

Compartment Review Presentation

Roscommon Forest Management Unit

Compartment 71048 Entry Year 2018 Acreage: 1,247

County Roscommon

Management Area: AuSable Outwash

Revision Date: 2016-08-04

Stand Examiner: Dale Ekdom

Legal Description:

T24N R01W Sections 27 & 34

Identified Planning Goals:

Vegetation management in the AuSable Outwash management area (MA) will provide forest products; maintain or enhance wildlife habitat; protect areas of unique character including several state wildlife area floodings, the Roscommon Forest Fire Experiment Station, threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year planning period will focus on improving the age-class structure of aspen, harvesting older jack pine and regeneration of red pine and oak to help balance age-classes. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests for hunting and other wildlife-related recreation opportunity and management of the state wildlife management areas. Expected trends within this 10-year planning period are an increase in non-native exotic plants, especially Phragmites in the wetland areas and increased recreational pressure

Soil and topography:

Terrain is flat to moderately rolling. Soils are mostly Ottawa loamy sand in Section

27 where the cover type is red pine. The remaining soils in Section 27 are a mixture of Roselawn and Grayling sands and Ottawa sandy loam on the upland areas and Greenwood peat in the lowland areas. The soils in Section 34 are mostly Grayling sand with some Rubicon sand on the upland areas and a band of Rifle peat and Lupton muck along South Creek.

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

This compartment is a solid block of state land and is surrounded by state land on 3 sides. North of the compartment, the private property is primarily farm fields and permanent residences on wooded acreages.

Unique Natural Features:

South Creek and its associated flood plain is a tributary to a natural river - S. Branch of the Au Sable - and as such falls under the Natural Rivers Act.

Archeological, Historical, and Cultural Features:

There is at least one archaeological site in this compartment

Special Management Designations or Considerations:

Stands adjacent to South Creek are designated HCVA's due to Natural River Status of South Creek.

Watershed and Fisheries Considerations:

South Creek is a tributary of the South Branch of the Au Sable River which is a designated trout stream

Wildlife Habitat Considerations:

Maintain ecosystem diversity in the compartment via habitat manipulation to benefit game species such as deer, grouse, rabbits, bear, and turkeys as well as non-game species.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of sand and gravel from ice-contact drift, glacial outwash, and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift are the Mississippian Marshall Sandstone and Coldwater Shale. The Marshall was previously used as a building stone in other areas of the state. Most of the good gravel pits are associated with upland areas. There may be some active sand & gravel activity in the SW¼ SE¼ of Section 22, just to the north of the compartment, and there appears to be a former sand pit in the SE¼ NE¼ of Section 27 (and a former state pit in Section 26). There may be additional potential in and around that pit. Part of St. Helen Field is located in Section 27. The field has produced over 8.7 million bbls of oil and 14.7 Bcf gas from the Devonian Richfield Formation and is in secondary recovery operations currently. All state parcels in Section 27 are leased and held-by-production in the

secondary recovery operations.

Vehicle Access:

Vehicle access to most of the compartment is excellent via county roads and forest two-tracks.

Survey Needs:

None necessary at this time.

Recreational Facilities and Opportunities:

Marl Lake Road at the south end of the compartment is also a snowmobile trail and the compartment is heavily used for hunting and other dispersed recreation.

Fire Protection:

There are high hazard fuel types in Section 34 (Jack Pine) but access is good for suppression equipment and there are several natural and man-made fuel-breaks within and adjacent to the compartment.

Additional Compartment Information:

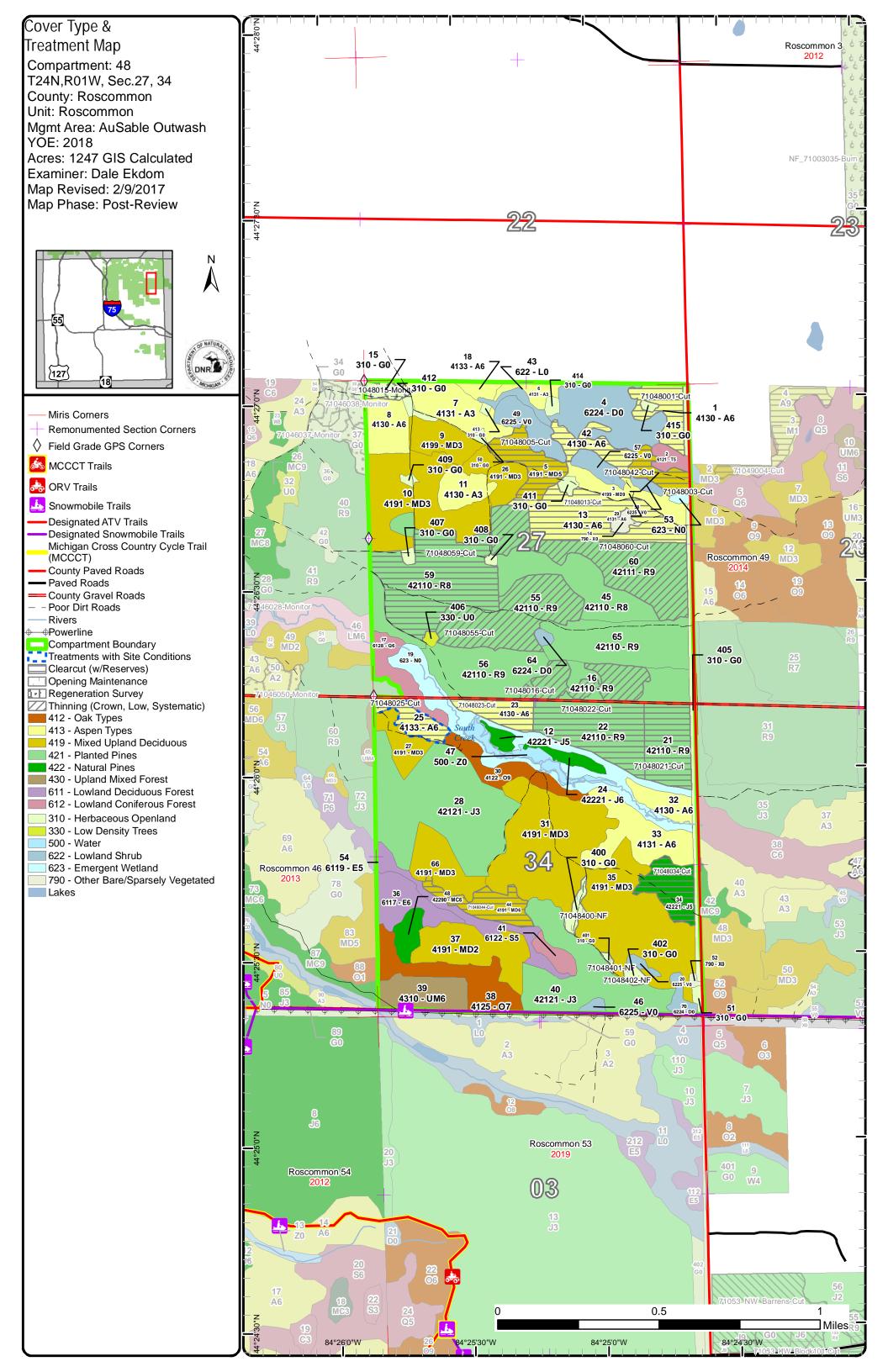
Heavy illegal fuel-wood cutting was found in one area of the compartment and some illegal dumping was discovered also.

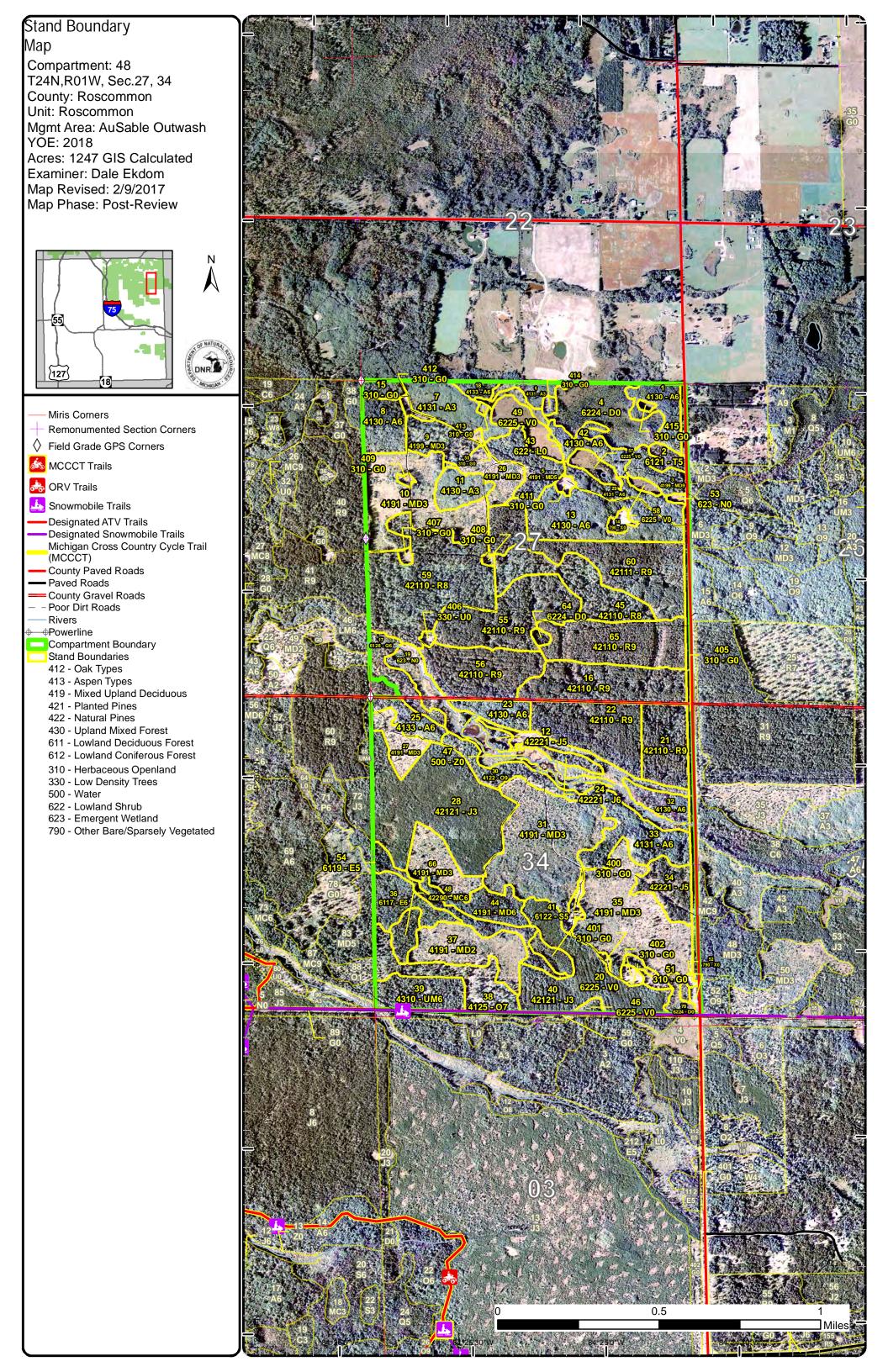
The following reports from the Inventory are attached:

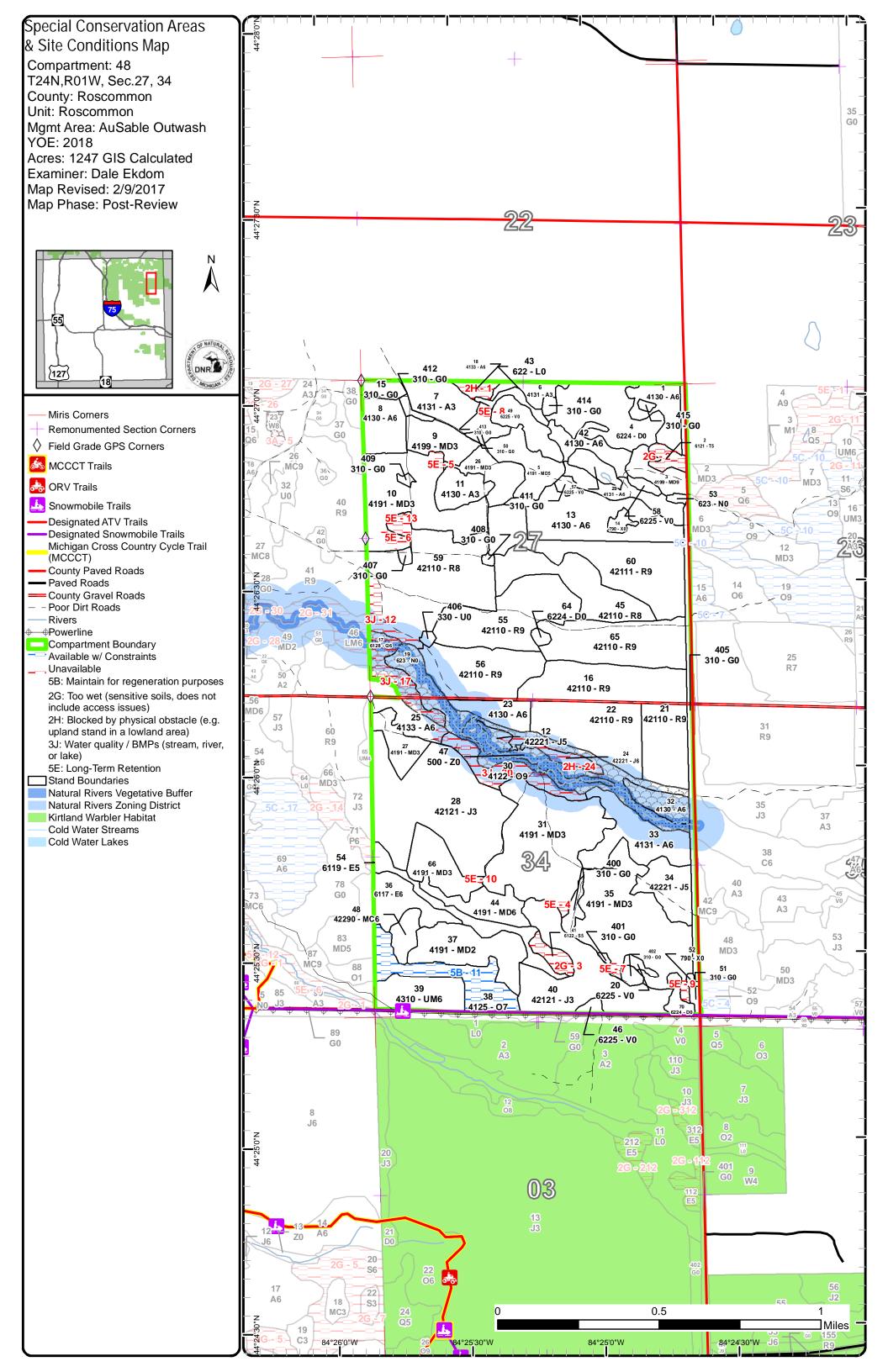
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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 2018

Roscommon Mgt. Unit Dale Ekdom : Examiner



Age Class

								,		,				,	,		,	,	
	Aoc Aoc	do s						, 3 / &		/ } \$						\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		St Jug	No. No. No.
Aspen	0	36	0	0	35	95	13	4	0	0	0	0	0	0	0	0	0	0	183
Bare/Sparsely Vegetated	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Bog	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Herbaceous Openland	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Jack Pine	0	0	0	122	0	0	0	0	8	0	0	0	0	0	0	0	0	15	145
Low-Density Trees	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	13
Lowland Deciduous	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	31
Lowland Shrub	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
Marsh	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Mixed Upland Deciduous	0	173	63	0	14	0	30	0	0	0	9	0	0	0	0	0	0	0	289
Natural Mixed Pines	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7
Oak	0	0	0	0	0	0	0	0	0	0	39	0	0	0	0	0	0	0	39
Red Pine	0	0	0	0	0	0	0	0	355	0	0	0	0	0	0	0	0	0	355
Tamarack	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
Treed Bog	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
Upland Mixed Forest	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Water	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Total	160	209	63	122	67	95	74	4	370	0	70	0	0	0	0	0	0	15	1249



Report 2 – Treatment Summary

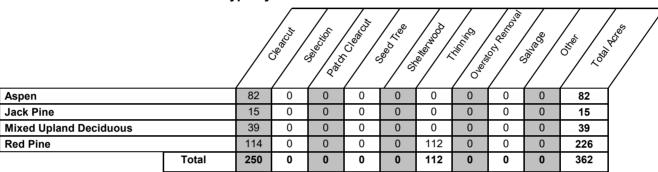
Roscommon Mgt. Unit Year of Entry: 2018

Acres of Harvest

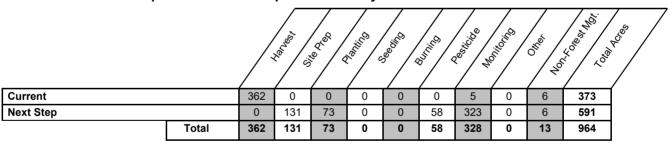
Compartment 48
Total Compartment Acres: 1,247

Commercial Harvest - 352 Harvests with Site Condition - 9 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Habitat Cut: No

Prescription cut all aspen/maple/jack pine to 2", cut all oak to 4", leave all R/W pine and mark up to 10 SF/Acre of oak to leave for a seed source, buffer bog to the north and vernal ponds in the NW as necessary for retention and BMP's, leave 2 quarter acre islands for retention on either side of the Specs:

forest two-track

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

acceptable regeneration is any combination of aspen/HW's/Pine to a fully stocked stand, plant jack pine where aspen/hardwoods do not Acceptable

regenerate to a fully stocked condition

Other Cut with Stand #13 to the east

Comment:

Regen:

Proposed Start Date: 10/01/2017

71048013-Cut 51-80 37.8 4130 - Aspen Poletimber Harvest Clearcut with 413 - Aspen Even-Aged **Draft Field** Well Retention Boundary

Habitat Cut: No Site Condition:

Prescription CCR to regenerate aspen and balance aspen age classes, leave all oak for wildlife mast, leave buffers on grassy opening and the barrow pit in the center of the stand for retention, leave out areas heavier to oak/RM saps-poles if they will make a manageable size stand or use these areas Specs:

for retention if they are too small

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: 10/01/2017

Roscommon Mgt. Unit Report 3 -- Treatments Compartment: 48 s Year of Entry: 2018 t а **Treatment Treatment Cover Type** Treatment Acres Stand Size Stand BA Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure Status d Natural Regen 71048015-4.6 310 - Herbaceous Draft Field 15 Nonstocked 0 Unspec Monitoring 413 - Aspen Even-Aged Openland ified (Re-Inventory) Boundary Monitor **Habitat Cut: No** Site Condition: Prescription monitor for natural regeneration Specs: Next Step **Treatments:** Acceptable any combination of aspen and other species to a fully stocked stand, trench and plant RP if regeneration fails Regen: Other this stand was cut out-of-YOE with Stand #38 of 71046 to the west in January 2016 and the next steps monitoring was place on St #8 so the Comment: monitoring in St #8 was deleted and was re-created for St #15. **Proposed Start Date:** 10/01/2018 42110 - Planted 16 71048016-Cut 20.0 Sawtimber 78 201+ 4211 - Planted Draft Field Harvest Low Thinning Even-Aged Red Pine Red Pine Well Boundary **Habitat Cut: No Site Condition:** Prescription Low thinning to 120-140 SF residual to improve the quality of the stand, should be able to take out some utility poles this YOE, leave out areas which have a heavy hardwood or pine understory - mostly on the east side and along the north side of Pine Drive. Specs: Next Step **Treatments:** <u>Acceptable</u> Regen: **Other** May have to remove every 3rd row is spots to improve maneuverability within the stand, sale may meet Chapter 7 thresh-holds due to leaving out less dense areas with heavy understory so approve any potential acreage change at the review. Comment: **Proposed Start Date:** 10/01/2017 22 9 42110 - Planted 81-110 Draft Field 71048021-Cut Sawtimber Harvest Clearcut with 42111 - Planted Even-Aged Red Pine Well Retention Red Pine. Boundary Mixed Deciduous **Habitat Cut: No Site Condition:** Prescription final harvest and re-plant to red pine, manage for a mix of red pine and oak, retention will be to mark out a few areas with heavy R/J/O understory for visual along Pine Road and leave the R/J/O understory along F-97 as a visual buffer Specs: Next Step SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr); SitePrep, Roller Chopping; Treatments: Pesticide, Aerial

Acceptable Any combination of planted red pine and other species to a fully stocked stand

Regen:

Other Comment:

10/01/2017 Proposed Start Date:

Draft Field 42110 - Planted 42111 - Planted 71048022-Cut 35.1 Sawtimber 111-Harvest Clearcut with Even-Aged Red Pine Well 140 Retention Red Pine, Boundary Mixed

Deciduous

Habitat Cut: No Site Condition:

Prescription final harvest and re-plant to red pine, manage for a mix of red pine and oak, retention will be to mark out a few islands with heavy R/J/O

understory for visual along Pine Road and F-97 Specs:

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

Treatments: Artificial Regen(3yr)

Acceptable Any combination of planted red pine and other species to a fully stocked stand

Regen:

Other

Comment:

10/01/2017 **Proposed Start Date:**

Acceptable any combination of planted red pine and other species to a fully stocked stand

Regen:

Other Comment:

10/01/2017 Proposed Start Date:

42 71048042-Cut 11.1 4130 - Aspen Poletimber 47 Unspec Harvest Clearcut 413 - Aspen Even-Aged **Draft Field** Well ified Boundary

Habitat Cut: No **Site Condition:**

Prescription final harvest for aspen management, little to no retention due to the long/narrow shape although the far west end of the stand is cut off by a wet drainage and could be left for retention, buffer any potholes for BMP's, leave a few small areas heavy to RP SL's for diversity, leave all oak for Specs: mast, should probably cut during dry or frozen conditions due to a water table that's close to the surface

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

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

Regen:

Other Comment:

Proposed Start Date: 10/01/2017

Acceptable Any combination of hardwoods and pine to a fully stocked stand

Regen:

Other (plant areas that are not fully stocked hardwoods after 3 years to red pine

Comment:

10/01/2017 **Proposed Start Date:**

42111 - Planted 4211 - Planted 71048060-Cut 50.4 78 Even-Aged Draft Field Sawtimber 111-Harvest Low Thinning Red Pine, Mixed 140 Red Pine Well Boundary

Deciduous

Habitat Cut: No Site Condition:

Prescription low thinning removing defect first to a target BA of 130 SF to improve the quality of the stand, avoid marking in the steeper areas of the stand to limit potential damage to the residual, may have to remove a few rows also in spots to improve maneuverability, avoid marking in areas of heavy Specs:

hardwood understory, leave as much hardwood as possible to maintain diversity in the stand

Next Step **Treatments:**

<u>Acceptable</u>

Regen:

Other

Comment:

Proposed Start Date:

10/01/2017

s t		Rosco	ommon Mgt. Unit		Re	eport 3	Treatmei	nts		tment: 48 Entry: 2018	DNR DNR
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
400	71048400-NF	3.5	310 - Herbaceous Openland	Nonstocke	ed	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Draft Field Boundary
		ultivate, t	Site Condition: fertilize, seed as requ	="	ntain es	stablished	l Wildlife Openin	ng, Keno 11.	·		
<u>Next</u> <u>Treat</u>	<u>Step</u> NonFor tments:	restMgt, l	Herbaceous/Crop/Gr	ass Plantin	g						
Acce Rege	<u>ptable</u> en:										
Other Com	<u>r</u> ment <u>:</u>										
	osed Start Date	<u>:</u> 10/0	01/2017								
401	71048401-NF	0.7	310 - Herbaceous Openland	Nonstocke	ed	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Draft Field Boundary
		ultivate, t	Site Condition: fertilize, seed as requ		ntain es	stablished	l Wildlife Openin	ng, Keno 12.	·		
<u>Next</u> <u>Treat</u>	<u>Step</u> NonFoi tments:	restMgt, l	Herbaceous/Crop/Gr	ass Plantin	g						
Acce Rege	<u>ptable</u> en:										
Other Com	<u>r</u> ment:										
Propo	osed Start Date	<u>:</u> 10/0	01/2017								
402	71048402-NF	2.2	310 - Herbaceous Openland	Nonstocke	ed	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Draft Field Boundary
		ultivate, t	Site Condition: fertilize, seed as requ	•	ntain es	stablished	l Wildlife Openin	ng, Keno 13.			
	<u>Step</u> NonFoi tments:	restMgt, l	Herbaceous/Crop/Gr	ass Plantin	g						
Acce Rege	<u>ptable</u> en:										
Other Com	<u>r</u> ment:										

Total Treatment Acreage Proposed:

Proposed Start Date:

10/01/2017 **372.6**

Compartment: 48

Roscommon Mgt. Unit

Dale Ekdom : Examiner Year of Entry: 2018

Availa	ability for	Managemer	nt						
Total	Acres	Acres Avail	Acres	D	omina	nt Site	e Con	ditions	3
Acres	Available	With Condition	Not Available		5B	2G	2H	3J	5E
183	177	0	5	Aspen		0	4	1	0
3	3	0	0	Bare/Sparsely Vegetated					
24	24	0	0	Bog					
43	43	0	0	Herbaceous Openland					
145	140	0	5	Jack Pine			5		
1	1	0	0	Low-Density Trees					
13	0	0	13	Lowland Conifers				13	
30	30	0	0	Lowland Deciduous					
3	3	0	0	Lowland Shrub					
5	0	0	5	Lowland Spruce/Fir		5			
40	39	0	1	Marsh			1		
287	280	0	7	Mixed Upland Deciduous					7
7	7	0	0	Natural Mixed Pines					
39	0	25	14	Oak	25			14	
354	345	0	10	Red Pine				7	3
4	0	0	4	Tamarack		4			
36	36	0	0	Treed Bog					
18	18	0	0	Upland Mixed Forest					
9	9	0	0	Water					
1,247	1,156	25	66	Total Forested Acres	25	10	10	35	11
	93%	2%	5%	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.

Unavailable 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) 4 5E: Long-Term Unspecified Unspecified Unspecified Unspecified Comments:			Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition		
	1	Unavailable	obstacle (e.g. upland	4	<u> </u>	Unspecified	Unspecified	Unspecified		
small isolated stand left when Stands 6 and 7 were harvested In 2008 YOE, south and east sides have broad drainages which are wet										

Report 4 – Site Conditions

Roscommon Mgt. Unit

Dale Ekdom : Examiner

2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Roscommon Mgt. Unit

Dale Ekdom : Examiner

9	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
10	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
11	Available	5B: Maintain for regeneration purposes	25	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
12	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
13	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
17	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	13	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
(Comments:						
24	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	7	3D: Recreational / Scenic values	Unspecified	Unspecified	Unspecified
(Comments:						

Report 4 – Site Conditions

Roscommon Mgt. Unit

Dale Ekdom : Examiner Year of Entry: 2018

30 Unavailable 3J: Water quality / BMPs 15 3D: Recreational / 3D: Recreational / Scenic values Unspecified Unspecified Unspecified Comments:

Compartment: 48

02/09/2017 11:42:37 AM - Page 4 of 4 TONELLOM1

Compartment: 048
Year of Entry: 2018



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
	Potential Old Growth		SCA Removal	1
Comments				
This area no longer n	neets the criteria to be classified as a Spec	ial Conservation Area.		
	Potential Old Growth		SCA Removal	1
Comments				
This area no longer n	neets the criteria to be classified as a Spec	ial Conservation Area.		
	Potential Old Growth		SCA Removal	16
Comments				
This area no longer n	neets the criteria to be classified as a Spec	ial Conservation Area.		
	Potential Old Growth		SCA Removal	21
Comments				
This area no longer n	neets the criteria to be classified as a Spec	ial Conservation Area.		

Roscommon Mgt. Unit Compartment: 48
Year of Entry 2018



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	n 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 condistocked trout populations and those of other coldwater fish specified 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
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and coop U.S. Fish and Wildlife service for the recovery of threatened and 365, Endangered Species Protection, of the Natural Resources a PA 451, and the Federal Endangered Species Act of 1973. This is species plans in various stages of review. As of now only two ex Plover Habitat.	endangered species, as governed by Part and Environmental Protection Act, 1994 s an active program, with proposed
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spapproved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 10 and Vegetative Buffers for each Natural River see the table locat folder.	Zoning District is a 400 foot buffer for 00 feet. To view specific Zoning Districts

S t	Roscommor	Roscommon Mgt. Unit Level 4 Size Cover Type Density		Report 7	- Forested	Stands Compartment: 48 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	Poletimber Well	13.2	51	Unspecified	Dry ground but with water table close to the surface and numerous small/wet potholes, there is a good spot for a landing in the middle of the stand, mix of big tooth and quaking aspen with scattering of R/W pine poles-logs-XL's, final harvest for aspen management, no retention except to buffer interior potholes/vernal ponds and bog edges where needed
2	6121 - Tamarack	Poletimber Medium	4.4	97	81-110	Poles-size tamarack stand with balsam fir and black spruce on the edges and scattered thru-out stand, very wet
3	4199 - Other Mixed Upland Deciduous	Sawtimber Well	9.2	97	81-110	Mature oak over-story with younger aspen underneath, scattered mature R/J pine SL's and WP poles also, several wet potholes in stand with bog or lowland shrub, some stand edges are fairly steep as stand dives into the lowlands, oak is poor quality and declining, cut and manage for aspen but mark up to 20 SF acre of oak and R/W pine to leave where aspen is scarce, some areas will have fairly sparse regeneration of aspen but these areas can act as mini oak barrens
5	4191 - Mixed Upland Deciduous with Conifer	Poletimber Medium	15.6	52	1-50	mix of everything, looks like a "choppers choice" cut from the 1960's, terrain slopes to the north so there is good frost drainage, oak ranges from sapling to SL/XL,A/JP are pole-size, RM is S-P, R/W pine is P/L, oak is very poor quality and mostly small poles to small sawlogs but there are areas that are still sapling size oak, aspen and jack pine is ready to harvest and everything else should hold until next YOE, Oak XL's and R/W pine XL's are scattered thru-out stand, north-west part of the stand is lower ground and is mostly A6, there are also at least 2 vernal ponds in the NW part, overall the stand grows decent aspen and pine but the other species, especially the oak are low quality
6	4131 - Aspen, Oak	Sapling Well	5.7	7	Immature	Cut 2010, nice A3 regeneration
7	4131 - Aspen, Oak	Sapling Well	19.4	7	Immature	Cut 2010, nice A3 regeneration
8	4130 - Aspen	Poletimber Well	14.3	47	Unspecified	Nice A6, cut or hold as needed, possible green-up concerns on the north and west side of the stand, leave all oak or mark oak to leave if cut
9	4199 - Other Mixed Upland Deciduous	Sapling Well	13.5	36	Immature	O7O2M2A2J1, mix of everything due to cuts in 1981 and 2010, 2 ages of O/A/M regeneration, also scattered oak and R/W pine SL, which were marked to leave
10	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	46.1	7	Immature	Cut 2010, RP planted 2011, lots of hardwoods encroaching over planted red pine, release with aerial herbicide application?
11	4130 - Aspen	Sapling Well	10.6	7	Immature	Cut 2010, nice A3, edges have been inter-planted with RP from adjacent plantings
12	42221 - Natural Jack Pine, Mixed Deciduous	Poletimber Medium	3.2	77	Unspecified	OPIC - FMD: MIX OF JACK PINE/ASPEN/OAK, STAND IS 3 ISLANDS SURROUNDED BY MARSH IN FLOODPLAIN OF SOUTH CREEK, ALLOW TO CONVERT TO ASPEN/OAK, H.C.V.A = BUFFER ZONE OF NATURAL RIVER TRIBUTARY

s t	Roscommon Mgt. I			Report 7	- Forested	Stands Compartment: 48 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
13	4130 - Aspen	Poletimber Well	37.8	47	51-80	Stand was non-commercially cut in the 1970's, east 1/2 is approx. 5-7 years younger than the west 1/2 but is still mostly merchantable, ranges from small poles to small logs in size but there are also a few small areas with oak/RM saplings mixed amongst the aspen which could be left to grow some more or just left for retention, scattered oak SL's, lots of CWD on the ground as the aspen is beginning to thin itself naturally, final harvest and manage for aspen
16	42110 - Planted Red Pine	Sawtimber Well	36.8	78	201+	Planted 1935-1939, thinned portions in 1989 and 2000, very nice RP SL stand which ranges from very dense R9 with very little under-story to less dense R9 with lots of RP and HW saplings, 2 to 3-aged due to past thinnings, needs to be thinned again in some spots (mostly the west 2/3rds of the stand), possibly consider for conversion to hardwoods at some point if that is what management area plan calls for at that time.
17	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	13.1	97	Unspecified	Swamp conifer stand with hardwood component in the floodplain of South Creek, H.C.V.A = TRIBUTARY TO NATURAL RIVER, terrain is very wet to drier and with a water table close to the surface, trees range in size rom R/W pine XL's to pole-size NWC/TA/RM to RM/BF saplings, oldest trees are slowly dying but are being replaced with RM/BF, maintain for a BMP buffer on South Creek
18	4133 - Aspen, Mixed Pine	Poletimber Well	3.6	62	Unspecified	Stand was left-over (retention) from when Stands 6 and 7 were cut last YOE, wetter terrain in this stand plus broad natural drainages on the south and east sides make access difficult, east side of the stand is heavy to WP poles and there are scattered R/W pine XL's thru-out stand
21	42110 - Planted Red Pine	Sawtimber Well	22.9	77	81-110	Planted 1940, thinned in 1989, heavy understory of oak/JP/RP in the old skid trails and light-medium oak understory in the rest of the stand, hold or re-start as desired, recommend managing for a mixed stand of oak and red pine by cutting and then trenching/planting red pine to continue balancing RP age class distribution.
22	42110 - Planted Red Pine	Sawtimber Well	35.1	77	111-140	Planted 1940, Thinned in 2000, not quite ready for thinning yet but could thin if desired to 90SF/acre to promote growth on the best stems, understory is fairly sparse compared to Stand #21
23	4130 - Aspen	Poletimber Well	10.4	47	111-140	Mature TA stand which is starting to fall apart, west end is heavy to white pine, hold and accept some volume loss or cut now to regenerate aspen, consider leaving white pine on the west side for visual on Pine Drive, buffer lowland to the south if needed
24	42221 - Natural Jack Pine, Mixed Deciduous	Poletimber Well	4.8	77	Unspecified	OPIC - FMD: MIX OF JACK PINE/ASPEN/OAK, STAND IS AN ISLAND SURROUNDED BY MARSH IN FLOODPLAIN OF SOUTH CREEK, ALLOW TO CONVERT TO ASPEN/OAK, H.C.V.A = BUFFER ZONE OF NATURAL RIVER TRIBUTARY
25	4133 - Aspen, Mixed Pine	Poletimber Well	9.4	47	51-80	Decent A6 Stand, NW part is heavy to oak/JP and the rest is A6, Cut or hold as needed, plant red pine on the northwest end along road if this area does not regenerate, H.C.V.A. = PORTIONS OF STAND WITHIN NATURAL RIVER BUFFER ZONE (Tributary)

S t	Roscommor	n Mgt. Unit		Report 7	- Forested	Stands Compartment: 48 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
26	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	12.4	6	Immature	Cut 2010, planted to red pine in 2011, similar to Stand #10 but contains numerous small clones of aspen
27	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	10.9	6	Immature	Cut 2009, planted to jack pine in 2011, lots of pin cherry in this stand, scattered RP/Oak SL were left also
28	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	76.1	27	Immature	JP planted/seeded 1990, spots are approaching pole-size, scattered spots heavy to hardwoods
29	4131 - Aspen, Oak	Poletimber Well	12.1	42	111-140	Top of the hill along the forest 2T is solid A6 but the rest of the stand is smaller diameter with scattered aspen and heavier oak/red maple, hold 10 years until oak/red maple are bigger.
30	4122 - Oak, Pine	Sawtimber Well	14.2	97	51-80	over-mature poor quality oak and jack pine with mix of pine in the understory, going towards all aged, lots of firewood theft in this stand, partially within buffer of a natural river zone, maintain as buffer on South Creek
31	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	62.9	15	Immature	Cut 2001, seeded to JP in 2002, scattered R/W pine poles and oak poles, lots of natural hardwood regeneration along with the seeded JP
32	4130 - Aspen	Poletimber Well	8.8	39	Unspecified	Nice young A6 stand, still fairly small diameter-wise with some aspen in spots which is not yet pole-size, H.C.V.A. = PORTIONS WITHIN THE BUFFER ZONE OF A NATURAL RIVER
33	4131 - Aspen, Oak	Poletimber Well	26.3	39	51-80	Nice young A6 stand which is mostly A6 but parts are O5O2 while other parts are heavy to jack pine
34	42221 - Natural Jack Pine, Mixed Deciduous	Poletimber Medium	15.0	53	Unspecified	Mix of ages due to past wildfires, pole-size J6 in most spots but numerous spots are fairly sparse with mostly sapling size or 1 stick bush JP, age ranges from 30-50 years old, cut now or hold 10 years and harvest with the 2 aspen stands to the north (Stands 32 and 33), should hold okay for 10 years with little volume loss, stand is not really a jack pine site but is better suited to red pine or hardwoods, final harvest and trench/plant red pine, manage for a mix of red pine and hardwoods so no herbicide
35	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	58.6	6	Immature	Cut 2009, planted to jack pine in 2011, fairly equal mix of planted jack pine and natural oak regeneration with scattered red maple and pin cherry
36	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	15.7	52	81-110	hummocky ground with stand water all over but probably operable during drier or frozen conditions, stand is a mix of everything but it is dominated by the red maple pole-sapling understory, there are also scattered R/W/J pine saw-log trees but the jack pine is declining, age give is from the oldest A/M/JP but the bulk of the stand is younger, west part has most of the aspen and the east part is mostly RM saps-poles with mixed pine SL's, access to the stand is poor due to a drainage on the north end and no road to the stand from the south, the red maple in this stand needs to grow some more and the TA should hold OK due to the higher water table so recommend holding this stand until next YOE.

s t	Roscommon	Roscommon Mgt. Unit Level 4 Size		Report 7	– Forested	Stands Compartment: 48 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
37	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	26.7	6	Immature	Cut 2009, planted to jack pine in 2011, should be fully stocked stand next YOE but fairly sparse in spots now
38	4125 - Black, N. Pin Oak	Sawtimber Poor	25.0	97	1-50	Shelter-wood cut in 2009, now 2-aged natural JP/Oak regeneration with oak, red pine, and white in the over-story, retain until next YOE for regeneration purposes
39	4310 - Pine, Oak Mix	Poletimber Well	18.4	39	51-80	regeneration from 1978 cut which is just reaching pole-size and growing well, west part is heavy to R6 and parts are still sapling size
40	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	46.2	27	Immature	roller-chopped and seeded to jack pine, regenerated in strips 30-60 feet wide separated by "unplanted" strips 10-15 foot wide, parts are approaching pole-size
41	6122 - Black Spruce	Poletimber Medium	5.1	92	1-50	wet conifer pocket in a broad drainage area, mostly black spruce with super-canopy pines, small pockets of "L" within stand, too small or wet to bother with treating
42	4130 - Aspen	Poletimber Well	11.1	47	Unspecified	Nice A6 stand with scattered RP L/X's and oak saw-logs, stand is on a long arm with wet terrain of some sort on 3 sides, scattered wet potholes/drainages within stand of varying sizes, cut or hold stand as desired although some of the largest aspen is starting to fall apart
44	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	13.9	52	81-110	mix of everything with parts heavy to JP, oak, or TA depending on where you are in the stand, south edge is wetter as it grades into a wet timbered drainage, all species are poor quality with A/JP declining, lots of blowdown thru-out stand, far east part of the stand is heavy to pole-size oak
45	42110 - Planted Red Pine	Sawtimber Medium	30.9	78	81-110	Stand was planted in 1939 and thinned in 1989 and 2000, now consists of red pine saw-logs with a heavy understory of hardwoods, hardwood understory is O/A/M which is 2 aged and mostly 1-2" up to 4" in diameter, hold 10 years and then manage for the hardwood understory
48	42290 - Natural Mixed Pine	Poletimber Well	6.8	72	81-110	mixed conifer stand but jack pine in it is declining and mostly dead, lots of blowdown from declining jack pine, stand is thinning itself out naturally, heavy W3 thru-out stand of various heights and ages especially where the canopy is less dense
54	6119 - Mixed Lowland Deciduous Forest	Poletimber Medium	14.7	52	51-80	low, narrow, wet, stand with numerous areas heavy to leatherleaf bog, natural drainage area
55	42110 - Planted Red Pine	Sawtimber Well	41.2	78	171-200	Stand was planted in 1939 and various parts thinned in 1989 and/or 2000, needs to be thinned again in most spots, this stand is too nice of a young R9 stand to harvest and re-plant so hold at least another YOE before re-starting, recommend a low thinning to 120 SF removing defect to improve stand quality, probably will get a few utility poles out of this stand also, possibly consider for conversion to hardwoods at some point if that is what management area plan calls for at that time.

S t a n d	Roscommon Mgt. Unit			Report 7	Forested	Stands Compartment: 48 Year of Entry: 2018	RESOURCE.
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	<i>'?</i>
56	42110 - Planted Red Pine	Sawtimber Well	32.8	78	111-140	Planted 1939 and thinned portions in 1989, ranges from little understory to heavy understory depending on canopy density, nice red pine stand but not ready to be thinned again yet	
59	42110 - Planted Red Pine	Sawtimber Medium	66.2	78	1-50	Stand was planted in 1939 and thinned in 1989 and 2000, now consists of red pine saw-logs with a heavy understory of hardwoods, hardwood understory is O/A/M which is 2 aged and mostly 1-2" up to 4" in diameter, very variable BA with stand ranging from O3 to R7 to R9, recommend final harvesting red pine over-story and managing for the hardwood under-story, protect as much as much of the HW under-story as possible	_
60	42111 - Planted Red Pine, Mixed Deciduous	Sawtimber Well	50.4	78	111-140	Stand was planted in the mid-late 1930's and thinned in 2000 by removing rows and also individual trees, stand ranges from R9O1 in the denser canopy portions to R7O3R1 in the old skid trails or areas where a large HW tree was removed, stand has pockets of HW SL trees also and also numerous steep slopes and bowls, recommend low thinning to 120-140 SF to improve the quality of the stand, possibly consider for conversion to hardwoods at some point if that is what management area plan calls for at that time.	_
65	42110 - Planted Red Pine	Sawtimber Well	38.2	78	111-140	Thinned in 1989, 2000, and 2009, lots of oak saplings from the 1989 and 2000 cuts and RP seedlings from the 2009 cut, not ready for another thinning yet, very high quality stand now due to the 3 thinnings in the last 3 YOE's)

4191 - Mixed Upland Deciduous with Conifer

66

Sapling Well

17.6

6

Immature

Cut 2009 and planted to jack pine in 2011, lots of pin cherry in this stand, scattered red pine and oak SL trees were left when cut



		Site	General Comments:
6224 - Treed Bog	30.2	No	
790 - Other Bare/Sparsely Vegetate	2.5	No	Barrow Pit, lots of trash scattered around from people using this as a shooting range
310 - Herbaceous Openland	4.6		Cut in January 2016 for aspen management, treated with Stand 38 in 71046 to the west
623 - Emergent Wetland	39.2	No	FLOODPLAIN OF SOUTH CREEK, BUFFER ZONE OF NATURAL RIVER
6225 - Bog	1.8	No	Bog with a rim of surrounding trees
622 - Lowland Shrub	3.5	No	"L"/"V" TYPE ALONG EDGE OF LARGER BOG AREA
6225 - Bog	1.9	No	Bog, includes small island of high ground with J3 in the south central part of the stand
500 - Water	9.4	No	BEAVER FLOODINGS IN SOUTH CREEK, H.C.V.A. = BUFFER ZONE OF NATURAL RIVER TRIBUTARY
6225 - Bog	11.9	No	
310 - Herbaceous Openland	1.0	No	Old Well Site
310 - Herbaceous Openland	1.6	No	POWERLINE/ F-97 R.O.W. south of the CE sub-station (Stand #52)
790 - Other Bare/Sparsely Vegetate	0.8	No	Consumers Energy transfer station
623 - Emergent Wetland	1.0	No	
6225 - Bog	5.9	No	bog with a small pond in the center surrounded by conifer trees, encroaching conifers on the edges and scattered conifers in the middle of the stand
6225 - Bog	2.1	No	
6224 - Treed Bog	1.5	No	BOG WITH ENCROACHING SPRUCE/FIR
6224 - Treed Bog	4.1	No	
	790 - Other Bare/Sparsely Vegetate 310 - Herbaceous Openland 323 - Emergent Wetland 3225 - Bog 322 - Lowland Shrub 3225 - Bog 300 - Water 3225 - Bog 310 - Herbaceous Openland 310 - Herbaceous Openland 310 - Other Bare/Sparsely Vegetate 323 - Emergent Wetland 3225 - Bog 3225 - Bog 3225 - Bog	290 - Other Bare/Sparsely Vegetate 2.5 310 - Herbaceous Openland 39.2 323 - Emergent Wetland 39.2 3225 - Bog 1.8 3225 - Bog 1.9 300 - Water 9.4 3225 - Bog 11.9 310 - Herbaceous Openland 1.0 310 - Herbaceous Openland 1.6 320 - Other Bare/Sparsely Vegetate 0.8 323 - Emergent Wetland 1.0 3225 - Bog 5.9 3225 - Bog 5.9	790 - Other Bare/Sparsely Vegetate 2.5 No 310 - Herbaceous Openland 4.6 323 - Emergent Wetland 39.2 No 3225 - Bog 1.8 No 322 - Lowland Shrub 3.5 No 3225 - Bog 1.9 No 300 - Water 9.4 No 3225 - Bog 11.9 No 310 - Herbaceous Openland 1.0 No 310 - Herbaceous Openland 1.0 No 310 - Herbaceous Openland 1.6 No 323 - Emergent Wetland 1.0 No 323 - Emergent Wetland 1.0 No 3225 - Bog 5.9 No 3225 - Bog 5.9 No 3225 - Bog 1.5 No



Stand	Cover Type	Acres	Managed Site	General Comments:
400	310 - Herbaceous Openland	3.5	Yes	MAINTAINED WILDLIFE OPENING
401	310 - Herbaceous Openland	0.7	Yes	MAINTAINED WILDLIFE OPENING
402	310 - Herbaceous Openland	2.2	Yes	MAINTAINED WILDLIFE OPENING
405	310 - Herbaceous Openland	19.7	No	POWERLINE/ F-97 R.O.W., includes a narrow strip of jack pine or hardwoods in spots
406	330 - Low-Density Trees	1.1	No	ABANDONED WELL SITE, GRASSY OPENING WITH ENCROACHING OAK/RP/JP SAPS
407	310 - Herbaceous Openland	1.2	No	Old Well Site
408	310 - Herbaceous Openland	0.8	No	Old Well Site
409	310 - Herbaceous Openland	0.9	No	Old Well Site
411	310 - Herbaceous Openland	1.7	No	Old Well Site
412	310 - Herbaceous Openland	1.8	No	Old Well Site
413	310 - Herbaceous Openland	0.6	No	Old Well Site
414	310 - Herbaceous Openland	1.5	No	Old Well Site, east 1/3rd is treed
415	310 - Herbaceous Openland	0.9	No	old oil well site