



Compartment Review Presentation

Roscommon Forest Management Unit

Compartment 75

Entry Year 2015

Acreage: 1,961

County Roscommon

Management Area: Houghton Lake Wetlands

Revision Date: 07/29/2013

Stand Examiner: Doug Bates

Legal Description:

T23N R04W Sections 6, 7, & 18

Identified Planning Goals:

Maintain current cover types by regeneration harvests for areas where soils permit activity. Areas inaccessible, will allow stands to manage/regenerate on their own.

Soil and topography:

The lowland soil types consist of Rifle Peat and Houghton muck. The remaining soils are primarily Newton Loamy Sand with some Mergland Loam.

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

The entire compartment is State ownership. Several oil well pads are found in Section 18 and are managed by Merrit Energy. Their well pads are also found on the private property to the west. A portion of the compartment is the Reedsburg Dam Flooding containing the Muskegon river.

Unique Natural Features:

The compartment contains Rich Conifer Swamps as documented in the MNFI database. The stands contain spruce, fir, cedar and moss ground cover.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

Leave cedar to run its course naturally. By not harvesting it will allow this long lived species to exist in the stand layers for years to come. Deer density and browsing pressures will not allow cedar regeneration to occur if the deer are not excluded.

Watershed and Fisheries Considerations:

The Muskegon River, Dead Stream Creek, and Haymarsh Creek, along with the the associated Reedsburg Dam Flooding provide not only fishing opportunities but hunting, camping, and other recreational activities.

Wildlife Habitat Considerations:

Bald eagle and Osprey nesting sites are located throughout the compartment. Sightings of Moorhen's and Least Bittern have been documented in the past.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consists of peat/muck, glacial outwash sand, gravel, and post glacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift lies the Mississippian Michigan formation. The Michigan formation is quarried for gypsum elsewhere in the State. Most of the nearby gravel pits are associated with upland areas. There are no upland areas near here and gravel potential is limited. The Enterprise Field, operated by Merrit Energy, is located in Section 18. The field has produced over 4.7 million barrels of oil from the Devonian Richfield Formation. It is currently acting as a secondary recovery operation.

Vehicle Access:

Access is very poor for this compartment because of the large expanses of wet ground. A poor forest road originating from Missaukee County exists in Section 6, but just travels a few hundred feet into this compartment and stops. The only other roads exist in Section 18 and are being used for the oil operations. However, private property lies between this compartment and the county road(s) to the west with locked gates blocking the oil access roads. The State does not have any easements for access across these private parcels.

Survey Needs:

None needed

Recreational Facilities and Opportunities:

Hunting and fishing along with other recreational activities such as canoeing.

Fire Protection:

Mostly wet ground and vegetation types in area. What little high ground exists is surrounded by wet soils/vegetation types. Limited access roads mainly in Section 18. Ground conditions are not accessible with the wildfire suppression equipment on hand. Will need to work off of natural or existing man-made fuel breaks.

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**

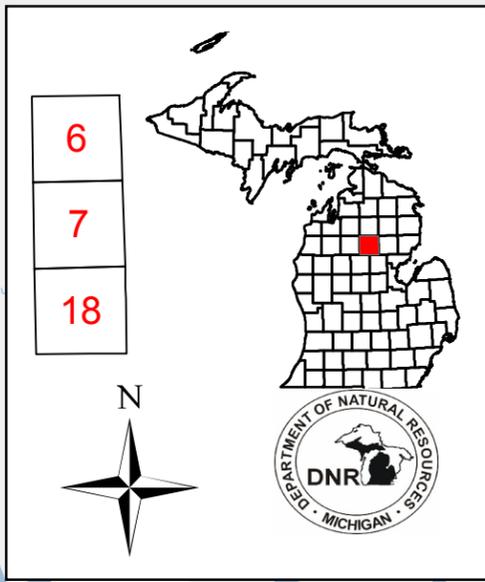
The following information is displayed, where pertinent, on the attached compartment maps:

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

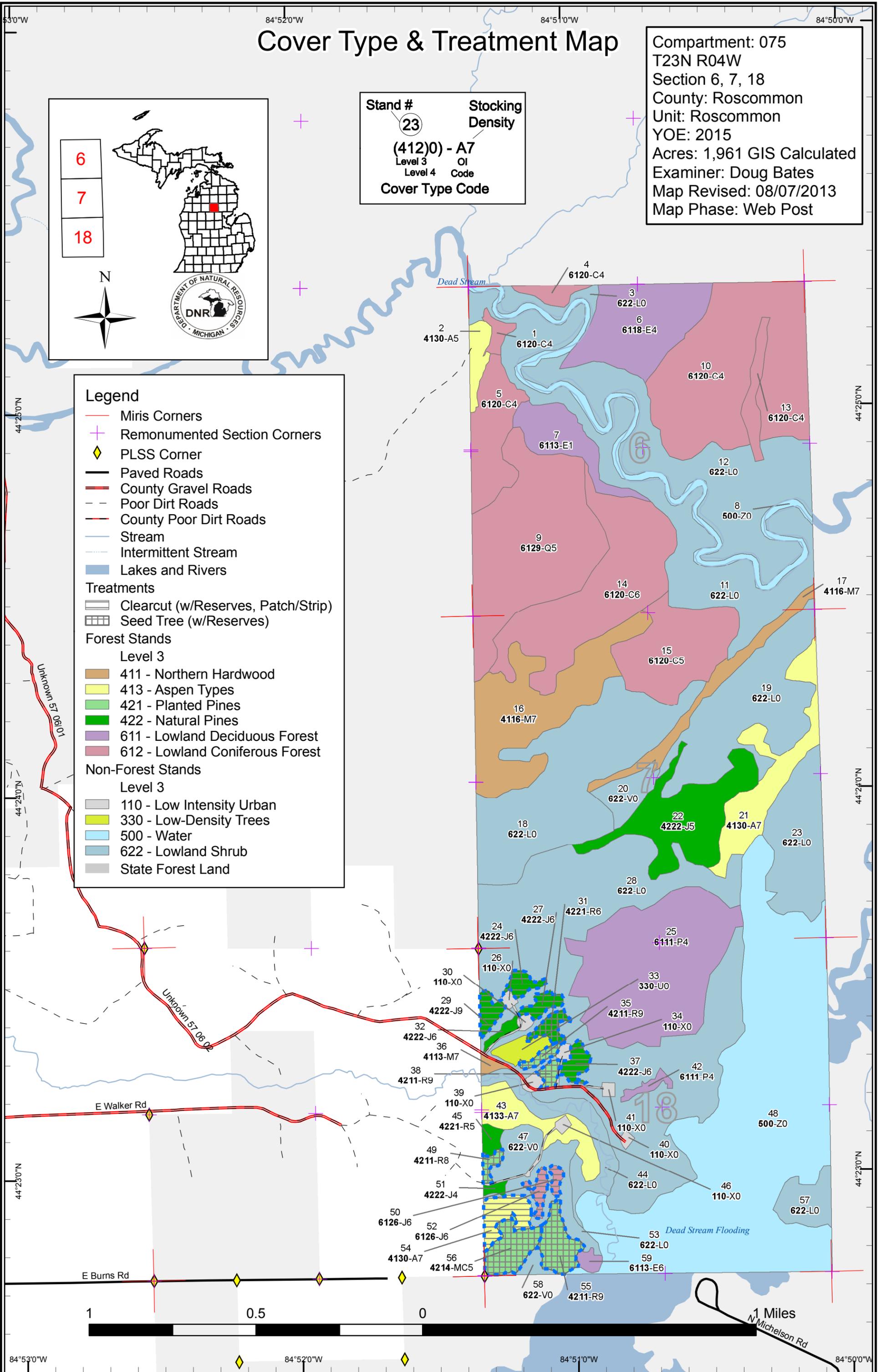
Cover Type & Treatment Map

Compartment: 075
 T23N R04W
 Section 6, 7, 18
 County: Roscommon
 Unit: Roscommon
 YOE: 2015
 Acres: 1,961 GIS Calculated
 Examiner: Doug Bates
 Map Revised: 08/07/2013
 Map Phase: Web Post

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



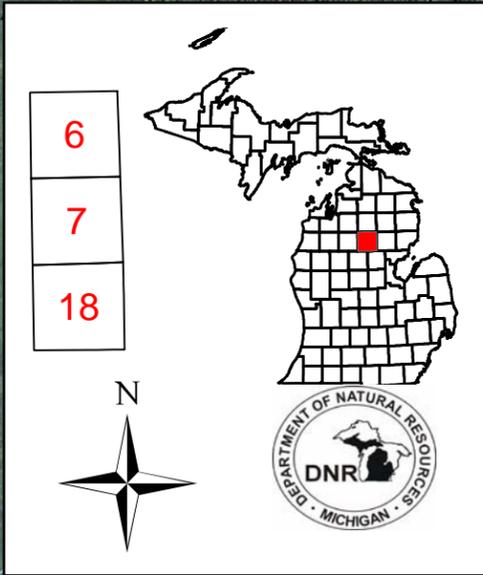
- Legend**
- Miris Corners
 - + Remonumented Section Corners
 - ◆ PLSS Corner
 - Paved Roads
 - County Gravel Roads
 - - - Poor Dirt Roads
 - - - County Poor Dirt Roads
 - Stream
 - - - Intermittent Stream
 - Lakes and Rivers
- Treatments**
- ▨ Clearcut (w/Reserves, Patch/Strip)
 - ▩ Seed Tree (w/Reserves)
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
 - 413 - Aspen Types
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3
- 110 - Low Intensity Urban
 - 330 - Low-Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - State Forest Land



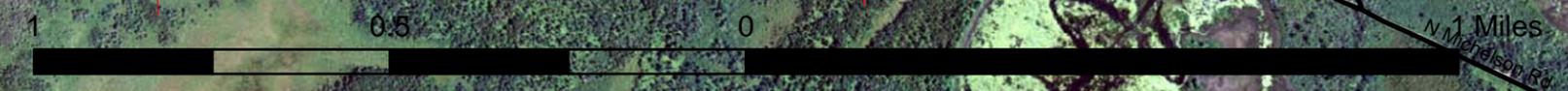
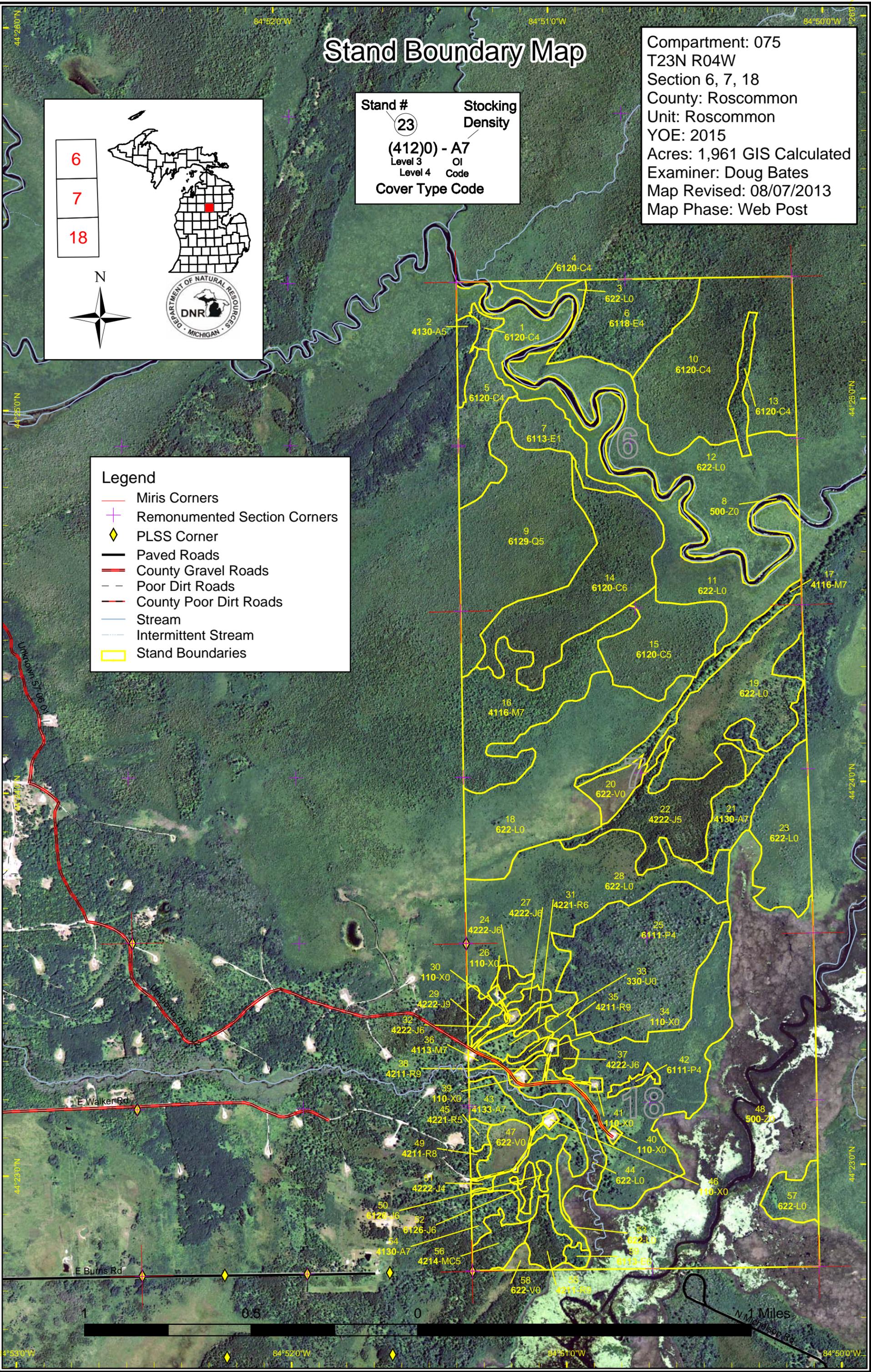
Stand Boundary Map

Compartment: 075
 T23N R04W
 Section 6, 7, 18
 County: Roscommon
 Unit: Roscommon
 YOE: 2015
 Acres: 1,961 GIS Calculated
 Examiner: Doug Bates
 Map Revised: 08/07/2013
 Map Phase: Web Post

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



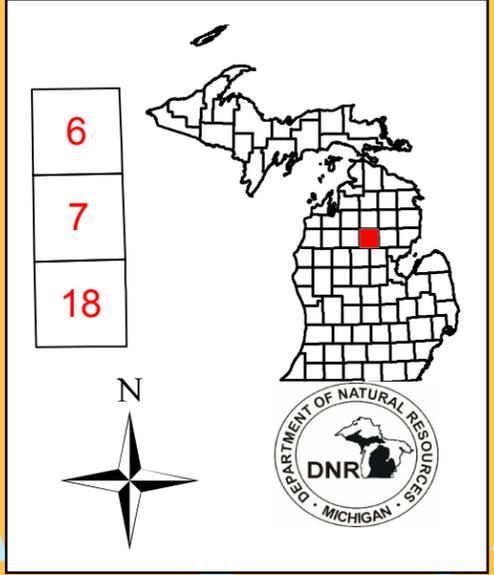
- Legend**
- Miris Corners
 - + Remonumented Section Corners
 - ◆ PLSS Corner
 - Paved Roads
 - County Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Stream
 - - Intermittent Stream
 - Stand Boundaries



Special Conservation Areas & Site Conditions Map

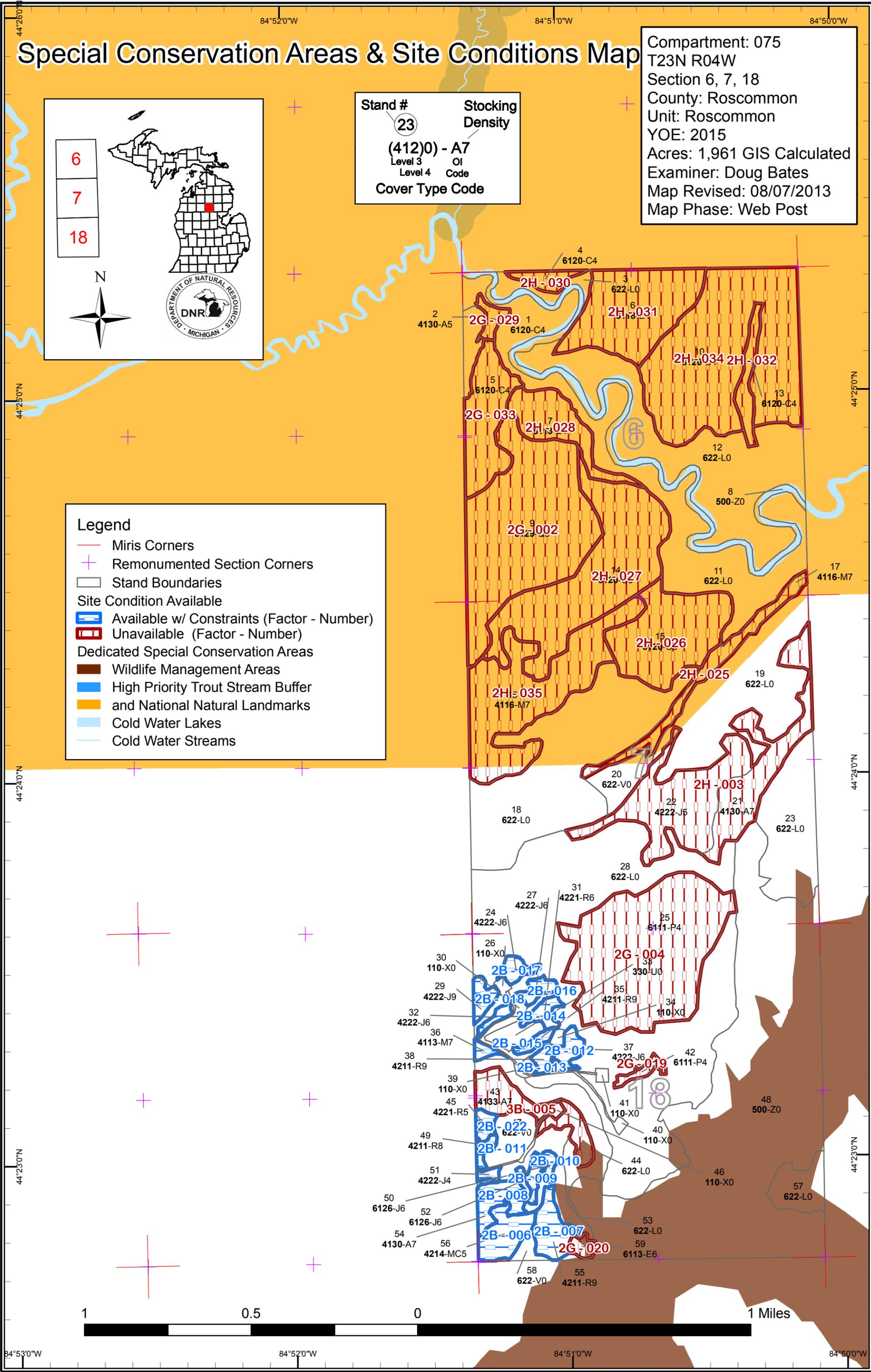
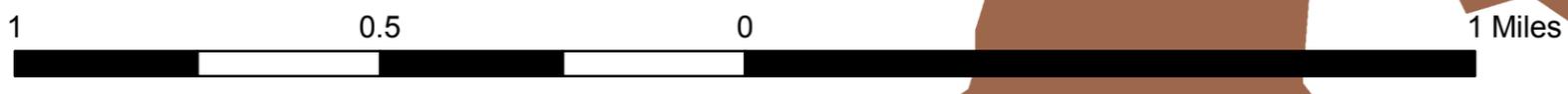
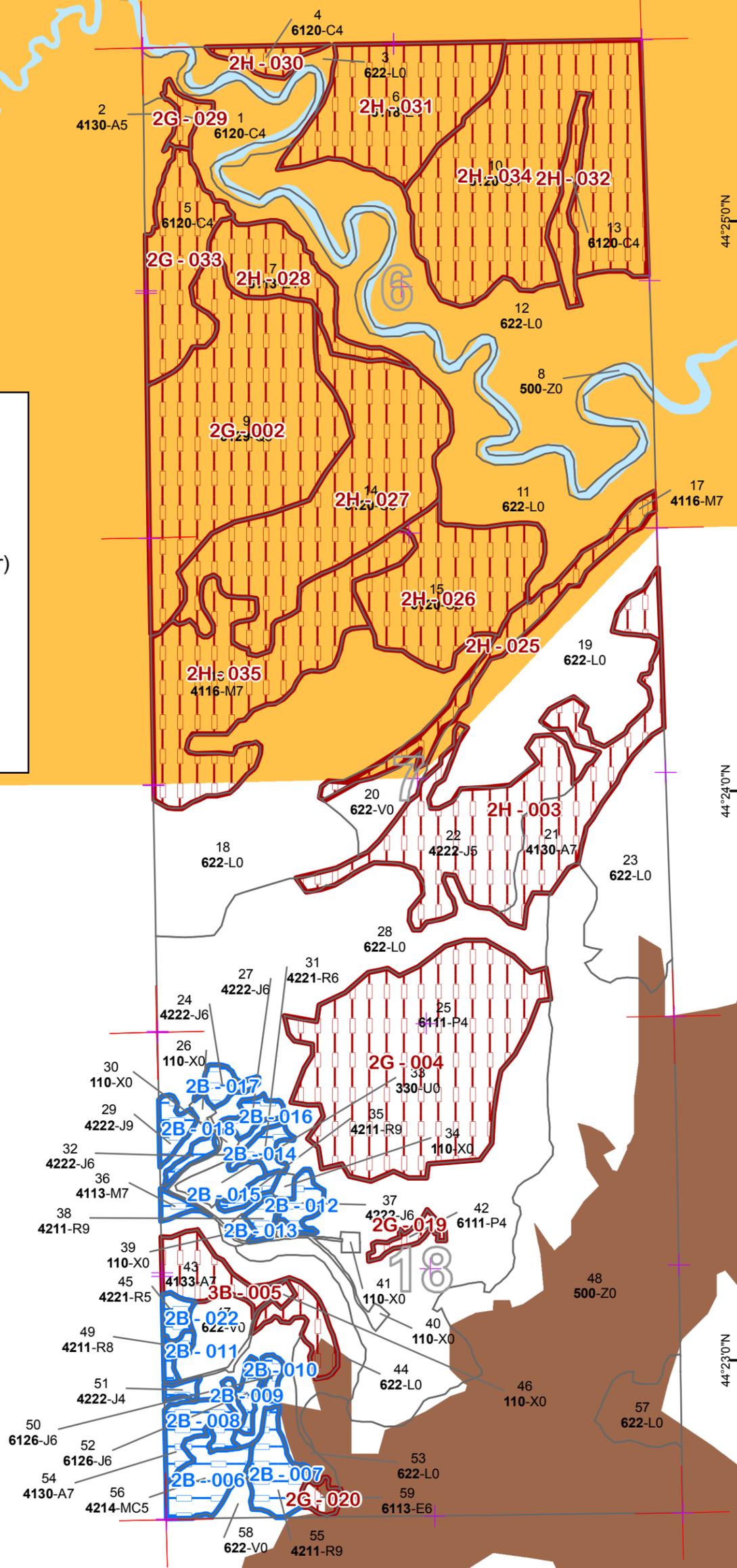
Compartment: 075
 T23N R04W
 Section 6, 7, 18
 County: Roscommon
 Unit: Roscommon
 YOE: 2015
 Acres: 1,961 GIS Calculated
 Examiner: Doug Bates
 Map Revised: 08/07/2013
 Map Phase: Web Post

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



Legend

- Miris Corners
- + Remonumented Section Corners
- Stand Boundaries
- Site Condition Available
- Available w/ Constraints (Factor - Number)
- Unavailable (Factor - Number)
- Dedicated Special Conservation Areas
- Wildlife Management Areas
- High Priority Trout Stream Buffer and National Natural Landmarks
- Cold Water Lakes
- Cold Water Streams



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	0	0	0	8	0	0	0	20	44	0	0	0	0	0	72
Bog	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Cedar	0	0	0	0	0	0	149	85	4	64	0	0	0	0	302
Jack Pine	0	0	2	14	7	0	0	0	48	0	0	0	0	0	72
Low-Density Trees	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	111	0	0	0	0	0	0	0	111
Lowland Conifers	0	0	0	0	0	0	0	0	0	106	0	0	0	0	106
Lowland Deciduous	0	23	0	3	0	0	52	0	0	0	0	0	0	0	77
Lowland Shrub	737	0	0	0	0	0	0	0	0	0	0	0	0	0	737
Northern Hardwood	0	0	0	0	0	0	0	88	2	0	0	0	0	0	90
Planted Mixed Pines	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12
Red Pine	0	0	0	7	0	0	0	13	5	0	0	0	0	0	24
Urban	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Water	314	0	0	0	0	0	0	0	0	0	0	0	0	0	314
Total	1095	23	2	31	7	0	312	218	103	169	0	0	0	0	1961



Report 2 – Proposed Treatment Summaries

Roscommon Mgt. Unit
Year of Entry 2015

Compartment 075
Total Compartment Acres: 1,961

Acres by Treatment Type

Commercial Harvest - 63	Tree Planting - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen Types	9	0	0	0	0	0	9
Lowland Coniferous Forest	5	0	0	0	0	0	5
Natural Pines	15	0	4	0	0	0	19
Planted Pines	0	0	29	0	0	0	29
Total	29	0	33	0	0	0	63

S
t
a
n
d

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

#Type!

Prescription
Specs:

Other
Comments:

Next
Steps:

Proposed
Start Date: #Type!

**Total Treatment
Acreage Proposed: 0**



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
24	71075024-Cut	3.6	42220 - Natural Jack Pine	High Density Pole	32	81-110	Harvest	Clearcut	42220 - Natural Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Treatment: Remove all species to a two inch d.b.h.. <u>Specs:</u> Long Term MO: Natural jack pine and other mixed deciduous Retention: Small size, none recommended <u>Other</u> Oil well pad along south border. Only access for commercial harvest is via private property. Trying to obtain permission from a cooperative <u>Comment:</u> landowner for access to treat this area should we not get access is future years. <u>Next</u> Good jack pine regeneration present, will come back naturally. Aspen is also filling in on oil well pad to south. <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2014 <u>Limiting Factor</u> 2B: Unknown if access through adjacent landowner(s) is possible										
27	71075027-Cut	3.6	42220 - Natural Jack Pine	High Density Pole	37	81-110	Harvest	Clearcut	42210 - Natural Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Treatment: Clearcut all species to a two in d.b.h.. <u>Specs:</u> Long term MO: Natural jack pine Retention: None recommended due to small irregular size <u>Other</u> Oil well pad on south side. Commercial access is via private property where permission is trying to be obtained by a potential cooperative <u>Comment:</u> landowner for access so we can treatment it now in case possible future landowners are not as receptive. <u>Next</u> No need steps, will regenerate naturally. <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2014 <u>Limiting Factor</u> 2B: Unknown if access through adjacent landowner(s) is possible										
29	71075029-Cut	4.0	42220 - Natural Jack Pine	High Density Log	45	81-110	Harvest	Clearcut	42220 - Natural Jack Pine	Cmpt. Review Proposal
<u>Prescription</u> Treatment: Remove all species to a 2 inch d.b.h.. <u>Specs:</u> Long term MO: Natural jack pine Retention: Small irregular sized stand, Recommend no retention <u>Other</u> Oil well pad on north end. Access for commercial harvest is via private property. Trying to obtain permission from a cooperative landowner for <u>Comment:</u> access. Treat when can in case a future landowner is not as cooperative. <u>Next</u> None needed, will regenerate naturally. <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2014 <u>Limiting Factor</u> 2B: Unknown if access through adjacent landowner(s) is possible										
31	71075031-Cut	3.8	42210 - Natural Red Pine	High Density Pole	38	51-80	Harvest	Seed Tree	42210 - Natural Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Treatment: Final harvest all species to a two inch d.b.h. except for red pine to 6 inches. In addition, mark to leave 10-20 basal area of larger red <u>Specs:</u> pine for seed source Longterm MO: red pine mix with jack pine Retention: None needed in additional to the residual red pine due to small size and irregular shape. <u>Other</u> Oil well pad on south line. Only access for a commercial harvest is via private property. Trying to obtain permission from a current cooperative <u>Comment:</u> landowner for this access in case future landowners are not <u>Next</u> None, should regenerate back naturally with mixed pine. <u>Steps:</u> <u>Proposed</u> <u>Start Date:</u> 10/01/2014 <u>Limiting Factor</u> 2B: Unknown if access through adjacent landowner(s) is possible										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
35	71075035-Cut	2.2	42110 - Planted Red Pine	High Density Log	82	81-110	Harvest	Seed Tree	42210 - Natural Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Treatment: Remove all species to a two inch d.b.h. except for red pine to 6 inch. In addition, mark to leave 20 basal area of the largest red pine <u>Specs:</u> for seed source. Longterm MO: Red pine stand Retention: None recommended due to stands small irregular shaped size</p> <p><u>Other</u> Well pad on east side. Access for commercial harvest is via private property. Pursuing permission for access from a cooperative landowner so <u>Comment:</u> can treat are now in case future owners are not as forthcoming</p> <p><u>Next</u> None, will regenerate back naturally. Currently getting red pine regeneration back into open areas of the stand. <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2014</p> <p><u>Limiting Factor</u> 2B: Unknown if access through adjacent landowner(s) is possible</p>										
37	71075037-Cut	4.3	42220 - Natural Jack Pine	High Density Pole	35		Harvest	Clearcut	42220 - Natural Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Treatment: Final harvest all species to a two inch d.b.h.. <u>Specs:</u> Longterm MO: Natural jack pine Retention: None needed due to the stands small irregular shaped size.</p> <p><u>Other</u> Well pad in northwest corner. Commercial access is only via private property. Currently trying to gain access by way of a cooperative landowner <u>Comment:</u> to treat this area in case future landowners are not as forthcoming.</p> <p><u>Next</u> None needed, good jack pine regeneration currently. <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2014</p> <p><u>Limiting Factor</u> 2B: Unknown if access through adjacent landowner(s) is possible</p>										
38	71075038-Cut	2.4	42110 - Planted Red Pine	High Density Log	82	171- 200	Harvest	Seed Tree	42210 - Natural Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Treatment: Remove all species to a two inch d.b.h. except for red pine to 6 inches. In addition, mark to leave 20 basal areas of the largest red <u>Specs:</u> pines for a seed source Longterm MO: Planted red pine with natural regeneration Retention: None needed due to small size</p> <p><u>Other</u> Access for commercial harvest is only possible via private property. Currently working with a cooperative landowner to gain access to treat the <u>Comment:</u> area now in case future landowners are not as forthcoming</p> <p><u>Next</u> None, red pine regeneration is coming in existing open areas of the stand. <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2014</p> <p><u>Limiting Factor</u> 2B: Unknown if access through adjacent landowner(s) is possible</p>										
49	71075049-Cut	2.2	42110 - Planted Red Pine	Medium Density Log	75	51-80	Harvest	Seed Tree	42210 - Natural Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Treatment: Remove all species to a 2 inch d.b.h., except for red pine to 6 inch. In addition, mark to leave 20 basal area of the largest red pine <u>Specs:</u> for seed source. Longterm MO: Planted red pine with natural red pine regeneration Retention: None needed due to small size</p> <p><u>Other</u> Access for commercial harvest is only possible via private property. Currently working with a cooperative landowner to gain access to treat the <u>Comment:</u> area now in case future landowners are not as forthcoming</p> <p><u>Next</u> None needed, red pine regenrtion present in existing opening currently in stand <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2014</p> <p><u>Limiting Factor</u> 2B: Unknown if access through adjacent landowner(s) is possible</p>										



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
50	71075050-Cut	1.7	6126 - Lowland Jack Pine	High Density Pole	33		Harvest	Clearcut	6126 - Lowland Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Treatment: Remove all species to a two inch db.h.. Dry or frozen ground conditions needed during harvest time</p> <p><u>Specs:</u> Longterm MO: Nautral jack pine Retention: None needed due to smal size</p> <p><u>Other</u> Access for commercial harvest is only possible via private property. Currently working with a cooperative landowner to gain access to treat the area now in case future landowners are not as forthcoming. This is way cutting early if can to get the age class back early.</p> <p><u>Comment:</u></p> <p><u>Next</u> None needed good natural regeneration of jack currently</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2014</p> <p><u>Limiting Factor</u> 2B: Unknown if access through adjacent landowner(s) is possible</p>										
52	71075052-Cut	3.1	6126 - Lowland Jack Pine	High Density Pole	49	51-80	Harvest	Clearcut	6126 - Lowland Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Treatment: Remove all species to a two inch d.b.h.. Low ground so must be harvest in dry/frozen ground conditions</p> <p><u>Specs:</u> Longterm MO: Nautal jack pine Retention; None due to small size and irregualr shape</p> <p><u>Other</u> Access for commercial harvest is only possible via private property. Currently working with a cooperative landowner to gain access to treat the area now in case future landowners are not as forthcoming. Cutting early will move age class back in case can't get in future</p> <p><u>Comment:</u></p> <p><u>Next</u> None, good natural jack pine regeneration currently</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2014</p> <p><u>Limiting Factor</u> 2B: Unknown if access through adjacent landowner(s) is possible</p>										
54	71075054-Cut	9.1	4130 - Aspen	Low Density Log	80		Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription</u> Treatment: Remove all species to two inch d.b.h.. Must be cut in dormant season to stimulate the poor vigored stand to get optimal aspen regeneration.</p> <p><u>Specs:</u> Longterm MO: natural aspen with a mix of red pine and maple Retention: None</p> <p><u>Other</u> Access for commercial harvest is only possible via private property. Currently working with a cooperative landowner to gain access to treat the area now in case future landowners are not as forthcoming</p> <p><u>Comment:</u></p> <p><u>Next</u> None, if cut in dormant season will get some aspen coming in with a mix of red maple, pine, and birch</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2014</p> <p><u>Limiting Factor</u> 2B: Unknown if access through adjacent landowner(s) is possible</p>										
55	71075055-Cut	10.8	42110 - Planted Red Pine	High Density Log	77	141-170	Harvest	Seed Tree	42210 - Natural Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Treatment: Remove all species to two inch except the red pine to six inches. In addition, mark to leave 10-20 basal area of the largerst red pine for seed source</p> <p><u>Specs:</u> Longterm MO: Red pine Retention: None</p> <p><u>Other</u> Access for commercial harvest is only possible via private property. Currently working with a cooperative landowner to gain access to treat the area now in case future landowners are not as forthcoming</p> <p><u>Comment:</u></p> <p><u>Next</u> None, natural regeneration of red pine present in open areas currently</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2014</p> <p><u>Limiting Factor</u> 2B: Unknown if access through adjacent landowner(s) is possible</p>										

S
t
a
n
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
56 71075056-Cut	11.8	42140 - Planted Mixed Pine	Medium Density Pole	73	81-110	Harvest	Seed Tree	42290 - Natural Mixed Pine	Cmpt. Review Proposal

Prescription Treatment: Remove all species to two inch except for the red pine to 6 inches. In addition marke to leave 10 basal area of the largest red pine for future seed source. Ground wet, must cut when ground conditions are dry or frozen
Specs: Longterm MO: A mix pine stand of red and jack
 Retention: None

Other Access for commercial harvest is only possible via private property. Currently working with a cooperative landowner to gain access to treat the area now in case future landowners are not as forthcoming
Comment:

Next None, good jack pine regeneration presently in stand. Will get red pine seeding into areas. Jack will just be a heavier component of stand
Steps:

Proposed
Start Date: 10/01/2014

Limiting Factor 2B: Unknown if access through adjacent landowner(s) is possible

**Total Treatment
 Acreage Proposed: 62.7**

Report 5 – Site Conditions

Roscommon Mgt. Unit
Doug Bates : Examiner

Compartment 075
Year of Entry 2015

Availability for Management

Total Acres	Acres Available	Acres Not Available		Dominant Site Conditions				
				No	3B	2H	2G	2B
71	17	55	Aspen	7	20	35		9
302	1	300	Cedar	1		266	34	
72	24	48	Jack Pine			48		24
111		111	Lowland Aspen/Balsam Poplar				111	
106		106	Lowland Conifers				106	
77		77	Lowland Deciduous			74	3	
89	3	86	Northern Hardwood	1		86		2
12	12		Planted Mixed Pines					12
24	24		Red Pine					24
864	81	783	Total Forested Acres	10	20	509	253	71
	9%	91%	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 Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
002	Not Available	2G: Too wet (sensitive soils, does not include access issues)	106	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)			
Comments:							
003	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	84				
Comments:							
004	Not Available	2G: Too wet (sensitive soils, does not include access issues)	108	2B: Unknown if access through adjacent landowner(s) is possible	5A: Not able to obtain desirable regeneration		
Comments:							

Report 5 – Site Conditions

Roscommon Mgt. Unit
Doug Bates : Examiner

Compartment 075
Year of Entry 2015

005	Not Available	3B: Threatened, endangered, and special concern species/communities	20	
Comments:				
006	Available	2B: Unknown if access through adjacent landowner(s) is possible	12	
Comments:				
007	Available	2B: Unknown if access through adjacent landowner(s) is possible	11	
Comments:				
008	Available	2B: Unknown if access through adjacent landowner(s) is possible	9	
Comments:				
009	Available	2B: Unknown if access through adjacent landowner(s) is possible	3	
Comments:				

Report 5 – Site Conditions

Roscommon Mgt. Unit
Doug Bates : Examiner

Compartment 075
Year of Entry 2015

010	Available	2B: Unknown if access through adjacent landowner(s) is possible	2	
Comments:				
011	Available	2B: Unknown if access through adjacent landowner(s) is possible	2	
Comments:				
012	Available	2B: Unknown if access through adjacent landowner(s) is possible	4	
Comments:				
013	Available	2B: Unknown if access through adjacent landowner(s) is possible	2	
Comments:				
014	Available	2B: Unknown if access through adjacent landowner(s) is possible	4	
Comments:				
015	Available	2B: Unknown if access through adjacent landowner(s) is possible	2	
Comments:				

Report 5 – Site Conditions

Roscommon Mgt. Unit

Doug Bates : Examiner

Compartment 075

Year of Entry 2015

016	Available	2B: Unknown if access through adjacent landowner(s) is possible	4			
Comments:						
017	Available	2B: Unknown if access through adjacent landowner(s) is possible	4			
Comments:						
018	Available	2B: Unknown if access through adjacent landowner(s) is possible	4			
Comments:						
019	Not Available	2G: Too wet (sensitive soils, does not include access issues)	3	2B: Unknown if access through adjacent landowner(s) is possible	3L: Other wildlife concerns	5A: Not able to obtain desirable regeneration
Comments: Proximity to eagle nest						
020	Not Available	2G: Too wet (sensitive soils, does not include access issues)	3	2B: Unknown if access through adjacent landowner(s) is possible		
Comments:						
021	Available	2B: Unknown if access through adjacent landowner(s) is possible	1			
Comments:						

Report 5 – Site Conditions

Roscommon Mgt. Unit

Doug Bates : Examiner

Compartment 075

Year of Entry 2015

022	Available	2B: Unknown if access through adjacent landowner(s) is possible	3			
Comments:						
023	Available	2B: Unknown if access through adjacent landowner(s) is possible	2			
Comments:						
024	Available	2B: Unknown if access through adjacent landowner(s) is possible	2			
Comments:						
025	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	18	3L: Other wildlife concerns		
Comments:						
026	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	49	2G: Too wet (sensitive soils, does not include access issues)	5A: Not able to obtain desirable regeneration	3L: Other wildlife concerns
Comments: Amount of deer browse will not allow cedar regeneration						
027	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	85	2G: Too wet (sensitive soils, does not include access issues)	5A: Not able to obtain desirable regeneration	3L: Other wildlife concerns
Comments: Amount of deer browse will not allow cedar regeneration						

Report 5 – Site Conditions

Roscommon Mgt. Unit
Doug Bates : Examiner

Compartment 075
Year of Entry 2015

028	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	23	2G: Too wet (sensitive soils, does not include access issues)		
Comments:						
029	Not Available	2G: Too wet (sensitive soils, does not include access issues)	4			
Comments:						
030	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	5	2G: Too wet (sensitive soils, does not include access issues)	5A: Not able to obtain desirable regeneration	3L: Other wildlife concerns
Comments: Amount of deer browse will not allow cedar regeneration						
031	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	52	2G: Too wet (sensitive soils, does not include access issues)		
Comments:						
032	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	9	2G: Too wet (sensitive soils, does not include access issues)	5A: Not able to obtain desirable regeneration	3L: Other wildlife concerns
Comments: Amount of deer browse will not allow cedar regeneration						
033	Not Available	2G: Too wet (sensitive soils, does not include access issues)	31	5A: Not able to obtain desirable regeneration	3L: Other wildlife concerns	
Comments: Amount of deer browse will not allow cedar regeneration						

Report 5 – Site Conditions

Roscommon Mgt. Unit

Doug Bates : Examiner

Compartment 075

Year of Entry 2015

034	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	118	2G: Too wet (sensitive soils, does not include access issues)	5A: Not able to obtain desirable regeneration	3L: Other wildlife concerns
-----	----------------------	---	-----	---	---	-----------------------------

Comments:

Amount of deer browse will not allow cedar regeneration

035	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	70	2G: Too wet (sensitive soils, does not include access issues)
-----	----------------------	---	----	---

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
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 Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
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.
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.
SCA	Non-Dedicated Natural Areas and National Natural Landmarks	This category is comprised of those Natural, Wilderness and Wild Areas that have been nominated or proposed for legal dedication, but for which legal dedication by legislature has not occurred. The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.
HCVA	Legally dedicated Natural Areas, Wilderness or Wild Areas	The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	Low Density Pole	3.8	80	1-50	All the ash is dead from the emerald bore. High water table with poor drainage. Sawlog size at north end that tapers to pole size and lower basal area to the south. Could access from Missaukee County but the small size, limited product, and poor operating conditions make it not a good candidate for salvage.
2	4130 - Aspen	Medium Density Pole	7.5	35	51-80	Sparse stand with some older larger diameter aspen on the edges. There is brachen ground cover. The stand is right around the forty year old class. It appears to be the same size/type as Stand 66, Compartment 91 of the Baldwin Unit. Believe this stand was harvested when theirs was, about 40 years ago.
4	6120 - Lowland Cedar	Low Density Pole	5.4	90		Very sparse poor quality cedar with majority being dead. No regeneration of any tree species in understory. Water present on ground.
5	6120 - Lowland Cedar	Low Density Pole	30.7	60		All the ash is dead from the emerald bore. Very sparse with small diameters and at best 10-20 basal area of sawlog sizes. Reed canary grass and standing water in entire stand. Heavier cedar component but they are porr quality and dying off also. Ash not worth salvaging and believe all cedar will blow over if remove the ash as wind breaks. (30 basal area average for cedar)
6	6118 - Lowland Deciduous with Cedar	Low Density Pole	51.7	61	1-50	A ridge runs along the west side containing the majority of the maple and aspen. There area scattered pockets of cedar in the low area amongst the ash. All the ash is dead from the emerald bore. The ash is small poles with very few saw sized ones. Currently has heavy ash regeneration in the understory that has not emperience mortality. The overstory doesnt warrant a salvage along with the no good access. There is a campsite along the west side where boaters camp.
7	6113 - Lowland Maple	Low Density Sapling	22.8	15		Some pole sized ash and cedar but they are wither about dead or have blown over. Heavy red maple sapling regeneration.
9	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	105.8	90		Mix of all lowland species. Cedat most prevalent but poor quality, dead or dying. Lots of wind throw potential.
10	6120 - Lowland Cedar	Low Density Pole	118.7	67	1-50	Poor quality cedar with numerous dead or dying but still standing. The ash is all dead. No regeneration of cedar in understory but some ash but not sure how long will live before subcoming to the ash bore. Decent red maple though. If cut fear it would just convert to more tag alder marsh.
13	6120 - Lowland Cedar	Low Density Pole	9.5	90		All ash is dead. More saw sized ash but the stand is inaccessible. Heavy ash regeneration but how long will it go before it suffers bore mortality.
14	6120 - Lowland Cedar	High Density Pole	85.3	72		Heavy cedar in pole sized class with numerous dead tops, deformed, just poor quality stuff. Some red maple in the interior but mostly on the fringe. Scattered large white pines towering over the rest. Their roughly spaced of about 1 per 5 acres. Some deer activity but not a wintering yard.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
15	6120 - Lowland Cedar	Medium Density Pole	48.8	90		Poor quality sporadic cedar with some mixed red maple Inaccessible.
16	4116 - Mixed N. Hardwood - Aspen	Low Density Log	70.3	70		Scattered red maple clumps with sporadic aspen clones. Heavier aspen to the south. records show there was some activity done here in 1964 but it does not state what. Not sure if it was a habitat cut. It is inaccessible for commercial harvest.
17	4116 - Mixed N. Hardwood - Aspen	Low Density Log	17.9	70	51-80	Scattered red maple clumps and aspen clones. Heavier aspen to the south. Records of some activity done here in 1964 but what specifically could not be found. Unsure if it was a habitat cut, the stand is inaccessible for commercial harvest.
21	4130 - Aspen	Low Density Log	35.1	82		Large overmature aspen very scattered with light regeneration. Ground has higher water table resulting in some tag alder understory. Some red maple and red pine on the fringes. Very similar to Stand 49. Surrounded by large expanses of lowland brush making any commercial harvest not feasible.
22	42220 - Natural Jack Pine	Medium Density Pole	48.4	80		Jack and red pine mix. No access for commercial harvest due to large expanses of lowland brush/bogs.
24	42220 - Natural Jack Pine	High Density Pole	3.6	32	81-110	Bracken and blueberry ground cover but does undulate. Some saw sizes but majority are poles followed by saplings. Deer sign. Well pads adjacent have aspen regenerating in the open areas after pad was constructed on noncurrently mowed. Believe can get mixed regeneration of jack and aspen if harvest. There is only one way into the stand and it is via private property. Currently have permission for access from the current landowner. Should take advantage and treat now in case access is revoked in the future.
25	6111 - Lowland Balsam Poplar	Low Density Pole	108.1	65	1-50	Several dozen 1-2 acre pockets of lowland poplar in larger pole sizes separated by wide fingers of tag alder fingers isolating the pockets from each other. Multiple hummocks with trees in a lowland type. The volume of wood, the skid distances over sensitive soils to get to a high ground landing, and the potential to have the site convert completely to tag alder if the overstory was removed make this site not a candidate for a treatment.
27	42220 - Natural Jack Pine	High Density Pole	3.6	37	81-110	Bracken/blueberry ground cover. Stand almost into saw size, roughly half and half. Decent jack pine regeneration in the understory. Some deer activity in here. The well pad to the south has aspen coming in, believe would get a good mix of aspen and jack pine if harvested.
29	42220 - Natural Jack Pine	High Density Log	4.0	45	81-110	Bracken fern/blueberry ground cover. Stand is older and has several blow downs. Less regeneration in the understory. Open areas to the north have been coming back to aspen. Harvest site and get a jack pine/aspen mix.
31	42210 - Natural Red Pine	High Density Pole	3.8	38	51-80	Red pine with heavy jack pine regeneration in the understory. The jack pine seems to be filling in around the red pine and tapering into the surrounding lowland areas. No signs of being a plantation, Recommend harvest due to access restrictions.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
32	42220 - Natural Jack Pine	High Density Pole	2.0	21	1-50	
35	42110 - Planted Red Pine	High Density Log	2.2	82	81-110	Just into sawlog class but some 16 inch red pine throughout. No regeneration except for some scattered jack pine. Can make out some forms of rows. No records of planting by use but to the west there is plantations on private property also.
36	4113 - R.Maple, Conifer	Low Density Log	1.7	88	51-80	Brachen fern ground cover with no understory regeneration except for red pine seedlings under the red pine overstory. About 1/2 acre cleared spot on the west side that is part of a well pad for the well pump that is on the immediately adjacent private property.
37	42220 - Natural Jack Pine	High Density Pole	4.3	35		Brachen/blund cover. Jack pine heavy with scattered red pine throughout. Just into the pole sized class with heavy jack pine regeneration. No signs was a plantation. Harvest stand will get good jack pine regeneration back post-harvest
38	42110 - Planted Red Pine	High Density Log	2.4	82	171-200	Brachen and blueberry ground cover. No regeneration of red pine or any species except for a quater acre open area on the east side filling in with red pine. Can make out some assemblance of old rows. No records of us doing plantings but there are similiar stands on the private property to the west. Harvest the site to stimulate regeneration.
42	6111 - Lowland Balsam Poplar	Low Density Pole	2.9	64		All the ash is dead, was not much anyway. Poor site not well drained. Some regeneration of BAM but is light. May respond to a harvest but would need to be done in the winter but some issue involved.
43	4133 - Aspen, Mixed Pine	Low Density Log	20.1	77	51-80	Brachen fern and blueberry ground cover with an overmature aspen overstory. Very little regeneration of it and what is there is getting hit by deer. The red pine and maple are thicker and are around the perimeter.
45	42210 - Natural Red Pine	Medium Density Pole	3.0	35	1-50	Lower ground with some tag alder and leatherleaf. Looks to be natural red pine.
49	42110 - Planted Red Pine	Medium Density Log	2.2	75	51-80	Branchen fern and blueberry ground cover. Ground undulates and several large with pine stumps from logging days. Can just make out rows in some areas. Regeneration is minimal with just a few spots of red pine otherwise understory is barren.
50	6126 - Lowland Jack Pine	High Density Pole	1.7	33		Leatherleaf ground cover. No other species besides jack, could harvest and get good jack pine regeneration back.
51	42220 - Natural Jack Pine	Low Density Pole	1.4	33	51-80	Brachen fern ground cover. Majority of the stand is jack pine with its regeneration in the understory. Several open areas with no regeneration. Red pine is large stuff mainly and found at the east end.

S
t
a
n
d

Roscommon Mgt. Unit

Report 8 – Forested Stands

Compartment: 075
Year of Entry: 2015

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
52	6126 - Lowland Jack Pine	High Density Pole	3.1	49	51-80	Undulating ground with high and low areas. Mainly jack pine with some black spruce mixed in. Some regeneration of both also. The stand is close to rotation age and there is access issues so should try and treat now.
54	4130 - Aspen	Low Density Log	9.1	80		Higher ground with bracken ground cover. Fringes contain red pine and on highest ground overmature aspen dying off with no regeneration. Would benefit from a harvest.
55	42110 - Planted Red Pine	High Density Log	10.8	77	141-170	Appears to be an old plantation more than like planted by the people who did the ones on private property to the west. No records of the DNR doing them. There is a 1/2 acres leatherleaf bog within its boundary. Good site for a harvest.
56	42140 - Planted Mixed Pine	Medium Density Pole	11.8	73	81-110	Lower ground with leatherleaf. The red pine appears to be in rows from a past planting. No record of us doing this but there are similar plantations on the private property to the west. Lower ground so the red is not as good and more natural jack pine has filled into the open areas. In transition from pole to saw.
59	6113 - Lowland Maple	High Density Pole	2.6	35	1-50	Small diameter just coming into poles. Slightly lower ground as transitions from red pine to west and cattails to the east.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	6220 - Alder/willow	7.7	No	Unspecified	Tag alder edge along the Dead Stream.
8	50 - Water	33.3	No	Unspecified	Dead Stream
11	6220 - Alder/willow	99.2	No	Unspecified	Tag alder edge along the Dead Stream.
12	6229 - Mixed lowland shrub	100.9	No	Unspecified	Dogwood outflooding from the Dead Stream.
18	6220 - Alder/willow	112.1	No	Unspecified	tag alder with reed canary grass
19	6220 - Alder/willow	74.5	No	Unspecified	Leatherleaf bog with some sporadic jack pine on higher hummocks.
20	6225 - Bog	11.5	No	Unspecified	Leatherleaf bog
23	6220 - Alder/willow	44.5	No	Unspecified	Tag alder
26	11 - Low Intensity Urban	1.1	Yes	High (NonForested)	Well pad Enterprise Tract 11-8.
28	6220 - Alder/willow	243.0	No	Unspecified	Tag alder with reed canary grass. Sporadic jack pine abd red maple on slightly higher elevations amongst the low ground.
30	11 - Low Intensity Urban	1.1	Yes	High (NonForested)	Well pad, Enterprise Tract 11-3
33	3301 - Low Density Deciduous Tree	6.0	No	Unspecified	Higher ridge with grass and brachen ground cover. There is some red maple multi-stemmed clumps and other tree species, but very light and scattered about.
34	11 - Low Intensity Urban	1.2	Yes	High (NonForested)	Well pad with pumper. Enterprise Unit 11-9, Merrit Energy.
39	11 - Low Intensity Urban	1.6	Yes	High (NonForested)	Well pad with pumper from Merit Energy. Enterprise Unit Tract 11-6.
40	11 - Low Intensity Urban	3.8	Yes	High (NonForested)	This is the well access road for all the well pads north of Haymarsh Creek. Buried petroleum and electrical lines along the edge.
41	11 - Low Intensity Urban	1.0	Yes	Medium (NonForested)	Well pad for Enterprise 11-4, Meritt Energy Company



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
44	6220 - Alder/willow	22.9	No	Unspecified	All the overstory trees (10-20 B.A.) were ash that have died from the bore. All that is left is tag alder and reed canary grass. Haymarsh Creek runs thru the middle. Creek 20 foot wide and 1+ foot deep of water.
46	11 - Low Intensity Urban	2.2	Yes	High (NonForested)	Access Road and well pad with pumper (Enterprise Tract 11-7). The access road to the well sites also has buried electrical and petroleum lines along the edges.
47	6225 - Bog	11.3	No	Unspecified	Leatherleaf bog
48	50 - Water	280.4	Yes	Medium (NonForested)	Dead Stream Flooding. Heavy cattail along edges with no signs of phragmites.
53	6220 - Alder/willow	18.0	No	Unspecified	Tag alder with reed canary grass.
57	6220 - Alder/willow	14.0	No	Unspecified	Lowland brush with a narrow strip of spruce at the west tip. Must be just slightly higher ground.
58	6225 - Bog	3.2	No	Unspecified	Leatherleaf bog with sporadic jack pine saplings.