

Roscommon Forest Management Unit Compartment Review Presentation

Compartment # 161 Entry Year: 2014
Compartment Acreage: 1301 County: Roscommon

Revision Date: 8/7/2012

Stand Examiner: Jason Lewicki

Legal Description: T21N R03W Section 19 and 30.

Identified Planning Goals: Upper Muskegon Eco-Regional Management Area

Management Goals: Maintain current age and species diversity in a range of early and late succession

ecosystems.

Soil and Topography: Terrain is mostly flat to gently rolling throughout the compartment. Soils on uplands are a mix of Croswell, Grayling and Greycalm sands. Lowland areas consist Tawas-Lupton mucks.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The entire compartment and much of the surrounding township are under state ownership. Land use is heavy within this compartment from hunting, ORV and snowmobile use. The area also has heavy oil and gas useage with multiple active wells and above ground pipelines. Some of which contain "sour gas".

Unique, Natural Features: There is a Northern Wet Meadow identified in the south west area of the compartment.

Archeological, Historical, and Cultural Features: None noted. No sites found during field work.

Special Management Designations or Considerations: None noted.

Watershed and Fisheries Considerations: Townline creek flows through the compartment.

Wildlife Habitat Considerations: Townline creek and adjacent riparian areas are used heavily by waterfowl and beavers.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift are the Jurassic Ionia Formation and the Pennsylvanian Grand River and Saginaw Formations. The Saginaw is quarried for brick making clay elsewhere in the State. There are no nearby gravel pits, the nearest gravel pit is located three miles to the west and potential appears to be limited. Headquarters Field is located in the compartment. The field has produced over 11.3 million BO and 4.2 Bcf gas primarily from the Devonian Richfield Formation. It is in secondary recovery operations currently. All of the State land in the compartment is currently leased.

Vehicle Access: There is good vehicle access to the compartment. There are multiple gravel county and forest roads. Some forest roads are well maintained for oil and gas well maintenance.

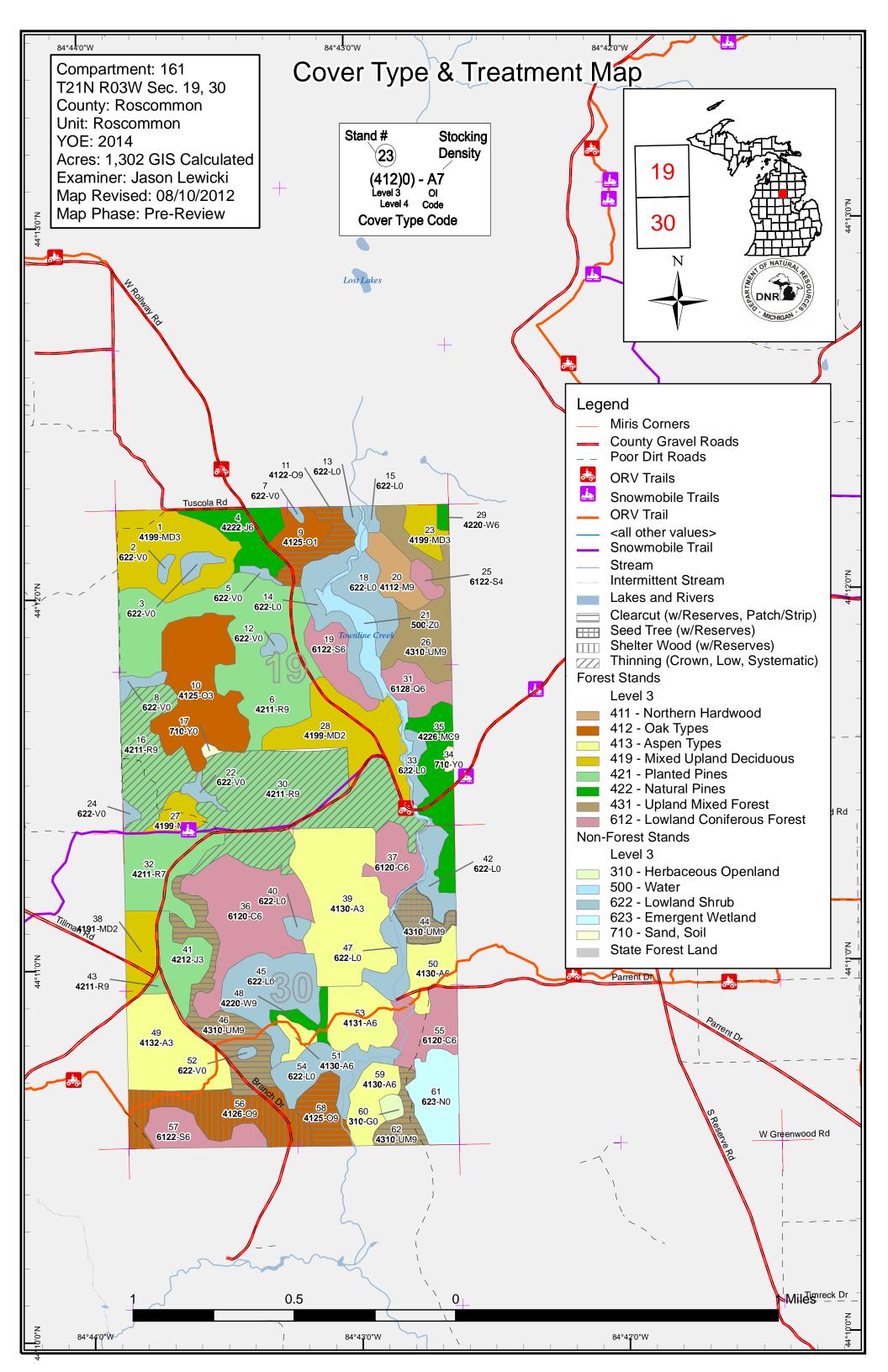
Survey Needs: No survey work currently needed.

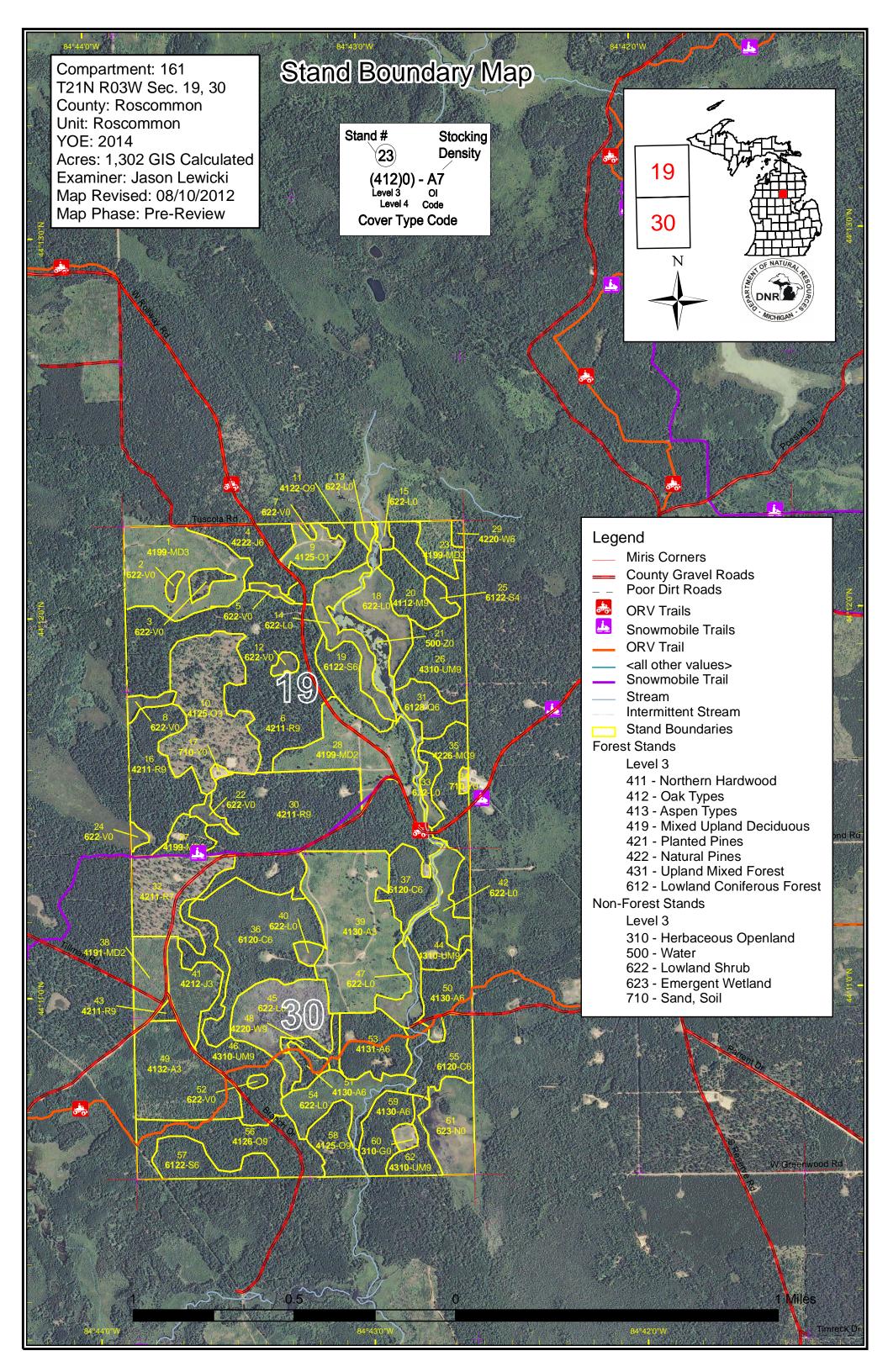
Recreational Facilities and Opportunities: A snowmobile trail(trail 6) and ORV trail(Denton Creek trail.) that run through the compartment. Hunting and trapping opportunities are excellent with a mix of upland and lowland cover types along with Townline creek.

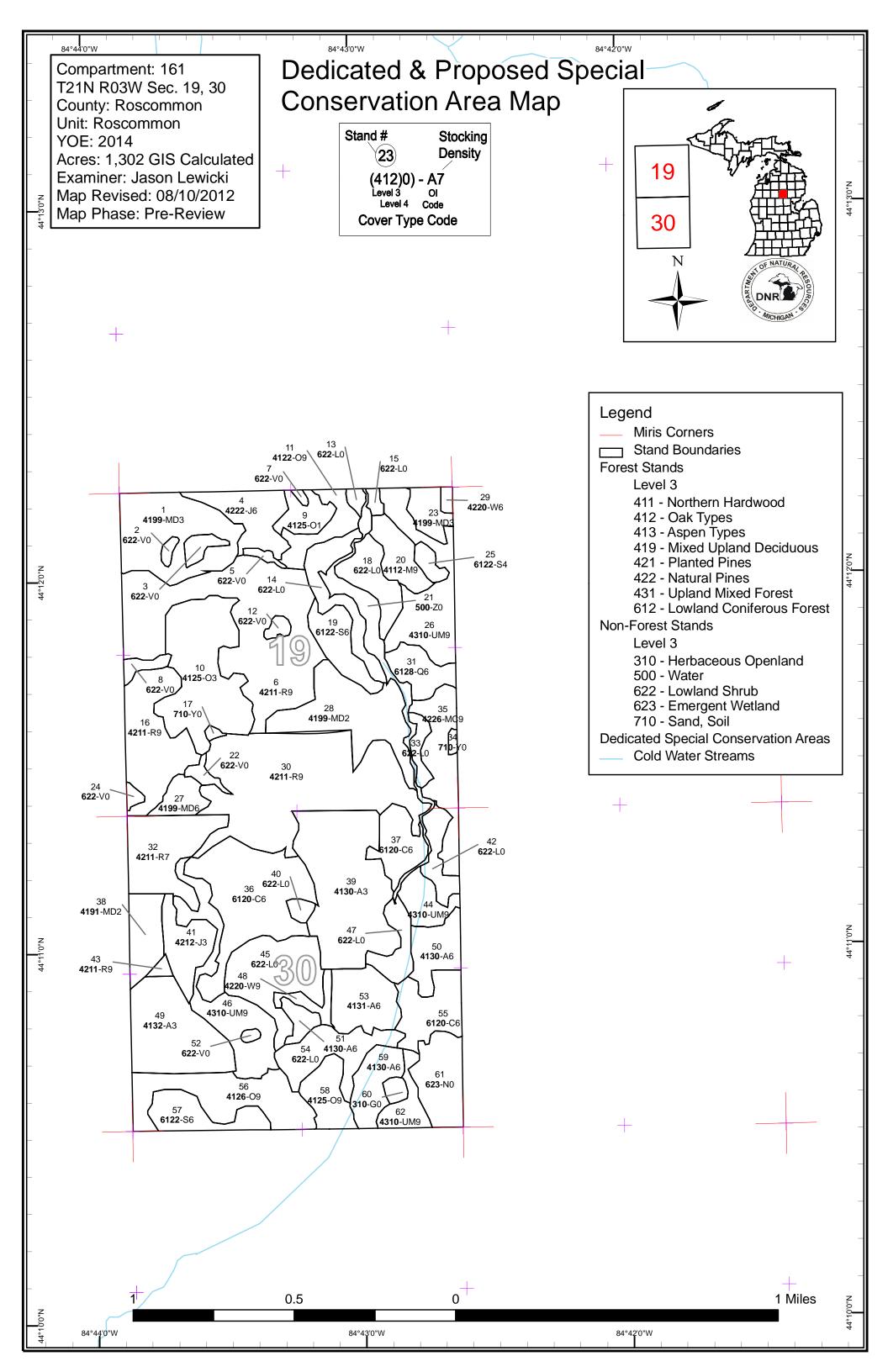
Fire Protection: There is a potential for large wildfires within this compartment and general area. Heavy pine cover types and heavy recreational use warrant concern. This is within the Houghton Lake DNR response area.

Additional Compartment Information: None

- ➤ The following reports from the Inventory are attached:
 - **♦** Total Acres by Cover Type and Age Class
 - **♦** Proposed Treatment Summary
 - **♦** Proposed Treatments No Limiting Factors
 - **♦** Proposed Treatments With Limiting Factors
 - **♦ Stand Details (Forested and Nonforested)**
 - **♦** Dedicated and Proposed Special Conservation Areas
- > The following information is displayed, where pertinent, on the attached compartment maps:
 - ♦ Base feature information, stand boundaries, cover types, and numbers
 - **♦** Proposed treatments
 - **♦** Details on the road access system







Compartment 161 Year of Entry 2014

Roscommon Mgt. Unit

Jason Lewicki : Examiner



Age Class 70,79 00,00 10,0 NO. AS &Q. Ø, 80 80 %× Aspen Bog Cedar Herbaceous Openland Jack Pine **Lowland Conifers** Lowland Shrub Lowland Spruce/Fir Marsh Mixed Upland Deciduous Natural Mixed Pines Northern Hardwood Oak Red Pine Sand, Soil Upland Mixed Forest Water White Pine

Total



Table 2 – Proposed Treatment Summaries

Roscommon Mgt. Unit
Year of Entry 2014

Compartment 161
Total Compartment Acres: 1302

Acres by Treatment Type

Commercial Harvest - 282 Site Prep - 0 Tree Planting - 0 Prescribed Burn - 0 Other - 0

Habitat Cut - 0 Opening Maintenance - 0 Tree Seeding - 0 Pesticide - 0

Cover Type by Harvest Method

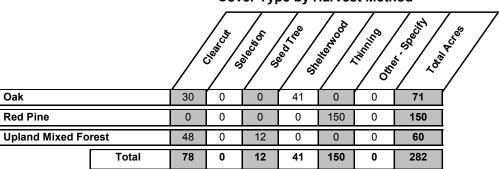


Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 161 Year of Entry 2014

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
11	71161011-Cut	14.0	4122 - Oak, Pine	High Density Log	85 I	81-110	Harvest	Clearcut with Reserves	4121 - Oak, Aspen	Cmpt. Review Proposal

Prescription Manage stand for white pine and single stem red maple. Remove old poor quality oak and aspen. Save some scattered oak for mast production/retention. Protect understory during harvesting operations. Sell sale by itself due to small acerage. Specs:

Other

s

Comments:

<u>Next</u> Steps:

Proposed

10/01/2013 Start Date:

40.7

71161016-Cut

42111 - Planted Red Pine, Mixed Deciduous

High Density Log 111-140

Harvest

Crown Thinning

42111 - Planted Red Pine, Mixed Deciduous

Cmpt. Review Proposal

Prescription Remove jack pine and high risk black/pin oak. Thin red pine from below by targeting suppressed and poor formed trees. There are areas where red pine is already at or below desired stocking levels. Thin down to around 80 BA. Manage stand for red pine. Protect oak and pine understory Specs: during harvest.

<u>Other</u>

Comments:

Next Steps:

<u>Proposed</u>

10/01/2013 Start Date:

30 71161030-Cut 109.6 42110 - Planted High 80 111-140 Harvest Crown Thinning 42110 - Planted Cmpt. Review Red Pine **Density Log** Red Pine Proposal

Prescription Thin red pine from below down to around 80 BA. Remove all jack pine. Target all high risk and poor quality oak for removal also. Protect and Specs: incourage white pine during harvest.

Other_

Comments:

<u>Next</u> Steps:

Proposed

10/01/2013 Start Date:

44 71161044-Cut 12.5 4310 - Pine, Oak High 85 81-110 Harvest Seed Tree with 4122 - Oak, Pine Cmpt. Review Mix **Density Log** Reserves Proposal

Prescription Seed tree harvest stand leaving a few red pine and oak per acre. Favor leaving more red pine than oak. Manage stand for whitee pine understory as well as maple and oak stump sprouts. Protect white pine during harvest.

Other_

Comments:

<u>Next</u> Steps:

Proposed

10/01/2013 Start Date:

71161046-Cut 4310 - Pine, Oak 37.0 High 75 81-110 Harvest Clearcut with 4121 - Oak, Aspen Cmpt. Review Density Log Reserves Mix Proposal

Prescription Final harvest and manage for oak/aspen/pine. Protect and promote oak and pine understory during harvest. Leave some scattered oak and pine for retention, mast/seed source and verticle structure. Possibly leave part of north "arm" for retention. ORV trail runs through stand. Specs: Protect with appropriate cutting specs.

<u>Other</u>

Comments:

<u>Next</u> Steps:

Proposed

10/01/2013 Start Date:

Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 161 Year of Entry 2014

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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
56	71161056-Cut	41.4	4126 - White, Black, N. Pin Oak	High Density Log	80	81-110	Harvest	Shelter Wood with Reserves	4129 - Mixed Oak	Cmpt. Review Proposal

<u>Prescription</u> Shelterwood/seed tree harvest stand by removing most oak and all red maple and aspen. Mark large crowned oak and pine to leave favoring <u>Specs:</u> white oak. Protect pine and oak understory during harvest. ORV trail runs through stand. Protect with appropriate specs.

<u>Other</u>

s

Comments:

Next Steps:

<u>Proposed</u>

Start Date: 10/01/2013

58 71161058-Cut 16.0 4125 - Black, N. Pin High 85 111-140 Harvest Clearcut with 4131 - Aspen, Oak Cmpt. Review Oak Density Log Reserves Proposal

<u>Prescription</u> Final harvest stand with reserves. Save a few large crowned oak/acre and all the white pine. MAnage stand for white pine oak and aspen. <u>Specs:</u> Areas on north end should sprout and expand aspen areas. Other areas a mix of oak and maple will be acceptable regeneration.

<u>Other</u>

Comments:

Next Steps:

Proposed

Start Date: 10/01/2013

6271161062-Cut10.74310 - Pine, Oak
MixHigh
Density Log8881-110Harvest
ReservesClearcut with
Reserves4125 - Black, N. Pin
OakCmpt. Review
Proposal

<u>Prescription</u> Final harvest with reserves by cutting oak and jack pine. Leave all good formed red and white pine. Manage for a mixed oak and pine stand.

Specs: Protect oak and pine understory when harvesting. Possibly join and sell negoiated with adjacent sale to the south.

<u>Other</u>

Comments:

Next Steps:

Proposed

Start Date: 10/01/2013

Total Treatment

Acreage Proposed: 281.8

Roscommon Mgt. Unit Table 4 -- Treatments Prescribed with Compartment: 161 a Limiting Factor s Year of Entry 2014 n Treatment **Acres** CoverType Size Stand BA **Treatment Treatment Cover Type Approval** Name Method Objective Status Density Age Range Type d #Error **Prescription** Specs: <u>Other</u> Comment: <u>Next</u> Steps: <u>Proposed</u> Start Date: #Error

Total Treatment Acreage Proposed:

Limiting Factor and No Treatment Reason

0

Out of YOE -- Treatments Prescribed with No Limiting Factor

Year of Entry: 2014

Approval Status CoverType **Treatment Treatment Cover Type** Treatment **Acres** Size Stand BA Name Density Range Type Method Objective Age

Prescription Specs:

Other Comments:

Next Steps:

Proposed

Start Date: #Error

Total Treatment Acreage Proposed:

0

S t	Roscommor	n Mgt. Unit		5 – Fo	orested Sta	Compartment: 161 Year of Entry: 2014	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
1	4199 - Other Mixed Upland Deciduous	High Density Sapling	47.3	7		Clear cut growing low quality black oak stump sprouts and pin cherry. Some maple and aspen.	
4	42220 - Natural Jack Pine	High Density Pole	22.2	36	81-110	Records show that this stand was harvested then rollerchopped in 1976.	
6	42110 - Planted Red Pine	High Density Log	103.1	81	51-80	1931 plantation that was species thinned in the past. Understory is "dog hair" advanced aok regeneration. Some white pine regen in spots.	
9	4125 - Black, N. Pin Oak	Low Density Sapling	10.7	7		Young Red pine plantation with scattered oak, cherry and aspen. A few jack pine seedlings.	
10	4125 - Black, N. Pin Oak	High Density Sapling	59.4	2		Stand was part of RPP and was harvested as a "seed tree". Scattered red pine and islands of red pine left. Advanced oak understory was protected and left and is now coded as the canopy. Little to no red pine is expected to regenerate due to heavy oak. Red pine could possibly regenerate in open areas or heavily used skid trails. Good red pine site, poor oak site	
11	4122 - Oak, Pine	High Density Log	14.0	85	81-110	Stand of white pine and low quality pin/black oak. Some scattered red maple and red pine. One good clone of bigtooth aspen along with some scattered. Heavy white pine understory with some making it into the canopy. White pine understory and poles took a beating from a heavy wet snowstorm on 3/2/12 causing alot of snapped boles.	
16	42111 - Planted Red Pine, Mixed Deciduous	High Density Log	40.7	81	111-140	1931 red pine plantation that is mixed with oak, jack pine and white pine. Oak is of low quality and in decline. Jack pine is also in decline and showing mortality. Heavy advanced oak and white pine understory. A small swale within stand that drains to the bog to the west.	
19	6122 - Black Spruce	High Density Pole	17.2	75	81-110		
20	4112 - Maple, Beech, Cherry Association	High Density Log	14.8	75	81-110		
23	4199 - Other Mixed Upland Deciduous	High Density Sapling	10.3	17		OAk stump sprout stand with cherry.	
<u></u> 25	6122 - Black Spruce	Low Density Pole	4.6	65			
26	4310 - Pine, Oak Mix	High Density Log	37.7	81	51-80	Mixed stand of oak, maple and pine. Heavy balsam fir and white pine understory. Low quality oak in decline. Heavier to red pine on south end.	
27	4199 - Other Mixed Upland Deciduous	High Density Pole	9.4	35	1-50	Old records indicate a "habitat cut".	
28	4199 - Other Mixed Upland Deciduous	Medium Density	44.8	7		Young red pine palntation with heavy hardwood competition in the form of aspen, oak and cherry.	

s t	Roscommo	n Mgt. Unit		5 – Fo	orested Sta	nds Compartment: 161 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
29	42200 - Natural White Pine	High Density Pole	1.9	65	51-80	
30	42110 - Planted Red Pine	High Density Log	109.6	80	111-140	Red pine sawtimber stand mixed with jack pine, white pine and poor quality oak. High mortality in the jack pine.
31	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	14.5	75	51-80	EAB present
32	42110 - Planted Red Pine	Low Density Log	35.2	81	1-50	Stand was selected for RPP and was shelterwood/seed tree cut. Little to no red pine is expected due to hardwood competition. Some pole timber red maple and aspen were left. Stand now grows stump sprout red ample and poor quality oak instead of high quality red pine
35	42260 - Natural Pine, Mixed Deciduous	High Density Log	28.4	80	81-110	Mixed pine and oak stand. Oak is old and of poor quality. Good advanced white pine regen , some making it into the canopy. Scattered mature red and white pine. Harvesting in this stand would cause too much damage from large crowned oaks. Reevaluate next entry.
36	6120 - Lowland Cedar	High Density Pole	60.2	75		
37	6120 - Lowland Cedar	High Density Pole	17.2	85		
38	4191 - Mixed Upland Deciduous with Conifer	Medium Density	16.6	10		PRESCRIBED BURN STAND IN 1997 FOR SLASH ON 4-26-01 THE AREA WAS HAND PLANTED WITH 2-0 RED PINE.
39	4130 - Aspen	High Density Sapling	73.6	5		Aspen stand with some stump sprout oak mixed in. Scattered white oak left from harvest. Some areas heavier to oak and cherry.
41	42120 - Planted Jack Pine	High Density Sapling	18.6	10		PRESCRIBED BURN STAND IN 1997 FOR SLASH. ON 4-26- 01
43	42110 - Planted Red Pine	High Density Log	1.9	81	81-110	Small stand of red pine mixed with jack pine and poor quality oak.
44	4310 - Pine, Oak Mix	High Density Log	12.5	85	81-110	Mixed stand of old, low quality black oak and red pine. Scattered mature jack pine. Variable height white pine understory.
46	4310 - Pine, Oak Mix	High Density Log	37.0	75	81-110	Stand of old, low quality oak with scattered red and jack pine. Oak and jack pine are overmature. There is a younger age class of aspen mixed in. Oak and pine in understory.
48	42200 - Natural White Pine	High Density Log	6.1	70	111-140	Small narrow stand of small diameter sawtimber white pine. Stand is split by small creek. A few large white pine growing along creek. ORV trail runs through stand.

s t	Roscommor		5 – For	rested Sta	Compartment: 161 Year of Entry: 2014	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
49	4132 - Aspen, Jack Pine	High Density Sapling	45.8	24	1-50	Aspen, oak and jack pine stand. Some trees entering pole timber size
50	4130 - Aspen	High Density Pole	17.4	38	111-140	bigtooth aspen stand with some older oak and red pine scattered about.
51	4130 - Aspen	High Density Pole	5.9	37	81-110	Small stand of mixed aspen. ORV trail runs through stand. Unaccessable for harvesting purposes. Beaver damage in some areas.
53	4131 - Aspen, Oak	High Density Pole	24.3	38	111-140	Bigtooth aspen pole timber stand with scattered oak and pine supercanopy. Hold till aspen grows into sawtimber.
55	6120 - Lowland Cedar	High Density Pole	23.5	70	81-110	Variable stand. Contains some more upland areas smaller than mapping standards. Townline creek flows through west side.
56	4126 - White, Black, N. Pin Oak	High Density Log	41.4	80	81-110	Stand of black and white oak mixed with white pine. Some scattered aspen. Gooad understory of oak and white pine. White oak has much better form and quality than black oak. Black oak is off poor quality and in decline.
57	6122 - Black Spruce	High Density Pole	18.3	75	111-140	Areas of very nice quality black spruce.
58	4125 - Black, N. Pin Oak	High Density Log	16.0	85	111-140	Stand of old black oak mixed with some white pine and red maple. Area of almost solid aspen on north end. Variable height understory of white pine, some making it to canopy.
59	4130 - Aspen	High Density Pole	17.2	Uneven Age	81-110	Bigtooth aspen stand with some oak and red pine supercanopy. Oak is found scattered and in small groups. Hold for 10 years or more untill the aspen grows into sawtimber class.
62	4310 - Pine, Oak Mix	High Density	10.7	88	81-110	Stand of old, low quality black oak mixed with pine. Oak and

Log

jack pine are overmature and in decline. Heavy advanced oak understory. Some white pine in understory as well.

6 - Nonforested Stands

Compartment: 161 Year of Entry: 2014



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:	MICHIGAN
2	6225 - Bog	1.9	No	Unspecified		
3	6225 - Bog	4.7	No	Unspecified		
5	6225 - Bog	2.0	No	Unspecified		
7	6225 - Bog	0.9	No	Unspecified		
8	6225 - Bog	4.0	No	Unspecified		
12	6225 - Bog	2.6	No	Unspecified		
13	6229 - Mixed lowland shrub	2.3	No	Unspecified		
14	6229 - Mixed lowland shrub	19.6	No	Unspecified		
15	6229 - Mixed lowland shrub	2.2	No	Unspecified		
17	710 - Sand, Soil	1.1	No	Unspecified		
18	6229 - Mixed lowland shrub	17.8	No	Unspecified		
21	50 - Water	21.2	No	Unspecified		
22	6225 - Bog	3.4	No	Unspecified		
24	6225 - Bog	1.9	No	Unspecified		
33	6229 - Mixed lowland shrub	5.7	No	Unspecified		
34	710 - Sand, Soil	1.3	No	Unspecified		
40	6229 - Mixed lowland shrub	3.0	No	Unspecified		
42	6229 - Mixed lowland shrub	11.5	No	Unspecified		

6 - Nonforested Stands

Compartment: 161 Year of Entry: 2014



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
45	6229 - Mixed lowland shrub	38.5	No	Unspecified	Old beaver flooding
47	6229 - Mixed lowland shrub	11.9	No	Unspecified	
52	6225 - Bog	1.2	No	Unspecified	
54	6229 - Mixed lowland shrub	25.4	No	Unspecified	
60	3102 - Grass	3.1	No	Unspecified	
61	6239 - Mixed Emergent Wetland	24.5	No	Unspecified	

Compartment: 161
Year of Entry: 2014



7 - 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.

Stand	SCA Type	SCA Name	Acres	Comments

Compartment: 161
Year of Entry 2014



8 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

Conservation Area	Туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	stocked trout populations and those of other of year to year. Coldwater streams in Michigan to	colved oxygen conditions that allow naturally-reproduced or coldwater fish species (e.g., slimy sculpin) to persist from ypically provide these conditions due to substantial ows. Such streams are established by Director's action and order 210.