



**Roscommon Forest Management Unit  
Compartment Review Presentation**  
**Compartment # 46**                      **Entry Year: 2013**  
**Compartment Acreage: 1279**           **County: Roscommon**

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**Revision Date:** 1/27/2011

**Stand Examiner:** D. Ekdom

**Legal Description:** T24N R1W Sections 28 & 33

**Identified Planning Goals:** Au Sable Outwash Management Area

**Management Goals:** Maintain current age and species diversity in a range of early and late successional ecosystems.

**Soil and Topography:** The terrain in the compartment is gently rolling and cut by two major drainages. Soils in the compartment are Roselawn and Saugatuck sands and Ottawa loamy sands on the uplands and Tawas-Lupton and Au Sable mucks and Dawson-Loxley peats in the drainages and lower ground.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** Compartment is a solid block of state land. Adjacent lands are both state and private land and the private land is mostly undeveloped and used for hunting and other recreational uses.

**Unique, Natural Features:** None recorded or detected during fieldwork.

**Archeological, Historical, and Cultural Features:** None specifically noted by HAL but one possible historical site was found during fieldwork.

**Special Management Designations or Considerations:** South Branch of the Au Sable River which just touches the west edge of Section 28, South Creek in the south ½ of Section 28, and portions of adjacent stands are HCVA's due to natural river designations of these streams.

**Watershed and Fisheries Considerations:** South Branch Au Sable River, South Creek, and an un-named drainage/creek in Section 33.

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

**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 Marshall Sandstone. The Marshall has been used as a building stone. Most of the nearby gravel pits are associated with upland areas. The nearest gravel pit is located two miles to the east. Gravel potential is thought to be limited, except in the W½ of Section 21. St. Helen Field produces in Sections 21 and 28. The field has produced over 8.7 million BO

and 14.7 Bcf gas from the Devonian Richfield Formation. It is in secondary recovery operations currently. All of the State land in Section 28 is currently leased and held by production.

**Vehicle Access:** Vehicle access to all areas of the compartment is good via county seasonal roads, forest /oil well roads, and the snowmobile trail.

**Survey Needs:** None necessary at this time.

**Recreational Facilities and Opportunities:** Compartment contains portions of the St. Helen snowmobile trail/route and portions of the Geels ORV loops.

**Fire Protection:** Compartment has no recent history of major fires, low incidence of wildland-urban interface, no large concentrations of high hazard fuel types, and numerous natural barriers to fire spread.

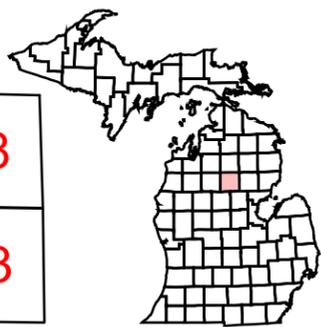
**Additional Compartment Information:** Proposed treatments include 96 acres of final harvests in aspen and red pine and 150 acres of red pine thinnings. 47 acres of final harvests in aspen were set up and cut in 2010 to help balance the aspen age class distribution in the compartment and on the Roscommon FMU.

- **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**

# Cover Type & Treatment Map

Compartment 46  
 T24N, R01W, Sec. 28, 33  
 County: Roscommon  
 Unit: Roscommon  
 YOE: 2013  
 Acres: 1,279 GIS Calculated  
 Stand Examiner: Dale Ekdorn  
 Map Revised: 8/15/2011  
 Map Phase: Pre-Review

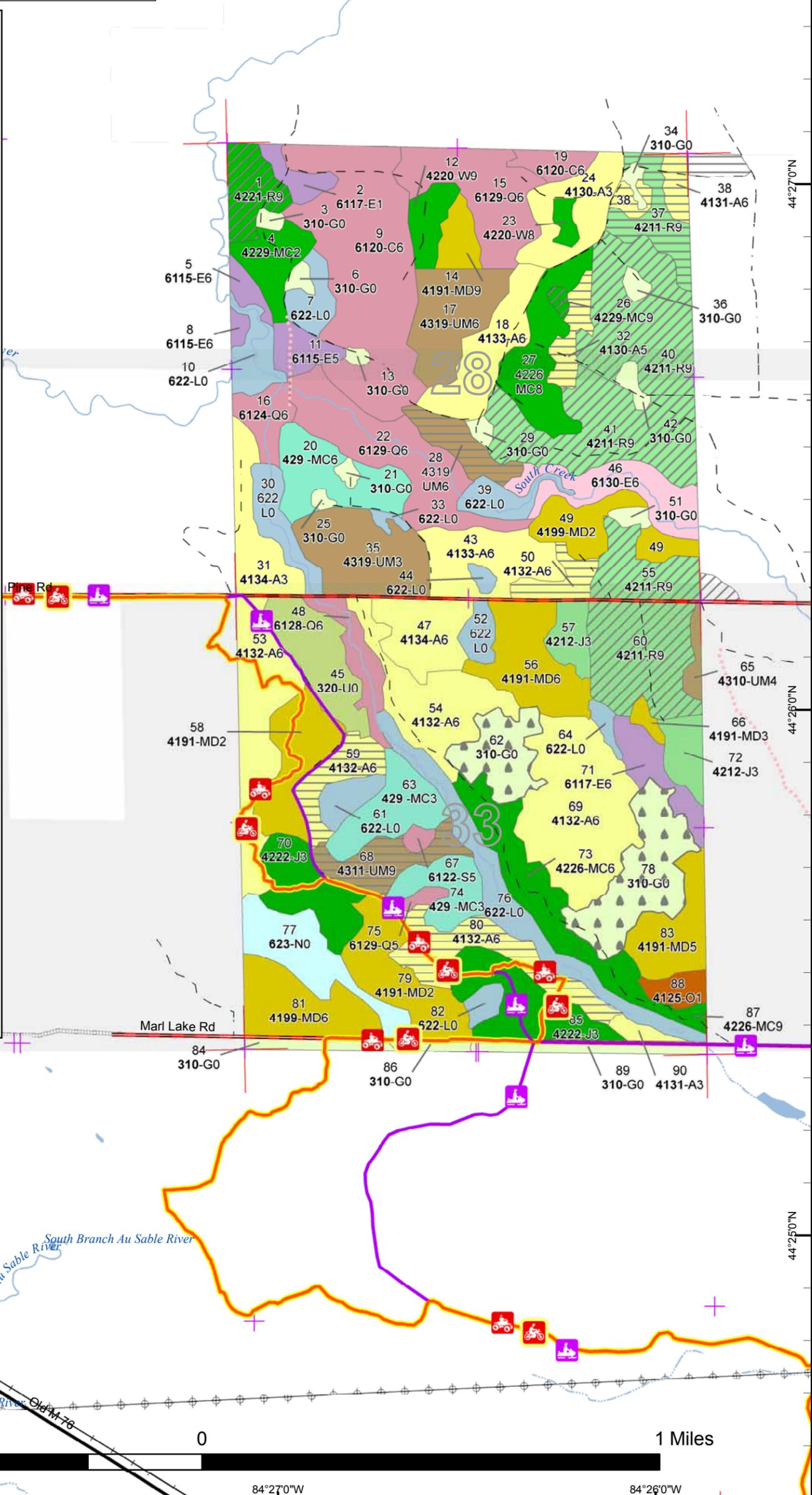
28  
 33



Stand #  
 23  
 (412)0 - A7  
 Level 3 OI  
 Level 4 Code  
 Cover Type Code

## Legend

- Paved Roads
  - County Gravel Roads
  - Poor Dirt Roads
  - Closed Roads
  - Railroads
  - Pipe
  - Power
  - Intermittent Stream/Drain
  - Stream
  - Lakes and Rivers
  - MCCCT Trails
  - Motorcycle Trails
  - ORV Trails
  - Snowmobile Trails
  - MCCCT Trail
  - Motorcycle (SOS License)
  - ORV Trail
  - Snowmobile Trail
  - State Forest Land
- Treatments**
- Clearcut (w/Reserves, Patch/Strip)
  - Thinning (Crown, Low, Systematic)
- Forest Stands**
- Level 3
- 412 - Oak Types
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 421 - Planted Pines
  - 422 - Natural Pines
  - 429 - Mixed Upland Conifers
  - 431 - Upland Mixed Forest
  - 611 - Lowland Deciduous Forest
  - 612 - Lowland Coniferous Forest
  - 613 - Lowland Mixed Forest
- Non-Forest Stands**
- Level 3
- 310 - Herbaceous Openland
  - 320 - Upland Shrub
  - 622 - Lowland Shrub
  - 623 - Emergent Wetland
- Non-Forest Regeneration**
- Planned Regeneration
- Natural
  - Planted

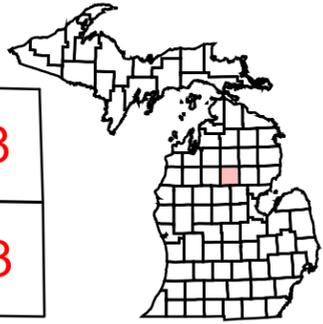


84°28'0"W      84°27'0"W      84°26'0"W

# Stand Boundary Map

Compartment 46  
 T24N, R01W, Sec. 28, 33  
 County: Roscommon  
 Unit: Roscommon  
 YOE: 2013  
 Acres: 1,279 GIS Calculated  
 Stand Examiner: Dale Ekdorn  
 Map Revised: 8/15/2011  
 Map Phase: Pre-Review

28  
 33



Stand #  
 23  
 (412)0 - A7  
 Level 3 OI  
 Level 4 Code  
 Cover Type Code

### Legend

- Miris Corners
- Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- Closed Roads
- Pipe
- Power
- Railroads
- Intermittent Stream/Drain
- Stream
- MCCCT Trails
- Motorcycle Trails
- ORV Trails
- Snowmobile Trails
- MCCCT Trail
- Motorcycle (SOS License)
- ORV Trail
- Snowmobile Trail
- Stand Boundaries

### Forest Stands

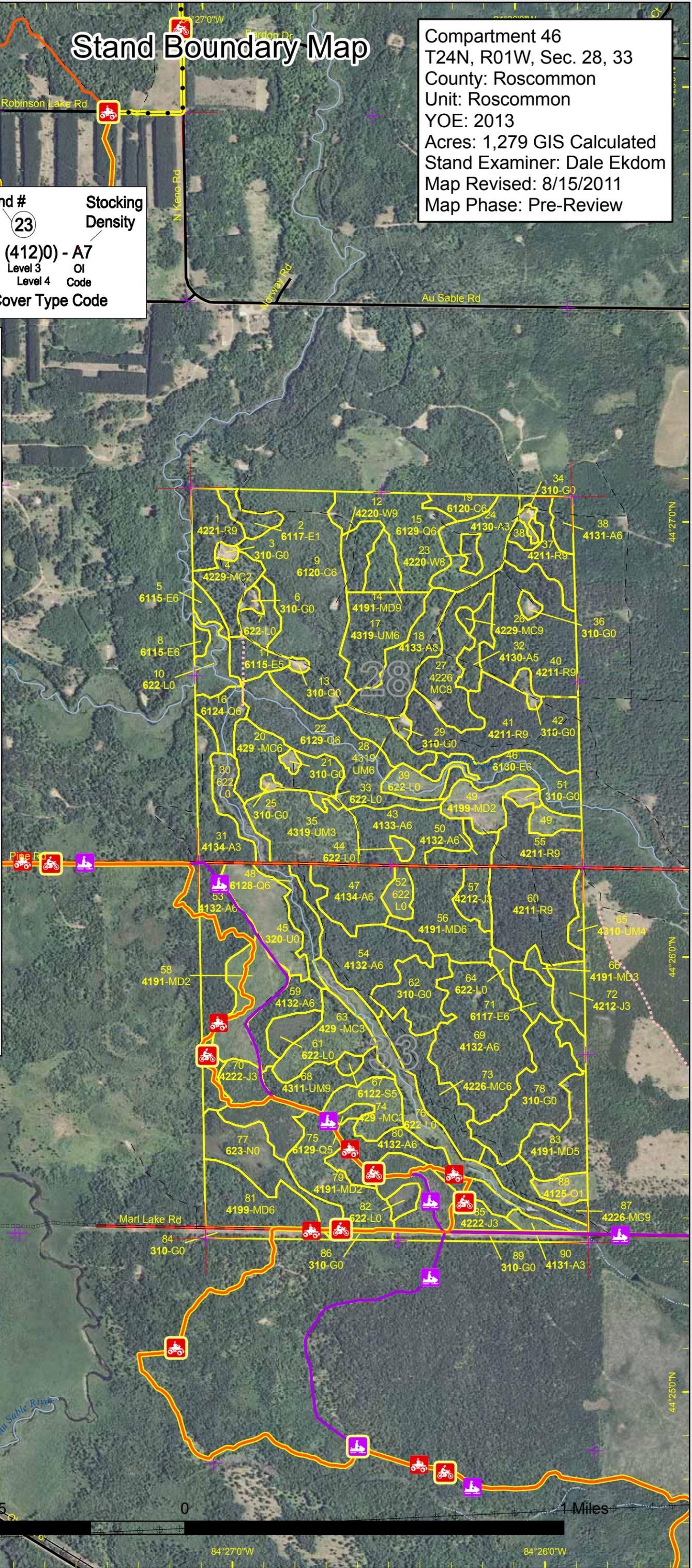
#### Level 3

- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

### Non-Forest Stands

#### Level 3

- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 622 - Lowland Shrub
- 623 - Emergent Wetland



84°28'0"W 84°27'0"W 84°26'0"W

44°27'0"N

44°26'0"N

44°25'0"N

44°27'0"N

44°26'0"N

44°25'0"N

# Dedicated & Proposed Special Conservation Area Map

Compartment 46  
 T24N, R01W, Sec. 28, 33  
 County: Roscommon  
 Unit: Roscommon  
 YOE: 2013  
 Acres: 1,279 GIS Calculated  
 Stand Examiner: Dale Ekdorn  
 Map Revised: 8/15/2011  
 Map Phase: Pre-Review

Stand # **23** Stacking Density  
**(412)0 - A7**  
 Level 3 OI  
 Level 4 Code  
 Cover Type Code

**Legend**

- Miris Corners
- Remonumented Section Corners
- Proposed Special Conservation Areas
- SCA - Special Conservation Area
- Natural Rivers Zoning District
- Natural Rivers Vegetative Buffer
- High Conservation Value Areas
- Kirtland Warbler Habitat
- Special Conservation Areas
- Cold Water Streams
- Stand Boundaries

**Forest Stands**

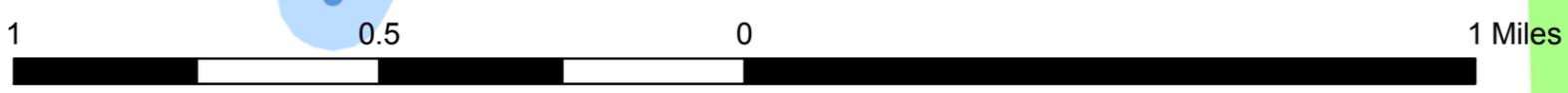
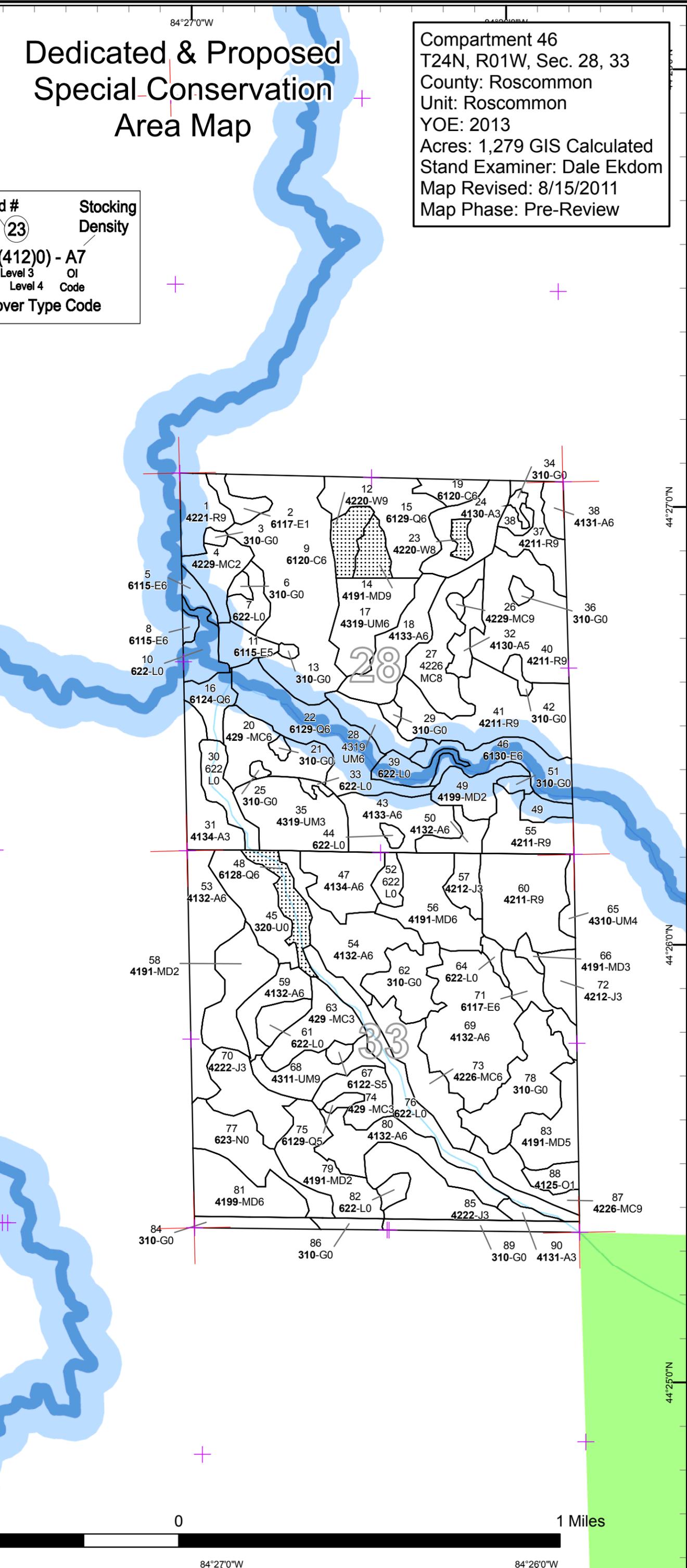
**Level 3**

- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

**Non-Forest Stands**

**Level 3**

- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 622 - Lowland Shrub
- 623 - Emergent Wetland



84°28'0"W 84°27'0"W 84°26'0"W

44°28'0"N  
44°27'0"N  
44°26'0"N  
44°25'0"N

84°28'0"W  
84°27'0"W  
84°26'0"W

**Table 1 – Total Acres by Cover Type and Age Class**



	Age Class														Total	
	Non-Forested	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Uneven Age
Aspen	0	3	18	40	0	165	0	0	8	35	0	0	0	0	0	269
Cedar	0	0	0	0	0	0	0	0	0	0	0	79	0	0	0	79
Herbaceous Openland	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83
Jack Pine	0	0	36	24	0	0	0	0	0	0	0	0	0	0	0	60
Lowland Conifers	0	0	0	0	0	0	0	0	0	2	46	29	0	0	11	88
Lowland Deciduous	0	0	6	0	0	11	0	0	6	8	0	0	0	0	0	30
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	21
Lowland Shrub	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Marsh	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Mixed Upland Deciduous	0	39	2	24	0	26	0	0	0	0	18	0	0	0	30	139
Natural Mixed Pines	0	0	0	0	0	31	0	0	1	0	0	0	0	0	35	67
Oak	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Red Pine	0	0	0	0	0	0	0	0	149	0	0	0	0	0	13	162
Upland Conifers	0	0	31	22	0	0	0	0	0	0	0	0	0	0	0	53
Upland Mixed Forest	0	0	29	0	0	24	0	0	4	25	0	0	0	0	0	82
Upland Shrub	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11
<b>Total</b>	<b>210</b>	<b>48</b>	<b>123</b>	<b>110</b>	<b>0</b>	<b>257</b>	<b>0</b>	<b>0</b>	<b>167</b>	<b>72</b>	<b>64</b>	<b>108</b>	<b>0</b>	<b>0</b>	<b>121</b>	<b>1279</b>



## Table 2 – Proposed Treatment Summaries

**Roscommon Mgt. Unit**  
**Year of Entry 2013**

**Compartment 046**  
**Total Compartment Acres: 1279**

### Acres by Treatment Type

Commercial Harvest - 231	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 15	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

### Cover Type by Harvest Method

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
<b>Aspen</b>	57	0	0	0	0	0	57
<b>Natural Mixed Pines</b>	0	0	0	0	1	0	1
<b>Red Pine</b>	13	0	0	0	149	0	162
<b>Upland Mixed Forest</b>	25	0	0	0	0	0	25
<b>Total</b>	<b>96</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>150</b>	<b>0</b>	<b>246</b>



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	71046001-Cut	12.8	42210 - Natural Red Pine	High Density Log	71	Harvest	Low Thinning	42211 - Natural Red Pine, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription</u> thin to 90 - 120 SF residual to enhance old growth characteristics by removing a variety of size classes and species, retain bio-diversity as much  <u>Specs:</u> as possible by marking all trees to cut (no spec. cutting), paint vernal ponds/depressions out of sale. use adequate buffer on west side of stand  along S. Br. Au Sable River, determine best course of action for dealing with potential arch. site in SE corner of the stand, watch well  site/flowlines which are within/adjacent to the stand</p> <p><u>Other</u>  <u>Comments:</u></p> <p><u>Next</u>  <u>Steps:</u></p>									
26	71046026-Cut	1.4	42290 - Natural Mixed Pine	High Density Log	71	Harvest	Low Thinning	42290 - Natural Mixed Pine	Cmpt. Review Proposal
<p><u>Prescription</u> thin to 14 SF to enhance old growth characteristics, no retention other than residual R/W pine due to small size of the stand, retain as biodiversity  <u>Specs:</u> by marking all trees to cut (no spec. cutting)</p> <p><u>Other</u>  <u>Comments:</u></p> <p><u>Next</u>  <u>Steps:</u></p>									
28	71046028-Cut	10.5	4319 - Mixed Upland Forest	High Density Pole	81	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<p><u>Prescription</u> final harvest for aspen mgmt., cut on dry/frozen ground during the dormant season to promote vigorous sprouting and limit potential for rotting,  <u>Specs:</u> leave adequate buffer on South Creek, leave lower ground spots within stand for retention, mark a few conifers and oak for diversity, any  regeneration to a fully stocked stand is acceptable, trench and plant jack pine if regeneration fails which is unlikely</p> <p><u>Other</u>  <u>Comments:</u></p> <p><u>Next</u>  <u>Steps:</u></p>									
32	71046032-Cut	7.6	4130 - Aspen	Medium Density Pole	70	Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> final harvest for aspen mgmt., no retention due to small size of the stand and age of the oldest aspen, mark a few oaks for wildlife mast, dormant  <u>Specs:</u> season cut to promote vigorous sprouting, any regeneration to a fully stocked stand is acceptable, trench and plant RP if regeneration fails which  is unlikely</p> <p><u>Other</u>  <u>Comments:</u></p> <p><u>Next</u>  <u>Steps:</u></p>									
37	71046037-Cut	13.3	42110 - Planted Red Pine	High Density Log	71	Harvest	Clearcut with Reserves	4122 - Oak, Pine	Cmpt. Review Proposal
<p><u>Prescription</u> final harvest and manage for oak, leave part north of two-track and buffer well site for retention, address green-up concern on east side of stand  <u>Specs:</u> as needed, watch oil pipelines within and adjacent to the stand, any combination of oak and pine to a fully stocked stand is acceptable, trench  and plant red pine where oak regeneration fails to take off</p> <p><u>Other</u>  <u>Comments:</u></p> <p><u>Next</u> regeneration check  <u>Steps:</u></p>									



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
38	71046038-Cut	7.9	4131 - Aspen, Oak	High Density Pole	45	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription:</u> final harvest for aspen mgmt., mark oak SL to leave for wildlife mast, mark R/W pine SL for diversity, no retention other than marked leave trees, address green-up concerns on the east side of this stand if still a problem, dormant season cut to promote vigorous sprouting of the older aspen in the stand, any regeneration to a fully stocked stand is acceptable, trench and plant RP if regeneration fails</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> cut with north part of stand 8 in 71048 to the east (north of 2T), watch pipelines within/adjacent to the stand</p> <p><u>Next Steps:</u></p>									
40	71046040-Cut	41.0	42110 - Planted Red Pine	High Density Log	71	Harvest	Low Thinning	42111 - Planted Red Pine, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription:</u> thin to 120 SF by removing defect and suppressed trees along with a few sawlog size trees which won't make utility poles, watch oil flowlines and well sites which are both within and adjacent to the stand, buffer well sites as retention</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> manage for utility poles next YOE</p>									
41	71046041-Cut	43.3	42110 - Planted Red Pine	High Density Log	71	Harvest	Low Thinning	42111 - Planted Red Pine, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription:</u> thin to 120 SF by removing defect and suppressed trees along with a few SL which won't make utility poles, watch oil pipelines/well sites within and adjacent to the stand, place retention around the well sites</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> manage for utility poles next YOE</p>									
50	71046050-Cut	7.4	4132 - Aspen, Jack Pine	High Density Pole	45	Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal
<p><u>Prescription:</u> cut all aspen/red maple/jack pine, leave oak/R-W pine for retention/diversity/visual and for wildlife mast, any regeneration to a fully stocked stand is acceptable, trench and plant red pine if regeneration fails which is unlikely</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u></p>									
55	71046055-Cut	17.0	42110 - Planted Red Pine	High Density Log	71	Harvest	Low Thinning	42111 - Planted Red Pine, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription:</u> thin to 120 SF by concentrating on improving the quality of the stand, no retention other than residual RP, save areas heavy to oak understory where possible</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> include stand to the east in Compt 48 when treated</p> <p><u>Next Steps:</u> manage for utility poles next YOE</p>									



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
59	71046059-Cut	11.5	4132 - Aspen, Jack Pine	High Density Pole	86	Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal
<p><u>Prescription:</u> final harvest for aspen mgt. leave all oak for retention/mast and all R/W pine for retention and visual, dormant season cut to increase sprouting,  <u>Specs:</u> stand should regenerate to aspen but alternate regeneration will be to trench and plant jack pine in any large areas which do not regenerate to aspen, leave adequate buffer on creek and any bog/wet areas  <u>Other</u>  <u>Comments:</u> SMT will need to be used for hauling during the winter as its the only route out to a county road so proper protections specs should be added to ensure trail stays open to snowmobiles during hauling, require that trucks go north to Pine Drive as Marl Lake Road is part of the SMT system  <u>Next</u>  <u>Steps:</u></p>									
60	71046060-Cut	34.6	42110 - Planted Red Pine	High Density Log	71	Harvest	Low Thinning	42111 - Planted Red Pine, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription:</u> thin to 120 SF concentrating on improving the quality of the stand, save as much oak understory as possible  <u>Specs:</u>  <u>Other</u>  <u>Comments:</u>  <u>Next</u> manage for utility poles next YOE  <u>Steps:</u></p>									
68	71046068-Cut	15.0	4311 - Pine, Aspen Mix	High Density Log	86	Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal
<p><u>Prescription:</u> final harvest for aspen mgt., dormant season cut, leave all oak for mast and retention, leave islands heavy to pine for visual and retention, no  <u>Specs:</u> aspen retention due to age of the aspen, leave white birch along SMT for visual, stand should regenerate to aspen but alternate regeneration will be to trench and plant jack pine in any larger areas which don't regenerate to aspen, leave adequate buffer the creek  <u>Other</u>  <u>Comments:</u> SMT will need to be used for hauling during the winter so proper protectio specs should be added to ensure the trail stays open to snowmobiles during hauling, require trucks to go north to Pine Road as Marl Lake Road is part of the SMT system  <u>Next</u>  <u>Steps:</u></p>									
80	71046080-Cut	23.2	4132 - Aspen, Jack Pine	High Density Pole	86	Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal
<p><u>Prescription:</u> final harvest for aspen mgt., dormant season cut, retain all oak for wildlife mast, retention, and diversity. retain islands of R/W pine and/or all  <u>Specs:</u> R/W pine by spec for diversity, visual, and retention, retain adequate buffer on the creek, stand should regenerate to aspen but alternate regeneration will be to plant jack pine in large areas which do not regeerate to aspen  <u>Other</u>  <u>Comments:</u> SMT will need to be used during the winter as its the only route into the stand so proper protection specs need to be added to ensure the trails stays open to snowmobiles, proper protection specs are also needed on the ORV trail, consider marking leave trees close to the trail to avoid leaving stumps  <u>Next</u>  <u>Steps:</u></p>									
<b>Total Treatment Acreage Proposed:</b>		<b>246.5</b>							

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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#Error

Prescription  
Specs:

Other  
Comment:

Next  
Steps:

Limiting Factor and No  
Treatment Reason

**Total Treatment**  
**Acreage Proposed: 0**

**Out of YOE -- Treatments  
Prescribed with No Limiting Factor**

Year of Entry: 2013



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
<b>71048_OutOfY OE_1-Cut</b>	2.2				Harvest	Low Thinning	42111 - Planted Red Pine, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription</u> thin to 120 SF by concentrating on improving the quality of the stand, no retention other than residual RP, save areas heavy to oak understory  <u>Specs:</u> where possible</p> <p><u>Other</u> cut with stand to the west in 71046  <u>Comments:</u></p> <p><u>Next</u> manage for utility poles next YOE  <u>Steps:</u></p>								
<b>71048_OutOfY OE-Cut</b>	4.0			0	Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal
<p><u>Prescription</u> final harvest for aspen mgmt., mark oak SL to leave for wildlife mast, mark R/W pine SL for diversity, no retention other than marked leave  <u>Specs:</u> trees, address green-up concerns on the east side of this stand if still a problem, dormant season cut to promote vigorous sprouting of the older aspen in the stand, any regeneration to a fully stocked stand is acceptable, trench and plant RP if regeneration fails</p> <p><u>Other</u> cut with stand to the west in 71046  <u>Comments:</u></p> <p><u>Next</u>  <u>Steps:</u></p>								
<b>71118_OutOfY OE-Cut</b>	6.6			0	Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal
<p><u>Prescription</u> final harvest for aspen mgmt. mark or leave all oak for diversity/retention/visuals. buffer low marshy ground on southwest. leave out any wetter  <u>Specs:</u> areas in the north part of the stand for BMP reasons. leave out areas with heavy R/W pine component for diversity/retention/visuals. Any regeneration of aspen/oak/pine to a fully stocked stand is acceptable. regeneration alternative is to plant red pine if stand is not fully stocked but this is unlikely.</p> <p><u>Other</u> treat with stand to the west in 71117, add proper protection specs to ensure trail status open to snowmobiles during hauling  <u>Comments:</u></p> <p><u>Next</u>  <u>Steps:</u></p>								
<b>71165_OutOfY OE-Cut</b>	5.1				Harvest	Low Thinning	42260 - Natural Pine, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription</u> thin to 90-120 SF/Acre so as to enhance old growth/bio-diversity characteristics  <u>Specs:</u></p> <p><u>Other</u> stand has a dense A/RM understory which will need to be addressed with appropriate sale specs, save W3 understory where possible, treat  <u>Comments:</u> stand to the west in 71163 when this stand is treated (same stand)</p> <p><u>Next</u>  <u>Steps:</u></p>								
<b>Total Treatment Acreage Proposed:</b>	<b>17.9</b>							

S t a n d	Roscommon Mgt. Unit		5 – Forested Stands			Compartment: 046
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2013
						General Comments:
1	42210 - Natural Red Pine	High Density Log	12.8	Uneven Age	141-170	Stand appears to be natural RP stand - no planting record found and no discernable rows, scattered pockets heavy to WP poles/logs, thinned 1993 by removing HW's and JP but very little HW regenerated except for a few openings and on the edges of the stand, all ages of RP exist in this stand from seedlings to X-logs), good candidate for SCA but needs a treatment to move it towards old growth, thin to 90 - 120 SF residual to enhance old growth characteristics of this stand
2	6117 - Lowland Deciduous, Mixed Coniferous	Low Density Sapling	5.7	17		cut 1993, upland parts regenerated well to TA/RM and lower parts which are wetter are balsam fir and tag alder
4	42290 - Natural Mixed Pine	Medium Density	12.5	Uneven Age		mix of older R/W pine with younger HW's and JP, stand is 2-aged going towards all-aged, HW's and JP were cut out in 1993, north end is mostly conifer logs, poles, and saps, south end is mostly conifer logs and poles and HW saps, south and west of 2T the stand is lower with a few wet runs and potholes, recommend holding stand until conifer/HW understory gets bigger, stand has good vertical structure for now for various wildlife and lots of wildlife sign is evident
5	6115 - Lowland Ash	High Density Pole	3.8	71		black ash stand in floodplain of S. Br. Au Sable River
8	6115 - Lowland Ash	High Density Pole	1.7	77		black ash stand in bottomland of S. Br. Au Sable River, tag alder and understory and marsh grass ground cover
9	6120 - Lowland Cedar	High Density Pole	72.5	101		wet cedar swamp with lots of blowdown, south end has more hardwoods, smaller trees, and is less dense
11	6115 - Lowland Ash	Medium Density Pole	7.7	88		low/wet/slow-growing stand created by ol 2T to oil well site (now abandoned), scattered areas with heavy conifer component (BF, WP, BS, Tam., NWC)
12	42200 - Natural White Pine	High Density Log	8.4	Uneven Age	81-110	WP sawlogs and x-logs with hardwood poles and balsam fir saps, retain as old growth SCA, no treatment, some WP X-logs are 30" + DBH
14	4191 - Mixed Upland Deciduous with Conifer	High Density Log	7.2	Uneven Age	171-200	Stand is mature RM and other hardwoods with X-log WP, balsam fir saplings in the understory, possibly burn to maintain OG characteristics and control BF
15	6129 - Mixed Coniferous Lowland Forest	High Density Pole	29.2	108		low, wet swamp, cedar with pockets of H9, hardwoods rapidly disappearing, deeryard?
16	6124 - Lowland Spruce-Fir	High Density Pole	9.2	90		mix of spruce and fir with some tamarack/hardwoods, hummucky low ground cut by a few lower drainages and potholes, hardwoods are poor quality and declining
17	4319 - Mixed Upland Forest	High Density Pole	23.9	40		stand was cut in 1970 by cutting all A/RM, high ground with decent A/M regeneration interspersed with lower ground with mult. stem RM and BF saps, hardwoods are just past pole size, hold 10 years and evaluate for treatment at that time



S t a n d	Roscommon Mgt. Unit		5 – Forested Stands			Compartment: 046
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2013
						General Comments:
18	4133 - Aspen, Mixed Pine	High Density Pole	20.9	41		1970's YOO trembling aspen with scattered oak and pine of the same age and older, pocket of RP SL on south end could be saved for retention if cut
19	6120 - Lowland Cedar	High Density Pole	6.1	101		almost pure cedar with hardwoods dying out
20	429 - Mixed Upland Conifers	High Density Pole	21.5	25		Trembling Aspen with Balsam Fir component
22	6129 - Mixed Coniferous Lowland Forest	High Density Pole	37.0	90		bottomland adjacent to south creek, scattered areas of "L" type where beavers have been active
23	42200 - Natural White Pine	Medium Density Log	2.9	Uneven Age	111-140	2 aged going towards all aged, cut hardwoods and left pine in 1993, mix of W/R pine SL with TA & RM u.s. and oak seedlings starting under the A/M saps
24	4130 - Aspen	High Density Sapling	18.5	16		cut in 1993, good aspen regen on upland, not so good on the lower areas, parts are wet with just tag alder or marsh grass
26	42290 - Natural Mixed Pine	High Density Log	1.4	71	200+	natural RP stand, 2 aged stand with hardwoods removed in approx 1960, thin to 140 square feet to enhance old growth characteristics of stand, no retention due to stand size
27	42260 - Natural Pine, Mixed Deciduous	Medium Density Log	22.3	Uneven Age	81-110	most pine is 1940 YOO with the hardwoods 1970 YOO, pine is growing well but not great quality and hardwoods are just past pole-size, scattered areas are heavy to 1970 YOO oak and pine, south end just north of oil well site is heavy to RP SL
28	4319 - Mixed Upland Forest	High Density Pole	10.5	81		aspen with heavy conifer component, transition zone between South Creek bottomlands and uplands, stand is hummocky ground but should be operable with cautions, clearcut for aspen regeneration, cut in dry or frozen ground during dormant season and leave adequate buffer on South Creek floodplain
31	4134 - Aspen, Spruce/Fir	High Density Sapling	17.5	25		Stand slopes down to the north and hardwood densities decrease as you move downslope towards the swamp to the north, Trembling Aspen just reaching pole-size
32	4130 - Aspen	Medium Density Pole	7.6	70		2 aged stand with TA at south end younger than north end (1970 YOO), oldest aspen is declining and should be cut now, no retention due to age of aspen, mark a few oaks for wildlife mast
35	4319 - Mixed Upland Forest	High Density Sapling	28.9	15		Trembling Aspen stand with heavy conifer component
37	42110 - Planted Red Pine	High Density Log	13.3	71	111-140	RP SL stand with heavy understory of oak, stand was thinned in 1993 by removing hardwoods and jack pine, parts need thinning and other parts are OK as is, final harvest and manage for oak but plant RP where oak is sparse, leave part north of two-track and buffer well site for retention, green-up concern on east side will need to be addressed





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
38	4131 - Aspen, Oak	High Density Pole	7.9	45		poor quality oak SL and RM/TA poles, scattered pine SL, aspen appears to be 2-aged with the youngest aspen circa 1965 YOO, oldest aspen appears to be same aged as oak/pine SL. some hypox. canker started, should be cut now B4 aspen declines further
40	42110 - Planted Red Pine	High Density Log	41.0	71	171-200	RP SL with hardwood understory, some RM approaching pole size, thinned by removing hardwoods and jack pine in 1993
41	42110 - Planted Red Pine	High Density Log	43.3	71	171-200	planted RP with scattered oak SL and misc. conifers coming in along South Creek, thinned in 1993 by removing HW's and JP
43	4133 - Aspen, Mixed Pine	High Density Pole	22.6	25		lower areas are RM/WP/BF with misc. swqamp conifers, drier areas are TA/BO/BF, most species are just getting to pole-size
46	6130 - Fir, Aspen, Maple	High Density Pole	21.2	Uneven Age		floodplain/bottomland of South Creek
47	4134 - Aspen, Spruce/Fir	High Density Pole	19.0	45		TA poles mixed with conifer poles, also scattered R/W pine x-logs, consider cutting next YOE as aspen is doing well or cut now for better aspen distribution in the compt./unit
48	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	10.9	Uneven Age		bottomland of creek, 2 aged with cedar poles and white pine SL and XL being the oldest and hardwoods and spruce-fir younger, lots of dead/down hardwoods, somewhat operable on the edges but much wetter near the creek, heavy balsam fir understory thru-out most of stand except for the south end which has less u.s., possible designate as SCA for riparian corridor reasons
49	4199 - Other Mixed Upland Deciduous	Medium Density	17.3	6		cut 2004 resulting in variable regeneration - good aspen and oak regeneration in spots but the rest of the stand is fairly open
50	4132 - Aspen, Jack Pine	High Density Pole	7.4	45		Stand ranges from areas of mature/over-mature trembling aspen SL (north part) to areas of mature JP and oak with immature TA poles in the understory (along Pine Dr.), scattered super canopy RP trees also, some hypox. canker present
53	4132 - Aspen, Jack Pine	High Density Pole	31.5	45		TA with a few areas heavy to JP and scattered R/W pine and oak, aspen is both solitary and clonal, solitary aspen declining somewhat but clonal aspen doing well, several areas are more open with upland brush and almost pole size aspen, scattered wetter pockets with aspen/black spruce/tag alder - especially on the west edge, most aspen can hold or is not ready to harvest, recommend holding 10 years and cutting with stand to the west in Compartment 45 which is of similar age and species makeup.
54	4132 - Aspen, Jack Pine	High Density Pole	28.4	45		Aspen stand with BTA barely pole-size in most spots, other spots heavy to pole-size white pine and JP, stand also has some x-log WP, begin separating out areas of WP/JP and aspen next YOE
55	42110 - Planted Red Pine	High Density Log	17.0	71	141-170	planted RP thinned in 1994 by removing JP and Oak, NE part has smaller trees and less dense BA, Oak u.s. thru-out ranges from O1 to O3 in several spots

Stand	Roscommon Mgt. Unit		5 – Forested Stands			Compartment: 046	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2013	
56	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	25.6	45			DRIP cut in 1965?? - site is not really an aspen site, possibly grow oak/RP on more upland areas of the stand in future YOE, scattered super-canopy R/W pine
57	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	7.8	14			cut 1994, planted/seeded to JP in 1996
58	4191 - Mixed Upland Deciduous with Conifer	Medium Density	21.6	4			stand is mix of everything - mostly aspen/oak on north end and oak/jp on south end, possibly speilt stand next YOE when easier to define
59	4132 - Aspen, Jack Pine	High Density Pole	11.5	86			trembling aspen stand with several areas heavy to jack pine, aspen appears to be 2 aged in spots with larger mature SL mixed with smaller pole/sap size aspen, scattered RP X-logs and WP saps, scattered oak SL's with several areas heavy to oak pole, logs, and saps, jack pine and aspen both need to be cut, recommend dormant season cut and minimal retention of aspen, leave all oak for retention and mast, leave R/W pine for visual and retention, stand should regenerate to aspen but alternate regeneration would be to plant JP in any large areas that do not regenerate to aspen
60	42110 - Planted Red Pine	High Density Log	34.6	71	171-200		removed HW's and JP in 1994, scattered areas in u.s are O3 and others are fairly open, some RP seeding in on main N-S skid road, RP SI is 70
63	429 - Mixed Upland Conifers	High Density Sapling	18.0	15			appears to be nat. regeneration as no trenches or FTP were found
65	4310 - Pine, Oak Mix	Low Density Pole	3.5	71	1-50		transition between jack pine to the east and RP to the west, removed jack pine/HW's in 1994 so stand is now 2-aged
66	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	2.3	17			cut to 4" and not seeded, fairly equal mix of oak and red maple with J/R pines seeding in naturally
67	6122 - Black Spruce	Medium Density Pole	2.0	86			wet pocket of black spruce and lowland hardwoods with tag alder
68	4311 - Pine, Aspen Mix	High Density Log	15.0	86			poles size trembling aspen clones interspersed with areas of jack pine poles and logs and oak saps, scattered areas with TA saps and heavy oak saps, JP is mature and TA is merchantable in most spots, aspen is 2 aged with the oldest aspen circa 1924, recommend dormant season cut and minimal retention of aspen due to age, leave all oak for mast and retention and leave islands heavy to RP for visual and retention, possibly leave white birch esp. in areas visible from the SMT, plant jack pine in any larger areas that do not regenerate to aspen
69	4132 - Aspen, Jack Pine	High Density Pole	50.2	48			J/A poles with scattered oak SL, lots of pin cherry and oak saps in many spots, JP poles better quality than aspen poles (not really and apsn site), both aspen and jack pine could use more growing before harvesting, recommend holding 10 years and then managing for oak/jack pine mix - JP SI is 57





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
70	42220 - Natural Jack Pine	High Density Sapling	19.3	15		appears to be natural jack pine stand as no planting records were found
71	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	11.3	45		bulk of stand is broad drainage area which is seasonally wet, several spots are wet most of the year and have "L" in the understory, there is at least one higher island with oak and jack pine, R/W pine X-logs scattered thru-out stand as supercanopy trees
72	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	8.7	14		cut 1994 and seede to JP in 1996, doghair JP
73	42260 - Natural Pine, Mixed Deciduous	High Density Pole	21.4	45	111-140	2 aged stand with oak SL and white pine saps/poles, north end is heavier to aspen and jack pine saps/poles, WP component increases as you move south, spots are also heavy to aspen saps/poles
74	429 - Mixed Upland Conifers	High Density Sapling	13.4	15		appears to be trenched and possibly planted or seeded but no FTP found, parts of the stand are fairly sparse and others are dog hair pine
75	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	2.0	86		stand is in a wet drainage/pothole, wettest parts are conifers, somewhat drier parts are more hardwoods, ground cover is leatherleaf or swamp grass, very hummocky
79	4191 - Mixed Upland Deciduous with Conifer	Medium Density	24.3	25		more upland areas are TA/oak?JP and lower/wetter areas are black spruce/tamarack mixed with "L", south edges are the wettest, north end seems older or possibly more productive as it appears to be pulp size already
80	4132 - Aspen, Jack Pine	High Density Pole	23.2	86		mix of TA/JP/Oak/RM with scattered R/W pine, appears to be a 2 aged stand with overmature aspen(1924 YOO) and immature/mature aspen which is younger (1962 YOO), most oak is 1924 YOO and jack pine is 2 aged (1924/1962), recommend final harvest and plant jack pine where aspen does not regenerate, several pockets are heavy to red/white pine
81	4199 - Other Mixed Upland Deciduous	High Density Pole	22.9	Uneven Age		looks like aspen and possibly RM was specd. cut in 1965, stand is now heavy oak and TA poles with scattered oak logs and X-logs overtop and heavy oak seedling/sapling underneath, stand also has a scattered pine component, there are several pockets (mostly along the road and north edge) which are heavy to jack pine poles, entire stand appears to be a better oak site than an aspen site as aspen is poor quality TA and oak is decent quality single stem pin oak, recommend holding 10 years and then managing for oak with some sort of thinning
83	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	18.1	90	81-110	2 aged stand of log size oak and R/W pine and pole-size JP and aspen, O/J areas are interspersed with aspen/oak clones, scattered areas are heavy to WP or RP with the south end of the stand having a 1 -2 acre inclusion of natrual RP which could be thinned if the rest of the stand is treated this YOE, stand is not an aspen site but would make a good spot to grow oak or R/J pine, recommend holding the entire stand for next YOE until understory has become more merchantable

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Roscommon Mgt. Unit

## 5 – Forested Stands

Compartment: 046  
Year of Entry: 2013

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
<b>85</b>	42220 - Natural Jack Pine	High Density Sapling	23.7	25		appears to be natural jack pine stand as no cplanting records were found
<b>87</b>	42260 - Natural Pine, Mixed Deciduous	High Density Log	9.8	45	81-110	2 aged stand of mature J/O SL and R/W pine poles, understory R/W pine is almost poles size, recommend thinning entire stand next YOE when u.s. is merchantable
<b>88</b>	4125 - Black, N. Pin Oak	Low Density Sapling	5.7	6		cut 2004 and planted to RP in 2006, will probably be oak stand mixed with planted RP and natural JP, lots of stump sprout oak as well as some oak from seed
<b>90</b>	4131 - Aspen, Oak	High Density Sapling	2.9	6		nice A3 cut in 2004



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	310 - Herbaceous Openland	1.5	N/A	Unspecified	
6	310 - Herbaceous Openland	1.9	N/A	Unspecified	
7	622 - Lowland Shrub	7.6	N/A	Unspecified	
10	622 - Lowland Shrub	9.5	N/A	Unspecified	
13	310 - Herbaceous Openland	1.1	N/A	Unspecified	
21	310 - Herbaceous Openland	1.4	N/A	Unspecified	
25	310 - Herbaceous Openland	1.1	N/A	Unspecified	
29	310 - Herbaceous Openland	1.7	N/A	Unspecified	
30	622 - Lowland Shrub	10.5	N/A	Unspecified	
33	622 - Lowland Shrub	1.4	N/A	Unspecified	
34	310 - Herbaceous Openland	1.6	N/A	Unspecified	
36	310 - Herbaceous Openland	1.9	N/A	Unspecified	
39	622 - Lowland Shrub	7.8	N/A	Unspecified	
42	310 - Herbaceous Openland	2.5	N/A	Unspecified	
44	622 - Lowland Shrub	1.7	N/A	Unspecified	
45	320 - Upland Shrub	21.0	N/A	Unspecified	
51	310 - Herbaceous Openland	2.1	N/A	Unspecified	
52	622 - Lowland Shrub	5.2	N/A	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
61	622 - Lowland Shrub	6.6	NVA	Unspecified	
62	3102 - Grass	17.2	Natural Regen	Aspen	cut while inventorying this compartment - should be A3 after 1 growing season
64	622 - Lowland Shrub	2.6	NVA	Unspecified	
76	622 - Lowland Shrub	26.9	NVA	Unspecified	
77	623 - Emergent Wetland	22.1	NVA	Unspecified	
78	3102 - Grass	30.4	Natural Regen	Aspen	cut while inventorying this compartment- should be A3 after 1 growing season - middle 1/3rd was heavy to J6 and may need to be planted back to jack pine
82	622 - Lowland Shrub	3.5	NVA	Unspecified	
84	310 - Herbaceous Openland	6.1	NVA	Unspecified	
86	310 - Herbaceous Openland	3.4	NVA	Unspecified	
89	310 - Herbaceous Openland	9.5	NVA	Unspecified	



## 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
12	Unique Site - SCA	71046012	8.4	rare on the Roscommon FMU, this stand is a good example of a dry-mesic northern forest
14	Unique Site - SCA	71046014	7.2	rare on the Roscommon FMU, this stand is a good example of a mesic northern forest
23	Unique Site - SCA	71046023	2.9	Type 2 old growth - 2 aged going towards all aged
48	Unique Site - SCA	71046048	10.9	designate as SCA due to age and for riparian corridor aspects



## 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.

ERA = Ecological Reference Area  
 HCVA = High Conservation Value Area  
 SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and cooperative process between the DNR and the U.S. Fish and Wildlife service for the recovery of threatened and endangered species, as governed by Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, and the Federal Endangered Species Act of 1973. This is an active program, with proposed species plans in various stages of review. As of now only two exist, Kirtland Warbler Habitat and Piping Plover Habitat.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.