

Compartment Review Presentation

Cadillac Forest Management Unit

Compartment 63117 Entry Year 2023 Acreage: 2,275

County Missaukee

Management Area: Manistee River Valley

Revision Date: 2021-05-25

Stand Examiner: Thomas Peterson III

Legal Description:

T24N, R7W, Sections 20, 21, 28, 29, 32, 33

Identified Planning Goals:

Vegetation management in the Manistee River Valley management area 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:

Mostly Rubicon and Kalkaska sands. Terrain is rolling and hilly.

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

Mix of State and private parcels. Snowmobile trail runs north/south through compartment. Most residences in area are full time.

Unique Natural Features:

Rolling Hills and Steep Terrain.

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

Ham Creek Watershed / portions of creek in compartment. There are no lakes or other streams in compartment.

Wildlife Habitat Considerations:

Featured wildlife species are deer, bear, pileated woodpecker, and ruffed grouse. Management emphasis will be on maintenance of large, contiguous blocks of northern hardwoods for landscape composition, promotion of vertical structure and shrub layer with stands, retention of large diameter trees, and maintenance of aspen and openings

Mineral Resource and Development Concerns and/or Restrictions

Sections 20-21, 28-29, & 32-33, T24N-R7W, Missaukee County

No known potential exists for commercial metallic mineral production in this part of the state. The nearest active sand/gravel pit is roughly three miles away. There appears to be some good potential for sand & gravel within the compartment, but there is also abundant clay in the area, typical of moraine tills. The nearest oil & gas production, past or present, is more than three miles to the northeast, and there has been minimal exploration in and around the compartment. There is current leasing activity 2-3 miles to the east. It is far enough from the compartment that potential for oil & gas here is still considered low at this time. The State does not own all the mineral rights within the compartment. Because the mineral estate is the dominant estate, reasonable access to the surface must be provided to private owners if they choose to explore or develop their mineral rights.

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Vehicle Access:

There is sufficient vehicular access throughout the compartment.

Survey Needs:

Stands 27 and stand 26 need survey before harvesting.

Recreational Facilities and Opportunities:

The Lake City Spur of the MissKal Snowmobile Trail passes through the compartment. Area provides for snowmobiling, hunting, color touring and camping

Fire Protection:

Access for wildfire suppression equipment is provided by local road system and forest roads. Urban Interface could be a concern near the private property holdings.

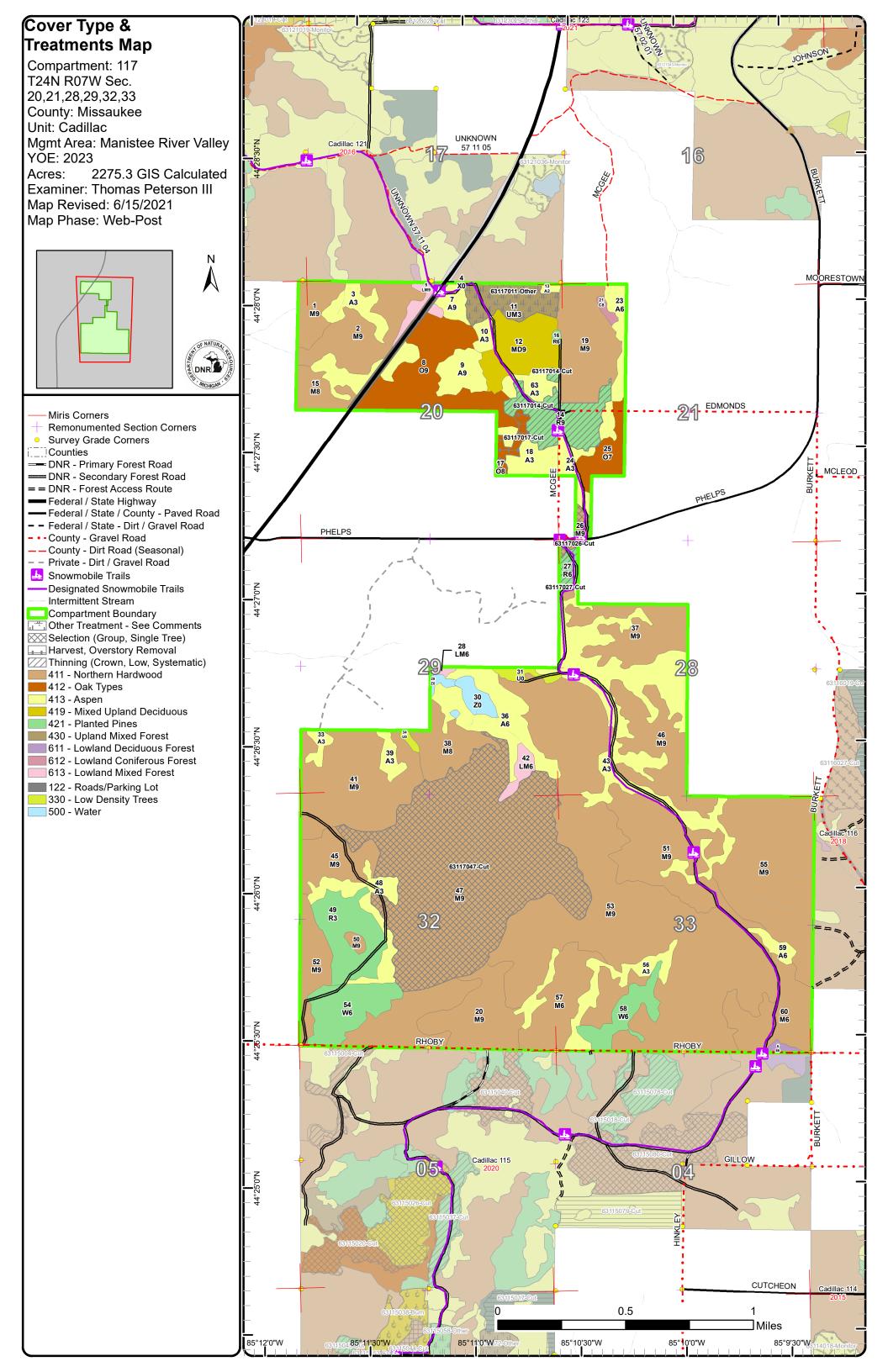
Additional Compartment Information:

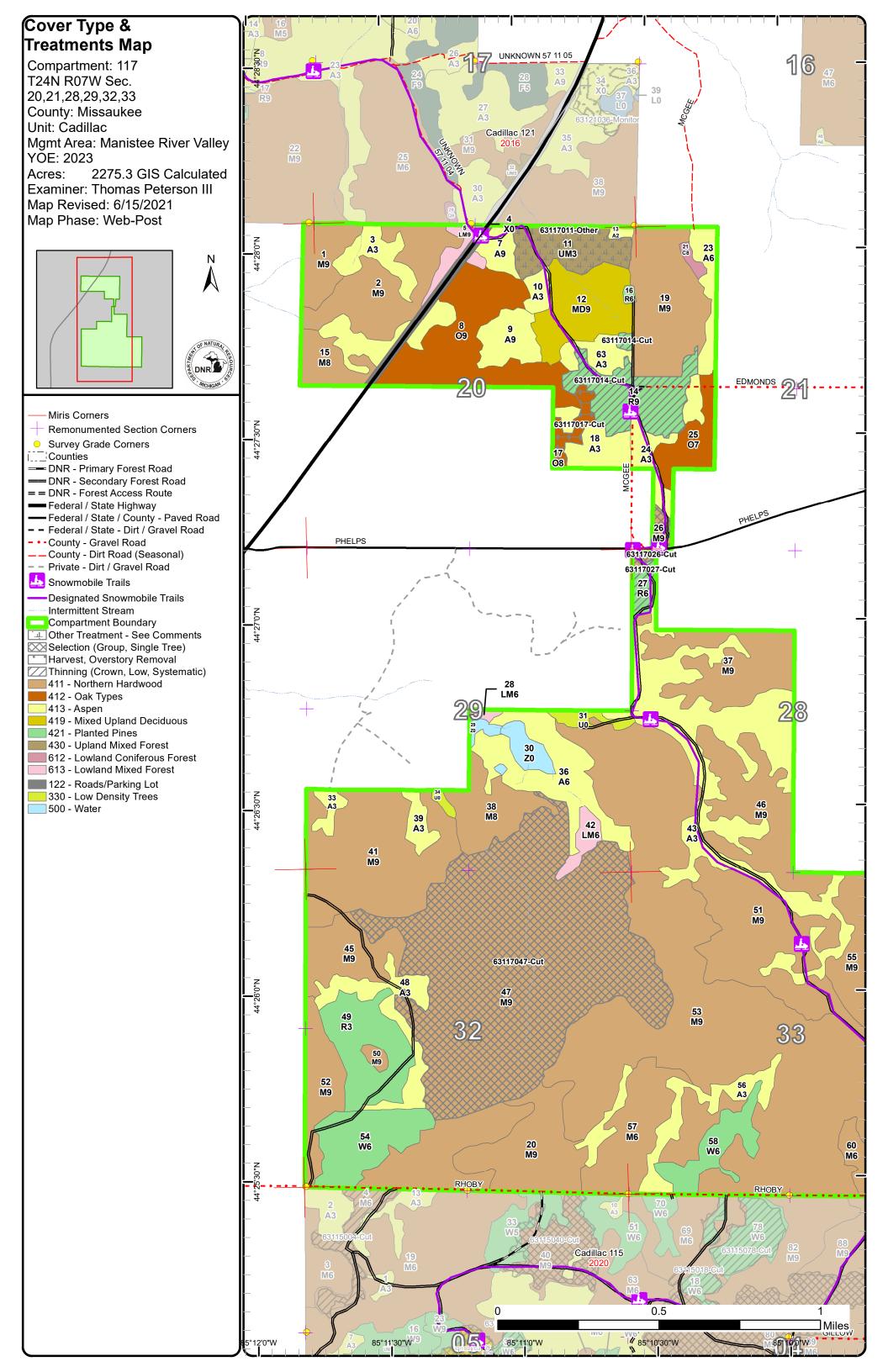
The following reports from the Inventory are attached:

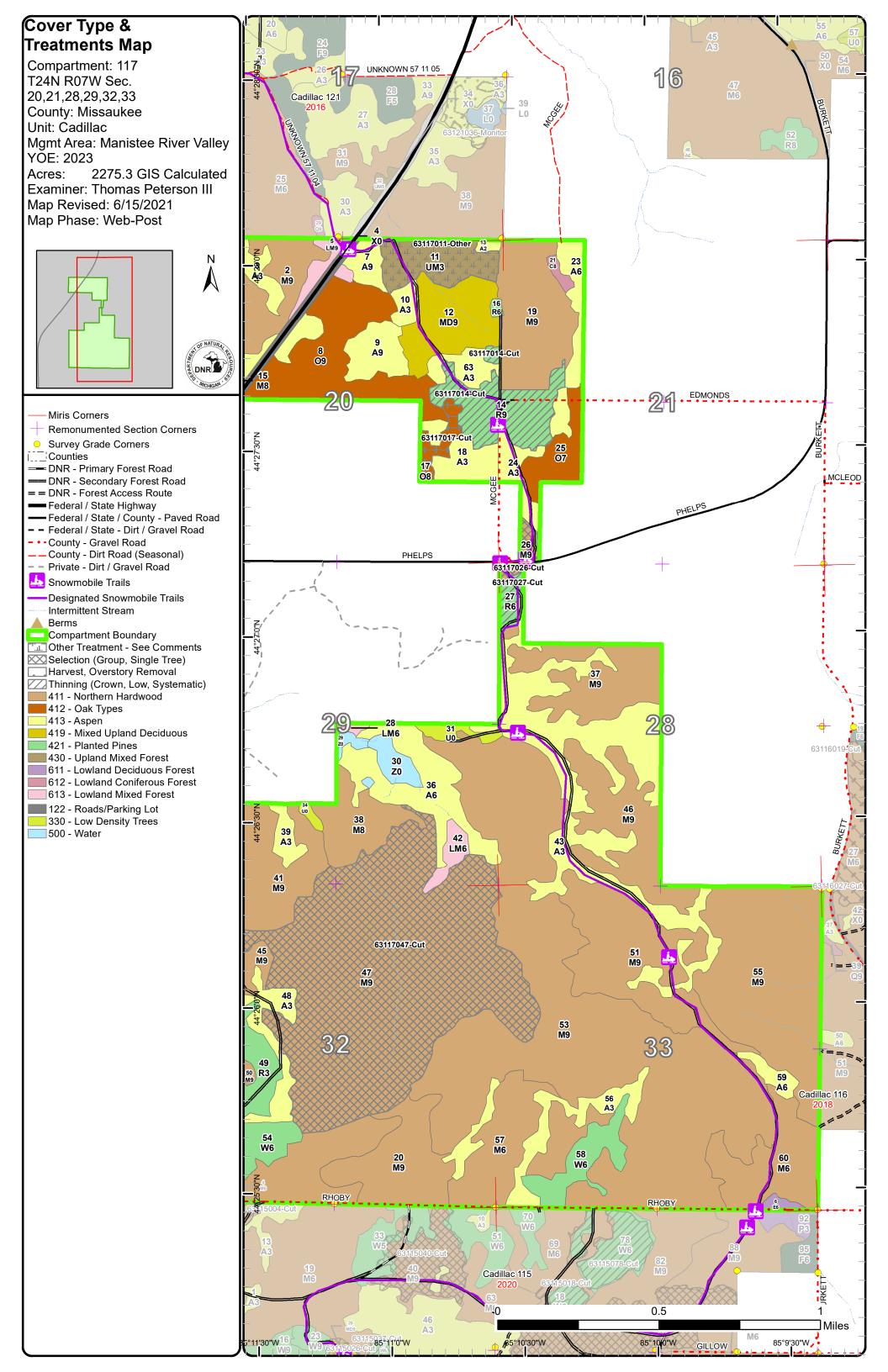
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

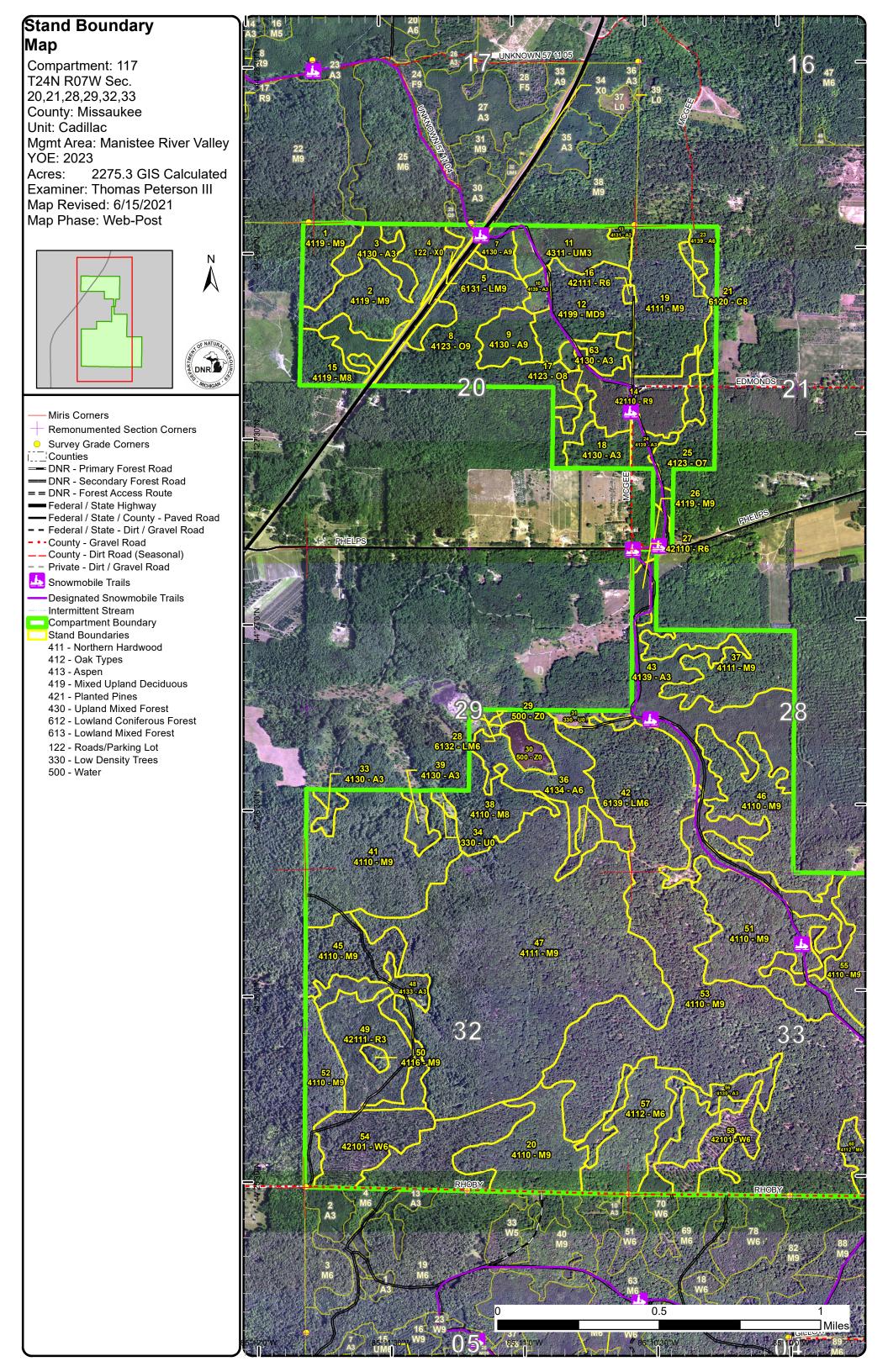
The following information is displayed, where pertinent, on the attached compartment maps:

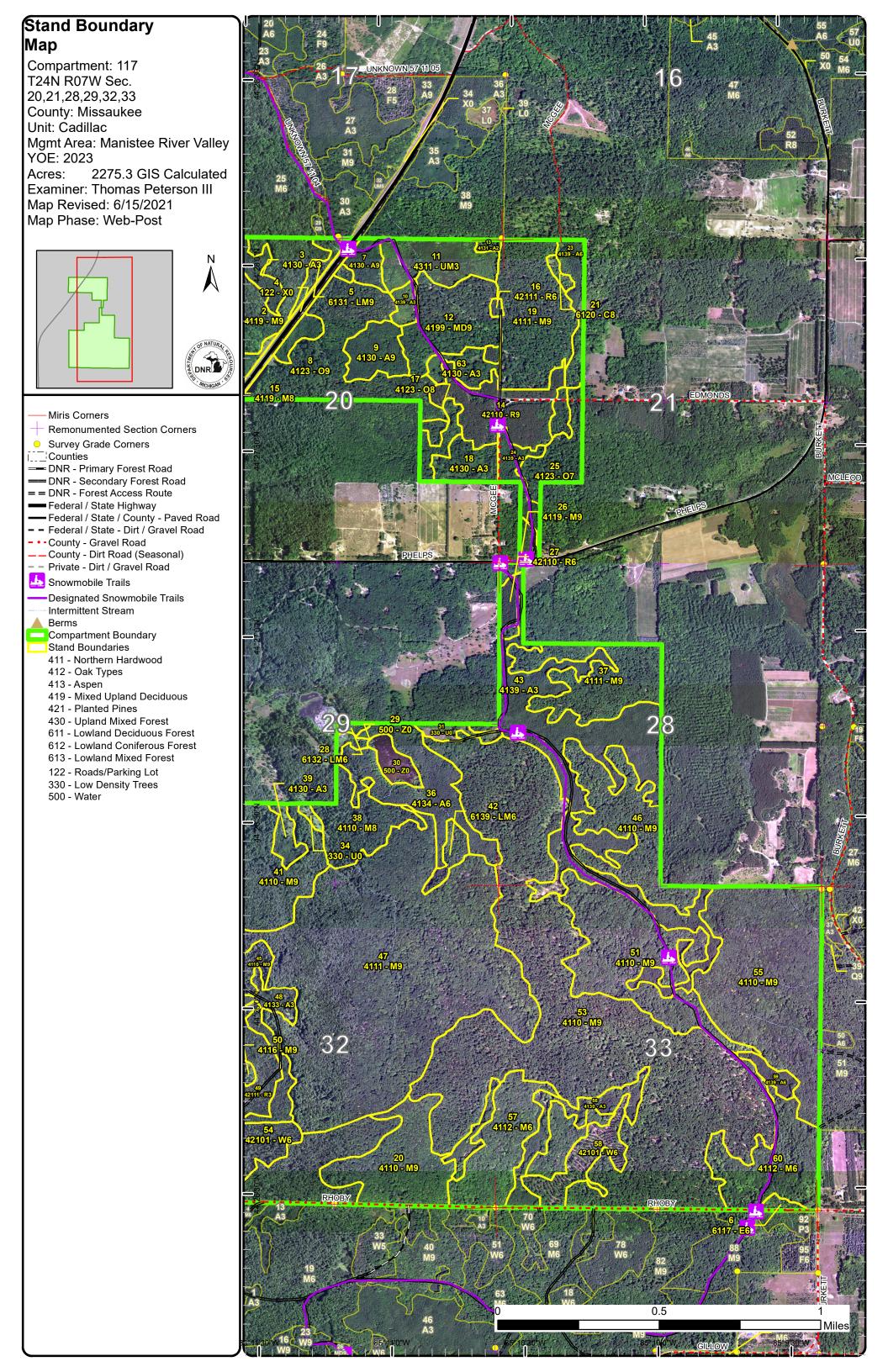
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

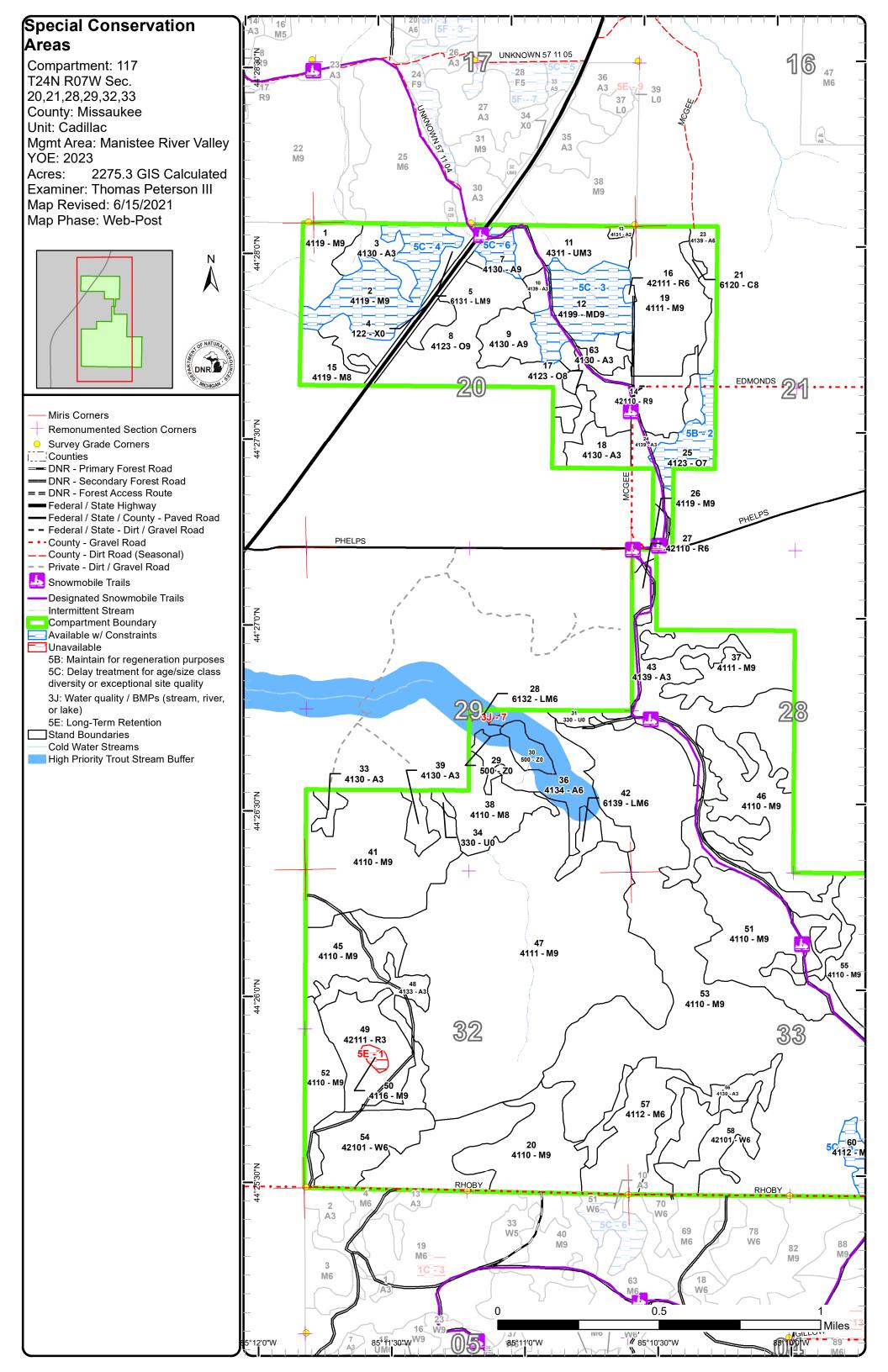


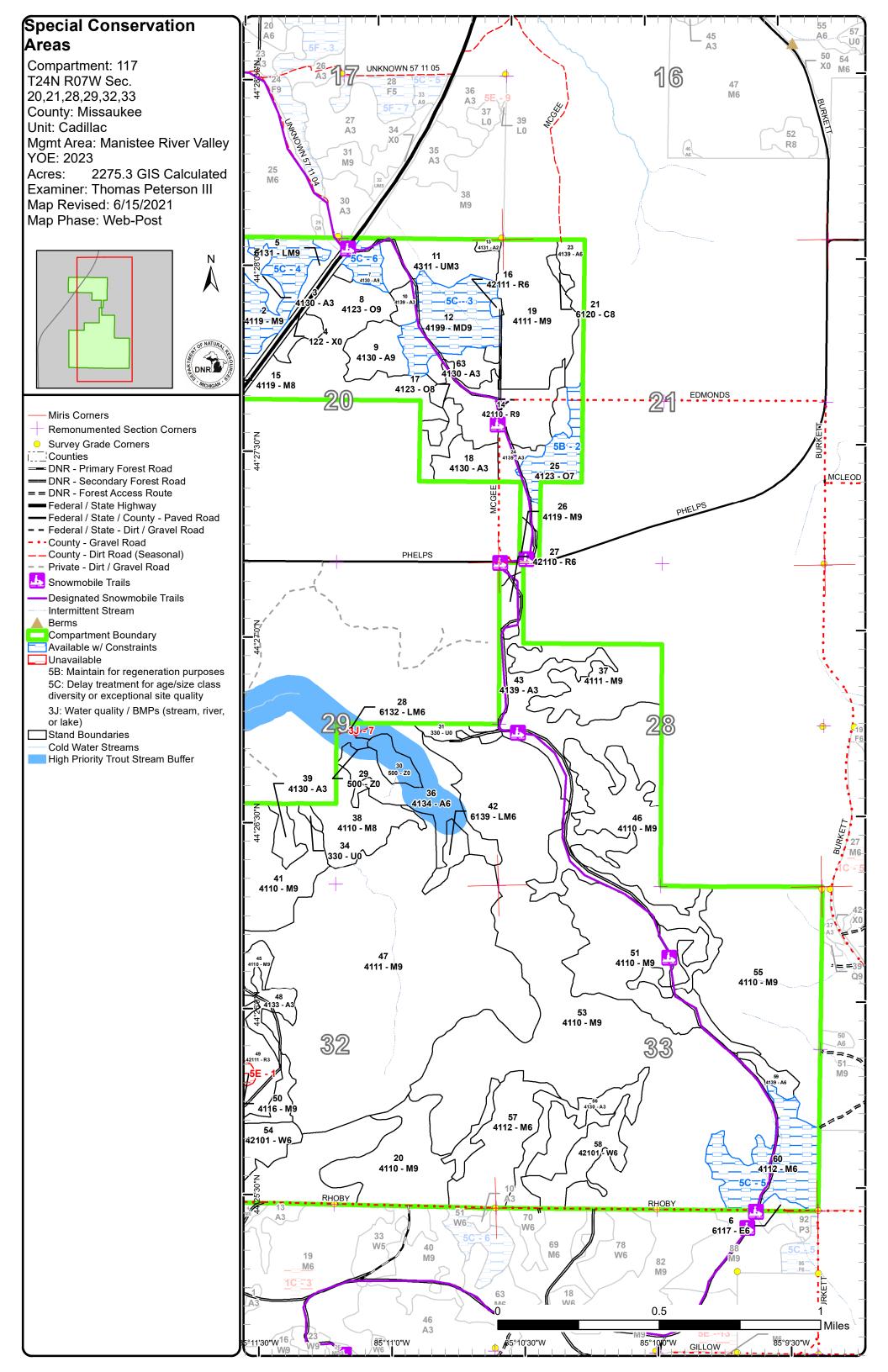












Compartment 117 Year of Entry 2023

Thomas Peterson III: Examiner

Cadillac Mgt. Unit



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Age Class

	/	Kor C	/ 8 /s	2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 /		3 / \$	S G	3/8	/ 8 /	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			Ø ZZ		*			<u> </u>	A LOS
Aspen	0	28	21	242	64	0	9	0	0	0	0	0	0	0	0	0	0	0	363
Cedar	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	2
Low-Density Trees	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Lowland Mixed Forest	0	0	0	0	0	0	8	0	0	0	8	0	2	0	0	0	0	0	18
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	41	0	0	0	0	0	0	0	0	41
Northern Hardwood	0	0	0	0	0	0	0	3	48	1318	88	0	0	0	0	0	0	20	1477
Oak	0	0	0	0	0	0	0	0	0	0	0	20	0	9	0	0	0	66	95
Red Pine	0	0	0	42	8	0	0	41	0	0	0	0	0	0	0	0	0	0	91
Upland Mixed Forest	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Urban	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Water	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
White Pine	0	0	0	0	0	0	0	60	0	0	0	0	0	0	0	0	0	0	60
Total	31	28	50	284	72	0	17	104	48	1359	96	23	2	9	0	0	0	86	2207



Report 2 – Treatment Summary

Cadillac Mgt. Unit Year of Entry: 2023

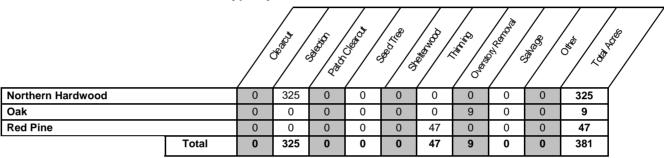
Acres of Harvest

Compartment 117
Total Compartment Acres: 2,275

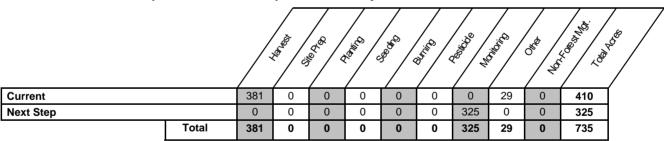
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Commercial Harvest - 381 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Cadillac Mgt. Unit Report 3 -- Treatments Compartment: 117 S Year of Entry: 2023 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat n Method Objective Name CoverType Density Age Range Type Structure Cut d **Proposed Treatments:**

11 63117011- 29.0 4311 - Pine, Aspen Mix

Other Mix Well re Red Pine

Prescription Release red pine in this stand by hand. Cut all aspen, red maple, and jack pine. If there are any scattered oak in stand leave them.

Other

Other

4211 - Planted

Even-Aged

No

<u>Prescription</u> Release red pine in this stand by hand. Cut all aspen, red maple, and jack pine. If there are any scattered oak in stand leave them <u>Specs:</u>

Immatu

Sapling

Next Step Treatments:

Acceptable

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

14 63117014-Cut 40.8 42110 - Planted Sawtimber 66 171- Harvest Crown Thinning 4211 - Planted Even-Aged No Red Pine Well 200 Red Pine

<u>Prescription</u>
Specs:
Thin stand down to a Basal Area of 120. Some Rows might be tight. Mark for equipment maneuverability, remove poor quality trees, then mark trees to release crowns. Cut all trees that pose a threat to snowmobile trail in future. Use snowmobile spec to protect snowmobile

Next Step Treatments:

Acceptable Not looking to regenerate stand at this time Thinning Red Pine Crown

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

17 63117017-Cut 8.6 4123 - Red Oak Sawtimber 120 1-50 Harvest Overstory 4199 - Other Even-Aged No Medium Removal Mixed Upland Deciduous

<u>Prescription</u> Specs: Remove overstory, protect regen as much as possible. Cut Regen off flush if damaged to promote more stump sprouting. Leave no retention due to stand being under 10 acres.

Next Step Treatments:

Acceptable Any mix of oak, aspen, red maple or other mixed species.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

Cadillac Mgt. Unit

Report 3 -- Treatments

Compartment: 117 Year of Entry: 2023

Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat

n CoverType Density Method Objective Name Age Range Type Structure Cut d 26 63117026-Cut 6.5 4119 - Mixed Sawtimber 111-Harvest Single Tree 411 - Northern Even-Aged Nο Selection Northern Hardwoods Well 140 Hardwood

Thin stand down to a basal area of 80. Removing poor quality trees first then release crop trees. Cut all aspen, ironwood and beech in sale. Cut all trees that pose a threat to snowmobile trail in future. Use snowmobile spec to protect snowmobile Trail. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory) Treatments:

Acceptable Aspen, where aspen clones are located. Any mixture of red maple, sugar maple, basswood or oak is acceptable.

Regen:

S

ŧ а

Treatment

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

Even-Aged 63117027-Cut 6.3 42110 - Planted Poletimber 36 171-Harvest Systematic 4211 - Planted No Red Pine Well 200 **Thinning** Red Pine

Prescription Row thin red pine stand. Row spacing seemed adequate to cut 1 leave 2 rows. If logger is having difficulty maneuvering in sale, cut 2 leave 3 Specs: rows is acceptable. Cut all trees that pose a threat to snowmobile trail in future. Use snowmobile spec to protect snowmobile trail.

Next Step Treatments:

Acceptable Not a regeneration cut

Regen:

Other Survey Corner East Line?

Comment:

Site Condition

Proposed Start Date: 10/1 /2022

47 63117047-Cut 318.6 4111 - S.Maple, Sawtimber 85 411 - Northern 111-Harvest Single Tree Even-Aged No Hard Mast Well 140 Selection Hardwood Association

Prescription Thin Stand down to average Basal area of 80. Concentrate on releasing sugar maple crop trees. Mark some larger oaks to create large canopy gaps. Stand is very hilly so mark paths up and down hills so that equipment can maneuver around. In addition to marking stand Specs: follow regeneration gap guidelines for northern hardwoods. If no desirable regeneration occurs use any method necessary to obtain

desirable regeneration. This includes the following: herbicide, scarification, planting, or fencing of the regeneration gaps.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Sugar Maple, Basswood, Black Cherry and red oak

Regen: Other

Recommend tracked equipment when writing up sale. Use oak wilt spec to protect the nice red oak that are scattered throughout the stand.

Comment:

Site Condition

Proposed Start Date: 10/1 /2022

Total Treatment 409.8 Acreage Proposed:

Cadillac Mgt. Unit

Thomas Peterson III: Examiner

Compartment: 117
Year of Entry: 2023

Availa	ability for	Managemer	nt					
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Con	ditions
Acres	Available	With Condition	Not Available		5B	5C	3J	5E
363	354	9	0	Aspen		9		
2	2	0	0	Cedar				
8	8	0	0	Low-Density Trees				
3	3	0	0	Lowland Deciduous				
17	15	0	2	Lowland Mixed Forest			2	
41	0	41	0	Mixed Upland Deciduous		41		
1544	1443	98	3	Northern Hardwood		98		3
95	75	20	0	Oak	20			
90	90	0	0	Red Pine				
29	29	0	0	Upland Mixed Forest				
11	11	0	0	Urban				
12	12	0	0	Water				
60	60	0	0	White Pine				
2,275	2,103	167	5	Total Forested Acres	20	148	2	3
	92%	7%	0%	Relative Percent				

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

Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
	stand 49					
Available	5B: Maintain for regeneration purposes	20	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
	Unavailable Comments: Retention island for	Cond Availability Dominant Site Condition Unavailable 5E: Long-Term Retention Comments: Retention island for stand 49 Available 5B: Maintain for regeneration purposes	Cond Availability Dominant Site Condition Acres Unavailable 5E: Long-Term Retention 3 Comments: Retention island for stand 49 Available 5B: Maintain for regeneration purposes	Cond Availability Dominant Site Condition Acres Other Site Condition Unavailable 5E: Long-Term Retention 3 Unspecified Comments: Retention island for stand 49 Available 5B: Maintain for 20 Unspecified regeneration purposes	Cond Availability Dominant Site Condition Acres Other Site Condition Other Site Condition Unavailable 5E: Long-Term Retention 3 Unspecified Unspecified Comments: Retention island for stand 49 Available 5B: Maintain for regeneration purposes 20 Unspecified Unspecified	Cond Availability Dominant Site Condition Acres Other Site Condition Other Site Condition Other Site Condition Unavailable 5E: Long-Term Retention 3 Unspecified Unspecified Unspecified Comments: Retention island for stand 49 Available 5B: Maintain for regeneration purposes 20 Unspecified Unspecified Unspecified

Report 4 – Site Conditions

Cadillac Mgt. Unit
Thomas Peterson III: Examiner

3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	41	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	50	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	48	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments:						

Mgt. Unit

Compartment: #Type! Year of Entry:



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

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Cadillac Mgt. Unit Compartment: 117
Year of Entry 2023





* 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	туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxyg stocked trout populations and those of other coldwater fi year to year. Coldwater streams in Michigan typically procontributions of groundwater to their stream flows. Such designated as trout resources by Fisheries Order 210.	ish species (e.g., slimy sculpin) to persist from ovide these conditions due to substantial
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosy influences the aquatic ecosystem and vice-versa. Becau streams and open water wetlands, riparian areas harbor communities are ecologically and socially significant in the as aesthetics, habitat, bank stability, timber production, a	use of the unique conditions adjacent to lakes, a high diversity of plants and wildlife. Riparian heir effects on water quality and quantity, as well

Report 7 - Stands



Compartment: 117

Year of Entry: 2023

Stand	d Level 4 C	over Type	\$	Size De	ensity	Acres	Stand Age E	BA Range	Managed \$	Site	General Comments
1	4119 - Mixed No	orthern Har	dwoods S	awtimb	er Well	20.2	100	51-80	N/A		Stand has average basal area of 110. Stand has a lot of large red oak in
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	it. Stand has old wildlife opening that has a large amount of Autumn Olive established in it. Stand has high amount of beech in understory at this
	Sugar Maple	30	Log/Pole/XLog	14		Suç	gar Maple	Low	10 - 20 feet	Sapling	time.
	Basswood	20	Log/Pole	10			Beech	High	10 - 20 feet	Sapling	1995 - Thinned part of sale Schnauzer Hardwoods (Sale #63-002-04-01)
	Beech	5	Log/Pole	10		R	led Oak	Low	10 - 20 feet	Sapling	
	Red Oak	35	Log/Pole/XLog	16	100	Ir	onwood	Medium	< 5 feet	Sapling	
	Red Maple	10	Log/Pole	10		Aut	umn Olive	Low	< 5 feet	Tall Shrul	
		,				Bigto	ooth Aspen	Medium	10 - 20 feet	Sapling	
2	4119 - Mixed No	orthern Har	dwoods S	awtimb	er Well	49.9	80	111-140	N/A		2021 - North Part of stand is more red maple and aspen. As you go
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	South in stand you get into some decent sugar maple. Very Hilly Terrain. Large Oak Scattered Throughout stand. Beech is established in
	Sugar Maple	30	Log/Pole	12	80		Beech	High	5 - 10 feet	Sapling	understory. Stand has a lot of poles in it. Average Basal Area of Stand is
	Basswood	15	Log/Pole	10		Ir	onwood	Low	5 - 10 feet	Sapling	116 at this time. Stand will be ready to be treated next year of entry. Due
	Beech	10	Log/Pole	10		Re	ed Maple	Medium	5 - 10 feet	Sapling	to lower quality of hardwoods in northern part of stand, restarting entire stand might me an option.
	Red Oak	19	Log/Pole/XLog	16		Suç	gar Maple	Trace	5 - 10 feet	Sapling	stand might me an option.
	Bigtooth Aspen	10	Log/Pole	12					1		
	Red Maple	16	Log/Pole	10							
3	4130	- Aspen		Saplin	g Well	33.3	27	Immature	N/A		2021 - Stand is growing good, stand has some pole size aspen at this
	Canopy Species	% Cover	Size Class	DBł	l Age						time but majority of stand is still in sapling size at this time. 1994 - Stand clearcut part of M-66 Sale (Sale # 63-074-01)
	Red Maple	30	Sapling/Pole	3							(0.00.00.00.00.00.00.00.00.00.00.00.00.0
	Bigtooth Aspen	60	Sapling/Pole	3	27						
	Black Cherry	10	Sapling/Pole	3							
4	122 - Road	d/Parking L	_ot	Nonst	ocked	10.6			Managed O	pening	m-66
5	6131 - Hemlock, B	White Pine	e, Maple, S	awtimb	er Well	7.8	90	81-110	N/A		Stand is a low wet land area that most likely has a seasonal creek flow through it during wet periods. Stand is a mix of lowland and uplands.
	Canopy Species	% Cover	Size Class	DBI	l Age						
	Red Maple	10	Log/Pole	10							
	Yellow Birch	10	Log/Pole	10							
	Red Oak	10	Log/Pole/XLog	12							
	Bigtooth Aspen	15	Log/Pole	10							
Ne	orthern White Cedar	10	Pole/Log	8							
140											
INC	White Pine	20	Log/Pole/XLog	12							

DNR DNR

Stanc	Level 4 Co	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed 9	Site	General Comments
6	6117 - Lowland Coni	Deciduous, iferous	, Mixed F	Poletimb	er Well	2.8	60	Unspecified	N/A		Stand swapped from Non-Forested to Forested. wet
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Speci	ies Density	Avg. Height	Size	
	Red Maple	40	Pole/Sapling	5	60	Am	erican Elm	Low	10 - 20 feet	Sapling	
	Yellow Birch	5	Pole	6		Re	ed Maple	Medium	5 - 10 feet	Sapling	
	Paper Birch	5	Pole	5			Beech	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	30	Pole/Log	8		Wi	itch Hazel	Low	5 - 10 feet	Tall Shrub	
	White Pine	20	Pole/Log/Sap	8							
7	4130	- Aspen	5	Sawtimb	er Well	9.0	55	111-140	N/A		2021 -Stand is fully stocked aspen stand at this time. Stand has other
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	anopy Speci	ies Density	Avg. Height	Size	mixed species as well. Stand shows no decline at this time, if plan needed more aspen this stand could be harvested this year of entry.
	Red Maple	15	Pole	8			Beech	Low	5 - 10 feet	Sapling	Theodod more deport this starta could be flativested this year of entry.
	Red Oak	15	Log/Pole	12				-			
	Bigtooth Aspen	65	Log/Pole	12	55						
	White Pine	5	Pole/Log	8							
8	4123 -	Red Oak	5	Sawtimb	er Well	66.4	80	111-140	N/A		2021 - Stand has a lot of Red oak in it. Stand is very hilly. Stands
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	anopy Speci	ies Density	Avg. Height	Size	average BA is 120. No oak restart acres in the plan for this year hold anther year of entry and consider clearcutting half this stand to give the
	Sugar Maple	15	Log/Pole/XLog	g 14		Re	ed Maple	Low	< 5 feet	Sapling	oak a chance to regenerate.
	Red Maple	5	Log/Pole	12			Beech	Medium	< 5 feet	Sapling	1995 - Thinned part of sale Schnauzer Hardwoods (Sale #63-002-04-01)
	Basswood	10	Log/Pole	12		Ir	ronwood	Low	Variable	Sapling	
	Beech	10	Log/Pole	12							
	Red Oak	60	Log/Pole/XLog	g 16	80						
9	4130	- Aspen	S	Sawtimb	er Well	17.6	38	111-140	N/A		Leave stand for 10 more years and then cut next year of entry.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Speci	ies Density	Avg. Height	Size	Stand Cut in 1983 Sale Name Pioneer 20 Block
	Sugar Maple	5	Log/Pole	10			Beech	Low	< 5 feet	Sapling	
	Red Maple	25	Log/Pole	10							•
	Red Oak	5	Log/Pole/XLog	g 16							
	Bigtooth Aspen	65	Log/Pole	10	38						
10	4139 - Aspen,	Mixed Deci	duous	Saplin	g Well	5.8	16	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH	H Age						
	Red Maple	40	Sapling	2	16						
	Bigtooth Aspen	50	Sapling	2	16						
	Black Cherry	5	Sapling	2							

Cadillac Mgt. Unit

Compartment: 117

Year of Entry: 2023

Stand	Level 4 Co	over Type	Si	ize De	ensity	Acres Stand Age	BA Range	Managed S	ite	General Comments
11	4311 - Pin				g Well	29.0 16	Immature	N/A		2021 Stand is a failed red pine planting. Aspen and red maple are over red pine in most of stand. There are only a few spots were the red pine
	Canopy Species		Size Class	_	I Age					has out competed competition. Stand is in transition point between
	Red Maple	30	Sapling	1						sapling and pole at this time, with majority of trees being sapling at this time. Might be a good candidate for mechanical release if it can be put on
	Bigtooth Aspen	15	Sapling	1						books right away.
	Red Pine	40	Sapling	2	16					
	Jack Pine	15	Sapling	2						
12	4199 - Other Mixe				er Well	40.8 81	141-170	N/A		2021 Stand has a lot of beech in understory. Stand is very hilly and steep in spots. Stand has average basal area of 150
	Canopy Species	% Cover	Size Class	_	l Age	Sub-Canopy Specie		Avg. Height	Size	2014 Treated with sale 63-031-13-01 -remove ash, beech and x log oak
	Sugar Maple	30	Log/Pole/XLog	14	81	Beech	High	5 - 10 feet	Sapling	down to 70 basal area short wood only no chipping
	Basswood	15	Log/Pole/XLog	12		Ironwood	Medium	< 5 feet	Sapling	
	Red Oak	42	Log/Pole/XLog	16	81					
	Red Maple	5	Log/Pole	12						
	Beech	8	Log/Pole	10						
13	4131 - A	spen, Oak		pling l	Medium	1.7 18	51-80	N/A		Stand appears to be on old landing that has fully stocked stand around it. Could be an old homestead as well, there is one apple tree in this
	Canopy Species	% Cover	Size Class	DBH	I Age					stand.
	Red Maple	20	Sapling/Pole	3						
	Red Oak	20	Pole	8						
	Black Cherry	10	Sapling/Pole	3						
	Bigtooth Aspen	50	Sapling/Pole	3	18					
14	42110 - Plai	nted Red P	ine Sa	wtimb	er Well	40.8 66	171-200	N/A		Stand has a large amount of beech brush. Stand average BA is 188. Canopy is tight stand could be thinned.
	Canopy Species	% Cover	Size Class		I Age	Sub-Canopy Species	s Density	Avg. Height	Size	-2014 -Stand thinned in spring of 2014 Red Edmonds (Sale # 63-010-13-
	Red Pine	90	Log/Pole	12	66	Red Maple	Low	5 - 10 feet	Sapling	01)
	Red Oak	10	Log/XLog	16		Beech	High	5 - 10 feet	Sapling	1993- Stand was third row thinned Edmonds Red (Sale # 63-043-93-01)
15	4119 - Mixed No	orthern Har	dwoods Saw	timbe	r Mediun	n 16.9 100	51-80	N/A		2021 - Stand was originally part of stand 1. Broke it off due stand having a much lower basal area and a much thicker understory. Stands average
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Canopy Specie	s Density	Avg. Height	Size	basal area is 50 at this time.
	Sugar Maple	30	Log/Pole/XLog	14		Sugar Maple	Low	10 - 20 feet	Sapling	1995 - Thinned part of sale Schnauzer Hardwoods (Sale #63-002-04-01)
	Basswood	20	Log/Pole	10		Beech	High	10 - 20 feet	Sapling	
	Beech	5	Log/Pole	10		Red Oak	Low	10 - 20 feet	Sapling	
	Red Oak	35	Log/Pole/XLog	16	100	Ironwood	Medium	< 5 feet	Sapling	
	Red Maple	10	Log/Pole	10		Bigtooth Aspen	Medium	10 - 20 feet	Sapling	
16	42111 - Planted Deci	Red Pine, iduous	Mixed Po	letimb	er Well	1.2 37	111-140	N/A		2021 - Stand has been third row thinned Basal area is around 120 at this time.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Canopy Specie	s Density	Avg. Height	Size	
	Red Maple	10	Pole/Log	8		Red Maple	High	5 - 10 feet	Sapling	
		10	Pole/Log Pole	_			High	5 - 10 feet	Sapling	



Stand	d Level 4 Co	over Type	s	ize De	ensity	Acres	Stand Age I	BA Range	Managed S	Site	General Comments			
17	4123 -	Red Oak	Saw	/timbe	Medium	8.6	120	1-50	N/A		Stand appears to be an old oak species removal by the looks of			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	understory under oak. Remove top of stand to get oak to regenerate.			
	Red Oak	80	Log/Pole/XLog	14	120	Re	ed Maple	High	10 - 20 feet	Sapling				
	Red Maple	10	Log/Pole	12			Beech	Low	5 - 10 feet	Sapling				
	Bigtooth Aspen	10	Log/Pole	12		Bla	ck Cherry	Medium	10 - 20 feet	Sapling				
						Bigto	ooth Aspen	Medium	5 - 10 feet	Sapling				
18	4130	- Aspen	5	Sapling	g Well	17.1	7	Immature	N/A		2021 - Stand if fully stocked aspen stand at this time. A lot of big oak left			
	Canopy Species	% Cover	Size Class	DBH	I Age						during past harvest. 2014 Sale was harvested. Stand cut as Part of Acorn Aspen (Sale			
	Red Maple	15	Sapling	1	11						Number 63-007-13-01)			
	Red Oak	15	Log/Pole	12										
	Bigtooth Aspen	65	Sapling	1	7									
	Beech	5	Sapling	1										
19	4111 - S.Maple, Ha	ard Mast As	ssociation Sa	awtimb	er Well	58.3	80	81-110	N/A		2021 - Stands Average basal area of 108. Stand has nice sugar maple			
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	crop trees. Consider thinning next year of entry if Basal area is greater than 120 at that time or wait till it is greater then 120. Stand thinned in			
	Sugar Maple	50	Log/Pole/XLog	14	80	Sug	gar Maple	Low	10 - 20 feet	Sapling	spring 2015 - (New Baby Hardwoods 63-026-13-01)			
	Basswood	15	Log/Pole/XLog	14			Beech	High	5 - 10 feet	Sapling				
	Red Oak	15	Log/Pole/XLog	16		Ir	onwood	Medium	10 - 20 feet	Sapling				
	Black Cherry	5	Log/Pole	10										
	Red Maple	10	Log/Pole	10										
	Beech	5	Log/Pole	12										
20	4110 - Sugar M	laple Assoc	ciation Sa	awtimb	er Well	50.3	88	81-110	N/A		2021 Stands average ba is sitting around 108 at this time. Stand is log			
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	stand with undesirable advanced regeneration in it. Should be able to thi stand next year of entry if stand hits 120.			
	Sugar Maple	55	Log/Pole	12	88	Re	ed Maple	Low	5 - 10 feet	Sapling				
	Basswood	15	Log/Pole	10		Ir	onwood	Medium	< 5 feet	Sapling				
	Red Maple	5	Log/Pole	12			Beech	High	< 5 feet	Sapling				
	Beech	10	Log/Pole	10				'			-			
	Red Oak	5	Log/Pole/XLog	12										
	Black Cherry	10	Log/Pole	10										
21	6120 - Lov	wland Ceda	ır Saw	/timbe	r Medium	2.5	105	81-110	N/A		2021 - Stand is very wet. Stand has a lot of cedar in it.			
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size				
	Red Maple	20	Log/Pole	12		Re	ed Maple	Medium	5 - 10 feet	Sapling				
	Yellow Birch	20	Log/Pole	12			Alder	Low	5 - 10 feet	Tall Shrub				
No	orthern White Cedar	60	Log/Pole	10	105						-			



Stand	d Level 4 Co	over Type	S	ize De	ensity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments
23	4139 - Aspen, I	Mixed Deci	duous Po	oletimb	er Well	14.0	28	Immature	N/A		2021 - Stand is at stage between sapling and pole size, with greater
	Canopy Species	% Cover	Size Class	DBH	I Age						percentage of aspen trees being pole at this time.
	Red Maple	40	Pole/Sapling	5							
	Bigtooth Aspen	50	Pole/Sapling	5	28						
	Black Cherry	10	Pole/Sapling	5							
24	4139 - Aspen, I	Mixed Deci		Saplino		16.1	27	Immature	N/A		2021- Stand if fully stocked stand of aspen at this time. Aspen saplings are starting to get to pole size at this time should be an A6 next year of
	Canopy Species	% Cover		_	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	entry. Lots of oak left during past harvest.
	Red Maple	40	Sapling/Pole	3			Beech	Low	< 5 feet	Sapling	1994 - McGee Road Aspen (Sale # 63-004-94-01)
	Beech	5	Sapling	2		Ir	onwood	Low	< 5 feet	Sapling	
	Bigtooth Aspen	50	Sapling/Pole	3	27						
Sen	viceberry (Juneberry)	5	Sapling	2							
25	4123 -	Red Oak	Sa	awtimb	er Poor	19.7	100	1-50	N/A		2021 - Stand still has at least 20 -50 BA of oak scattered across it with a fully stocked Advanced Regeneration. Advanced Regeneration is too
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	established to remove the rest of the oak at this time.
	Red Oak	80	XLog/Log/Pole	18	100	Bigto	ooth Aspen	High	5 - 10 feet	Sapling	2014 overstory removal Treated with sale 63-031-13-01
	White Pine	20	Log/Pole	12	100	Re	ed Maple	Medium	5 - 10 feet	Sapling	1995 Stand was Shelterwood Cut. Dump Sale (Sale # 63-007-93-01)
							Beech	Medium	5 - 10 feet	Sapling	
						W	hite Pine	Medium	5 - 10 feet	Sapling	
						Wi	tch Hazel	Low	5 - 10 feet	Tall Shrub	
26	4119 - Mixed No	rthern Har	dwoods Sa	awtimb	er Well	6.5	90	111-140	N/A		Stand is small acreage and snowmobile trail runs through stand. Stand
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	also has hilly terrain.
	Sugar Maple	30	Log/Pole	12	90		Beech	Medium	5 - 10 feet	Sapling	
	Basswood	20	Log/Pole/XLog	14		Ir	onwood	Medium	5 - 10 feet	Sapling	
	Beech	20	Log/Pole/XLog	14	90					,	-
	Red Oak	10	Log/Pole/XLog	16							
	Bigtooth Aspen	10	Log/Pole/XLog	12							
	Red Maple	10	Pole/Log	8							
27	42110 - Plar	nted Red P	rine Po	oletimb	er Well	6.3	36	171-200	N/A		2021 Stand has never been third row thinned. Crowns are tight and
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	Average basal area is greater then 170. Stand has good row spacing so cut 1 leave 2 spacing should work.
	Red Pine	100	Pole/Sapling	6	36	Commo	on Blackberry	Low	< 5 feet	Tall Shrub	
28	6132 - Mixed Lowla	nd Forest	with Cedar Po	oletimb	er Well	1.9	110	81-110	N/A		wet
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	
	American Elm	10	Pole/Sapling	5		Ва	alsam Fir	Medium	5 - 10 feet	Sapling	
	Red Maple	20	Pole/Log	8		Bla	ck Cherry	Medium	5 - 10 feet	Sapling	
	Bigtooth Aspen	20	Pole/Log	8							-
N.L.	orthern White Cedar	40	Pole/Log	8	110						
INC											



Stand	Level 4 Co	over Type	;	Size De	nsity	Acres	Stand Age	BA Range	Managed Si	ite	General Comments
29	500 -	- Water		Nonsto	cked	2.8			No		Ham Creek flows through stand.
30	500 -	- Water		Nonsto	cked	9.4		Immature	No		Stand appears to be water. Lots of snow but water on edges of stand at time of inventory. Stand has dead snags in it. Stand is part of Ham Creek Water Shed.
31	330 - Low-[Density Tre	ees	Nonsto	cked	6.1			No		
33	4130	- Aspen		Sapling	Well	5.2	16	Immature	N/A		2021 Stand is fully stocked sapling aspen stand. There is one open area
	Canopy Species	% Cover	Size Class	DBH	Age						in stand not big enough to delineate out of stand. 2004 Stand Clearcut as part of Addmore Hardwoods (Sale # 63-015-03-
	Sugar Maple	10	Log/Pole	12							01)
	Red Maple	10	Sapling	2							
	Red Oak	10	Log/Pole	10							
	Bigtooth Aspen	70	Sapling	2	16						
	220	Density Tre	200	Nonsto	ckod	1.9		Unspecified	No		Ctand has a few continued block about 2 Ctata time treat, does do not at
34	330 - LOW-L	Denisity 110	663	14011010	ckeu	1.9		Unspecified	INO		Stand has a few scattered black cherry's State two track dead ends at
34	330 - LOW-L	Definity The		14011010	ckeu		nopy Specie			Size	gate going into private property.
34	330 - LOW-I	Density Tre		14011010		Sub-Ca	nopy Specie		Avg. Height	Size Pole	
34	4134 - Aspe			oletimb		Sub-Ca Bla		es Density			gate going into private property. Stand is a fully stocked stand with Balsam Fire in understory. North and
		en, Spruce,		oletimb		Sub-Ca Bla	ck Cherry	es Density Low	Avg. Height		Stand is a fully stocked stand with Balsam Fire in understory. North and wet part of stand are extremely wet and may not be able to be harvested.
	4134 - Aspe	en, Spruce,	/Fir P	oletimb	er Well	Sub-Ca Bla	ck Cherry	es Density Low	Avg. Height		gate going into private property. Stand is a fully stocked stand with Balsam Fire in understory. North and
36	4134 - Aspe	en, Spruce, % Cover	/Fir P	oletimb	er Well	Sub-Ca Bla	ck Cherry	es Density Low	Avg. Height		Stand is a fully stocked stand with Balsam Fire in understory. North and wet part of stand are extremely wet and may not be able to be harvested. Ham Creek runs through Northwest corner of stand, so ham creek and
36	4134 - Aspe Canopy Species Red Maple	en, Spruce. **Cover** 15	/Fir P Size Class Pole/Log	oletimb DBH	er Well	Sub-Ca Bla	ck Cherry	es Density Low	Avg. Height		Stand is a fully stocked stand with Balsam Fire in understory. North and wet part of stand are extremely wet and may not be able to be harvested. Ham Creek runs through Northwest corner of stand, so ham creek and
36	4134 - Aspe Canopy Species Red Maple Bigtooth Aspen	en, Spruce. ***Cover** 15	/Fir P Size Class Pole/Log Pole/Log	Poletimber DBH	er Well	Sub-Ca Bla	ck Cherry	es Density Low	Avg. Height		Stand is a fully stocked stand with Balsam Fire in understory. North and wet part of stand are extremely wet and may not be able to be harvested. Ham Creek runs through Northwest corner of stand, so ham creek and
36	4134 - Aspe Canopy Species Red Maple Bigtooth Aspen Balsam Fir	en, Spruce. **Cover* 15	/Fir P Size Class Pole/Log Pole/Log Pole/Sapling Pole/Sapling	Poletimb DBH 8 9 5	er Well Age 35	Sub-Ca Blac 46.6	ck Cherry	es Density Low	Avg. Height		Stand is a fully stocked stand with Balsam Fire in understory. North and wet part of stand are extremely wet and may not be able to be harvested. Ham Creek runs through Northwest corner of stand, so ham creek and stand 30 will all need buffers when doing harvest in the future. 2021 - Stands Average Basal Area of 92 at this time. Stand has a lot of
36	4134 - Aspe Canopy Species Red Maple Bigtooth Aspen Balsam Fir Black Cherry	en, Spruce. **Cover* 15 60 20 5	/Fir P Size Class Pole/Log Pole/Log Pole/Sapling Pole/Sapling	Poletimb DBH 8 9 5 7	er Well Age 35	\$ub-Ca Blac 46.6	35	81-110	Avg. Height N/A		Stand is a fully stocked stand with Balsam Fire in understory. North and wet part of stand are extremely wet and may not be able to be harvested. Ham Creek runs through Northwest corner of stand, so ham creek and stand 30 will all need buffers when doing harvest in the future. 2021 - Stands Average Basal Area of 92 at this time. Stand has a lot of nice crop trees and is higher quality. Grow stand out to basal area of 120
36	4134 - Aspe Canopy Species Red Maple Bigtooth Aspen Balsam Fir Black Cherry	en, Spruce. **Cover* 15 60 20 5	/Fir P Size Class Pole/Log Pole/Log Pole/Sapling Pole/Sapling Ssociation S	Poletimb DBH 8 9 5 7	er Well Age 35 er Well	\$ub-Ca Blace 46.6 50.0 Sub-Ca	35 81	81-110	Avg. Height N/A	Pole	Stand is a fully stocked stand with Balsam Fire in understory. North and wet part of stand are extremely wet and may not be able to be harvested. Ham Creek runs through Northwest corner of stand, so ham creek and stand 30 will all need buffers when doing harvest in the future. 2021 - Stands Average Basal Area of 92 at this time. Stand has a lot of
36	A134 - Aspe Canopy Species Red Maple Bigtooth Aspen Balsam Fir Black Cherry 4111 - S.Maple, Ha	en, Spruce. **Cover* 15 60 20 5 ard Mast A **Cover*	/Fir P Size Class Pole/Log Pole/Log Pole/Sapling Pole/Sapling ssociation S Size Class	Poletimber B	ar Well Age 35 ar Well Age	\$ub-Ca Black 46.6 50.0 \$ub-Ca Re	35 81 nopy Specie	81-110 81-110 81-110 81-110	Avg. Height N/A N/A Avg. Height	Size Sapling Sapling	Stand is a fully stocked stand with Balsam Fire in understory. North and wet part of stand are extremely wet and may not be able to be harvested. Ham Creek runs through Northwest corner of stand, so ham creek and stand 30 will all need buffers when doing harvest in the future. 2021 - Stands Average Basal Area of 92 at this time. Stand has a lot of nice crop trees and is higher quality. Grow stand out to basal area of 120 then consider thinning stand again.
36	4134 - Aspe Canopy Species Red Maple Bigtooth Aspen Balsam Fir Black Cherry 4111 - S.Maple, Ha Canopy Species Sugar Maple	en, Spruce. ***Cover** 15	/Fir P Size Class Pole/Log Pole/Sapling Pole/Sapling Sociation S Size Class Log/Pole	Sawtimbe	ar Well Age 35 ar Well Age	Sub-Ca Blace 46.6 50.0 Sub-Ca	35 81 nopy Species Maple	81-110 81-210 81-210 81-210 81-210 81-210 81-210 81-210	N/A N/A N/A Avg. Height 5 - 10 feet	Pole Size Sapling	Stand is a fully stocked stand with Balsam Fire in understory. North and wet part of stand are extremely wet and may not be able to be harvested. Ham Creek runs through Northwest corner of stand, so ham creek and stand 30 will all need buffers when doing harvest in the future. 2021 - Stands Average Basal Area of 92 at this time. Stand has a lot of nice crop trees and is higher quality. Grow stand out to basal area of 120 then consider thinning stand again.
36	4134 - Aspe Canopy Species Red Maple Bigtooth Aspen Balsam Fir Black Cherry 4111 - S.Maple, Ha Canopy Species Sugar Maple Basswood	en, Spruce. **Cover* 15 60 20 5 ard Mast A **Cover* 45 20	/Fir P Size Class Pole/Log Pole/Sapling Pole/Sapling Pole/Sapling Sociation S Size Class Log/Pole Log/Pole	Sawtimbe	ar Well Age 35 ar Well Age	Sub-Ca Blace 46.6 50.0 Sub-Ca	81 nopy Species and Maple Beech	81-110 81-110 81-110 Bullet Density Low High	N/A N/A N/A Avg. Height 5 - 10 feet 5 - 10 feet	Size Sapling Sapling	Stand is a fully stocked stand with Balsam Fire in understory. North and wet part of stand are extremely wet and may not be able to be harvested. Ham Creek runs through Northwest corner of stand, so ham creek and stand 30 will all need buffers when doing harvest in the future. 2021 - Stands Average Basal Area of 92 at this time. Stand has a lot of nice crop trees and is higher quality. Grow stand out to basal area of 120 then consider thinning stand again.
36	4134 - Aspe Canopy Species Red Maple Bigtooth Aspen Balsam Fir Black Cherry 4111 - S.Maple, Ha Canopy Species Sugar Maple Basswood Red Oak	en, Spruce. **Cover* 15	/Fir P Size Class Pole/Log Pole/Sapling Pole/Sapling Sociation S Size Class Log/Pole Log/Pole XLog/Log/Pole	DBH	ar Well Age 35 ar Well Age	Sub-Ca Blace 46.6 50.0 Sub-Ca	81 nopy Species and Maple Beech	81-110 81-110 81-110 Bullet Density Low High	N/A N/A N/A Avg. Height 5 - 10 feet 5 - 10 feet	Size Sapling Sapling	Stand is a fully stocked stand with Balsam Fire in understory. North and wet part of stand are extremely wet and may not be able to be harvested. Ham Creek runs through Northwest corner of stand, so ham creek and stand 30 will all need buffers when doing harvest in the future. 2021 - Stands Average Basal Area of 92 at this time. Stand has a lot of nice crop trees and is higher quality. Grow stand out to basal area of 120 then consider thinning stand again.
36	4134 - Aspe Canopy Species Red Maple Bigtooth Aspen Balsam Fir Black Cherry 4111 - S.Maple, Ha Canopy Species Sugar Maple Basswood Red Oak Red Maple	en, Spruce. **Cover* 15	/Fir P Size Class Pole/Log Pole/Log Pole/Sapling Pole/Sapling Ssociation S Size Class Log/Pole Log/Pole XLog/Log/Pole Pole/Log	DBH 8 9 5 7 Sawtimbe DBH 10 12 18 8	ar Well Age 35 ar Well Age	Sub-Ca Blace 46.6 50.0 Sub-Ca	81 nopy Species and Maple Beech	81-110 81-110 81-110 Bullet Density Low High	N/A N/A N/A Avg. Height 5 - 10 feet 5 - 10 feet	Size Sapling Sapling	Stand is a fully stocked stand with Balsam Fire in understory. North and wet part of stand are extremely wet and may not be able to be harvested. Ham Creek runs through Northwest corner of stand, so ham creek and stand 30 will all need buffers when doing harvest in the future. 2021 - Stands Average Basal Area of 92 at this time. Stand has a lot of nice crop trees and is higher quality. Grow stand out to basal area of 120 then consider thinning stand again.

rt 7 – Stands Compartment: 117 Year of Entry: 2023

- MICHIGAN

Stand	Level 4 Cover Type Size De				nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
38	4110 - Sugar Maple Association Sawtimber Medium						30.6 80 51-80		N/A		2021. Parts of stand are more like a black cherry shelterwood then your
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	typical hardwood stand. Other parts of stand is like typical norther hardwood stand. Stand has undesirable understory at this time. Average
	Sugar Maple	35	Log/Pole	12		Ir	onwood	Medium	5 - 10 feet	Sapling	BA in this stand is 71.
	Basswood	15	Log/Pole	10		Haw	thorn (spp.)	Medium	5 - 10 feet	Tall Shrub	2015 Stand Treated with sale 63-031-13-01 remove all aspen, ironwood
	Black Cherry	35	Log/Pole	12	80		Beech	Medium	5 - 10 feet	Sapling	and mark rest of stand down to 70 favoring black cherry,
	Red Maple	7	Log/Pole	12							
	Red Oak	8	Log/Pole	12							
39	4130	- Aspen	;	Sapling	Well	7.5	16	Immature	N/A		2021 Stand is fully stocked sapling aspen stand
	Canopy Species	% Cover	Size Class	DBH	Age						2004 Stand Clearcut as part of Addmore Hardwoods (Sale # 63-015-03-01)
	Red Maple	20	Sapling	2							
	Red Oak	10	Log/Pole	12							
	Bigtooth Aspen	70	Sapling	2	16						
41	4110 - Sugar M	laple Asso	ciation Sa	awtimb	er Well	95.1	85	81-110	N/A		2021 Stand is currently sitting as a basal area of 96. Stand has areas
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	that have solid poles located throughout them. Overall stand is log size. Lots of undesirable advanced regeneration in this stand.
	Sugar Maple	65	Log/Pole	12	85		Beech	Full	5 - 10 feet	Sapling	2004 Stand Thinned Addmore Hardwoods (Sale # 63-015-03-01)
	Red Maple	5	Log/Pole	10		Ir	ronwood	Full	5 - 10 feet	Sapling	
	Basswood	20	Log/Pole	12		Su	gar Maple	Low	5 - 10 feet	Sapling	
	Red Oak	5	Log/Pole/XLog	14							
	Black Cherry	5	Log/Pole	12							
42	6139 - Mixed			oletimb		7.5	50	111-140	N/A		2021 Stand is fully stocked with aspen under Tamarack, Stand will might convert to lowland aspen stand next year of entry.
	Canopy Species		Size Class		Age						osinon to tomana aspon otana nom your or otany.
	Red Maple	20	Pole/Log	8							
	Tamarack	30	Pole/Sapling	6	50						
	White Pine	15	Log/Pole/XLog		110						
	Hemlock	10	Log/Pole	10							
	Bigtooth Aspen	25	Pole/Log	8							
43	4139 - Aspen, I	39 - Aspen, Mixed Deciduous Saplin				116.4	26	Immature	N/A		2021 - Stand is at stage between Pole and Sapling, greater percentage o trees at this time are sapling size. Stand is fully stocked.
	Canopy Species		Size Class		Age						Sale Was Completed in 1995
	Red Maple	30	Sapling/Pole	4							Rhoby Aspen (Sale # 63-052-93-01)
	Bigtooth Aspen	50	Sapling/Pole	4	26						
	Black Cherry	20	Sapling/Pole	3							
45	4110 - Sugar Maple Association Sawtimber Well						85	51-80	N/A		2021 - Sale has open pockets within it. Sale average basal area at this time is around 76. Stand has no desirable species in its understory at
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	this time. Stand has turned over to a log stand with poles still in it. Let
	Sugar Maple	50	Log/Pole	10	85		Beech	Medium	5 - 10 feet	Sapling	stand sit next couple years of entry till it hits BA of 120, then consider
	Red Maple	20	Log/Pole	10		Ir	ronwood	Medium	5 - 10 feet	Sapling	thinning. 2015 - Sale Treated with sale number 63-031-13-01 remove all aspen,
	Basswood	30	Log/Pole	10							ironwood and ash.

Report 7 – Stands

Compartment: 117

Year of Entry: 2023

OF NATURAL PRODUCTION
MICHIGAN

Stan	d Level 4 C		ize De		Adics	Stand Age BA Range			Site	General Comments	
46			Sawtimber Well			88	81-110	N/A		2004 Stand Thinned Addmore Hardwoods (Sale # 63-015-03-01) Decent quality hardwood stand just into log size overall, still pole size maple in	
	Canopy Species	% Cover	Size Class		l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	spots. Good spacing still from last thinning. Hilly terrain.
	Sugar Maple	70	Log/Pole	13	88		Beech	Medium	< 5 feet	Sapling	
	Red Maple	5	Log/Pole	12		Ir	onwood	Medium	< 5 feet	Sapling	
	Basswood	10	Log	13		Commo	on Blackberry	Low	< 5 feet	Tall Shrub	
	Beech	10	Log	12							
	Black Cherry	5	Log/Pole	11							
47	4111 - S.Maple, H	ard Mast A	ssociation S		er Wel	l 318.6	85	111-140	N/A		2021 - Stands Average Basal Area is 127 at this time. Stand has wide range of basal areas from 60 to 160. This appears to dependent on
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	beach and ash removal from previous cut. Stand is very hilly some area
	Sugar Maple	50	Log/Pole/XLog	14	85		Beech	High	5 - 10 feet	Sapling	might be to steep to harvest.
	Red Maple	5	Log/Pole	10		Ir	onwood	High	5 - 10 feet	Sapling	1995 - Stand was thinned 1999 Extreme Hardwoods (Sale # 63-021-95-
	Basswood	20	Log/Pole/XLog	10							01)
	Beech	5	Log/Pole	12							
	Black Cherry	5	Log/Pole	12							
	Ironwood	5	Pole	5							
	Red Oak	10									
	Red Oak	10	Log/Pole/XLog	16							
48	4133 - Aspe	en, Mixed F	Pine	Saplin		26.9	26	Immature	N/A		2021- Stand 48 was cut out of stand 49. Stand 48 has characteristics of planted pine, but the aspen and other mixed deciduous species have out
48	4133 - Aspe	en, Mixed F	Pine Size Class	Sapling DB H	g Well	26.9	26	Immature	N/A		2021- Stand 48 was cut out of stand 49. Stand 48 has characteristics of planted pine, but the aspen and other mixed deciduous species have or competed the remaining red pine in this stand at this time.
48	4133 - Aspe Canopy Species Red Maple	en, Mixed F % Cover	Pine Size Class Sapling	Sapline DBH		26.9	26	Immature	N/A		planted pine, but the aspen and other mixed deciduous species have or
48	4133 - Aspe Canopy Species Red Maple Beech	en, Mixed F % Cover 15	Pine Size Class Sapling Sapling/Pole	Sapling DBH 3	I Age	26.9	26	Immature	N/A		planted pine, but the aspen and other mixed deciduous species have or
48	4133 - Aspe Canopy Species Red Maple Beech Bigtooth Aspen	en, Mixed F % Cover 15 5 40	Pine Size Class Sapling Sapling/Pole Sapling/Pole	Sapling DBH 3 3 3		26.9	26	Immature	N/A		planted pine, but the aspen and other mixed deciduous species have or
48	4133 - Aspe Canopy Species Red Maple Beech Bigtooth Aspen Black Cherry	% Cover 15 5 40 5	Pine Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole	Sapling DBH 3 3 3 3	I Age	26.9	26	Immature	N/A		planted pine, but the aspen and other mixed deciduous species have or
48	4133 - Aspe Canopy Species Red Maple Beech Bigtooth Aspen Black Cherry Ironwood	en, Mixed F **Cover* 15 5 40 5 5 5 5	Pine Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling	Sapline DBH 3 3 3 3 2	I Age	26.9	26	Immature	N/A		planted pine, but the aspen and other mixed deciduous species have or
48	4133 - Aspe Canopy Species Red Maple Beech Bigtooth Aspen Black Cherry Ironwood Red Pine	en, Mixed F **Cover* 15 5 40 5 5 25	Pine Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling Sapling	Sapling	I Age	26.9	26	Immature	N/A		planted pine, but the aspen and other mixed deciduous species have or
48	4133 - Aspe Canopy Species Red Maple Beech Bigtooth Aspen Black Cherry Ironwood	en, Mixed F **Cover* 15 5 40 5 5 5 5	Pine Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling	Sapline DBH 3 3 3 3 2	I Age	26.9	26	Immature	N/A		planted pine, but the aspen and other mixed deciduous species have or
48	4133 - Aspe Canopy Species Red Maple Beech Bigtooth Aspen Black Cherry Ironwood Red Pine Red Oak	en, Mixed F **Cover* 15 5 40 5 5 25 5	Pine Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling Sapling Sapling Sapling Sapling	Sapling	26	26.9		Immature	N/A		planted pine, but the aspen and other mixed deciduous species have or competed the remaining red pine in this stand at this time.
	4133 - Aspe Canopy Species Red Maple Beech Bigtooth Aspen Black Cherry Ironwood Red Pine Red Oak	en, Mixed F **Cover* 15 5 40 5 25 5 4 Red Pine, iduous	Pine Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling Sapling Sapling Sapling Sapling	Sapline Sapline 3 3 3 2 3 3 Sapline	26	41.8		Immature		Size	planted pine, but the aspen and other mixed deciduous species have or competed the remaining red pine in this stand at this time. 2021 - Planted red pine various degrees of success across stand. Some
	A133 - Aspe Canopy Species Red Maple Beech Bigtooth Aspen Black Cherry Ironwood Red Pine Red Oak 42111 - Planted Dec	en, Mixed F **Cover* 15 5 40 5 25 5 4 Red Pine, iduous	Pine Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling Sapling Sapling Sapling Mixed	Sapline Sapline 3 3 3 2 3 3 Sapline	26 Well	41.8 Sub-Ca	26	Immature	N/A	Size Tall Shrub	planted pine, but the aspen and other mixed deciduous species have or competed the remaining red pine in this stand at this time. 2021 - Planted red pine various degrees of success across stand. Som areas red pine, other areas mixed deciduous trees are current canopy.
	A133 - Aspe Canopy Species Red Maple Beech Bigtooth Aspen Black Cherry Ironwood Red Pine Red Oak 42111 - Planted Dec Canopy Species	en, Mixed F **Cover* 15 5 40 5 25 5 1 Red Pine, iiduous **Cover*	Pine Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling Sapling Sapling Mixed Size Class	Sapline DBH 3 3 3 3 2 3 3 Sapline	26 Well	41.8 Sub-Ca Commo	26 Inopy Species	Immature Density	N/A Avg. Height		planted pine, but the aspen and other mixed deciduous species have or competed the remaining red pine in this stand at this time. 2021 - Planted red pine various degrees of success across stand. Somareas red pine, other areas mixed deciduous trees are current canopy.
	A133 - Aspection Canopy Species Red Maple Beech Bigtooth Aspen Black Cherry Ironwood Red Pine Red Oak 42111 - Planted Dec Canopy Species Red Maple	en, Mixed F **Cover* 15	Pine Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling	Sapling	26 26 g Well	41.8 Sub-Ca Commo	26 Inopy Species on Blackberry	Immature Density Medium	N/A Avg. Height < 5 feet	Tall Shrub	planted pine, but the aspen and other mixed deciduous species have or competed the remaining red pine in this stand at this time. 2021 - Planted red pine various degrees of success across stand. Somareas red pine, other areas mixed deciduous trees are current canopy.
	A133 - Aspection Aspection Red Maple Beech Bigtooth Aspen Black Cherry Ironwood Red Pine Red Oak 42111 - Planted Decc Canopy Species Red Maple Red Pine	en, Mixed F % Cover 15 5 40 5 25 5 4 Red Pine, iduous % Cover 20 60	Pine Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling Sapling Sapling Sapling Sapling Sapling Sapling/Pole Mixed Size Class Sapling Sapling Sapling	Sapling	26 26 g Well	41.8 Sub-Ca Commo	26 Inopy Species on Blackberry	Immature Density Medium	N/A Avg. Height < 5 feet	Tall Shrub	planted pine, but the aspen and other mixed deciduous species have or competed the remaining red pine in this stand at this time. 2021 - Planted red pine various degrees of success across stand. Som areas red pine, other areas mixed deciduous trees are current canopy.
49	A133 - Aspection Asperticular Planted Canopy Species Red Maple Beech Bigtooth Aspen Black Cherry Ironwood Red Pine Red Oak 42111 - Planted Dec Canopy Species Red Maple Red Pine Black Cherry Bigtooth Aspen	en, Mixed F **Cover* 15	Pine Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling Sapling Sapling Sapling Sapling Sapling/Pole Mixed Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling	Sapling	26 26 g Well	41.8 Sub-Ca Commo	26 Inopy Species on Blackberry	Immature Density Medium	N/A Avg. Height < 5 feet	Tall Shrub	planted pine, but the aspen and other mixed deciduous species have o competed the remaining red pine in this stand at this time. 2021 - Planted red pine various degrees of success across stand. Som areas red pine, other areas mixed deciduous trees are current canopy.
	A133 - Aspection Asperticular Planted Canopy Species Red Maple Beech Bigtooth Aspen Black Cherry Ironwood Red Pine Red Oak 42111 - Planted Dec Canopy Species Red Maple Red Pine Black Cherry Bigtooth Aspen	## Cover 15 5 40 5 5 25 5 5 40 60 10 10 Hardwood	Pine Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling Sapling Sapling Sapling Sapling Sapling/Pole Mixed Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling	Sapling	26 26 Age 26	41.8 Sub-Ca Commo	26 Inopy Species on Blackberry Sumac	Immature Density Medium Medium 81-110	N/A Avg. Height < 5 feet 5 - 10 feet	Tall Shrub	planted pine, but the aspen and other mixed deciduous species have or competed the remaining red pine in this stand at this time. 2021 - Planted red pine various degrees of success across stand. Som areas red pine, other areas mixed deciduous trees are current canopy.
49	Canopy Species Red Maple Beech Bigtooth Aspen Black Cherry Ironwood Red Pine Red Oak 42111 - Planted Dec Canopy Species Red Maple Red Pine Black Cherry Bigtooth Aspen	## Cover 15 5 40 5 5 25 5 5 40 60 10 10 Hardwood	Pine Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling Sapling Sapling Sapling Sapling Sapling/Pole Mixed Size Class Sapling Sapling/Pole Sapling Sapling/Pole Sapling Sapling/Pole Sapling Sapling	Sapling	26 Well Age 26 26 er Wel	41.8 Sub-Ca Commo	26 Inopy Species on Blackberry Sumac	Immature Density Medium Medium 81-110	N/A Avg. Height < 5 feet 5 - 10 feet N/A	Tall Shrub	planted pine, but the aspen and other mixed deciduous species have or competed the remaining red pine in this stand at this time. 2021 - Planted red pine various degrees of success across stand. Som areas red pine, other areas mixed deciduous trees are current canopy.
49	Canopy Species Red Maple Beech Bigtooth Aspen Black Cherry Ironwood Red Pine Red Oak 42111 - Planted Dec Canopy Species Red Maple Red Pine Black Cherry Bigtooth Aspen 4116 - Mixed N. Canopy Species	en, Mixed F **Cover* 15	Pine Size Class Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling Sapling Sapling Sapling Sapling Sapling/Pole Mixed Size Class Sapling Sapling/Pole Sapling Sapling/Pole Sapling Sapling/Pole Sapling Sapling	Sapling	26 26 Well Age 26 1 Age	41.8 Sub-Ca Commo	26 Inopy Species on Blackberry Sumac 60 Inopy Species	Immature Density Medium Medium 81-110 Density	N/A Avg. Height < 5 feet 5 - 10 feet N/A Avg. Height	Tall Shrub Tall Shrub	planted pine, but the aspen and other mixed deciduous species have or competed the remaining red pine in this stand at this time. 2021 - Planted red pine various degrees of success across stand. Som areas red pine, other areas mixed deciduous trees are current canopy.

rt 7 – Stands Compartment: 117
Year of Entry: 2023



Stand	Level 4 C	over Type		Size De	ensity	Acres	Stand Age B	A Range	Managed S	ite	General Comments
51	4110 - Sugar N	laple Asso	ciation	Sawtimb	er Well	81.4	95	81-110	N/A		2021 - Stands current ba is at 108. Stand has some decent terrain in it
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	rolling hills. 1 point had higher ba but was on slope that might have been to steep to thin last time around. Stand has undesirable advanced
	Sugar Maple	65	Log/Pole	11	95		Beech	Medium	< 5 feet	Sapling	regeneration in understory. Should be able to thin stand next year of entry
	Red Maple	5	Pole/Log	8		Ir	onwood	High	Variable	Sapling	or when stand hits ba of 120.
	Basswood	15	Log/Pole	10							•
	White Ash	5	Log/Pole	10							
	Beech	5	Log/Pole	10							
	Black Cherry	5	Log/Pole	10							
52	4110 - Sugar N	laple Asso	ociation	Sawtimb	er Well	27.6	85	81-110	N/A		2021 - Stands average basal area is 106. Grow stand out till it hits basal area of 120 then considering thinning stand again.
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	1995 - Stand was thinned 1999 Extreme Hardwoods (Sale # 63-021-95-
	Sugar Maple	75	Log/Pole/XLo	g 14	85		Beech	High	5 - 10 feet	Sapling	01)
	Red Maple	5	Log/Pole	10		Ir	onwood	High	5 - 10 feet	Sapling	
	Basswood	10	Log/Pole	12		Bla	ck Cherry	Low	5 - 10 feet	Sapling	
	Black Cherry	5	Log/Pole	12						'	
	Beech	5	Log/Pole	12							
53	4110 - Sugar N	laple Asso	ociation	Sawtimb		416.4	88	51-80	N/A		Stand thinned in 2014/2015 117 Hardwoods Sale # 63-002-13-01. Large block of hilly hardwood of medium to good quality hardwood. Stand just
	17 1						nopy Species	Density	Avg. Height	Size	pushed into log size overall still portions of stand more pole size. Beech
	Sugar Maple	60	Log/Pole	11	88	Su	gar Maple	Trace	5 - 10 feet	Sapling	and ash targeted heavily in last thinning only few beech were left.
	Basswood	25	Log	12		Ir	ronwood	High	5 - 10 feet	Sapling	
	Beech	5	Log/Pole	12			Beech	High	5 - 10 feet	Sapling	
	Red Oak	5	Log/XLog	13		Bla	ck Cherry	Low	5 - 10 feet	Sapling	
	Black Cherry	2	Log/Pole	10		W	hite Ash	Medium	< 5 feet	Sapling	
	Yellow Birch	1	Pole	9							
	Red Maple	2	Log/Pole	12							
54	42101 - Planted White Pine, Mixed Deciduous			Poletimber Well		37.8	60	111-140	N/A		2021 Stand thinned less then 6 years ago, Basal area is not there to thin again and canopy still has a lot of room to grow.
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Stand Row thinned in 2015 with Rhoby White Sale (Sale number 63-021 13-01)
	Sugar Maple	5	Log/Pole/XLo	g 12			Beech	Medium	5 - 10 feet	Sapling	1001)
	White Pine	75	Log/Pole	10	60					'	
	Red Maple	10	Log/Pole	10							
55	4110 - Sugar Maple Association				Sawtimber Well		88	51-80	N/A		Stand thinned under Crazy RoBurk Hardwoods Sale # 63-027-13-01
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	stand Harvested 2017. Overall good quality stand. Stand decreases in quality in the south end. Very nice cherry logs in stand, beech componen
	Sugar Maple	65	Log/Pole	11	88		Beech	Medium	< 5 feet	Sapling	still solid with limited white wash noticed.
	Red Maple	3	Log/Pole	12		Ir	ronwood	Medium	< 5 feet	Sapling	
	Basswood	10	Log/Pole	10							
	Beech	12	Log/Pole	12							

Report 7 - Stands



Compartment: 117

Year of Entry: 2023

Stand	Level 4 Co	Si	nsity	Acres	Stand Age	BA Range	Managed S	iite	General Comments					
56	4130 -	- Aspen	Sapling Well			29.0	26	Immature	N/A		2021 - Stand is stage between sapling and pole at this time. Majority of			
	Canopy Species	% Cover	Size Class	DBH	Age						trees still being sapling at this time. Next year of entry stand should be fully stocked A6.			
	Red Maple	30	Sapling/Pole	4							1995 - Sale Was Completed in 1995			
	Beech	5	Sapling/Pole	3							1993 - Rhoby Aspen (Sale # 63-052-93-01)			
	Bigtooth Aspen	60	Sapling/Pole	4	26									
	Black Cherry	5	Sapling	3										
57	4112 - Maple, Beecl	h, Cherry A	Association Po	letimb	er Well	57.5	85	81-110	N/A		2021 - Stands average BA is around 84. Stand has saw logs in it at this			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	anopy Specie	s Densit	y Avg. Height	Size	time but does not met the threshold to be a log stand yet. Stand has undesirable advanced regeneration under it.			
	Sugar Maple	45	Pole/Log	9	85		Beech	Mediu	m 5 - 10 feet	Sapling	2004 Stand Thinned Addmore Hardwoods (Sale # 63-015-03-01)			
	Red Maple	25	Pole/Log	8		Ir	ronwood	Mediu	m 5 - 10 feet	Sapling				
	Basswood	10	Log/Pole	10							_			
	Beech	20	Log/Pole	10										
58	58 42101 - Planted White F Deciduous		ne, Mixed Poletimber Well			22.3	22.3 60 111-140		N/A		2021 Stand thinned less then 6 years ago, Basal area is not there to thin again and canopy still has a lot of room to grow.			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	anopy Specie	s Densit	y Avg. Height	Size	Stand Row thinned in 2015 with Rhoby White Sale (Sale number 63-021-13-01)			
	Sugar Maple	10	Log/Pole/XLog	11			Beech	Low	5 - 10 feet	Sapling				
	Red Maple	5	Log/Pole	10		Re	ed Maple	Low	5 - 10 feet	Sapling				
	White Ash	5	Log/Pole	10										
59	4139 - Aspen, I	Mixed Deci	duous Po	letimb	er Well	6.3	26	Immature	N/A		2021 - Stand is fully stock pole size aspen stand			
	Canopy Species	% Cover	Size Class	DBH	Age						1995 Stand was final harvested. as part of Rhoby Aspen (Sale # 63-052-93-01)			
	Red Maple	30	Pole/Sapling	5										
	Bigtooth Aspen	50	Pole/Sapling	6	26									
	Black Cherry	20	Pole/Sapling	5										
60	4112 - Maple, Beecl				er Well	47.8	75	111-140	N/A		Lowest quality block of hardwood in this section of the compartment. More soft maple then other stands, with snow trail running through the			
	Canopy Species		Size Class		Age		anopy Specie		, , ,	Size	middle. Few red and white pine along main road.			
	Sugar Maple	40	Pole/Log	9	75		Beech	High		Sapling				
	Red Maple	30	Log/Pole	12	75	Ir	ronwood	Mediu	m 5 - 10 feet	Sapling				
	Beech	15	Log/Pole	10										
	Black Cherry	10	Pole/Log	9										
	White Pine	2	Log/Pole	12										
	Red Pine	2	Log/Pole	10										
	Quaking Aspen	1	Log/XLog	13										

Cadillac Mgt. Unit Report 7 – Stands



Stand	Level 4 Co	over Type	;	Size De	ensity	Acres	Stand Ag	je BA Range	Managed Site	General Comments
63	4130	- Aspen		Sapling	g Well	11.0	7	Immature	N/A	2021 - Stand if fully stocked aspen stand at this time. A lot of big oak left during past harvest.
	Canopy Species	% Cover	Size Class	DBH	l Age					2014 Sale was harvested. Stand cut as Part of Acorn Aspen (Sale
	Bigtooth Aspen	65	Sapling	1	7					Number 63-007-13-01)
	Red Maple	15	Sapling	1						
	Beech	5	Sapling	1						
	Red Oak	15	Log/Pole/XLog	g 16						