



Compartment Review Presentation

Roscommon Forest Management Unit

Compartment 4

Entry Year 2015

Acreage: 673

County Roscommon

Management Area: AuSable Outwash

Revision Date: 08/05/2013

Stand Examiner: Jason Lewicki

Legal Description:

T24N, R01W Sections 3, 10 and 15

Identified Planning Goals:

Provide for sustainable ecosystem based management. Maintain healthy and diverse forested stands for wildlife, recreation and the production of forest products.

Soil and topography:

Soils on the uplands consist primarily of Greycalm and Klacking-Perecheney sands. Lowland areas consist of Tawas-Lupton muck.

The topography is generally flat.

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

The compartment is fragmented by private property.

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:

None known

Watershed and Fisheries Considerations:

This compartment lies within the AuSable River watershed. East creek flows through the compartment.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

Sections 1 & 2, T24N-R1W, Roscommon County

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 400 feet. Beneath the glacial drift is the Mississippian Marshall Sandstone. The Marshall has been used as a building stone in the past. Most of the good gravel pits are associated with upland areas. The nearest gravel pit is located in Section 10 and potential appears to be good. St. Helen Field is located 1.5 miles to the southwest. 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. None of the Compartment is currently leased.

Vehicle Access:

Vehicle access is very good due to multiple county roads and forest roads.

Survey Needs:

None known.

Recreational Facilities and Opportunities:

Various hunting opportunities occur within the compartment.

Fire Protection:

Additional Compartment Information:

The following reports from the Inventory are attached:

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

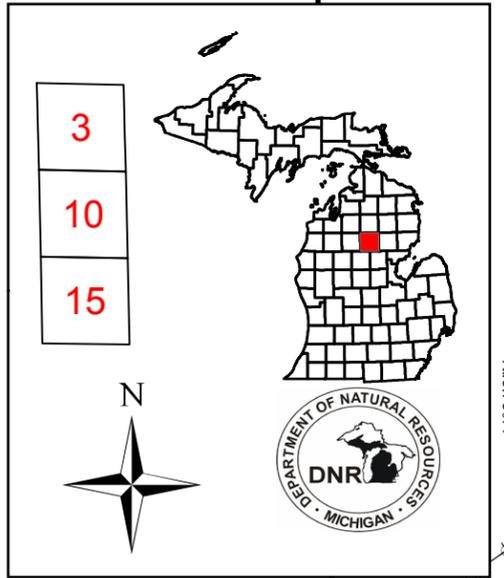
The following information is displayed, where pertinent, on the attached compartment maps:

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

Cover Type & Treatment Map

Compartment: 004
 T24N R01W
 Sections 3, 10, 15
 County: Roscommon
 Unit: Roscommon
 YOE: 2015
 Acres: 673 GIS Calculated
 Examiner: Jason Lewicki
 Map Revised: 12/13/2013
 Map Phase: Web Post

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



Legend

- Miris Corners
- + Remonumented Section Corners
- ◆ PLSS Corner
- Highway
- County Paved Roads
- Paved Roads
- - - Poor Dirt Roads
- Pipeline
- Powerline
- Lakes and Rivers
- Stream
- - - Intermittent Stream
- MCCCT Trail
- Motorcycle (SOS License)
- MCCCT Trails
- Motorcycle Trails

Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Thinning (Crown, Low, Systematic)
- Other Treatment - See Comments
- Treatments w/ Site Condition

Forest Stands

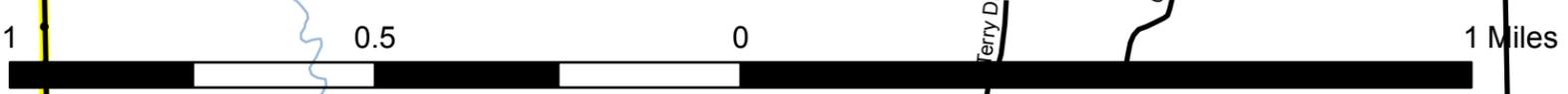
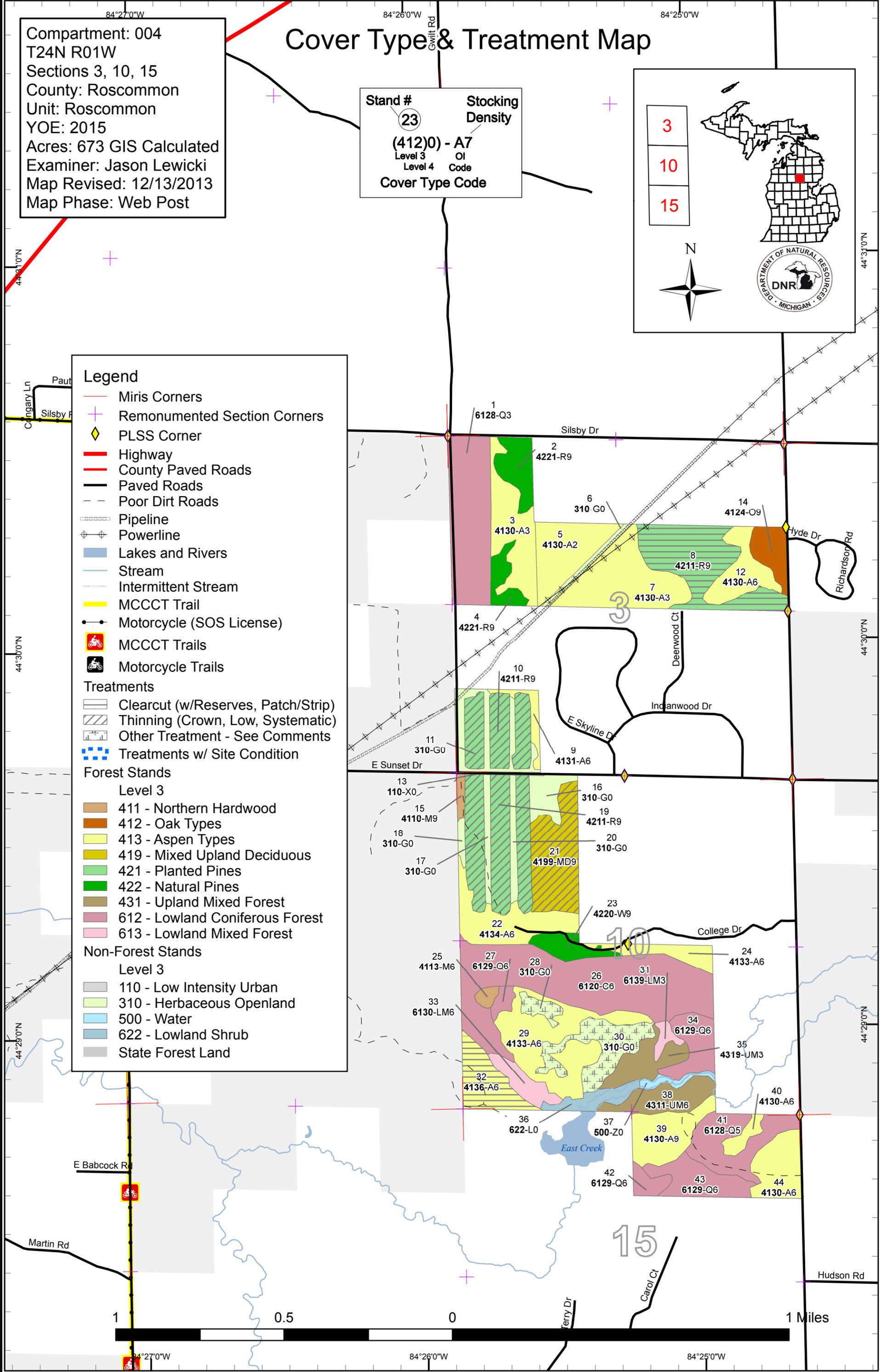
Level 3

- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

Level 3

- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub
- State Forest Land



84°27'0"W 84°26'0"W 84°25'0"W
 44°31'0"N 44°30'0"N 44°29'0"N

Stand Boundary Map

Compartment: 004
 T24N R01W
 Sections 3, 10, 15
 County: Roscommon
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 YOE: 2015
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 Map Revised: 12/13/2013
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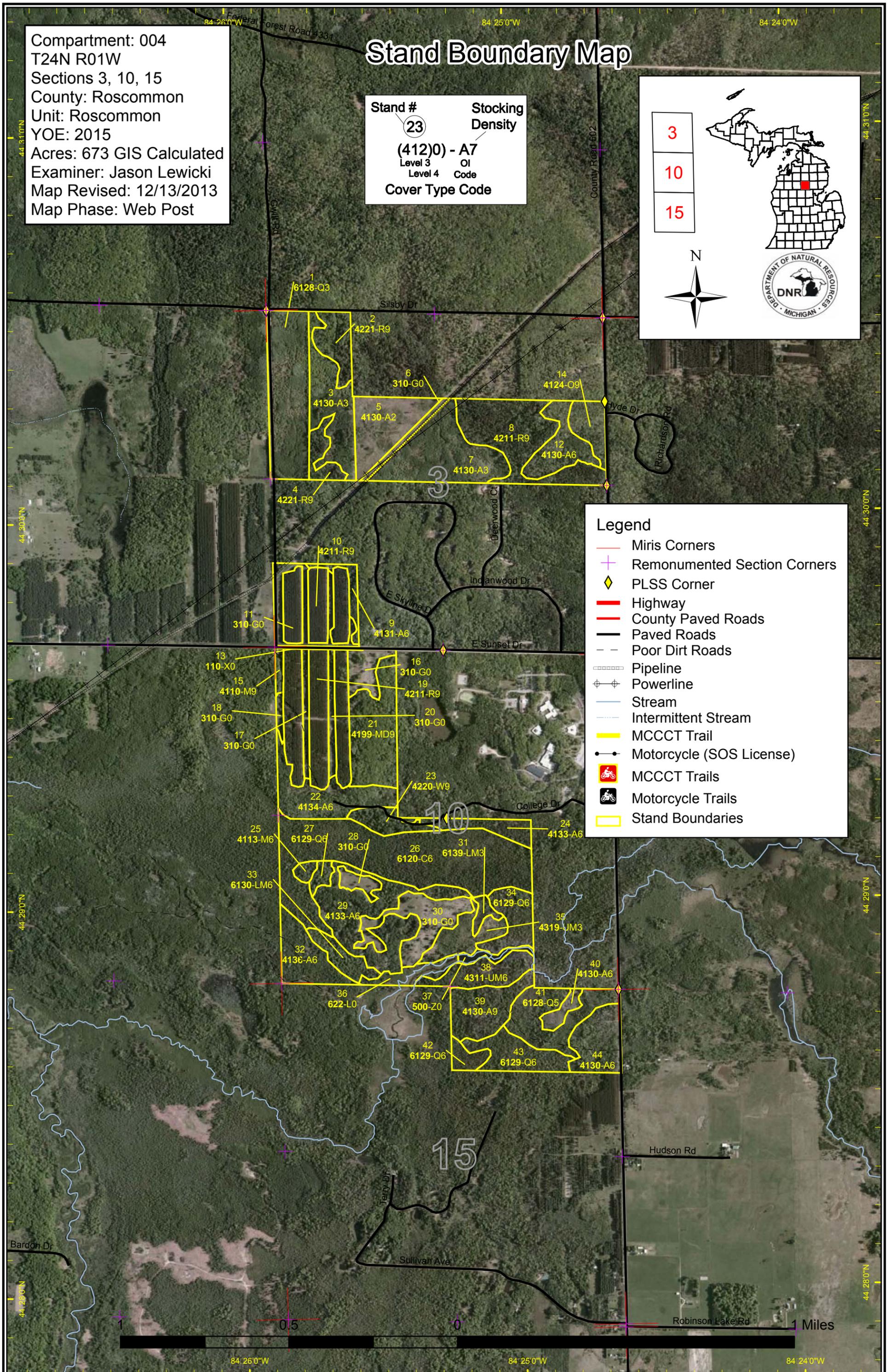
Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

3
 10
 15

N
 DEPARTMENT OF NATURAL RESOURCES
 DNR
 MICHIGAN

Legend

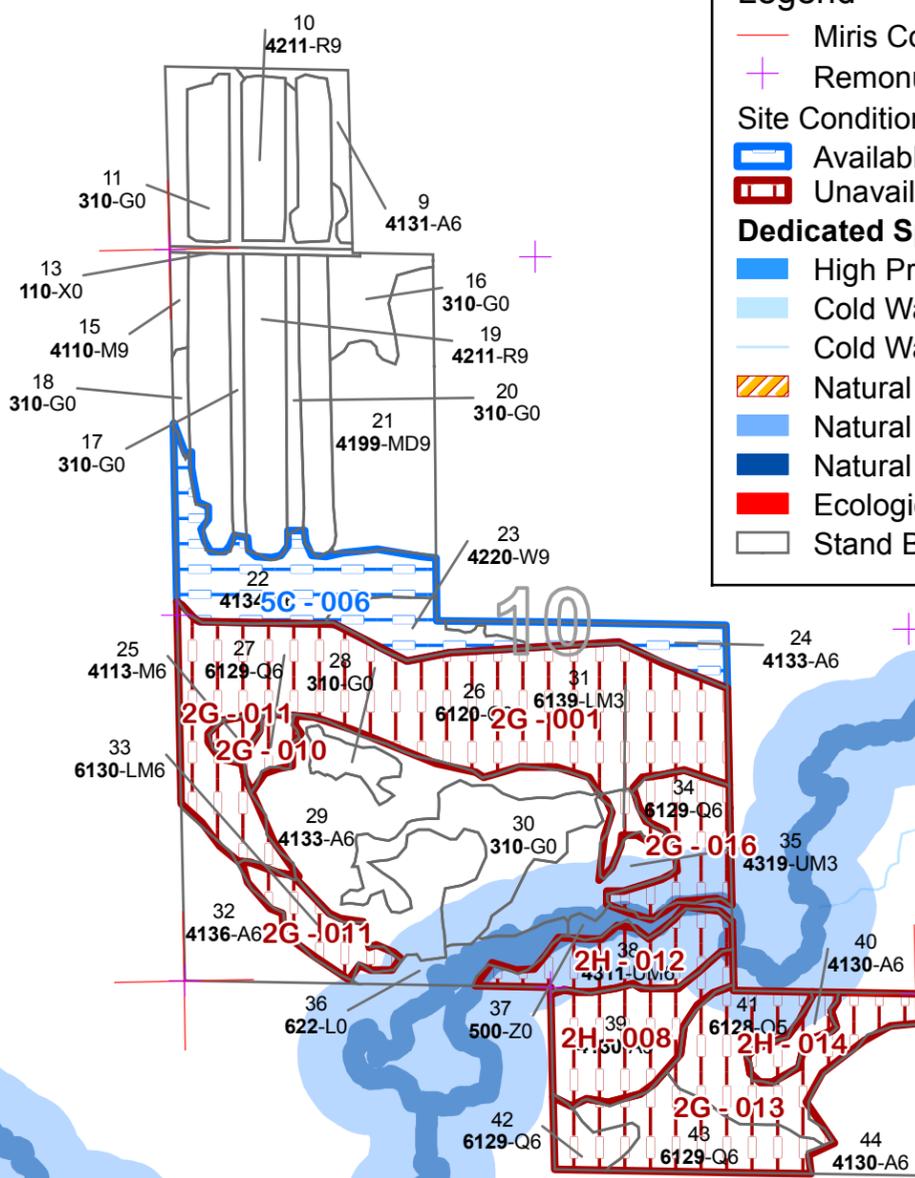
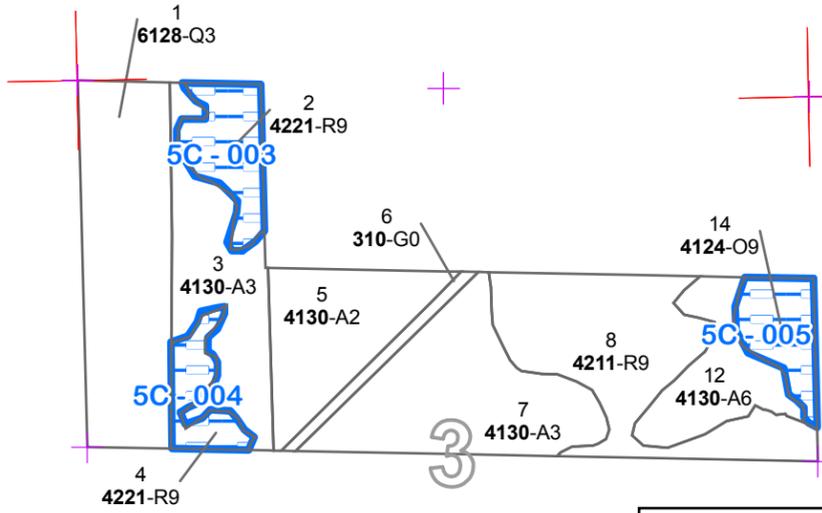
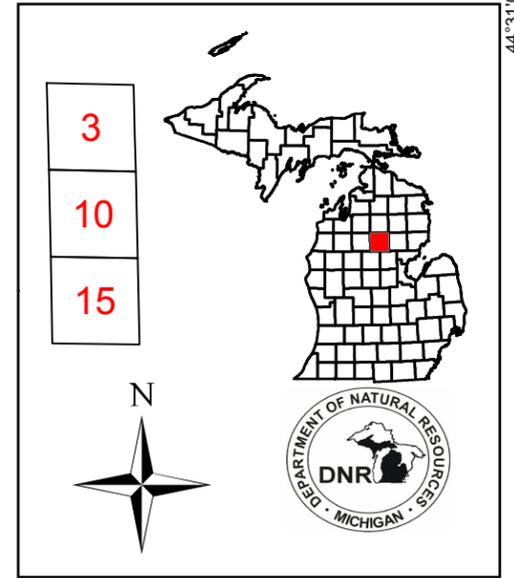
- Miris Corners
- Remonumented Section Corners
- PLSS Corner
- Highway
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- Paved Roads
- Poor Dirt Roads
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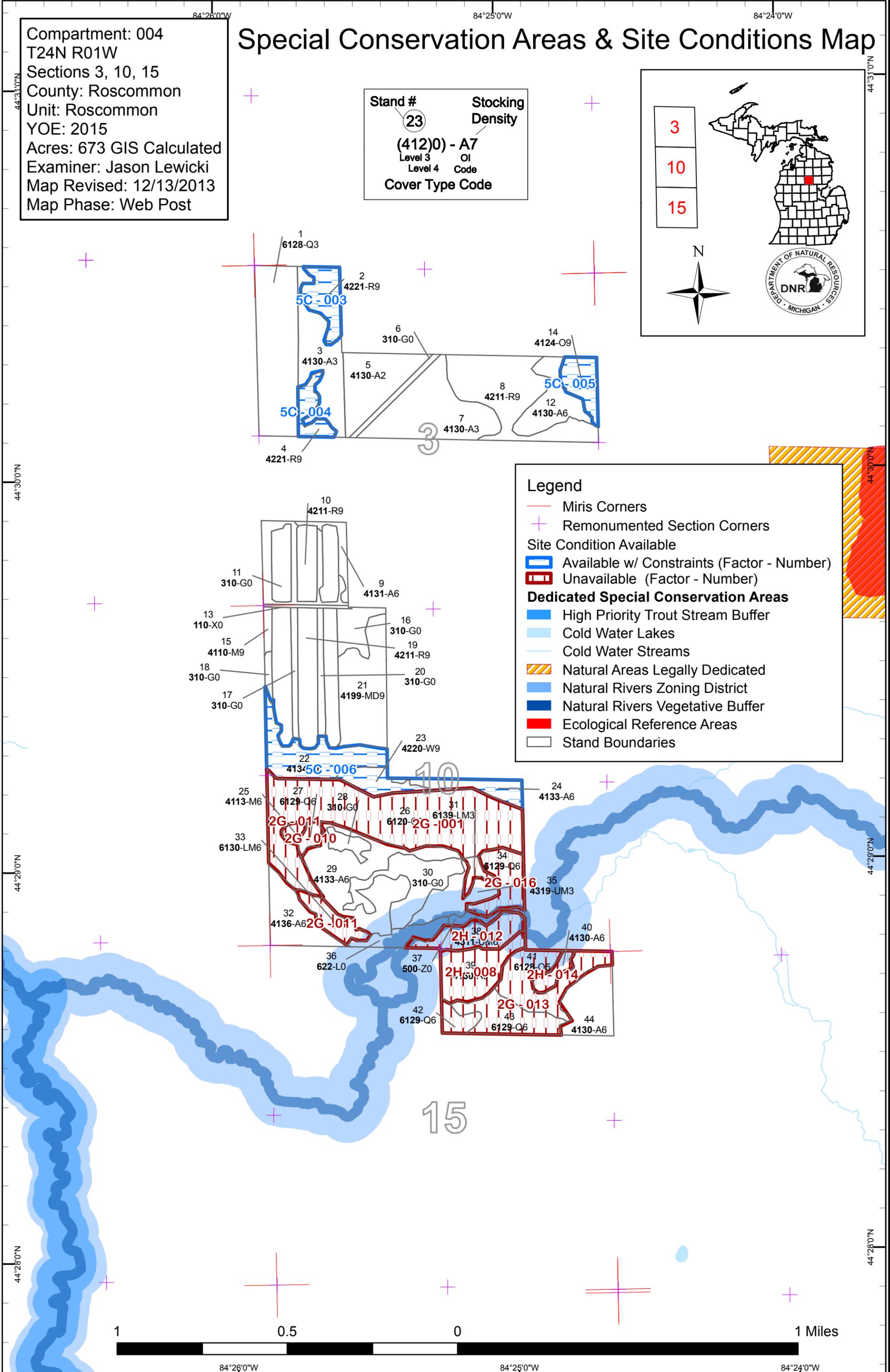
Special Conservation Areas & Site Conditions Map

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



Legend

- Miris Corners
- Remonumented Section Corners
- Site Condition Available
 - Available w/ Constraints (Factor - Number)
 - Unavailable (Factor - Number)
- Dedicated Special Conservation Areas**
 - High Priority Trout Stream Buffer
 - Cold Water Lakes
 - Cold Water Streams
 - Natural Areas Legally Dedicated
 - Natural Rivers Zoning District
 - Natural Rivers Vegetative Buffer
 - Ecological Reference Areas
 - Stand Boundaries



Report 1 – Total Acres by Cover Type and Age Class



	Age Class														Total
	0-9	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	22	58	4	0	84	35	18	0	0	0	0	0	0	0	222
Cedar	0	0	0	0	0	0	0	0	0	82	0	0	0	0	82
Herbaceous Openland	58	0	0	0	0	0	0	0	0	0	0	0	0	0	58
Lowland Conifers	0	39	0	0	0	22	0	18	0	17	0	0	0	0	97
Lowland Mixed Forest	0	3	0	0	0	0	8	0	0	0	0	0	0	0	11
Lowland Shrub	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	29	0	0	0	0	0	29
Northern Hardwood	0	0	0	0	2	0	0	0	2	0	0	0	0	0	4
Oak	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9
Red Pine	0	0	0	0	63	0	0	0	53	0	0	0	0	0	116
Upland Mixed Forest	0	12	0	0	0	14	0	0	0	0	0	0	0	0	26
Urban	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Water	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
White Pine	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8
Total	92	111	4	0	149	72	26	18	93	99	8	0	0	0	673



Report 2 – Proposed Treatment Summaries

Roscommon Mgt. Unit
Year of Entry 2015

Compartment 004
Total Compartment Acres: 673

Acres by Treatment Type

Commercial Harvest - 144	Tree Planting - 36	Other - 4
Habitat Cut - 0	Opening Maintenance - 19	

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>
Aspen Types	16	0	0	0	0	0	16
Mixed Upland Deciduous	0	0	0	0	29	0	29
Planted Pines	36	0	0	0	63	0	99
Total	52	0	0	0	91	0	144



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
8	71004008-Cut	35.7	42110 - Planted Red Pine	High Density Log	89	111-140	Harvest	Clearcut with Reserves	42110 - Planted Red Pine	Fld. Tr. Bdy. - Incomplete
<u>Prescription</u> Final harvest and re establish red pine. Leave a buffer strip as retention on far east side along f-97.										
<u>Specs:</u>										
<u>Other Comments:</u>										
<u>Next Steps:</u> Prepare site and plant Red Pine.										
<u>Proposed Start Date:</u> 10/01/2014										
10	71004010-Cut	23.1	42110 - Planted Red Pine	High Density Log	48	141-170	Harvest	Crown Thinning	42110 - Planted Red Pine	Fld. Tr. Bdy. - Incomplete
<u>Prescription</u> free thinn stand by removing 1/3 the volume. Focus on removing poor formed and suppressed red pine.										
<u>Specs:</u>										
<u>Other Comments:</u>										
<u>Next Steps:</u>										
<u>Proposed Start Date:</u> 10/01/2014										
19	71004019-Cut	39.7	42110 - Planted Red Pine	High Density Log	48	171-200	Harvest	Crown Thinning	42110 - Planted Red Pine	Fld. Tr. Bdy. - Incomplete
<u>Prescription</u> "Free thin" stand by removing approximately 1/3 the volume of the stand. Target suppressed and poor formed red pine for removal.										
<u>Specs:</u>										
<u>Other Comments:</u>										
<u>Next Steps:</u>										
<u>Proposed Start Date:</u> 10/01/2014										
21	71004021-Cut	28.5	4199 - Other Mixed Upland Deciduous	High Density Log	88	111-140	Harvest	Crown Thinning	4111 - S.Maple, Hard Mast Association	Fld. Tr. Bdy. - Incomplete
<u>Prescription</u> Thin stand down to 70-90 BA. Remove all suppressed oak. Mark for best tree in place. Focus growth on pole timber sugar maple.										
<u>Specs:</u>										
<u>Other Comments:</u>										
<u>Next Steps:</u>										
<u>Proposed Start Date:</u> 10/01/2014										
32	71004032-Cut	16.4	4136 - Aspen, Mixed Conifer	High Density Pole	47	81-110	Harvest	Clearcut with Reserves	4130 - Aspen	Fld. Tr. Bdy. - Incomplete
<u>Prescription</u> Final harvest stand and manage for aspen regeneration. Leave scattered pine and fir for retention. Leave 12-16 brush piles along north conifer swamp line for rabbit.										
<u>Specs:</u>										
<u>Other Comments:</u>										
<u>Next Steps:</u>										
<u>Proposed Start Date:</u> 10/01/2014										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
30	NF_71004030- NonFor	19.4	3102 - Grass				Non-Forest Management	Other - Specify	3102 - Grass	Fld. Tr. Bdy. - Incomplete
<u>Prescription</u> Managed wildlife opening <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> Unspecified										
28	NF_71004028- Other	4.0	3102 - Grass				Other	Unspecified	3102 - Grass	Fld. Tr. Bdy. - Incomplete
<u>Prescription</u> Managed wildlife opening <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> Unspecified										
Total Treatment Acreage Proposed:		167.0								

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

Prescription
Specs:

Other
Comment:

Next
Steps:

Proposed
Start Date: #Type!

Limiting Factor

Total Treatment
Acreage Proposed: 0.0

Report 5 – Site Conditions

Roscommon Mgt. Unit

Compartment 004

Jason Lewicki : Examiner

Year of Entry 2015

Availability for Management

Total Acres	Acres		Dominant Site Conditions	No	5C	2H	2G
	Available	Not Available					
220	197	23	Aspen	166	31	22	1
81	0	81	Cedar	0	0		81
96	39	57	Lowland Conifers	39			57
10		10	Lowland Mixed Forest				10
28	28		Mixed Upland Deciduous	28			
4	2	2	Northern Hardwood	2			2
9	9		Oak		9		
116	116		Red Pine	98	18		
26	12	14	Upland Mixed Forest	12		14	
8	8		White Pine		8		
599	412	187	Total Forested Acres	347	66	35	151
	69%	31%	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.*

Site No.	Dominant Site Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
001	Not Available	2G: Too wet (sensitive soils, does not include access issues)	84				
Comments:							
003	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11				
Comments:							

Report 5 – Site Conditions

Roscommon Mgt. Unit
Jason Lewicki : Examiner

Compartment 004
Year of Entry 2015

004	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	
Comments:				
005	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	
Comments:				
006	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	39	
Comments:				
008	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	18	
Comments:				
010	Not Available	2G: Too wet (sensitive soils, does not include access issues)	3	
Comments:				
011	Not Available	2G: Too wet (sensitive soils, does not include access issues)	10	
Comments:				

Report 5 – Site Conditions

Roscommon Mgt. Unit
Jason Lewicki : Examiner

Compartment 004
Year of Entry 2015

012	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	14
Comments:			
013	Not Available	2G: Too wet (sensitive soils, does not include access issues)	43
Comments:			
014	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	4
Comments:			
016	Not Available	2G: Too wet (sensitive soils, does not include access issues)	13
Comments:			



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
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Comments



Report 7 – 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	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
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	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.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6128 - Lowland Coniferous, Mixed Deciduous	High Density Sapling	38.8	18		
2	42210 - Natural Red Pine	High Density Log	11.0	80	51-80	Older red pine stand that was species thinned in 1994. Understory of maple oak and aspen just entering pole timber size. Hold for ten more years before harvesting red pine. Pine appears healthy.
3	4130 - Aspen	High Density Sapling	24.0	19	1-50	
4	42210 - Natural Red Pine	High Density Log	6.8	80	51-80	Older red pine that was thinned in 1994. Understory of maple oak and aspen just entering pole timber size. Hold for ten more years before harvesting the pine. Pine appears healthy.
5	4130 - Aspen	Medium Density	22.0	8		Some scattered red pine and oak left as super canopy.
7	4130 - Aspen	High Density Sapling	33.5	16		
8	42110 - Planted Red Pine	High Density Log	35.7	89	111-140	Mature red pine stand that was thinned in 1998. Some nice sawtimber white pine mixed in. Understory is very heavy to red maple. Some white pine understory on east side. Far east side along F-97 was never harvested.
9	4131 - Aspen, Oak	High Density Pole	4.3	50	1-50	
10	42110 - Planted Red Pine	High Density Log	23.1	48	141-170	Red pine plantation that was third row thinned last entry. BA ranges from 150-200.
12	4130 - Aspen	High Density Pole	15.0	47		Mixed aspen stand with super canopy of oak and pine. Old OI indicates 1966 Y.O.E. ??
14	4124 - Red with White Oak	High Density Log	9.2	85	81-110	Small oak/pine stand that was probably left as buffer from aspen harvest to the west?
15	4110 - Sugar Maple Association	High Density Log	2.0	85	81-110	Norther hardwoods stand that was thinned in the summer of 2012 with stand in adjacent compartment.
19	42110 - Planted Red Pine	High Density Log	39.7	48	171-200	1965 red pine plantations that were 3rd row thinned in 2008. BA ranges from 150-220.
21	4199 - Other Mixed Upland Deciduous	High Density Log	28.5	88	111-140	Stand of large high quality red oak mixed with sugar maple. Some scattered beech, basswood and dying ash. A pocket of hemlock present. Stand was thinned in 1997.
22	4134 - Aspen, Spruce/Fir	High Density Pole	22.2	52	111-140	Aspen stand mixed with balsam fir. bigtooth is not quite mature yet. Wait until next entry before regenerating



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	42200 - Natural White Pine	High Density Log	7.9	100	141-170	Small stand of large diameter white pine.
24	4133 - Aspen, Mixed Pine	High Density Pole	9.0	52	81-110	Thinn strip of aspen and white pine between swamp and private property. Hold for ten more years and reevaluate. Old inventory indicates its 52 yrs old??
25	4113 - R.Maple, Conifer	High Density Pole	2.1	44	51-80	
26	6120 - Lowland Cedar	High Density Pole	81.6	99	51-80	Part of large cedar/lowland conifer swamp that extends into adjacent compartments. Good snowshoe hare sign.
27	6129 - Mixed Coniferous Lowland Forest	High Density Pole	2.8	75	81-110	
29	4133 - Aspen, Mixed Pine	High Density Pole	36.0	43	111-140	Pole timber quaking aspen stand mixed with heavy balsam fir. Some scattered red and white pine. Small area of almost solid red pine along south west side. Hold till next entry.
31	6139 - Mixed Lowland Forest	High Density Sapling	2.9	15		
32	4136 - Aspen, Mixed Conifer	High Density Pole	16.4	47	81-110	Stand of mature quaking aspen mixed with balsam fir. Aspen showing signs of decline and mortality. Some stems showing signs of heart rot(cankers).
33	6130 - Fir, Aspen, Maple	High Density Pole	7.9	65	81-110	Mixed lowland conifer stand with red maple and birch. Small creek flows through stand towards east creek.
34	6129 - Mixed Coniferous Lowland Forest	High Density Pole	12.8	99		
35	4319 - Mixed Upland Forest	High Density Sapling	12.3	18		Small creek runs through stand that is currently occupied by beavers..
38	4311 - Pine, Aspen Mix	High Density Pole	14.0	55	51-80	Mixed stand of aspen and jack pine on the south side of east creek. Beavers have gotten most of the aspen near creek. Heavier to jack pine on the north side of stand. No access.
39	4130 - Aspen	High Density Log	18.5	65	51-80	Overmature stand of quaking aspen mixed with balsam fir. Aspen is most likely rotten. No access.
40	4130 - Aspen	High Density Pole	4.1	28	81-110	
41	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	22.4	50	1-50	Lowland mixed stand. Some areas were heavy to black ash but most are entirely dead due to EAB. Those ares are heavy to tag alder.

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Roscommon Mgt. Unit

Report 8 – Forested Stands

Compartment: 004
Year of Entry: 2015



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42	6129 - Mixed Coniferous Lowland Forest	High Density Pole	4.5	99		
43	6129 - Mixed Coniferous Lowland Forest	High Density Pole	15.4	75		
44	4130 - Aspen	High Density Pole	16.8	43	81-110	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
6	3102 - Grass	3.4	No	Unspecified	
11	3102 - Grass	11.7	No	Unspecified	
13	11 - Low Intensity Urban	1.4	No	Unspecified	
16	3102 - Grass	8.2	No	Unspecified	
17	3102 - Grass	4.5	No	Unspecified	
18	3102 - Grass	1.8	No	Unspecified	
20	3102 - Grass	4.8	No	Unspecified	
28	3102 - Grass	4.0	Yes	High	
30	3102 - Grass	19.4	Yes	High	
36	6220 - Alder/willow	7.2	No	Unspecified	
37	50 - Water	3.1	No	Unspecified	