

Roscommon Forest Management Unit Compartment Review Presentation

Compartment #141 Entry Year: 2012

Compartment Acreage: 1277 County: Roscommon

Revision Date: 7/12/2010

Stand Examiner: J. Hartman

Legal Description: T21N R3W sections 9 and 16

Management Area: Upper Muskegon

Management Goals: Follow normal procedures for prescriptions during this year of entry while acknowledging that the compartment is within a proposed matrix level Biodiversity Stewardship Area (BSA) that may affect the long-term management goals.

Soil and Topography: The compartment is within a large outwash plain where the site quality is primarily driven by the depth to the water table. There is a large amount of wetland and PArVCo habitat type. The remaining upland would be typed on varying points of the PArVHa category.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The whole compartment and the surrounding area are completely state owned.

Unique, Natural Features: An American marten was observed in the compartment in 1999. Other documented natural features include Kirtland's warbler, bald eagle, osprey, king rail, Hill's thistle, and Alleghany plum. Potential exists for massasauga, spotted turtle, ram's head orchid, calypso orchid, and limestone oak fern.

Archeological, Historical, and Cultural Features: None identified.

Special Management Designations or Considerations: Two small wetland stands were nominated as "oldgrowth" from the 2000 plan. Nothing significant was identified in these stands. Therefore the designation was not carried forward during this inventory cycle. However, the entire compartment has been proposed as as part of a landscape Biodiversity Stewardship Area (BSA) through a different process.

Watershed and Fisheries Considerations: One small intermittent tributary of Wolf Creek flows through the northwest corner of the compartment. No ponds or flowing water was identified in the rest of the compartment. Numerous wetlands feed Wolf Creek, which eventually flows to the Muskegon River.

Wildlife Habitat Considerations: The mix of upland and lowland habitats provide for an array of wildlife.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 600 and 800 feet. Beneath the glacial drift are the Pennsylvanian Grand River and Saginaw Formations. The Saginaw is quarried for clay in the State. Most of the nearby gravel pits are associated with upland areas. The nearest gravel pit is located two and one-half miles to the east. Gravel potential is thought to be limited.

Headquarters Field lies one mile to the southwest. The field has produced over 11.3 million BO and 4.2 Bcf gas primarily from the Devonian Richfield Formation and is in secondary recovery operations currently. All of the State land is currently leased for oil and gas development.

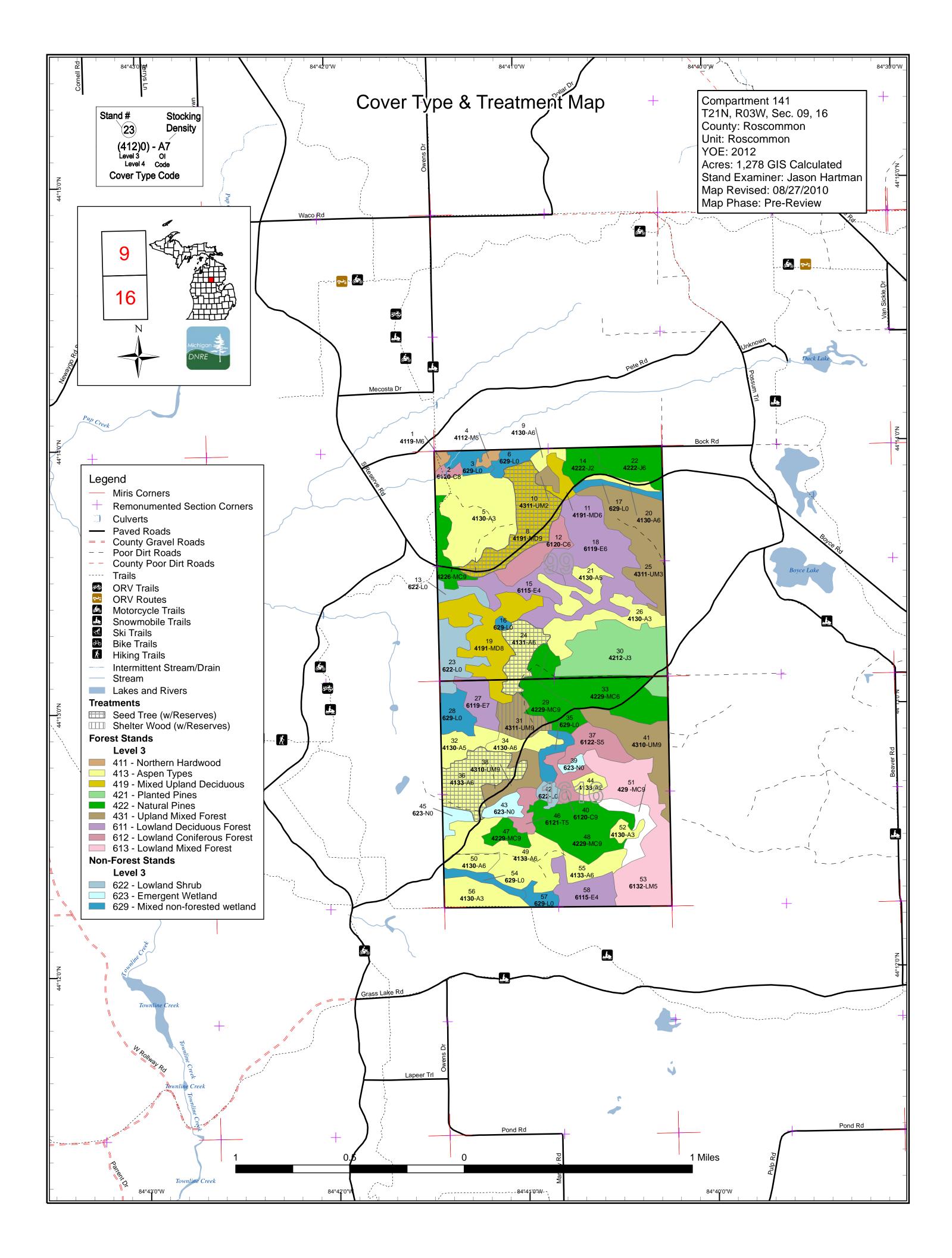
Vehicle Access: Boyce Road and Possum Trail are two sand surfaced county roads that provide access to most of the forest roads within the compartment.

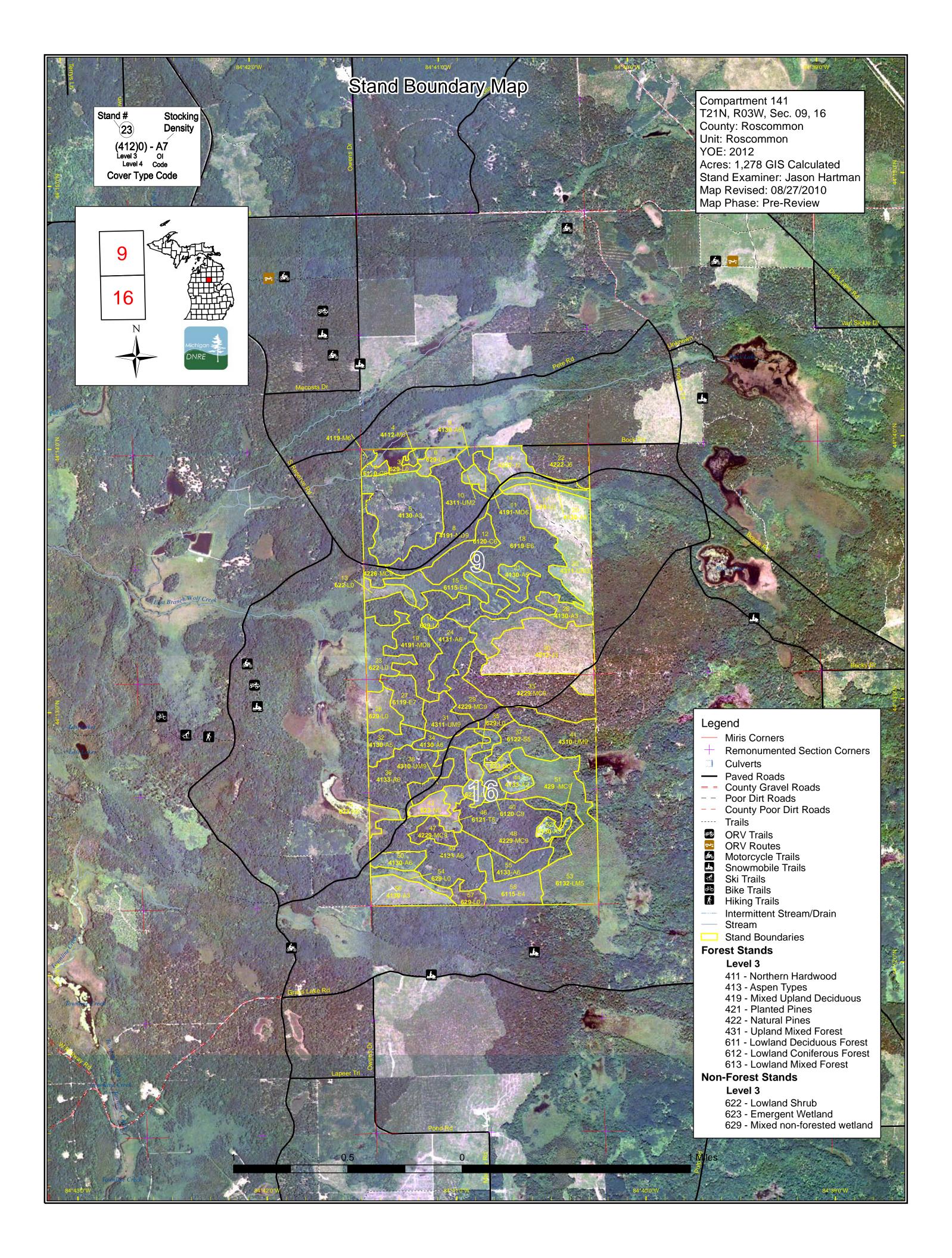
Survey Needs: None necessary.

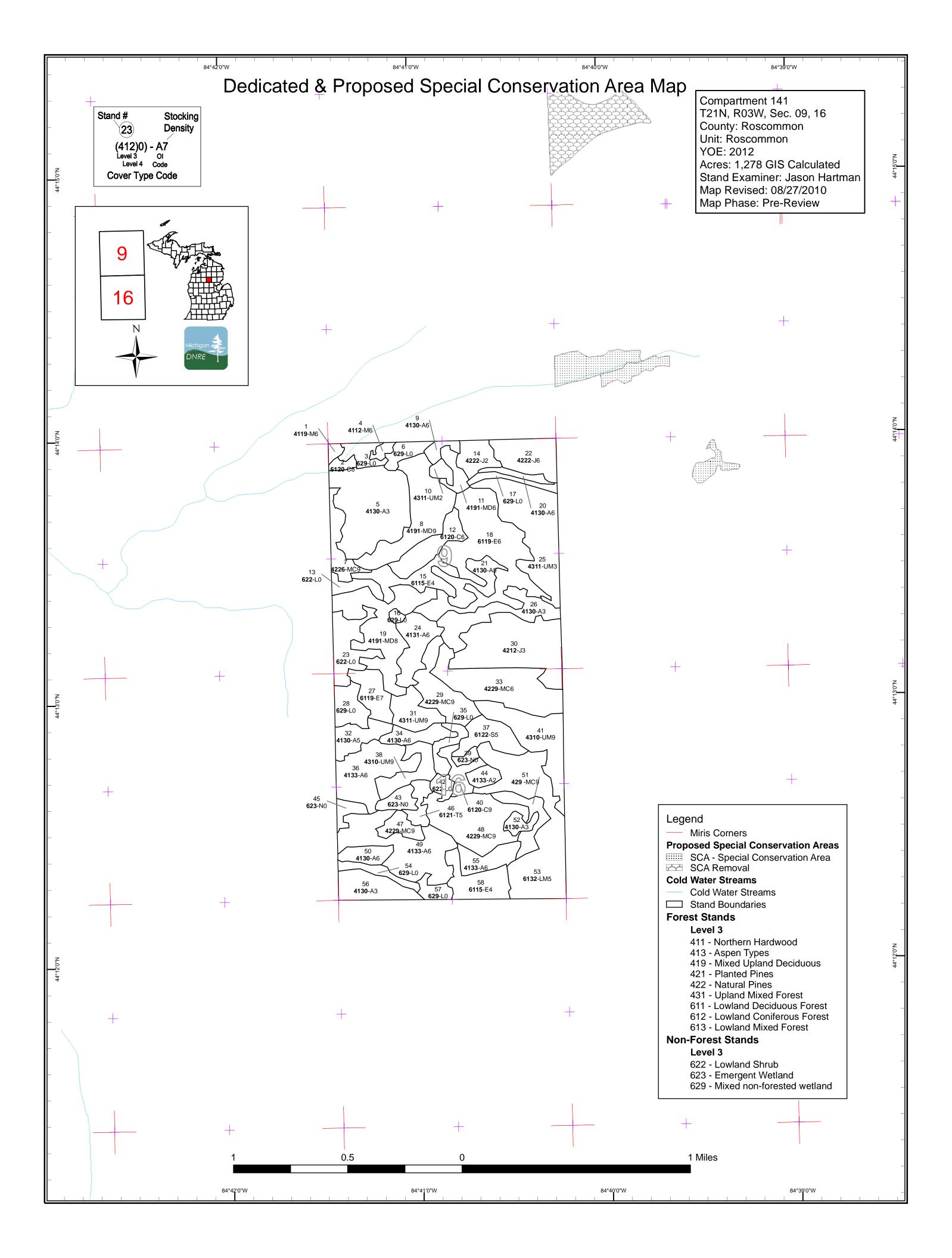
Recreational Facilities and Opportunities: A few locations serve as seasonal hunting camps in the fall. There is a snowmobile trail along the compartment boundary to the south that also crosses through the northwest corner where it joins an ORV trail to cross the wet areas.

Fire Protection: The thick pine stands and jack pine plantations could support large fire growth. However, there is a lot of lowland areas that would slow fire spread. Access is relatively good through most upland areas. The best water point would be along the tributary in the northwest corner.

- ➤ 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







Data updated before 10:00 AM

Compartment 141 Year of Entry 2012



Age Class

							Age \	J.400									
	No.	O S S S S S S S S S S S S S S S S S S S	8,7	0,70	R. P.		D. C.	, S. / .	\$ 60.00	, p. / ,	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	,	So. O.	SI IS	0 X X X X X X X X X X X X X X X X X X X	S /	, so /
Aspen	0	23	141	69	10	92	0	0	0	0	0	0	0	0	0	335	
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	24	11	0	35	
Jack Pine	0	14	66	0	26	0	0	0	0	0	0	0	0	0	0	106	
Lowland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	105	23	18	146	
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	78	0	78	
Lowland Shrub	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	103	
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	20	
Marsh	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	
Mixed Upland Deciduous	0	0	0	0	0	8	0	0	0	103	0	0	0	0	0	111	
Natural Mixed Pines	0	0	0	0	0	54	0	15	10	0	0	0	0	78	0	156	
Northern Hardwood	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	6	
Tamarack	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9	
Upland Conifers	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	15	
Upland Mixed Forest	0	65	0	0	0	0	0	18	0	57	0	0	0	0	0	140	
Total	121	101	207	69	37	157	0	45	24	180	0	0	130	191	18	1278	



Table 2 – Proposed Treatment Summaries

Data updated before 10:00 AM

Roscommon Mgt. Unit Year of Entry 2012

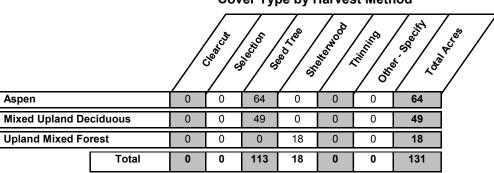
Compartment 141
Total Compartment Acres: 1278

Acres by Treatment Type

Commercial Harvest - 131 Site Prep - 0 Tree Planting - 0 Prescribed Burn - 0 Other - 0

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

Cover Type by Harvest Method



Roscommon Mgt. Unit Data updated before 10:00 AM Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 141 Year of Entry 2012

a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
8	71141008-Cut	49.0	4191 - Mixed Upland Deciduous with Conifer	High Density Log	85	Harvest	Seed Tree with Reserves	Aspen, Mixed Pine	Cmpt. Review Proposal

Prescription Mark 10-30 ft of large oak to leave for mast and future large snags. Cut all deciduous spp. to 2" dbh. Leave all pine and protect the scattered Specs: pine regeneration. Aspen, oak, and red maple will regenerate in areas with less oak creating a mixed aspen, oak, and pine stand.

Other Treatment is within proposed BSA boundary. It is intended to gradually move toward restoring the stand structure in dry-mesic northern forest. In Comments: addition, the treatment will help stagger aspen age classes.

<u>Next</u> Steps:

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71141024-Cut 23 1 4131 - Aspen, Oak High Density Pole Harvest Seed Tree with Aspen, Mixed Pine Cmpt. Review 24 Reserves Proposal

Prescription This stand has much less oak and pine than the others and also has some overmature aspen toward the north end. Mark oak with big crowns and some hollow aspen to leave. Cut all remaining deciduous spp. to 2"dbh. Leave all pine and protect pine regeneration through the harvest. Specs: Close off overgrown firewood cutter roads throughout the stand leaving a turnaround to the south or east.

Treatment is within proposed BSA boundary. It is intended to gradually move toward restoring the stand structure in dry-mesic northern forest. In <u>Other</u> Comments: addition, the treatment will help stagger aspen age classes.

Next Steps:

> Shelter Wood with Natural Red Pine, 71141031-Cut 18.1 4311 - Pine, Aspen High Density Log 65 Harvest Cmpt. Review Mix Reserves Mixed Deciduous Proposal

> Prescription Spec cut aspen, red maple, and oak marking individuals of each speices to leave for wildlife trees. Leave all pine including those less than 4"dbh and protect the pine regeneration through harvest. The management objective would be for an open grown natural pine stand with open areas of Specs: aspen regeneration.

> Treatment is within proposed BSA boundary. It is intended to gradually move toward restoring the stand structure in dry-mesic northern forest. In Other addition, the treatment will help stagger aspen age classes. Comments:

Next Steps:

71141036-Cut 40.5 Seed Tree with 36 4133 - Aspen, High Density Pole 40 Harvest Aspen, Mixed Pine Cmpt. Review Mixed Pine

Reserves

Prescription Mark 10-30 ft of large oak to leave for mast and future large snags. Cut all remaining deciduous spp. to 2" dbh. Leave all pine and protect the scattered pine regeneration. Aspen, oak, and red maple will regenerate in areas with less oak creating a mixed aspen, oak, and pine stand. Specs:

Treatment is within proposed BSA boundary. It is intended to gradually move toward restoring the stand structure in dry-mesic northern forest. In Other addition, the treatment will help stagger aspen age classes. Comments:

Next Steps:

Total Treatment

130.7 Acreage Proposed:

Proposal

		Roscomi	non Mgt. Unit	Table 4 -	- Treatmo	ents Prescrib	ed with	Compartment: 141	
S t a	Data	a updated	before 10:00 AM		a Limiti	ing Factor		Year of Entry 2012	DNRE DNRE
n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status

#Error

Prescription

Specs:

Other Comment:

Next Steps:

Limiting Factor and No Treatment Reason

Total Treatment Acreage Proposed:

0

Data updated before 10:00 AM

Out of YOE -- Treatments Prescribed with No Limiting Factor

Year of Entry: 2012

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
Prescription Specs:								
Other Comments:								
<u>Next</u>								

Total Treatment Acreage Proposed:

Steps:

0

Roscommon Mgt. Unit

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5 - Forested Stands

Data updated before 10:00 AM

Compartment: 141 Year of Entry: 2012 Michigan \$

					10:00 AM Year of Entry: 2012
Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4119 - Mixed Northern Hardwoods	High Density Pole	2.6	65		
6120 - Lowland Cedar	Medium Density Log	3.4	110		Small stand of cedar near snowmobile trail bridge. The stand opens up and transitions to mixed non-forested wetland to the northeast.
4112 - Maple, Beech, Cherry Association	High Density Pole	3.2	40		On the upland lowland transition with pockets of interior lowland. Heavy beaver activity in the area.
4130 - Aspen	High Density Sapling	69.4	17		Some heavy beaver cutting along the north edge. Updated OI from timber sale called it and O3, but it is clearly dominated by aspen.
42260 - Natural Pine, Mixed Deciduous	High Density Log	15.1	65		Multiple ages in the main canopy. 115, 85, 65, 45. Feature stand is 65. Average age and dbh by species is misleading. Better descriptors would be dbh by canopy class.
4191 - Mixed Upland Deciduous with Conifer	High Density Log	49.0	85	81-110	Poor quality quaking aspen mixed with pine to the north. Bigooth aspen, red maple, and oak in the center and aspen/balsam/pine along the road. Some of the oak is in decline and the younger stuff is suppressed and poor form.
4130 - Aspen	High Density Pole	5.3	35		
4311 - Pine, Aspen Mix	Medium Density	4.6	7		Natural jp regen with bog inclusions. On the border between upland and lowland.
4191 - Mixed Upland Deciduous with Conifer	High Density Pole	8.1	40		On the upland lowland transition. Has bog jack pine in the bottleneck
6120 - Lowland Cedar	High Density Pole	21.0	115		
42221 - Natural Jack Pine, Mixed Deciduous	Medium Density	13.8	7		Natural jack pine with lowland bog inclusions.
6115 - Lowland Ash	Low Density Pole	22.3	115		Several areas that are nearly solid tag alder.
6119 - Mixed Lowland Deciduous Forest	High Density Pole	83.1	115		Mix of upland and lowland. Scattered overmature aspen in areas where water table isn't as high. Some areas are solid black ash and there is one pocket of solid black spruce. Scattered cedar and balsam throughout.
4191 - Mixed Upland Deciduous with Conifer	Medium Density Log	54.2	85		On the transition from upland aspen to lowland ash.
4130 - Aspen	High Density Pole	5.1	38		Skinny strip of aspen along the road. Some fresh beaver activity.
	4119 - Mixed Northern Hardwoods 6120 - Lowland Cedar 4112 - Maple, Beech, Cherry Association 4130 - Aspen 42260 - Natural Pine, Mixed Deciduous 4191 - Mixed Upland Deciduous with Conifer 4130 - Aspen 4130 - Aspen 4130 - Aspen 4130 - Aspen 4131 - Pine, Aspen Mix 4191 - Mixed Upland Deciduous with Conifer 6120 - Lowland Cedar 42221 - Natural Jack Pine, Mixed Deciduous 6115 - Lowland Ash 6119 - Mixed Lowland Deciduous Forest	Cover TypeDensity4119 - Mixed Northern HardwoodsHigh Density Pole6120 - Lowland CedarMedium Density Log4112 - Maple, Beech, Cherry AssociationHigh Density Pole4130 - AspenHigh Density Sapling42260 - Natural Pine, Mixed DeciduousHigh Density Log4191 - Mixed Upland Deciduous with ConiferHigh Density Pole4311 - Pine, Aspen MixMedium Density4191 - Mixed Upland Deciduous with ConiferHigh Density Pole4311 - Pine, Aspen MixMedium Density6120 - Lowland CedarHigh Density Pole42221 - Natural Jack Pine, Mixed DeciduousMedium Density6115 - Lowland AshLow Density Pole6119 - Mixed Lowland Deciduous ForestHigh Density Pole4191 - Mixed Upland Deciduous with ConiferMedium Density Log4191 - Mixed Upland Deciduous with ConiferMedium Density Log4191 - Mixed Upland Deciduous with ConiferMedium Density Log	Cover TypeDensityAcres4119 - Mixed Northern HardwoodsHigh Density Pole2.66120 - Lowland CedarMedium Density Log3.44112 - Maple, Beech, Cherry AssociationHigh Density Pole3.24130 - AspenHigh Density Sapling69.442260 - Natural Pine, Mixed DeciduousHigh Density Log15.14191 - Mixed Upland Deciduous with ConiferHigh Density 	Cover Type Density Acres Age 4119 - Mixed Northern Hardwoods High Density Pole 2.6 65 6120 - Lowland Cedar Ardwoods Medium Density Log 3.4 110 4112 - Maple, Beech, Cherry Association High Density Pole 3.2 40 4130 - Aspen High Density Sapling 69.4 17 42260 - Natural Pine, Mixed Deciduous High Density Log 49.0 85 4191 - Mixed Upland Deciduous with Conifer High Density Log 5.3 35 4311 - Pine, Aspen Mix Pole Medium Density 4.6 7 4191 - Mixed Upland Deciduous with Conifer High Density Pole 8.1 40 6120 - Lowland Cedar Pole High Density Pole 21.0 115 42221 - Natural Jack Pine, Mixed Deciduous Density Pole 13.8 7 6115 - Lowland Ash Pole Low Density Pole 22.3 115 6119 - Mixed Lowland Deciduous Forest High Density Pole 83.1 115 6119 - Mixed Upland Deciduous with Conifer Medium Density Log 54.2 85 4191 - Mixed Upland Deci	Cover Type Density Acres Age Range 4119 - Mixed Northern Hardwoods High Density Pole 2.6 65 65 6120 - Lowland Cedar Cherry Association Medium Density Log 3.4 110 110 4112 - Maple, Beech, Cherry Association High Density Pole 3.2 40 40 4130 - Aspen High Density Sapling 69.4 17 65 4191 - Mixed Upland Deciduous With Conifer High Density Log 49.0 85 81-110 4130 - Aspen High Density Pole 5.3 35 35 4311 - Pine, Aspen Mix Density Pole 4.6 7 7 4191 - Mixed Upland Deciduous With Conifer High Density Pole 21.0 115 42221 - Natural Jack Pine, Mixed Deciduous Medium Density Pole 13.8 7 6115 - Lowland Ash Deciduous Forest High Density Pole 22.3 115 6119 - Mixed Upland Deciduous Forest High Density Density Pole 83.1 115 4191 - Mixed Upland Deciduous With Conifer Medium Density Pole 54.2 85 4130

5 – Forested StandsData updated before 10:00 AM

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a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	4130 - Aspen	Medium Density Pole	18.3	17		Aspen didn't come in very strong
22	42220 - Natural Jack Pine	High Density Pole	26.2	32		FTP says it was aerial seeded to jack pine in 1978 with a larger area in contiguous compartments. Map looks like it was from a fire
24	4131 - Aspen, Oak	High Density Pole	23.1	45		Two ages of aspen present. Older age class is hollow and beginning to fall apart. Scattered oak and pine.
 25	4311 - Pine, Aspen Mix	High Density Sapling	60.3	6		Canopy is dominated by deciduous spp for now, but jack pine will catch up.
 26	4130 - Aspen	High Density Sapling	30.0	17		
<u> </u>	6119 - Mixed Lowland Deciduous Forest	Low Density Log	17.6	Uneven Age		Lots of windthrow and beaver activity with heavy alder understory and some aspen regen.
 29	42290 - Natural Mixed Pine	High Density Log	28.5	120	111-140	On the transition from jack pine to the northeast to white pine/aspen to the southwest. Lots of structural complexity and heavy white pine understory. Several age classes present in the canopy. Age classes include 120, 85, 65, 45. Average ages and dbh by spp. is somewhat misleading.
30	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	66.3	17		
31	4311 - Pine, Aspen Mix	High Density Log	18.1	65		Mix of red pine log trees and aspen pole trees. Various ages of red pine in the canopy some of which are the original monarchs. Heavier balsam fir to the south.
32	4130 - Aspen	Medium Density Pole	15.7	40		Has some lowland inclusions including a 100 ft wide alder drain
33	42290 - Natural Mixed Pine	High Density Pole	53.5	45	81-110	Records indicate planting of red pine and jack pine in 1928. Likely some various disturbances since then. Has multiple age classes of red pine and white pine and some original monarchs present. Dominated by poles and small logs in several locations with heavy white pine understory.
34	4130 - Aspen	High Density Pole	12.3	40		Has some overmature aspen mixed in, especially in the wettest areas, but overall it is the younger pole sized stems. The is a culvert of Possum Trail in this stand.
 36	4133 - Aspen, Mixed Pine	High Density Pole	40.5	40		Stand extends into the compartment to the west. The north-central portion is heavier to oak and pine. There is some heavy beaver activity in the arm to the southeast. The oak is falling apart in places.
37	6122 - Black Spruce	Medium Density Pole	19.7	85		Looks like it has some big white pine in the arm to the east. Didn't get to that part of the stand on the ground, but notice it on the DOQQ now.

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a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
38	4310 - Pine, Oak Mix	High Density Log	17.0	85	81-110	Some small oak poles present along the road. White pine and other spp. in two age classes - 85/45
40	6120 - Lowland Cedar	High Density Log	11.0	125		Mostly lowland, but transitions to upland to the north.
41	4310 - Pine, Oak Mix	High Density Log	39.6	85		Mulitple age classes in the canopy120, 85, 40. Some incredible quality white pine and red pine along the wetland edge. Substantial component of pole sized white pine in the transition toward the north and east
44	4133 - Aspen, Mixed Pine	Medium Density	6.8	17		Upland knob that was done part commercial and part by habitat cut. Old access road has red pine regen scattered through it.
46	6121 - Tamarack	Medium Density Pole	9.0	65		
47	42290 - Natural Mixed Pine	High Density Log	9.7	75	111-140	Upland/lowland transition with pockets of lowland inclusions throughout. Scattered supercanopy of original monarchs.
48	42290 - Natural Mixed Pine	High Density Log	49.6	125	141-170	Natural two-aged pine stand with fire scars on monarchs. Most aspen is hollow. Red pine dominated in central and southeast portion and white pine dominated to the northwest. Some small areas don't have the 63 yr old (7") component and are dominated by 125 yr old (18") white pine, but most of it is two-aged with about 10 sq. ft monarchs. Average dbh is misleading. Very diverse stand and would suggest an SCA nomination if the BSA stuff doesn't go through.
49	4133 - Aspen, Mixed Pine	High Density Pole	54.0	29		

4130 - Aspen

429 - Mixed Upland

Conifers

4130 - Aspen

6132 - Mixed Lowland

Forest with Cedar

4133 - Aspen, Mixed

Pine

4130 - Aspen

6115 - Lowland Ash

50

51

52

53

55

56

58

High Density

Pole

High Density

Log

High Density

Sapling

Medium

Density Pole

High Density

Pole

High Density

Sapling

Low Density

Pole

10.2

14.5

6.0

78.3

15.2

22.5

23.2

17

75

17

125

29

7

125

81-110

Multiple ages in the canopy. 75, 125, 45. On the transtion

toward lowland.

Small openings with red maple and some oak

Old logging roads present, but access is poor due to low area

between here and main roads.

Roscommon Mgt. Unit

6 – Nonforested StandsData updated before 10:00 AM

Compartment: 141 Year of Entry: 2012



Stand	Cover Type	Acres	Gen Cmts:
3	629 - Mixed non-forested wetland	9.3	
6	629 - Mixed non-forested wetland	8.6	
13	6220 - Alder/willow	7.9	Scattered dead cedar with thick alder.
16	629 - Mixed non-forested wetland	2.0	
17	629 - Mixed non-forested wetland	6.4	
23	6220 - Alder/willow	24.5	Has some scattered dead and dying ash.
28	629 - Mixed non-forested wetland	14.8	
35	629 - Mixed non-forested wetland	9.2	wet meadow to the south and alder to the northeast.
39	6230 - Cattail	3.3	
42	622 - Lowland Shrub	5.5	
43	6233 - Wet Meadow	8.5	
45	6233 - Wet Meadow	6.2	
54	629 - Mixed non-forested wetland	8.1	
57	629 - Mixed non-forested wetland	6.8	
	<u> </u>		

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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.

Data updated before 10:00 AM

Stand	SCA Type	SCA Name	Acres	Comments

Roscommon Mgt. Unit Compartment: 141





8 – DEDICATED CONSERVATION AREA DETAILS

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

Conservation Area	Туре	Description	Data updated before 10:00 AM	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	stocked trout pop year to year. Cold contributions of g	ulations and those of other coldwater fish s water streams in Michigan typically provide	conditions that allow naturally-reproduced or species (e.g., slimy sculpin) to persist from e these conditions due to substantial eams are established by Director's action and