

## **Compartment Review Presentation**

**Roscommon Forest Management Unit** 

Compartment 71020 Entry Year 2020 Acreage: 3,186

**County Roscommon** 

Management Area: Upper Muskegon

Revision Date: 2018-08-06

Stand Examiner: Dale Ekdom

**Legal Description:** 

T21N R03W Sections 20, 29, 30 - 33

### **Identified Planning Goals:**

Vegetation management in the Upper Muskegon management area (MA) 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:

Terrain is mostly level to gently rolling glacial outwash plain. Soils on the upland areas are Grayling, Rubicon, and Roselawn sands. Soils in the potholes, drainages, and swamps are Rifle peat and Houghton muck.

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

This compartment is 100% state land and is surrounded by state land on 3 sides. Most of the property to the south is private property but there is some state land ownership south of Sections 31 and 33 in Clare County.

### **Unique Natural Features:**

Rich conifer swamp and wet meadow communities recorded in the compartment. Kirtlands warbler and secretive locust element occurences recorded in adjacent compartments.

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

None known or detected during fieldwork. Good potential for all three in the compartment especially along Townline Creek.

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

None

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

Townline Creek is a Type 1 cold-water trout stream. It flows on the west edge of the compartment and into Section 31. There is also an un-named tributary flowing from the south into Townline Creek in Section 31 from a large beaver flooding/wetland complex.

## Wildlife Habitat Considerations:

The compartment contains a rich conifer swamp in the central lower portion, recognized by MNFI. Adjacent to this swamp is a wet meadow, also recognized by MNFI. This area maintains high deer numbers that winter in the swamp complexes along Townline Creek. Maintain and expand aspen stands for grouse and woodcock when opportunistic. Maintain ecosystem diversity in the compartment via habitat manipulation to benefit game species such as deer, bear, grouse, snowshoe hare, and turkeys as well as non-game species.

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

Active sand/gravel pits are not located nearby, and sand & gravel potential within the compartment appears to be limited. The compartment is within the Headquarters oil field, which has been producing oil from Devonian formations since the 1940s. Much of the state-owned mineral rights within the compartment are currently leased. The W/2 of Sec 33 and parcels outside the compartment are currently nominated for the May 2018 oil & gas lease auction. There is no known metallic mineral potential in this part of the state.

### **Vehicle Access:**

Vehicle access to upland areas is good via county roads, forest two-tracks, numerous fire breaks, recreational trails, and oil and gas rights-of-ways. However, large areas are inaccessible due to low, wet terrain and drainages.

### **Survey Needs:**

None needed at this time

## **Recreational Facilities and Opportunities:**

Snowmobile Trail. ORV trail. ORV route

#### **Fire Protection:**

There are large areas of this compartment which are higher hazard pine fuel types and much of this compartment has an extensive wildland-urban interface due to the oil and gas development in the area. This compartment is in the Zone 4 Fire Dispatch Area and a large portion of it is in a designated "No-Plow" zone.

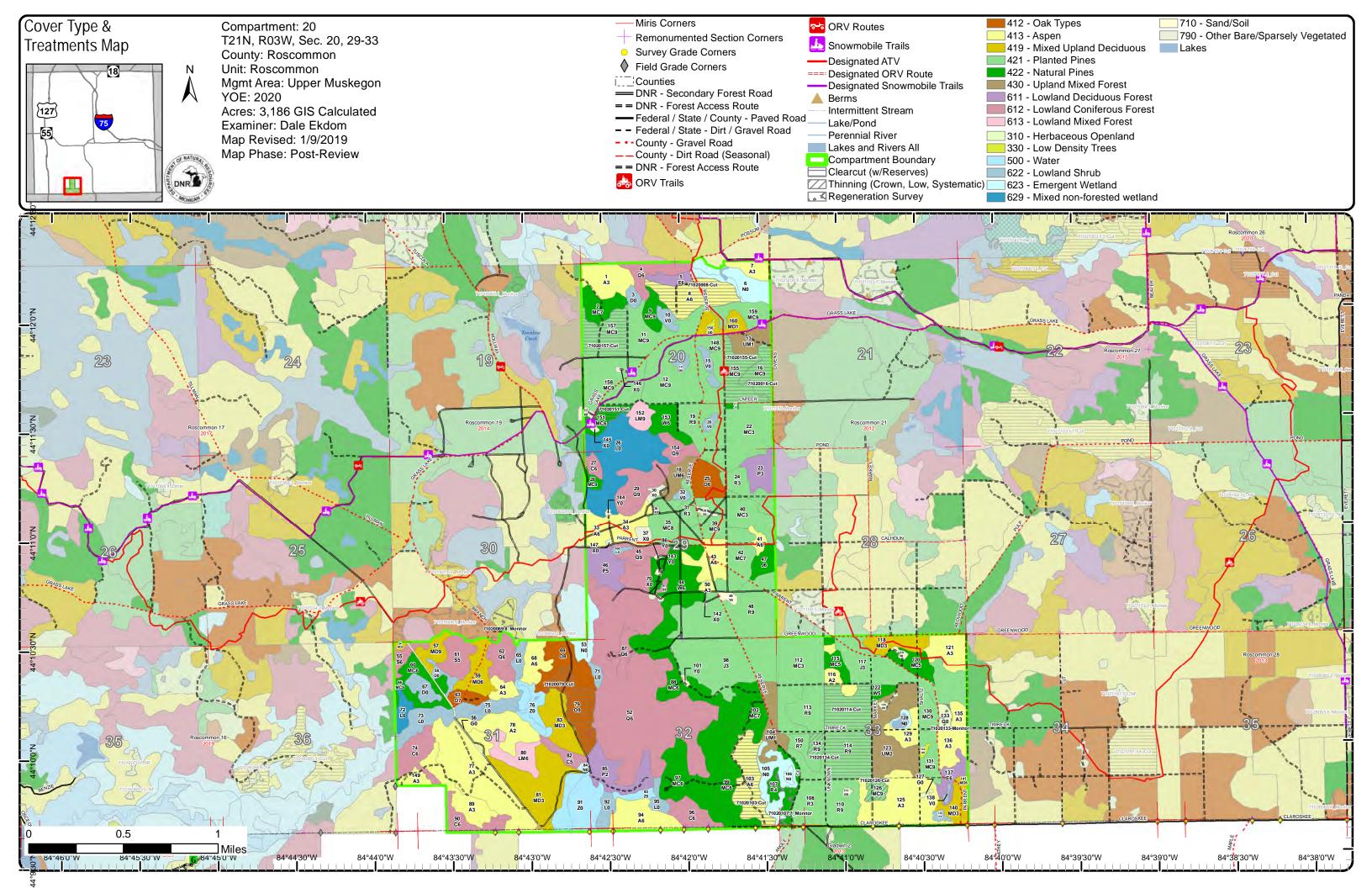
### **Additional Compartment Information:**

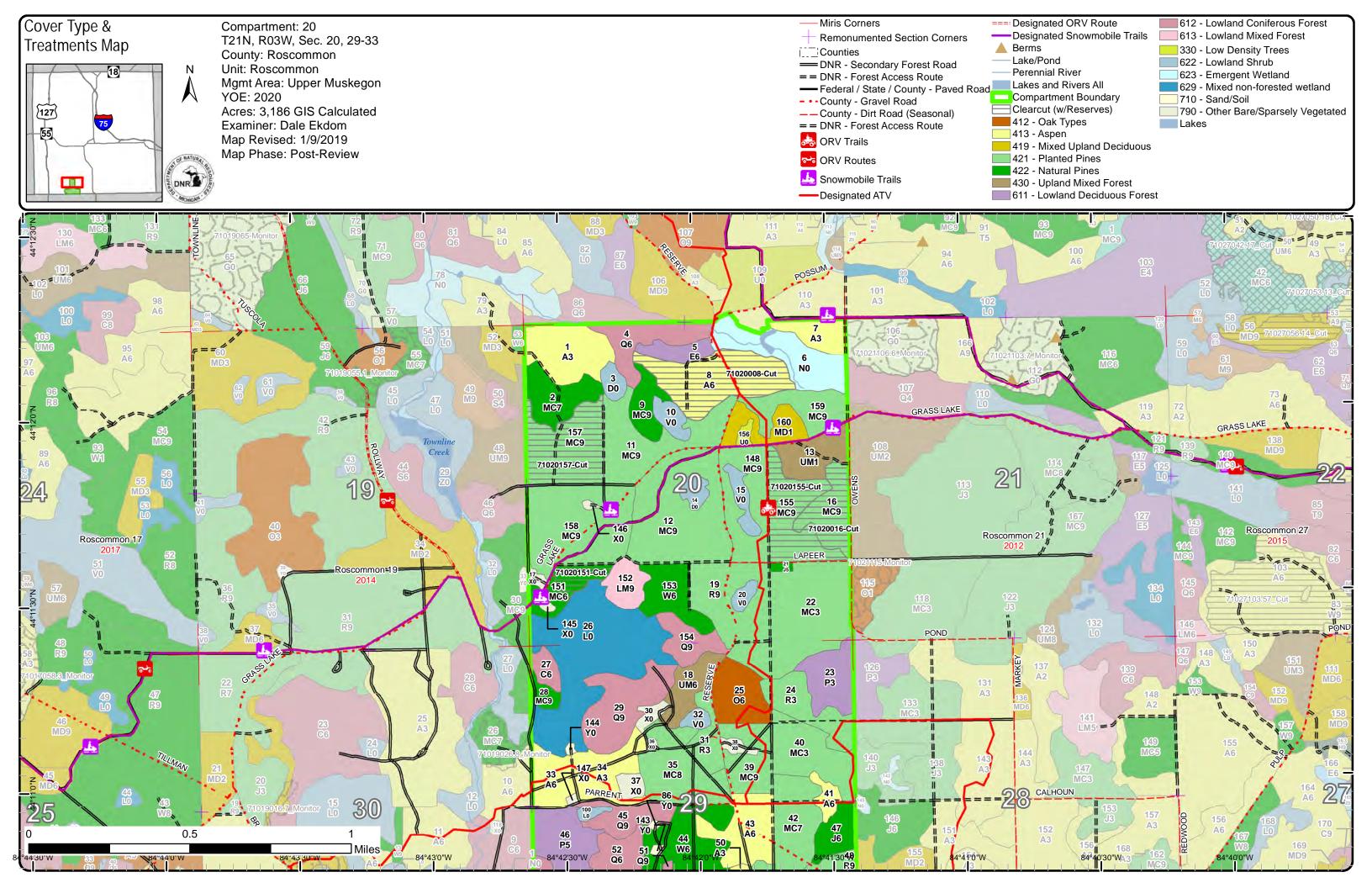
The following reports from the Inventory are attached:

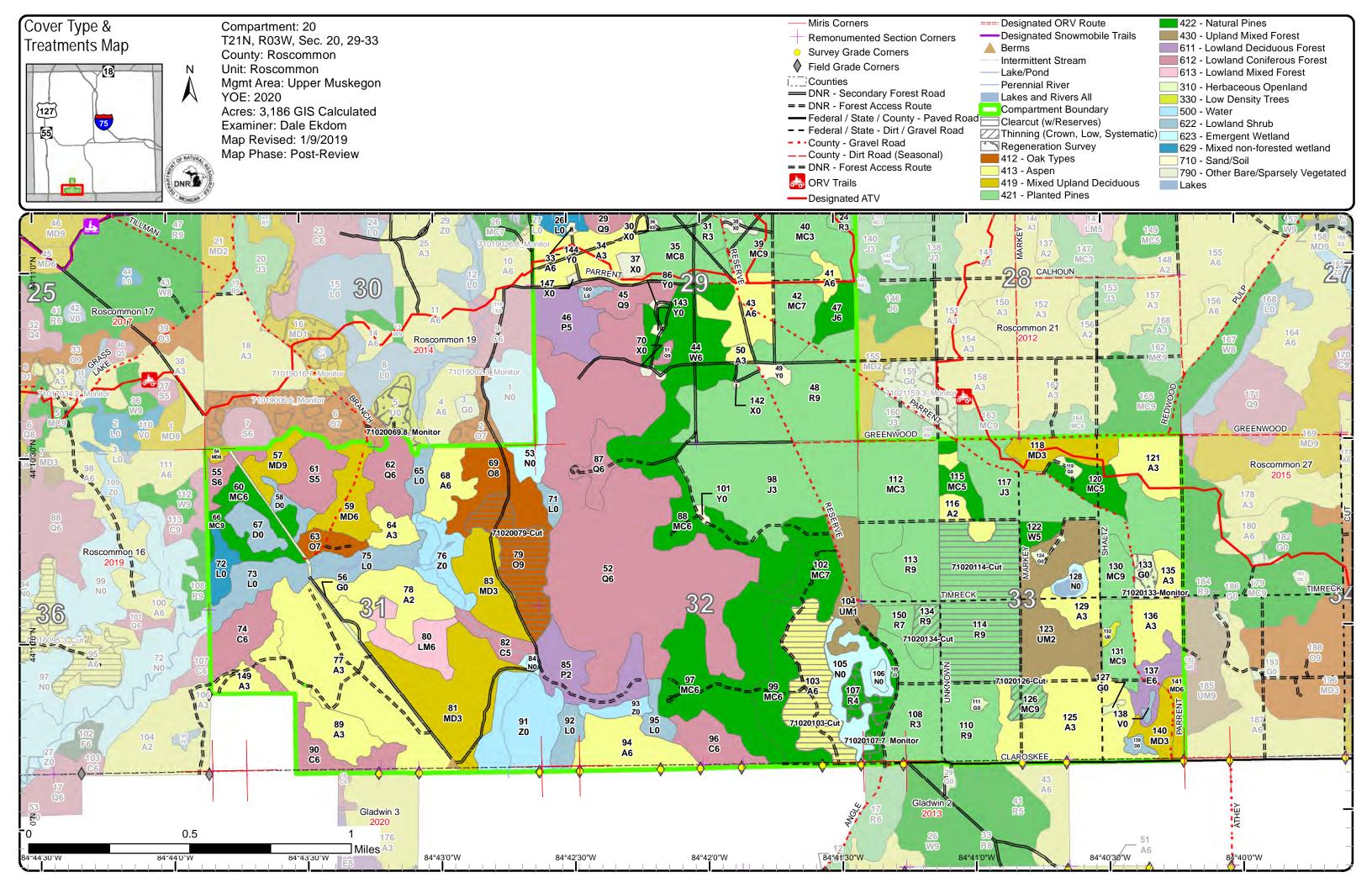
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

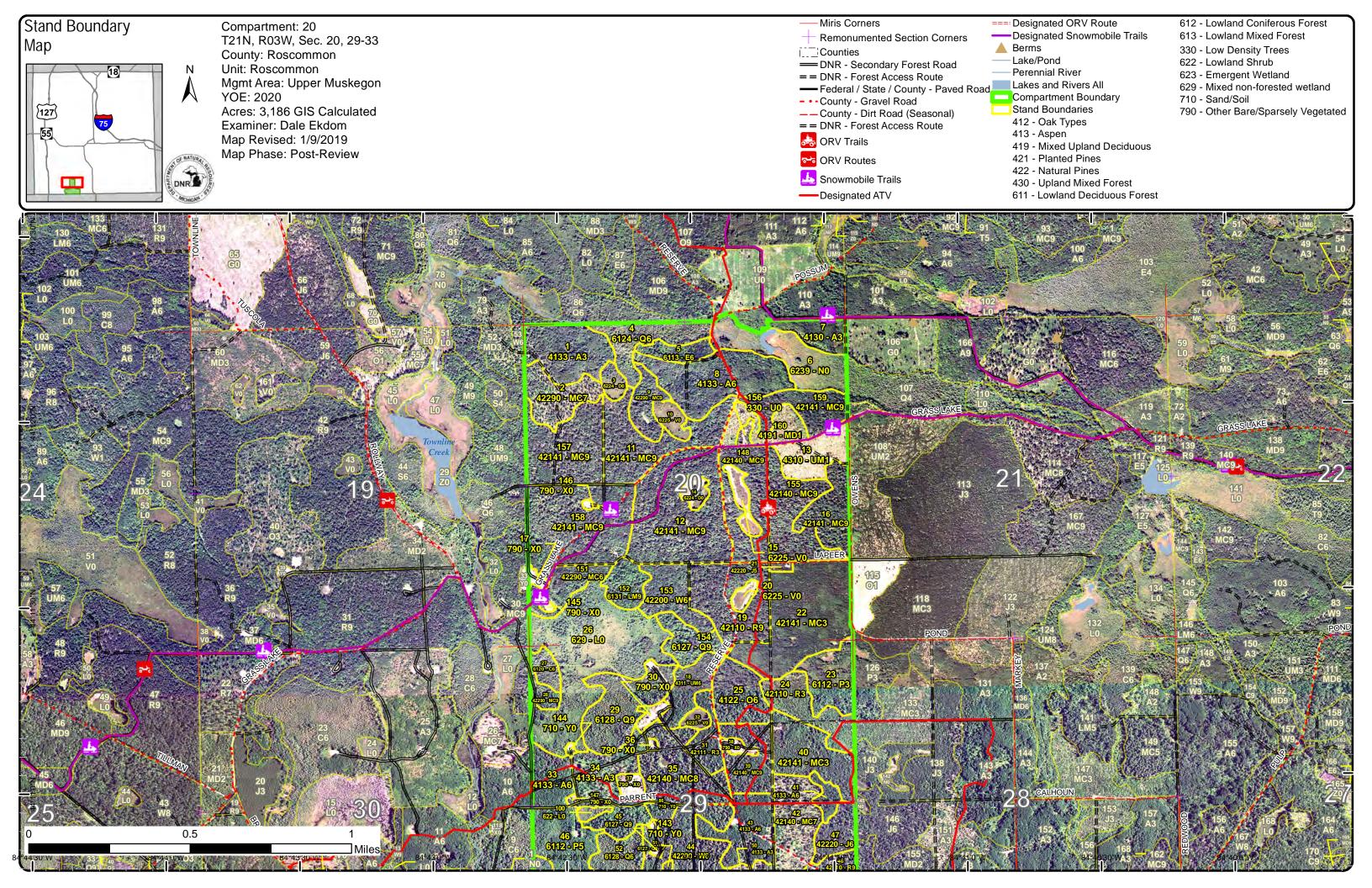
The following information is displayed, where pertinent, on the attached compartment maps:

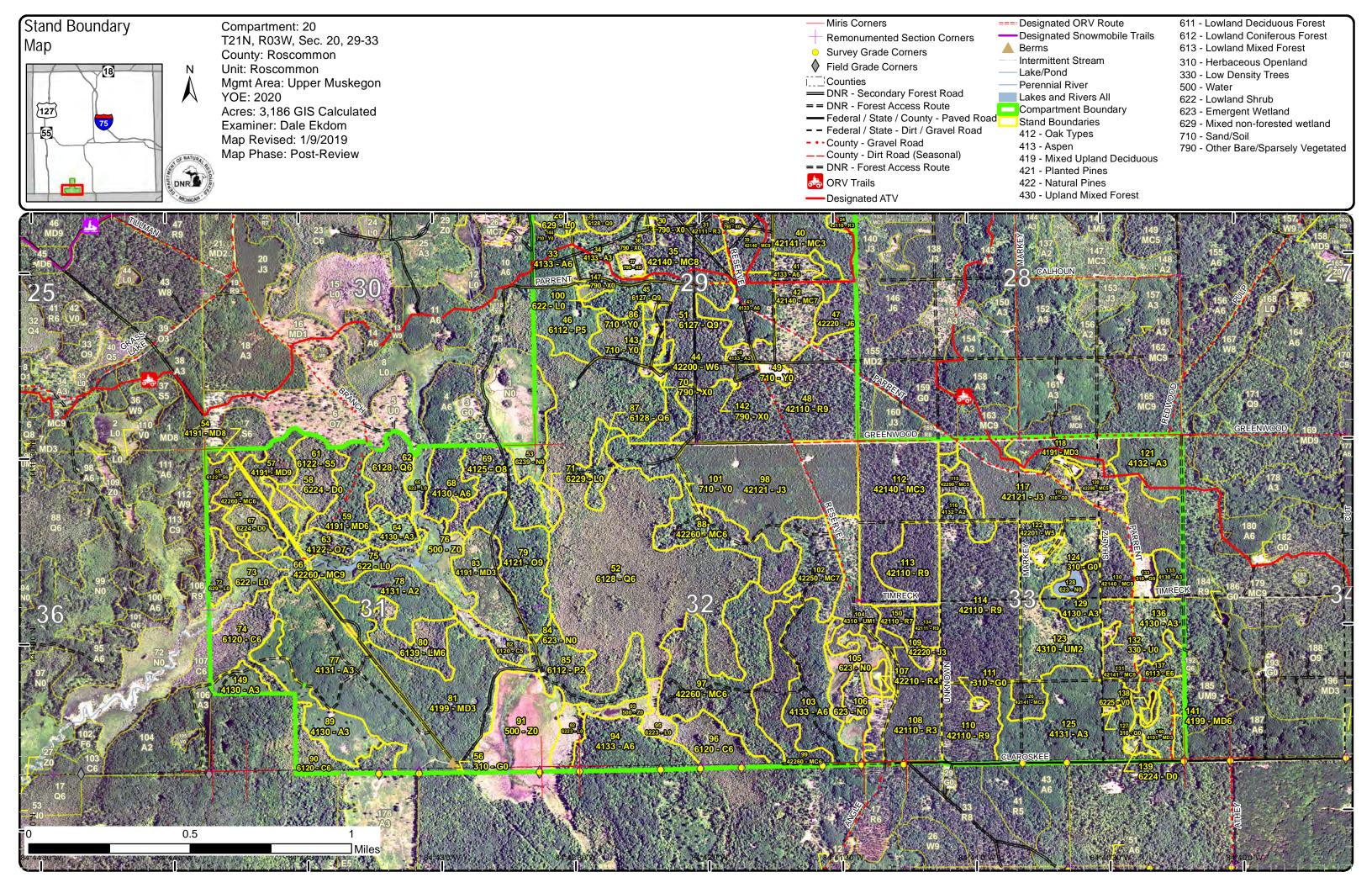
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

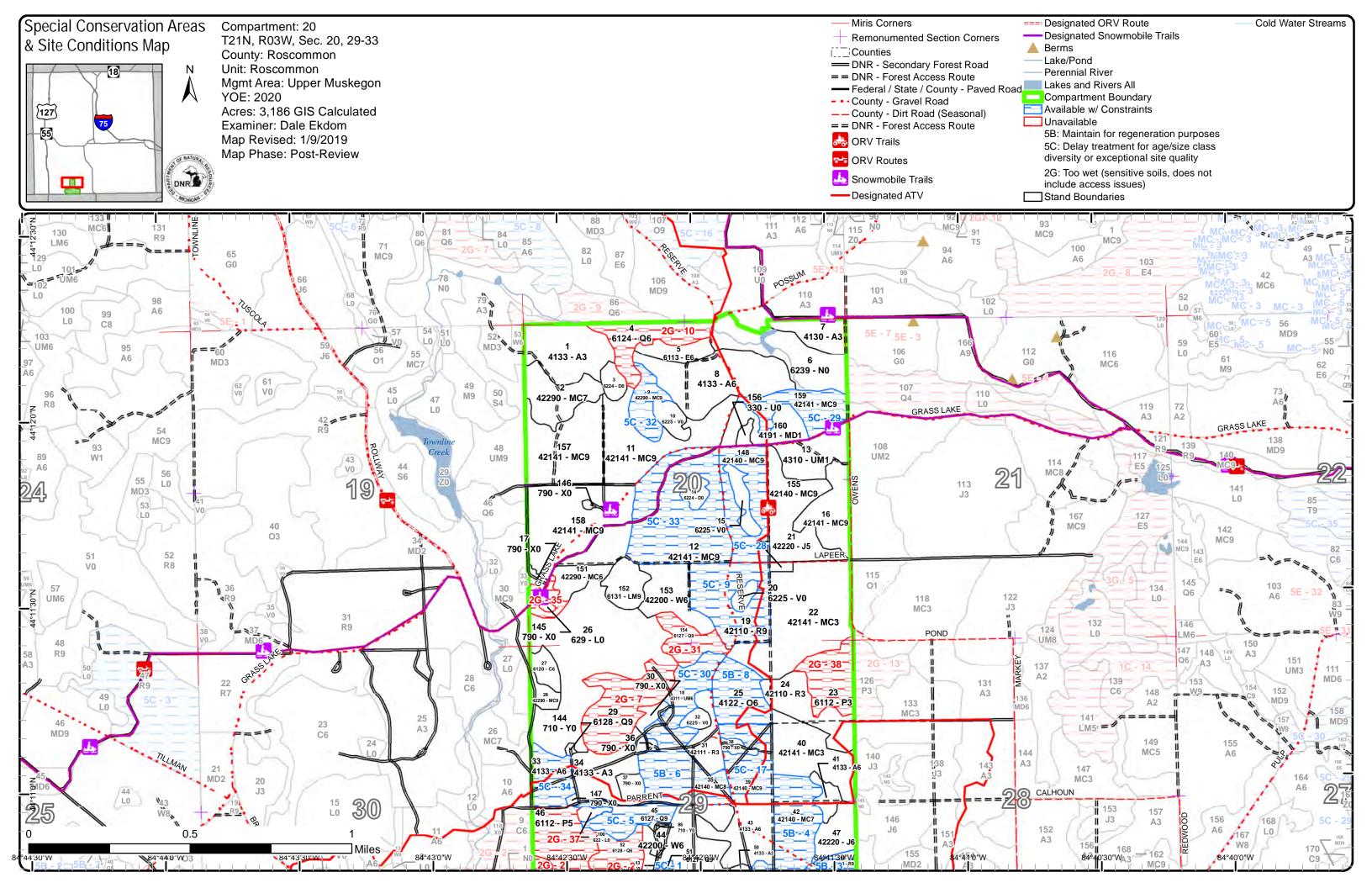


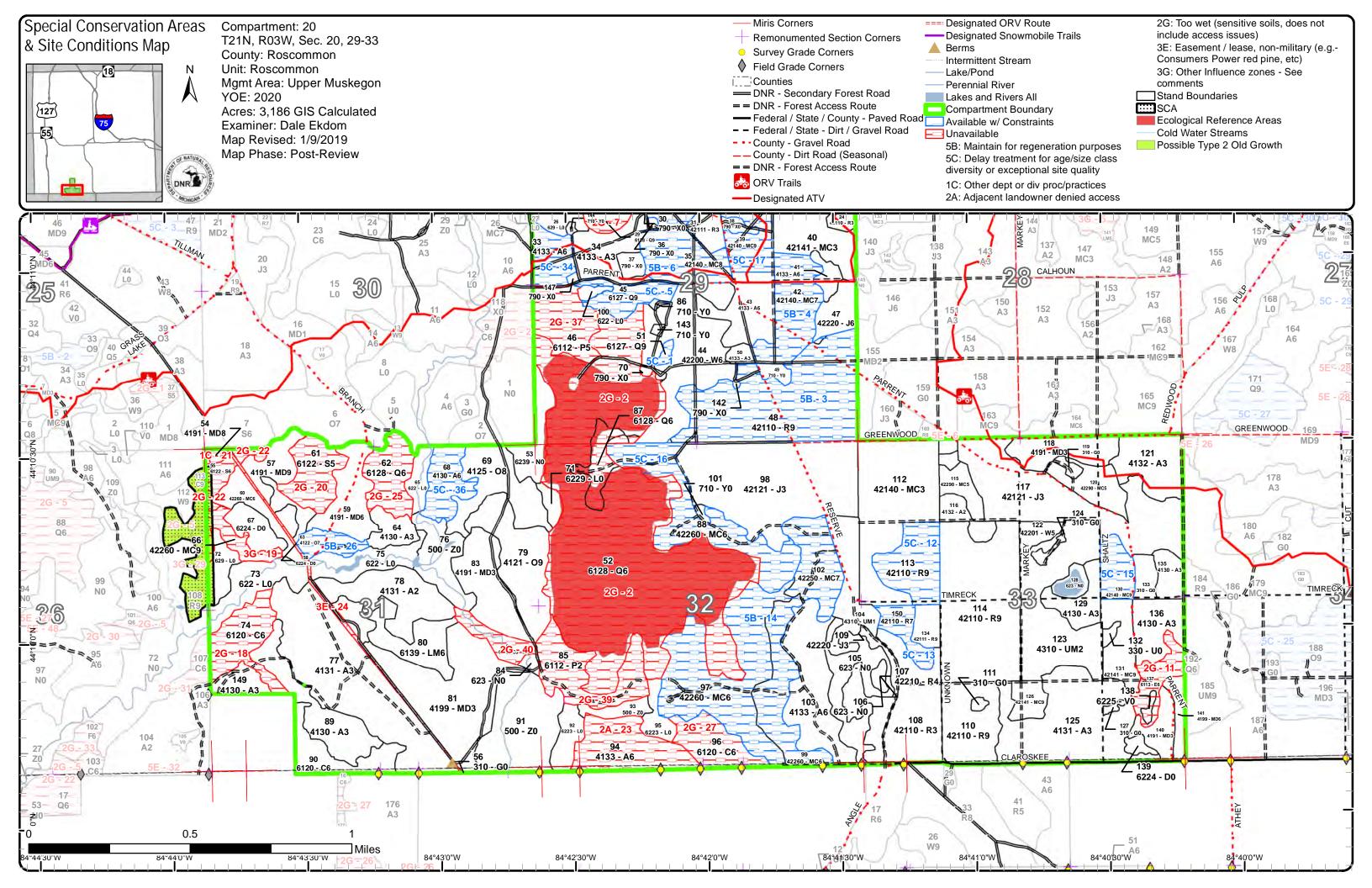












Compartment 20

Year of Entry 2020

# Roscommon Mgt. Unit Dale Ekdom : Examiner



### Age Class

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	¥or	A CONTRACT OF THE PROPERTY OF		\$ 20	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	8 /4	100 C	, %		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	80.00	\$ /0,	70,7	,	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		ON SERVICE SER	g* Juo	Non Land
Aspen	0	67	112	65	133	0	99	39	0	0	0	0	0	0	0	0	0	0	515
Bare/Sparsely Vegetated	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Bog	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Cedar	0	0	0	0	0	0	0	0	6	26	0	19	0	0	23	0	0	0	74
Herbaceous Openland	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Jack Pine	0	0	0	156	12	0	0	0	0	0	0	0	0	0	0	0	0	0	168
Low-Density Trees	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lowland Aspen/Balsam Poplar	0	0	0	30	41	0	0	0	0	0	0	0	0	0	0	0	0	0	71
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	12	19	303	0	13	0	0	11	358
Lowland Deciduous	0	0	0	0	0	0	8	0	0	0	12	0	0	0	0	0	0	0	20
Lowland Mixed Forest	0	0	0	0	0	20	0	10	0	0	0	0	0	0	0	0	0	0	30
Lowland Shrub	147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	8	20	0	0	0	0	0	0	28
Marsh	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
Mixed Upland Deciduous	0	13	37	76	28	0	0	0	0	0	2	0	12	0	0	0	0	0	168
Natural Mixed Pines	0	0	0	0	0	14	14	165	4	42	0	0	0	9	0	0	0	10	258
Oak	0	0	0	0	0	0	0	0	0	9	19	63	0	0	0	0	0	0	89
Planted Mixed Pines	0	0	0	80	58	8	0	0	0	34	251	0	0	0	0	0	0	85	516
Red Pine	0	0	20	45	0	0	0	13	0	0	232	0	0	0	0	0	0	27	337
Sand, Soil	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Treed Bog	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Upland Mixed Forest	0	68	0	22	0	0	0	14	0	0	0	0	0	0	0	0	0	0	103
Water	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65
White Pine	0	0	0	0	0	6	0	69	0	0	0	0	0	0	0	0	0	0	75
Total	377	148	169	474	272	48	121	310	10	111	536	121	315	9	36	0	0	133	3186



## **Report 2 – Treatment Summary**

Roscommon Mgt. Unit Year of Entry: 2020

### **Acres of Harvest**

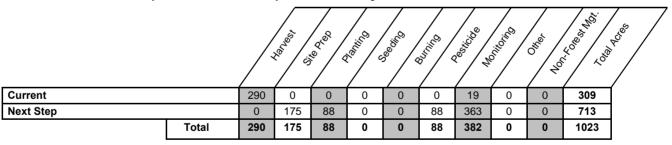
Compartment 20
Total Compartment Acres: 3,186

Commercial Harvest - 290 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

## **Cover Type by Harvest Method**

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		/"		10 10 10 10 10 10 10 10 10 10 10 10 10 1			DOM SHOW	out of the state o	ke, out of	88.185		
Aspen		77	0	0	0	0	7	0	0	0	84	
Natural Mixed Pines		8	0	0	0	0	0	0	0	0	8	
Oak		35	0	0	0	0	0	0	0	0	35	
Planted Mixed Pines		80	0	0	0	0	8	0	0	0	88	
Red Pine		76	0	0	0	0	0	0	0	0	76	
	Total	275	0	0	0	0	15	0	0	0	290	

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



**Prescription** 

Other Percent to Treat = 100%

Comment:

Proposed Start Date: 10/31/2017

79 71020079-Cut 34.5 4121 - Oak, Aspen Sawtimber 100 81-110 Harvest Clearcut with 4131 - Aspen, Even-Aged Draft Field Well Retention Oak Boundary

**Habitat Cut: No Site Condition:** 

Prescription final harvest for aspen management and delineate a few retention islands where oak is still in good condition (retention), buffer swamp to the west as necessary (retention), use brush pine and drumming log specs where appropriate, mark up to 2 conifers/acre to leave for diversity Specs:

(retention) or just leave all red and white pine via spec.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any combination of aspen, oak, and other species to a fully stocked stand

Regen:

plant red pine in any areas that do not come back to a fully stocked condition

Other Comment:

**Proposed Start Date:** 10/1 /2019

Roscommon Mgt. Unit Report 3 -- Treatments Compartment: 20 s Year of Entry: 2020 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure **Status** d 4133 - Aspen, 103 71020103-Cut 38.6 Poletimber Clearcut with 413 - Aspen Draft Field 60 Harvest Even-Aged Mixed Pine Well Retention Boundary **Site Condition: Habitat Cut: No** Prescription final harvest for aspen management, buffer lowland brush/marsh to the east, leave oak clumps for mast/retention where feasible and a few areas heavy to R/W pine for diversity/retention, use brush pile and drumming log specs Specs: Monitoring, Natural Regen (Re-Inventory) Next Step **Treatments:** Acceptable Any combination of aspen and other species to a fully stocked stand Regen: Other Comment: **Proposed Start Date:** 10/1 /2019 108 71020107.7 M 13.2 42110 - Planted Sapling 27 Immatu Monitoring Natural Regen 42110 - Planted Unspecified Draft Field Red Pine Well (Intermediate) Red Pine Boundary onitor re **Habitat Cut: No Site Condition:** Prescription Specs: Next Step **Treatments:** <u>Acceptable</u> Regen: no retention other than buffers due to small size of the stand Old next step comments: regeneration survey to determine low/non-stocked areas Other Comment: 10/1 /2016 **Proposed Start Date:** 114 71020114-Cut 42110 - Planted 76.0 Sawtimber 91 4319 - Mixed Draft Field 111-Harvest Clearcut with Even-Aged Red Pine Well 140 Retention **Upland Forest** Boundary **Habitat Cut: No Site Condition:** Prescription final harvest and manage for the hardwood under-story, delineate five 1/2 acre retention islands scattered within the stand Specs: Monitoring, Natural Regen (Re-Inventory) Next Step

**Treatments:** 

Acceptable any combination of hardwoods and other species to a fully stocked stand

Regen:

Other

Comment:

**Proposed Start Date:** 10/1 /2019

42141 - Planted 126 71020126-Cut 7.8 Sawtimber 45 141-Crown Thinning 42141 - Planted Draft Field Harvest Even-Aged Mixed Pine. Mixed Well 170 Mixed Pine. Boundary Deciduous Mixed Deciduous

**Habitat Cut: No Site Condition:** 

Prescription thin to 110 SQ FT mostly from below but remove some crown trees also, Thin WP on east side and RP on west side, leave HW as much as

possible thru-out the stand for diversity Specs:

Next Step Treatments:

<u>Acceptable</u>

Regen:

Other

Comment:

**Proposed Start Date:** 10/1 /2019

Roscommon Mgt. Unit Report 3 -- Treatments Compartment: 20 s Year of Entry: 2020 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure **Status** d 71020133-5.9 310 - Herbaceous Artificial 42111 - Planted Even-Aged Field Boundary 133 Nonstocked Unspec Monitoring Openland ified Regen(3yr) Red Pine, Monitor Mixed Deciduous **Habitat Cut: No** Site Condition: Prescription Monitor for a fully stocked stand of varying species. If fully stocked via other species do not replant red plant. Specs: Next Step **Treatments:** Acceptable Fully stocked stand red pine and mixed deciduous. Regen: Other

**116 71020134-Cut** 6.8 4132 - Aspen, Jack

Habitat Cut: No Site Condition:

Harvest

Crown Thinning

4221 - Natural

Red Pine

Even-Aged

Draft Field

Boundary

Sapling

Medium

36

81-110

<u>Prescription</u> Thin to 120 SF, thin mostly from below to improve stand quality but remove some of the bigger pine also, keep oak and white pine in this stand <u>Specs:</u> as much as possible to maintain stand diversity

9 /1 /2020

Next Step

Treatments:

Comment:

**Proposed Start Date:** 

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/1 /2019

151 71020151-Cut 7.8 42290 - Natural Poletimber 60 111-Harvest Clearcut with 4211 - Planted Even-Aged Draft Field Mixed Pine Well 140 Retention Red Pine Boundary

Habitat Cut: No Site Condition:

Prescription final harvest and plant RP with full suite of tools, leave off wettest area in the SW part and the part west /north of Grass Lake Road as retention

Specs: and for BMP's/Visual

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Pesticide, (Inactive)Skidder/Mechanical; Monitoring, Artificial

<u>Treatments:</u> Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable fully stocked red pine stand 80% free to grow

Regen:

Other Add SMT/ORV route protection specs

Comment:

Proposed Start Date: 10/1 /2019

4211 - Planted Draft Field 155 71020155-Cut 27.7 42140 - Planted 93 Sawtimber 111-Harvest Clearcut with Even-Aged Red Pine Mixed Pine Well 140 Retention Boundary

Habitat Cut: No Site Condition:

Prescription final harvest and plant red pine, leave a small island on north end along Grass Lake Road for retention and visual on SMT, trench/spray around

Specs: any aspen and oak regeneration if they are encountered

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr);

<u>Treatments:</u> Pesticide, (Inactive)Skidder/Mechanical

Acceptable fully stocked red pine stand 80% free to grow

Regen:

Other add ORV trail protection specs to sale

Comment:

Proposed Start Date: 10/1 /2019

Roscommon Mgt. Unit Report 3 -- Treatments Compartment: 20 s Year of Entry: 2020 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age **Approval** n Objective Method d Name CoverType Density Age Range Type Structure **Status** 157 71020157-Cut 42141 - Planted 4211 - Planted 34.0 Sawtimber 88 81-110 Clearcut with Even-Aged Draft Field Harvest Mixed Pine, Mixed Red Pine Well Retention Boundary Deciduous **Habitat Cut: No Site Condition:** Prescription final harvest and plant red pine Specs: Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Pesticide, (Inactive)Skidder/Mechanical; Monitoring, Artificial

<u>Treatments:</u> Regen(1yr); Monitoring, Artificial Regen(3yr)

<u>Acceptable</u> fully stocked red pine stand 80% free to grow

Regen:

Other put a 1 acre retention island towards the middle of the stand on either or both sides of the forest road going thru the stand center

Comment:

Proposed Start Date: 10/1 /2019

Total Treatment Acreage Proposed:

319.2

Compartment: 20

Roscommon Mgt. Unit

Dale Ekdom : Examiner Year of Entry: 2020

Availa	ability for	Managemer	nt								
Total	Acres	Acres Avail	Acres	D	omina	nt Site	Con	dition	S		
Acres	Available	With Condition	Not Available		5B	5C	1C	2A	2G	3E	3G
514	454	30	30	Aspen		30		30	0		
16	16	0	0	Bare/Sparsely Vegetated		0			0		
19	18	0	1	Bog					1		
74	23	0	51	Cedar				0	51		
18	12	0	6	Herbaceous Openland						6	
168	167	0	0	Jack Pine	0						
3	3	0	0	Low-Density Trees							
71	0	0	71	Lowland Aspen/Balsam Poplar		0			71		
359	0	15	344	Lowland Conifers		15			344		
20	8	0	12	Lowland Deciduous					12		
30	30	0	0	Lowland Mixed Forest							
147	147	0	0	Lowland Shrub		0					
28	0	0	28	Lowland Spruce/Fir					28		
75	75	0	0	Marsh					0		
168	167	0	2	Mixed Upland Deciduous			2		0		
258	68	175	16	Natural Mixed Pines	120	54			6		9
90	62	27	0	Oak	27				0		
516	325	191	0	Planted Mixed Pines	59	131			0		
336	188	149	0	Red Pine	83	66					
6	6	0	0	Sand, Soil							
27	27	0	0	Treed Bog							
103	90	14	0	Upland Mixed Forest		14					
65	65	0	0	Water							
75	74	0	0	White Pine	0				0		
3,185	2,024	600	561	Total Forested Acres	290	311	2	30	514	6	9
	64%	19%	18%	Relative Percent		-					

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Roscommon Mgt. Unit

Dale Ekdom : Examiner

2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	265	5A: Not able to obtain desirable regeneration	3G: Other Influence zones - See comments	Unspecified	Unspecified
	Comments:						
3	Available	5B: Maintain for regeneration purposes	83	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Available	5B: Maintain for regeneration purposes	29	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	13	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Available	5B: Maintain for regeneration purposes	30	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	30	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified	Unspecified
	Comments:						

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8	Available	5B: Maintain for regeneration purposes	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	32	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	19	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments:						
11	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	14	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	24	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
13	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

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				age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
G	omments:						
15	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	5B: Maintain for regeneration purposes	Unspecified	Unspecified	Unspecified
Co	omments:						
16	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	44	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
17	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	19	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						
18	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	23	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						

Roscommon Mgt. Unit

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19	Unavailable	3G: Other Influence zones - See comments	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: SCA conservation	values include connectivity/corri	dor. la	ge older pine trees, trending t	oward all-aged		
20	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	20	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
21	Unavailable	1C: Other dept or div proc/practices	2	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
22	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	8	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
23	Unavailable	2A: Adjacent landowner denied access	29	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified	Unspecified	Unspecified
	Comments: cut off by private la	and in Clare County and beaver f	loodin	g in Roscommon County			
24	Unavailable	3E: Easement / lease, non- military (e.g Consumers Power red pine, etc)	6	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

Roscommon Mgt. Unit

Dale Ekdom: Examiner

25	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
26	Available	5B: Maintain for regeneration purposes	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
27	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	18	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
28	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
29	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
30	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Roscommon Mgt. Unit

Dale Ekdom: Examiner

31	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	12	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified	Unspecified
C	Comments:						
32	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
33	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	57	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
34	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
35	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
C	Comments:						

Roscommon Mgt. Unit

Dale Ekdom: Examiner

36	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	17	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
37	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	23	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Habitat Cut?						
38	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	18	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
39	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	30	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
40	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
	Comments: flowing stream in s	stand					

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: 20
Year of Entry 2020



# 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 Area	on Type	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 oxygen condi- stocked trout populations and those of other coldwater fish speci- year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of identified as Element Occurrences (EOs) by the Michigan Natura context of their natural community classification system. Element (Excellent) or B (Good) and a Global (G) or State (S) element (ra threatened (2), or rare (3) serve as an initial base of ERAs. They the State. The system is comprised of individual or associations of managed for restoration and maintenance of natural ecological p submit recommendations for lands as ERAs using the DNR Constitution.	I Features Inventory (MNFI) within the Occurrences with viability ranks of A rity) ranking of endangered (1), may be located upon any ownership in of natural community types that are rocesses and values. The public may

S t	Roscommor	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 20 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4133 - Aspen, Mixed Pine	Sapling Well	26.0	36		Aspen stand approaching pole timber size. Some white pine pole mixed in. Some balsam fir as you head north towards drainage. WP saplings thru-out in under-story
2	42290 - Natural Mixed Pine	Sawtimber Poor	17.8	88	1-50	Red pine stand with oak and white pine understory. Some areas of M3 understory. Harvested using overstory removal leaving 10-30 BA of red pine. Release oak and white pine understory. Cut winter of 2010/2011. Nice regeneration of oak and pine from cut plus whatever was in the under-story when released
4	6124 - Lowland Spruce- Fir	Poletimber Well	18.9	118	51-80	swamp conifers is a broad drainage area with flowing stream
5	6113 - Lowland Maple	Poletimber Well	7.7	54	81-110	Low ground, mix of red maple and oak. Some white pine and balsam fir pole timber present. Balsam fir, white pine, and red maple in understory.
7	4130 - Aspen	Sapling Well	11.1	18	Immature	Good aspen regen from harvest. Small bog within stand near east side.
8	4133 - Aspen, Mixed Pine	Poletimber Well	38.7	54	Unspecified	Mixed aspen stand. Big tooth aspen showing better growth rates than quaking. most Quaking aspen is west of Reserve Rd, scattered areas of heavier white pine component and scattered red pine poles/SL thru-out stand, scattered oaks thru-out as well, mostly hardwood and pine with scattered aspen along north edge
9	42290 - Natural Mixed Pine	Sawtimber Well	10.6	60	111-140	planted to w/r/j in 1926 but also has lots of natural white pine, removed oak. aspen, and jack pine in most of the stand in 1980 and 1981, heavy to white pine poles/logs but a few spots have more red pine SL/XL, a lot of the white pine under-story is almost pole size, hold 10 years and thin when pine stand to the west/south is final harvested
11	42141 - Planted Mixed Pine, Mixed Deciduous	Sawtimber Well	33.4	93	51-80	planted red pine and jack pine in 1926, stand was treated in 1980 and 1981 by removing most oak, aspen, and jack pine, the under-story is oak, jack pine and aspen saplings/poles depending on location, aspen clones are at or approaching polesize, basal area is very variable due to past cuttings, stand is 3 aged going towards all-aged
12	42141 - Planted Mixed Pine, Mixed Deciduous	Sawtimber Well	56.7	93	111-140	ranges from dense R9 to less dense R9 due to past thinnings in 1980 and 1981 when they removed most oak, aspen, and jack pine, oak and white pine mix in understory along with some aspen clones which are at or approaching pole-size, parts are ready to thin and other parts are fairly sparse yet, WP understory heavy in spots, hold or possibly thin denser parts this YOE and then final harvest next YOE?

4310 - Pine, Oak Mix

13

Sapling Poor

16.5

5

Immature

Cut fall of 2011, burned to reduce slash in Spring 2015 and then roller-chopped/trenched in Fall 2015 and planted in 2016. Had a replant in 2017. Fall 2018 regeneration survey found healthy red pine mixed with fair amount of oak. Regeneration to tall to spray

so let be a mixed stand.

s t	Roscommor	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 20 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
16	42141 - Planted Mixed Pine, Mixed Deciduous	Sawtimber Well	18.1	93	81-110	Mixed pine stand which was planted to red pine and jack pine in 1926, Some younger oak, jack pine, and aspen poles, and cherry brush in understory. most aspen is clonal rather than solitary. East edge is less dense in terms of BA, Consider cc and plant red pine
18	4311 - Pine, Aspen Mix	Poletimber Well	13.8	60	111-140	white pine pole timber stand mixed with some oak, red pine, jack pine and aspen clones but jack pine is mostly dead. oak and red pine mature, white pine and aspen smaller and immature.
19	42110 - Planted Red Pine	Sawtimber Well	31.9	93	111-140	Red pine stand that had jack pine, oak, and aspen removed in summer 2001, Understory is mix of aspen, oak and white pine. Good stand to hold due to visuals in Reserve Rd travel corridor.
21	42220 - Natural Jack Pine	Poletimber Medium	1.4	39	51-80	Stand Year Origin was 1980, natural jack pine around an old oil well site
22	42141 - Planted Mixed Pine, Mixed Deciduous	Sapling Well	53.9	26	Immature	planted 1993, mix of planted red/jack pine and natural jack pine/oak/aspen
23	6112 - Lowland Aspen	Sapling Well	18.4	35	Unspecified	habitat cut 1984, wet aspen stand that is approaching pole timber size, parts of the stand are more open with oak, jack pine, and pin cherry poles, wettest parts of the stand have heavy tag alder, lots of wildlife sign thru-out stand.
24	42110 - Planted Red Pine	Sapling Well	19.5	16	Immature	Stand was planted to red pine but some areas have good natural jack pine regeneration that has seeded in, some of the planted red pine is pushing 2 inches
25	4122 - Oak, Pine	Poletimber Well	18.7	90	81-110	Stand was treated in 1991, records say they removed everything except oak but it looks like they might have left white pine also. Stand has advanced regeneration of jack pine, white pine, and oak with some aspen also. Under-story is almost pole-size. ORV trail runs through stand. large concentration of oak in one stand in the compartment so retain stand as good source of hard mast.
27	6120 - Lowland Cedar	Poletimber Well	5.5	79		cedar, balsam fir, and tag alder understory.
28	42290 - Natural Mixed Pine	Sawtimber Well	4.4	79	81-110	White pine stand mixed with some red pine. Parts are solid W6W3 and other parts are more W9, Balsam fir underscore, not ready for any trmt based on age, stand size, and BA
29	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	29.6	110	111-140	Lower ground and in western fringe area white pine is mixed with nice cedar. Upland areas of stand are large white pine with red maple, white pine understory. Some old fire scars on white pine evident., potential Type II old growth if left alone the next few YOE's, questionable operability as the really wet areas have tag alder under-story
31	42111 - Planted Red Pine, Mixed Deciduous	Sapling Well	10.3	26	Immature	OPIC - FMD: Red pine plantation with some oak, aspen and jack pine mixed in.

S t	Roscommon Mgt. Unit			Report 7	– Forested	Stands Compartment: 20 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
33	4133 - Aspen, Mixed Pine	Poletimber Well	13.8	53		Young pole timber aspen stand. Some oak and red maple scattered throughout. White pine under-story, north end is more hardwoods and pine including jack pine
34	4133 - Aspen, Mixed Pine	Sapling Well	20.2	8	Immature	Cut winter of 2010/2011, left red/white pine and scattered oak, fully stocked with mix of regeneration now, SE arm was heavy to white pine and was left out of sale.
35	42140 - Planted Mixed Pine	Sawtimber Medium	30.1	91	51-80	Stand originally planted in 1929 but now looks like a natural stand, Jack pine and oak were removed in spring 2013, Stand is composed primarily of red pine sawtimber mixed with some smaller white pine. Excellent oak and jack pine regeneration. Jack pine seeded in natuurally very well especially in skid trails.
39	42140 - Planted Mixed Pine	Sawtimber Well	18.5	91	81-110	Red pine stand that surrounds muskegon oil headquarters. Older advanced regeneration of jack pine, oak and aspen all approaching pole timber size, 2 aged stand, parts have good stocking of red pine SL's other parts are just scattered red pine SL's with heavy pole jack pine/oak/aspen, good stand to hold to help balance red pine ages in the compartment as holding 10 years will put more growth on pole/sapling under-story
40	42141 - Planted Mixed Pine, Mixed Deciduous	Sapling Well	25.8	27	Immature	OPIC - FMD: Red pine plantation with natural seeded jack pine.  Jack pine has overtopped the red pine in many areas. Red pine has good growth where not overtopped.
41	4133 - Aspen, Mixed Pine	Poletimber Well	4.8	37		Small stand of big tooth aspen just reaching pole size, Some bigger red and white pine scattered about, aspen slow growing due to heavy conifer residuals
42	42140 - Planted Mixed Pine	Sawtimber Poor	29.4	91	1-50	Stand has had jack pine and some oak removed in the past. Had overstory of red pine and poor quality oak. Oak is in serious decline. Understory is jack pine, white pine along with good advanced oak regeneration. Overstory removal leaving some super canopy red pine and oak. Plant to red pine if understory is determined to be understocked. CUT WINTER 2010/2011 and now R7O2J2, may want to feature under-story next YOE, far SW tip was not included in the sale but is similar timber type and density as what the treated portion is now.
43	4133 - Aspen, Mixed Pine	Poletimber Well	22.8	37	1-50	Aspen stand approaching pole timber size in some areas. Some scattered red and white pine overstory. Scattered areas heavy to jack pine poles. White pine regeneration in the areas heavy to aspen.
44	42200 - Natural White Pine	Poletimber Well	51.7	60	81-110	White pine pole timber stand with some scattered red pine, jack pine and oak SL's, 3 aged if you include the red pine super canopy which was planted in 1929
<b>45</b>	6127 - Lowland Pine	Sawtimber Well	13.3	130	111-140	Large diameter white pine stand with scattered large diameter red pine, Exhibits old growth charateristics. White pine underscore mixed with cedar, balsam fir, and red maple
46	6112 - Lowland Aspen	Poletimber Medium	23.0	37		Very wet, slow growing aspen stand, just getting to pole size, Balsam fir, red maple and tag alder understory. Some open areas of cattails.

s t	Roscommor	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 20 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
47	42220 - Natural Jack Pine	Poletimber Well	10.8	34	Immature	Stand Year Origin 1985, jack pine poles with scattered red pine and oak of various sizes
48	42110 - Planted Red Pine	Sawtimber Well	82.9	91	81-110	Jack pine and oak were removed lin summer 2002. Stand is composed primarily of red pine sawtimber mixed with some smaller white pine. Excellent oak and jack pine regeneration. Jack pine seeded in naturally very well especially in skid trails. Parts have less dense canopy but heavy regeneration and other parts are heavy canopy with only a little regeneration in the subcanopy.
50	4133 - Aspen, Mixed Pine	Sapling Well	2.9	8	Immature	Cut winter 2010/2011, left white pine and scattered oak SL's, fully stocked in aspen, red maple, jack pine, and oak
51	6127 - Lowland Pine	Sawtimber Well	1.7	110	111-140	Large red and white pine in and around small bog. White pine in understory. Hold for possible Type 1 or 2 Old Growth and BMP's around the bog
52	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	252.6	110	Unspecified	Thick cedar stand with thick balsam fir understory in more open areas, too wet to operate, Townline Creek Swamp ERA
54	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Medium	1.6	99	1-50	mix of older oak and younger A/WP, treat with compartment to the north or west when A/WP become more merchantable
55	6122 - Black Spruce	Poletimber Well	8.2	99	Unspecified	black spruce swamp, part of townline creek drainage
57	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	12.4	119	81-110	E-2/3rds is R9W3, W-1/3 is O8W3, scattered wet runs and potholes, good candidate for Type 1 or 2 old growth as age is there and its trending towards all-aged
59	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	21.7	38	1-50	cut 1981 to 4" spec. now upland brush/oak interspersed with aspen clones and solitary aspen, WP ranges from saplings to poles to SL and is persistent except in areas heavy to aspen
60	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	13.9	54	81-110	2 aged stand going towards all-aged, ranges from W6O7 to O9W3 with an occasional R/W pine X-log tree, thin at some future YOE when smaller white pine becomes merchantable or save for POG
61	6122 - Black Spruce	Poletimber Medium	19.6	109		black spruce with occasional X-log R/W pine, RM u.s. throughout most of stand except where cedar is heavy
62	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	19.1	109	Unspecified	wet cedar swamp with occasional X-log WP
63	4122 - Oak, Pine	Sawtimber Poor	8.5	87	111-140	cut fall 2013, left pine and marked oak, west end is heavier to aspen regeneration, understory should be featured next YOE
64	4130 - Aspen	Sapling Well	8.7	4	Immature	cut fall 2013, left conifers and scattered oak

s t	Roscommon	Mgt. Unit		Report 7	' - Forested	Stands Compartment: 20 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
66	42260 - Natural Pine, Mixed Deciduous	Sawtimber Well	9.3	129	51-80	long ridge of upland surrounded by swamp or lowland brush, cut off from east by broad drainageunder-story is approx 40 years old or younger, potential dry northern forest ERA, will be Type 1 or 2 OG if left alone
68	4130 - Aspen	Poletimber Well	16.5	53	Unspecified	nice A6 stand, scattered oak and pine SL and XL, cut now and manage for aspen, may be 2 aged as some aspen appears younger - approx. 1983 YOO
69	4125 - Black, N. Pin Oak	Sawtimber Medium	27.9	100	51-80	Thinned in 2013 and now 3 aged, oak and R/W pine SL with A/RM and pine poles and oak saplings from latest cut
74	6120 - Lowland Cedar	Poletimber Well	23.1	130	Unspecified	
77	4131 - Aspen, Oak	Sapling Well	83.8	14	Unspecified	Cut 2004, some spots seem bare but overall stand is fully stocked
78	4131 - Aspen, Oak	Sapling Medium	29.8	22		cut 1996 and doing well, white pine was left when cut and is now pole-size, scattered SL oak and white pine also, north end along Townline Creek is more sparse but has more oak, some wetter potholes within stand also
79	4121 - Oak, Aspen	Sawtimber Well	34.5	100	81-110	Stand is an oak/aspen mix and is 2-aged going towards all aged, mature R/W/B oak SL's with younger mature aspen, also scattered sap/pole/SL W/R pine, removed all jack pine and marked maple and oak in the central portion of the stand in 2013 and left all aspen to grow 10 more years within this part and in the untreated portion, oak now starting to decline thru-out stand and aspen is now merchantable, stand needs to be regenerated now and managed for aspen with an oak component
80	6139 - Mixed Lowland Forest	Poletimber Well	19.6	42		NE and NW arms of the stand are wetter with less hardwoods and more swamp species such as NWC, Bl. Spruce, and Balsam Fir, stand is 2 aged moving towards all aged with a well developed u.s. of various species, sizes, and ages. good candidate for old growth/biodiversity
81	4199 - Other Mixed Upland Deciduous	Sapling Well	57.4	22	Immature	
82	6120 - Lowland Cedar	Poletimber Medium	9.3	88		natural drainageway with stream
83	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	26.9	15	Immature	
85	6112 - Lowland Aspen	Sapling Medium	29.6	22	Immature	partially flooded aspen regen. with some higher spots in the stand, lots of beaver activity on edges and in area, U.S. in the wet parts is tag alder, u.s. in the higher ground is hardwoods and white pine
87	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	11.3	60		wet spongy ground with some blowdown, trace of remnant WP XLogs approx. 1890 YOO scattered thru-out stand

s t	Roscommor	n Mgt. Unit		Report 7	– Forested	Stands Compartment: 20 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
88	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	44.6	60	111-140	mixed pine stand with oak SL and scattered BTA, JP/Oak doing well, west edge is lower and wetter, should hold 10 years no problem due to higher water table in most of the stand, manage for pine/oak next YOE?
89	4130 - Aspen	Sapling Well	27.1	7	Immature	monitor stand for hardwood regeneration, esp. aspen
90	6120 - Lowland Cedar	Poletimber Well	17.4	88	Unspecified	conifer swamp
94	4133 - Aspen, Mixed Pine	Poletimber Well	29.9	55	Unspecified	BTA with white pine and balsam fir coming on strong in the understory, no access except across an old beaver dam or thru private property in Clare county
96	6120 - Lowland Cedar	Poletimber Well	18.8	100	Unspecified	lots of blowdown, very hummocky, and wet
97	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	68.3	60	111-140	stand is 2 aged trending towards all aged, some areas heavy to BTA and RM, some areas are heavy to WP logs and XLogs, thin when white pine u.s. becomes more merchantable
98	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	84.7	26	Immature	planted 1992 with good success
99	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	27.9	60	111-140	RM/Aspen just becoming merchantable, JP doing OK, not quite ready for thinning yet, remove A/M/J in 10 years and then manage for R/W pine
102	42250 - Pine, Oak	Sawtimber Poor	24.0	82	51-80	removed aspen, jack pine, and red maple in december 2013, north end is heavy to oak poles/SL's with scattered white pine poles, south end is heavy to R/W pine poles/SL with scattered oak SL's, good aspen regeneration in spots, scattered oak regeneration thru-out stand
103	4133 - Aspen, Mixed Pine	Poletimber Well	38.7	60		mostly aspen/red maple with areas heavy to pine (red, jack, and white), final harvest but leave some heavy pine areas for retention and diversity, leave scattered oak in clumps for mast/diversity/retention also if feasible
104	4310 - Pine, Oak Mix	Sapling Poor	21.9	26	Immature	cut 1992 and left to regenerate naturally, poor success in some spots but good jack pine and oak regeneration in others
107	42210 - Natural Red Pine	Poletimber Poor	13.2	62	1-50	removed jack pine, aspen, and red maple in december 2013, , SE arm is heavy to RP pole residual, NW arm was mostly JP with scattered RP poles/SL's, need to continue monitoring stand for natural jack pine and oak regeneration as it fills into the more open spots, possibly will get some natural red pine regeneration also
108	42110 - Planted Red Pine	Sapling Well	34.9	27	Immature	planted red pine with natural O/JP, individual trees are pole size, possibly pole size stand next YOE

s t	Roscommon	Mgt. Unit		Report 7	- Forested	Stands Compartment: 20 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
109	42220 - Natural Jack Pine	Sapling Well	3.5	25	Immature	Parts are open-grown, slow-growing
110	42110 - Planted Red Pine	Sawtimber Well	27.3	91	111-140	thinned in 2002 by removing O/J, thinned again to remove suppressed/low quality trees in January 2015, hold 10 years to add growth before final harvesting or thinning again, very nice stand of red pine but has a heavy oak understory
112	42140 - Planted Mixed Pine	Sapling Well	57.7	34	51-80	cut 1981 but left RP then planted to 488 RP per acre in 1985, also has lots of natural O/J regeneration, Kotar is PVCd/PArVHa, treat via thinning when u.s. becomes merchantable so as to avoid damage to u.s. if treated now
113	42110 - Planted Red Pine	Sawtimber Well	24.2	91	141-170	RP SL with heavy WP under-story, planted stand but it appears to be more as natural origin stand, youngest white pine is 1985 YOO, hold 10 years to allow more height growth on WP and then remove over-story RP and manage for white pine OR thin entire stand after WP is more merchantable
114	42110 - Planted Red Pine	Sawtimber Well	75.9	91	111-140	thinned 2003 - 2005 by removing O/J, now 2 aged going towards all aged where WP is in the O.S. as well as the U.S., too much under-story to thin again, possibly final harvest and manage for the hardwood under-story
115	42290 - Natural Mixed Pine	Poletimber Medium	10.1	78	81-110	mix of oak and pine of various species and ages, north part and north 2/3rds of south part thinned in Spring 2014, south 1/3rd of south part did not need thinning
116	4132 - Aspen, Jack Pine	Sapling Medium	9.4	36	81-110	loggers choice or 4" spec cut leaving white pine, aspen at or clods to pole-size, rest of species are smaller yet
117	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	67.3	25	Immature	planted jack pine, almost pole-size
118	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	18.2	25	Immature	stand cut 1992, jack pine planted 1993, planted around aspen clones
120	42290 - Natural Mixed Pine	Poletimber Medium	14.0	43	81-110	mix of pine and HW species and ages and origins, WP understory is almost merchantable, thinned in December 2015 by cutting aspen and JP and marked oak/pine, now 2 aged, some spots fairly open with good regeneration and others are more dense in O/S with less regeneration

42201 - Natural White

Pine, Mixed Deciduous

121

122

4132 - Aspen, Jack Pine Sapling Well

Poletimber

Medium

22.7

5.8

26

42

Immature

81-110

stand cut in 1992, aspen with less dense areas planted to J/R

pine in 1993

2 aged stand?, loggers choice cut or 4" spec. cut leaving white pine, areas heavier to aspen but white pine persistent thru out stand, thin next YOE

s t	Roscommon Mgt. Unit			Report 7 – Forested Stands Compartment: 20 Year of Entry: 2020		
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
123	4310 - Pine, Oak Mix	Sapling Medium	51.1	8	Immature	cut 2003 and planted to red pine in 2004 w/o trenching due to above ground pipelines in the stand, greater than 75% red pine mortality, pipelines removed and then trenched 2009 and replanted 2010, left areas heavy to A3 and J3 which are 14 years old
125	4131 - Aspen, Oak	Sapling Well	62.4	36		nice A/O regeneration with WP pulp , just transitioning into polesize
126	42141 - Planted Mixed Pine, Mixed Deciduous	Sawtimber Well	7.8	45	141-170	nice stand of planted W/R pine that appears more as natural pine, some blowdown occurring, west of 2T is heavier to mostly planted red pine, east of 2T is heavier to white pine and also planted origin but with lots of natural white pine also which is younger, most WO is open-grown and wolfy, some weeviling on the white pine, white pine legacy size trees are present in the stand, overall it would benefit form a thinning
129	4130 - Aspen	Sapling Well	11.9	27	Immature	nice aspen regeneration which is just reaching pole size
130	42140 - Planted Mixed Pine	Sawtimber Well	11.9	91	111-140	2 aged stand of R/W pine logs w/ WP & oak understory, going towards all-aged, WP understory is just reaching pole size, not ready to thin yet so maintain this stand for visual along Parrent Road for now
131	42141 - Planted Mixed Pine, Mixed Deciduous	Sawtimber Well	15.5	91	111-140	SL & pole-size R/W pine w/ X-Log WO, thinned 2014, 3 aged going towards all aged, hold 10 years to put more growth on residual before final harvesting or thinning again, use this YOE for visual management on Parrent Drive
134	42111 - Planted Red Pine, Mixed Deciduous	Sawtimber Well	6.8	91	141-170	Thinned in early 2000's by removing all but red pine and a few scattered oaks, scattered small areas with 90 SF or less but bulk of stand is ready to be thinned, thin again this YOE to 120 SF, thin from below to improve stand quality but remove some of the bigger pine also
135	4130 - Aspen	Sapling Well	7.9	36		Good aspen regeneration, transitioning to pole-size
136	4130 - Aspen	Sapling Well	16.9	15	Immature	decent A/O/M regeneration, scattered white pine saplings and poles, some sparse spots which didn't regenerate well but still fully stocked now
137	6113 - Lowland Maple	Poletimber Well	12.4	90	111-140	lowland HW's with X-log WP and WP u.s., 2 aged going towards all-aged, W3 filling in nicely, stand doing well on its own, NE corner has small inclusion of cedar ,
140	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	10.0	16	Immature	Cut 2002, planted 2004 to red pine (no trenching) with approx. 50% mortality on the RP seedlings, trenched in 2009 and replanted 2010, natural JP/Oak/Aspen regeneration with lots of pin cherry also
141	4199 - Other Mixed Upland Deciduous	Poletimber Well	6.7	37	51-80	

s t	Roscommor	n Mgt. Unit		Report 7	- Forested	Stands Compartment: 20 Year of Entry: 2020
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
148	42140 - Planted Mixed Pine	Sawtimber Well	25.3	93	111-140	planted to red/jack pine in 1926. lots of natural WP also which is smaller and younger, oak and white pine mix in understory, jack pine pretty well gone, should hold okay until next YOE
149	4130 - Aspen	Sapling Well	7.7	7	Immature	monitor stand for hardwood regeneration, esp. aspen
150	42110 - Planted Red Pine	Sawtimber Poor	9.8	91	81-110	Part of Stand #134 that is not ready to be thinned, less density of big RP but dense u/s in most spots, hold 10 years and then final harvest with Stand #134
151	42290 - Natural Mixed Pine	Poletimber Well	13.2	60	111-140	white pine pole timber stand transitioning to saw-log size. Lots of oak, red pine, jack pine and aspen present. Jack pine and oak declining fast, not much under-story, red pine and some white pine planted in 1931 - both of which are now mature, rest of white pine and other species are natural origin, Kotar habitat type is PArVCo(?) according to maps but this doesn't reflect what is on the ground as the majority of the stand is dry upland
152	6131 - Hemlock, White Pine, Maple, Birch	Sawtimber Well	10.3	60	81-110	super canopy white pine over hardwoods and cedar
153	42200 - Natural White Pine	Poletimber Well	17.3	60	81-110	Thick white pine pole timber stand in transition to a saw-log size stand. Some oak, red pine, jack pine and aspen present. Jack pine and oak is in poor shape and declining, aspen and red pine are mature, options are to hold stand, low thinning to 80-90 and taking some of the bigger red pine, or final harvest and plant red or jack pine, Kotar habitat type is PArVHa
154	6127 - Lowland Pine	Sawtimber Well	12.3	93	81-110	core of the stand is super canopy white pine with red maple poles and white pine saplings, edges are either low and wet with cedar component OR drier and heavier to hardwoods and aspen, fairly wet terrain with a few spots/islands of drier upland, good stand to leave for future Type 1 or 2 old growth
155	42140 - Planted Mixed Pine	Sawtimber Well	27.7	93	111-140	red pine logs and x-logs over jack pine/white pine poles due to past thinning in 1980 and 81 when most oak, aspen and jack pine were removed, there are still a few scattered oak logs and x-logs, oak and white pine mix in understory, Kotar habitat type is PVCd/PArVHa on the north end and PArVHa on the south end
157	42141 - Planted Mixed Pine, Mixed Deciduous	Sawtimber Well	34.0	88	81-110	Stand was treated in the past. Understory is a mix of either oak, jack pine, white pine, and/or aspen depending on location, Understory at or nearing pole size in most spots, Kotar habitat type is PVCd/PArVHa

42141 - Planted Mixed

Pine, Mixed Deciduous

158

Sawtimber

Well

51.5

88

111-140

planted to red pine and jack pine in 1931, appears to have had salvage/improvement cuts done in 1972/73 where they salvaged

dead oak, cut marked red/white pine, and diameter limit cut some of the larger oak and aspen, aspen/oak/jack pine/red maple regeneration resulting from these cuts is now pole-size or almost pole-size, stand is two/three-aged going towards all-aged

S t a n d	Roscommor	n Mgt. Unit		Report 7	- Forested	Stands Compartment: 20 Year of Entry: 2020
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
159	42141 - Planted Mixed Pine, Mixed Deciduous	Sawtimber Well	18.7	93	111-140	planted to red/white/jack pine in 1926, removed oak, aspen, and jack pine in 1980 and 1981 in most of stand, far east end was not thinned with the rest, now SL/XL pine and oak with pole-size pine underneath, jack pine in in-thinned parts mostly dead, not much understory, should hold OK until next YOE
160	4191 - Mixed Upland Deciduous with Conifer	Sapling Poor	13.4	8	Immature	Cut fall of 2011, was trenched in 2011 w/o burning and then planted in 2012



Cover Type	Acres	Managed Site	General Comments:
6224 - Treed Bog	4.4	No	north end is treed bog, south end is bog with encroaching/scattered conifers
6239 - Mixed Emergent Wetland	28.4	No	mix of marsh grass, cat-tail, lowland brush, and open water; beaver activity in this drainage
6225 - Bog	5.9	No	
6224 - Treed Bog	4.4	No	
6225 - Bog	6.0	No	OPIC - FMD: OI Stand Year Origin was
790 - Other Bare/Sparsely Vegetate	1.9	No	Oil well pad
6225 - Bog	3.0	No	OPIC - FMD: OI Stand Year Origin was
629 - Mixed non-forested wetland	74.4	No	"L" with some areas heavier to conifer trees
790 - Other Bare/Sparsely Vegetate	3.2	No	Abandoned oil well pad?, possible spot to develop new opening?
6225 - Bog	2.9	No	
790 - Other Bare/Sparsely Vegetate	0.8	No	Oil well pad
790 - Other Bare/Sparsely Vegetate	3.8	No	Oil well pad
790 - Other Bare/Sparsely Vegetate	2.4	No	Muskegon Oil headquarters.
710 - Sand, Soil	3.1	No	Oil well pad
6239 - Mixed Emergent Wetland	13.4	No	Marsh, Lowland Brush
310 - Herbaceous Openland	6.2	No	Pipeline ROW, mostly upland but does cross Townline Creek and several wet swales
6224 - Treed Bog	5.2	No	field verified to be treed bog
622 - Lowland Shrub	6.7	No	floodplain of Townline Creek
	6224 - Treed Bog 6239 - Mixed Emergent Wetland 6225 - Bog 6224 - Treed Bog 6225 - Bog 790 - Other Bare/Sparsely Vegetate 6225 - Bog 629 - Mixed non-forested wetland 790 - Other Bare/Sparsely Vegetate 6225 - Bog 790 - Other Bare/Sparsely Vegetate 710 - Sand, Soil 6239 - Mixed Emergent Wetland 310 - Herbaceous Openland	6224 - Treed Bog 4.4 6239 - Mixed Emergent Wetland 28.4 6225 - Bog 5.9 6224 - Treed Bog 4.4 6225 - Bog 6.0 790 - Other Bare/Sparsely Vegetate 1.9 6226 - Bog 3.0 629 - Mixed non-forested wetland 74.4 790 - Other Bare/Sparsely Vegetate 3.2 6225 - Bog 2.9 790 - Other Bare/Sparsely Vegetate 0.8 790 - Other Bare/Sparsely Vegetate 2.4 710 - Sand, Soil 3.1 6239 - Mixed Emergent Wetland 13.4 310 - Herbaceous Openland 6.2	Cover Type         Acres         Site           6224 - Treed Bog         4.4         No           6239 - Mixed Emergent Wetland         28.4         No           6225 - Bog         5.9         No           6224 - Treed Bog         4.4         No           6225 - Bog         6.0         No           790 - Other Bare/Sparsely Vegetate         1.9         No           6225 - Bog         3.0         No           629 - Mixed non-forested wetland         74.4         No           790 - Other Bare/Sparsely Vegetate         3.2         No           6225 - Bog         2.9         No           790 - Other Bare/Sparsely Vegetate         0.8         No           790 - Other Bare/Sparsely Vegetate         3.8         No           790 - Other Bare/Sparsely Vegetate         2.4         No           790 - Other Bare/Sparsely Vegetate         2.4         No           710 - Sand, Soil         3.1         No           6239 - Mixed Emergent Wetland         13.4         No           310 - Herbaceous Openland         6.2         No           6224 - Treed Bog         5.2         No



Cover Type	Acres	Managed Site	General Comments:
6224 - Treed Bog	10.1	No	
790 - Other Bare/Sparsely Vegetate	1.4	No	oil well site
6229 - Mixed lowland shrub	3.9	No	
629 - Mixed non-forested wetland	8.7	No	Parts are heavy to lowland hardwoods but too difficult to access stand and differentiate these areas.
622 - Lowland Shrub	18.8	No	
622 - Lowland Shrub	16.3	No	
500 - Water	19.0	No	Flooding (Beaver) on Townline Creek
623 - Emergent Wetland	1.8	No	
710 - Sand, Soil	0.7	No	oil well site
500 - Water	40.5	No	Anderson Flooding
6223 - Inundated Shrub Swamp	9.1	No	
500 - Water	5.5	No	
6223 - Inundated Shrub Swamp	6.7	No	
622 - Lowland Shrub	2.0	No	
710 - Sand, Soil	1.1	No	oil well site
623 - Emergent Wetland	23.9	No	hardwoods and jack pine scattered thru-out stand
623 - Emergent Wetland	2.3	No	stand is water depending on year/time of year
310 - Herbaceous Openland	1.1	No	old Well Site?
	790 - Other Bare/Sparsely Vegetate 6229 - Mixed lowland shrub 629 - Mixed non-forested wetland 622 - Lowland Shrub 500 - Water 623 - Emergent Wetland 710 - Sand, Soil 500 - Water 6223 - Inundated Shrub Swamp 500 - Water 6223 - Inundated Shrub Swamp 622 - Lowland Shrub 710 - Sand, Soil	6224 - Treed Bog       10.1         790 - Other Bare/Sparsely Vegetate       1.4         6229 - Mixed lowland shrub       3.9         629 - Mixed non-forested wetland       8.7         622 - Lowland Shrub       16.3         500 - Water       19.0         623 - Emergent Wetland       1.8         710 - Sand, Soil       0.7         500 - Water       40.5         6223 - Inundated Shrub Swamp       9.1         500 - Water       5.5         6223 - Inundated Shrub Swamp       6.7         6222 - Lowland Shrub       2.0         710 - Sand, Soil       1.1         623 - Emergent Wetland       23.9         623 - Emergent Wetland       2.3	Cover Type         Acres         Site           6224 - Treed Bog         10.1         No           790 - Other Bare/Sparsely Vegetate         1.4         No           6229 - Mixed lowland shrub         3.9         No           629 - Mixed non-forested wetland         8.7         No           622 - Lowland Shrub         18.8         No           622 - Lowland Shrub         16.3         No           500 - Water         19.0         No           623 - Emergent Wetland         1.8         No           710 - Sand, Soil         0.7         No           6223 - Inundated Shrub Swamp         9.1         No           6223 - Inundated Shrub Swamp         6.7         No           6223 - Inundated Shrub Swamp         6.7         No           622 - Lowland Shrub         2.0         No           710 - Sand, Soil         1.1         No           623 - Emergent Wetland         23.9         No           623 - Emergent Wetland         2.3         No



Stand	Cover Type	Acres	Managed Site	General Comments:
119	310 - Herbaceous Openland	1.9	No	old well site?
124	310 - Herbaceous Openland	1.8	No	
127	310 - Herbaceous Openland	1.0	No	
128	623 - Emergent Wetland	5.2	No	
132	330 - Low-Density Trees	1.5	No	filling in with conifer and oak regeneration
133	310 - Herbaceous Openland	5.9		Trenches 2016, Planted 2017 to red pine in FTP C71-970.
138	6225 - Bog	1.3	No	
139	6224 - Treed Bog	2.6	No	
142	790 - Other Bare/Sparsely Vegetate	0.3	No	Oil well pad
143	710 - Sand, Soil	0.8	No	oil well site
144	710 - Sand, Soil	0.6	No	oil well site
145	790 - Other Bare/Sparsely Vegetate	0.7	No	well site
146	790 - Other Bare/Sparsely Vegetate	0.8	No	oil well site
147	790 - Other Bare/Sparsely Vegetate	0.7	No	abandoned oil well site?
156	330 - Low-Density Trees	1.9	No	Low Density Conifer Trees, old oil well site, mostly white pine poles, stand was left when surrounding stand was cut, monitor stand for illegal ORV use as its fairly open and has an old two-track going up into it