

Compartment Review Presentation

Roscommon Forest Management Unit

Compartment 68
Entry Year 2016
Acreage: 334

County Roscommon

Management Area: Upper Muskegon

Revision Date: 06/24/2014

Stand Examiner: Doug Bates

Legal Description:

T23N R03W Sections 7 and 8

Identified Planning Goals:

Maintain current cover types staggering age classes providing healthy forests for both natural and human uses.

Soil and topography:

The terrain is mainly flat with some areas of rolling elevation. The soils are primarily Roselawn sand and Roselawn sandy loam.

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

The compartment is a solid block of public land with no private inholdings. Private property does adjoin the compartment on all sides but the west. The Markey Township sewage treatment facility is located immediately to the north of the parcel with the Higgins Lake Forest Estates subdivision immediately to the northeast. The remaining parcels are larger single residences or farming usage.

Unique Natural Features:

No Unique Natural Features known.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

No special needs have been found in this compartment.

Watershed and Fisheries Considerations:

None noted.

Wildlife Habitat Considerations:

None noted.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Mississippian Michigan Formation. The Michigan is quarried for gypsum elsewhere in the State. Most of the good gravel pits are associated with upland areas. A gravel pit is located in Section 8 and there should be potential on the uplands. East Norwich Field is located six miles to the northwest. The field has produced over 15.9 million BO and 15.7 Bcf gas primarily from the Devonian Richfield Formation, and is in secondary recovery operations currently. Section 8 is currently leased for oil and gas development.

Vehicle Access:

Vehicular access is very good with three boundary sides of the compartment being defined by seasonal county roads: North Townline, West School and Lakewood Drive. West Gardner Road also traverses through the easterly third so several forest roads spider off these county roads allowing access to every part of the compartment.

Survey Needs:

None needed at this time.

Recreational Facilities and Opportunities:

No defined recreational system is found here but the site does receive hunting activity and snowmobile traffic in the winter months.

Fire Protection:

Fire protection is of low concern in this compartment because of mostly oak and aspen cover type and good vehicle access.

Additional Compartment Information:

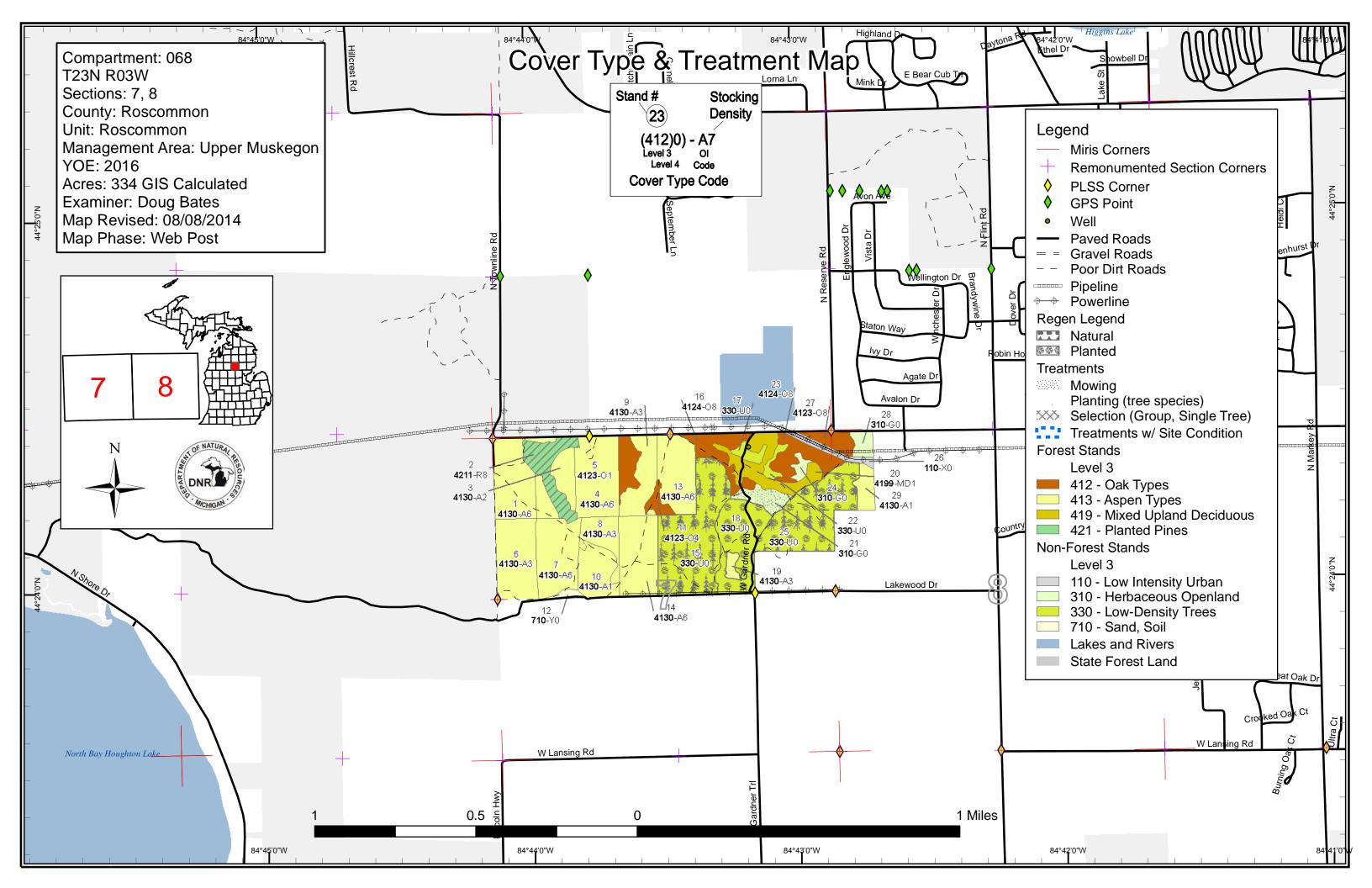
With the presence of the county road system surrounding the compartment, it has received more heavy use from illegal ORV traffic and has some damage starting on the south end from eroding of hills by "hill climbing".

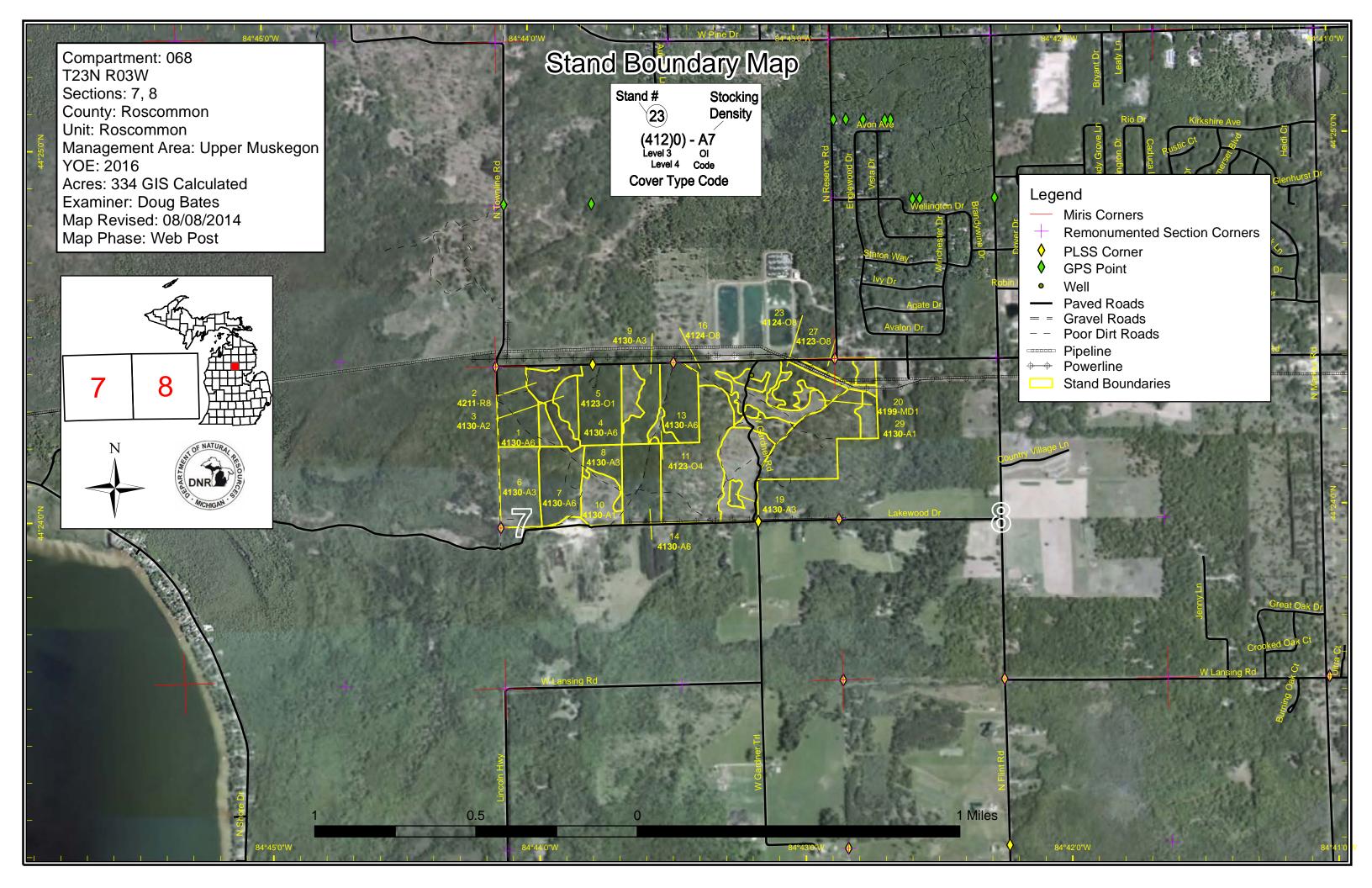
The following reports from the Inventory are attached:

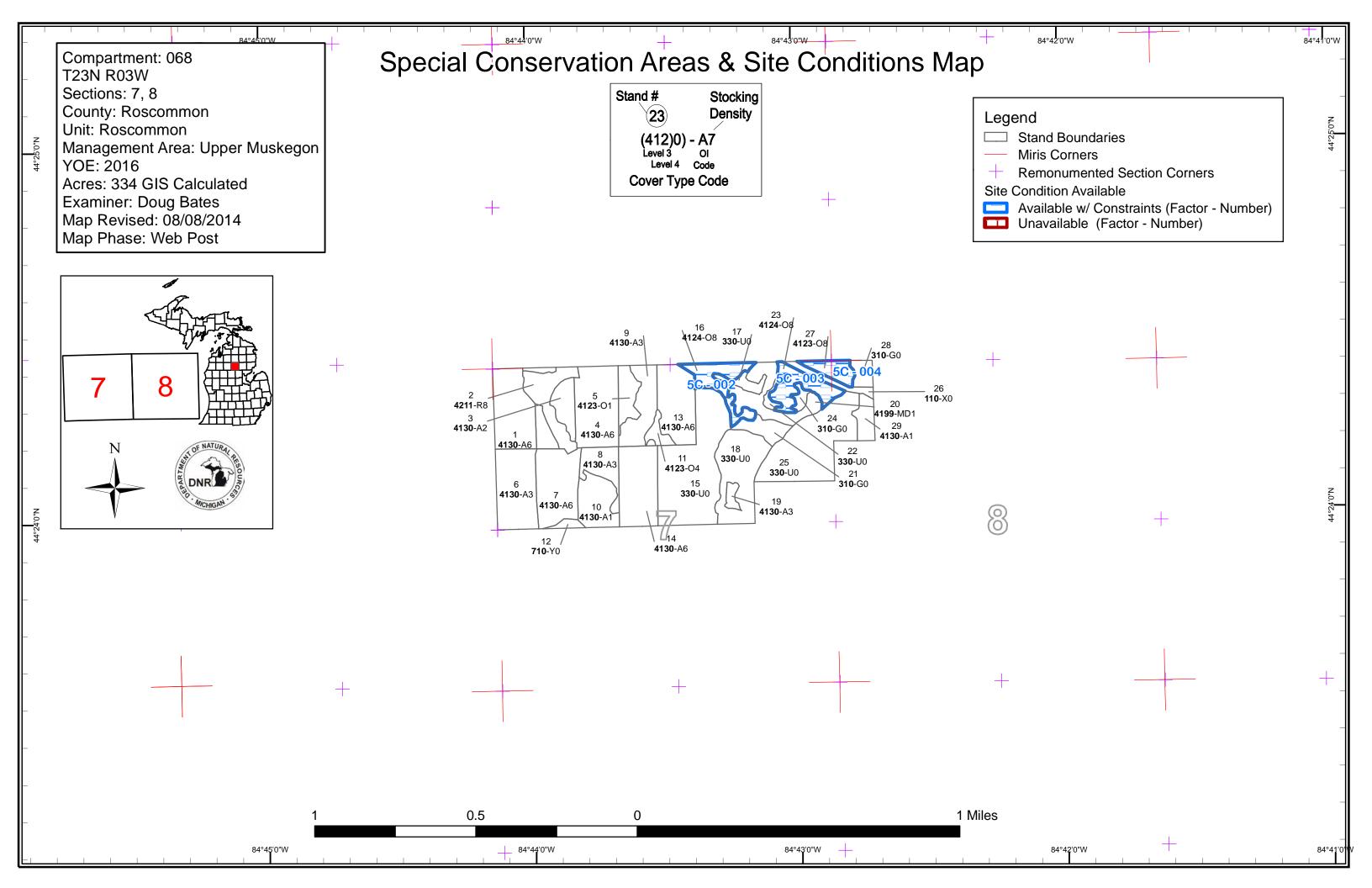
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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







Roscommon Mgt. Unit

Doug Bates : Examiner

Compartment 068 Year of Entry 2016



Age Class																
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Aspen	6	62	95	0	0	0	0	0	0	0	0	0	0	0	164	ĺ
Herbaceous Openland	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
Low-Density Trees	97	0	0	0	0	0	0	0	0	0	0	0	0	0	97	I
Mixed Upland Deciduous	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13	I
Oak	0	6	3	0	0	0	0	0	10	15	0	0	0	0	33	I
Red Pine	0	0	0	0	11	0	0	0	0	0	0	0	0	0	11	
Sand, Soil	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Urban	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	I
Total	133	68	98	0	11	0	0	0	10	15	0	0	0	0	334]



Report 2 – Proposed Treatment Summaries

Roscommon Mgt. Unit Year of Entry 2016

Compartment 068
Total Compartment Acres: 334

Acres by Treatment Type

Commercial Harvest - 11

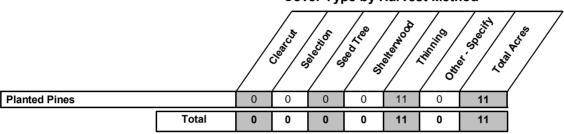
Tree Planting - 72

Other - 0

Habitat Cut - 0

Opening Maintenance - 5

Cover Type by Harvest Method



Roscommon Mgt. Unit S

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 068 Year of Entry 2016

а **Treatment** Acres CoverType Size Stand BA **Treatment Treatment Cover Type** Approval n Method Objective Name Density Range Status Age **Type** d 71068002-Cut 42110 - Planted 141-170 Cmpt. Review 2 11.4 Medium 49 Harvest Low Thinning 4211 - Planted Red Red Pine Density Log Pine Proposal

Specs:

Prescription Treatment: Cut all aspen and red maple to a 2 inch d.b.h.. Cut all marked oak. Cut marked red pine. They are to be marked to a minimum basal area of 110. Mark to remove poorly formed, cull, crown competitors to manage for best tree in place.

Retention: None

<u>Other</u>

t

Comments:

Next Steps:

Proposed

10/01/2015 Start Date:

NF 71068015_ 15

40.2 3301 - Low Density **Edt-Plant Deciduous Trees**

Tree Planting

Hand Plant

4211 - Planted Red Pine

Cmpt. Review Proposal

Prescription Trench and hand plant red pine seedlings

Specs:

This is on a site harvested out of YOE for Oak Wilt Salvage. The site has a current FTP, C71-911, assigned from when the Chapter 7 was received <u>Other</u>

Comments: to harvest out-of-entry and replant the site.

Next Steps:

Proposed

Start Date: Unspecified

NF 71068025 25

Edt-Plant

31.8 3301 - Low Density **Deciduous Trees**

Tree Planting

Hand Plant

4211 - Planted Red

Cmpt. Review

Pine Proposal

Prescription Trench and hand plant red pine seedlings.

Specs:

This is on a site harvested out of YOE for Oak Wilt Salvage. The site has a current FTP, C71-911, assigned from when the Chapter 7 was received Other_

Comments: to harvest out-of-entry and replant the site.

<u>Next</u> Steps:

Proposed

Start Date: Unspecified

> NF 71068021-5.4 3102 - Grass NonFor

Non-Forest Management Mowing

3102 - Grass

Cmpt. Review Proposal

Prescription

Specs: Other

Site is to be maintained by Wildlife Division.

Comments:

<u>Next</u> Steps:

Proposed

Start Date: Unspecified

Total Treatment

88.8 **Acreage Proposed:**

Roscommon Mgt. Unit Report 4 -- Treatments Prescribed with a Site Condition

Stand

Age

BA

Range

Treatment

Type

Treatment

Method

Size

Density

Compartment: 068 Year of Entry 2016

Cover Type

Objective

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Status

#Type! #Type!

CoverType

Acres

Prescription

Treatment

Name

Specs:

s

n

Other Comment:

Next Steps:

Proposed Ctart Data

Start Date: #Type!

Limiting Factor

Total Treatment

Acreage Proposed: 0.0

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Report 5 - Site Conditions

Roscommon Mgt. Unit

Doug Bates: Examiner

Compartment 068
Year of Entry 2016

Availability for Management

Total Acres Acres Dominant Site Conditions

Acres Available Not Available No 5C

164	164	Aspen	164	
13	13	Mixed Upland Deciduous	13	
33	33	Oak	9	24
11	11	Red Pine	11	
221	221	Total Forested Acres	197	24
	100%	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.

		Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10				
nments:						
Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10				
nments:						
Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5				
nments:						
	nments: Available mments:	age/size class diversity or exceptional site quality mments: 5C: Delay treatment for age/size class diversity or exceptional site quality mments: 5C: Delay treatment for age/size class diversity or exceptional site quality	age/size class diversity or exceptional site quality mments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality mments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality	age/size class diversity or exceptional site quality mments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality mments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality	age/size class diversity or exceptional site quality mments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality mments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality	age/size class diversity or exceptional site quality mments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality mments: Available 5C: Delay treatment for age/size class diversity or exceptional site quality age/size class diversity or exceptional site quality

Roscommon Mgt. Unit

Compartment: 068
Year of Entry: 2016



Report 6 - 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: 068
Year of Entry 2016



Report 7 - 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	Туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA Ar	chaeological Site	An aquatic or terrestrial area of the State that contains physical sites of cultural and historical significance that may occur upon bottomlands. They include thousands of Native American settler and British outposts, nineteenth century logging camps, mines the Great Lakes, there are shipwrecks and other remains docume identified by Natural heritage data from the State Historic Presenting the sensitive nature of this information, no further detail about to	terrestrial areas and Great Lakes ments and burial sites, as well as French and homesteads. Beneath the waters of menting the maritime trade. Such sites may eservation Office. Proposed treatments in maintain the integrity of these sites. Due to

S t	Roscommon Mgt. Unit			Report 8	– Forested	Stands Compartment: 068 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	High Density Pole	18.5	27		Clearcut in 1987. Just coming into pole size. Mix of oak and red maple in stand. Some pockets of open areas where clones haven't spread or some die off. Nothing found to be of concern about the die off. Sub-canopy is mainly the oak and red maple with some younger aspen regeneration.
2	42110 - Planted Red Pine	Medium Density Log	11.4	49	141-170	1965 plantation that was third rowed thinned in 2009. Could benefit from a thinning down to a 90 basal area. The north end of the stand is the densest with the south finger being lighter containing a few more large wolfy oaks that are suppressioning the pines at their crown edges. The pines have only 1/3rd of the tops with live branches. Need to open up the crown. Trace amounts of some red maple and cherry regeneration. Trees have the height but not the girth.
3	4130 - Aspen	Medium Density	10.9	16		Was clearcut in 1998. The north strip along School Road is mostly oak regeneration. A small grass opening at the southwest corner. There are several other small open areas scattered abou being either just grass or cherry brush and a handful of oak clusters from stump sprouting. The aspen has not closed in enough yet. There is more hardwood of other species in this stand.
4	4130 - Aspen	High Density Pole	21.4	27		Final harvested in 1987. Good aspen stand just into pole size but the percentage of sapling is still high also. Scattered red maple and oak in overstory also but thier mainly in the sub-canopy regeneration with the trace amount of aspen.
5	4123 - Red Oak	Low Density Sapling	6.1	16		Final harvest done in 1998. This stand had a lesser aspen component when the larger parent stand was harvested. You car see the aspen clones filling in where the originals were but they are small and scattered over a larger space. The other portion of the stand is mainly oak. The oak regeneration is from seeding at about three feet which the deer are eating heavily up to the pole sized ones that came from stump sprouts. Will be a mixed stand with oak and dense aspen islands with several small grass openings scattered about fragmenting the landscape for wildlife.
6	4130 - Aspen	High Density Sapling	19.9	16		Final harvested in 1998 with the southwest corner having about ar acre or so jack pine/lowland brush type inclusion. On the lower end of the canopy closure percentage. Have a couple areas where aspen is light, more open grass with cherry brush. Not large enough to call its own stand. Aspen is and will fill in more. Good fragmentation. More maple and oak in the overstory and heavier in the sub-canopy also. Is more aspen in the sub-canopy than other stands in this age class/type in the compartment.
7	4130 - Aspen	High Density Pole	19.2	26		Final harvest from 1987. Some scattered aspen actually into small log sizes around open areas. Healthy looking stand with the north end containing a ridge knob about 3/4 acre in size consisting of multi-stemmed red oak and red maple from stump sprouts. About 2/3rds is oak.
8	4130 - Aspen	High Density Sapling	8.1	16		Final harvest done in 1998. Hand full of stems just into poles, about 10 basal area.
9	4130 - Aspen	High Density Sapling	11.8	16		Final harvest done in 1998. Good aspen with scattered red maple and oak in amongst overstory. More maple in sub-canopy as regeneration followed by the oak with trace amounts of aspen.

s t	Roscommo	Roscommon Mgt. Unit			– Forested	Stands Compartment: 068 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
10	4130 - Aspen	Low Density Sapling	11.4	16		Final harvest done in 1998. This stand must have had a large percentage of oak in it. The aspen is in pockets where the original clone was. The other areas, about 70% of the stand, is open grass/fern with pin cherry and/or oak stump sprouts from 1 foot to 7 feet. The open areas are good for wildlife fragmenting. To many areas to break into individual grass stands. Even though more area open with oak, it is very sparsely spaced. Aspen is spreading out from the clone and more oak filling in also. Good mixed stand for the future.
11	4123 - Red Oak	Low Density Pole	2.8	27	51-80	This stand is a combination of two stands cut about 11 years apart. The side west of the two-track, smaller portion, was cut most recently and is by far the most open. It has some aspen filling in from the stand to the west, the parent stand it was cut from, and has a few stump sprout clusters of red maple and oak. East of the two-track is the 27 years old stuff and is from a separate parent aspen stand cut 11 years prior and did not come back to aspen. It is an even mix of both red maple and oak stump sprouts, but pole sized. There are some aspen intermixed. Keep as own stand because of the cover type differences and the good grass fragementation portion west of trail.
13	4130 - Aspen	High Density Pole	17.0	27		Final harvest done in 1987. Pole sized aspen stand with maple and oak in overstory being more sapling diameter. The subcanopy regeneration is largely maple followed by oak and trace of aspen.
14	4130 - Aspen	High Density Pole	19.0	27		Aspen final harvest in 1987. Nice stand that has some log sized aspen showing up on the edges of more open areas. Not much aspen in the understory, trace, but some oak. The south end of the stand drops from a ridge to the county road. Between the ridge and road lies a cattail marsh bowl. About 1/2 acre in size.
16	4124 - Red with White Oak	Medium Density Log	9.6	89	111-140	Harvest was done in the fall of 2007 where all apsen, majority of red maple and, marked oak were removed. Most of the regeneration that is coming in is maple, but there is some oak. Stand is a horseshoe shaped ridge with the portion bordering School Road being thinned very lightly. As the stand progresses south it was harvested heavier and more pole size oak remain instead of log as is in the north. Recommend keeping any eye on it for oak wilt potential. Wilt was in adjacent salvaged stands and firewooders are in here, just think need to limit oak harvesting in this compartment. The oak component was significantly dropped due to the two stands that had to be salvaged due to the wilt. Keep for diversity and treat if wilt is found in it.
19	4130 - Aspen	High Density Sapling	1.7	6		A small aspen stand that was final harvest in the Fall 2007 with the larger oak stand it was surrounded by. There is goo aspen regeneration with oak mixed in.
20	4199 - Other Mixed Upland Deciduous	Low Density Sapling	13.5	6		A stand final harvested in the Fall 2007 and was then trenched and planted to red pine in spring 2010. Scattered residual oak left, less 5 B.A It has the canopy closure but it is on the low end. The red pine plantation seedlings still not over three feet whereby the pre-existing stand types are constituting the forest canopy type at this time. Only see a handful of pine tops above the snow and those that are have been eaten by deer. Large aspen clones were trenched around. Will be a mixed stand over

s t	Roscommo	n Mgt. Unit		Report 8	– Forested	l Stands	Compartment: 068 Year of Entry: 2016	DNR DNR
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	MICHIGAN .
23	4124 - Red with White Oak	Medium Density Log	9.7	91	51-80	2008 removing all the a Portion of stand south pockets of aspen in two are mixed in amongs mainly for aspen but d been decreased because	ordering the powerline was cuspen, red maple, and some rewas not treated and contains large clones. Maple and large the clones. Considered treated not two. The oak compared the oak wilt in this composition of the oak wilt in this composition.	marked oak. poor quailty ge wolfy oaks ating stand nponent has onent. Keep
27	4123 - Red Oak	Medium Density Log	5.0	94	81-110	openings. Other reg directly across street thinning but decided to density in the area, the salvage, and it would	Light regeneration of oak in cleneration is red maple. Oak on the private. Considered do leave alone for now becaus loss of oak component in the be good for diversity. If it donfected treat it then.	wilt heavy oing a light e of the wilt area due wilt
29	4130 - Aspen	Low Density Sapling	4.7	5		other selected red oak	noving all species but white or Some areas having really d rd being light. Cherry is heavy	lense aspen

Compartment: 068 Year of Entry: 2016



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
12	710 - Sand, Soil	1.4	Yes	High	Northern edge of an old borrow pit that continues to the south on Markey Township Property. The bottom of the slope to the south is the seasonal county road, Lakewood Drive. A Resourse Damage Report report was created and entered into the system. The slope is being eroded by motorized vehicles of all types. It is even being eroded by track studded snowmobiles. There is no immediately adjacent water bodies that erosion is getting into at this time. The township property to the south has open water which may over time become an issue.
15	3301 - Low Density Deciduous Trees	40.2	Plantation	Red Pine	Stand was thinned in 1998 removing all aspen and red maple. Had a RX burn done and then shelterwood cut in 2007. Stand was to be understory burnt again but several oak wilt pockets were found throughout the stand so it was final harvested to try and stop the spreag in the winter 2012. Marked some oak to leave outside of wilt epicenters. It was mainly white oak with about 5 B.A Very good oak regeneration from stump sprouts, 5-7 feet tall. If the site did not have the wilt scattered about, would cancel the planting. Best though as a backup to plant with red pine, FTP #C71-911, and if oak survives it will be mixed stand. A retention strip left on the south end with an overhead powerline running thru it.
17	3301 - Low Density Deciduous Trees	2.4	No	Unspecified	An older grass opening with some oak filling in but is a heavy component of pin cherry scattered about. It is giving some canopy closure but they are already starting to decline and will be be gone in time. Wait and see if oak establishes itself enough to give the canopy closure a forested status.
18	3302 - Low Density Conifer Trees	21.2	Plantation	Red Pine	Final harvested in the Fall 2007. It was trenched and planted to red pine in 2010. White oak and marked red oak left. Very good oak regeneration of sprouts 2-7 feet tall. Will be a nice mixed stand. Red pine under the snow, but a few tops above the snow and those have neen eaten by deer. Where there was a good aspen clone regenerating, it was trenched around. One at the north end by the wildlife opening.
21	3102 - Grass	5.4	Yes	High	Opening maintained by wildlife division. Large oaks left around the perimeter, however, the north end ones have gotten oak wilt and pads were found on one. It has spread to the adjoining and there are about dozen stems affected. Needs to be handled or will continue into remaining oak around opening as well as the stand to the west.
22	3301 - Low Density Deciduous Trees	1.7	No	Unspecified	Grass opening in the process of converting to forested. There are oak and pin cherry scattered about. If the oak continues establishing itself at its current rate, the cover type percentage will be enough to call it forested. The cherry is at its peak and starting to decline with age and will fall out. The north end of the stand is a large bowl that may seasonally hold water.
24	3102 - Grass	1.8	No	Unspecified	A grass opening not maintained by wildlife division containing a handful of large mature multi-stemmed pin oaks along the perimeter.

Report 9 - Nonforested Stands

Compartment: 068 Year of Entry: 2016



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
25	3301 - Low Density Deciduous Trees	31.8	Plantation	Red Pine	Stand was initially thinned in 1998 and then understory burnt under shortly after. It was then shelterwood cut in winter 2008. Several oak wilt pockets were found in the stand so if was final harvested in the winter 2012 to try and stop the spread. Overstory of some white oak and couple red oak were left outside the wilt epicenters. The stump sprouting of oak is very good and if not for wilt problems wouldn't need to be planted. However needs to be planted to red pine, FTP #C71-911 as a backup. If the oak survies future wilt outbreaks if will be a good mixed stand.
26	11 - Low Intensity Urban	3.6	Yes	High	Overhead powerline cooridor
28	3102 - Grass	3.3	No	Unspecified	Grass opening with a handful of large multi-stemmed oak at the edges with some cherry. Not maintained by wildlife.