

Compartment Review Presentation

Roscommon Forest Management Unit

Compartment 71048 Entry Year 2024 Acreage: 1,578

County Roscommon

Management Area: Upper Muskegon

Stand Examiner: Jason Lewicki

Legal Description:

T22N, R02W Sections 26, 27 and 28

Identified Planning Goals:

Vegetation management in the Upper Muskegon management area (MA) (Figure 2.27.1) will provide forest products; maintain or enhance wildlife habitat; protect areas of unique threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year period will focus on harvesting older jack pine and balancing age class distributions of oak, aspen and red pine. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests for hunting and other wildlife-related recreation. Expected trends within this 10-year planning period are the need to manage exotic species (especially Phragmites and glossy buckthorn), the need to continue to manage cover types for a balanced age-class distribution and an expected increase in recreation pressure.

Soil and topography:

The soils on the uplands generally consist of Grayling and Saugatuck sands while the lowlands are dominated by Rifle peat.

The topography within the compartment is generally flat to gently rolling.

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

There is some private land holders scattered throughout the compartment. Much of the surrounding area and township is under State Ownership.

Unique Natural Features:

None known

Archeological, Historical, and Cultural Features:

None known

Special Management Designations or Considerations:

None known

Watershed and Fisheries Considerations:

The headwaters of Denton creek lie just to the west of the compartment.

Wildlife Habitat Considerations:

The compartment is located just east of the Denton Creek Flooding and is bisected by Crooked Road. Aspen, mixed deciduous, and jack pine are the most common timber types in the compartment. A drainage runs from SE to NW which eventually flows toward the Backus system. The compartment is important to deer, turkey, grouse and woodcock. Black bear and snowshoe hare also frequent the compartment, especially in association with the lowland areas of the compartment. This compartment sees heavy pressure for hunting with Crooked Road as a popular public access route. Management considerations include treatments that will promote hard and soft mast production for wildlife including retention of large crown mast producing trees when possible. Early successional species such as aspen should be managed to ensure young stands are always available for grouse and woodcock. To promote snowshoe hare and other small mammals, brush piles will be constructed in association with timber harvests along lowland edges. Currently there are no managed wildlife openings within the compartment. The Denton dam is currently planned for removal in 2022 due to its age and significant hazard rating. This dam removal has the potential to affect the hydrology within this compartment.

Mineral Resource and Development Concerns and/or Restrictions

Sections 26-28, T22N-R2W, Roscommon County

No known potential exists for metallic minerals in this part of the state. The nearest active sand/gravel pit is two miles to

the east. Commercial aggregate and borrow pits are common in this region, and there is generally good potential for sand & gravel within the outwash and ice-contact glacial deposits of the area. The best potential for sand & gravel in the compartment appears to be on the uplands in the northeast of Sec 26. Some minor oil production has occurred in the compartment consisting of the Denton Creek Field, an eight-well field that produced from the Detroit River Group and was abandoned in the late 1990s. There has been no additional well drilling or permitting activity in the compartment since that time. While there has been some more recent oil & gas leasing in the compartment, potential for hydrocarbon development in this area is 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, the surface owner must provide the owner of the mineral rights reasonable access to the surface for mineral exploration and development.

Vehicle Access:

Vehicle access is very good throughout the compartment due to its proximities to M-55 and F-97. Multiple county roads and forest roads traverse the uplands increasing its accessibility.

Survey Needs:

There will be a survey needed around private property for when stand 116 is harvested.

Recreational Facilities and Opportunities:

The snowmobile and ORV trail run through this compartment. It is also a very popular are for hunting.

Fire Protection:

This compartment has no recent history of major fires with numerous natural barriers to slow the spread of fire. Recreation is popular in this compartment and may contribute to a fire start.

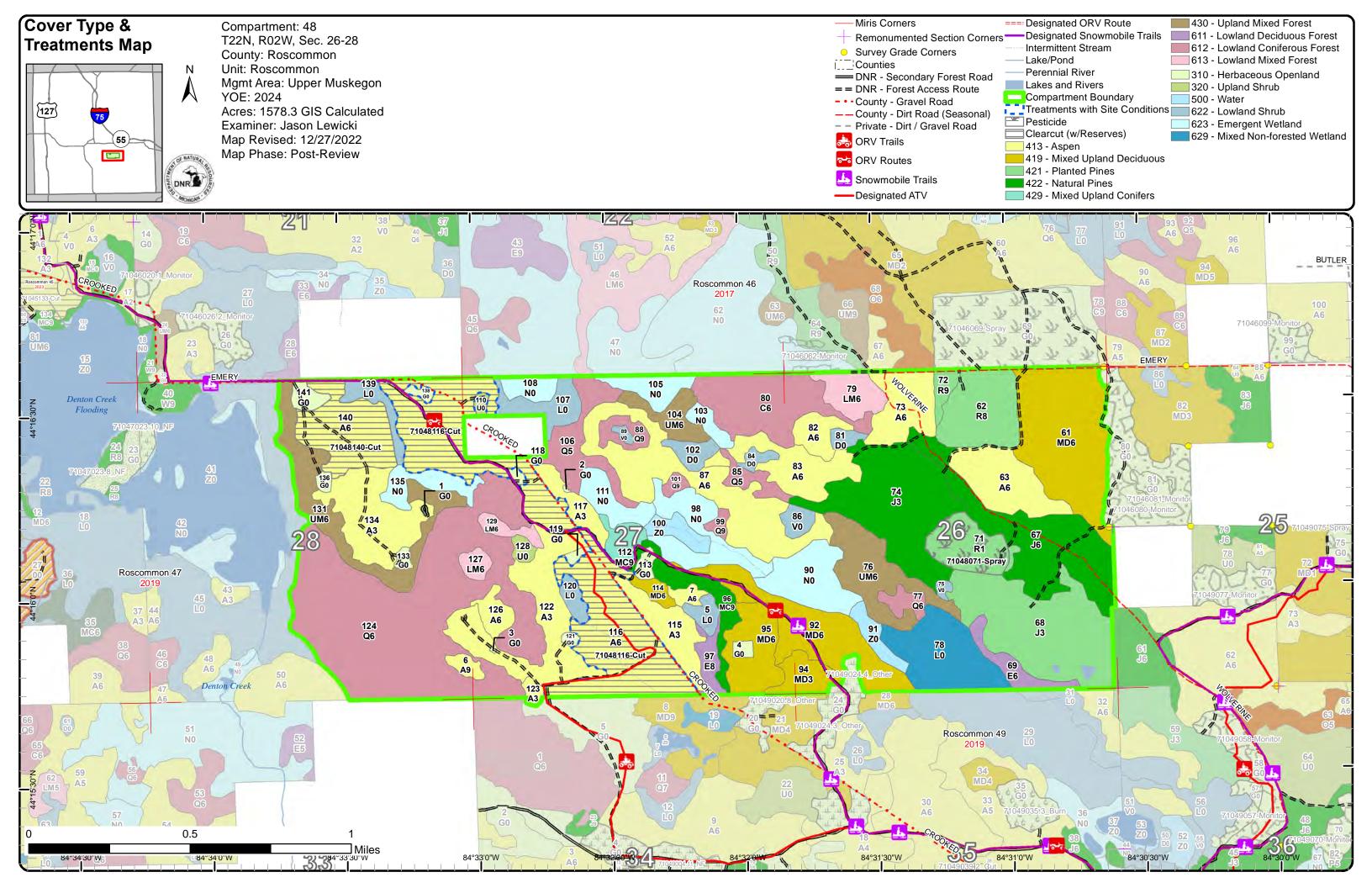
Additional Compartment Information:

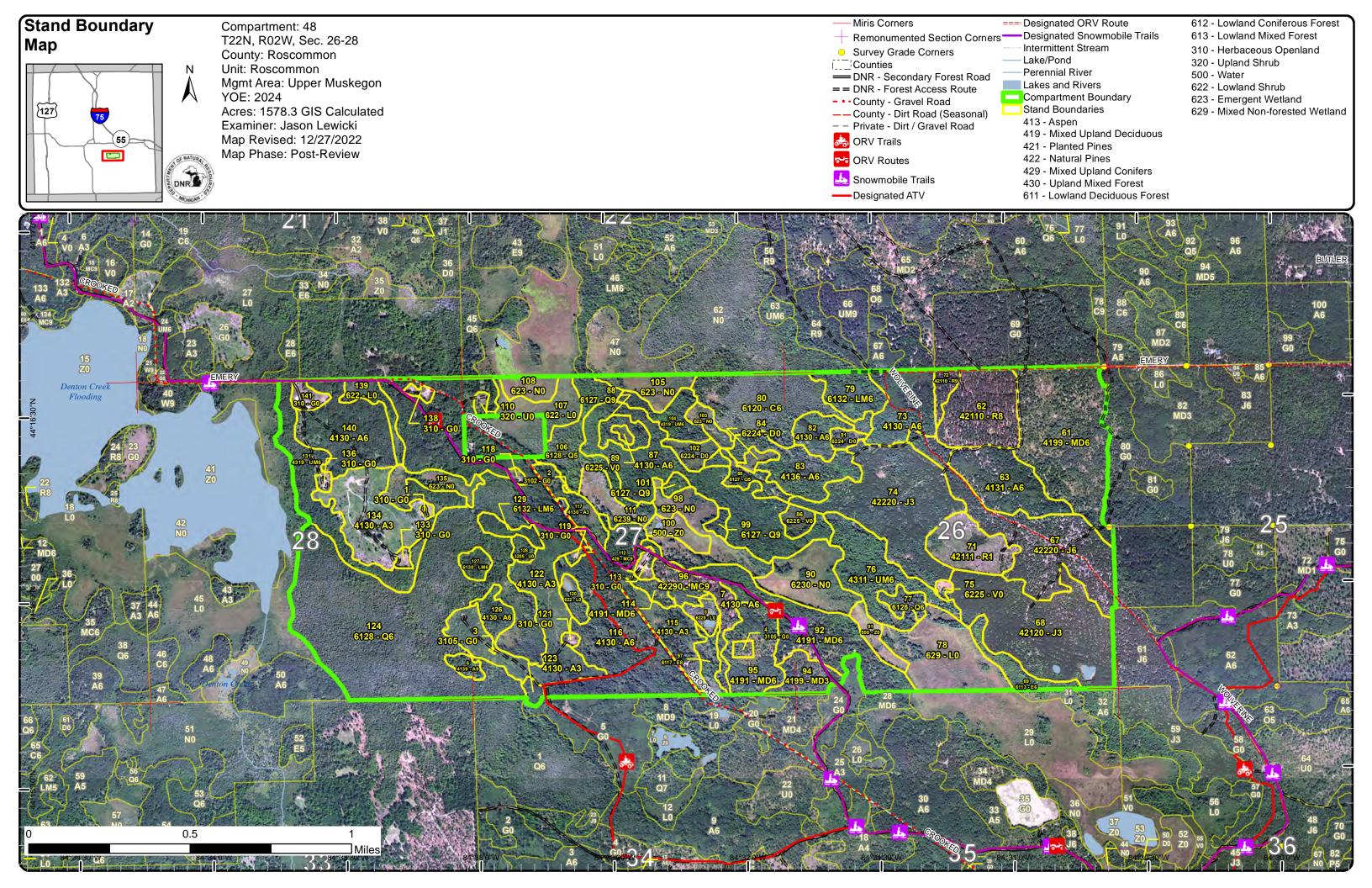
The following reports from the Inventory are attached:

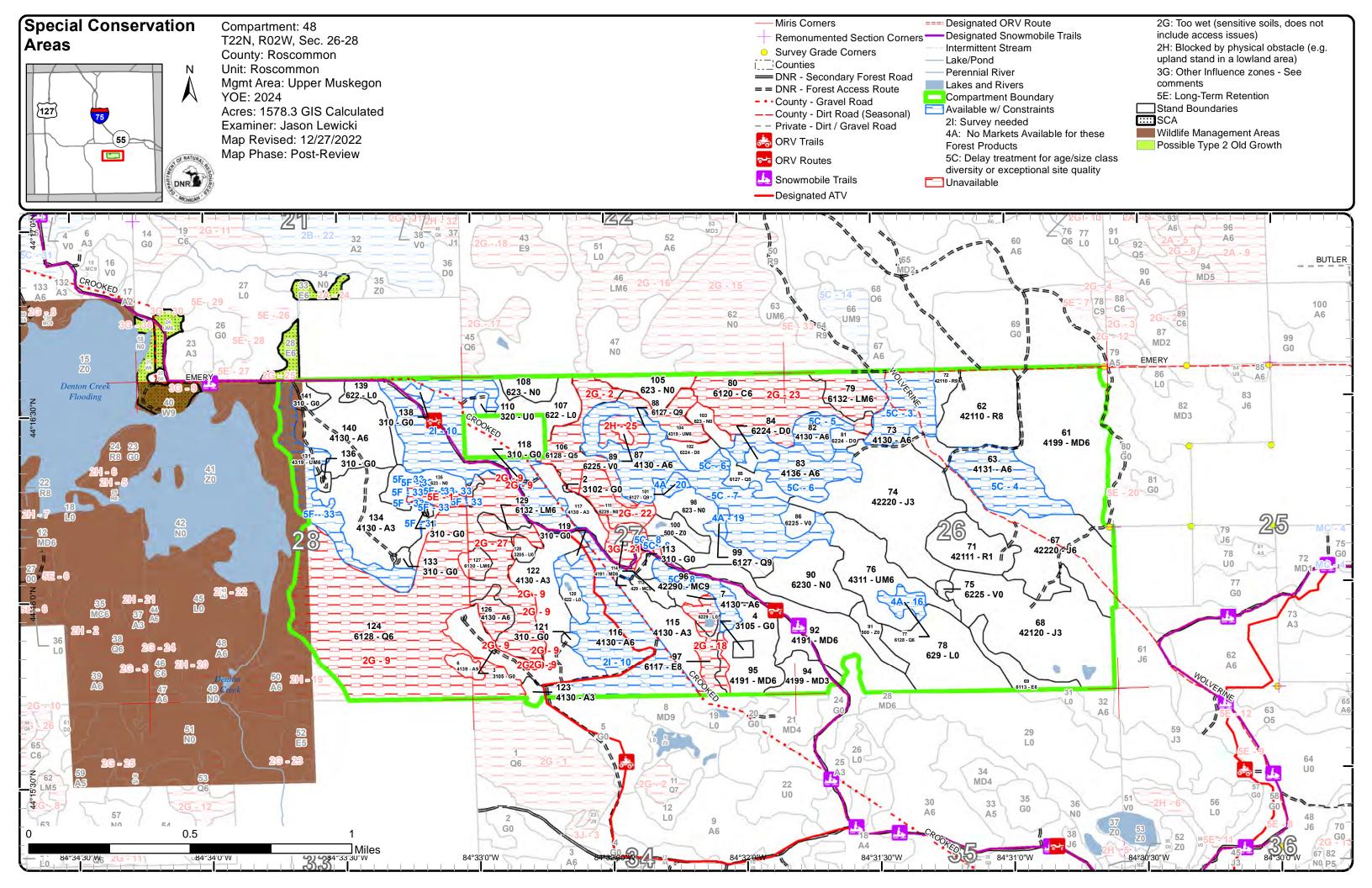
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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 48 Year of Entry 2024

Roscommon Mgt. Unit Jason Lewicki: Examiner



Age Class

	¥oc.	Kora C	3 / 8	2 / 4	A A	3 / 12	S S	3/8	\$ / 8	R. S.	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	3 /g	72,	Ø /&			OF A	gt Jres	A LOS
Aspen	0	70	51	0	3	300	38	0	4	0	0	0	0	0	0	0	0	0	466
Bog	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Cedar	0	0	0	0	0	0	0	0	0	0	0	46	0	0	0	0	0	0	46
Herbaceous Openland	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Jack Pine	0	0	0	146	0	0	0	0	0	0	0	0	0	0	0	0	0	62	208
Lowland Conifers	0	0	0	0	0	0	0	0	8	0	0	218	3	0	0	0	0	13	241
Lowland Deciduous	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	7	17
Lowland Mixed Forest	0	0	0	0	0	10	0	0	0	0	0	15	0	0	0	0	0	0	25
Lowland Shrub	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74
Marsh	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	104
Mixed Upland Deciduous	0	0	0	37	4	120	0	0	0	0	0	0	0	0	0	0	0	0	161
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	16
Red Pine	0	23	0	0	0	0	0	39	0	0	0	0	0	0	0	0	0	0	62
Treed Bog	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9
Upland Mixed Forest	0	0	0	0	0	88	0	0	0	0	0	0	0	0	0	0	0	0	88
Upland Shrub	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Water	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Total	240	93	51	183	7	529	38	39	12	0	0	296	3	0	0	0	0	91	1579



Report 2 – Treatment Summary

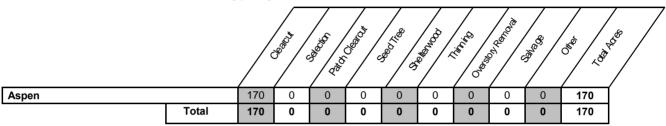
Roscommon Mgt. Unit Year of Entry: 2024

Acres of Harvest

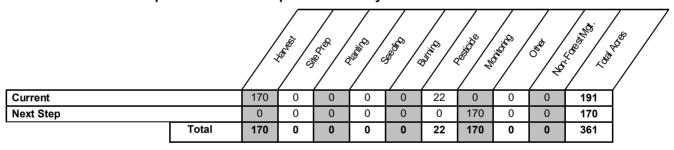
Compartment 48
Total Compartment Acres: 1,578

Commercial Harvest - 38 Harvests with Site Condition - 131 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



S t a n

d

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

Approved Treatments:

71 71048071-21.6 42111 - Planted Sapling Immatu Pesticide **ERROR** 4211 - Planted Even-Aged No Red Pine Spray Red Pine, Mixed Poor re

Deciduous

Prescription Specs:

Next Step Treatments:

Acceptable red pine 80% FTG

Regen:

Other Percent to Treat = 100% Comment:

Site Condition:

Proposed Start Date: 1 /1 /2023

116 71048116-Cut 131.4 4130 - Aspen Poletimber 49 81-110 Harvest Clearcut with 413 - Aspen Even-Aged No Well Retention

Weil

<u>Prescription</u> Clearcut stand with a 2" spec. Leave islands of retention preferably with a pine component present. Leave a buffer/retention along the bog <u>Specs:</u> edge. Apply drumming log specs to increase grouse habitat. Snowmobile and orv trail present. Protect with appropriate specs. Survey

needed on the north end along private.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen at fully stocked levels.

Regen:

Other Comment:

Site Condition: Survey Needed

Proposed Start Date: 10/1 /2023

140 71048140-Cut 38.1 4130 - Aspen Poletimber 58 81-110 Harvest Clearcut with 413 - Aspen Even-Aged No

Well Retention

Prescription Clearcut stand with a 2" spec and regenerate aspen. Leave blowdown areas out of the sale as well as some retention possibly along the east

Specs: swamp line. Apply drumming log spec and place some brush piles along swamp edges to increase grouse and hare habitat.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen at fully stocked levels.

Regen:

Other Comment:

Site Condition:

Proposed Start Date: 10/1 /2023

Total Treatment 191.1 Acreage Proposed:

Compartment: 48

Roscommon Mgt. Unit

Jason Lewicki : Examiner Year of Entry: 2024

Availa	ability for	Managemer	nt									
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Cond	ditions	S			
Acres	Available	With Condition	Not Available		21	4A	5C	5F	2G	2H	3G	5E
465	168	289	8	Aspen	131	0	157		8			0
8	8	0	0	Bog								
46	0	0	46	Cedar					46			
20	20	0	0	Herbaceous Openland					0			
208	208	0	0	Jack Pine								
241	8	11	222	Lowland Conifers		11			215	7		0
18	10	0	7	Lowland Deciduous					7			
25	1	0	24	Lowland Mixed Forest					24			
74	68	0	5	Lowland Shrub					5			
104	90	0	14	Marsh		0			14			0
161	161	0	0	Mixed Upland Deciduous								
16	0	11	5	Natural Mixed Pines			11		3		2	
62	62	0	0	Red Pine								
13	13	0	0	Treed Bog					0			
9	0	0	9	Upland Conifers					0		9	
88	40	30	18	Upland Mixed Forest		0		30	12			6
5	5	0	0	Upland Shrub					0			
15	15	0	0	Water					0			
1,578	878	341	359	Total Forested Acres	131	11	169	30	336	7	11	6
	56%	22%	23%	Relative Percent								

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

y Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
5E: Long-Term Retention	6	Unspecified	Unspecified	Unspecified	Unspecified
	•	5E: Long-Term Retention 6	5E: Long-Term Retention 6 Unspecified	5E: Long-Term Retention 6 Unspecified Unspecified	5E: Long-Term Retention 6 Unspecified Unspecified Unspecified

Report 4 – Site Conditions

Roscommon Mgt. Unit

Jason Lewicki : Examiner

2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	37	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	31	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	28	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Roscommon Mgt. Unit

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7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	64	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
8	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
9	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	150	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
10	Available	2I: Survey needed	131	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
16	Available	4A: No Markets Available for these Forest Products	6	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
18	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	16	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

Report 4 – Site Conditions

Roscommon Mgt. Unit

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19	Available	4A: No Markets Available for these Forest Products	3	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
20	Available	4A: No Markets Available for these Forest Products	3	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
21	Unavailable	3G: Other Influence zones - See comments	11	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
22	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	13	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
23	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	61	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
25	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						

Report 4 - Site Conditions

Roscommon Mgt. Unit

Compartment: 48 Year of Entry: 2024 Jason Lewicki: Examiner

27	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	oes not include				Unspecified
С	omments:						
33	Available	5F: Evaluated for Forest Health Considerations	30	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						

Terrain is transition zone between upland to the east and lowland to the west and south, Part of this stand was recently cut in 2015, rest of stand has enough aspen that it should regenerate to aspen if held and cut in 10 years with Stand #51, stand is still fairly young yet

12/27/2022 3:47:19 PM - Page 5 of 5 TONELLOM1 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				

Roscommon Mgt. Unit Compartment: 48





Report 6 - EXISTING SPECIAL CONSERVATION AREA DETAILS

* 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 Type Area	Description	HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA Type 1 and Type 2 Old Growth	forest, or primeval forest) is an area of forest exhibits unique ecological features related to forests are of natural origin. They may be dominate	est, ancient forest, virgin st that has few or no signs of human disturbance and that o age, composition and associated structure. Old growth ad by late successional forest species (i.e. sugar maple and mple of a stand dominated by long-lived early- or mid-seral



Stand	d Level 4 Co	ver Type		Size De	ensity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
1	310 - Herbace	eous Open	land	Nonsto	ocked	0.4	0	Unspecified	No		DEQ website shows wellsite being a few hundred north of this site but it is believed to be here. permit #37227. Updated stand data to not "managed oil/gas". Muskegon Development is not responsible for any additional surface restoration. R Merrick
2	3102 -	- Grass		Nonsto	ocked	0.2		Unspecified			Permit #36308. Active oil and gas
3	3105 - Mixed Up	oland Herba	aceous	Nonsto	ocked	0.1		Unspecified			Permit #37272. Oil and gas production. Site was not field checked due to field restrictions of 2020. Site may actual be north of here along 2track. This is where DEQ site shows it
4	3105 - Mixed Up	land Herba	aceous	Nonsto	ocked	2.0	0	Unspecified			DEQ data shows active oil and gas site. Permit #36685
5	6229 - Mixed	lowland sh	nrub	Nonsto	ocked	5.4	0		No		
6	4139 - Aspen, N	Mixed Deci	duous	Sawtimb	er Well	3.8	75	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
	White Pine	10	Log/Pole	10		Ва	ılsam Fir	Medium	Variable	Sapling	
	Red Maple	20	Pole/Log	8		W	hite Pine	Low	Variable	Sapling	
	Balsam Fir	5	Pole	6							
	Paper Birch	10	Pole	5							
	Quaking Aspen	55	Log/Pole	12	75						
7	4130 -	Aspen		Poletimb	er Well	3.4	49	81-110	N/A		Small stand of primarily quaking aspen poletimber.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	
	Quaking Aspen	95	Pole	8	49	Re	ed Maple	Low	10 - 20 feet	Sapling	
	White Pine	5	Pole	6		W	hite Pine	Low	Variable	Sapling	
61	4199 - Other Mixed	d Upland D	eciduous	Poletimb	er Well	73.1	49	1-50	N/A		Low quality oak and aspen stand. Some open areas are dominated by
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	cherry and grass. Some bigtooth aspen clones found mostly on the north end.Could possibly harvest the aspen and jack pine out of stand and leave
	Jack Pine	10	Pole	8		Black/Re	d (Hybrid) Oa	ak Low	5 - 10 feet	Sapling	all of the oak.
	Bigtooth Aspen	2	Pole	8		Pi	n Cherry	Medium	5 - 10 feet	Sapling	
Bla	ck/Red (Hybrid) Oak	35	Pole/Sapling	g 6	49						-
	Quaking Aspen	28	Pole	6	49						
	Pin Cherry	25	Sapling	2							
62	42110 - Plar	nted Red P	ine S	awtimbe	r Mediui	m 34.2	64	81-110	N/A		Thinned in 1997 by removing hardwoods and jack pine. Second thinning in Summer 2016 to 100 SF
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	Julilile: 2010 to 100 3F
	Red Pine	98	Log	13	64	Black/Re	ed (Hybrid) Oa	ak Medium	5 - 10 feet	Sapling	
	Bigtooth Aspen	2	Sapling/Pole	e 2		Pi	n Cherry	Medium	Variable	Sapling	
						Ja	ack Pine	Low	5 - 10 feet	Sapling	

Roscommon Mgt. Unit



Stand	Level 4 Co	ver Type	:	Size De	nsity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
63	4131 - As	spen, Oak	P	oletimb	er Well	30.6	49	51-80	N/A		Low quality oak stand with pockets of aspen and scattered jack pine.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	opy Species	Density	Avg. Height	Size	
	Jack Pine	10	Pole	6		Wh	ite Oak	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	40	Pole	7	49	Black/Red	d (Hybrid) Oal	k Low	5 - 10 feet	Sapling	
Bla	ck/Red (Hybrid) Oak	50	Pole/Sapling	6	49	Pin	Cherry	Low	5 - 10 feet	Sapling	
67	42220 - Natu	ıral Jack P	ine P	oletimb	er Well	62.4	49	1-50	N/A		Natural jack pine stand. Needs another 10+ years to grow before
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	opy Species	Density	Avg. Height	Size	harvesting again.
Bla	ck/Red (Hybrid) Oak	18	Pole/Sapling	6		Black/Red	d (Hybrid) Oal	k Low	Variable	Sapling	
	White Pine	2	Pole	5		Jac	ck Pine	Low	Variable	Sapling	
	Jack Pine	75	Pole	7	49	Pin	Cherry	Low	< 5 feet	Sapling	
	Quaking Aspen	5	Pole	6						ı	
68	42120 - Plan	ted Jack P	ine	Sapling	ı Well	76.3	26	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	opy Species	Density	Avg. Height	Size	
Bla	ck/Red (Hybrid) Oak	5	Sapling	3		Pin	Cherry	Low	< 5 feet	Sapling	
	Pin Cherry	5	Sapling	2							
	Jack Pine	90	Sapling/Pole	3	26						
69	6113 - Low	vland Maple	e P	oletimb	er Well	10.5	49	51-80	N/A		Primarily a red maple poletimber stand along a swamp edge. Operable for
69	6113 - Low Canopy Species	•	e P		er Well		49 nopy Species		N/A Avg. Height	Size	Primarily a red maple poletimber stand along a swamp edge. Operable for the most part. Small pocket of pine on the very north end.
69		•				Sub-Car				Size Sapling	
69	Canopy Species	% Cover	Size Class	DBF	Age	Sub-Car Wh	opy Species	Density	Avg. Height		
	Canopy Species Red Maple	% Cover	Size Class	DB F	Age 49	Sub-Car Wh	nopy Species ite Pine	Density Low	Avg. Height Variable	Sapling	
	Canopy Species Red Maple Quaking Aspen	% Cover 80 10	Size Class Pole Pole	DB- 6 5	Age 49	Sub-Car Wh	nopy Species ite Pine	Density Low	Avg. Height Variable	Sapling	
	Canopy Species Red Maple Quaking Aspen ck/Red (Hybrid) Oak White Pine 42111 - Planted	% Cover 80 10 5	Size Class Pole Pole Pole/Sapling Pole	DBH 6 5 5	49 49	Sub-Car Wh	nopy Species ite Pine	Density Low	Avg. Height Variable	Sapling	the most part. Small pocket of pine on the very north end. Wildfire May 2001 Two fire skips/retention pockets about 1 acre each.
Bla	Canopy Species Red Maple Quaking Aspen ck/Red (Hybrid) Oak White Pine 42111 - Planted	% Cover 80 10 5 5 Red Pine, duous	Size Class Pole Pole Pole/Sapling Pole	5 5 8 Sapling	49 49	Sub-Car Wh Red	nopy Species ite Pine d Maple	Low Medium	Avg. Height Variable 10 - 20 feet	Sapling	the most part. Small pocket of pine on the very north end. Wildfire May 2001 Two fire skips/retention pockets about 1 acre each. Trenched in 2013 and planted to red pine in 2014
Bla	Canopy Species Red Maple Quaking Aspen ck/Red (Hybrid) Oak White Pine 42111 - Planted Decid	% Cover 80 10 5 5 Red Pine, duous	Size Class Pole Pole Pole/Sapling Pole Mixed	5 5 8 Sapling	49 49 Poor	Sub-Car Wh Red	nopy Species ite Pine d Maple	Low Medium	Avg. Height Variable 10 - 20 feet	Sapling	Wildfire May 2001 Two fire skips/retention pockets about 1 acre each. Trenched in 2013 and planted to red pine in 2014 Prescribed aerial herbicide release of red pine from cherry competition.
Bla	Canopy Species Red Maple Quaking Aspen ck/Red (Hybrid) Oak White Pine 42111 - Planted Decid Canopy Species	% Cover 80 10 5 5 8ed Pine, duous % Cover	Size Class Pole Pole Pole/Sapling Pole Mixed Size Class	DBH 6 5 5 8 Sapling	49 49 Poor	Sub-Car Wh Red	nopy Species ite Pine d Maple	Low Medium	Avg. Height Variable 10 - 20 feet	Sapling	the most part. Small pocket of pine on the very north end. Wildfire May 2001 Two fire skips/retention pockets about 1 acre each. Trenched in 2013 and planted to red pine in 2014
Bla	Canopy Species Red Maple Quaking Aspen ck/Red (Hybrid) Oak White Pine 42111 - Planted Decid Canopy Species Red Pine	% Cover	Size Class Pole Pole Pole/Sapling Pole Mixed Size Class Sapling	DBH 6 5 5 8 8 Sapling DBH 1	49 49 Poor	Sub-Car Wh Red	nopy Species ite Pine d Maple	Low Medium	Avg. Height Variable 10 - 20 feet	Sapling	Wildfire May 2001 Two fire skips/retention pockets about 1 acre each. Trenched in 2013 and planted to red pine in 2014 Prescribed aerial herbicide release of red pine from cherry competition.
Bla	Canopy Species Red Maple Quaking Aspen ck/Red (Hybrid) Oak White Pine 42111 - Planted Decid Canopy Species Red Pine Pin Cherry	% Cover	Pole Pole/Sapling Pole Mixed Size Class Sapling Sapling Sapling	DBH 6 5 5 8 Sapling DBH 1 2	Age	Sub-Car Wh Red	nopy Species ite Pine d Maple	Low Medium	Avg. Height Variable 10 - 20 feet	Sapling	Wildfire May 2001 Two fire skips/retention pockets about 1 acre each. Trenched in 2013 and planted to red pine in 2014 Prescribed aerial herbicide release of red pine from cherry competition. Spray when Stand 69 is aerial release sprayed. Stand was thinned in1997. For some reason this area of the plantation has
71	Canopy Species Red Maple Quaking Aspen ck/Red (Hybrid) Oak White Pine 42111 - Planted Decid Canopy Species Red Pine Pin Cherry Jack Pine	80	Pole Pole/Sapling Pole Mixed Size Class Sapling Sapling Sapling	DBH	Age	Sub-Car Wh Rec 22.7	ite Pine d Maple	Density Low Medium Immature	Avg. Height Variable 10 - 20 feet N/A	Sapling	Wildfire May 2001 Two fire skips/retention pockets about 1 acre each. Trenched in 2013 and planted to red pine in 2014 Prescribed aerial herbicide release of red pine from cherry competition. Spray when Stand 69 is aerial release sprayed.
71 72	Canopy Species Red Maple Quaking Aspen ck/Red (Hybrid) Oak White Pine 42111 - Planted Decid Canopy Species Red Pine Pin Cherry Jack Pine 42110 - Planted	80	Pole Pole/Sapling Pole Mixed Size Class Sapling Sapling Sapling Sapling	DBH	Poor Age 8	Sub-Car Wh Rec 22.7	nopy Species ite Pine d Maple 8	Density Low Medium Immature	Avg. Height Variable 10 - 20 feet N/A	Sapling Sapling	Wildfire May 2001 Two fire skips/retention pockets about 1 acre each. Trenched in 2013 and planted to red pine in 2014 Prescribed aerial herbicide release of red pine from cherry competition. Spray when Stand 69 is aerial release sprayed. Stand was thinned in1997. For some reason this area of the plantation has



Stand	Level 4 Co	over Type	;	Size De	ensity	Acres	Stand Age I	BA Range	Managed S	ite	General Comments			
73	4130	- Aspen	Р	oletimb	er Well	25.1	49	51-80	N/A		Most of the white pine and balsam are found in the sw part of the stand.			
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Aspen is primarily quaking there and bigtooth elsewhere. Try to hold for ter more years.			
Blad	ck/Red (Hybrid) Oak	5	Pole	6		Black/Red	d (Hybrid) Oak	Medium	5 - 10 feet	Sapling	more yours.			
	Balsam Fir	5	Pole/Sapling	5		Bal	sam Fir	Low	Variable	Sapling				
	White Pine	8	Pole	8		Pin	Cherry	Low	5 - 10 feet	Sapling				
	Red Maple	5	Pole	5							_			
	Bigtooth Aspen	50	Pole	6	49									
	Quaking Aspen	27	Pole	5	49									
74	42220 - Nat	ural Jack P	ine	Sapling	g Well	69.5	28	Immature	N/A		Thick, natural jack pine regeneration mixed with a bit of oak and pin cherry.			
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Poletimber developing. High water table on the west edge of stand.			
Blad	ck/Red (Hybrid) Oak	10	Sapling/Pole	3		Bal	sam Fir	Low	Variable	Sapling				
	Jack Pine	75	Sapling/Pole	3	28	Pin	Cherry	Low	< 5 feet	Sapling				
	Pin Cherry	10	Sapling	3							1			
	White Pine	3	Pole/Log	8										
	Red Pine	2	Pole	6										
75	6225	5 - Bog		Nonsto	ocked	1.5	ι	Inspecified	No					
76	4311 - Pine	e, Aspen M	ix P	oletimb	er Well	34.8	49	51-80	N/A		Stand of quaking aspen with some pine and fir mixed in. Areas of lowland			
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Car	nopy Species	Density	Avg. Height	Size	mixed in. Areas dominated by pine and fir. Let grow another 10 years before harvesting.			
	Red Maple	15	Pole	5	49	Wh	ite Pine	Low	Variable	Sapling	bororo narvosting.			
	Quaking Aspen	30	Pole	6	49	Bal	sam Fir	Low	Variable	Sapling				
	Balsam Fir	15	Pole	5							-			
	Red Pine	5	Pole	8	49									
	White Pine	35	Log/Pole	10	49									
77	6128 - Lowland (Deci	Coniferous, iduous	Mixed P	oletimb	er Well	5.8	101 L	Jnspecified	N/A					
78	629 - Mixed nor	n-forested w	vetland	Nonsto	ocked	40.0	l	Jnspecified	No					

Compartment: 48
Year of Entry: 2024

OF NATURAL DING

Stand	and Level 4 Cover Type			Size D	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments	
79	6132 - Mixed Lowla				ber Well		101	111-140	N/A		2 aged going towards all aged, hardwoods appear to have beeen cut in 1972, rest of stand is 1920 YOO	
	Canopy Species	% Cover	Size Class	DB	H Age	Sub-Ca	nopy Species		Avg. Height	Size	1072, 1031 01 314114 13 1020 100	
No	orthern White Cedar	25	Pole/Log	8	101	Ba	alsam Fir	High	Variable	Sapling		
	Red Maple	15	Pole/Log	8	49							
	Paper Birch	15	Pole	6	49							
	Quaking Aspen	15	Pole	8	49							
	Balsam Fir	25	Pole	6	101							
	White Pine	5	Log/XLog	15	101							
80	6120 - Lov	wland Ceda	ır	Poletim	ber Well	45.6	101 l	Unspecified	N/A			
	Canopy Species	% Cover	Size Class	DB	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
No	orthern White Cedar	90	Pole	8	101	Ва	alsam Fir	Medium	Variable	Sapling		
	Paper Birch	10	Log	10						1	•	
81	6224 - 1	Freed Bog		Nons	tocked	3.4	l	Unspecified	No			
82	4130 - Aspen			Poletimber Well			49	51-80	N/A		Small hill of better quality aspen than the surrounding stands. Hold and	
	Canopy Species	% Cover	Size Class	DB	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	harvest in 10 years with surrounding aspen stands	
	Quaking Aspen	20	Pole	6	49	Pi	n Cherry	Medium	Variable	Sapling		
	Bigtooth Aspen	75	Pole	8	49	Ba	alsam Fir	Medium	Variable	Sapling		
	Balsam Fir	5	Pole	5						-	•	
83	4136 - Aspen	, Mixed Co	nifer	Poletim	ber Well	27.7	49	51-80	N/A		Primarily a quaking aspen stand mixed with pine and fir. Poor quality. Star needs 10 more years of growth.	
	Canopy Species	% Cover	Size Class	DB	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	needs to more years or growth.	
	White Pine	13	Pole	8		Black/Re	ed (Hybrid) Oal	c Low	Variable	Sapling		
	Red Pine	2	Log	12		Pi	n Cherry	Low	Variable	Tall Shrub		
Bla	ck/Red (Hybrid) Oak	20	Pole/Sapling	g 5	49	Ва	alsam Fir	Low	Variable	Sapling		
	Jack Pine	2	Pole	5							-	
	Quaking Aspen	48	Pole	5	49							
	Balsam Fir	15	Pole	5								
84	6224 - 1	Freed Bog		Nons	tocked	3.1	l	Unspecified	No			
85	6127 - Lo	wland Pine	P	oletimb	er Mediu	m 7.5	75	51-80	N/A			
	Canopy Species	% Cover	Size Class	DB	H Age		nopy Species	Density	Avg. Height	Size		
	White Pine	60	Pole/Log	8	75	Ва	alsam Fir	Low	Variable	Sapling		
	Black Spruce	15	Pole	6							-	
	Balsam Fir	10	Pole	6								
	Red Maple	15	Pole	6								



Stand	Level 4 Co	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
86	6225	- Bog		Nonsto	cked	5.2		Unspecified	No		
87	4130 -	- Aspen	F	Poletimb	er Well	64.4	49	81-110	N/A		Large stand of primarily quaking aspen. White pine Is found scattered and
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	along swamp edges. Aspen diameters are small for age. Recommended letting grow another 10 years before harvesting.
	Balsam Fir	2	Pole	6		Re	ed Maple	Medium	Variable	Sapling	Teaming great allowed to yours 20,000 has recalling.
	Bigtooth Aspen	2	Pole	6		Pi	n Cherry	Low	Variable	Tall Shrub	
	White Pine	15	Log/Pole	10		W	hite Pine	Low	Variable	Sapling	
	Red Pine	2	Log	12							
Bla	ck/Red (Hybrid) Oak	2	Pole	5	49						
	Quaking Aspen	67	Pole	6	49						
	Red Maple	10	Pole	6							
88	6127 - Lo	wland Pine		Sawtimb	er Well	6.7	101	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
	Black Spruce	20	Pole	8		Blad	ck Spruce	Medium	Variable	Sapling	
	Red Pine	5	Log	14		Re	ed Maple	Low	10 - 20 feet	Sapling	
	Jack Pine	2	Log/Pole	10							
	White Pine	73	Log/Pole	12	101						
89	6225	- Bog		Nonsto	cked	1.5		Unspecified	No		
90	6230 -	- Cattail		Nonsto	cked	27.1		Unspecified	No		
91	500 -	Water		Nonsto	cked	7.5		Unspecified	No		
92	4191 - Mixed Upla Co	and Deciduo nifer	ous with F	Poletimb	er Well	46.7	49	81-110	N/A		Mixed stand of maple, oak and pine. Aspen is found in pockets or clones and mostly in the north half of the stand.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
	Quaking Aspen	10	Pole	6	49	W	hite Pine	Low	Variable	Sapling	
Bla	ck/Red (Hybrid) Oak	15	Pole	5		Re	ed Maple	Low	Variable	Sapling	
	White Pine	25	Pole/Log	8		Black/Re	d (Hybrid) Oa	ak Low	Variable	Sapling	
	Bigtooth Aspen	10	Pole	7							
	Red Maple	40	Pole	6	49						
94	4199 - Other Mixed	d Upland D	eciduous	Sapling	Well	12.2	25	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
	Pin Cherry	64	Sapling/Pole	4	25	Pi	n Cherry	Low	< 5 feet	Sapling	
	Jack Pine	2	Sapling/Pole	4		Black/Re	d (Hybrid) Oa	ak Low	5 - 10 feet	Sapling	
Bla	ck/Red (Hybrid) Oak	34	Sapling/Pole	3		W	hite Pine	Low	Variable	Sapling	



Stand	Level 4 Co	ver Type	;	Size Dens	sity	Acres	Stand Age B	A Range	Managed S	ite	General Comments
95	4191 - Mixed Upla Cor	nd Decidu nifer	ous with F	Poletimber	Well	25.0	27	1-50	N/A		A mixed stand of primarily low quality oak and cherry. There are pockets of aspen and maple along with some scattered pine.
	Canopy Species	% Cover	Size Class	DBH A	\ge	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	White Pine	30	Pole	7		Piı	n Cherry	Medium	< 5 feet	Sapling	
	Quaking Aspen	5	Pole/Sapling	5	27	WI	hite Pine	Low	Variable	Sapling	
	Pin Cherry	30	Sapling/Pole	4		Black/Re	ed (Hybrid) Oak	Low	< 5 feet	Sapling	
Blad	ck/Red (Hybrid) Oak	35	Pole/Sapling	5	27						•
96	42290 - Natu	ral Mixed F	Pine S	Sawtimber	Well	16.5	101	81-110	N/A		Mixed pine stand.Stand was thinned summer 2016 to 90 SF.
	Canopy Species	% Cover	Size Class	DBH A	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
Blad	ck/Red (Hybrid) Oak	5	Log	12		WI	hite Pine	Medium	Variable	Sapling	
	White Pine	40	Log/Pole	12 1	101	Re	ed Maple	Low	< 5 feet	Sapling	
	Red Pine	55	Log/Pole	13 1	101	Bigto	ooth Aspen	Medium	5 - 10 feet	Sapling	
						Piı	n Cherry	Low	5 - 10 feet	Sapling	
97	6117 - Lowland E Conif	Deciduous, erous	Mixed Sa	wtimber M	ledium	7.4	101	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH A	\ge	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	50	Pole/Log	10 1	101	WI	hite Pine	Medium	Variable	Sapling	
	Paper Birch	5	Pole/Log	10							•
	Quaking Aspen	15	Pole/Log	11							
Blad	ck/Red (Hybrid) Oak	10	Log	13							
	White Pine	20	XLog	20 1	101						
98	623 - Emerg	gent Wetla	nd	Nonstock	ced	26.5	U	nspecified	No		
99		wland Pine	, S	Sawtimber		2.7	110	81-110	N/A		
	Canopy Species	% Cover		DBH A	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	White Pine	95	Log/XLog/Pole		110	WI	hite Pine	Medium	10 - 20 feet	Sapling	
	White Pine	5	Pole	6							
100	500 -	Water		Nonstock	æd	7.9			No		
101	6127 - Lov	wland Pine	; S	Sawtimber	Well	2.5	101	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH A	Age		nopy Species	Density	Avg. Height	Size	
	Jack Pine	2	Log/Pole	10			ed Maple	Medium	10 - 20 feet	Sapling	
	Red Maple	3	Pole	6		WI	hite Pine	Low	Variable	Sapling	
	Red Pine	95	Log/Pole	12 1	101			<u> </u>			
102	6224 - T	reed Bog		Nonstock	ced	6.5	U	nspecified	No		



Stand	Level 4 Cover Type		;	Size Density			Stand Age BA Range Unspecified		Managed S	Site	General Comments
103	623 - Emergent Wetland			Nonstocked		5.6			d No		
104	4319 - Mixed	Upland Fo	orest F	Poletimb	er Well	12.7	49	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	
	Red Maple	45	Pole/Sapling	5	49	Ва	Isam Fir	Low	Variable	Sapling	
	Balsam Fir	20	Pole/Sapling	5							
	White Pine	35	Pole/Log	8							
105	623 - Emerç	gent Wetla	ind	Nonsto	ocked	11.9		Unspecified	No		
106	6 6128 - Lowland Coniferou Deciduous		, Mixed Po	letimbei	Medium	24.0	101	51-80	N/A		stand is very wet wtih tag alder thru-out most of stand in the understory hardwoods are declining but swamp conifers are taking over, lots of
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	blowdown on ground, stand is cut by numerous tag alder swales/pocke and a free flowing stream
	Balsam Poplar	5	Pole	8		Ва	lsam Fir	Low	Variable	Sapling	and a nee nowing stream
	Balsam Fir	40	Pole	5	101	Ta	ag Alder	Medium	Variable	Tall Shrub	
Nor	thern White Cedar	35	Pole	6							
107	622 - Low	rland Shrul)	Nonsto	cked	14.7		Unspecified	No		
108	623 - Emerç	gent Wetla	ınd	Nonsto	cked	7.6		Unspecified	No		
110	320 - Upl	and Shrub	,	Nonsto	cked	1.8		Unspecified	No		
111	6239 - Mixed Er	mergent W	etland	Nonsto	cked	12.8	0		No		
112	429 - Mixed U	Jpland Cor	nifers S	Sawtimb	er Well	8.7	101	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
	Red Maple	20	Pole	6		Wh	nite Pine	High	Variable	Pole	
Nor	thern White Cedar	10	Pole	6		Ва	Isam Fir	Low	Variable	Sapling	
	White Pine	53	Log/Pole/XLog	g 10	101	Ta	ag Alder	Low	5 - 10 feet	Tall Shrub	
	Red Pine	2	Log	14	101	Re	d Maple	Low	Variable	Pole	
	Hemlock	5	Pole	8			-				1
-	Quaking Aspen	10	Pole	6							
113	310 - Herbace	eous Oper	ıland	Nonsto	cked	3.0		Unspecified	No		permit #36684. Stand updated to not "managed oil/gas". Oryx Energy not responsible for any additional surface restoration. R Merrick



Stand	Stand Level 4 Co		ver Type		Size Density		Stand Age BA Range		Managed Site		General Comments
114	4191 - Mixed Upla Co	and Decidu nifer	ous with	Poletimb	er Well	4.3	35	51-80	N/A		Low quality, low density aspen, oak and white pine stand. Wild fire burned this stand in 1987 per old notes off of oil wells.
(Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
C	Quaking Aspen	35	Pole	5	35	Pi	n Cherry	Medium	5 - 10 feet	Sapling	
Black	/Red (Hybrid) Oak	25	Pole/Sapling	5	35						-
	White Pine	35	Pole	6							
	Jack Pine	5	Pole/Sapling	g 5							
115	4130 -	- Aspen		Saplin	g Well	20.1	9	Immature	N/A		
(Canopy Species	% Cover	Size Class	DBI	H Age						
	Bigtooth Aspen	70	Sapling	1	9						
Black	/Red (Hybrid) Oak	10	Pole	6							
	Quaking Aspen	20	Sapling	1							
116	4130 -	- Aspen		Poletimb	er Well	131.4	131.4 49		N/A		Large, Mature, mixed aspen stand. Heavier to bigtooth on northern end.
(Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Some scattered pine and oak.
C	Quaking Aspen	44	Pole/Log	8	49	Pi	n Cherry	Medium	< 5 feet	Sapling	
	Balsam Fir	2	Pole	6	49	Ba	alsam Fir	Low	Variable	Sapling	
Black	/Red (Hybrid) Oak	5	Pole/Log	8		Black/Re	ed (Hybrid) Oa	k Low	5 - 10 feet	Sapling	
	Red Maple	10	Pole/Log	8	49	Re	ed Maple	Low	10 - 20 feet	Sapling	
	White Pine	8	Log/Pole	10		W	hite Pine	Low	Variable	Sapling	
	Red Pine	1	Log	14							
В	Sigtooth Aspen	30	Log/Pole	10	49						
117	4130 -	- Aspen		Saplin	g Well	11.0	8	Immature	N/A		Young aspen sapling stand with some scattered oak poletimber left from before the harvest.
(Canopy Species	% Cover	Size Class	DBI	H Age						before the harvest.
	Red Maple	5	Sapling	1							
	Black Cherry	2	Sapling	1							
Black	/Red (Hybrid) Oak	5	Pole	6							
C	Quaking Aspen	88	Sapling	1	8						
118	310 - Herbace	paceous Openland Nonstocked			1.3	1.3 Unspecified				permit #36269. Stand has been updated not "managed oil/gas". Muskegon Development is no longer responsible for any additional restoration of well pad. R Merrick	
119	310 - Herbace	eous Open	land	Nonstocked		1.5	1.5 U				permit#35970
120	622 - Low	owland Shrub Nonstocked			5.1	5.1 Unspecified		No			
121	121 310 - Herbaceous Openland		Nonst	ocked	1.3 Uı		Unspecified	No		permit #36309. Stand modified to not "managed oil/gas". Muskegon Development is no longer responsible for any additional surface restoration. R Merrick	



Stand	Level 4 Co	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
122	4130	- Aspen		Sapling	y Well	50.6	10	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age						
	Quaking Aspen	10	Sapling	1							
	Black Cherry	2	Sapling	1							
	Bigtooth Aspen	78	Sapling	1	10						
	Red Maple	5	Sapling	1							
Blad	ck/Red (Hybrid) Oak	5	Sapling/Pole	e 3							
123	4130	- Aspen		Sapling	y Well	2.7	32	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	
	Quaking Aspen	85	Sapling/Pole	э 3	32	Pi	n Cherry	Medium	5 - 10 feet	Sapling	
Blad	ck/Red (Hybrid) Oak	15	Sapling/Pole	e 3							-
124	6128 - Lowland Dec	Coniferous,	Mixed	Poletimb	er Well	191.6	101	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	
	Red Maple	20	Pole/Log	8		Ta	ag Alder	Low	5 - 10 feet	Tall Shrub	
	Black Spruce	20	Pole	6		Ва	alsam Fir	Medium	Variable	Sapling	
No	rthern White Cedar	45	Pole/Log	8	101						
	Balsam Fir	5	Pole	6							
	Paper Birch	10	Pole	5							
126	4130	- Aspen	Poletimber Well		7.5	49	51-80	N/A		Primarily a bigtooth aspen stand with balsam fir. Some wet pockets but	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	overall operable.
	Bigtooth Aspen	90	Pole	7	49	Ва	alsam Fir	Medium	Variable	Sapling	
	Red Maple	5	Pole	6		Pi	n Cherry	Low	5 - 10 feet	Sapling	
	Balsam Fir	5	Pole	5							-
127	6130 - Fir, <i>i</i>	Aspen, Mar	ole	Poletimb	er Well	4.8	49	Unspecified	N/A		lowland aspen stand with BF encroaching in understory, surrounded by very wet swamp, could be cut when frozen but access is a problem
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	wet swamp, could be cut when nozen but access is a problem
	Quaking Aspen	50	Pole	6	49	Ва	alsam Fir	Medium	Variable	Sapling	
	Balsam Fir	50	Pole	4	49						-
128	3205 - Mixed	l Upland Sh	nrub	Nonsto	ocked	3.1		Unspecified	No		uplnad brush with scattered TA,oak, and RM saps/poles
129	6132 - Mixed Lowla	and Forest v	with Cedar	Cedar Poletimber Well		5.5	49	51-80	N/A		The east end is upland aspen island/peninsula surrounded by swamp, west end is lowland aspen with balsam fir and a few NWC, both sections of the
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	stand are operable (west end if frozen) but volumes would be low and
	Quaking Aspen	50	Pole	6	49	Ва	alsam Fir	Medium	Variable	Sapling	access is difficult due to the surrounding swamp
	Balsam Fir	30	Pole	5							
No	rthern White Cedar	20	Pole	5							



Stand	nd Level 4 Cover T			Size Density		Acres	Stand Age BA Range		Managed S	ite	General Comments
131	4319 - Mixed	4319 - Mixed Upland Forest				40.4	49	81-110	N/A		Primarily a quaking aspen and balsam fir strip between high and low ground. Multiple wet areas within stand. Stand creates a nice travel/cove
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Can	opy Species	s Density	Avg. Height	Size	corridor for wildlife.
	Balsam Fir	45	Pole	6	49		sam Fir	Medium	Variable	Sapling	
	White Pine	5	Pole	8		Whi	ite Pine	Low	Variable	Sapling	
	Red Maple	15	Pole/Log	8	49						
	Quaking Aspen	30	Pole	6	49						
	Bigtooth Aspen	5	Pole/Log	9							
133	310 - Herbaceous Openland			Nonsto	ocked	1.8		Unspecified	No		permit #36310. Stand updated to not "managed oil/gas". Muskegon Development is no longer responsible for any additional surface restoration of this well pad. R Merrick
134	4130	- Aspen		Sapling	g Well	38.7	7	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH	I Age						
	Pin Cherry	3	Sapling	1							
Blac	ck/Red (Hybrid) Oak	5	Log	14							
	Bigtooth Aspen	70	Sapling	1	7						
	Red Maple	2	Sapling	1							
	Quaking Aspen	20	Sapling	1	7						
135	623 - Emergent Wetland			Nonsto	ocked	12.5		Unspecified	No		
136	310 - Herbac	eous Open	land	Nonsto	ocked	1.7	l	Unspecified	No		permit #36775. Stand data modified to not "managed oil/gas". Muskegon Development is not responsible for any additional restoration of well pad. Merrick
138	310 - Herbac	eous Open	land	Nonsto	ocked	1.9	ı	Unspecified			Permit #36774
139	622 - Lov	vland Shrub)	Nonstocked		8.7			No		
140	4130	- Aspen		Poletimb	er Well	38.1	58	81-110	N/A		Mature quaking aspen stand with some bigtooth and a few scattered pine.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Can	opy Species	s Density	Avg. Height	Size	A few areas of storm blow down especially on the north end from a few years ago. Those areas already have aspen regeneration within them and
	Bigtooth Aspen	10	Log/Pole		58		sam Fir	Medium	Variable	Sapling	exhibit large amounts of CWD.
	Quaking Aspen	87	Pole	6	58	Black/Red	I (Hybrid) Oa	k Low	Variable	Sapling	
	White Pine	2	Log	12		Pin	Cherry	Medium	5 - 10 feet	Sapling	
	Balsam Fir	1	Pole	6						3	1
141	310 - Herbac	Nonsto	ocked	4.8	4.8 Un		No		Permit #36776. Stand data modified to no "managed oil/gas". Muskegon Development is no longer responsible for any additional surface restoration - R Merrick		