopy Species	High 111-140 Density Medium	No N/A Avg. Height 10 - 20 feet	Sapling Size Sapling	
72	310 - Herbac 6112 - Lov Canopy Species Quaking Aspen Balsam Fir	wland Asper Cover 60 40 Upland Fo	and Posize Class Pole/Log Pole	Nonsto	er Well Age 55 55	Quak 1.7 6.1 Sub-Cal Ba Re	0 55 nopy Species Isam Fir d Maple	High 111-140 Density Medium Low 81-110	No N/A Avg. Height 10 - 20 feet 10 - 20 feet	Sapling Size Sapling	
72	310 - Herbac 6112 - Lov Canopy Species Quaking Aspen Balsam Fir 4319 - Mixed	wland Asper Cover 60 40 Upland Fo	and Posize Class Pole/Log Pole rest Sa	Nonsto	er Well Age 55 55 er Well	Quak 1.7 6.1 Sub-Cal Ba Re 19.9 Sub-Cal	0 55 nopy Species Isam Fir d Maple	High 111-140 Density Medium Low 81-110	5 - 10 feet No N/A Avg. Height 10 - 20 feet 10 - 20 feet N/A	Sapling Size Sapling Sapling	
72	310 - Herbac 6112 - Lov Canopy Species Quaking Aspen Balsam Fir 4319 - Mixed Canopy Species	wland Asper Cover 60 40 Upland Fo Cover	and Posize Class Pole/Log Pole rest Sa Size Class	Nonsto	er Well Age 55 55 er Well	Quak 1.7 6.1 Sub-Cal Ba Re 19.9 Sub-Cal	0 55 nopy Species Isam Fir d Maple 52 nopy Species	High 111-140 Density Medium Low 81-110 Density	No N/A Avg. Height 10 - 20 feet 10 - 20 feet N/A Avg. Height	Size Sapling Sapling Sapling	
72	310 - Herbac 6112 - Lox Canopy Species Quaking Aspen Balsam Fir 4319 - Mixed Canopy Species Red Maple	wland Asper **Cover** 60 40 **Upland Fo **Cover** 2	and Posize Class Pole/Log Pole rest Sa Size Class Pole/Log	Nonsto	er Well Age 55 55 er Well	Quak 1.7 6.1 Sub-Cal Ba Re 19.9 Sub-Cal	0 55 nopy Species Isam Fir d Maple 52 nopy Species	High 111-140 Density Medium Low 81-110 Density	No N/A Avg. Height 10 - 20 feet 10 - 20 feet N/A Avg. Height	Size Sapling Sapling Sapling	
72	310 - Herbac 6112 - Lov Canopy Species Quaking Aspen Balsam Fir 4319 - Mixed Canopy Species Red Maple Red Pine	wland Asper Cover 60 40 Upland Fo Cover 2 3	and Posize Class Pole/Log Pole rest Sa Size Class Pole/Log Log/Pole	Nonsto	er Well Age 55 55 er Well Age	Quak 1.7 6.1 Sub-Cal Ba Re 19.9 Sub-Cal	0 55 nopy Species Isam Fir d Maple 52 nopy Species	High 111-140 Density Medium Low 81-110 Density	No N/A Avg. Height 10 - 20 feet 10 - 20 feet N/A Avg. Height	Size Sapling Sapling Sapling	
72	310 - Herbac 6112 - Lov Canopy Species Quaking Aspen Balsam Fir 4319 - Mixed Canopy Species Red Maple Red Pine Quaking Aspen	wland Asper Cover 60 40 Upland Fo Cover 2 3 37	and Posize Class Pole/Log Pole rest Sa Size Class Pole/Log Log/Pole Pole/Log	Nonstone DBH 8 8 14 8	er Well Age 55 55 er Well Age	Quak 1.7 6.1 Sub-Cal Ba Re 19.9 Sub-Cal	0 55 nopy Species Isam Fir d Maple 52 nopy Species	High 111-140 Density Medium Low 81-110 Density	No N/A Avg. Height 10 - 20 feet 10 - 20 feet N/A Avg. Height	Size Sapling Sapling Sapling	



	Cover Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	ite		General Comments	MICHIGAN
74 4310 - F	ine, Oak Mi	x P	oletimb	er Well	3.0	59	111-140	N/A		Natural mixed stand.		
Canopy Species	% Cover	Size Class	DBH	I Age								
Red Maple	5	Pole/Log	7									
White Oak	5	Pole/Log	9									
Black/Red (Hybrid) Oa	< 40	Pole/Sap/Log	8	59								
White Pine	40	Log/Pole	10	59								
Red Pine	10	Pole	8	59								
75 4125 - Bla	ck, N. Pin C	ak S	awtimb	er Well	11.5	85	81-110	N/A				
Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size			
Black/Red (Hybrid) Oa	40	Pole/Log	8	85	Ва	lsam Fir	Low	10 - 20 feet	Sapling			
White Pine	15	Pole/Log	8	64			-	ı		יַ		
White Oak	15	Pole/Log	9									
Red Oak	15	Pole/Log	9									
Quaking Aspen	15	Pole/Log	9									
76 4133 - Asp	en, Mixed F	rine	Saplin	g Well	38.7	38	81-110	N/A				
Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size			
Bigtooth Aspen	45	Pole/Sapling	5	38	Re	d Maple	Low	5 - 10 feet	Sapling			
Quaking Aspen	20	Pole/Sapling	5		Bigto	oth Aspen	Low	10 - 20 feet	Sapling			
White Pine	25	Pole/Log	8		Black/Re	d (Hybrid) Oa	k Low	10 - 20 feet	Sapling			
Black/Red (Hybrid) Oa	c 10	Pole	7							-		
77 4130) - Aspen	S	awtimb	er Well	7.2	61	Unspecified	N/A				
Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size			
Red Maple	8	Pole/Log	8		Ва	lsam Fir	Low	10 - 20 feet	Sapling			
Quaking Aspen	10	Log/Pole	10	61	Re	d Maple	Low	10 - 20 feet	Sapling			
	C.F.	Law/Dala				a mapic						
Bigtooth Aspen	65	Log/Pole	10	61	Bla	ck Cherry	Low	10 - 20 feet	Sapling			
Bigtooth Aspen Black/Red (Hybrid) Oa		Log	10	61	Bla	·	Low					
				61	Blad	·	Low					
Black/Red (Hybrid) Oa Balsam Fir	(12	Log Pole/Sapling	11	61 er Well		·	81-110					
Black/Red (Hybrid) Oa Balsam Fir	12 5	Log Pole/Sapling	11 5 oletimb			ck Cherry		10 - 20 feet				
Black/Red (Hybrid) Oa Balsam Fir 78 4136	12 5 0 - Aspen	Log Pole/Sapling	11 5 oletimb	er Well		ck Cherry		10 - 20 feet				
Black/Red (Hybrid) Oa Balsam Fir 78 4130 Canopy Species	12 5 - Aspen % Cover	Log Pole/Sapling P	11 5 oletimb	er Well		ck Cherry		10 - 20 feet				
Black/Red (Hybrid) Oa Balsam Fir 78 4130 Canopy Species Red Maple	12 5 3 - Aspen % Cover	Log Pole/Sapling P Size Class Pole	11 5 oletimb	er Well		ck Cherry		10 - 20 feet				
Plack/Red (Hybrid) Oa Balsam Fir 78 4130 Canopy Species Red Maple Red Oak	12 5 - Aspen	Log Pole/Sapling P Size Class Pole Log/Pole	11 5 oletimb 5 11	er Well		ck Cherry		10 - 20 feet				



Stand	d Level 4 Co	over Type	3	ize De	попту	Acres	Stand Age B	A Range	Managed S	ite	General Comments	MICHIGA
79	4125 - Blacl	k, N. Pin O	ak Sa	awtimb	er Well	9.7	73	51-80	N/A		Steep ridge dominated by oak.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Red Maple	5	Pole/Sapling	6		Re	ed Maple	Low	10 - 20 feet	Sapling		
	White Oak	5	Log	13								
Bla	ack/Red (Hybrid) Oak	80	Pole/Log	9	73							
	White Pine	10	Log/Pole	16								
80	4311 - Pine	e, Aspen M	ix Po	oletimb	er Well	16.1	78	1-50	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
Bla	ack/Red (Hybrid) Oak	10	Log/Pole	11	77	Wh	nite Pine	Low	10 - 20 feet	Sapling		
	White Pine	35	Pole/Log	8	78	Re	ed Maple	Low	10 - 20 feet	Sapling		
	White Oak	5	Pole	8		Bigto	oth Aspen	Medium	10 - 20 feet	Sapling		
	Red Pine	10	Pole/Sap/Log	9				•				
	DI I II I											
	Bigtooth Aspen	30	Sapling	3								
81	Red Maple	10	Sapling	3	er Well	37.6	86	51-80	N/A		p	
81	Red Maple 4191 - Mixed Upla Co	10 and Decidue	Sapling ous with Sa	3 awtimb				51-80	N/A	Size	p	
81	Red Maple 4191 - Mixed Upla	10 and Decidue	Sapling ous with Sa Size Class	3 awtimb	er Well	Sub-Ca	nopy Species	51-80 Density Low	N/A Avg. Height 5 - 10 feet	Size Sapling	p	
	Red Maple 4191 - Mixed Upla Co Canopy Species	10 and Decidue	Sapling ous with Sa Size Class Pole/Log/Sap	3 awtimb		Sub-Ca	nopy Species ed Maple	Density	Avg. Height	Sapling	p	
	Red Maple 4191 - Mixed Upla Co Canopy Species Red Maple	and Decidue onifer % Cover 5	Sapling ous with Sa Size Class	3 awtimb	I Age	Sub-Ca Re Bigto	nopy Species	Density Low Low	Avg. Height 5 - 10 feet		p	
81	Red Maple 4191 - Mixed Upla Co Canopy Species Red Maple ack/Red (Hybrid) Oak	10 and Deciduo	Sapling ous with Sa Size Class Pole/Log/Sap Log/Pole	3 awtimb DBH 5 11	I Age	Sub-Ca Re Bigto Black/Re	nopy Species ed Maple ooth Aspen	Density Low Low	Avg. Height 5 - 10 feet 10 - 20 feet	Sapling Sapling	p	
Bla	Red Maple 4191 - Mixed Upla Co Canopy Species Red Maple ack/Red (Hybrid) Oak Quaking Aspen White Pine	and Deciduo onifer **Cover 5 30 25	Sapling ous with Sa Size Class Pole/Log/Sap Log/Pole Pole/Sapling Log/Pole	3 DBH 5 11 5	86 86	Sub-Ca Re Bigto Black/Re	nopy Species ed Maple both Aspen ed (Hybrid) Oak nite Pine	Density Low Low Low	Avg. Height 5 - 10 feet 10 - 20 feet 10 - 20 feet	Sapling Sapling Sapling	p	
	Red Maple 4191 - Mixed Upla Co Canopy Species Red Maple ack/Red (Hybrid) Oak Quaking Aspen White Pine 6220 - Al	10 and Deciduonifer % Cover 5 30 25 40	Sapling ous with Sa Size Class Pole/Log/Sap Log/Pole Pole/Sapling Log/Pole	3 awtimb DBH 5 11 5 111 Nonsto	86 86	Sub-Ca Re Bigto Black/Re Wh	nopy Species ed Maple both Aspen ed (Hybrid) Oak nite Pine	Density Low Low Low Medium	Avg. Height 5 - 10 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet	Sapling Sapling Sapling	p Overstory oak and white pine.	
Bla 82	Red Maple 4191 - Mixed Upla Co Canopy Species Red Maple ack/Red (Hybrid) Oak Quaking Aspen White Pine 6220 - Al	and Deciduonifer Cover 5 30 25 40 Solider/willow Pine, Oak	Sapling ous with Sa Size Class Pole/Log/Sap Log/Pole Pole/Sapling Log/Pole	3 DBH 5 11 5 111 Nonsto	86 86 cocked	Sub-Cal Re Bigto Black/Re Wh	nopy Species ed Maple both Aspen ed (Hybrid) Oak nite Pine	Density Low Low Low Medium	Avg. Height 5 - 10 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet No	Sapling Sapling Sapling		
82 83	Red Maple 4191 - Mixed Upla Co Canopy Species Red Maple ack/Red (Hybrid) Oak Quaking Aspen White Pine 6220 - Al	and Deciduonifer Cover 5 30 25 40 Solider/willow Pine, Oak	Sapling ous with Sa Size Class Pole/Log/Sap Log/Pole Pole/Sapling Log/Pole	3 DBH 5 11 5 111 Nonsto	86 86 ccked	Sub-Cal Re Bigto Black/Re Wh 1.9 12.1 Sub-Cal	nopy Species ed Maple both Aspen ed (Hybrid) Oak nite Pine 0 U	Density Low Low Low Medium 151-80	Avg. Height 5 - 10 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet No	Sapling Sapling Sapling Sapling		
82 83	Red Maple 4191 - Mixed Upla Co Canopy Species Red Maple ack/Red (Hybrid) Oak Quaking Aspen White Pine 6220 - Al	and Deciduonifer **Cover* 5 30 25 40 Ider/willow Pine, Oak **Cover*	Sapling ous with Sa Size Class Pole/Log/Sap Log/Pole Pole/Sapling Log/Pole	DBH 5 11 5 11 Nonsto	86 86 ccked	Sub-Cal Re Bigto Black/Re Wh 1.9 12.1 Sub-Cal	nopy Species ad Maple both Aspen ad (Hybrid) Oak nite Pine 0 U 88 nopy Species	Density Low Low Low Medium 151-80 Density	Avg. Height 5 - 10 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet No N/A Avg. Height	Sapling Sapling Sapling Sapling		