



**Newberry Forest Management Unit  
Compartment Review Presentation  
Compartment 045      Entry Year: 2012  
Compartment Acreage: 943      County: Luce**

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**Revision Date:** 9/23/2010

**Stand Examiner:** Tori Irving

**Legal Description:** T49N, S8W Section 18, 19, 30, 31

**Identified Planning Goals ('Management Area' or 'RMU', if applicable):**

Deer Park Management Area

**Management Goals:**

Timber, wildlife, recreation, and fisheries are the main uses of this area. The goal is to manage for all of these simultaneously and to provide, enhance and perpetuate their uses through proper management. Forest treatments prescribed will help ensure the sustainability of the forest resource and continue to enhance the quality of the wildlife habitat.

**Soil and Topography:**

Soil types include Wallace, Rubicon-Spot Mix, ponded Histols & Aquents, Rousseau fine sand; Carbondale, Lupton, Tawas; Spot-Dawson Peats, Rousseau-Dawson Complex, and a small pocket of Finch Sand. The topography in this compartment is steep to rolling with kettle lakes and pine ridges scattered throughout the area.

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

The entire compartment is state owned. There is a combination of private land and Forestland Group surrounding the compartment. Land use in this compartment include hunting, fishing, wildlife/nature viewing, dog sledding, ORVs, and hiking.

**Unique, Natural Features:**

Michigan Natural Features Inventory (MNFI) lists the occurrence of high-quality muskeg and high quality dry northern forest. Potential for red-shouldered hawk, goshawk, merlin, great blue heron rookery, eagle, and osprey are also listed. There is potential for moose, wolf, incurvate emerald, frigga fritillary, freija fritillary, ebony boghunter in the boggy areas, and wood turtle. Other potential species include sweet coltsfoot, Wiegand's sedge, northern prostrate clubmoss, fir clubmoss, English sundew, meadow beauty, round-leaved orchis, black crowberry, yellow pitcher-plant, panicled screwstem in bogs and open wetlands. Potential for calypso orchis, Lapland buttercup, ram's head lady's slipper, round-leaved orchid, and limestone oak fern in cedar swamps.

**Archeological, Historical, and Cultural Features:**

None noted.

**Special Management Designations or Considerations:** None

**Watershed and Fisheries Considerations:**

Good-to-Excellent. The Little Two-Hearted River is classified as Type 1 trout water from Lake Superior upstream through almost all of section 19. It loses its trout classification where the tributary enters. It

supports native brook trout, but it is not actively managed at present. Locals describe large brook trout, but not many due to the heavy sand bedload. Even so, we request no heavy equipment near the lip of that bank. The sand substrate is highly erodible and any tire tracks or furrows would produce a straight, instantaneous sand drop into the river. The system is already overloaded with sand bedload, and once the sand is in the river, it takes tremendous effort to remove it. Actual sand in the water supports a total biomass of flora and fauna similar to sand in the Sahara Desert.

**Wildlife Habitat Considerations:** **Compartment 45** lies in northeastern Luce county and is situated in the Seney Sand Lake Plain ecological sub-subsection. The compartment has a good diversity of types with lowland forest types, mixed pine, and mixed upland deciduous types interspersed. Aspen is present in the compartment as well as non-forested wetlands throughout.

A single shelterwood harvest in mixed pine is scheduled to occur. It will retain mixed conifer and will strive to maintain the travel corridor that would be used by wildlife traversing the compartment. Wildlife using this compartment are expected to be diverse due to the varying forest types and their interspersed.

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

Surface sediments consist of lacustrine (lake) sand and gravel, coarse-textured glacial till and peat and muck. There is insufficient data to determine the glacial drift thickness. The Cambrian Munising Formation and the Precambrian Jacobsville Sandstone subcrop below the glacial drift. The Jacobsville has been used as a building stone in the past. Gravel pits are located five miles to the northeast. Potential may be good in Sections 31 and 32. There is no economic oil and gas production in the UP.

**Vehicle Access:**

This east edge of the compartment can be accessed by County Road 500. There forest roads throughout the compartment that can be used to access the interior of the compartment during the dry times of the year.

**Survey Needs:**

Some private property lines will need to be confirmed in order for treatments to occur.

**Recreational Facilities and Opportunities:**

Recreational opportunities include ORV riding, hunting, fishing, wildlife/nature view, dog sledding, and hiking. The North Country Pathway runs through the compartment. Fishing opportunities exist in the Little Two Hearted River. Dog sledders use the forest roads all year to run their sled dogs.

**Fire Protection:** This compartment is in the Two Hearted Zone Dispatch Area. There is a good fragmentation of the fuel types making the risk for large fire growth of this area moderate. Private property risk is high in this area because of the fuel type and locations.

**Additional Compartment Information:**

- **The following reports from the Inventory are attached:**
  - ◆ **Total Acres by Cover Type and Age Class**
  - ◆ **Proposed Treatment Summary**
  - ◆ **Proposed Treatments – No Limiting Factors**
  - ◆ **Proposed Treatments – With Limiting Factors**
  - ◆ **Stand Details (Forested and Nonforested)**
  - ◆ **Dedicated and Proposed Special Conservation Areas**

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

# Cover Type & Treatment Map

Compartment 045  
 T49N, R08W, Sec. 18, 19, 30, 31  
 County: Luce  
 Unit: Newberry  
 YOE: 2012  
 Acres: 943 GIS Calculated  
 Stand Examiner: Tori Irving  
 Map Revised: 10/29/2010  
 Map Phase: Pre-Review

18  
 19  
 30  
 31

N  
 Michigan DNR

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

Stocking Density

**Legend**

- Miris Corners
- Remonumented Section Corners
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- Trails
- Hiking Trails
- Intermittent Stream/Drain
- Stream

**Treatments**

- Shelter Wood (w/Reserves)

**Forest Stands**

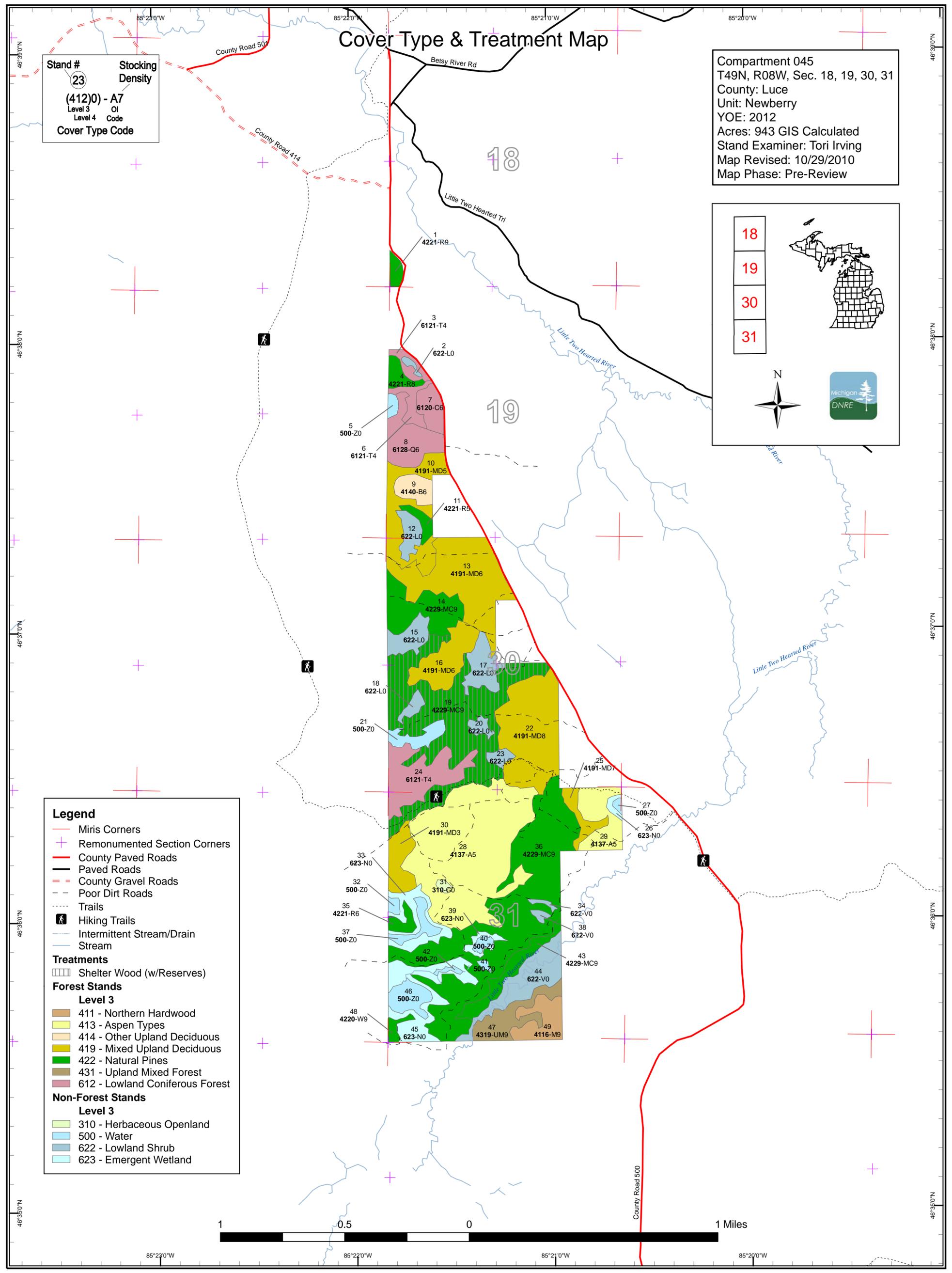
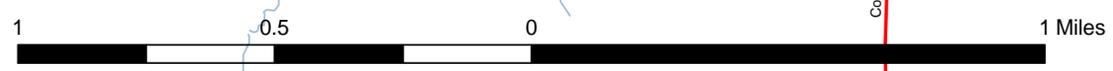
**Level 3**

- 411 - Northern Hardwood
- 413 - Aspen Types
- 414 - Other Upland Deciduous
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

**Non-Forest Stands**

**Level 3**

- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland



# Stand Boundary Map

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

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18  
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## Legend

- Miris Corners
- + Remonumented Section Corners
- County Paved Roads
- Paved Roads
- - - County Gravel Roads
- - - Poor Dirt Roads
- - - Trails
- Hiking Trails
- Intermittent Stream/Drain
- Stream
- Stand Boundaries

## Forest Stands

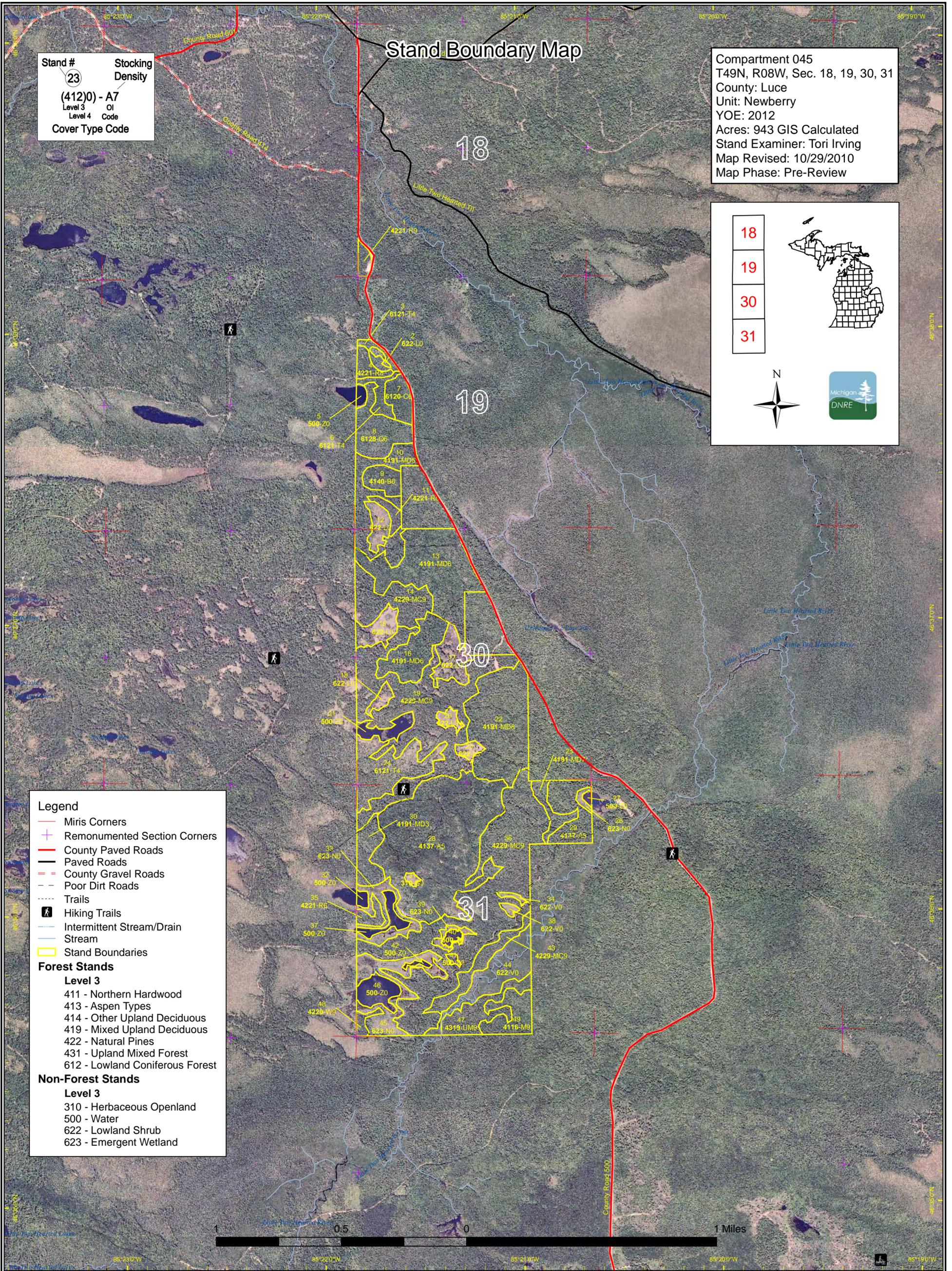
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## Non-Forest Stands

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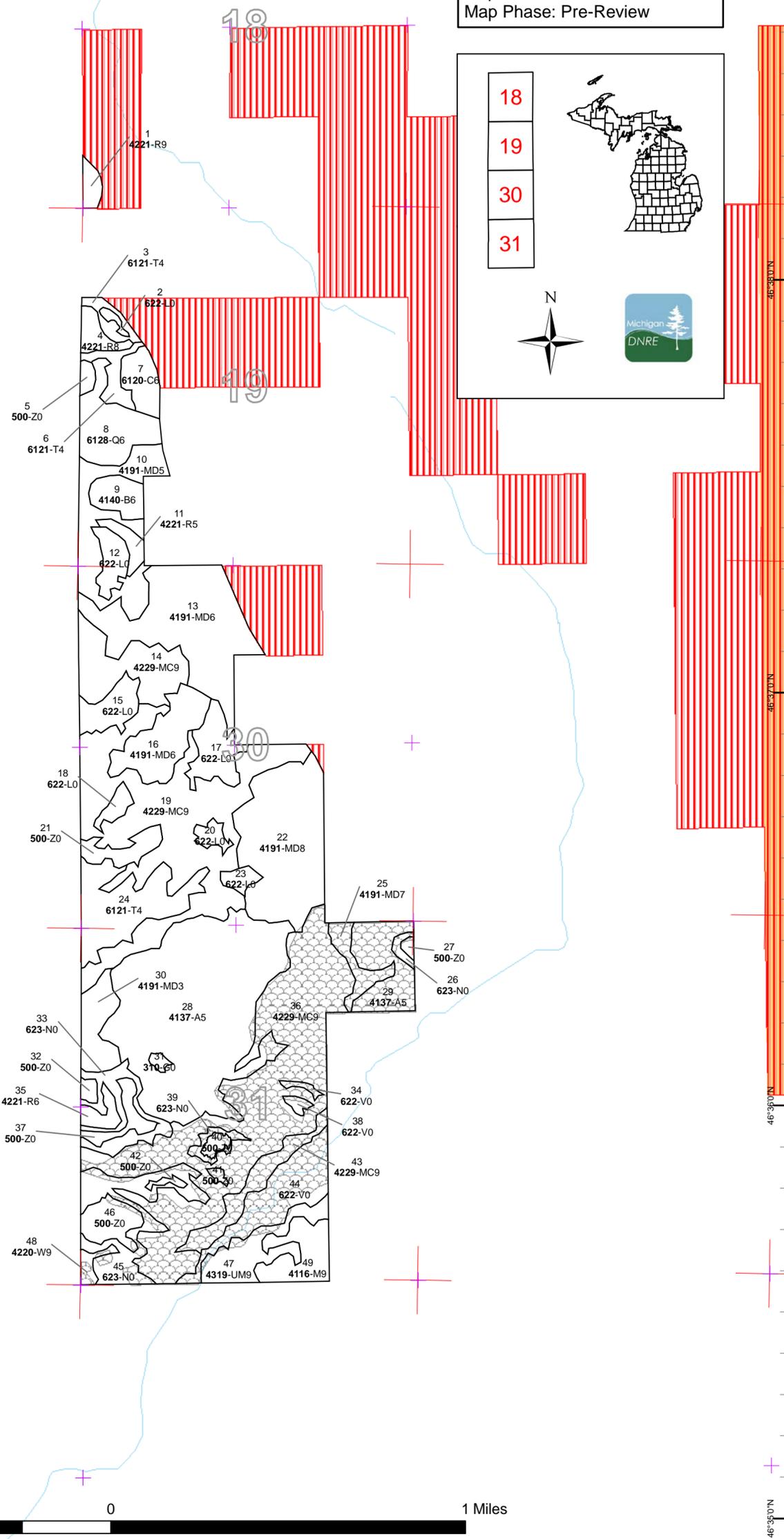
# Dedicated & Proposed Special Conservation Area Map

Compartment 045  
 T49N, R08W, Sec. 18, 19, 30, 31  
 County: Luce  
 Unit: Newberry  
 YOE: 2012  
 Acres: 943 GIS Calculated  
 Stand Examiner: Tori Irving  
 Map Revised: 10/29/2010  
 Map Phase: Pre-Review

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



18  
 19  
 30  
 31

**Legend**

- Miris Corners
- Remonumented Section Corners
- Stand Boundaries
- Proposed Special Conservation Areas**
  - SCA - Special Conservation Area
  - SCA Removal
- Cold Water Streams**
  - Cold Water Streams
  - Non\_Dedicated Natural Areas and National Natural Landmarks
  - Visual Management Areas
  - Ecological Reference Areas
- Forest Stands**
  - Level 3**
    - 411 - Northern Hardwood
    - 413 - Aspen Types
    - 414 - Other Upland Deciduous
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  - Non-Forest Stands**
    - Level 3**
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**Table 1 – Total Acres by Cover Type and Age Class**

Data updated before 2:00 PM



	Age Class														Total	
	Non-Forested	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Uneven Age
Aspen	0	0	0	154	0	0	0	0	0	0	0	0	0	0	0	154
Bog	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Cedar	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10
Herbaceous Openland	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lowland Conifers	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	23
Lowland Shrub	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
Marsh	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Mixed Upland Deciduous	0	0	0	0	69	0	0	69	0	0	0	0	0	0	63	202
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	119	164	0	0	0	0	283
Northern Hardwood	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	17
Paper Birch	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	9
Red Pine	0	0	0	0	0	0	0	0	6	9	5	0	0	0	0	19
Tamarack	0	0	0	0	0	45	0	0	0	0	0	0	0	0	0	45
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	19
Water	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
White Pine	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
<b>Total</b>	<b>159</b>	<b>0</b>	<b>0</b>	<b>154</b>	<b>69</b>	<b>55</b>	<b>17</b>	<b>103</b>	<b>6</b>	<b>150</b>	<b>168</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>943</b>



## Table 2 – Proposed Treatment Summaries

Data updated before 2:00 PM

Newberry Mgt. Unit  
Year of Entry 2012

Compartment 045  
Total Compartment Acres: 942.7

### Acres by Treatment Type

Commercial Harvest - 104	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

### Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Natural Mixed Pines	0	0	0	104	0	0	104
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>104</b>	<b>0</b>	<b>0</b>	<b>104</b>



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	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
19	42045019-Cut	104.3	42290 - Natural Mixed Pine	High Density Log	86	Harvest	Shelterwood	Natural Mixed Pine	Cmpt. Review Proposal

Prescription: Thin stand to 50-80 residual BA. Target red and white pine.

Specs:

Other

Comments:

Next Steps: Acceptable species mix in this stand include: a mix of coniferous species and upland northern hardwood species.

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**Total Treatment  
 Acreage Proposed: 104.3**

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Data updated before 2:00 PM

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

Prescription  
Specs:

Other  
Comment:

Next  
Steps:

Limiting Factor and No  
Treatment Reason

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**Total Treatment**  
**Acreage Proposed: 0**

Data updated before 2:00 PM

Out of YOE -- Treatments  
Prescribed with No Limiting Factor

Year of Entry: 2012



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

Other  
Comments:

Next  
Steps:

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**Total Treatment  
Acreage Proposed:           0**



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42210 - Natural Red Pine	High Density Log	3.9	89	111-140	There is a ridge in through the stand that runs almost parallel to Co Rd. 500. On the east border of the stand there is an ORV blow out along county road 500. This stand in really nice and has potential to regenerate quality red pine. There are some scattered white birch and aspen throughout the canopy. The understory lowland species are on the border of CO RD 500 but are not found throughout the entire stand. Other ground species include lily of the valley, starflower, and blueberry.
3	6121 - Tamarack	Low Density Pole	4.8	47		Ground cover species include leather leaf and horsetails. The WP in this stand is supercanopy and scattered throughout. There are also some white birch, red maple, and black willow along the edge and a few scattered though the stand.
4	42210 - Natural Red Pine	Medium Density Log	5.9	75	81-110	Stand borders lake. The understory is fairly thick with black spruce, red maple and some cedar. There are some large log white and red pine scattered in the stand.
6	6121 - Tamarack	Low Density Pole	7.0	47		There is a lot of top die back on the tamarack trees. There is some standing water around the edge of that stand. Stand has a lot of tag alder through it. There is evidence of flooding and it could have held water in the past. On ther perimeter there are cattails, grasses and leather leaf.
7	6120 - Lowland Cedar	High Density Pole	10.1	65		
8	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	23.1	60		Transition zone between a more upland hardwood stand and lowland conifer stand.
9	4140 - Other Upland Deciduous	High Density Pole	9.4	40		Young white birch stand with scattered hemlock/white pine through out. There are some white birch and red maple regeneration present as well. Most of the canopy level regeneration is about 2 sticks tall.
10	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	30.5	30		There is a ridge that separates stands 6 and 8. Ther eis a heavier fir/hemlock component around the border of the stand. The fir understory is pretty thick.
11	42210 - Natural Red Pine	Medium Density Pole	4.6	90	111-140	Black spruce is distributed around the perimeter. There are large log red and white pine in the stand.
13	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	63.5	Uneven Age	1-50	Short scrubby trees scattered through a somewhat open area. Probably was cut in the past. The trees are small and is going to develop into a mixed stand of hardwoods and conifers.
14	42290 - Natural Mixed Pine	High Density Log	28.4	90	1-50	Stand looks like it has been thinned before. There are a lot of sapling sized deciduous trees in the understory.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
16	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	24.1	31	1-50	Stand is mostly red maple and aspen with some scattered pockets of hemlock and white birch. There is a small amount of yellow birch and supercanopy white pine scattered in the stand. The white pine are large log diameters. Ground cover species include: star flower, club moss, and lily of the valley
19	42290 - Natural Mixed Pine	High Density Log	104.3	86	81-110	There is a small pocket of white birch and aspen in the middle of the stand - not big enough to meet the mapping standards. Stand looks like it has been thinned before judging on the quality of the pine.
22	4191 - Mixed Upland Deciduous with Conifer	Medium Density Log	61.4	64	1-50	In the southern part of the stand the diameters are smaller and the canopy is more open. The North Country Trail runs through the southern part of the stand.
24	6121 - Tamarack	Low Density Pole	33.7	40		
25	4191 - Mixed Upland Deciduous with Conifer	Low Density Log	8.1	64		
28	4137 - Aspen, Birch	Medium Density Pole	132.8	28		The diameters of the trees in this stand are at the very low end of the pole size class. The old OI mentions that the area was heavily burned in 1982.
29	4137 - Aspen, Birch	Medium Density Pole	21.0	28		
30	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	14.3	30		
35	42210 - Natural Red Pine	High Density Pole	4.7	86		This stand was part of the Swamp Lakes Pine Sale (#003-00-01) and was completed 8/19/04.
36	42290 - Natural Mixed Pine	High Density Log	135.1	98	81-110	There are some very steep ridges in this stand and are untreatable with the terrain. This stand was part of the Swamp Lakes Pine Sale (#003-00-01) and was completed 8/19/04.
43	42290 - Natural Mixed Pine	High Density Log	14.8	89		
47	4319 - Mixed Upland Forest	High Density Log	19.0	89		
48	42200 - Natural White Pine	High Density Log	3.0	89		
49	4116 - Mixed N. Hardwood - Aspen	High Density Log	16.7	50		



Stand	Cover Type	Acres	Gen Cmts:
2	6229 - Mixed lowland shrub	1.3	
5	50 - Water	2.2	
12	6229 - Mixed lowland shrub	8.1	The stand was full of water in the 1997 aerial photos.
15	6229 - Mixed lowland shrub	11.0	
17	6229 - Mixed lowland shrub	14.2	
18	6229 - Mixed lowland shrub	3.8	
20	6229 - Mixed lowland shrub	3.5	No water present but has evidence of flooding.
21	50 - Water	8.3	
23	6229 - Mixed lowland shrub	3.5	
26	6239 - Mixed Emergent Wetland	1.8	
27	50 - Water	1.1	Rat Lake
31	310 - Herbaceous Openland	1.3	
32	50 - Water	1.8	
33	6239 - Mixed Emergent Wetland	14.1	
34	6225 - Bog	1.3	There are some small pathces of standing water under the leatherelaf. There are some scattered pitcher plant through the site.
37	50 - Water	6.7	
38	6225 - Bog	1.6	There are some small pathces of standing water under the leatherelaf. There are some scattered pitcher plant through the site.
39	6239 - Mixed Emergent Wetland	3.2	Other species include grass pink orchid, water lily, lily pads, and blue flag iris.



Stand	Cover Type	Acres	Gen Cmts:
40	50 - Water	2.3	
41	50 - Water	1.0	Other species in this stand include blue flag irises, lily pads, and grass-pink orchids.
42	50 - Water	1.2	
44	6225 - Bog	27.1	This stand includes the Little Two Hearted River. The river is surrounded by a bog-type. There are blue flag irises and pitcher plants scattered through the site also.
45	6239 - Mixed Emergent Wetland	26.9	
46	50 - Water	11.1	

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

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

*Data updated before 2:00 PM*

<b>Stand</b>	<b>SCA Type</b>	<b>SCA Name</b>	<b>Acres</b>	<b>Comments</b>
multiple - see	SCA Removal	Comp 45 - SCA Removal	213.9	Remove 'Potential Old Growth' coding. Stand has been cut in the past and does not meet old growth condition based on my observation and data collection.



## 8 – DEDICATED CONSERVATION AREA DETAILS

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

*Data updated before 2:00 PM*

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

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	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.