



Newberry Forest Management Unit
Compartment Review Presentation
Compartment #34 **Entry Year: 2013**
Compartment Acreage: 1382 **County: Luce**

Revision Date: 9/14/2011

Stand Examiner: Keith Magnusson

Legal Description: T49N R9W Sections 7, 8, 17 & 18

RMU (if applicable): Compartment 34 is located within the Deer Park Management Area. For further description of this management unit go to the following web site:

http://www.midnr.com/publications/pdfs/forestslandwater/Ecosystem/EUP/final-MAsummaries/09_Deer_Park_MA_summary.pdf

Management Goals: To maintain forest health, diversity and sustainability while considering wildlife, fisheries, recreation and environmental needs and concerns.

Soil and Topography: The soil type is predominately Rubicon sand. The topography is mostly level to rolling throughout the compartment with areas of steep sand banks along the Two Hearted River.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment is entirely State owned and is almost entirely surrounded by State land. There is a private 40 acre parcel with a seasonal cabin to the northwest of the compartment. The compartment is adjacent to the Two Hearted River which is designated as a Natural River. The area is used heavily for recreation activity such as camping, hiking, canoeing, fishing, ORV riding and some hunting. The area has also been historically used for timber production.

Unique, Natural Features: The Two Hearted River and its corridor is a unique and natural feature to the area. The Two Hearted River has been designated as a Natural River and there was a natural river plan adopted as to how to manage land around the river. Michigan Natural Features Inventory lists the potential for wood turtle, grasshopper sparrow and hill's thistle to occur within the compartment. The inventory also lists the eastern portions of section 8 in this compartment as pine barrens.

Archeological, Historical, and Cultural Features: None Listed.

Special Management Designations or Considerations: Special considerations must be made for timber management around the Two Hearted River. Follow the Two Hearted River Natural River Plan.

Watershed and Fisheries Considerations:

Fisheries Values: Excellent

Fisheries Concerns: The East Branch Big Two-Hearted River runs along the entire western end of the compartment. The East Branch Big Two-Hearted River has an excellent natural population of brook trout, steelhead and salmon fishing. The terrain adjacent to the river serves as an excellent buffer to any treatments to the east, making treatments in the adjacent stands difficult. The prescribed treatments need to follow Natural River BMP's in all adjacent areas to the East Branch Big Two-Hearted River.

Wildlife Habitat Considerations: Compartment 34 lies in north central Luce county and lies in the Grand Marais Sandy End Moraine and Outwash ecological sub-subsection. The compartment is almost entirely jack pine and the western border is the Two-hearted River which provides an excellent wildlife travel corridor.

In a predominantly pine forested ecosystem, maintaining a variety of age and size classes and maintaining as much structural diversity as possible in managed stands will be important to achieving wildlife objectives. For example, retaining soft and hard mast producing species where they exist in harvested stands will help provide food sources, nest and den trees, and improve structural diversity of the stands. Species diversity will increase wildlife diversity and thus a variety of non jack pine species will be retained after final harvests such as aspen (for food sources for birds, snags for cavity nesting birds and mammals) and maple (for multi canopy layering for mid canopy nesting birds) and oak for mast production for deer and squirrels. Kirtland warbler, a featured species in the compartment, will benefit from the maintenance of young jack pine in the compartment.

Mineral Resource and Development Concerns and/or Restrictions:

Sections 7, 8, 17 and 18, T49N-R9W, Luce County

Surface sediments consist of lacustrine (lake) sand and gravel. There is insufficient data to determine the glacial drift thickness. The Precambrian Jacobsville Sandstone subcrops below the glacial drift. The Jacobsville was used as a building stone in the past. There are no gravel pits in the area, and potential appears to be limited. There is no economic oil and gas production in the UP.

Vehicle Access: Vehicle access into compartment exists from two tracks leading from county roads 414 and 423. Most roads are sand two tracks.

Survey Needs: None at this time.

Recreational Facilities and Opportunities: There are campgrounds in close proximity to this compartment. The Two-Heart ORV Trail runs through middle of the compartment along with a snowmobile trail that touches the south boundary of the compartment. Hunting, wildlife viewing, dog sledding and berry picking are frequent recreational uses of the land within the compartment. Fishing and canoeing opportunities exist in the Two Hearted River and it is a fairly popular destination for those users. The Rainbow Lodge is very close to this compartment. It is a local business that offers a store, camping/lodging activities as well a canoe livery service.

Fire Protection: The compartment is part of the Two Hearted Zone Dispatch Area. Large fire growth potential is high because of the continuous stands of Jack Pine. Fires should be easily accessed by heavy equipment.

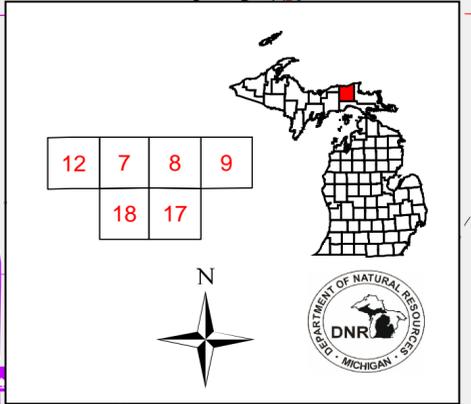
Additional Compartment Information:

- **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**
-

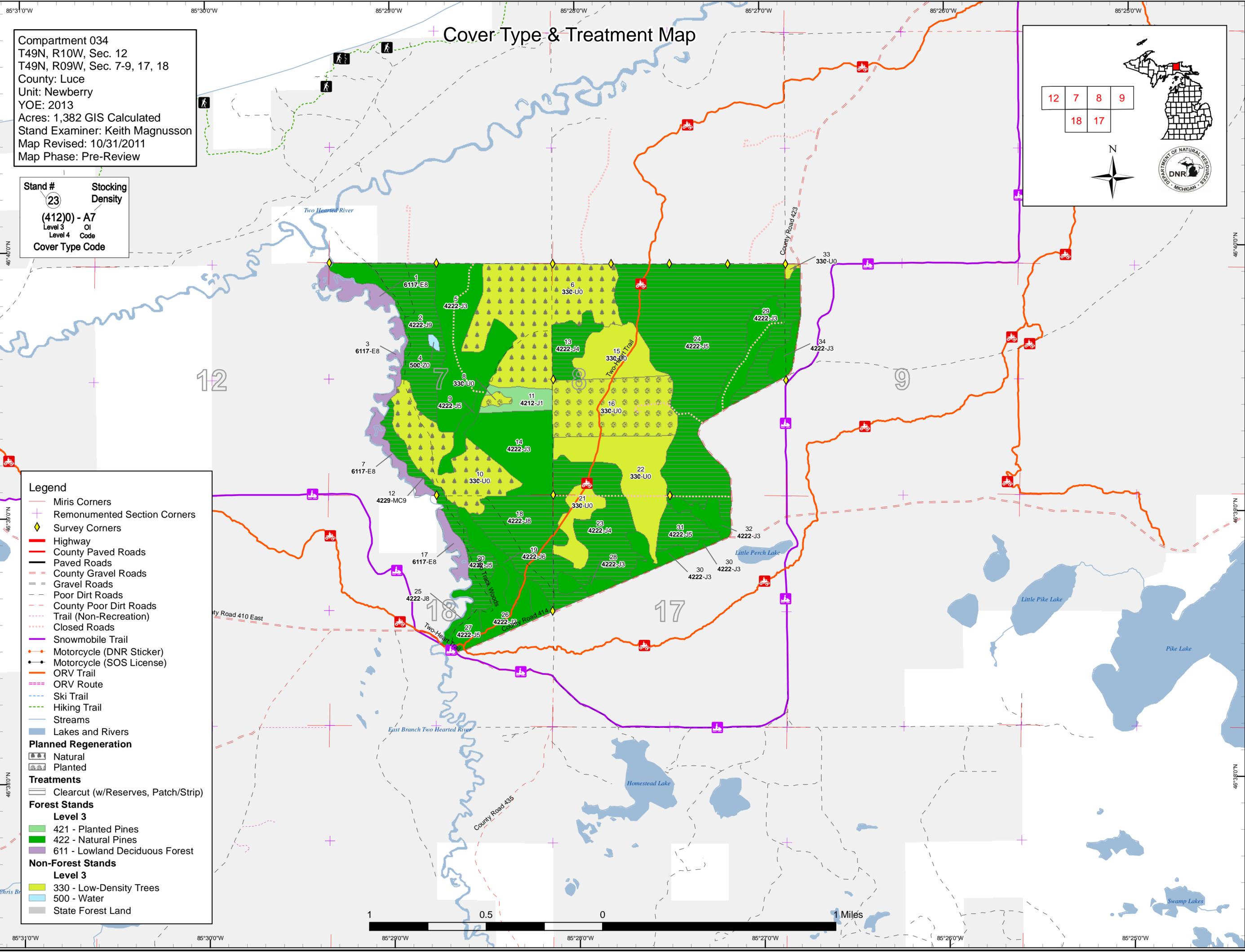
Compartment 034
 T49N, R10W, Sec. 12
 T49N, R09W, Sec. 7-9, 17, 18
 County: Luce
 Unit: Newberry
 YOE: 2013
 Acres: 1,382 GIS Calculated
 Stand Examiner: Keith Magnusson
 Map Revised: 10/31/2011
 Map Phase: Pre-Review

Cover Type & Treatment Map



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

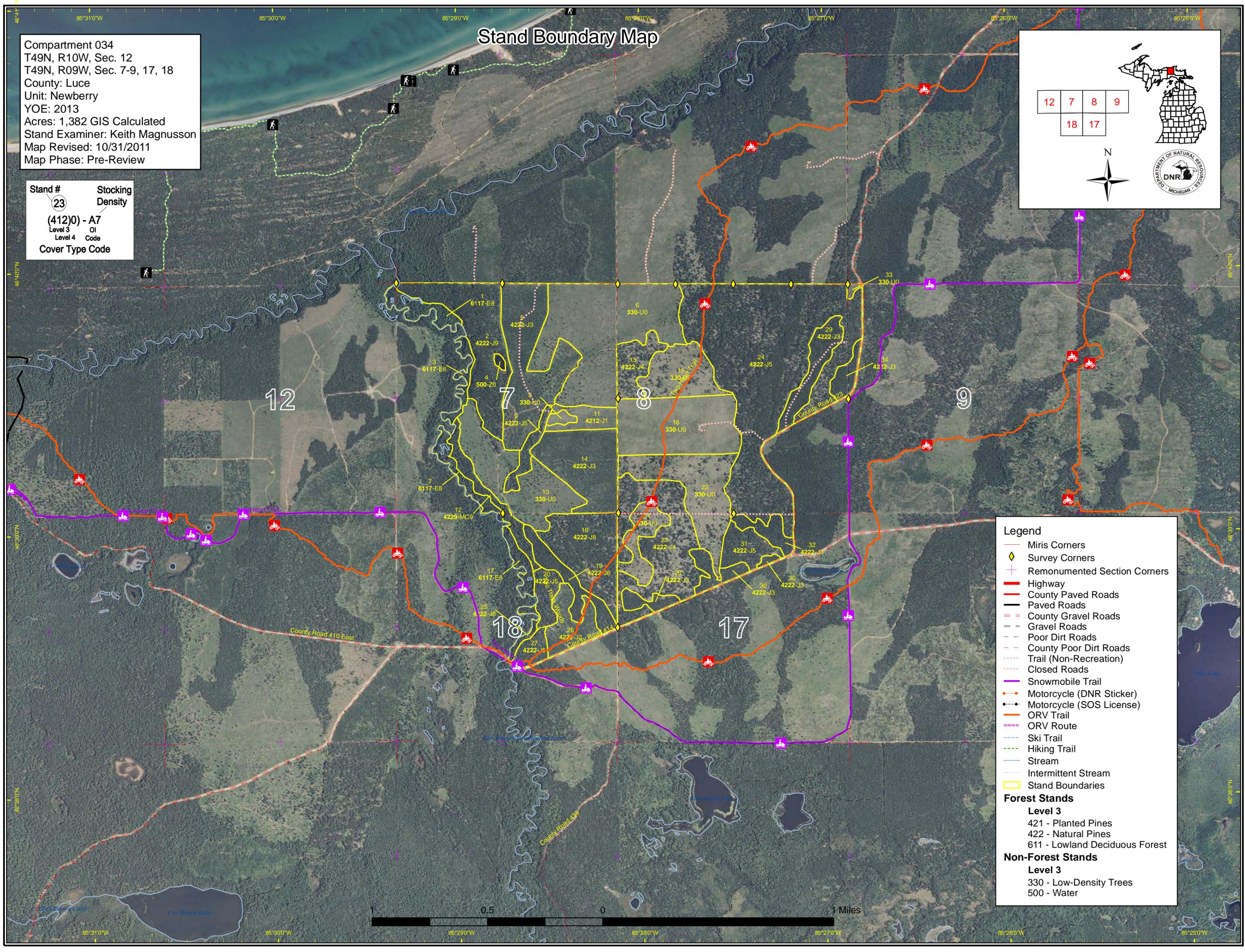
- Legend**
- Miris Corners
 - Remonumented Section Corners
 - Survey Corners
 - Highway
 - County Paved Roads
 - Paved Roads
 - County Gravel Roads
 - Gravel Roads
 - Poor Dirt Roads
 - County Poor Dirt Roads
 - Trail (Non-Recreation)
 - Closed Roads
 - Snowmobile Trail
 - Motorcycle (DNR Sticker)
 - Motorcycle (SOS License)
 - ORV Trail
 - ORV Route
 - Ski Trail
 - Hiking Trail
 - Streams
 - Lakes and Rivers
- Planned Regeneration**
- Natural
 - Planted
- Treatments**
- Clearcut (w/Reserves, Patch/Strip)
- Forest Stands**
- Level 3**
- 421 - Planted Pines
 - 422 - Natural Pines
 - 611 - Lowland Deciduous Forest
- Non-Forest Stands**
- Level 3**
- 330 - Low-Density Trees
 - 500 - Water
 - State Forest Land



Stand Boundary Map

Compartment 034
 T49N, R10W, Sec. 12
 T49N, R09W, Sec. 7-9, 17, 18
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Legend

- Miris Corners
- ◆ Survey Corners
- + Remonumented Section Corners
- Highway
- County Paved Roads
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- Motorcycle (SOS License)
- ORV Trail
- ORV Route
- Ski Trail
- Hiking Trail
- Stream
- Intermittent Stream
- Stand Boundaries

Forest Stands

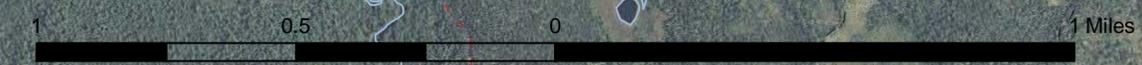
Level 3

- 421 - Planted Pines
- 422 - Natural Pines
- 611 - Lowland Deciduous Forest

Non-Forest Stands

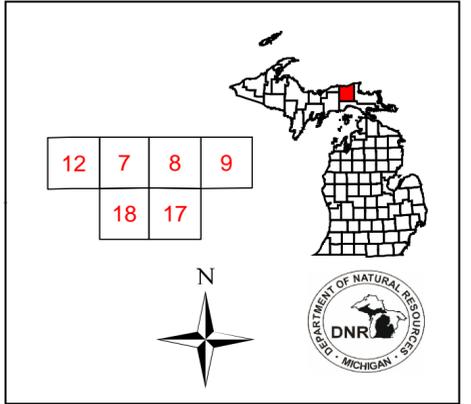
Level 3

- 330 - Low-Density Trees
- 500 - Water

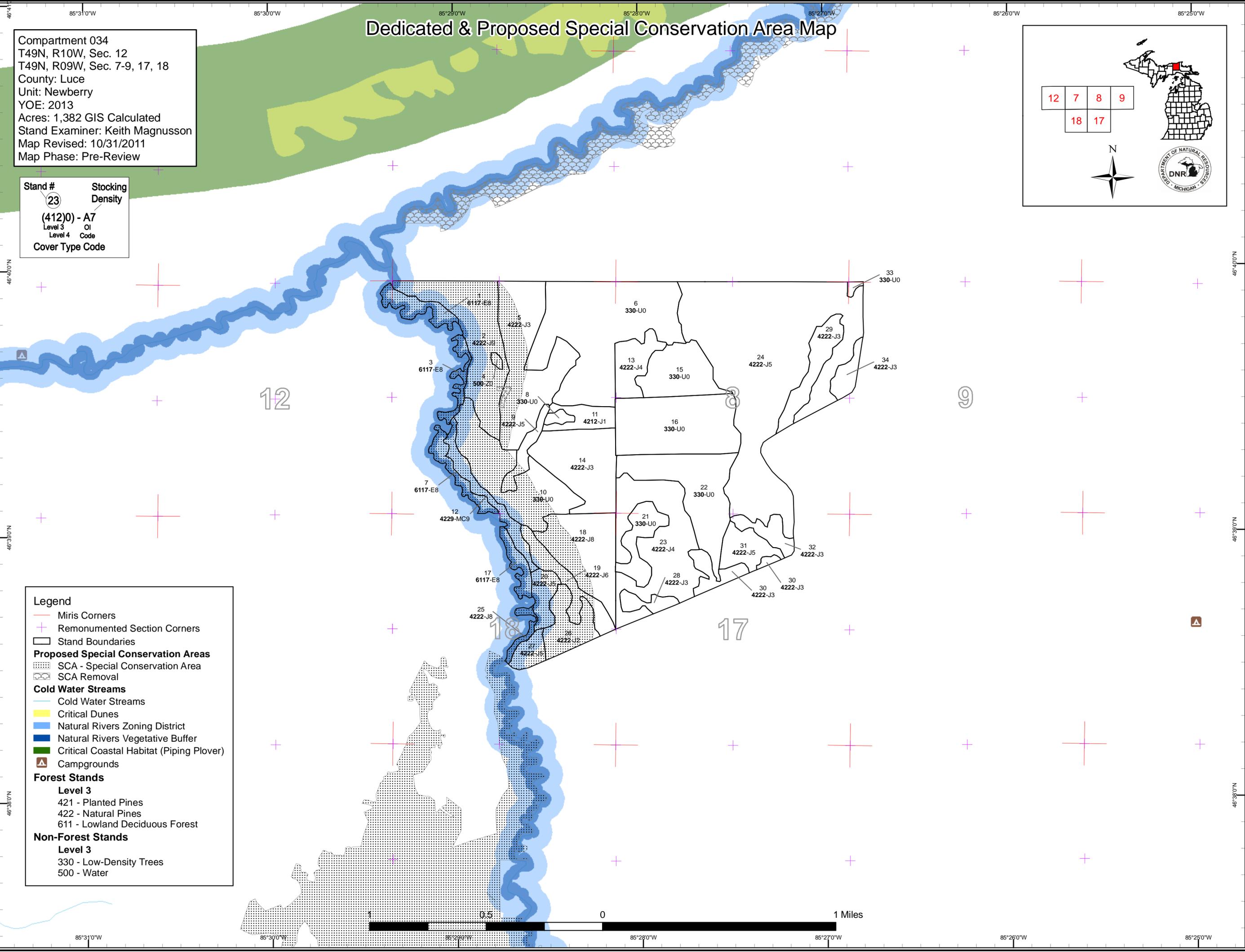


Dedicated & Proposed Special Conservation Area Map

Compartment 034
 T49N, R10W, Sec. 12
 T49N, R09W, Sec. 7-9, 17, 18
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 Unit: Newberry
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 Map Revised: 10/31/2011
 Map Phase: Pre-Review



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



- Legend**
- Miris Corners
 - + Remonumented Section Corners
 - Stand Boundaries
 - Proposed Special Conservation Areas**
 - ▨ SCA - Special Conservation Area
 - ▩ SCA Removal
 - Cold Water Streams**
 - Cold Water Streams
 - Critical Dunes
 - Natural Rivers Zoning District
 - Natural Rivers Vegetative Buffer
 - Critical Coastal Habitat (Piping Plover)
 - ▲ Campgrounds
 - Forest Stands**
 - Level 3**
 - 421 - Planted Pines
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 - 611 - Lowland Deciduous Forest
 - Non-Forest Stands**
 - Level 3**
 - 330 - Low-Density Trees
 - 500 - Water

Table 1 – Total Acres by Cover Type and Age Class

Newberry Mgt. Unit

Compartment 034 Year of Entry 2013

Keith Magnusson : Examiner



	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
Jack Pine	0	0	193	61	24	24	115	374	0	83	0	0	0	0	0	875
Low-Density Trees	437	0	0	0	0	0	0	0	0	0	0	0	0	0	0	437
Lowland Deciduous	0	0	0	0	0	0	0	0	0	16	32	0	0	0	0	48
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	20
Water	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	439	0	193	61	24	24	115	374	0	119	32	0	0	0	0	1382



Table 2 – Proposed Treatment Summaries

Newberry Mgt. Unit
Year of Entry 2013

Compartment 034
Total Compartment Acres: 1382

Acres by Treatment Type

Commercial Harvest - 566	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

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
Jack Pine	546	0	0	0	0	0	546
Natural Mixed Pines	20	0	0	0	0	0	20
Total	566	0	0	0	0	0	566



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	42034002-Cut	68.2	42220 - Natural Jack Pine	High Density Log	83	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Red and white pine scattered throughout stand. Leave a component of RP/WP. Some oak, aspen and red maple present in stand as a minor component. Leave all oak as well as a component of aspen - 1 tree per 5 acres if they exist. The area of stand west of the N/S running road has more of a red pine/white pine component with more balsam fir/red maple understory. This area is also rolling topography with a few gullies/drainages leading towards river.</p> <p><u>Specs:</u></p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u> Scarify stand after harvest to encourage natural regeneration. Acceptable regeneration includes jack pine, red pine, white pine and oak.</p>									
12	42034012-Cut	19.8	42290 - Natural Mixed Pine	High Density Log	83	Harvest	Clearcut with Reserves	42290 - Natural Mixed Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Stand is silviculturally ready to treat. Remove all jack pine, spruce and balsam. Some red and white pine will likely have to be marked as well for silvicultural as well as operability reasons. Some of stand falls on topography that rolling with abrupt hillsides along old river corridors and will have to be considered when stand is treated. Stand falls in the Two Hearted Natural River Zone, follow plan with treatment prescribed. Stand currently serves as a nice buffer to the river.</p> <p><u>Specs:</u></p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u> Scarification may be difficult in some areas due to topography. Will need to evaluate after treatment occurs. Acceptable regeneration would be jack pine, red pine, white pine, balsam fir, spruce or oak.</p>									
13	42034013-Cut	23.6	42220 - Natural Jack Pine	Low Density Pole	61	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Final harvest of jack pine. Some budworm mortality evident from last outbreak. Leave any other species present as retention.</p> <p><u>Specs:</u></p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u> Follow up with scarification and/or planting to increase stocking levels. Acceptable regeneration would be jack pine, red pine, white pine or oak.</p>									
18	42034018-Cut	61.0	42220 - Natural Jack Pine	Medium Density Log	67	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Stand is silviculturally ready to treat. Final harvest jack pine. Leave other species as residual.</p> <p><u>Specs:</u></p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u> Scarify stand after harvest. Plant stand to jack pine if scarification fails. Acceptable regeneration would be jack pine, red pine, white pine or oak.</p>									
20	42034020-Cut	14.5	42220 - Natural Jack Pine	Medium Density Pole	56	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Cut jack pine, leave all other species as retention.</p> <p><u>Specs:</u></p> <p><u>Other</u> <u>Comments:</u> Stand falls in the Two Hearted River Zone, take this into consideration when stand is treated.</p> <p><u>Next</u> <u>Steps:</u> Scarify stand after harvest. Plant stand to jack pine if scarification fails. Acceptable regeneration would be jack pine, red pine, white pine, oak.</p>									



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
23	42034023-Cut	89.4	42220 - Natural Jack Pine	Low Density Pole	56	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal

Prescription: Final harvest jack pine. Some budworm mortality evident from last outbreak. Leave any other species present as retention.

Specs:

Other

Comments:

Next Steps: Follow up with scarification and/or planting to increase stocking levels. Acceptable regeneration would be jack pine, red pine, white pine or oak.

24	42034024-Cut	268.6	42220 - Natural Jack Pine	Medium Density Pole	61	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
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Prescription: Final harvest jack pine based on age/silvicultural reasons to start stand over again. Leave any other species as retention.

Specs:

Other

Comments:

Next Steps: Scarify after harvest to help establish regeneration. Plant to jack pine if scarification fails. Acceptable regeneration would be jack pine, red pine, white pine or oak.

31	42034031-Cut	20.9	42220 - Natural Jack Pine	Medium Density Pole	61	Harvest	Clearcut with Reserves	42220 - Natural Jack Pine	Cmpt. Review Proposal
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Prescription: Final harvest jack pine based on age/silvicultural reasons to start stand over again. Leave any other species as retention.

Specs:

Other

Comments:

Next Steps: Scarify stand after harvest. Acceptable regeneration would be jack pine, red pine, white pine and oak. If scarification fails, plant to jack pine.

**Total Treatment
Acreage Proposed: 565.9**

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

Prescription
Specs:

Other
Comment:

Next
Steps:

Limiting Factor and No
Treatment Reason

Total Treatment
Acreage Proposed: 0

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

Year of Entry: 2013



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
42045001-Cut	3.9	42210 - Natural Red Pine	High Density Log	89	Harvest	Seed Tree	42210 - Natural Red Pine	Cmpt. Review Proposal

Prescription: Harvest site to imitate a catastrophic crown fire by "clear-cutting all but a patchy mosaic of pine trees and clumps of trees to serve as seed trees"
Specs: (MNFI). Focus on the 8-18 inch DBH class. Residual BA 10-20 to allow for successful pine regeneration.

Other Comments: This stand is identified by MNFI as a Dry Northern Forest. Move some of the Hemlock and Yellow Birch logs into stand 34 for Hemlock regeneration nurse logs.

Next Steps: Burn the harvested area in the spring to reduce slash, hardwood competition, and to expose the mineral soil. This should be done within 2-3 years after the completion of any harvesting activities. If the site is not burned within the time frame, scarify site to promote pine regeneration. If scarification fails, plant red pine. Acceptable regeneration mix is RP and a small component of WP.

**Total Treatment
Acreage Proposed: 3.9**



Stand	Newberry Mgt. Unit		5 – Forested Stands			Compartment: 034 Year of Entry: 2013	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
1	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Log	16.0	80		Stand flanks the East Branch Two Hearted River. Stand follows river corridor and is a mix of uplands and lowlands. Called stand lowland because of the seasonal flooding that can occur in the spring months.	
2	42220 - Natural Jack Pine	High Density Log	77.9	83	81-110		
3	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Log	8.9	90		Stand flanks the East Branch Two Hearted River. Stand follows river corridor and is a mix of uplands and lowlands. Called stand lowland because of the seasonal flooding that can occur in the spring months.	
5	42220 - Natural Jack Pine	High Density Sapling	87.7	18		Stand was cut in 1993; TSale#008-93. It came in thick and is now sapling sized, 1-2"DBH 5-15' tall. Some pole/saw sized residual of oak, red pine, and red maple in the overstory throughout stand.	
7	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Log	13.0	90		Stand flanks the East Branch Two Hearted River. Stand follows river corridor and is a mix of uplands and lowlands. Called stand lowland because of the seasonal flooding that can occur in the spring months.	
9	42220 - Natural Jack Pine	Medium Density Pole	11.5	51	51-80		
11	42120 - Planted Jack Pine	Low Density Sapling	16.0	11		Stand was cut in mid 90's TSale#009-93. It did not regenerate well and was planted in 2002; FTP42-352. The JP is now ~5' tall and 1/2" DBH. Still open areas in stand where the trees did not survive.	
12	42290 - Natural Mixed Pine	High Density Log	19.8	83	111-140		
13	42220 - Natural Jack Pine	Low Density Pole	23.6	61		Stand is very open in many places. Variable sizes, density, age in jack pine across stand. Patchy clumps of jack pine growing amongst open areas.	
14	42220 - Natural Jack Pine	High Density Sapling	62.7	16		Stand was cut in mid 90's TSale#009-93. Scattered residual red pine, oak and red maple in the overstory.	
17	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density Log	10.4	90	51-80	Stand flanks the East Branch Two Hearted River. Stand follows river corridor and is a mix of uplands and lowlands. Called stand lowland because of the seasonal flooding that can occur in the spring months.	
18	42220 - Natural Jack Pine	Medium Density Log	61.0	67			
19	42220 - Natural Jack Pine	High Density Pole	24.2	48			

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Newberry Mgt. Unit

5 – Forested Stands

Compartment: 034

Year of Entry: 2013



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	42220 - Natural Jack Pine	Medium Density Pole	14.5	56		Stand is mostly jack pine that is approx. 55 years old although there are some scattered older jack pine in stand. The stand has a red/white pine component that is older as well. The jack pine in the stand is limby and must have started from an open grown condition, the BA in stand is medium stocked but merchantable.
23	42220 - Natural Jack Pine	Low Density Pole	89.4	56		Stand is very open in many places. Variable sizes, density, age in jack pine across stand. Patchy clumps of jack pine growing amongst open areas. Many jack pine trees are limby and open grown.
24	42220 - Natural Jack Pine	Medium Density Pole	268.6	61		Stand is variable; thick and thin density with variable diameters and ages. Thick areas of taller JP where trees are of somewhat smaller diameter, some non-merchantable. Thinner areas contain larger diametered open grown wolfy trees. Some areas of old JP w/younger sapling sized regen present.
25	42220 - Natural Jack Pine	Medium Density Log	5.0	83		Stand falls on the edge/bank of the Two Hearted River and serves as a forested buffer along the river corridor. Jack pine in the stand is old and beyond rotation age. Heavy balsam fir understory in most places in stand.
26	42220 - Natural Jack Pine	Medium Density	26.7	17		Stand was cut in 1993 and scarified in 1994. TSale # 010-93. Jack pine is now 10-20' tall and 1-2" DBH.
27	42220 - Natural Jack Pine	Medium Density Pole	11.0	30		Stand is a mix of jack pine, white pine, red pine, spruce, balsam and p. birch. Jack pine is dominate. Some older red pine on the overstory. Most species are regenerating to some degree or another. Some variability in ages.
28	42220 - Natural Jack Pine	High Density Sapling	9.1	27		Stand was cut in June of 1984 and then scarified. It is now fully stocked with 10-20' tall JP 2-5" DBH.
29	42220 - Natural Jack Pine	High Density Sapling	25.6	27		Stand was cut in June of 1984 and then scarified. It is now fully stocked with 10-20' tall JP 1-4" DBH.
30	42220 - Natural Jack Pine	High Density Sapling	15.2	27		Stand was cut in June of 1984 and then scarified. It is now fully stocked with 10-20' tall JP 1-4" DBH.
31	42220 - Natural Jack Pine	Medium Density Pole	20.9	61		Stand is variable; thick and thin density with variable diameters and ages. Thick areas of taller JP where trees are of somewhat smaller diameter, some non-merchantable. Thinner areas contain larger diametered open grown wolfy trees. Some areas of old JP w/younger sapling sized regen present.
32	42220 - Natural Jack Pine	High Density Sapling	13.3	34		Stand was cut in 1977. It is fully stocked with 20-30' tall JP 2-6" DBH. Sapling sized stand becoming pole sized.
34	42220 - Natural Jack Pine	High Density Sapling	11.0	27		Stand was cut in June of 1984 and then scarified. It is now fully stocked with 10-20' tall JP 1-4" DBH.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
4	50 - Water	1.6	No	Unspecified	Small depression in topography. Water level looks lower now than what was shown in the imagery. There is leatherleaf along the edges of stand.
6	3302 - Low Density Conifer Trees	141.1	Natural Regen	Jack Pine	Stand was treated in 2005. JP seedlings now regenerating and 1-2' tall. Stand looks to be fully stocked.
8	3302 - Low Density Conifer Trees	3.7	Planted	Jack Pine	
10	3302 - Low Density Conifer Trees	74.1	Natural Regen	Jack Pine	Stand was treated in 2005; Tsale#018-03. J. pine regeneration is now 1-2' tall. Red maple stump sprout saplings present. There are scattered red pine, white pine, and red maple in overstory that was left as residual from the cutting. Stand looks to be regenerating well to jack pine. Stand will be moving to a forested condition soon.
15	3302 - Low Density Conifer Trees	40.8	No	Jack Pine	Stand is a grassy opening that has open grown, limby jack pine scattered throughout. Grass ground cover with some blueberry brush as well as some sweet fern.
16	3302 - Low Density Conifer Trees	83.7	Planted	Jack Pine	Stand is regenerating naturally with jack pine 1-2' tall. Some scotch pine present seedlings present as well. Red maple stump sprout seedlings present. Stand was recently trenched for planting to increase stocking.
21	3302 - Low Density Conifer Trees	23.1	No	Unspecified	Stand is a grassy opening that has open grown, limby jack pine scattered throughout. Grass ground cover with some blueberry brush as well as some sweet fern.
22	3302 - Low Density Conifer Trees	69.1	No	Unspecified	Stand is a grassy opening that has open grown, limby jack pine scattered throughout. Grass ground cover with some blueberry brush as well as some sweet fern.
33	3302 - Low Density Conifer Trees	1.7	Natural Regen	Jack Pine	Stand was final harvested in 2007. Some jp and white pine regen present but not a lot as of yet. What's here is approx. 6"-1' tall. Red maple stump sprout regen present. May have to wait another year to see more pine regen.

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

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

Stand	SCA Type	SCA Name	Acres	Comments
multiple - see	Unique Site - SCA	42034_SCA	336.7	Area represents the Two Hearted River Natural River Zone. Follow the Natural River Plan when implementing treatments.



8 – DEDICATED CONSERVATION AREA DETAILS

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

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

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