



## Shingleton Forest Management Unit Compartment Review Presentation

**Compartment # 111**

**Entry Year: 2014**

**Compartment Acreage: 2233**

**County: Schoolcraft**

**Revision Date:** August 15, 2012

**Stand Examiner:** Mario Molin

**Legal Description:** T46N R13W sections 1, 2, 3, 4, and 9

**RMU (if applicable):** The compartment lies within the Fox River Complex Management Area.

**Management Goals:** To provide multiple use benefits for the citizens of Michigan.

**Soil and Topography:** The majority of the compartment is level rubicon sand. There are some areas of lower ground comprised of saugatuck sand, and rifle and Spaulding peat that are wet part of the year.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** The south side of the compartment borders several private ownerships. State land surrounds the rest of the compartment.

**Unique, Natural Features (include only non-site specific and non-sensitive information):** Potential for wood turtle along the East Branch of the Fox River. There is potential for Incurvate Emerald, Ebony boghaunter, Frigga fritillary and Freija fritillary in bogs.

**Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):** None known.

**Special Management Designations or Considerations:** The East Branch of the Fox River has a Natural River Designation.

**Watershed and Fisheries Considerations:** Streams are classified from First Quality Cold Water (FQCW) down to Second Quality Warm Water (SQWW). In this area, the FQCW means an excellent trout fishery, one that is supplemented by a Fisheries Division annual stocking program. These waters are generally the famous ones, but also include somewhat smaller waters that are capable of supporting the fish population density necessary to provide a superior angling experience. SQCW implies a cold stream that supports a natural trout population, but is limited by either physical size or lack of spawning/foraging habitat. Its limitations mean that it will never support a heavy angling pressure and harvest, so Fisheries Division does not publicize the water. Local anglers, however, know what the streams support, and do fish them quite a bit. In-stream habitat is usually in the form of large woody debris, or downed trees. Fish need them because they provide protection from overhead predators and because they force water currents to scour holes under and around them. The holes provide more water volume in the stream, keeping it cooler, as well as giving the fish more volume to “hide” in. The woody structure also forces more eddy currents, breaking the “solid” water flow so that fish can get out of the current to rest. First Quality Warm Waters, (FQWW) are large, productive waters capable of supporting a good fishery for either warm-water species or cool-water species. In the Upper Peninsula, the designation generally applies to walleye, pike, musky or smallmouth bass waters. SQWW means small, possibly stagnant, warm streams that produce little to no actual fishery. Although small, their warm temperatures and generally high nutrient levels imply generally a higher productivity than the more “fishable” streams. Their value is attained from the production of forage that migrates downstream

into areas of either cold-water or warm-water sports fish populations. For that reason, they are NOT useless waters, and they should be protected somewhat for the aquatic invertebrate and fish forage that they produce. Beaver populations in these streams could be a benefit, as their dams will increase productivity as well as inhibit sand bedload migration. Fisheries Values Excellent. The East Branch Fox River is classified First Quality CW. In fact, the stretch of the East Branch upstream from M-77 contains the largest average size brook trout in the Eastern Upper Peninsula. Fisheries Division maintains two sand traps, one just upstream from the M-77 bridge and one off the woods road just north of the plateau immediately north of the bridge. This stretch is not generally for fly-fishermen due to the lack of open space along the stream. Cold Creek is also a FQCW stream.

**Wildlife Habitat Considerations:** This compartment is located in the Grand Marias Sandy End Moraine Outwash sub-subsection. The average growing season is approximately 120 days. The extreme winter temperature generally reaches approximately -35° F. Snowfall in this compartment averages 200 inches or more annually. The compartment falls within the Danaher Kingston Outwash Management Area which highlights the following Featured Species: Eastern bluebird, Kirtland's warbler, red crossbill, sharp-tailed grouse and spruce grouse. General Land Office (GLO) Surveyor notes show the major upland forest species included a mixture of white pine, hemlock, beech, red maple, and birch (yellow and white). White pine appeared to have been slightly more abundant than the others. Minor components in the uplands included red pine, spruce cedar, basswood, and sugar maple. Lowlands at that time contained primarily tamarack and spruce. Fire and windthrow were likely the major forms of natural disturbance within the compartment. The Current upland vegetation is substantially altered from pre-settlement conditions. Red pine plantations, aspen, and grassy openings are now the dominant habitat types on the uplands. Lowland areas contain similar species composition but different structure than found by the early surveyors. Wildlife habitat objectives include allowing some of the forest to return to pre-settlement species composition while also maintaining some early successional forest conditions. Eventually, the narrow red pine plantation blocks should be consolidated. No rare species are known to occur within this compartment. Other wildlife species of interest that may utilize this compartment include American toad, gray jay, red squirrel, and white-tailed deer.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. There is insufficient data to determine the glacial drift thickness. The Ordovician Utica and Collingwood Shale's subcrop below the glacial drift. There is not an economic use for these shale's. Gravel pits are not found in the general area and potential appears to be limited. There is no commercial oil and gas production in the UP.

**Vehicle Access:** There are two-track roads throughout most of the compartment.

**Survey Needs:** None

**Recreational Facilities and Opportunities:** The Danaher ORV trailhead and part of the trail are in this compartment. The Seney-Grand Marais snowmobile Trail 431 also goes through the west part of the compartment.

**Fire Protection:** Much of the compartment is upland pine plantation with good access.

**Additional Compartment Information:**

➤ **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**

**Table 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	163	68	22	3	163	0	0	0	0	0	0	0	0	419
Cedar	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9
Hemlock	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7
Herbaceous Openland	343	0	0	0	0	0	0	0	0	0	0	0	0	0	343
Jack Pine	0	6	0	0	28	10	8	0	0	0	0	0	0	0	52
Low-Density Trees	110	0	0	0	0	0	0	0	0	0	0	0	0	0	110
Lowland Aspen/Balsam Poplar	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
Lowland Conifers	0	0	0	0	0	0	0	19	0	0	0	0	0	0	19
Lowland Deciduous	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
Lowland Shrub	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Lowland Spruce/Fir	0	40	79	0	0	0	118	48	0	0	0	0	0	0	285
Mixed Upland Deciduous	0	0	42	5	0	106	0	0	0	0	0	0	0	0	153
Natural Mixed Pines	0	0	0	5	27	5	12	0	0	0	0	0	0	0	49
Northern Hardwood	0	0	5	0	0	74	0	0	0	0	0	0	0	0	78
Planted Mixed Pines	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
Red Pine	10	0	0	0	53	362	0	1	0	0	0	0	0	0	426
Tamarack	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
Treed Bog	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Upland Mixed Forest	11	90	35	32	0	0	0	0	0	0	0	0	0	0	168
Upland Spruce/Fir	0	0	0	8	0	0	0	0	0	0	0	0	0	0	8
Urban	28	0	0	0	0	0	0	0	0	0	0	0	0	0	28
Water	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
White Pine	0	0	0	0	0	6	37	0	0	0	0	0	0	0	44
<b>Total</b>	<b>525</b>	<b>299</b>	<b>233</b>	<b>75</b>	<b>113</b>	<b>729</b>	<b>176</b>	<b>68</b>	<b>9</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2234</b>



## Table 2 – Proposed Treatment Summaries

**Shingleton Mgt. Unit**  
**Year of Entry 2014**

**Compartment 111**  
**Total Compartment Acres: 2234**

### Acres by Treatment Type

Commercial Harvest - 190	Site Prep - 0	Tree Planting - 159	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
<b>Jack Pine</b>	13	0	0	0	0	0	13
<b>Natural Mixed Pines</b>	5	0	0	0	0	0	5
<b>Red Pine</b>	0	0	0	0	172	0	172
<b>Total</b>	18	0	0	0	172	0	190



<b>S t a n d</b>	<b>Treatment Name</b>	<b>Acres</b>	<b>CoverType</b>	<b>Size Density</b>	<b>Stand Age</b>	<b>BA Range</b>	<b>Treatment Type</b>	<b>Treatment Method</b>	<b>Cover Type Objective</b>	<b>Approval Status</b>
<b>3</b>	<b>41111003-Cut</b>	51.3	42110 - Planted Red Pine	High Density Pole	44	141-170	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> 3rd row thin. <u>Specs:</u></p> <p><u>Other</u> Railroad grade on west side. <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2013</p>										
<b>26</b>	<b>41111026-Cut</b>	23.1	42110 - Planted Red Pine	High Density Pole	51	81-110	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> 3rd row thin. <u>Specs:</u></p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2013</p>										
<b>33</b>	<b>41111033-Cut</b>	13.6	42110 - Planted Red Pine	High Density Pole	51	141-170	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> 3rd row thin. <u>Specs:</u></p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2013</p>										
<b>38</b>	<b>41111038-Cut</b>	5.2	42260 - Natural Pine, Mixed Deciduous	Low Density Pole	35	1-50	Harvest	Clearcut	3102 - Grass	Cmpt. Review Proposal
<p><u>Prescription</u> Opening maintainance. <u>Specs:</u></p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2013</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
39	41111039-Cut	9.6	42110 - Planted Red Pine	High Density Pole	51	141-170	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> 3rd row thin. <u>Specs:</u>  <u>Other Comments:</u>  <u>Next Steps:</u>  <u>Proposed Start Date:</u> 10/01/2013										
44	41111044-Cut	28.7	42110 - Planted Red Pine	High Density Pole	51	111-140	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> 3rd row thin. <u>Specs:</u>  <u>Other Comments:</u>  <u>Next Steps:</u>  <u>Proposed Start Date:</u> 10/01/2013										
45	41111045-Cut	5.8	42110 - Planted Red Pine	High Density Pole	51	141-170	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> 3rd row thin. <u>Specs:</u>  <u>Other Comments:</u>  <u>Next Steps:</u>  <u>Proposed Start Date:</u> 10/01/2013										
51	41111051-Cut	39.5	42110 - Planted Red Pine	High Density Pole	51	111-140	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Thin to 90 BA, not taking entire rows of trees. <u>Specs:</u>  <u>Other Comments:</u>  <u>Next Steps:</u>  <u>Proposed Start Date:</u> 10/01/2013										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
109	41111109-Cut	13.2	42120 - Planted Jack Pine	High Density Pole	47	81-110	Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal

Prescription: Clear cut with red pine reserved (mark for access)

Specs:

Other

Comments:

Next Regeneration of jack pine and red pine by use of currently accepted practices, scarification, trench and plant.

Steps: Follow up according to work instructions.

Proposed

Start Date: 10/01/2018

105	NF_41111105- Plant	159.5	3102 - Grass				Tree Planting	Machine Plant	42110 - Planted Red Pine	Cmpt. Review Proposal
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Prescription:

Specs:

Other

Comments:

Next Monitor according to work instructions.

Steps:

Proposed

Start Date: 10/01/2013

**Total Treatment  
Acreage Proposed: 349.5**

**Table 4 -- Treatments Prescribed with a Limiting Factor**



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

Prescription Specs:

Other Comment:

Next Steps:

Proposed Start Date: #Error

Limiting Factor and No Treatment Reason

**Total Treatment Acreage Proposed: 0**

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

Year of Entry: 2014



Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
<b>41009014-Cut1</b>	5.2	6120 - Lowland Cedar	High Density Pole	141		Harvest	Patch or Strip Clearcut	6120 - Lowland Cedar	Cmpt. Review Proposal - Incomplete

Prescription patch cut app. 5 acres, determined at time of prep  
Specs:

Other  
Comments:

Next Monitor according to work instructions.  
Steps:

Proposed  
Start Date: 10/01/2011

<b>41044_OutOfY OE-Cut</b>	0.9					Harvest	Crown Thinning	42210 - Natural Red Pine	Cmpt. Review Proposal - Incomplete
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Prescription Mark red pine and white pine to 80 sq.ft. where densities are high enough. Cut all other species except hemlock, oak, and cedar.  
Specs:

Other Retention will be a portion of the red pine and white pine trees remaining.  
Comments:

Next Possible regeneration harvest next year of entry.  
Steps:

Proposed  
Start Date: 10/01/2013

<b>41172002-Cut</b>	4.4	4112 - Maple, Beech, Cherry Association	High Density Pole	49		Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
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Prescription Treatment=Thin stand down to 80 BA on average while putting in regen gaps to promote species diversity and Sugar Maple. Put stand up with adjacent hardwood in comp 169 in 2014.  
Specs: MO=Un-even aged hardwoods with quality Sugar Maple stems  
Retention=Residual BA

Other  
Comments:

Next Natural regen survey to follow harvest during the next inventory cycle.  
Steps:

Proposed  
Start Date: 10/01/2014

**Total Treatment  
Acreage Proposed: 10.5**



Stand	Shingleton Mgt. Unit			5 – Forested Stands		Compartment: 111 Year of Entry: 2014	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
1	6122 - Black Spruce	High Density Pole	11.2	64	51-80	spruce 50 50 70 w pine 20 tamarack 10	
3	42110 - Planted Red Pine	High Density Pole	51.3	44	141-170	R pine 140 150 160 120 J Pine 10	
5	6113 - Lowland Maple	Low Density Pole	3.5	26	1-50		
6	42110 - Planted Red Pine	High Density Pole	29.0	51	81-110	R pine 100 80 150 110  ORV trail in stand. Cut in 2005.	
10	6112 - Lowland Aspen	High Density Pole	2.7	44	81-110		
11	4310 - Pine, Oak Mix	Medium Density	10.8	5	1-50		
12	4117 - Mixed N. Hardwood - Pine	Low Density Sapling	4.5	25	1-50	Old G-type filling in...	
13	42110 - Planted Red Pine	High Density Pole	21.5	51	111-140	Cut in 2005.	
14	42220 - Natural Jack Pine	Medium Density Pole	1.9	40	51-80		
16	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	4.8	35	1-50	beech 40 j pine 10 r maple 10 10 r oak 10 w pine 10	
17	42110 - Planted Red Pine	High Density Pole	9.1	51	51-80	Cut in 2011	
18	4132 - Aspen, Jack Pine	Low Density Pole	7.9	25			
19	4199 - Other Mixed Upland Deciduous	Medium Density Pole	94.7	50	1-50	Mix of pine coming well.	
23	6122 - Black Spruce	High Density Pole	79.2	29	51-80		
25	42110 - Planted Red Pine	High Density Pole	15.9	51	111-140	Cut in 2005.	
26	42110 - Planted Red Pine	High Density Pole	23.1	51	81-110	Few scattered oak	

## Shingleton Mgt. Unit

## 5 – Forested Stands

Compartment: 111  
Year of Entry: 2014

Stand	Shingleton Mgt. Unit			5 – Forested Stands		Compartment: 111 Year of Entry: 2014	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
27	4130 - Aspen	High Density Pole	3.7	50	51-80		
29	42110 - Planted Red Pine	High Density Log	50.2	51	81-110		
30	4130 - Aspen	Medium Density Pole	1.6	52	51-80		
33	42110 - Planted Red Pine	High Density Pole	13.6	51	141-170	Contract out	
35	42110 - Planted Red Pine	High Density Pole	10.4	51	81-110	Cut in 2011	
38	42260 - Natural Pine, Mixed Deciduous	Low Density Pole	5.2	35	1-50	Opening/fire break that is growing over	
39	42110 - Planted Red Pine	High Density Pole	9.6	51	141-170		
42	42110 - Planted Red Pine	High Density Pole	45.3	51	81-110	Cut in 2005.	
43	42220 - Natural Jack Pine	High Density Pole	2.2	46	1-50		
44	42110 - Planted Red Pine	High Density Pole	28.7	51	111-140		
45	42110 - Planted Red Pine	High Density Pole	5.8	51	141-170		
47	42110 - Planted Red Pine	High Density Pole	34.3	51	81-110	Cut in 2011	
48	42110 - Planted Red Pine	High Density Sapling	9.9	5			
49	42140 - Planted Mixed Pine	High Density Log	2.9	51	51-80	r. pine 60 30 50 j. pine 30 30 40	
50	42110 - Planted Red Pine	High Density Pole	26.1	51	111-140		
51	42110 - Planted Red Pine	High Density Pole	39.5	51	111-140		
52	4130 - Aspen	High Density Sapling	4.5	27			
53	4130 - Aspen	Medium Density Pole	21.9	37			

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## Shingleton Mgt. Unit

## 5 – Forested Stands

Compartment: 111  
Year of Entry: 2014

Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4311 - Pine, Aspen Mix	High Density Pole	21.9	37	1-50	
4130 - Aspen	Medium Density Pole	101.6	52	1-50	
4130 - Aspen	Low Density Pole	29.3	50	1-50	cheery 20 10 0 aspen 0 10 0 r maple 0 0 10  Willow shrub with islands of cherry and aspen.
42120 - Planted Jack Pine	High Density Log	4.2	61	51-80	r pine 10 30 20 j pine 60 20 30
6126 - Lowland Jack Pine	High Density Log	2.0	61	81-110	j pine 50 90 50 r pine 50 0 0 b spruce 10
42220 - Natural Jack Pine	High Density Pole	1.5	51	51-80	Small stand of good quality jack pine that was not previously typed out.
6126 - Lowland Jack Pine	Low Density Pole	2.0	64	1-50	
6122 - Black Spruce	High Density Pole	15.8	64	51-80	Drainage in middle of stand.
6122 - Black Spruce	High Density Pole	66.9	60	1-50	
6122 - Black Spruce	Medium Density	10.2	17		
42220 - Natural Jack Pine	High Density Pole	7.1	53	51-80	j pine 90 40 50 aspen 0 50 0 r maple 50 0 0
6122 - Black Spruce	Low Density Sapling	20.7	18	1-50	
42290 - Natural Mixed Pine	Medium Density Pole	12.3	61	1-50	Steep ridge.
6127 - Lowland Pine	Medium Density Pole	19.3	77	51-80	
6122 - Black Spruce	Medium Density Pole	16.6	77	111-140	cedar 50 60 10 b spruce 70 130 30 b fir 10 30 20
42210 - Natural Red Pine	High Density Pole	1.1	77		

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## Shingleton Mgt. Unit

## 5 – Forested Stands

Compartment: 111  
Year of Entry: 2014

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
76	6120 - Lowland Cedar	High Density Pole	8.6	81	51-80	cedar 50 60 20 b spruce 20 0 10 r maple 10 10 10
77	6122 - Black Spruce	High Density Pole	31.0	70	81-110	spruce 110 70 20 w pine 10 20 20
79	4116 - Mixed N. Hardwood - Aspen	High Density Pole	26.0	55	51-80	
81	4130 - Aspen	High Density Pole	3.0	42	1-50	
82	4319 - Mixed Upland Forest	Low Density Pole	35.1	20	1-50	
83	6122 - Black Spruce	High Density Pole	24.5	64	111-140	spruce 30 90 30 fir 10 0 0 w pine 40 10 0 r maple 10 0 10 cedar 10 10 10 hemlock 10 0 60 y birch 0 0 10
						Age doesnt seem to match the stand. Unique site to the compartment, maybe able to argue for type 2 old growth based on the hemlock and white pine.
84	4112 - Maple, Beech, Cherry Association	High Density Pole	11.4	55	51-80	
85	4136 - Aspen, Mixed Conifer	High Density Sapling	9.5	13		
86	4112 - Maple, Beech, Cherry Association	High Density Pole	29.3	55	51-80	
87	4139 - Aspen, Mixed Deciduous	High Density Sapling	19.1	13		
88	6122 - Black Spruce	Medium Density	8.8	13		
89	42200 - Natural White Pine	High Density Pole	37.2	67	51-80	
90	4130 - Aspen	High Density Pole	56.0	24	1-50	
91	42340 - Upland Spruce/Fir	High Density Pole	7.9	39	51-80	Moderate slope to creek. Changes dominate species every hundred yards.
92	42350 - Upland Hemlock	Medium Density Log	7.4	97	1-50	

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## Shingleton Mgt. Unit

## 5 – Forested Stands

Compartment: 111  
Year of Entry: 2014

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
93	6121 - Tamarack	Medium Density Pole	2.9	39	1-50	
94	4130 - Aspen	High Density Sapling	18.9	13		
95	4191 - Mixed Upland Deciduous with Conifer	Low Density Pole	11.3	55	1-50	
96	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	42.2	24		
97	4134 - Aspen, Spruce/Fir	High Density Sapling	73.9	13		Some residual superstory white pine and hemlock.
98	42290 - Natural Mixed Pine	High Density Pole	3.2	42	51-80	
99	4112 - Maple, Beech, Cherry Association	High Density Pole	7.2	55	51-80	Nice red maple poles.
100	4130 - Aspen	Medium Density Pole	26.4	50	1-50	Mix of all size classes.
101	42220 - Natural Jack Pine	High Density Pole	1.4	52	51-80	
102	4136 - Aspen, Mixed Conifer	High Density Sapling	4.1	14	1-50	
103	42290 - Natural Mixed Pine	High Density Pole	23.4	42	51-80	
106	42200 - Natural White Pine	High Density Log	6.4	55	81-110	
107	42110 - Planted Red Pine	High Density Pole	1.4	47	1-50	Retention pocket from past harvest.
108	42220 - Natural Jack Pine	High Density Sapling	6.1	10		
109	42120 - Planted Jack Pine	High Density Pole	13.2	47	81-110	j pine 130 40 50 r pine 50 20 0 w pine 0 10 0
110	4132 - Aspen, Jack Pine	Medium Density	37.2	14		
111	42260 - Natural Pine, Mixed Deciduous	Medium Density Log	5.2	55	81-110	
112	42120 - Planted Jack Pine	High Density Pole	10.5	47	51-80	j pine 50 100 30 r pine 0 20 20 aspens 0 0 20

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Shingleton Mgt. Unit

5 – Forested Stands

Compartment: 111  
Year of Entry: 2014



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
113	4311 - Pine, Aspen Mix	Medium Density Pole	10.2	34	1-50	
114	4311 - Pine, Aspen Mix	High Density Sapling	90.5	10		



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
2	3303 - Mixed Low Density Trees	4.0	No	Unspecified	
4	11 - Low Intensity Urban	1.1	No	Unspecified	
7	3102 - Grass	6.7	No	Unspecified	
8	3302 - Low Density Conifer Trees	13.8	Planted	Red Pine	ftp 41-1195
9	3102 - Grass	12.3	No	Unspecified	
15	11 - Low Intensity Urban	26.6	Yes	Low (NonForested)	
20	50 - Water	0.2	No	Unspecified	
21	3102 - Grass	8.4	No	Unspecified	
28	3102 - Grass	9.9	No	Unspecified	
31	3102 - Grass	5.2	No	Unspecified	
32	3102 - Grass	12.4	No	Unspecified	
34	3102 - Grass	80.6	No	Unspecified	
36	3102 - Grass	2.0	No	Unspecified	
37	3102 - Grass	9.6	No	Unspecified	
40	3102 - Grass	5.0	No	Unspecified	
41	3303 - Mixed Low Density Trees	3.4	No	Unspecified	
46	50 - Water	2.6	No	Unspecified	
54	3102 - Grass	5.7	No	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
58	3303 - Mixed Low Density Trees	59.1	No	Unspecified	
61	3102 - Grass	1.2	No	Unspecified	
65	3303 - Mixed Low Density Trees	29.3	No	Unspecified	
67	6229 - Mixed lowland shrub	3.9	Natural Regen	Lowland Conifers	It is not a mixed lowland shrub stand, but there is no option for lowland spruce clearcuts that are regenerating.
75	6224 - Treed Bog	17.2	No	Unspecified	
78	3102 - Grass	9.6	No	Unspecified	
80	3102 - Grass	5.3	No	Unspecified	
104	3102 - Grass	9.8	No	Unspecified	
105	3102 - Grass	159.5	Yes	High (NonForested)	Currently FTP C41- 1433 being trenched currently (7/12)



**7 – PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS**

\* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

Stand	SCA Type	SCA Name	Acres	Comments



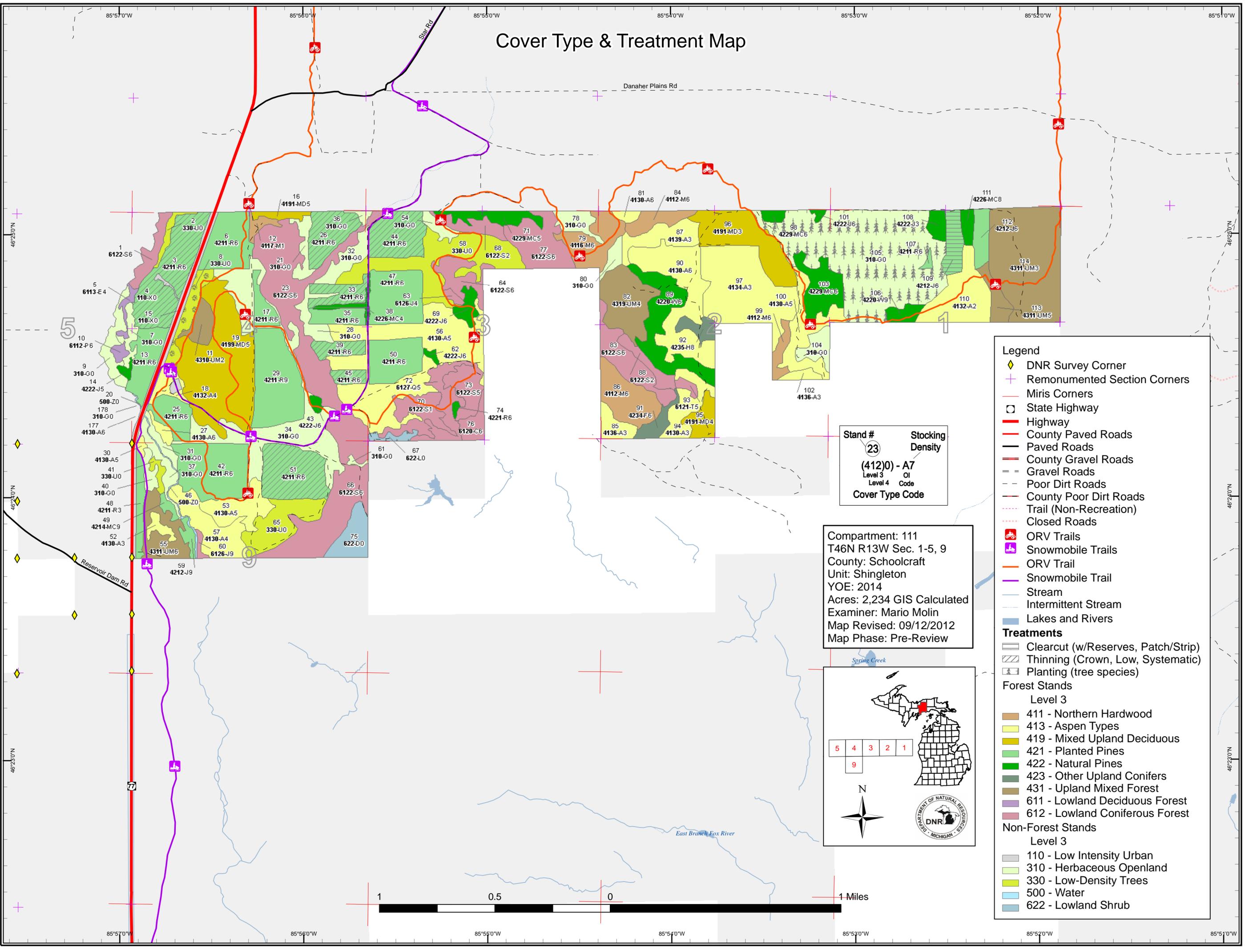
## 8 – DEDICATED CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Mineral Resource Area	Areas that are primarily managed for mineral resource extraction, on a permanent or temporary basis. They include both metallic and non-metallic mineral mines as well as oil and natural gas sites.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.

# Cover Type & Treatment Map



**Legend**

- ◆ DNR Survey Corner
- + Remonumented Section Corners
- Miris Corners
- State Highway
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- ORV Trails
- Snowmobile Trails
- ORV Trail
- Snowmobile Trail
- Stream
- Intermittent Stream
- Lakes and Rivers

**Treatments**

- Clearcut (w/Reserves, Patch/Strip)
- Thinning (Crown, Low, Systematic)
- Planting (tree species)

**Forest Stands**

Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

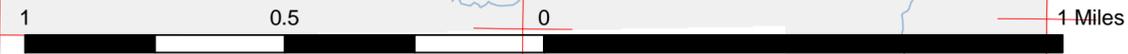
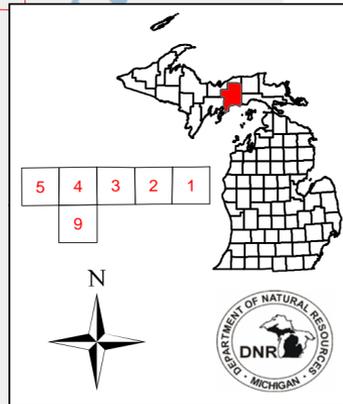
**Non-Forest Stands**

Level 3

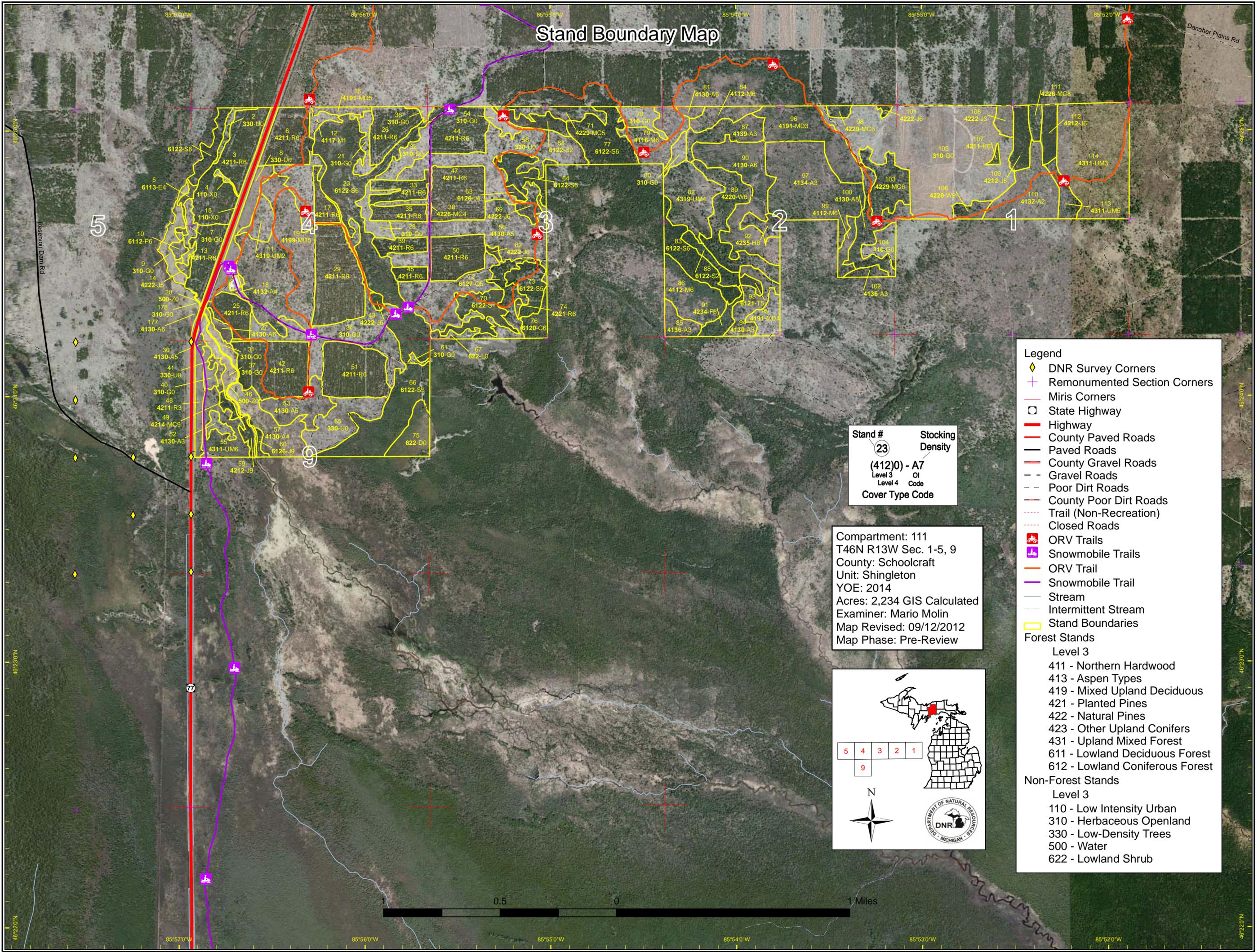
- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub

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

Compartment: 111  
 T46N R13W Sec. 1-5, 9  
 County: Schoolcraft  
 Unit: Shingleton  
 YOE: 2014  
 Acres: 2,234 GIS Calculated  
 Examiner: Mario Molin  
 Map Revised: 09/12/2012  
 Map Phase: Pre-Review



# Stand Boundary Map



**Legend**

- ◆ DNR Survey Corners
- ✚ Remonumented Section Corners
- Miris Corners
- State Highway
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- 🛵 ORV Trails
- 🛷 Snowmobile Trails
- ORV Trail
- Snowmobile Trail
- Stream
- Intermittent Stream
- Stand Boundaries

**Forest Stands**

Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

**Non-Forest Stands**

Level 3

- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub

Stand # **23**      Stacking Density

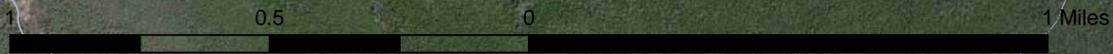
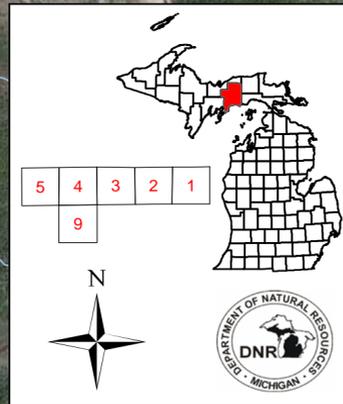
**(4120) - A7**

Level 3      OI

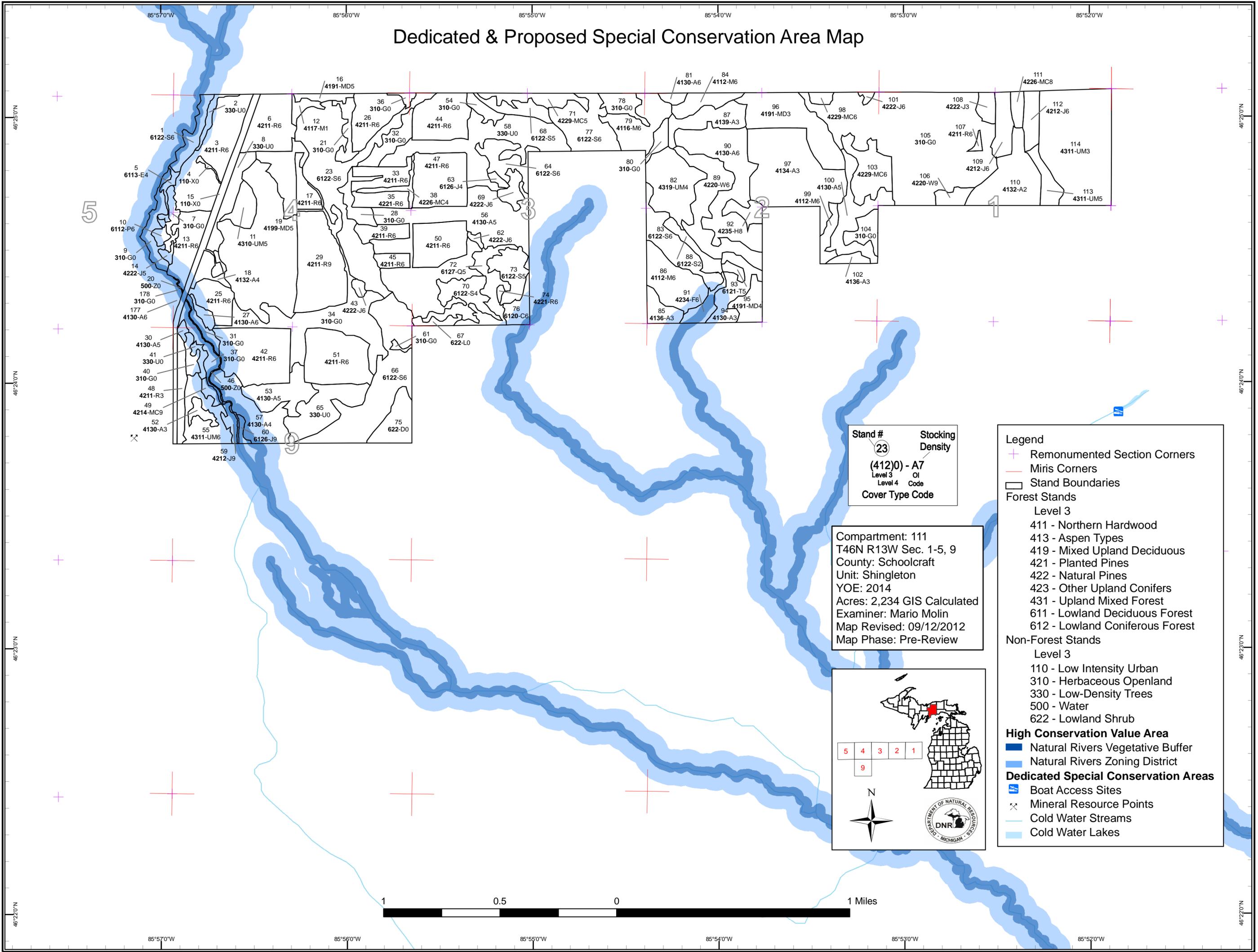
Level 4      Code

Cover Type Code

Compartment: 111  
 T46N R13W Sec. 1-5, 9  
 County: Schoolcraft  
 Unit: Shingleton  
 YO: 2014  
 Acres: 2,234 GIS Calculated  
 Examiner: Mario Molin  
 Map Revised: 09/12/2012  
 Map Phase: Pre-Review



# Dedicated & Proposed Special Conservation Area Map



**Stand #**  
23

**Stocking Density**  
(4120) - A7

Level 3 OI  
Level 4 Code

**Cover Type Code**

Compartment: 111  
T46N R13W Sec. 1-5, 9  
County: Schoolcraft  
Unit: Shingleton  
YOE: 2014  
Acres: 2,234 GIS Calculated  
Examiner: Mario Molin  
Map Revised: 09/12/2012  
Map Phase: Pre-Review

**Legend**

- + Remonumented Section Corners
- Miris Corners
- Stand Boundaries

**Forest Stands**

**Level 3**

- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

**Non-Forest Stands**

**Level 3**

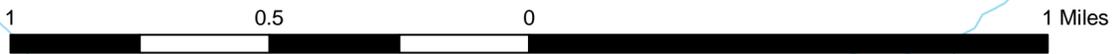
- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub

**High Conservation Value Area**

- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District

**Dedicated Special Conservation Areas**

- Boat Access Sites
- ⊗ Mineral Resource Points
- Cold Water Streams
- Cold Water Lakes



85°57'0"W 85°56'0"W 85°55'0"W 85°54'0"W 85°53'0"W 85°52'0"W

46°25'0"N 46°24'0"N 46°23'0"N 46°22'0"N