



# Report 1 – Compartment Review Presentation

## Traverse City Forest Management Unit

Compartment: 55

Entry Year: 2015

Acreage: 3,248

County: Grand Traverse

Management Area: Manistee River Valley

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### Revision Date:

Stand Examiner: Patrick Cotant

### Legal Description:

T27N-R09W-Sec. 9 - 16

### Identified Planning Goals:

The Pere Marquette State Forest Management Plan recognizes the area to be of Mixed Use. This is a blend of vegetative management and recreation.

### Soil and topography:

Rubicon sands are the dominant soil type throughout compartment with Lupton Mucks present in lowland areas and creek bottoms as well. In addition some Macelona Lake Loamy sands are present in small localized areas. This is indicative of the areas within the compartment that seem to have a slightly higher water table. Compartment is slightly rolling to rolling with occasional steep banks leading to Fife Lake Creek.

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

Scattered State – Private ownership within and around the comp. Heavy residential development occurring around comp. This area receives heavy recreational use throughout the year from skiers, bikers, hikers and hunters.

### Unique, Natural Features:

Bogs in Sec. 8

### Archeological, Historical, and Cultural Features:

We have thirteen sites recorded within this compartment. Five are on private land, so there are no concerns for those sites. There are several sites in the compartment in stands that may be slated for treatments.

Site of historic Fife Lake State Forest Headquarters is located within this compartment.

### Special Management Designations or Considerations:

Visual and BMP considerations Should be taken into account along all lakes, bogs, marshes, streams and recreational trails. If timber sales are conducted adjacent to the above mentioned areas, protection should be addressed during sale set up and also by using appropriate VMS sale specifications.

### Watershed and Fisheries Considerations:

The Fife Lake Outlet flows through Compartment 55. It is a Designated Trout Stream with self-sustaining populations of brown and brook trout. Headquarters Lake, Spring Lake, Twin Lake, and Pickerel Lake, also fall within the boundaries of Compartment 55. All offer decent fishing for species like bluegill, pumpkinseed sunfish, northern pike, and largemouth bass. BMPs should be followed for any treatments near these waters.

### Wildlife Habitat Considerations:

The SW half of the compartment lies on a steep moraine ridge (LTA 1111). Soils are sandy and excessively drained. Within this compartment, aspen stands, northern hardwoods, red pine plantations, and forested openings are located on this LTA type. The NE portion of Compartment 41 consists of a moraine ridge with well drained loamy sands (LTA 1122). Habitat types are similar to those of LTA 1111.

Ruffed grouse use different aged aspen throughout their life cycle. Younger stands provide cover while older stands provide catkins (food source) for the winter months. Within each compartment, clearcutting helps facilitate different sized aspen trees by mimicking the necessary disturbance vital for regeneration. The inclusion of coarse woody debris (cwd) for drumming logs and maintaining berry-producing shrubs is also desirable. Wildlife considerations for northern hardwood stands involve maintaining tree species diversification, the inclusion of den/nesting trees & snags, cwd, and maintaining a scattering of mast-producing trees/shrubs. This will insure use by many species of wildlife. Examples of species include scarlet tanager, raccoon, broad-winged hawk, wild turkey, and white-tailed deer. Many wildlife species rely on small forest

openings. These openings provide grassy nest sites, plentiful seeds and insects, and cover. Examples of species include northern flicker, eastern chipmunk, and blue racer. Handfelling with chainsaws may be needed to maintain this forest edge habitat.

### **Mineral Resource and Development Concerns and/or Restrictions**

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and minor coarse-textured till. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift are the Mississippian Marshall Sandstone and Coldwater Shale. The Marshall was previously used as a building stone. The nearest gravel pit is located in Section 33 and there could be potential, especially in the southeast. This area is located south of the prolific Niagaran reef trend. This Compartment is nominated for the May 2013 Oil & Gas Lease Auction, probably for the Collingwood Formation. The Antrim Shale has not been developed in this area and may be too deep.

### **Vehicle Access:**

No new roads are needed and no closures are recommended at this time.

### **Survey Needs:**

None needed.

### **Recreational Facilities and Opportunities:**

A spur from Snowmobile Trail #5 (Boardman Valley Snowmobile Trail) is located in the NW corner of this compartment. The North Country Trail & Shore to Shore non-motorized trail runs NE/SW midway through the compartment. Spring Lake, which is one of the oldest State Forest Campgrounds (designated in 1929) is located within this compartment. Proposed timber management activities should include trail protection specifications to reduce impacts, as well as serve as an example of how silviculturally sound timber harvesting practices can co-exist, and often improve recreation and hunting experiences for future generations. A non-winter harvest, coupled with avoiding the use of the trail as a haul route is suggested considerations. Any forest treatments within Spring Lake State Forest Campground should include: collaboration with PRD to develop timber harvest plan; specifications that will lessen impacts on users during camping season (winter cut only); "short-log" requirement to lessen potential damage to campground infrastructure and desirable understory vegetation; slash management to reduce logging debris on campsites, removal of hazard trees; and "flush-cut" stump requirement to reduce tripping/vehicle hazards in concentrated use areas.

### **Fire Protection:**

While this area is in Gr. Traverse Co., initial attack DNR forces are from the Manton office because of travel time. Traverse City DNR units respond also. Portions of sections 11 and 14 are in a zone dispatch area. Battalion #6-Fife Lake is the local VFD responding to this area.

### **Additional Compartment Information:**

#### **The following reports from the Inventory are attached:**

- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

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

# Cover Type & Treatment Map

Compartment: 055  
 T25N R09W  
 Sections 11, 13, 14, 23, 24, 25, 26, 35  
 County: Grand Traverse  
 Unit: Traverse City  
 YOE: 2015  
 Acres: 3,248 GIS Calculated  
 Examiner: Patrick Cotant  
 Map Revised: 05/28/2013  
 Map Phase: Web Post

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

11 13  
 14 23  
 24 25  
 26 35

N

### Legend

- Miris Corners
- Remonumented Section Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Railroads
- Lakes and Rivers
- Stream
- Intermittent Stream
- MCCCT Trail
- Snowmobile Trail
- Motorcycle (DNR Sticker)
- ORV Route
- Hiking Trail
- Horse Trail
- Hiking Trails
- Horse Trails
- MCCCT Trails
- ORV Routes
- Snowmobile Trails

### Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Seed Tree (w/Reserves)
- Shelter Wood (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Selection (Group, Single Tree)
- Other Treatment - See Comments

### Forest Stands

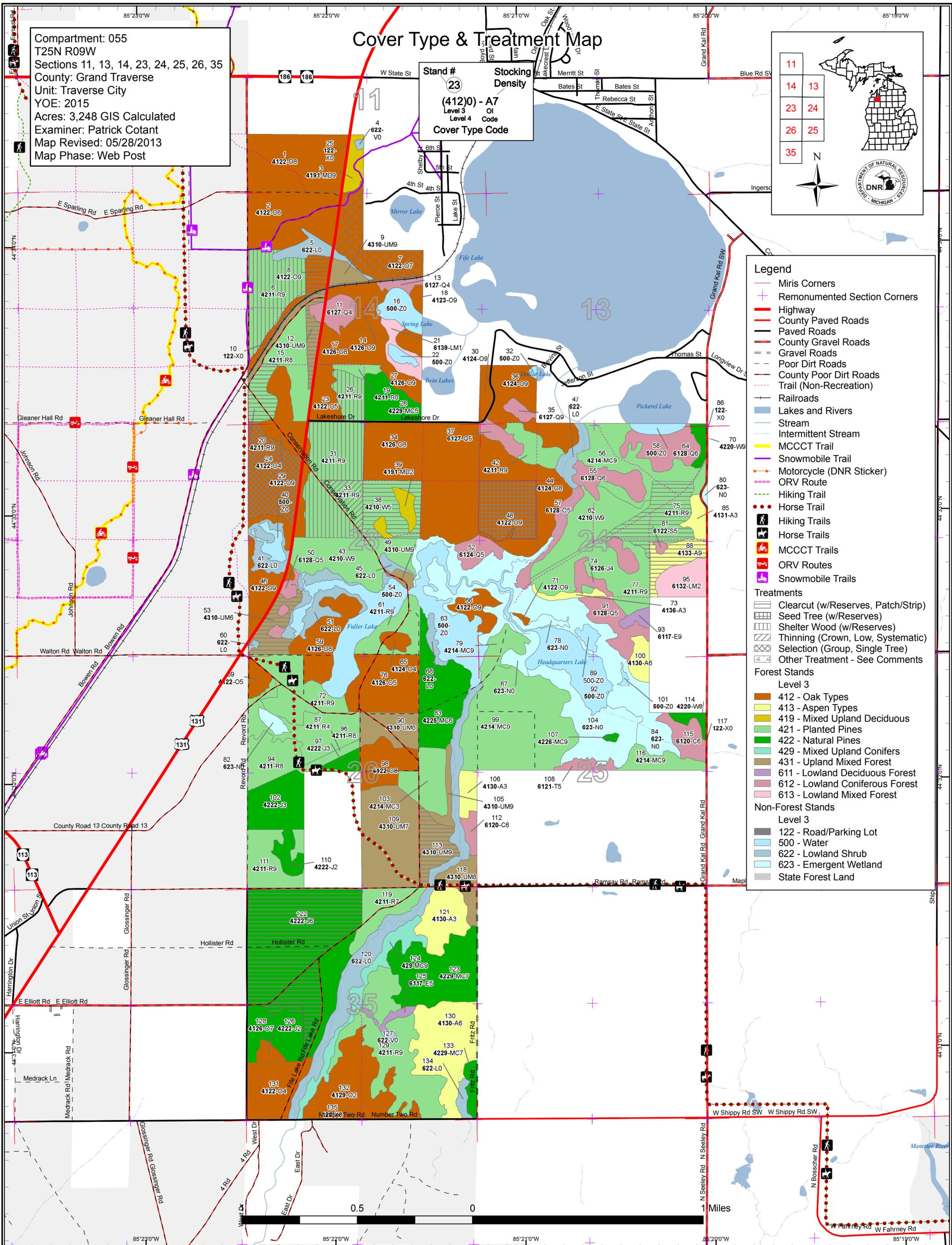
Level 3

- 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
- 613 - Lowland Mixed Forest

### Non-Forest Stands

Level 3

- 122 - Road/Parking Lot
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- State Forest Land



# Stand Boundary Map

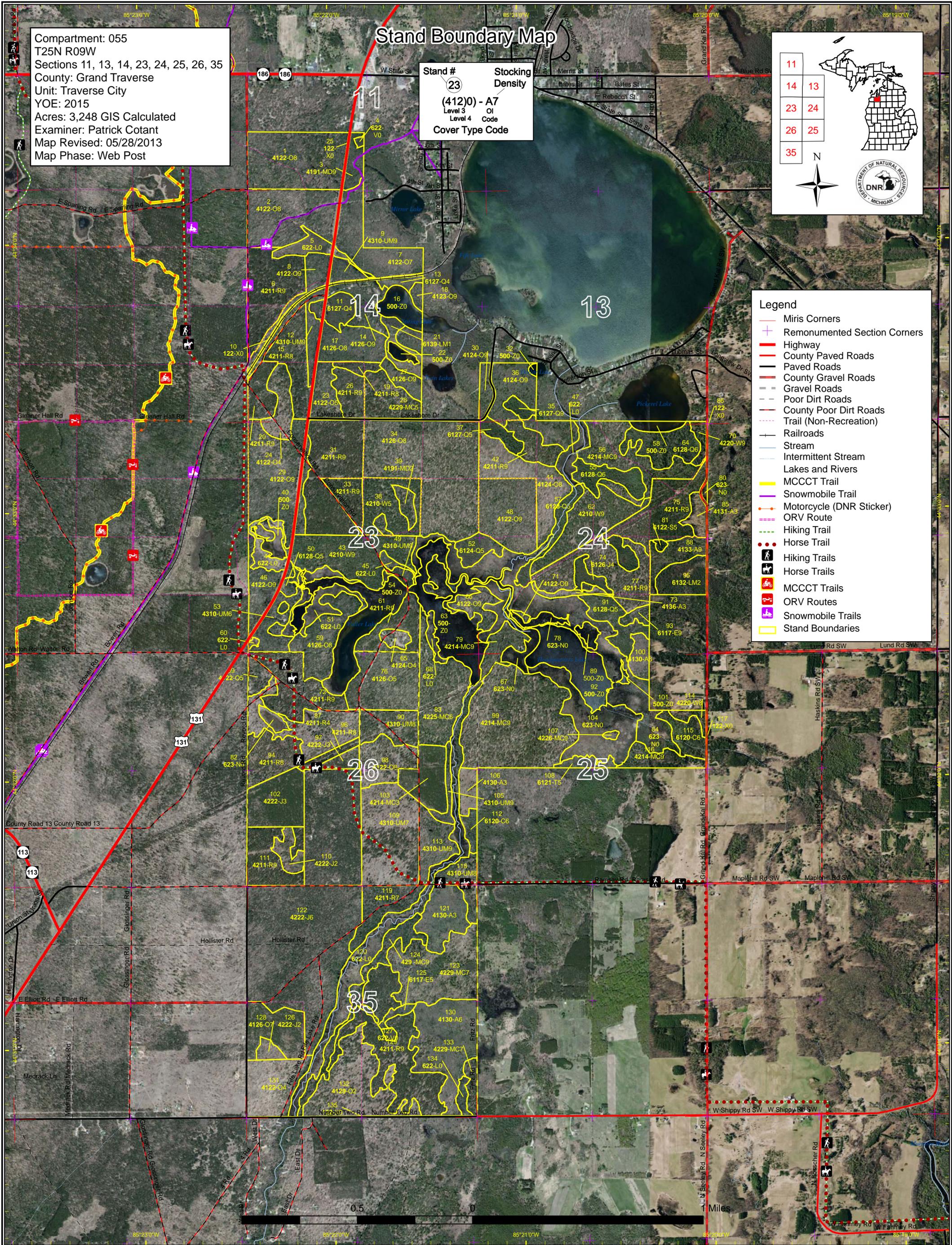
Compartment: 055  
 T25N R09W  
 Sections 11, 13, 14, 23, 24, 25, 26, 35  
 County: Grand Traverse  
 Unit: Traverse City  
 YOE: 2015  
 Acres: 3,248 GIS Calculated  
 Examiner: Patrick Cotant  
 Map Revised: 05/28/2013  
 Map Phase: Web Post

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

11	
14	13
23	24
26	25
35	

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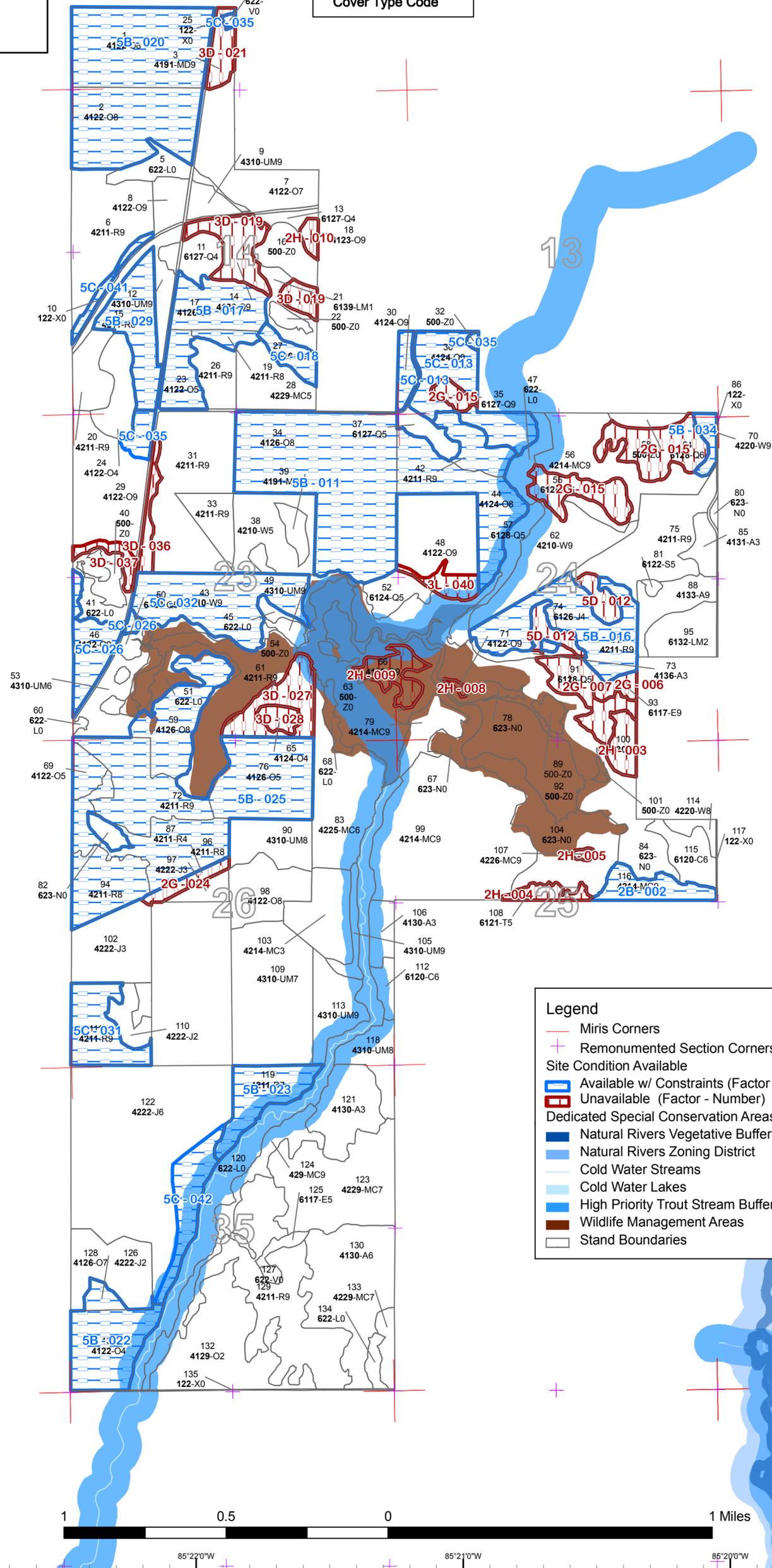
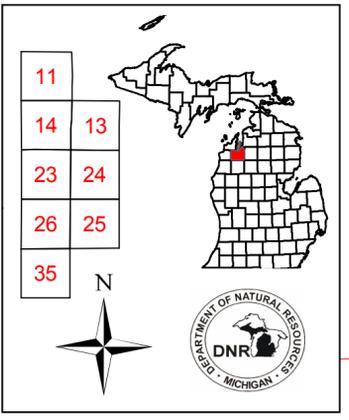
- ### Legend
- Miris Corners
  - Re monumented Section Corners
  - Highway
  - County Paved Roads
  - Paved Roads
  - County Gravel Roads
  - Gravel Roads
  - Poor Dirt Roads
  - County Poor Dirt Roads
  - Trail (Non-Recreation)
  - Railroads
  - Stream
  - Intermittent Stream
  - Lakes and Rivers
  - MCCCT Trail
  - Snowmobile Trail
  - Motorcycle (DNR Sticker)
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  - Hiking Trail
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  - Hiking Trails
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  - ORV Routes
  - Snowmobile Trails
  - Stand Boundaries



Compartment: 055  
 T25N R09W  
 Sections 11, 13, 14, 23, 24, 25, 26, 35  
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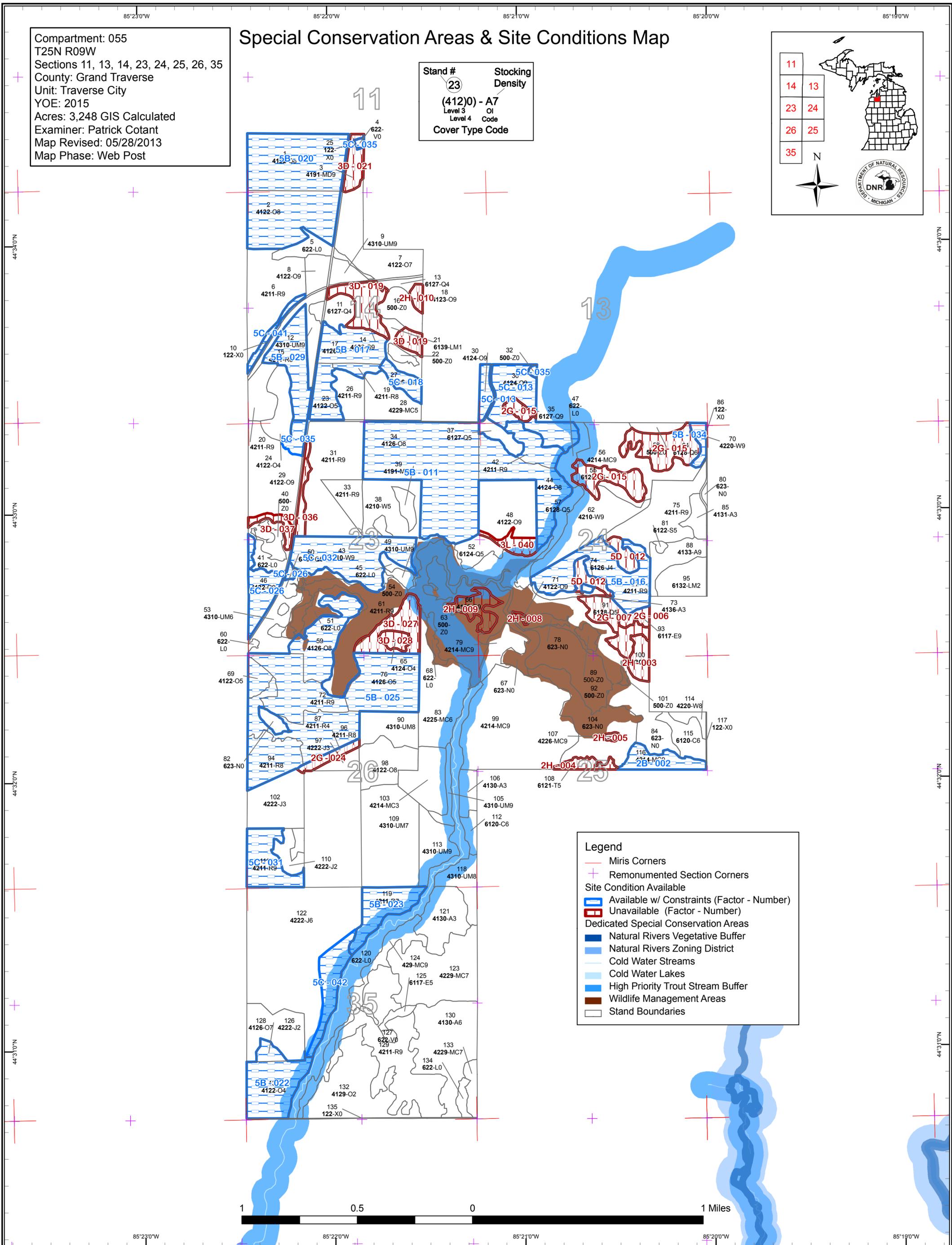
# Special Conservation Areas & Site Conditions Map

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



**Legend**

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



Report 2 – 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	14	36	0	77	9	0	0	0	0	0	0	0	0	137
Bog	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Cedar	0	0	0	0	0	0	0	0	15	0	0	6	0	0	21
Jack Pine	0	17	64	0	14	0	0	0	161	0	0	0	0	0	256
Lowland Conifers	0	0	5	0	19	13	0	20	0	44	20	5	0	0	126
Lowland Deciduous	0	0	0	0	0	5	0	0	5	0	0	0	0	0	10
Lowland Mixed Forest	0	0	10	19	0	0	0	0	0	0	0	0	0	0	29
Lowland Shrub	133	0	0	0	0	0	0	0	0	0	0	0	0	0	133
Lowland Spruce/Fir	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Marsh	187	0	0	0	0	0	0	0	0	0	0	0	0	0	187
Mixed Upland Deciduous	0	9	0	0	0	0	0	0	0	10	0	0	0	0	19
Natural Mixed Pines	0	0	0	0	0	0	61	7	24	50	0	0	0	0	142
Oak	0	58	0	18	0	0	0	26	169	200	345	34	0	0	850
Planted Mixed Pines	0	0	27	0	0	0	0	0	0	186	0	0	0	0	213
Red Pine	0	0	0	0	0	0	0	119	84	338	30	0	0	0	570
Tamarack	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6
Upland Conifers	0	0	0	0	0	0	0	0	26	0	0	0	0	0	26
Upland Mixed Forest	0	0	0	0	0	0	0	39	141	0	0	0	0	0	180
Urban	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Water	180	0	0	0	0	0	0	0	0	0	0	0	0	0	180
White Pine	0	0	0	0	0	0	0	0	0	135	0	0	0	0	135
<b>Total</b>	<b>528</b>	<b>99</b>	<b>143</b>	<b>37</b>	<b>110</b>	<b>27</b>	<b>69</b>	<b>210</b>	<b>625</b>	<b>961</b>	<b>395</b>	<b>45</b>	<b>0</b>	<b>0</b>	<b>3248</b>



# Report 3 – Proposed Treatment Summaries

Traverse City Mgt. Unit  
Year of Entry 2015

Compartment 055  
Total Compartment Acres: 3248

## Acres by Treatment Type

Commercial Harvest - 531    Tree Planting - 196    Other - 41  
Habitat Cut - 0    Opening Maintenance - 0

## Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen Types	17	0	0	0	0	0	17
Natural Pines	140	0	0	0	0	0	140
Oak Types	10	47	39	0	0	0	96
Planted Pines	87	0	0	127	14	0	228
Upland Mixed Forest	50	0	0	0	0	0	50
<b>Total</b>	<b>304</b>	<b>47</b>	<b>39</b>	<b>127</b>	<b>14</b>	<b>0</b>	<b>531</b>



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
<b>6 61055006_Edt -Cut</b>	48.3	42110 - Planted Red Pine	High Density Log	90	141-170	Harvest	Shelterwood	4122 - Oak, Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Harvest overstory red pine in an attempt to release oak regeneration while leaving some red pine on site to provide shade/protection for oak regen. Mark to leave approximately 20-40 BA of red pine. In addition, delineate 2-3 islands along western edge of stand to account for visual concerns along snowmobile trail.</p> <p><u>Specs:</u></p> <p><u>Other</u> Oak and red maple regen is very dense, some damage to this regen should be expected during harvest operations. If snowmobile trail is used for hauling operations use appropriate sale specs for protection of trail.</p> <p><u>Comments:</u></p> <p><u>Next</u> Monitor regeneration following harvest.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2014</p>									

<b>8 61055008_Edt -Cut</b>	9.9	4122 - Oak, Pine	High Density Log	89	81-110	Harvest	Clearcut with Reserves	42250 - Pine, Oak	Cmpt. Review Proposal
<p><u>Prescription</u> Final harvest stand. Leave all white pine and mark to leave a few white oak near 131 corridor. Some small diameter white pine will need to be removed to conduct harvest operations. Exclude narrow finger along railroad track from sale area.</p> <p><u>Specs:</u></p> <p><u>Other</u></p> <p><u>Comments:</u></p> <p><u>Next</u></p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2014</p>									

<b>12 61055012_Edt -Cut</b>	11.5	4310 - Pine, Oak Mix	High Density Log	89	81-110	Harvest	Clearcut with Reserves	42250 - Pine, Oak	Cmpt. Review Proposal
<p><u>Prescription</u> Final harvest stand, leave all white pine - mark to leave some descent quality white oak throughout stand (&lt;10BA). Exclude narrow finger along railroad track, also be mindful of lowland in northern portion of stand during sale set up. A small set back should be adequate to avoid any environmental concerns.</p> <p><u>Specs:</u></p> <p><u>Other</u></p> <p><u>Comments:</u></p> <p><u>Next</u></p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2014</p>									

<b>20 61055020-Cut</b>	15.7	42110 - Planted Red Pine	High Density Log	85	81-110	Harvest	Clearcut	42110 - Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Final harvest and replant to red pine.</p> <p><u>Specs:</u></p> <p><u>Other</u> Shore-to-shore riding/hiking trail runs along west edge of stand. Use appropriate sale specs to ensure trail protection.</p> <p><u>Comments:</u></p> <p><u>Next</u> Replant to red pine at plantation spacing following harvest.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2014</p>									

<b>26 61055026_Edt -Cut</b>	15.3	42110 - Planted Red Pine	High Density Log	84	111-140	Harvest	Shelterwood	42250 - Pine, Oak	Cmpt. Review Proposal
<p><u>Prescription</u> Mark to leave approximately 20-40 BA of red pine, white pine and oak (preferably white oak). Apply basically the same treatment as stand directly to the east, exceptional regeneration is present within this stand.</p> <p><u>Specs:</u></p> <p><u>Other</u></p> <p><u>Comments:</u></p> <p><u>Next</u> Monitor regen of stand following harvest.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2014</p>									



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
29 61055029-Cut	47.3	4122 - Oak, Pine	High Density Log	94	81-110	Harvest	Single Tree Selection	4122 - Oak, Pine	Cmpt. Review Proposal

Prescription Remove all pin oak and jack pine. Leave all red and white pine and mark to leave approximately 20 BA of white oak. Exclude area east of 131 along with pocket of large WP in northeast corner of stand from sale area. In addition, delineate a buffer along lowland area at southern edge of stand. Treatment area reflects these exclusions however this is only an approximation and may be slightly different at time of sale set up.

Other Comments: Shore-to-shore riding/hiking trail runs along west edge of stand. Use appropriate sale specs for trail protection.

Next Steps:

Proposed Start Date: 10/01/2014

31 61055031-Cut	63.1	42110 - Planted Red Pine	High Density Log	93	111-140	Harvest	Shelterwood	42250 - Pine, Oak	Cmpt. Review Proposal
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Prescription Remove majority of overstory red pine while marking to leave approximately 20-40 BA of red pine to continue to serve as protection/shade for advanced oak regen while also providing a red pine seed source.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2014

33 61055033-Cut	13.9	42110 - Planted Red Pine	High Density Log	93	111-140	Harvest	Crown Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
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Prescription Thin red pine focusing on removing approximately 1/3 of the overall volume. Focus on removing intermediate/suppressed trees while also removing any defect that is still present. In addition, remove utility pole class trees for spacing in order to achieve appropriate stocking.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2014

38 61055038-Cut	30.6	42100 - Planted White Pine	Medium Density Pole	99	51-80	Harvest	Clearcut with Reserves	4191 - Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
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Prescription Remove white pine overstory to release oak regeneration. Mark to leave approximately 10-20 BA of white pine to serve as shelterwood for remaining regen while also providing a seed source to increase diversification of regen. In addition, delineate a couple small islands (~1 ac each) in northwest portion of stand in order to maintain some structural diversity.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2014



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
48 61055048-Cut	38.6	4122 - Oak, Pine	High Density Log	106	81-110	Harvest	Seed Tree with Reserves	4122 - Oak, Pine	Cmpt. Review Proposal

Prescription Mark to leave approximately 10-30 BA throughout stand, consisting mainly of white pine and white oak. Leave portion of stand south of "40" line, adjacent to lowland out of sale area to maintain a riparian buffer and to specifically enhance wood duck habitat. Some more traditional final harvest areas within stand are acceptable in order to diversify vertical structure within stand.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2014

53 61055053-Cut	17.2	4310 - Pine, Oak Mix	High Density Pole	79	81-110	Harvest	Clearcut with Reserves	42250 - Pine, Oak	Cmpt. Review Proposal
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Prescription Final harvest removing jack pine, red maple, aspen and pin oak. Leave red and white pine along with white oak.

Other Comments: Small lowland areas adjacent to stand have been mapped however some areas of higher water table may exist within stand boundary and should be avoided during sale set up.

Next Steps:

Proposed Start Date: 10/01/2014

75 61055075_Edt -Cut	41.2	42110 - Planted Red Pine	High Density Log	92	111-140	Harvest	Clearcut	42110 - Planted Red Pine	Cmpt. Review Proposal
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Prescription Final harvest stand, trim off portion of stand adjacent to Grand/Kal rd to address visual aesthetics. In addition, mark to leave a couple islands in southern portion of stand, adjacent to stand 88 to account for retention. A few individual trees may be marked throughout stand as well for retention, to address visual concerns and to provide for a seed source. Consider adding chipping spec to sale in order to minimize slash for planting operations.

Other Comments:

Next Steps: Replant stand to red pine following harvest. Address the need for site prep following harvest. If needed, roller chop stand to reduce competition and slash height.

Proposed Start Date: 10/01/2014

88 61055088-Cut	16.9	4133 - Aspen, Mixed Pine	High Density Log	43	81-110	Harvest	Clearcut with Reserves	4133 - Aspen, Mixed Pine	Cmpt. Review Proposal
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Prescription Final harvest aspen and red maple, mark to leave scattered red and white pine. In central portion of stand, south of small treed bog there is a higher concentration of pine. Delineate this island and harvest all aspen and red maple within it while leaving all pine in this small area.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2014



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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113	61055113-Cut	21.7	4310 - Pine, Oak Mix	High Density Log	74	81-110	Harvest	Clearcut with Reserves	4122 - Oak, Pine	Cmpt. Review Proposal
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Prescription Final harvest, marking to leave some larger white oak and red pine. Harvest all jack pine, aspen and red maple regardless of size - cut all other trees greater than 4.5".  
Specs: Exclude large white pine along eastern edge from sale area, adjacent to creek.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2014

122	61055122-Cut	113.7	42220 - Natural Jack Pine	High Density Pole	87	81-110	Harvest	Clearcut	42120 - Planted Jack Pine	Cmpt. Review Proposal
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Prescription Final harvest all species. Delineate small islands throughout stand to help address aesthetics while also providing a seed source. These islands should be concentrated near large red pine and oak. In addition, mark to leave a few individual trees, preferably red pine and white oak to serve as mast/seed producers. There is significant regeneration of oak, pine species, etc along with many shrub species throughout stand that should be protected where possible during harvest operations.

Other Comments: Following harvest, if there are areas in northern portion of stand that are open enough to plant, these areas should be replanted to red pine.

Next Steps: If deemed desirable following harvest, replant open areas in northern portions of stand to red pine. These will be pockets of red pine surrounded by larger areas of natural regeneration.

Proposed Start Date: 10/01/2014

122	61055122-Cut_small	25.9	42220 - Natural Jack Pine	High Density Pole	87	81-110	Harvest	Clearcut	42120 - Planted Jack Pine	Cmpt. Review Proposal
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Prescription Final harvest all jack pine - mark to leave some clumps/islands of JP, oak and red pine. In addition, mark to leave a few white oak to serve as mast/seed producers. Less dense understory in this portion of stand, however regen should be protected where possible.

Other Comments:

Next Steps: If funding is available for prescribed burning, consider burning all or portions of stand south of Elliott road with the goal being opening maintenance. Also, promote blueberry shrub understory where possible throughout this portion of stand.

Proposed Start Date: 10/01/2014

	61055009-Cut_2_Other	41.4					Other	Unspecified	4122 - Oak, Pine	Successful Completion - Pending Next Step
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Prescription  
Specs:

Other Comments:

Next Steps:

Proposed Start Date: 04/02/2013

**Total Treatment Acreage Proposed: 572.1**



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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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#Type!

Prescription  
Specs:

Other  
Comment:

Next  
Steps:

Proposed  
Start Date: #Type!

Limiting Factor

**Total Treatment  
Acreage Proposed: 0**

Report 6 – Out of YOE – Treatments  
 Prescribed with No Limiting Factor

Year of Entry: 2015



Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
28218	5.9	Unspecified				Harvest	Other - Specify in Comments	Unspecified	Cmpt. Review Proposal

Prescription Specs:

Other Comments:

Next Steps:

Proposed Start Date:

28219	7.2	Unspecified				Harvest	Other - Specify in Comments	Unspecified	Cmpt. Review Proposal - Incomplete
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Prescription Specs:

Other Comments:

Next Steps:

Proposed Start Date:

61043_OutOfY OE-Cut	2.1					Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal - Incomplete
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Prescription Specs: retain some pine and oak for mast and seed production, Follow WLD guidance for CWD creation. Harvest all stems that are not retained.

Other Comments: New stand should have mix of oak, pine, aspen and maple.

Next Steps:

Proposed Start Date: 09/01/2009

**Total Treatment Acreage Proposed: 15.3**

## Report 7 – Site Conditions

Traverse City Mgt. Unit

Patrick Cotant : Examiner

Compartment 055

Year of Entry 2015

### Availability for Management

Total Acres	Acres		Dominant Site Conditions	Dominant Site Conditions								
	Available	Not Available		No	5D	5C	5B	3L	3D	2H	2G	2B
137	128	9	Aspen	128						9		
21	21		Cedar	21								
256	241	14	Jack Pine	220	14	21						
125	57	69	Lowland Conifers	57							69	
10	5	5	Lowland Deciduous	5							5	
29	29		Lowland Mixed Forest	29								
1	1		Lowland Spruce/Fir	1								
19	9	10	Mixed Upland Deciduous	9					10			
142	140	1	Natural Mixed Pines	140						1		
850	781	69	Oak	239		86	456	8	43	17		
213	213		Planted Mixed Pines	197								16
570	542	28	Red Pine	281		26	234		22		6	
6		6	Tamarack							6		
26	26		Upland Conifers	26								
179	179		Upland Mixed Forest	179								
135	135		White Pine	76		54	5					
2,719	2,508	211	Total Forested Acres	1,609	14	187	696	8	75	34	80	16
	92%	8%	Relative Percent									

*\*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
002	Available	2B: Unknown if access through adjacent landowner(s) is possible	16				
<p><b>Comments:</b> Access would require adjacent landowner permission. Stand is variable in terms of stocking, most likely will not pursue access during this YOE.</p>							

## Report 7 – Site Conditions

Traverse City Mgt. Unit

Patrick Cotant : Examiner

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003	<b>Not Available</b>	<b>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</b>	9	2B: Unknown if access through adjacent landowner(s) is possible	
<b>Comments:</b>					
004	<b>Not Available</b>	<b>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</b>	6	4A: No merchantable products (see product standards)	
<b>Comments:</b>					
005	<b>Not Available</b>	<b>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</b>	1		
<b>Comments:</b>					
006	<b>Not Available</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	5		
<b>Comments:</b>					
007	<b>Not Available</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	20		
<b>Comments:</b>					
008	<b>Not Available</b>	<b>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</b>	1		
<b>Comments:</b>					

# Report 7 – Site Conditions

Traverse City Mgt. Unit  
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009	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	13
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Comments:

010	Not Available	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3
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Comments:

011	Available	5B: Retention for regeneration purposes	176
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Comments:

012	Not Available	5D: Unproductive Forest Land	14
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Comments:

013	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	45
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Comments:

015	Not Available	2G: Too wet (sensitive soils, does not include access issues)	48
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Comments:

## Report 7 – Site Conditions

Traverse City Mgt. Unit

Patrick Cotant : Examiner

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016	Available	5B: Retention for regeneration purposes	51	
<b>Comments:</b>				
017	Available	5B: Retention for regeneration purposes	48	
<b>Comments:</b>				
018	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	
<b>Comments:</b>				
019	Not Available	3D: Recreational / Scenic values	26	
<b>Comments:</b> Sprin Lake State Forest Campground - some hazard tree and oak wilt removal has been done within stand.				
020	Available	5B: Retention for regeneration purposes	123	
<b>Comments:</b>				
021	Not Available	3D: Recreational / Scenic values	10	
<b>Comments:</b>				

Report 7 – Site Conditions

Traverse City Mgt. Unit  
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022	Available	5B: Retention for regeneration purposes	41
Comments:			
023	Available	5B: Retention for regeneration purposes	25
Comments:			
024	Not Available	2G: Too wet (sensitive soils, does not include access issues)	6
Comments:			
025	Available	5B: Retention for regeneration purposes	197
Comments:			
026	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	20
Comments:			
027	Not Available	3D: Recreational / Scenic values	22
Comments:			

## Report 7 – Site Conditions

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028	Not Available	3D: Recreational / Scenic values	6	3I: Historical / archeological (add locked comments)	
<b>Comments:</b>					
029	Available	5B: Retention for regeneration purposes	30		
<b>Comments:</b>					
031	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	26		
<b>Comments:</b>					
032	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	54	5B: Retention for regeneration purposes	
<b>Comments:</b>					
034	Available	5B: Retention for regeneration purposes	5		
<b>Comments:</b>					
035	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	8	No Limiting Factor	
<b>Comments:</b>					

## Report 7 – Site Conditions

Traverse City Mgt. Unit  
Patrick Cotant : Examiner

Compartment 055  
Year of Entry 2015

036	Not Available	3D: Recreational / Scenic values	7	No Limiting Factor
<b>Comments:</b>				
037	Not Available	3D: Recreational / Scenic values	5	
<b>Comments:</b> Stand provides scenic values along US131 as well as adjacent to lowland/wetland area. Also provides wildlife habitat - specifically nesting opportunities.				
040	Not Available	3L: Other wildlife concerns	8	3J: Water quality / BMPs (stream, river, or lake)
<b>Comments:</b> Stand is adjacent to lowland/headwaters flooding. Delineated this area of original stand 48 to provide enhanced nesting opportunities for wood duck and other water fowl.				
041	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	
<b>Comments:</b>				
042	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	21	
<b>Comments:</b>				



### Report 8 – PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
<b>Comments</b>				



**Report 9 – DEDICATED CONSERVATION AREA DETAILS**

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

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

Conservation Area	Type	Description
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4122 - Oak, Pine	Medium Density Log	66.1	97	51-80	Mixed stand of pine and oaks, treated 15-20 yrs previously. Dense oak and red maple regen with pockets of scattered white pine regen. Variability in terms of canopy coverage, some openings filling in w/ dense regen. Two small lowland areas exist east of trail that runs through stand. Not large enough to map based on current mapping standards. Old comment - Good regen.
2	4122 - Oak, Pine	Medium Density Log	56.6	84		TS# 6102811. TCR 3/12 Cut by different diameter limits Cut all white oak and wp 18" /larger. Cut all rp 14" /larger and also cut all red maple. aspen and jp.
3	4191 - Mixed Upland Deciduous with Conifer	High Density Log	9.7	99	111-140	Small oak/pine stand with WP understory along with some red maple and occasional oaks. Stand is in a small valley, provides nice visual buffer along 131 and snow trail.
6	42110 - Planted Red Pine	High Density Log	48.3	90	141-170	Good quality red pine, dense understory of red maple and oaks. Some defect present in red pine - consider thinning or could seed tree to promote rp/oak dynamic. Oak species and red maple are uniformly quite dense throughout stand and will most likely respond to being released.
7	4122 - Oak, Pine	Low Density Log	41.4	106	1-50	Stand is being harvested during inventory cycle. Was sold, turned back in and resold under contract 61-030-11-01, sale name 'The End'.
8	4122 - Oak, Pine	High Density Log	14.9	89	81-110	Oak pine stand along both sides of rr tracks, separated due to stand mapping rules but are essentially the same stand. White pine are good quality, red oak species seem to be declining, white oak are descent quality.
9	4310 - Pine, Oak Mix	High Density Log	7.5	87	111-140	Small oak/pine stand wedged between lowland, rr tracks and 131 - resulting in difficult access. A few large red pine present in stand.
11	6127 - Lowland Pine	Low Density Pole	13.0	50	1-50	swapped to a low stocked forested stand, contains enough wp to categorize as 25-50% canopy closure - probably more on the low end of that percentage range. lots of dead standing snags, west of 131 is more shrubby. old comment - The JP is dead. Some white pine growing in. I called the east a treed bog, while west of the highway, it came out to be a mixed lowland shrub. Stand swapped from Non-Forested to Forested.
12	4310 - Pine, Oak Mix	High Density Log	16.2	89	81-110	Oak pine stand along both sides of rr tracks, separated due to stand mapping rules but are essentially the same stand. White pine are good quality, red oak species seem to be declining, white oak are descent quality.
13	6127 - Lowland Pine	Low Density Pole	4.7	29	1-50	small bog stand at northern edge of silver lk. some overstory oak/pine near edges. old comment - small pocket of log size oak and pine in northern part of stand



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	4126 - White, Black, N. Pin Oak	High Density Log	25.6	101	81-110	Oak/pine stand containing Spring Lake Forest Campground. Some oaks have been removed adjacent to campsites for hazard tree purposes. Original stand was split E/W and southern portion of stand was treated. Old Comment - North half of stand is Spring Lake State Forest Campground and boat launch
15	42110 - Planted Red Pine	Medium Density Log	30.4	93	51-80	Red pine stand that has been thinned multiple times, growing well, Dense oak and white pine regen in places. Variable stocking in places, BA ranges from 20-110 with an average around 60-70 sq ft/ac. Some pockets of stand contain greater amounts of white pine in the pole/log size class.
17	4126 - White, Black, N. Pin Oak	Medium Density Log	27.0	107	51-80	Regeneration coming in well, significant amount of WP, red maple, oak species and some scattered aspen. TS# 029-11. TCR 03/12 Harvested all aspen and red maple and marked oak and white pine.
18	4123 - Red Oak	High Density Log	3.3	90	111-140	Stand is isolated and inaccessible for equipment due to lowland, lake and PVT property being adjacent to stand. in-accessable stand along the NE side of Spring Lake
19	42110 - Planted Red Pine	Medium Density Log	5.2	84	81-110	Similar to adjacent red pine areas however this stand contains relatively pure red maple regen in the 15-25' range. Red pine is of good quality, growing well. Variable BA in places, some areas high while other areas are quite open. Some defect remains in red pine canopy. New stand added.
20	42110 - Planted Red Pine	High Density Log	15.7	85	81-110	
21	6139 - Mixed Lowland Forest	Low Density Sapling	10.0	24		Low stocked stand with red maple and spruce scattered evenly throughout. Alder 'groundcover' with occasional patches of leatherleaf.
23	4122 - Oak, Pine	Medium Density Pole	15.6	84	51-80	Mixed oak, pine stand, somewhat open. Areas dominated by pine but found that pin oak makes up majority of canopy. Descent oak regen in places, pockets of white pine regen as well. New stand added.
24	4122 - Oak, Pine	Low Density Pole	18.0	36	1-50	Lightly stocked stand, variable size classes throughout. Overall poor quality however stand is producing some descent regeneration. Some open areas within stand. Red pine pole/log sized trees are present in northern/eastern portions of stand.
26	42110 - Planted Red Pine	High Density Log	15.3	84	111-140	Red pine plantation w/ oak throughout. some white pine as well. Red pine is growing well, understory of oak, red maple and white pine is advancing nicely.
27	4126 - White, Black, N. Pin Oak	High Density Log	9.2	99	81-110	Relatively small stand is on a slope towards lake/lowland. Large white pine scattered throughout. White oak are most numerous of oak species, growing well. White pine regen is doing good, dense in places. Lots of wildlife use, large stick nest in white pine near northern stand edge.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	42290 - Natural Mixed Pine	Medium Density Pole	24.2	85	81-110	Red pine/white pine stand with dense oak and white pine understory. Treated 2 entry years ago, Canopy closure is variable, dense in places, open to regen underneath in other locations. Some pockets more dense to white pine, others to red pine. Red pine most dense along Lakeshore drive..
29	4122 - Oak, Pine	High Density Log	66.4	94	81-110	Oak/pine stand, some areas more dense to pine. scattered jack pine, some dead standing JP as well. Stand is a multi-part polygon with sliver of stand existing east of 131. If treated, leave portion of stand east of 131.
30	4124 - Red with White Oak	High Density Log	7.1	98	81-110	Oak pine stand, large diameter oak and white pine. Understory of white pine is growing well. Small stand, adjacent to road and PVT property. White oak tends to be more prevalent in southern portions of stand while true red oak is more common in northern portion of stand.
31	42110 - Planted Red Pine	High Density Log	63.1	93	111-140	Good quality red pine stand, growing well. Understory is occupied by very dense oak saplings in the 10-15' range, also some WP and red maple present. White pine present in small amounts in the overstory as well.
33	42110 - Planted Red Pine	High Density Log	13.9	93	111-140	Red pine stand growing well, thinned 2-3 times. Oak is dense in understory, however not as dense as in pre-inventory stand 29. Consider thinning stand by removing 1/3 of the volume, focusing mainly on removing defected, intermediate or otherwise poorly formed trees while also removing some larger diameter individuals for spacing purposes. This will open stand up significantly but will hopefully continue to provide diffused shade to oak saplings providing further shelter while also allowing red pine to fully develop into utility pole size class.
34	4126 - White, Black, N. Pin Oak	Medium Density Log	119.6	107	51-80	Oak/pine stand with pretty good, diverse regeneration. Some areas of regen are more dense with other pockets being devoid of substantial regen. Overstory density is also variable in places.
35	6127 - Lowland Pine	High Density Log	4.7	110	51-80	White pine, black spruce lowland forest with leatherleaf throughout understory. Hummocks throughout with standing water in between in many places. A few very large WP are present along southern edge of stand.
36	4124 - Red with White Oak	High Density Log	37.9	104	111-140	Oak pine stand with variable species composition. occasional pockets of red pine. some large white pine present as well. Dense white pine understory in spots. Oak is old, still growing well however. Canopy closure is variable, averages in the 80% range, providing good shade for white pine regen. Old comment - Indian burial mounds found in this stand
37	6127 - Lowland Pine	Medium Density Pole	8.5	76	51-80	Variable lowland conifer stand with some e-type species throughout. Some variability in terms of overall stocking, scattered open pockets with reduced BA. Very narrow strip along edge of stand contains some upland species including red pine, majority of which is along southern edge of stand, adjacent to pre-inventory stand 126. Some wildlife use w/in stand. Black spruce and tamarack regen common in understory.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
38	42100 - Planted White Pine	Medium Density Pole	30.6	99	51-80	WP stand which has been treated in the past, growing fairly well with descent form throughout. Some pockets of dense regen in understory. Consider treating by thinning or shelterwood next YOY. Evaluate regen and if feasible, could final harvest stand and replant to red pine.
39	4191 - Mixed Upland Deciduous with Conifer	Medium Density	9.1	16	1-50	Two small pockets make up this stand. Was treated by overstory removal, leaving some WP as seed source/shelterwood. Stand is fully occupied with regeneration, growing fairly well although only mediocre quality.
42	42110 - Planted Red Pine	High Density Log	15.1	81	81-110	red pine stand, thinned 2-3 times previously. Growing well, somewhat light stocking at this point.
43	42100 - Planted White Pine	High Density Log	53.8	99	111-140	White pine plantation which has been row thinned and had subsequent thinning done, growing well. Dense oak regeneration throughout understory along with thick pockets of red maple regen and some WP regen. Consider treating stand, or portions of by shelterwood/seed tree harvesting to release oak regen.
44	4124 - Red with White Oak	Medium Density Log	41.8	81		
46	4122 - Oak, Pine	High Density Log	20.1	99	81-110	White pine, oak stand with descent quality white pine and white oak. Variable stocking in places, however ba hovers around 100 throughout. Areas of high water table along 131 corridor.
48	4122 - Oak, Pine	High Density Log	46.6	106	81-110	Oak/pine stand with scotch pine present throughout as well. White pine is of descent quality, as is white oak. Scattered red pine with some small pockets more dense.
49	4310 - Pine, Oak Mix	High Density Log	3.8	88	81-110	Small stand wedged between lowland areas and Headquarters lake. Trail passes directly adjacent to stand, along west edge. Some large red pine along with oaks and some WP. Old comment - High visual lookout between Headquarters Lake and Flooding - remote camping
50	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	6.6	48	1-50	Multi-part stand, consisting of three separate lowland islands w/in stand 51. Edges are variable, center 'island' of stand is more of a uniform treed bog type with white pine dominant. Cedar and red maple throughout. Larger white pine concentrated along lowland edges along w/ some larger red pine.
52	6124 - Lowland Spruce-Fir	Medium Density Pole	11.6	70	51-80	Lowland conifer stand, very dense. Standing water-frozen throughout stand at time of inventory. Some black ash-declining. Classified canopy closure as 50-75%, average of stand is in the upper end of this range.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
53	4310 - Pine, Oak Mix	High Density Pole	17.2	79	81-110	Jack pine, white pine, red pine, oaks and red maple along w/ a few small aspen clones make up stand. Variable species composition, very mixed stand. Consider removing jack pine, red maple and aspen along w/ pin oak. Low pockets within type have been mapped as pre-inventory stand 48. Pockets of high water table throughout stand should be avoided if stand is treated. Looks like a small borrow pit, maybe for construction of highway 131 is in center of stand.
55	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	17.8	94	51-80	Very dense lowland stand, basically a seep heading towards five lake creek. Cedar and balsam fir are significant components with quite a variety of e-type species present as well. Some larger WP present along edges and scattered throughout interior. Southern lobe of stand is slightly more upland but still contains high water table and some lowland indicator species. Some lowland conifers present in this portion of stand along with some larger white pine.
56	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Log	42.7	92	81-110	Mixed pine/oak stand, growing well overall. Oak is in descent shape after previous harvest. Pine is growing well throughout. Understory has a descent amount of WP, red maple and balsam fir with scattered oak and beech seedlings. Some small areas of high water table, mostly in central/northern portions of stand.
57	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	12.6	46		Creek bottom stand along Fife Lake Creek, dominated by fir, hemlock and other conifers along with scattered deciduous. Open areas of stand exist with pockets of tag alder and blow down. Stand is thick in places, classified canopy closure at 50-75%. Dense pockets consist mainly of balsam fir, helock and cedar. Lots of standing snags throughout creek corridor providing good wildlife habitat. Lots of whitetail activity in places, looks like they are yarding in localized areas of stand.
59	4126 - White, Black, N. Pin Oak	Medium Density Log	34.2	113	51-80	Harvested with TS # 015-10. TCR 3/12. Cut orange marked and all jack pine. Harvested red maple, whit pine, red pine and mixed oak. Large crowned older oak was removed.
61	42110 - Planted Red Pine	High Density Log	21.9	93	111-140	Nice stand of red pine with oak and white pine common throughout as well. Relatively open understory with quite a bit of blueberry throughout. Numerous trails leading from N/S road lead to lake edge and backcountry camp sites. Old comment - Visual stand bordering Headquarters Lake and Headquarters Flooding
62	42100 - Planted White Pine	High Density Log	40.4	91	81-110	White pine stand, has been thinned 2-3 times. Stocking level is variable in places with canopy gaps providing space for dense regen pockets of aspen, red maple, white pine and some pockets of fir. WP is of good quality throughout, single tops with very little weevil damage.
64	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	25.8	99	51-80	Mixed stand w/ variable density and species composition. Small amounts of standing h2o in places. Some large wp present. Species composition is quite variable throughout stand with different species occupying the greatest percentage of canopy cover in certain locations of stand.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
65	4124 - Red with White Oak	Low Density Pole	5.6	93	1-50	Lightly stocked oak barren type area, used to be the maintained site of the old Fife Lake Headquarters. Old comment - Old Headquarters site of the Fife Lake State Forest. Buildings and grounds are now gone. There was a residence and out buildings.
66	4122 - Oak, Pine	High Density Log	13.0	95		
69	4122 - Oak, Pine	Medium Density Pole	7.7	99		
70	42200 - Natural White Pine	High Density Log	5.4	99	51-80	Small upland stand adj to PVT and lowland - road along east edge. Decent regen, lots of wildlife use. Aspen were removed and constitute the majority of regen within stand.
71	4122 - Oak, Pine	High Density Log	1.1	90		Small island, inventoried from trail on the north side. Could not directly access at time of inventory due to unsafe ice and open water. Oaks and white pine dominate with red pine present in low numbers. Some large individual trees throughout stand.
72	42110 - Planted Red Pine	High Density Log	40.0	93	51-80	Red pine stand, hovering around 60-90 BA with some areas more open. Oak regen is dense in understory and has been released well with previous treatments, red pine continues to provide good shelterwood component. Past comments state that s/2 of stand had red pine planted in understory, quantity unknown. Not much for red pine saplings at this time. Also, did not find any evidence of Ponderosa pine in northern portion of stand, quite a few well formed scotch pine though. Old comment - scattered ponderosa and scotch pine are found in the north half of this stand.
73	4136 - Aspen, Mixed Conifer	High Density Sapling	5.0	15		Narrow aspen stand sandwiched between RP and lowland stand. Aspen growing well, fir and WP common throughout in various size classes. New stand added.
74	6126 - Lowland Jack Pine	Low Density Pole	14.2	45	1-50	Multi-part treed bog stand within larger red pine plantation created by small depressions. Some standing water within stand. Canopy is very lightly stocked and consists of a mixture of jp and wp.
75	42110 - Planted Red Pine	High Density Log	44.3	92	111-140	Nice red pine stand, treated last yoe. Growing well, recommend allowing to develop another yoe and focus on utility pole removal. Some variability in BA and understory density.
76	4126 - White, Black, N. Pin Oak	Medium Density Pole	46.8	109	51-80	TS#61-027-11TCR 3/12 Cut all aspen, jack pine, red maple and marked trees on west side of road. 16" diameter cut on oak on east side of road.
77	42110 - Planted Red Pine	High Density Log	50.9	92	81-110	Red pine stand growing well, some variation in canopy closure resulting in pockets of dense regen.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
79	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Log	14.4	94	111-140	Nice mixed stand growing well with red and white pine dominant along with oaks, scattered red maple and a few aspen clones present. Recommend leaving stand as is - it is providing a nice transition along lake/lowland with a great deal of wildlife use throughout. Quite a few snags along western edge of stand are providing nesting cavities.
81	6122 - Black Spruce	Medium Density Pole	1.4	60	51-80	Small treed bog w/ spruce/fir dominating variable density overstory. Leatherleaf and thick mosses constitute majority of ground cover. Some large WP, mainly around perimeter of stand. New stand added.
83	42250 - Pine, Oak	High Density Pole	48.4	91	51-80	Oak/pine stand with white pine dominant in northern 1/2 and red pine a greater component in southern 1/2. white oak makes up majority of oak component with some red/pin throughout. Understory is dense in places with oak and white pine regen. Some black cherry along with scattered red maple.
85	4131 - Aspen, Oak	High Density Sapling	8.2	23		Stand was harvested and trenched/planted with red pine. Some sapling red pine is holding on but has been overtopped by hardwood/aspen regen. Scattered overstory red pine present throughout stand. Old comment - stand was trenched and planted to red pine but hardwood overtopped pine (1991)  Scattering of red pine sawtimber
87	42111 - Planted Red Pine, Mixed Deciduous	Low Density Pole	41.3	79	51-80	
88	4133 - Aspen, Mixed Pine	High Density Log	16.9	43	81-110	Mixed aspen/pine stand. Consider harvesting aspen at this time. Red and white pine are scattered in east and west portions of stand however more of a concentration is present in center of stand - south of new treed bog stand. If prescription is placed on stand, leave scattered rp/wp except delineate retention island of higher density pine and remove asp/rm w/in island.
90	4310 - Pine, Oak Mix	Medium Density Log	22.4	88	51-80	
91	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	20.2	106		
93	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	4.9	85		Lowland E-type stand with aspen common. RM and black ash present as well, along with some lowland conifers in pockets.
94	42110 - Planted Red Pine	Medium Density Log	26.7	88	1-50	Lowly stocked red pine stand with good regen coming up in understory. Canopy closure ranges from 25-75% with an average BA of approximately 40-50 sq ft/ac. Red pine is good quality, slow growing as is typical for the headquarters area.
95	6132 - Mixed Lowland Forest with Cedar	Medium Density	19.2	39	1-50	Mixed lowland e-type stand with cedar and fir common throughout along with scattered spruce. Very wet throughout stand, some areas of standing water. Dropped canopy closure to 50-75% due to ash mortality.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
96	42110 - Planted Red Pine	Medium Density Log	6.2	88	51-80	Red pine planted along grade or old ditch, hard to tell. Narrow ditch does have high water table as previous comment indicates. high water table
97	42220 - Natural Jack Pine	High Density Sapling	6.9	16	1-50	Naturally regenerated JP stand resulting from harvest with oaks scattered throughout as well. Variable density in regen in places. Some pole sized red pine and oaks along edges of stand, remaining from previous harvest.
98	4122 - Oak, Pine	Medium Density Log	25.6	76		
99	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Log	112.8	92	51-80	Dense, diverse regen throughout stand consisting of aspen, oak, white pine and red maple. Overstory is in good shape, growing well and of descent quality..
100	4130 - Aspen	High Density Pole	9.3	59		Difficult stand to access, was able to get there during frozen conditions. Relatively dense, pole sized aspen - fair quality. Scattered conifers throughout stand.
102	42220 - Natural Jack Pine	High Density Sapling	33.9	23		Red pine plantation, jack pine has taken over majority of canopy at this point. Old comment - Area was planted to red pine - had high mortality and jack pine has taken over site
103	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Sapling	27.0	23		RP plantation, jack pine has regenerated evenly throughout stand as well. Red pine is entirely in furrows with jack pine in between. Old comment - Red Pine is planted - Jack Pine is natural.
105	4310 - Pine, Oak Mix	High Density Log	6.8	88	1-50	High water table in southern end of stand, seems like there is a drain extending back to the west along the southern edge of pre-inventory stand 99 and possibly originating in stand 93. The drain seems to head east to creek, through tag alder thicket in southern end of stand. Overall, stand provides nice buffer along creek/riparian area to the east. Some larger diameter WP and oaks provide nice aesthetics as well, along with pretty good wildlife habitat. Old comment - South end of stand has low tag alder pocket
106	4130 - Aspen	High Density Sapling	9.4	16		Stand was harvested 2 entry periods ago, aspen regenerating well. Scattered oaks and red pine were left as residual following harvest-providing some enhanced vertical structure and diversity in stand as well.
107	42260 - Natural Pine, Mixed Deciduous	High Density Log	1.2	95		Stand is an isolated upland island w/in large surrounding lowland complex. Viewed stand across lowland from western edge of stand 109. Estimated call to be natural pine, mixed deciduous. Stand consists of larger WP, RP and oak species.
108	6121 - Tamarack	Medium Density Pole	6.3	65		Very wet stand, inaccessible unless completely frozen. Stand is made up of lowland conifers with some more open areas becoming occupied by alder, some cattails.
109	4310 - Pine, Oak Mix	Low Density Log	67.1	83	1-50	



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
110	42221 - Natural Jack Pine, Mixed Deciduous	Medium Density	9.8	15	1-50	Sapling JP stand with descent amounts of oak and black cherry scattered throughout, some red maple - resulting from past harvest 2 entry periods ago.
111	42110 - Planted Red Pine	High Density Log	30.1	101	111-140	Nice red pine stand, growing fairly well. Dense oak understory w/ some variability in places. Thinned 2007, recommend leaving as is, possibly treat next yoe, however stand does have some cultural significance - may want to leave to develop into big tree mgmt. Sign at SW corner of stand identifies it as fife lake rp plantation - gives plantation origin date along with past thinning dates.
112	6120 - Lowland Cedar	High Density Pole	5.8	119	51-80	Small lowland conifer pocket, dominated by cedar with balsam fir and e-type species common throughout. Standing water in portions of stand.
113	4310 - Pine, Oak Mix	High Density Log	21.7	74	81-110	Pole/log sized oak with pole sized pine scattered throughout. Some small aspen clones as well. White pine concentrated in north. Descent oak regen. a couple small areas of high water table present.
114	42200 - Natural White Pine	Medium Density Log	4.7	97	51-80	Small upland stand wedged between PVT and lowland area. Dominated by WP with early successional mixed deciduous trees scattered throughout.
115	6120 - Lowland Cedar	High Density Pole	14.8	88	51-80	Lowland conifer stand with scattered e-type species. small/narrow creek runs through central portion of stand, heading westward. Very wet throughout stand.
116	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Log	15.8	93	81-110	Red pine stand that is inaccessible unless private access is granted. Old comment - Only access to stand is through private property
118	4310 - Pine, Oak Mix	Medium Density Log	16.9	84	51-80	Oak/pine stand with some birch and aspen. Semi-open area at intersection of roads. Merged stands that were on either side of east/west road.
119	42110 - Planted Red Pine	Low Density Log	24.9	94	1-50	Red pine stand with portions of riparian edge included w/in stand boundary. Red pine has been treated multiple times and is currently hovering in the 40-70 BA range with approximatly 50% canopy closure. Some oaks present, jack pine evenly scattered throughout in somewhat low numbers. Oak regen is dense in most areas of stand, growing well.
121	4130 - Aspen	High Density Sapling	28.3	25		Aspen stand, sapling size growing well and should convert to A6 next inventory cycle. Scattered balsam fir throughout along with WP and RM. Some high water table indicators, similar to adjacent stand to the south that was harvested recently.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
122	42220 - Natural Jack Pine	High Density Pole	160.9	87	81-110	Large JP stand with oak and red pine common throughout. Oak more numerous in western portion of stand. Mediocre quality jack pine, poor quality oaks. Consider final harvest of stand using 2-track as eastern/southern boundary of stand. This will provide the opportunity to break up stand while also providing a manageable buffer along creek. Following final harvest expect natural jack pine, oak and red pine regen to make up majority of stand along with some pockets of aspen regen as well. Delineate 2-3 retention islands along western edge to account for retention and to help in addressing aesthetic concerns of larger clearcut area. In addition, mark to leave a few scattered and oak. Northeast corner of stand has a slightly higher concentration of red pine, adjacent to pre-inventory stand 116b. Leave all red pine within stand. Old comment - Large stand - look to split, S 1/2 of stand has scattered Oaks
123	42290 - Natural Mixed Pine	Low Density Log	60.8	69	1-50	Stand is in good shape following harvest, very good regen throughout. Stand has numerous seeps which form small creek that dumps out of stand heading to the west through adjacent RP stands and eventually flows into Fife Lake creek. Old comment-scattered hawthorn Harvested with timber sale 042-06. Cut all merchantable red maple, paper birch, white ash, quaking aspen, balsam fir, balsam poplar, basswood, black ash, black cherry, ironwood. Do not cut pine, oak, cedar, hemlock. Completed 5/08.
124	429 - Mixed Upland Conifers	High Density Log	26.1	81	81-110	Mixed pine stand with aspen and red maple common in places. Stand drops from upland down slope to lowland edge. Stand provides an excellent riparian edge between adjacent red pine stand and lowland stand along creek. Lots of wildlife use throughout stand. Some large red and white pine present in places. Other portions of stand look planted however they are variable in stocking and overall species composition. Stand is variable from north to south. A small seasonal creek flows along southern edge of stand, at border with pre-inventory stand 120. Another small creek outlets at the western edge of pre-inventory stand 120b.
125	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Pole	4.8	54	51-80	Lowland - drainage - stand with small creek flowing through center of stand. alder, aspen, red maple and some upland conifers along edges make up majority of canopy. Open in places with canopy coverage varying from 50-75% overall.
126	42220 - Natural Jack Pine	Medium Density	30.6	23	1-50	Small J3 stand with some scattered log sized oak in overstory. Jack pine growing fairly well, some sapling sized white and red pine mixed throughout stand as well.
128	4126 - White, Black, N. Pin Oak	Low Density Log	5.2	87	1-50	Lightly stocked oak stand resulting from removal treatment. Old comment - Scattered oak making up overstory stocking. White oak is of descent quality, pin oak is fair to poor.
129	42110 - Planted Red Pine	High Density Log	77.3	75	111-140	Descent quality red pine stand with oak and red pine present in low numbers throughout. Oaks present in understory, dense in areas where canopy closure is less. Consider treating stand by thinning to remove remaining defect. Could also final harvest and replant portion and shelterwood the remainder.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
130	4130 - Aspen	High Density Pole	60.1	42	51-80	Descent quality aspen stand with scattered WP and balsam fir throughout. Some red maple and oak as well. Similar to preinventory stand 117 to the north, this stand does have somewhat of a high water table in places which may affect management options. Old comment - SE side of stand has scattered Red and White Pine sawlogs
131	4122 - Oak, Pine	Low Density Pole	35.3	87	1-50	Scattered oaks remain as residual, approximately 20-40 BA overall with pockets of higher stocking. White oak regen is relatively thick in places, some JP regen as well with very scattered RP seedlings present in places.
132	4129 - Mixed Oak	Medium Density	58.4	17	1-50	R7/R8 overstory with oak and red maple regen thick throughout. Pockets of aspen regen as well. Red pine is providing good shelterwood for oak regen which is of fair quality, mainly white oak. 2nd age is for overstory red pine. Old comment-Good mixed regeneration -oak, maple and pine
133	42290 - Natural Mixed Pine	Low Density Log	7.1	74	1-50	Small upland pine stand with overstory red and white pine dominant throughout, some hemlock and fir localized along western edge, adjacent to lowland shrub stand to the west. Red maple and aspen are common throughout understory and in more open areas of stand. Categorized stand as 25-50% canopy closure, would equate stand to an R/W7-R/W8.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
4	6225 - Bog	1.0	No	Low (NonForested)	Extends farther east. Unlisted is an unknown shrub.
5	6220 - Alder/willow	12.0	No	Low (NonForested)	A few dead trees west of highway. Most of the shrubs are tag alders. West side has open areas with sedges/bulrushes. Rubus around perimeter. There is more willow and cattails on the east part.
10	122 - Road/Parking Lot	4.5	N/A	Unspecified	
16	50 - Water	14.8	No	Low (NonForested)	Spring Lake.
22	50 - Water	3.9	No	Low (NonForested)	West Twin Lake.
25	122 - Road/Parking Lot	16.0	No	Low (NonForested)	US-131 and another paved road that goes along the south portion of Fife Lake.
32	50 - Water	1.0	No	Low (NonForested)	Grass Lake. There is housing nearby and is partially on private lands.
40	50 - Water	6.8	No	Low (NonForested)	
41	6220 - Alder/willow	12.9	No	Low (NonForested)	Old hawk nest in white pine along west edge. A trace of paper birch. Some poor red maples. Mostly tag alders with sedges/ferns underneath. Unlisted is fern.
45	6229 - Mixed lowland shrub	2.9	No	Unspecified	Small lowland shrub stand with some scattered conifers throughout including spruce, fir and white pine. some standing snags most likely due to seasonal flooding of stand. Some standing water at time of inventory. Dense lowland shrubs throughout.
47	6229 - Mixed lowland shrub	10.4	No	Low (NonForested)	Stand is the result of an historical beaver flooding. Remnants of old beaver dam can be seen at the very southern end of stand. Some dead standing cedar stems give clues to the fact that this stand most likely once looked very similar to pre-inventory stand 45b, directly to the south. Stand is occupied by lowland grasses, cattails, alder, dogwood and other lowland shrub species. Old comment- Did not visit. It would probably fit in this category.
51	6229 - Mixed lowland shrub	20.7	No	Low (NonForested)	Moderate amounts of tag alders and an unknown shrub. Mixed in with sedges and cattails.
54	50 - Water	49.8	No	Medium (NonForested)	Headquarters Floodings.
58	50 - Water	5.9	No	Low (NonForested)	Bottom part of Pickeral Lake.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
60	6229 - Mixed lowland shrub	0.9	No	Unspecified	
63	50 - Water	50.1	No	Medium (NonForested)	Headquarters Flooding. This area has high recreational and hunting values.
67	6233 - Wet Meadow	31.5	No	Low (NonForested)	Currently has water in it, even though flooding is low for this time of year.
68	6229 - Mixed lowland shrub	4.7	No	Unspecified	Lowland/emergent wetland on western side of flooding (eastern lobe of Fuller Lake)
78	623 - Emergent Wetland	5.2	N/A	Unspecified	
80	623 - Emergent Wetland	1.0	N/A	Unspecified	
82	6233 - Wet Meadow	4.9	No	Low (NonForested)	Lots of dead wood. Dry, but would have been filled with water in spring. Clumps of leatherleaf, mostly along perimeter.
84	623 - Emergent Wetland	95.4	No	High (NonForested)	
86	122 - Road/Parking Lot	2.1	N/A	Unspecified	
89	50 - Water	4.6	N/A	Unspecified	
92	50 - Water	41.7	N/A	Unspecified	
101	50 - Water	1.2	N/A	Unspecified	
104	6233 - Wet Meadow	49.3	No	Low (NonForested)	
117	122 - Road/Parking Lot	0.6	N/A	Unspecified	
120	6220 - Alder/willow	63.8	No	Low (NonForested)	Stand comprises lowland area along creek. Made up of open areas of alder and creek bottomlands. Stand boundary also includes transition zone between lowland and upland which in places does include lowland conifers along with scattered red maple, oak species and red and white pine. Groves of hemlock also present in places. Lots of wildlife use throughout creek corridor, found 2 unmarked foot bridges across creek. Old comment-Made observations from County Line Road. May have more of a mixed shrubland towards Headquarters, with a little bit of cedar. I believe Alder/willow is the right level 4 call.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
127	6225 - Bog	1.8	No	Low (NonForested)	Nice leatherleaf bog.
134	6229 - Mixed lowland shrub	4.3	No	Unspecified	Small stand, newly added. Surrounding aspen stand has high water table in placesbut this stand is made up entirely of lowland shrubs and has a high occurrence of standing water throughout.
135	122 - Road/Parking Lot	2.0	N/A	Unspecified	