



**ROSCOMMON FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 115 ENTRY YEAR: 2012

Compartment Acreage: 1231

County: Roscommon

Revision Date: 06-28-2010

Stand Examiner: Ben Wiese

Legal Description: T22N R3W sections 34, and 35

Management Area: Upper Muskegon

Management Goals: Provide for sustainable ecosystem based management including wildlife and forest products. Maintain healthy and diverse forested stands.

Soil and Topography: Grayling, Graycalm, Croswell and Au Gres sand, Dawson-Loxley peat, Tawas Leafriver and Lupton mucks. Broad flat outwash plain, few kettle lakes, excessively drained sand. Low lying ridges and valleys, mostly in the SW.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Private land to the West and Northwest and a parcel located in the North Central part within the compartment. The remainder of the compartment boundary is located within state forest land.

Unique, Natural Features: Kirtland's warbler recorded in SW 1/4 of section 35. Osprey to NE. Common loon to NE and SE. Historical king rail record to N. Secretive locust to SW. Historical Alleghany plum to W. Historical ram's head lady's-slipper to NE.

Archeological, Historical, and Cultural Features: None noted.

Special Management Designations or Considerations: None noted

Watershed and Fisheries Considerations: None noted.

Wildlife Habitat Considerations: Deer, grouse, turkey, bear, birds.

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 one and one-half miles to the southeast. Gravel potential is thought to be limited. Headquarters Field lies five miles 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. Section 35 is currently leased for oil and gas development.

Vehicle Access: There is good access throughout the compartment, utilizing M-18, various forest roads, county roads and snowmobile trails.

Survey Needs: None at this time

Recreational Facilities and Opportunities: Opportunities include hunting, and snowmobiling.

Fire Protection: Mostly red pine and mixed conifer cover types.

Additional Compartment Information:

- **The following 5 reports from the Inventory System:**
 - ◆ **Cover Type by Age Class**
 - ◆ **Cover Type by Management Objective**
 - ◆ **Compartment Volume Summary**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**

- **The following information is displayed, where pertinent, on the attached compartment maps:**
 - ◆ **Base feature information, stand numbers, cover types**
 - ◆ **Proposed treatments**
 - ◆ **Proposed road access system**
 - ◆ **Suggested potential old growth**

Cover Type & Treatment Map

Legend

- Miris Corners
- Remonumented Section Corners
- Culverts
- Cable
- Pipe
- Power
- Highway
- Paved Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trails
- ORV Trails
- ORV Routes
- Motorcycle Trails
- Snowmobile Trails
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers

Treatments

- Thinning (Crown, Low, Systematic)
- Selection (Group, Single Tree)

Forest Stands

Level 3

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

Non-Forest Stands

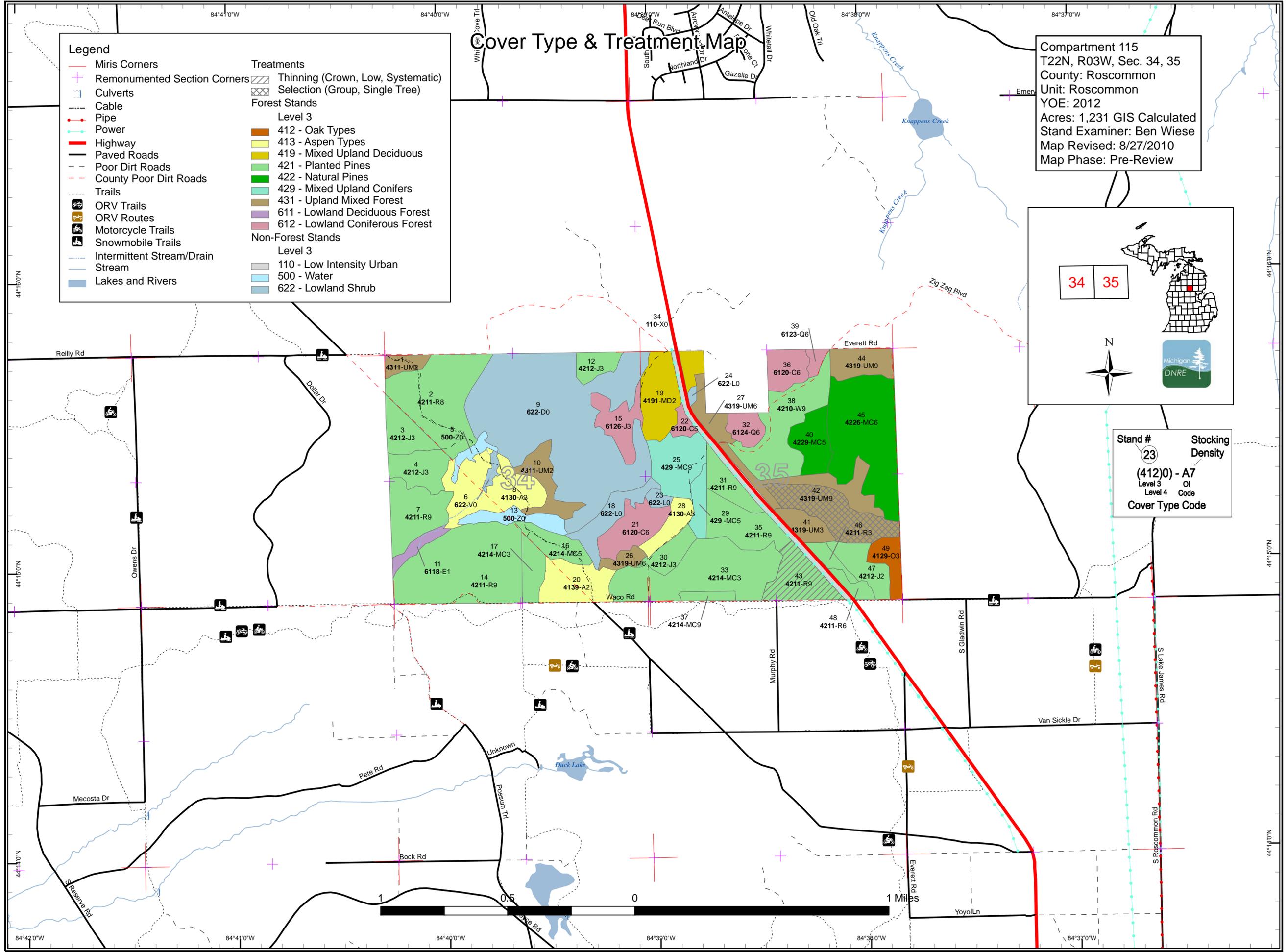
Level 3

- 110 - Low Intensity Urban
- 500 - Water
- 622 - Lowland Shrub

Compartment 115
 T22N, R03W, Sec. 34, 35
 County: Roscommon
 Unit: Roscommon
 YOE: 2012
 Acres: 1,231 GIS Calculated
 Stand Examiner: Ben Wiese
 Map Revised: 8/27/2010
 Map Phase: Pre-Review

Michigan
 DNRE

Stand #
 23
Stocking Density
 (4120) - A7
 Level 3
 Level 4
Code
 Cover Type Code



Stand Boundary Map

Legend

- Miris Corners
- Remonumented Section Corners
- Cable
- Pipe
- Power
- Culverts
- Highway
- Paved Roads
- Poor Dirt Roads
- County Poor Dirt Roads
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- ORV Trails
- ORV Routes
- Motorcycle Trails
- Snowmobile Trails
- Intermittent Stream/Drain
- Stream
- Stand Boundaries

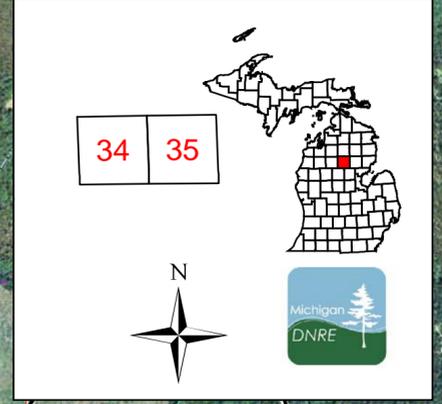
Forest Stands

- ### Level 3
- 412 - Oak Types
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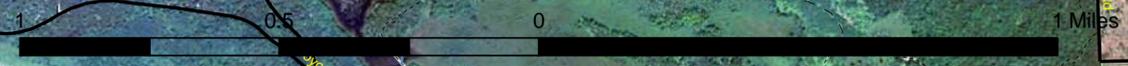
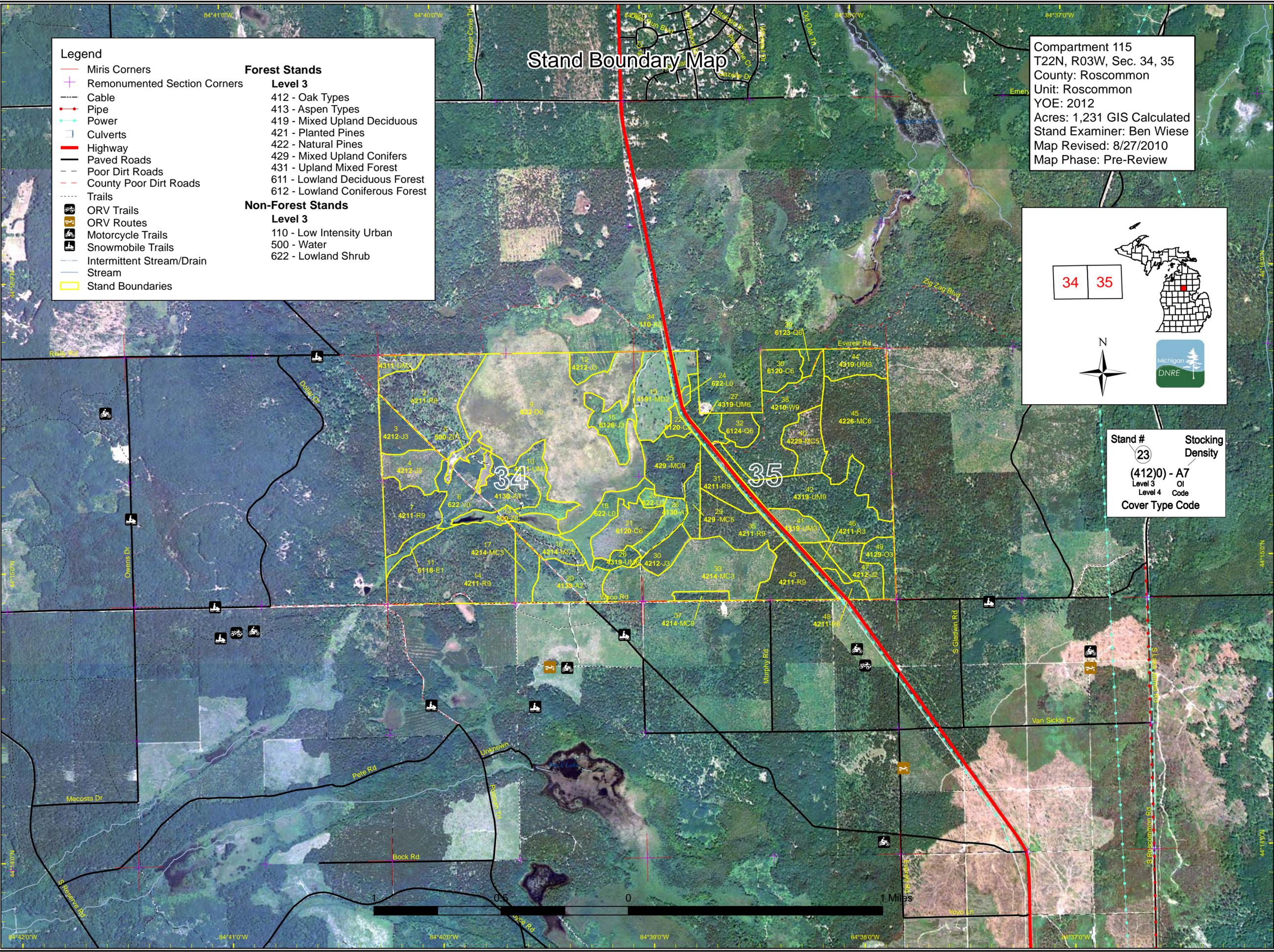
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Compartment 115
 T22N, R03W, Sec. 34, 35
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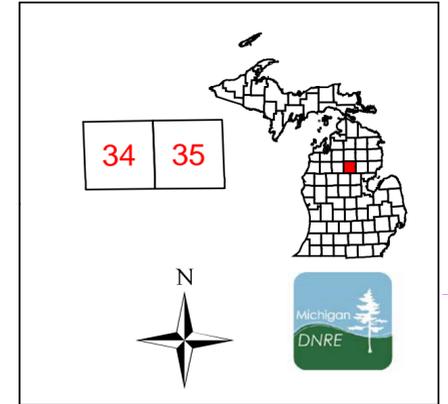
Stand #	Stocking Density
23	(4120) - A7
	Level 3 OI
	Level 4 Code
	Cover Type Code



Dedicated & Proposed Special Conservation Area Map

Compartment 115
 T22N, R03W, Sec. 34, 35
 County: Roscommon
 Unit: Roscommon
 YOE: 2012
 Acres: 1,231 GIS Calculated
 Stand Examiner: Ben Wiese
 Map Revised: 8/27/2010
 Map Phase: Pre-Review

- Legend**
- Miris Corners
 - + Remonumented Section Corners
 - Proposed Special Conservation Areas**
 - ▨ SCA - Special Conservation Area
 - ▨ SCA Removal
 - Dedicated Special Conservation Areas**
 - Cold Water Streams
 - ▭ Stand Boundaries
 - Forest Stands**
 - Level 3**
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Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code

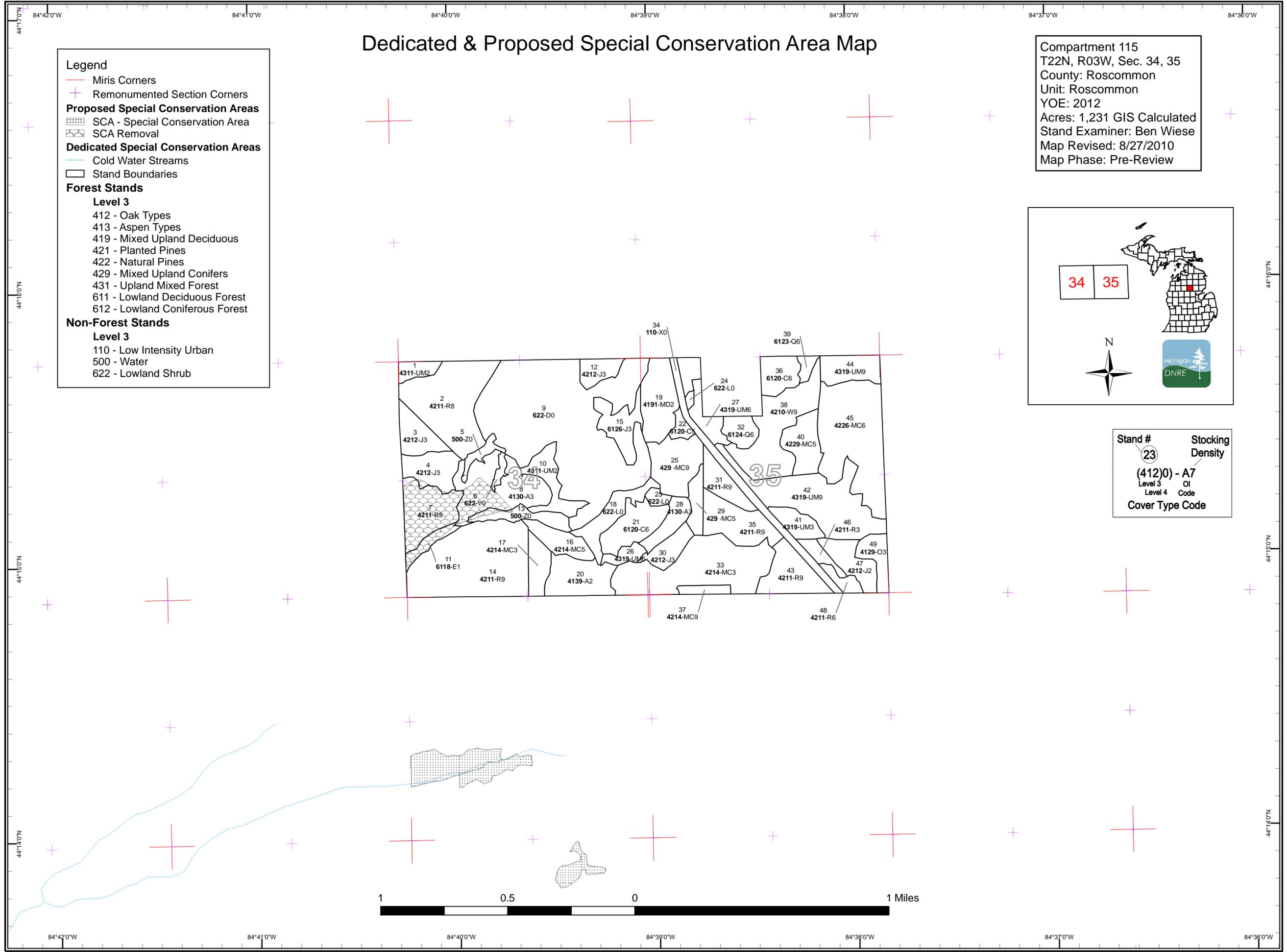
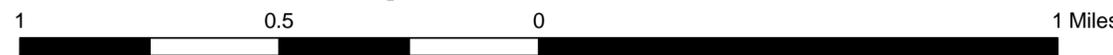
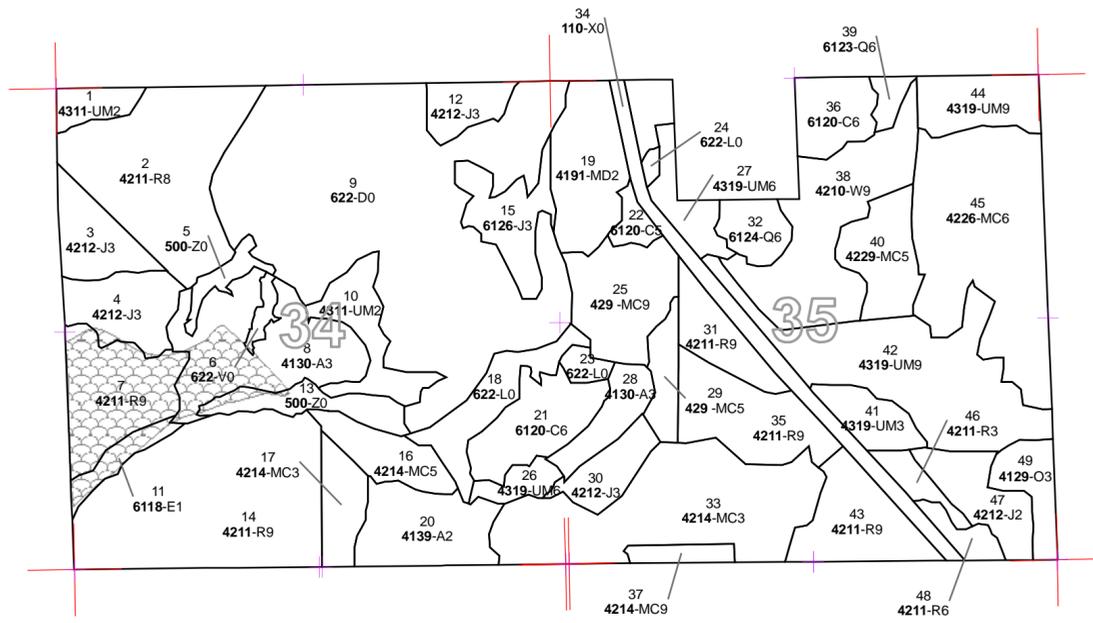


Table 1 – Total Acres by Cover Type and Age Class

Data updated before 10:00 AM



	Age Class														Total	
	Non-Forested	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Uneven Age
Aspen	0	27	56	0	0	0	0	0	0	0	0	0	0	0	0	83
Bog	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Cedar	0	0	0	0	0	0	0	0	0	5	0	0	0	39	0	43
Jack Pine	0	0	49	29	17	0	0	0	0	0	0	0	0	0	0	95
Lowland Conifers	0	0	0	0	4	0	0	10	0	0	0	0	0	0	0	14
Lowland Deciduous	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7
Lowland Shrub	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Mixed Upland Deciduous	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	36
Natural Mixed Pines	0	0	0	0	0	0	20	0	77	0	0	0	0	0	0	97
Oak	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	12
Planted Mixed Pines	0	0	82	0	0	0	5	0	15	0	0	0	0	0	0	102
Red Pine	0	0	0	0	12	0	0	0	44	206	0	0	0	0	0	262
Treed Bog	187	0	0	0	0	0	0	0	0	0	0	0	0	0	0	187
Upland Conifers	0	0	0	0	0	10	0	0	29	0	0	0	0	0	0	38
Upland Mixed Forest	0	0	37	0	0	0	6	74	18	0	0	0	0	0	0	135
Urban	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Water	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
White Pine	0	0	0	0	0	49	0	0	0	0	0	0	0	0	0	49
Total	257	62	225	41	34	65	32	84	183	210	0	0	0	39	0	1231



Table 2 – Proposed Treatment Summaries

Data updated before 10:00 AM

Roscommon Mgt. Unit
Year of Entry 2012

Compartment 115
Total Compartment Acres: 1231

Acres by Treatment Type

Commercial Harvest - 94	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

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Red Pine	0	0	0	0	56	0	56
Upland Mixed Forest	0	38	0	0	0	0	38
Total	0	38	0	0	56	0	94



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
42 71115042-Cut	38.4	4319 - Mixed Upland Forest	High Density Log	63	Harvest	Single Tree Selection	Mixed Upland Forest	Cmpt. Review Proposal

Prescription: Objective is to create an uneven aged pine and oak forest with a component of aspen by removing pulp and sawlogs and retaining healthy conifer and mast producing trees, encourage stump sprouting and natural reproduction of oak, allow for natural regeneration of pine. Try to create regeneration gaps for uneven aged management. Thin to 80 BA by cutting all aspen and jack pine over 4" dbh and marking some to leave. Mark all other species to cut.

Other Comments: Dry upland oak pine mix. Looks like the oak was thinned, based on stumps. Bigtooth aspen present in scattered individuals and small clones. Heavier to red pine on east side.

Next Steps:

43 71115043-Cut	25.4	42110 - Planted Red Pine	High Density Log	86	Harvest	Low Thinning	Planted Mixed Pine	Cmpt. Review Proposal
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Prescription: --Benjamin Wiese : 07/23/2010 comments:

Specs: Stand has potential to grow good sawlogs and power poles. Thin from below, keep basal area at 100-115 to promote pole growth. Remove most of the jack pine. Protect advanced regeneration and relic monarchs.

Other Comments: Stand was planted with mixed pine several times in the 1930's. It doesn't look like there has been any harvesting done. It is unique having a mature mixture of pine and scattered large diameter relic red pine. There are three age classes of red pine and a nice cohort of white pine saplings.

Next Steps:

**Total Treatment
Acreage Proposed: 63.8**



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

Prescription
Specs:

Other
Comment:

Next
Steps:

Limiting Factor and No
Treatment Reason

Total Treatment
Acres Proposed: 0

Data updated before 10:00 AM

Out of YOE -- Treatments
Prescribed with No Limiting Factor

Year of Entry: 2012



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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Prescription
Specs:

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 0**

Stand	Roscommon Mgt. Unit		5 – Forested Stands			Compartment: 115	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012	
1	4311 - Pine, Aspen Mix	Medium Density	7.3	10			
2	42110 - Planted Red Pine	Medium Density Log	62.3	80	51-80		Stand was harvested 10 years ago there is still slash present. The oak was spec. cut and the pine was left consequently there is a wide range of BA and stem quality. There are areas of dense red pine or white pine, scattered openings, and scattered pockets of aspen regen.
3	42120 - Planted Jack Pine	High Density Sapling	16.6	24			Trenched and planted jack pine. Scattered pockets of bigtooth aspen. Scattered red pine and white pine poles.
4	42121 - Planted Jack Pine, Mixed Deciduous	High Density Sapling	19.7	18			Jack pine plantation, scattered pockets of cherry and scattered pin oak trees.
7	42110 - Planted Red Pine	High Density Log	30.5	80	111-140		Stand was harvested by removing aspen and oak, then nominated as old growth. The diameters range from suppressed 5" to monarch 20" trees, most of which are between 9-15" dbh with 6-7 sticks. The crowns are big and healthy taking 1/3 to 1/2 of the total tree height. There is red maple seedlings and saplings growing sporadically in the understory, some are reaching into the red pine crowns. Pin oak also scattered in understory dense in some places. The terrain is gently rolling with small ridges, valleys and bowls.
8	4130 - Aspen	High Density Sapling	44.3	18			Aspen clones with scattered pin oak and jack pine. Majority of jack pine is in center of stand in a small valley.
10	4311 - Pine, Aspen Mix	Medium Density	18.0	16			Mixed stand of jack pine and quaking aspen pockets with scattered openings of pin oak and black cherry.
11	6118 - Lowland Deciduous with Cedar	Low Density Sapling	6.8	40			Difficult to age due to variability. Drains NE to SW. Species composition varies, alder present throughout.
12	42120 - Planted Jack Pine	High Density Sapling	10.4	17			Jack pine plantation was roller chopped. Trace red pine in scattered clumps. Black cherry and pin oak growing in scattered openings. Stand surrounded on three sides by bog there is leatherleaf in some areas. White pine seems more concentrated on W side. Southern tip of stand almost entirely white pine.
14	42110 - Planted Red Pine	High Density Log	87.5	80	51-80		Stand was harvested by removing the oak and aspen, it was then designated as old growth. Terrain is gently rolling with small ridges and valleys. Stand density is variable, understory is thick with cherry, pin oak and aspen in the open areas. Trace amounts of white pine poles just reaching into the canopy. The red pine is healthy with large crowns. The log diameter trees are between 5-7 sticks tall
15	6126 - Lowland Jack Pine	High Density Sapling	19.0	17			Very dense stand on edge of bog, high water table.



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Roscommon Mgt. Unit

5 – Forested Stands

Compartment: 115

Data updated before 10:00 AM

Year of Entry: 2012



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
16	42140 - Planted Mixed Pine	Medium Density Pole	15.0	72	51-80	Looks like this stand was spec. cut to leave all pine. There are pockets of red pine, white pine, quaking aspen and mixtures of both. Scattered openings where sub canopy is doing well. Scattered trace white pine x-logs.
17	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Sapling	12.6	13		Trenched and planted jack pine with a mix of pin oak, black cherry, and scattered red pine.
19	4191 - Mixed Upland Deciduous with Conifer	Medium Density	35.6	8		Stand was clearcut "shelterwood" harvested in 2002. Less than 10 ba residual. Pin oak stump sprouting good. Aspen clones of variable sizes. Trace ammounts of balsam fir. Looks like jack pine was planted, did not find planting record. Slash moderate left over from harvest.
20	4139 - Aspen, Mixed Deciduous	Medium Density	26.8	7		Stand is a mixture of bigtooth aspen, quaking aspen, pin oak pockets with black cherry spread throughout. Red pine seed trees and scattered white pine left from harvest. 1.3 acre stand of jack pine at corner of Waco and Duck Lake roads.
21	6120 - Lowland Cedar	High Density Pole	23.3	143		Cedar stand with heavy balsam fir understory. Tall super canopy black spruce. heavy pockets of blowdown esp. near edges.
22	6120 - Lowland Cedar	Medium Density Pole	4.6	85	1-50	Age is probably the same as the Isat major disturbance. Stand relatively uniform. Alder patch at North end of stand.
25	429 - Mixed Upland Conifers	High Density Log	28.6	78	81-110	Nice mixed conifer stand with high water table, wet along edges. Blowdown on West side near bog. Less pine more mixed oak along South edge. Dense patch of balsam fir along South edge.
26	4319 - Mixed Upland Forest	High Density Pole	6.4	50	1-50	Mostly upland, slightly wet on North edge. Scattered super canopy white pine. Jack pine and pin oak mostly concentrated on E of stand.
27	4319 - Mixed Upland Forest	High Density Pole	11.2	60	81-110	This stand borders M-18 on the west side and private land on the northeast side there is swamp on the south side there are some wet areas but stand is mostly upland. Big tooth aspen mostly in north part of stand is starting to fall apart. Scattered mid-canopy balsam fir pockets. Scatterd white pine some 20" + dbh. Red pine thicker along M-18, scattered legacy super canopy trees. There is some nice white pine and the red maple and balsam fir are thriving.
28	4130 - Aspen	High Density Sapling	12.1	17		Trace ammounts of black spruce. Deep ruts on NW edge from previous harvest.
29	429 - Mixed Upland Conifers	Medium Density Pole	9.5	40	1-50	Mixed stand, trace cherry, old white pine stumps.
30	42120 - Planted Jack Pine	High Density Sapling	12.3	27		Nice dense young jack pine stand, with trace ammounts of balsam fir, pin oak and white pine mainly along stand edges. Interior of stand jack pine with occasional pin oak. Understory is still undeveloped except for edge effect.

S t a n d	Roscommon Mgt. Unit		5 – Forested Stands			Compartment: 115
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012
						General Comments:
31	42110 - Planted Red Pine	High Density Log	15.0	77	81-110	Stand was likely planted to red pine and jack pine in the 1930's. Red pine dominant, jack pine and pin oak co-dominant. white pine and balsam fir mid-canopy and understory. Nice stand that looks natural. Fair amount of slash CWD.
32	6124 - Lowland Spruce-Fir	High Density Pole	10.4	60		Lowland coniferous swamp. Scattered white pine super canopy trees, some have 20-40' clear butt logs. Balsam fir and Black spruce understory very thick in some places. Canopy height variable.
33	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Sapling	69.6	17		Jack pine planted in 1993, stand looks healthy, variable amounts of pin oak, black cherry and red pine mixed. Red pine seems more concentrated in west part of stand.
35	42110 - Planted Red Pine	High Density Log	29.1	72	111-140	Almost pure red pine stand. Stand was thinned in '92 by removing everything but the red pine. Dominants and co-dominants have crowns 1/3-1/2 of tree height. Jack pine scattered in the understory where the tops were dragged during the harvest. Good pin oak regen in understory.
36	6120 - Lowland Cedar	High Density Pole	15.3	169		Nice cedar swamp with hemlock, unique stand did not see any cedar or hemlock regen. Creek in northeast of stand flowing north and east.
37	42140 - Planted Mixed Pine	High Density Log	5.2	52	81-110	Stand looks like it was left as a buffer for the clearcut surrounding it. Healthy stand large crowns, large growth rings. Good idea to leave for aesthetic reasons.
38	42100 - Planted White Pine	High Density Log	49.0	40	51-80	Some nice white pine, many are open grown with weevil damage. The damage is often above 16 ft. This is a good sight for white pine, they are growing fast. There is a record of this stand being planted however the ages of the trees don't match.
39	6123 - Lowland Fir	High Density Pole	4.0	35		Lowland balsam fir stand.
40	42290 - Natural Mixed Pine	Medium Density Pole	20.1	53	51-80	
41	4319 - Mixed Upland Forest	High Density Sapling	11.6	17		Scattered overstory pin oak. Trenched and planted red pine. Red pine and pin oak doing well, fully stocked.
42	4319 - Mixed Upland Forest	High Density Log	62.3	63	51-80	Dry upland oak pine mix. Looks like the oak was thinned, based on stumps. Bigtooth aspen present in scattered individuals and small clones. Heavier to red pine on east side.
43	42110 - Planted Red Pine	High Density Log	25.4	86	141-170	Stand was planted with mixed pine several times in the 1930's. It doesn't look like there has been any harvesting done. It is unique having a mature mixture of pine and scattered large diameter relic red pine. The stand is on the corner of M-18 and Waco Rd. good to leave for aesthetics and it's uniqueness. There are three age classes of red pine and a nice cohort of white pine saplings.

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Roscommon Mgt. Unit

5 – Forested Stands

Compartment: 115

Data updated before 10:00 AM

Year of Entry: 2012



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	4319 - Mixed Upland Forest	High Density Log	18.0	78	51-80	
45	42260 - Natural Pine, Mixed Deciduous	High Density Pole	76.9	78	81-110	Mixed stand. Nice scattered bigtooth aspen, nice jack pine stems. overall stand is healthy, aspen is in decline. Balsam fir scattered mid-canopy height. Central part of stand is more concentrated with pin oak, edges have more jack pine.
46	42111 - Planted Red Pine, Mixed Deciduous	High Density Sapling	6.2	30		
47	42121 - Planted Jack Pine, Mixed Deciduous	Medium Density	17.5	36		Looks like two ages of jack pine, some have nice clear poles, almost to log size. Sub-canopy is various densities/pockets of pin oak and black cherry.
48	42110 - Planted Red Pine	High Density Pole	5.9	30		
49	4129 - Mixed Oak	High Density Sapling	12.4	27		



Stand	Cover Type	Acres	Gen Cmts:
5	50 - Water	5.6	Leatherleaf around perimeter, open water in the center.
6	6225 - Bog	3.0	
9	6224 - Treed Bog	187.0	Leatherleaf bog with many snags. Various densities of white pine and jack pine seedlings and saplings. many 10-20' white pine saplings.
13	50 - Water	13.3	Old beaver dam at S. end. Scattered alder S. of the snowmobile trail.
18	6220 - Alder/willow	18.9	Scattered balsam fir and black spruce.
23	6220 - Alder/willow	3.6	Approximately 15% forested with spruce, fir and tamarack.
24	6220 - Alder/willow	1.4	
34	11 - Low Intensity Urban	24.0	

**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
7	SCA Removal	71115007	30.5	Remove SCA status. Stand 8 is 18 year old aspen. Stand 7 was harvested by removing aspen and oak then nominated as old growth. This stand should be thinned from below and from the crown to 60-70 BA. There are poles and good saw timber. After thinning allow the understory to develop into a mixed upland stand.



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.

Data updated before 10:00 AM

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

Conservation Area	Type	Description
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