



## Shingleton Forest Management Unit Compartment Review Presentation

**Compartment #136**

**Entry Year: 2014**

**Compartment Acreage: 2462**

**County: Alger**

**Revision Date:** 6/10/2012

**Stand Examiner:** Rick-James Hill

**Legal Description:** T48N R15W Sections 5,6,8,17 and 18

**RMU (if applicable):** The compartment is located within the Pictured Rocks Buffer Management Area.

**Management Goals:** Provide for the protection, integrated management, and responsible use of a healthy, productive, forest and mineral resource base for the social, recreational, environmental, and economic benefit of the people of the State of Michigan.

**Soil and Topography:** There are two main soil types in this compartment; Autrain sand and Rubicon sand. Both are listed as being naturally low in fertility. The terrain is mainly flat with some areas that have the steeper depressions making frost pockets.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** This compartment has broken ownership of private and commercial private lands. Sections 5, 6 and the northern most 40 in section 8 are within the Pictured Rocks National Lake Shore Boundary. Sections 17, 18 and the remainder of 8 are not within the PRNL boundary.

**Unique, Natural Features (include only non-site specific and non-sensitive information):** This Compartment contains portions of Kingston Plains. There are Sharp-tailed grouse to north and there is a Loon in Nugent Lake. There is an Eagle to the west and osprey to the east. There is potential for sharp-tailed grouse in Grass stands, potential for goshawk in mature pine and northern hardwood stands. There is potential for red shoulder hawk in mature northern hardwoods.

**Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):** This area was logged at the turn of the century like many of the areas in the Shingleton Management Unit. There are old grades that are still maintained as drivable two-track and some traces of old grades no longer drivable.

**Special Management Designations or Considerations:** This part of the Kingston Plains area is designated for the production of timber. The north half of the compartment is within the dedicated Pictured Rocks Buffer.

**Watershed and Fisheries Considerations:** Fisheries Values excellent. This compartment contains Kingston Lake which supports a natural northern muskie population, as well as good numbers of largemouth and smallmouth bass, yellow perch, panfish, and some walleye. Kingston Lake water levels are severely down from the normal full pool mark. The treatments proposed around the shoreline are selective cuts, but need to adhere to a minimum buffer distance of 100 feet with only selective cutting within 25 feet of outside edge. Due to the low water level, the buffer should start where the ordinary high water mark would be under normal conditions.

**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 Pictured Rocks Buffer Management Area which highlights the following Featured Species: American Marten, Blackburnian warbler, northern goshawk and pileated woodpecker. General Land Office (GLO) Surveyor notes indicate that this entire compartment was dominated by upland sandy soils. Throughout the compartment, the 1851 forest contained extensive amounts of hemlock, beech, balsam fir, and white pine. Somewhat lower, yet abundant amounts of birch (presumably mostly yellow, but some white) and red maple provided an additional deciduous component in the forest. Red pine and spruce were recorded with much lower frequencies. Kingston Lake and a few kettle ponds represent the lowlands within the compartment. This compartment does not contain any drainages. As such, the primary natural disturbance regimes were likely fire and windthrow. Logging and extensive slash fires have substantially altered the landscape in this area. Most of the organic material and vegetation in the eastern portion of the compartment were destroyed. In 1954, Forestry and Game management divisions entered into a plan for experimental reforestation projects on the Kingston Plains. That plan called for a wood production area, a game production area, and a control. Within the control, vistas displaying the stump fields were maintained for scenic and historic purposes. Stands 31, 34, 35, 36, 61, 62, 63, and 64 are included in the wood production area of this plan. Stand 401 was identified as a stump field vista. Stands 37 and 40 appear to be very similar in species composition to the pre-settlement forest. Wildlife habitat objectives include maintaining the open character of the stump fields in stand 401, and promoting forest species and structural diversity in the western portion of the compartment that is similar to pre-settlement conditions. Gray wolves, moose (Michigan special), merlin (Michigan threatened), and sharp-tailed grouse (Michigan special concern) have been recorded in compartment. Other wildlife species of interest may include bluebird, sandhill crane, meadow jumping mouse, and coyote.

**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 Cambrian Trempealeau Formation subcrops below the glacial drift. The Trempealeau could be used for stone. There are not any gravel pits in the area and potential appears limited. There is no commercial oil and gas production in the UP.

**Vehicle Access:** Access is very good through the entire compartment. H-58 runs through the center with many good two-tracks spurring off giving access to almost the entire compartment. Many of the two tracks are quite sandy and not capable of supporting heavy truck traffic.

**Survey Needs:** There are a few areas that will need some work, including a 40 acre block with private land on three sides.

**Recreational Facilities and Opportunities:** Kingston Lake State Forest Campground is open to year round camping. There is a boat launch at the lake that is not exclusive to campers. One of the starting points to the Fox River Pathway begins at the campground. The Grand Marais Snowmobile Club maintains Snowmobile Trail 8 that follows H-58 through the compartment.

**Fire Protection:** This compartment is comprised mainly of red pine plantations, some low quality hardwood timber types and large grass openings. Some cutting is scheduled in this compartment but slash loads will not be increased in any significant amounts.

#### **Additional Compartment Information:**

- **The following 5 reports from the Operations Inventory System (OIPC) are attached:**
  - ◆ **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**

**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 +		Unretn Age
Aspen	0	8	0	0	0	0	0	0	0	0	0	0	0	0	8
Hemlock	0	0	0	0	0	0	0	10	11	0	0	0	0	0	20
Herbaceous Openland	346	0	0	0	0	0	0	0	0	0	0	0	0	0	346
Jack Pine	17	0	3	0	10	0	106	0	0	0	0	0	0	0	135
Low-Density Trees	60	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Marsh	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	0	0	71	71
Natural Mixed Pines	0	12	0	0	12	14	5	3	57	0	0	0	0	0	103
Northern Hardwood	0	0	0	0	0	0	92	0	90	0	0	0	0	0	183
Planted Mixed Pines	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
Red Pine	0	0	105	0	0	555	0	0	0	0	0	0	0	0	660
Sand, Soil	49	0	0	0	0	0	0	0	0	0	0	0	0	0	49
Upland Conifers	0	0	0	0	0	11	44	0	26	0	0	0	0	0	81
Upland Mixed Forest	0	0	0	0	0	10	0	88	159	0	0	0	0	0	257
Upland Shrub	127	0	0	0	0	0	0	0	0	0	0	0	0	0	127
Urban	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Water	95	0	0	0	0	0	0	0	0	0	0	0	0	0	95
White Pine	0	0	0	10	169	43	0	0	19	0	0	0	0	0	241
<b>Total</b>	<b>715</b>	<b>20</b>	<b>108</b>	<b>10</b>	<b>191</b>	<b>638</b>	<b>247</b>	<b>101</b>	<b>363</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>71</b>	<b>2463</b>



## Table 2 – Proposed Treatment Summaries

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

**Compartment 136**  
**Total Compartment Acres: 2463**

### Acres by Treatment Type

Commercial Harvest - 1038	Site Prep - 0	Tree Planting - 196	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>Hemlock</b>	0	11	0	0	0	0	0	<b>11</b>
<b>Jack Pine</b>	106	0	0	0	0	0	0	<b>106</b>
<b>Mixed Upland Deciduous</b>	0	71	0	0	0	0	0	<b>71</b>
<b>Natural Mixed Pines</b>	0	0	0	0	48	0	0	<b>48</b>
<b>Northern Hardwood</b>	0	121	0	0	0	0	0	<b>121</b>
<b>Planted Mixed Pines</b>	5	0	0	0	0	0	0	<b>5</b>
<b>Red Pine</b>	12	0	0	0	405	0	0	<b>417</b>
<b>Upland Conifers</b>	0	11	0	0	0	0	0	<b>11</b>
<b>Upland Mixed Forest</b>	0	0	88	159	0	0	0	<b>248</b>
<b>Total</b>	<b>123</b>	<b>213</b>	<b>88</b>	<b>159</b>	<b>454</b>	<b>0</b>	<b>0</b>	<b>1038</b>



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	41136001-Cut	8.0	42110 - Planted Red Pine	High Density Pole	53	171-200	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal - Incomplete
<p><u>Prescription</u> This red pine stand is over 50 years old; a third row thin would improve growth on the trees left in the stand and leave all options on the table for future management. Mark trees for removal also cut all jack pine and aspen, remove white pine and red maple for access.</p> <p><u>Specs:</u></p> <p><u>Other</u> This stand should be cut with stands in c 135 as well as other stands west of Kingston Lake. There are a lot of sand hills making summer logging a challenging. Also winter logging is inappropriate due to the amount of snowfall received as well as recreation conflicts. A larger sale would make a large pit run spec more practical.</p> <p><u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2013</p>										
3	41136003-Cut	7.7	42110 - Planted Red Pine	High Density Pole	53	141-170	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal - Incomplete
<p><u>Prescription</u> This red pine stand is over 50 years old; a third row thin would improve growth on the trees left in the stand and leave all options on the table for future management. Mark trees for removal also cut all jack pine and aspen, remove white pine and red maple for access.</p> <p><u>Specs:</u></p> <p><u>Other</u> This stand should be cut with stands in c 135 as well as other stands west of Kingston Lake. There are a lot of sand hills making summer logging a challenging. Also winter logging is inappropriate due to the amount of snowfall received as well as recreation conflicts. A larger sale would make a large pit run spec more practical.</p> <p><u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u></p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2013</p>										
4	41136004-Cut	5.4	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Pole	53	1-50	Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal - Incomplete
<p><u>Prescription</u> This stand is a failed plantation it should be clearcut and then jack pine should be planted in the red pines place. Leave under 10SF of red pine and white pine for diversity. Also leave 3 % of the area of the stand along the western edge as retention.</p> <p><u>Specs:</u></p> <p><u>Other</u> This stand should be cut with stands in c 135 as well as other stands west of Kingston Lake. There are a lot of sand hills making summer logging a challenging. Also winter logging is inappropriate due to the amount of snowfall received as well as recreation conflicts. A larger sale would make a large pit run spec more practical.</p> <p><u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u> Jack pine should be planted post harvest use any approved methods to insure jack pine regeneration on the site. Acceptable regeneration is red pine, jack pine, white pine, balsam fir, and spruce.</p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2013</p>										
5	41136005-Cut	4.2	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	53	51-80	Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal - Incomplete
<p><u>Prescription</u> This stand is a failed plantation it should be clearcut and then jack pine should be planted in the red pines place. Leave under 10SF of red pine and white pine for diversity. Also leave 3 % of the area of the stand along the western edge as retention.</p> <p><u>Specs:</u></p> <p><u>Other</u> This stand should be cut with stands in c 135 as well as other stands west of Kingston Lake. There are a lot of sand hills making summer logging a challenging. Also winter logging is inappropriate due to the amount of snowfall received as well as recreation conflicts. A larger sale would make a large pit run spec more practical.</p> <p><u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u> Jack pine should be planted post harvest use any approved methods to insure jack pine regeneration on the site. Acceptable regeneration is red pine, jack pine, white pine, balsam fir, and spruce.</p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2013</p>										



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
13	41136013-Cut	29.0	42110 - Planted Red Pine	High Density Pole	59	171-200	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal - Incomplete
<p><u>Prescription Specs:</u> This red pine stand is over 50 years old; a third row thin would improve growth on the trees left in the stand and leave all options on the table for future management. Mark trees for removal also cut all jack pine and aspen, remove white pine and red maple for access.</p> <p><u>Other Comments:</u> The Fox River Trail cuts through this stand, there is also part of the stand that borders Kingston Lake the lake should be buffered, the Fox River Trail will be hard to protect in its current location moving it to the buffer along the lake would provide a more scenic trail as well as an opportunity to build the trail utilizing more sustainable trail construction methods.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
17	41136017-Cut	43.5	42290 - Natural Mixed Pine	High Density Log	89	141-170	Harvest	Crown Thinning	42210 - Natural Red Pine	Cmpt. Review Proposal - Incomplete
<p><u>Prescription Specs:</u> This stand should be thinned remove the hardwood as well as balsam fir and spruce, mark pine for removal. Target basal area is 100 square feet. Thin for best tree in place make gaps where practical try to release some of the younger advanced regeneration. Protect any hemlock and oak present on site, buffer Kingston Lake for visuals and water quality. Also buffer the small vernal ponds in the stand as well as the frost pockets. The area of buffers may be more then 10% that will be acceptable in this situation.</p> <p><u>Other Comments:</u> This stand should be cut with stands in c 135 as well as other stands west of Kingston Lake. There are a lot of sand hills making summer logging a challenging. Also winter logging is inappropriate due to the amount of snowfall received as well as recreation conflicts. A larger sale would make a large pit run spec more practical.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
21	41136021-Cut	97.1	42110 - Planted Red Pine	High Density Pole	50	111-140	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal - Incomplete
<p><u>Prescription Specs:</u> This red pine stand is over 50 years old; a third row thin would improve growth on the trees left in the stand and leave all options on the table for future management. Mark trees for removal also cut all jack pine and aspen, remove white pine and red maple for access.</p> <p><u>Other Comments:</u> This stand should be cut with stands in c 135 as well as other stands west of Kingston Lake. There are a lot of sand hills making summer logging a challenging. Also winter logging is inappropriate due to the amount of snowfall received as well as recreation conflicts. A larger sale would make a large pit run spec more practical.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
22	41136022-Cut	10.8	429 - Mixed Upland Conifers	High Density Pole	56	111-140	Harvest	Single Tree Selection	4113 - R.Maple, Conifer	Cmpt. Review Proposal - Incomplete
<p><u>Prescription Specs:</u> Cut this stand using a selection system. Cut this stand to a target of 70 square feet of basil area lower basil areas due to beech are acceptable. Retention will be a mix of species on site in the form of residual left after the harvest. Improve quality of stand by marking for crop trees using the complete marker as a guide. Cut all beech that exhibit symptoms bbd. Improve species diversity with tree selection. Mesic conifers should be favored though tree selection.</p> <p><u>Other Comments:</u> Group with other stands in the area survey work will be needed to find exact lines. Sale should be large to allow a large fill spec to improve sale viability.</p> <p><u>Next Steps:</u> If beech brush becomes an issue herbicide the beech brush. Planting of one or all of the following species oak, resistant beech stock, hemlock or white pine should be considered post harvest. Acceptable regeneration will include a mix of all species on site.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
26	41136026-Cut	70.6	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	82	81-110	Harvest	Group Selection	3302 - Low Density Conifer Trees	Cmpt. Review Proposal - Incomplete
<u>Prescription:</u> Cut all beech that exhibit symptoms bbd cut other trees as necessary to operate in the stand and remove the beech. The stand west of H-58 should be excluded from the harvest due to less beech being present there. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> If beech brush becomes an issue herbicide the beech brush. Planting of one or all of the following species oak, resistant beech stock, hemlock or white pine should be considered post harvest. Acceptable regeneration is any hardwood or conifer present on site except beech. <u>Proposed Start Date:</u> 10/01/2013										
29	41136029-Cut	8.1	42110 - Planted Red Pine	High Density Pole	59	171-200	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal - Incomplete
<u>Prescription:</u> Row thin this red pine stand cut every third row mark trees if rows are not present mark for operability and quality. <u>Specs:</u> <u>Other Comments:</u> Group with other stands on eastside of H-58 <u>Next Steps:</u> <u>Proposed Start Date:</u> 10/01/2013										
36	41136036-Cut	17.7	42110 - Planted Red Pine	High Density Pole	59	171-200	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal - Incomplete
<u>Prescription:</u> Row thin this red pine stand cut every third row mark trees if rows are not present mark for operability and quality. <u>Specs:</u> <u>Other Comments:</u> Group with stands on east side of H-58. <u>Next Steps:</u> <u>Proposed Start Date:</u> 10/01/2013										
45	41136045-Cut	71.0	42210 - Natural Red Pine	High Density Pole	59	81-110	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal - Incomplete
<u>Prescription:</u> Row thin this red pine stand cut every third row mark trees if rows are not present mark for operability and quality. <u>Specs:</u> <u>Other Comments:</u> Group with stands on east side of H-58. <u>Next Steps:</u> <u>Proposed Start Date:</u> 10/01/2013										



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
52	41136052-Cut	7.7	42110 - Planted Red Pine	High Density Pole	59	1-50	Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal - Incomplete
<p><u>Prescription:</u> Clearcut this stand mark some red and white pine to leave no more than 2 trees per acre leave a small area (3%-5%) on the edge of the stand as retention.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Group with stands on east side of H-58.</p> <p><u>Next Steps:</u> Trench and plant this stand to jack pine plant per TMS spec. Acceptable regeneration is red pine, jack pine, white pine, balsam fir, and spruce.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
54	41136054-Cut	10.7	42350 - Upland Hemlock	High Density Log	81	81-110	Harvest	Single Tree Selection	4114 - Beech, Hemlock	Cmpt. Review Proposal - Incomplete
<p><u>Prescription:</u> Cut this stand using a selection system. Basil area should be targeted at 80 sf less is acceptable in areas of beech. Focus on removal of beech as well as cutting hardwood that are of poor form or over mature. Some hemlock will be harvested the goal is to regenerate hemlock so this is acceptable. Balsam fir should be removed; Spruce should be marked so that there is still a spruce component in the stand. Retention will be a mix of species on site in the form of residual left after the harvest.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u> Logging access must be granted or be found through state land on the east side of this block. Group with other stands in the area survey work will be needed to find exact lines.</p> <p><u>Next Steps:</u> If beech brush becomes an issue herbicide the beech brush. Planting of one or all of the following species oak, resistant beech stock, hemlock or white pine should be considered post harvest. Acceptable regeneration is a mix of red maple, sugar maple, paper birch, yellow birch, hemlock, white pine, oak, red pine, spruce, balsam fir and black cherry.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
55	41136055-Cut	28.6	4119 - Mixed Northern Hardwoods	High Density Log	81	81-110	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal - Incomplete
<p><u>Prescription:</u> Cut this stand using a selection system. Cut this stand to a target of 80 square feet of basil area lower basil areas due to beech are acceptable.</p> <p><u>Specs:</u> Retention will be a mix of species on site in the form of residual left after the harvest. Improve quality of stand by marking for crop trees using the complete marker as a guide. Cut all beech that exhibit symptoms bbd. Improve species diversity with tree selection. Mesic conifers should be favored though tree selection.</p> <p><u>Other Comments:</u> Logging access must be granted or be found through state land on the east side of this block. Group with other stands in the area survey work will be needed to find exact lines.</p> <p><u>Next Steps:</u> If beech brush becomes an issue herbicide the beech brush. Planting of one or all of the following species oak, resistant beech stock, hemlock or white pine should be considered post harvest. Acceptable regeneration is a mix of red maple, sugar maple, paper birch, yellow birch, hemlock, white pine, oak, red pine, spruce, balsam fir and black cherry.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										
57	41136057-Cut	21.8	4117 - Mixed N. Hardwood - Pine	High Density Pole	68	81-110	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal - Incomplete
<p><u>Prescription:</u> Cut all beech that exhibit symptoms bbd cut other trees as necessary to operate in the stand and remove the beech.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> If beech brush becomes an issue herbicide the beech brush. Planting of one or all of the following species oak, resistant beech stock, hemlock or white pine should be considered post harvest. Acceptable regeneration is any hardwood or conifer present on site except beech.</p> <p><u>Proposed Start Date:</u> 10/01/2013</p>										



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
59	41136059-Cut	40.2	4115 - Y.Birch, Hemlock NH	High Density Pole	62	111-140	Harvest	Single Tree Selection	4115 - Y.Birch, Hemlock NH	Cmpt. Review Proposal - Incomplete
<p><u>Prescription</u> Cut this stand using a shelterwood system. Cut this stand to a target of 50 square feet of basal area lower basal areas due to beech are acceptable. Focus on removal of beech as well as cutting hardwood that are of poor form or over mature. Do not cut hemlock or white pine as the goal of the harvest is increase the representation of these species in the stand Keep much of the yellow birch as well as sugar maple that are of good form. Retention will be a mix of species on site in the form of residual left after the harvest. Cut all beech that exhibit symptoms bbd. Improve species diversity with tree selection. Mesic conifers should be favored through tree selection.</p> <p><u>Specs:</u></p> <p><u>Other</u> Group with stand 60, FLG access may be needed</p> <p><u>Comments:</u></p> <p><u>Next</u> If beech brush becomes an issue herbicide the beech brush. Planting of one or all of the following species oak, resistant beech stock, hemlock or white pine should be considered post harvest. Acceptable regeneration is a mix of red maple, sugar maple, paper birch, yellow birch, hemlock, white pine, oak, red pine, spruce, balsam fir and black cherry.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2013</p>										
60	41136060-Cut	159.3	4319 - Mixed Upland Forest	High Density Pole	81	51-80	Harvest	Shelter Wood with Reserves	4115 - Y.Birch, Hemlock NH	Cmpt. Review Proposal - Incomplete
<p><u>Prescription</u> Cut this stand using a shelterwood system. Cut this stand to a target of 50 square feet of basal area lower basal areas due to beech are acceptable. Focus on removal of beech as well as cutting hardwood that are of poor form or over mature. Do not cut hemlock or white pine as the goal of the harvest is increase the representation of these species in the stand Keep much of the yellow birch as well as sugar maple that are of good form. Retention will be a mix of species on site in the form of residual left after the harvest. Cut all beech that exhibit symptoms bbd. Improve species diversity with tree selection. Mesic conifers should be favored through tree selection.</p> <p><u>Specs:</u></p> <p><u>Other</u> Group with stand 59 FLG access may be needed.</p> <p><u>Comments:</u></p> <p><u>Next</u> If beech brush becomes an issue herbicide the beech brush. Planting of one or all of the following species oak, resistant beech stock, hemlock or white pine should be considered post harvest. Acceptable regeneration is a mix of red maple, sugar maple, paper birch, yellow birch, hemlock, white pine, oak, red pine, spruce, balsam fir and black cherry.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2013</p>										
62	41136062-Cut	88.3	4319 - Mixed Upland Forest	High Density Pole	76	81-110	Harvest	Seed Tree with Reserves	4113 - R.Maple, Conifer	Cmpt. Review Proposal - Incomplete
<p><u>Prescription</u> Cut this stand using a shelterwood system. Cut this stand to a target of 50 square feet of basal area lower basal areas due to beech are acceptable. Focus on removal of beech as well as cutting hardwood that are of poor form or over mature. Keep much of the yellow birch as well as sugar maple that are of good form. Retention will be a mix of species on site in the form of residual left after the harvest. Cut all beech that exhibit symptoms bbd. Improve species diversity with tree selection. Mesic conifers should be favored through tree selection.</p> <p><u>Specs:</u></p> <p><u>Other</u> Keep BA higher near H-58 for visual management. Cut a year early to save some beech.</p> <p><u>Comments:</u></p> <p><u>Next</u> If beech brush becomes an issue herbicide the beech brush. Planting of one or all of the following species oak, resistant beech stock, hemlock or white pine should be considered post harvest. acceptable regeneration is a mix of red maple, sugar maple, paper birch, yellow birch, hemlock, white pine, oak, red pine, spruce, balsam fir and black cherry.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2012</p>										
66	41136066-Cut	106.0	42220 - Natural Jack Pine	High Density Pole	60		Harvest	Clearcut with Reserves	42120 - Planted Jack Pine	Cmpt. Review Proposal - Incomplete
<p><u>Prescription</u> Clearcut this stand, leave any red pine and white pine present in the stand. Cut only a portion of the stand as to minimize visual management on H-58 as well as green up issues with the stand to the south. Retain 10 percent of the stand in areas that will improve visuals and mitigate green up issues.</p> <p><u>Specs:</u></p> <p><u>Other</u></p> <p><u>Comments:</u></p> <p><u>Next</u> Regenerate jack pine using any methods needed including but not limited to scarification, planting and herbicides. Acceptable regeneration is red pine, jack pine, white pine, balsam fir, and spruce.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2013</p>										



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
72	41136072-Cut	30.4	4115 - Y.Birch, Hemlock NH	High Density Log	64	111-140	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal - Incomplete

Prescription: Cut all beech that exhibit symptoms bbd cut other trees as necessary to operate in the stand and remove the beech.

Specs:

Other

Comments:

Next Steps: If beech brush becomes an issue herbicide the beech brush. Planting of one or all of the following species oak, resistant beech stock, hemlock or white pine should be considered post harvest. Acceptable regeneration is any hardwood or conifer present on site except beech.

Proposed

Start Date: 10/01/2013

74	41136074-Cut	17.5	42110 - Planted Red Pine	High Density Pole	57		Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal - Incomplete
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Prescription: Row thin this red pine stand cut every third row mark trees if rows are not present mark for operability and quality.

Specs:

Other

Group with other stands in the area.

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2013

76	41136076-Cut	4.7	42290 - Natural Mixed Pine	High Density Log	66	171-200	Harvest	Crown Thinning	42210 - Natural Red Pine	Cmpt. Review Proposal - Incomplete
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Prescription: Thin this stand mark to improve crop trees, and stand diversity. Remove hardwood, fir, jack pine and spruce. Mark red and white pine Target BA for the stand is 100.

Specs:

Other

Retention will be sample of trees present in the stand using green paint to mark to leave.

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2013

79	41136079-Cut	89.4	42110 - Planted Red Pine	High Density Pole	57	111-140	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal - Incomplete
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Prescription: Row thin this red pine stand cut every third row mark trees if rows are not present mark for operability and quality.

Specs:

Other

Group with other stands in the area.

Comments:

Next

Steps:

Proposed

Start Date: 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
87	41136087-Cut	60.0	42110 - Planted Red Pine	High Density Log	58	81-110	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal - Incomplete

Prescription: This red pine stand is over 50 years old; a third row thin would improve growth on the trees left in the stand and leave all options on the table for future management. Mark trees for removal also cut all jack pine and aspen, remove white pine and red maple for access.

Other Comments: Group with stands on east side of H-58

Next Steps:

Proposed Start Date: 10/01/2013

16	41136016-Plant	8.1	4130 - Aspen	Low Density Sapling	15		Tree Planting	Hand Plant	42120 - Planted Jack Pine	Cmpt. Review Proposal - Incomplete
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Prescription: Jack pine should be planted use any approved methods to insure jack pine regeneration on the site.

Specs:

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2013

35	41136035-Plant	4.0	42220 - Natural Jack Pine	Low Density Sapling	8		Tree Planting	Hand Plant	42120 - Planted Jack Pine	Cmpt. Review Proposal - Incomplete
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Prescription: Trench and plant this stand it failed natural regeneration plant per TMS spec.

Specs:

Other Comments: A new FTP is needed. Include stand in 134 that failed as well.

Next Steps: Acceptable regeneration is red pine, jack pine, white pine, balsam fir, and spruce.

Proposed Start Date: 10/01/2013

47	41136047-Plant	7.5	42220 - Natural Jack Pine	Low Density Sapling	8		Tree Planting	Hand Plant	42120 - Planted Jack Pine	Cmpt. Review Proposal - Incomplete
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Prescription: Trench and plant this stand it failed natural regeneration plant per TMS spec.

Specs:

Other Comments: Needs new FTP.

Next Steps: Acceptable regeneration is red pine, jack pine, white pine, balsam fir, and spruce.

Proposed Start Date: 10/01/2013



Stand	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
51	41136051-Plant	5.1	42220 - Natural Jack Pine	Low Density Sapling	8		Tree Planting	Hand Plant	42120 - Planted Jack Pine	Cmpt. Review Proposal - Incomplete

Prescription Trench and plant this stand it failed natural regeneration plant per TMS spec.

Specs:

Other Needs a new FTP.

Comments:

Next Acceptable regeneration is red pine, jack pine, white pine, balsam fir, and spruce.

Steps:

Proposed

Start Date: 10/01/2013

81	41136081-Plant	104.6	42210 - Natural Red Pine	Medium Density Sapling	20		Tree Planting	Hand Plant	42120 - Planted Jack Pine	Cmpt. Review Proposal - Incomplete
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Prescription Stand has been trenched

Specs: Under FTP

Other

Comments:

Next Acceptable regeneration is red pine, jack pine, white pine, balsam fir, and spruce.

Steps:

Proposed

Start Date: 07/30/2012 4:01:20 PM

83	NF_41136083-Plant	67.2	3102 - Grass				Tree Planting	Hand Plant	42110 - Planted Red Pine	Cmpt. Review Proposal - Incomplete
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Prescription Under FTP

Specs:

Other

Comments:

Next Acceptable regeneration is red pine, jack pine, white pine, balsam fir, and spruce.

Steps:

Proposed

Start Date: 07/30/2012

**Total Treatment  
Acreage Proposed: 1234.1**



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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
	1.8	Unspecified				Harvest	Unspecified	Unspecified	Cmpt. Review Proposal - Incomplete

Prescription  
Specs:

Other  
Comments:

Next  
Steps:

Proposed  
Start Date:

<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
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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_OutOfYOE-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

**Total Treatment  
Acreage Proposed: 7.8**



Stand	Shingleton Mgt. Unit			5 – Forested Stands		Compartment: 136	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2014	
1	42110 - Planted Red Pine	High Density Pole	8.0	53	171-200		Row thin this stand.
2	42200 - Natural White Pine	High Density Pole	5.2	53	81-110		
3	42110 - Planted Red Pine	High Density Pole	7.7	53	141-170		This stand should be row thinned to improve growth.
4	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Pole	5.4	53	1-50		This is a failed red pine plantation it should be clearcut and replanted to jack pine.
5	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	4.2	53	51-80		This is a failed red pine plantation it should be clearcut and replanted to jack pine.
6	42110 - Planted Red Pine	High Density Log	57.2	59	141-170		Thined last YOE could thin for form this YOE or leave for Next YOE
13	42110 - Planted Red Pine	High Density Pole	29.0	59	171-200		This stand should be row thinned to improve growth.
16	4130 - Aspen	Low Density Sapling	8.1	15			This is a brushy aspen site that is not doing much, Pine in the area grows well it should be planted with pine either jack or red so it can become productive.
17	42290 - Natural Mixed Pine	High Density Log	43.5	89	141-170		A selection cut or thinning to 90-100 square feet would be beneficial focus on removing hardwood and selecting for quality.
18	42290 - Natural Mixed Pine	Medium Density Log	13.8	89	81-110		This stand is the Kingston lake campground as well as the Kingston lake access site.
20	42200 - Natural White Pine	High Density Log	18.8	89	51-80		This stand was cut using a shelterwood system regeneration looks good in a lot of places. When the regeneration become merchantable thin the stand.
21	42110 - Planted Red Pine	High Density Pole	97.1	50	111-140		This stand has varying stocking and quality a thinning might add some growth, thinning may also improve the diversity of the stand. If the stand is cut try and cut it with stands from the adjacent compartment.
22	429 - Mixed Upland Conifers	High Density Pole	10.8	56	111-140		
23	42100 - Planted White Pine	High Density Sapling	10.5	38	81-110		
26	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	70.6	Uneven Age	81-110		Cut with inmates in 2002, looks good for the most part, if areas of beech are found a salvage could be performed.
29	42110 - Planted Red Pine	High Density Pole	8.1	59	171-200		This stand should be row thinned to improve growth.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	42350 - Upland Hemlock	High Density Pole	9.6	74	81-110	
33	42290 - Natural Mixed Pine	High Density Log	3.0	75	200+	An island in kingston lake.
35	42220 - Natural Jack Pine	Low Density Sapling	4.0	8		This area needs more trenching and replanting, was under an FTP needs a new one now.
36	42110 - Planted Red Pine	High Density Pole	17.7	59	171-200	This stand should be row thinned to improve growth.
37	42290 - Natural Mixed Pine	High Density Pole	11.8	15		Stand borders Kingston Lake, it should be Factor limited for water quality.
38	42290 - Natural Mixed Pine	High Density Pole	14.2	56		
39	429 - Mixed Upland Conifers	High Density Log	2.1	85		Stand borders Kingston Lake, it should be Factor limited for water quality and access.
40	429 - Mixed Upland Conifers	High Density Log	3.0	85	81-110	Stand borders Kingston Lake, it should be Factor limited for water quality and access.
45	42210 - Natural Red Pine	High Density Pole	71.0	59	81-110	This stand has varying stocking and quality a thinning might add some growth, thinning may also improve the diversity of the stand.
46	42220 - Natural Jack Pine	High Density Sapling	2.9	29		
47	42220 - Natural Jack Pine	Low Density Sapling	7.5	8		This stand should be replanted to Jack Pine.
48	429 - Mixed Upland Conifers	High Density Pole	43.5	67	51-80	
51	42220 - Natural Jack Pine	Low Density Sapling	5.1	8		This stand needs to be retrenched and planted initial planting has failed and old FTP was closed.
52	42110 - Planted Red Pine	High Density Pole	7.7	59	1-50	Clearcut this stand plant Jack pine this time also leave some red pine and white pine to add diversity to the area.
53	42260 - Natural Pine, Mixed Deciduous	Medium Density Pole	12.1	40		
54	42350 - Upland Hemlock	High Density Log	10.7	81	81-110	This is a hemlock stand. The BBD killing front has passed and killed much of the beech. Beech would have been around 15 percent of the stand before BBD killed about half of the beech.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
55	4119 - Mixed Northern Hardwoods	High Density Log	28.6	81	81-110	This is a diverse hardwood stand. The BBD killing front has passed and killed much of the beech. Beech would have been around 25 percent of the stand before BBD killed about half of the beech.
56	4319 - Mixed Upland Forest	High Density Pole	9.7	58	51-80	Poorly stocked hardwood slowly filling in an opening when BA justifies thin this stand.
57	4117 - Mixed N. Hardwood - Pine	High Density Pole	21.8	68	81-110	This stand was thinned last year of entry there is still some beech in the stand.
59	4115 - Y.Birch, Hemlock NH	High Density Pole	40.2	62	111-140	Cut all beech and most red maple. A shelterwood for white pine and hemlock regeneration would be smart an herbicide treatment to set back reduce beech brush would be needed post harvest.
60	4319 - Mixed Upland Forest	High Density Pole	159.3	81	51-80	This stand is a mix of hemlock, white pine, red maple, beech, fir, birch and sugar maple. There is about 20% beech in the stand it's full of scale and dying much of the maple looks to be in poor shape as well, there is also a component of fir that is nearing maturity.
61	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	6.2	57		
62	4319 - Mixed Upland Forest	High Density Pole	88.3	76	81-110	Much of the beech in this stand has died there is still some product left so there should be a salvage harvest. This area was hemlock and white pine pre settlement there is a good amount of both species in both stands now a shelter wood harvest to 40-50 sf to improve the hemlock and white pine proportion of the stand.
63	429 - Mixed Upland Conifers	High Density Log	21.1	86	1-50	This stand is a mix of white pine and hemlock. There is some good regeneration in the understory. This area was cut last entry period with pine and hemlock reserved, it's an example of what I am looking to do in much of the hardwood in the compartment.
64	42200 - Natural White Pine	High Density Pole	138.3	48	51-80	
66	42220 - Natural Jack Pine	High Density Pole	106.0	60		This stand is a mature Jack Pine stand in an area with a high priority on visual management due to its proximity to PRNL and the amount of traffic County road H-58 receives. The should be cut but visual issues should be taken into account with the cut either being split or having a large area that can be buffered along public view.
70	42220 - Natural Jack Pine	High Density Pole	9.8	48		
71	42200 - Natural White Pine	High Density Pole	30.7	46		
72	4115 - Y.Birch, Hemlock NH	High Density Log	30.4	64	111-140	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
74	42110 - Planted Red Pine	High Density Pole	17.5	57		This stand is in poor shape the trees are small and poorly stocked it could be thinned be allowed to grow for a while or be restarted.
76	42290 - Natural Mixed Pine	High Density Log	4.7	66	171-200	
79	42110 - Planted Red Pine	High Density Pole	89.4	57	111-140	This stand has some natural appearance due to topography present, and some large trees that where here prior to 1955. This stand could use a thin of every third row its hard to fallow rows so in most cases it will be natural appearing try to mark for diversity
80	4112 - Maple, Beech, Cherry Association	High Density Log	61.6	81	81-110	This stand was cut in 97-98, it has vary thick regen. The stand is of better quality then surrounding stands. BA is still to low so waiting ten more years would be a good plan.
81	42210 - Natural Red Pine	Medium Density	104.6	20		This stand was under planted at some point in the past in 2007 the stand was chosen for the red pine project, it was clearcut in 2011 the stand is being trenched in 2012 and will be planted in 2013 there is much red pine as a result of the under planting
82	42200 - Natural White Pine	High Density Pole	4.1	50	81-110	
85	42200 - Natural White Pine	High Density Pole	19.3	58	81-110	
86	42110 - Planted Red Pine	High Density Pole	74.8	57	81-110	This is a failed red pine plantation in an area with a high priority on visual management due to its proximity to PRNLand the amount of traffic County road H-58 receives. A pattern of irregular clearcuts with scattered red pine seed trees could be tried these areas should be converted to Jack Pine as the site will likely support that species much better.
87	42110 - Planted Red Pine	High Density Log	60.0	58	81-110	
88	42200 - Natural White Pine	High Density Pole	4.7	58	1-50	
89	42200 - Natural White Pine	High Density Pole	9.3	58	1-50	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
7	330 - Low-Density Trees	4.1	N/A	Unspecified	
8	320 - Upland Shrub	55.6	N/A	Unspecified	
9	310 - Herbaceous Openland	1.8	N/A	Unspecified	
10	310 - Herbaceous Openland	1.3	N/A	Unspecified	
11	310 - Herbaceous Openland	1.3	N/A	Unspecified	
12	330 - Low-Density Trees	1.0	N/A	Unspecified	
14	730 - Mud Flats	1.1	N/A	Unspecified	
15	730 - Mud Flats	1.2	N/A	Unspecified	
19	310 - Herbaceous Openland	4.6	N/A	Unspecified	
24	710 - Sand, Soil	44.0	N/A	Unspecified	
25	710 - Sand, Soil	1.4	N/A	Unspecified	
27	310 - Herbaceous Openland	1.5	N/A	Unspecified	
28	320 - Upland Shrub	7.2	N/A	Unspecified	
31	50 - Water	94.3	N/A	Unspecified	
32	11 - Low Intensity Urban	9.1	N/A	Unspecified	
34	3302 - Low Density Conifer Trees	2.8	N/A	Unspecified	
41	320 - Upland Shrub	5.5	N/A	Unspecified	
42	730 - Mud Flats	1.6	N/A	Unspecified	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
43	50 - Water	1.0	N/A	Unspecified	
44	320 - Upland Shrub	4.3	N/A	Unspecified	
49	320 - Upland Shrub	4.3	N/A	Unspecified	
50	330 - Low-Density Trees	24.3	N/A	Unspecified	
58	330 - Low-Density Trees	3.1	N/A	Unspecified	
65	320 - Upland Shrub	1.9	N/A	Unspecified	
67	310 - Herbaceous Openland	12.1	N/A	Unspecified	
68	330 - Low-Density Trees	1.5	N/A	Unspecified	
69	320 - Upland Shrub	48.1	N/A	Unspecified	
73	11 - Low Intensity Urban	11.1	N/A	Unspecified	
75	330 - Low-Density Trees	8.1	N/A	Unspecified	
77	310 - Herbaceous Openland	255.8	N/A	Unspecified	
78	6233 - Wet Meadow	1.2	N/A	Unspecified	
83	3102 - Grass	67.2	Planted	Red Pine	
84	330 - Low-Density Trees	14.8	N/A	Unspecified	



### 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.

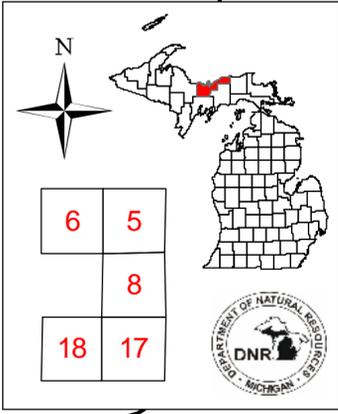
ERA = Ecological Reference Area  
HCVA = High Conservation Value Area  
SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Concentrated Recreation Area	Facilities that are designed and maintained for routine or heavy recreational use, including State Parks, State Forest campgrounds, motorized and non-motorized trails, trailheads, staging areas and public access sites.
SCA	Contiguous Resource Area	These are DNR-owned lands that are directly contiguous to adjacent ownerships, where there is potential for coordination of landscape-level management for similar purposes. Such lands include distinct but contiguous DNR-owned lands, such as State Parks, State Forest and Wildlife Areas. Such lands also include DNR-owned lands that are adjacent to other ownerships such as Federal Parks, National Forest wilderness areas, National Wildlife Refuges, conservancy lands, and private lands such as the Huron Mountain Club.
SCA	Visual Management Area	An area of general social appreciation that is managed to recognize and preserve a particular visual value. Examples of these areas include scenic vistas, scenic or natural beauty roads, and lakeshore areas.

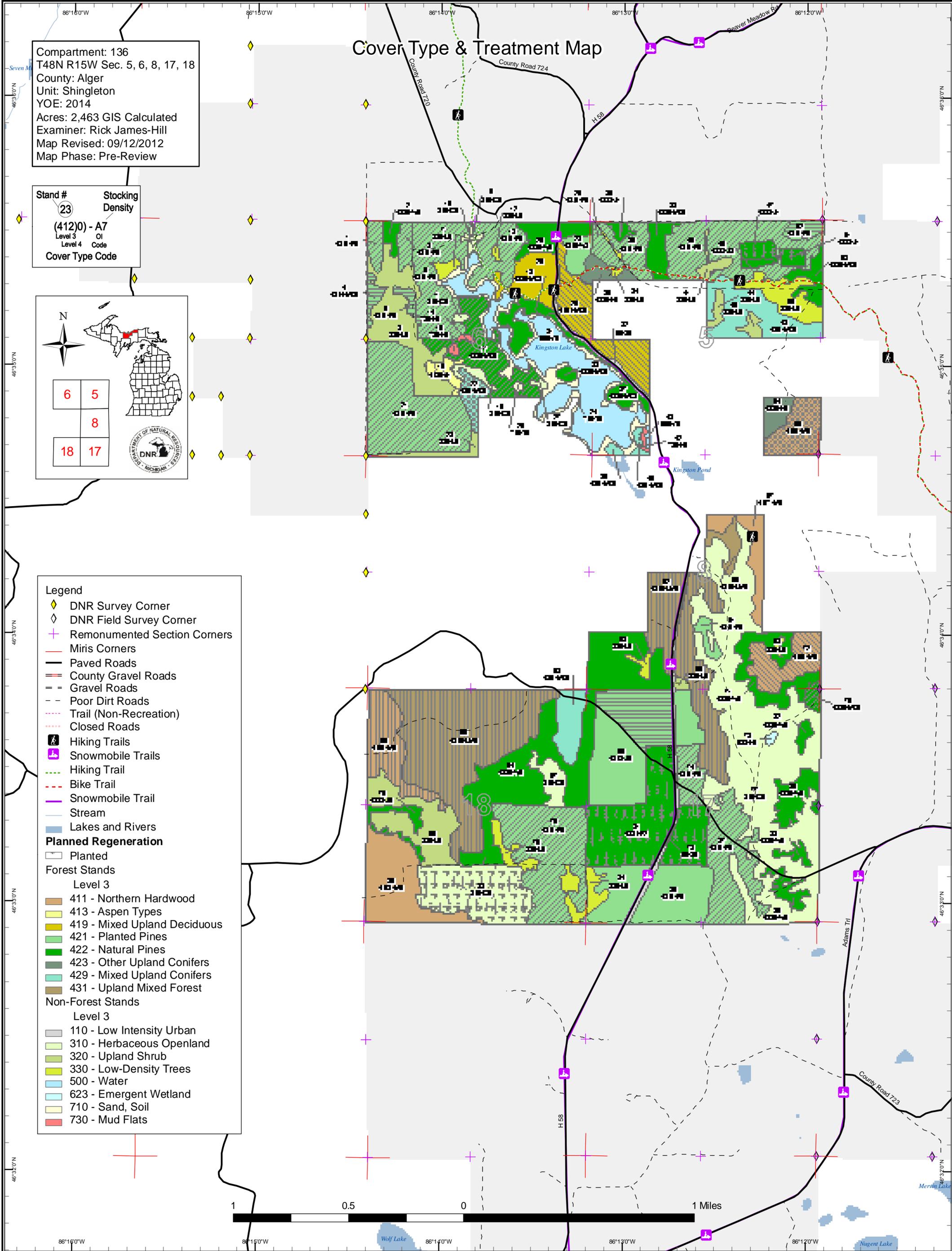
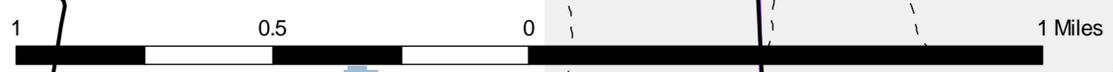
# Cover Type & Treatment Map

Compartment: 136  
 T48N R15W Sec. 5, 6, 8, 17, 18  
 County: Alger  
 Unit: Shingleton  
 YOE: 2014  
 Acres: 2,463 GIS Calculated  
 Examiner: Rick James-Hill  
 Map Revised: 09/12/2012  
 Map Phase: Pre-Review

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



- Legend**
- ◆ DNR Survey Corner
  - ◇ DNR Field Survey Corner
  - ⊕ Remonumented Section Corners
  - Miris Corners
  - Paved Roads
  - County Gravel Roads
  - Gravel Roads
  - Poor Dirt Roads
  - Trail (Non-Recreation)
  - Closed Roads
  - ⚡ Hiking Trails
  - ⚡ Snowmobile Trails
  - Hiking Trail
  - Bike Trail
  - Snowmobile Trail
  - Stream
  - Lakes and Rivers
- Planned Regeneration**
- Planted
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 421 - Planted Pines
  - 422 - Natural Pines
  - 423 - Other Upland Conifers
  - 429 - Mixed Upland Conifers
  - 431 - Upland Mixed Forest
- Non-Forest Stands**
- Level 3
- 110 - Low Intensity Urban
  - 310 - Herbaceous Openland
  - 320 - Upland Shrub
  - 330 - Low-Density Trees
  - 500 - Water
  - 623 - Emergent Wetland
  - 710 - Sand, Soil
  - 730 - Mud Flats

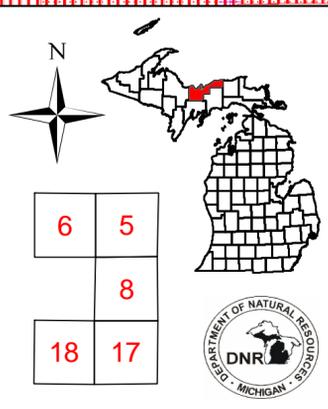




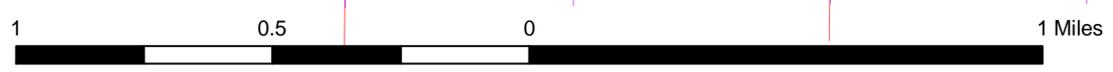
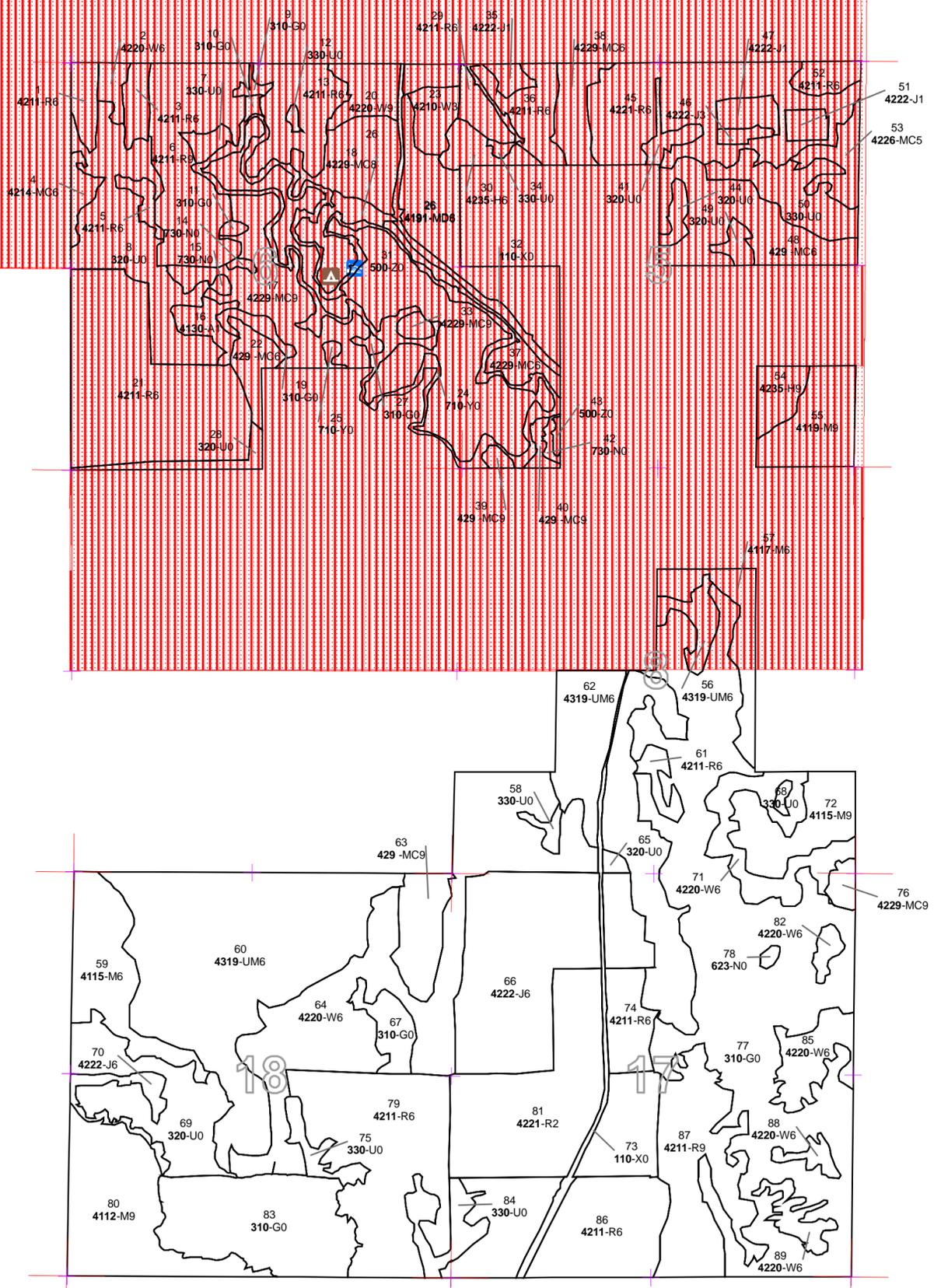
# Dedicated & Proposed Special Conservation Area Map

Compartment: 136  
 T48N R15W Sec. 5, 6, 8, 17, 18  
 County: Alger  
 Unit: Singleton  
 YOE: 2014  
 Acres: 2,463 GIS Calculated  
 Examiner: Rick James-Hill  
 Map Revised: 08/02/2012  
 Map Phase: Pre-Review

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



- 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
    - 429 - Mixed Upland Conifers
    - 431 - Upland Mixed Forest
  - Non-Forest Stands**
  - Level 3
    - 110 - Low Intensity Urban
    - 310 - Herbaceous Openland
    - 320 - Upland Shrub
    - 330 - Low-Density Trees
    - 500 - Water
    - 623 - Emergent Wetland
    - 710 - Sand, Soil
    - 730 - Mud Flats
  - Dedicated Special Conservation Areas**
  - ▲ Campgrounds
  - ⚓ Boat Access Sites
  - ▨ Visual Management Areas
  - ▤ Contiguous Resource Areas
  - Cold Water Streams



86°16'0"W      86°15'0"W      86°14'0"W      86°13'0"W      86°12'0"W

46°32'0"N  
46°31'0"N  
46°30'0"N  
46°29'0"N  
46°28'0"N

46°30'0"N  
46°29'0"N  
46°28'0"N  
46°27'0"N  
46°26'0"N