



Newberry Forest Management Unit
Compartment Review Presentation
Compartment #42025 Entry Year: 2013
Compartment Acreage: 1,078 County: Luce

Revision Date: September 1, 2011

Stand Examiner: Tori Irving

Legal Description: T49N, R10W, Sect. 9, 16, 17

RMU (if applicable): Deer Park Management Area

Management Goals:

Vegetative management for the Deer Park Management Area will emphasize balancing the age classes of jack pine and red pine, and provide various timber products. Management will maintain or enhance wildlife habitat.

Soil and Topography:

This compartment is mostly Rubicon sand with patches of Dawson, Greenwood, and Loxely soils, and Deer Park sand. There is rolling topography throughout the compartment with some steep slopes (15 to 35 percent) in the northern part of the compartment.

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

This compartment is almost entirely state-owned. There is a small parcel of private land in the SWNW of Section 9. This parcel is about nine acres. There are many opportunities for recreation, including, but not limited to, hunting, ORV, snowmobiling, and berry-picking, within and surrounding the compartment. Much of the surrounding land is also state-owned, which provides additional opportunities for timber harvests.

Unique, Natural Features:

Michigan Natural Features Inventory (MNFI) notes bog and numerous high-quality natural communities: dry northern forest, dry-mesic northern forest, mesic northern forest, intermittent wetland, muskeg, and patterned fen. MNFI also lists potential for goshawk, eagle, osprey, and pine-drops.

Archeological, Historical, and Cultural Features:

None listed.

Special Management Designations or Considerations:

None listed.

Watershed and Fisheries Considerations:

Fisheries Values: None

Fisheries Concerns: There are no water-bodies in this compartment, so Fisheries has no concerns at this time.

Wildlife Habitat Considerations: Compartment 25 is located in northern Luce county and is in the Grand Marais Sandy End Moraine and Outwash ecological sub-subsection. The compartment is heavily comprised of red pine with some jack pine stands and a minimal amount of mixed conifer. Stands are generally low in species composition.

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. Scattered birch and white pine that are retained in red pine harvests will provide soft snags for primary (woodpeckers, flickers) and secondary cavity nesters (chickadees, flycatchers, red backed voles, saw-whet owls etc.) and coarse woody debris later for small mammals, fisher and marten (a featured species in this compartment) hunting locations. Red crossbills (a featured species in this compartment) will benefit from scattered red and white pine as well as retention patches that include pine.

Mineral Resource and Development Concerns and/or Restrictions:

Sections 9, 16 and 17, T49N-R10W, Luce County Surface sediments consist of lacustrine (lake) sand and gravel. 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. 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:

This compartment is accessed by County Road 410W on the west and north. Seven Mile Firelane runs east-west through the compartment. There are also two-tracks off of the county road that can be used to access the compartments interior.

Survey Needs:

None.

Recreational Facilities and Opportunities:

Snowmobile Trail 8 and the Two Hearted ORV tail run through the compartment.

Fire Protection: The compartment is part of the Two Hearted Zone Dispatch Area. Potential for Large fire growth in this compartment is moderate because of the fragmentation of Red Pine, Hardwood and Jack Pine stands. Fires should be easily accessed by heavy equipment.

Additional Compartment Information: Text

➤ **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

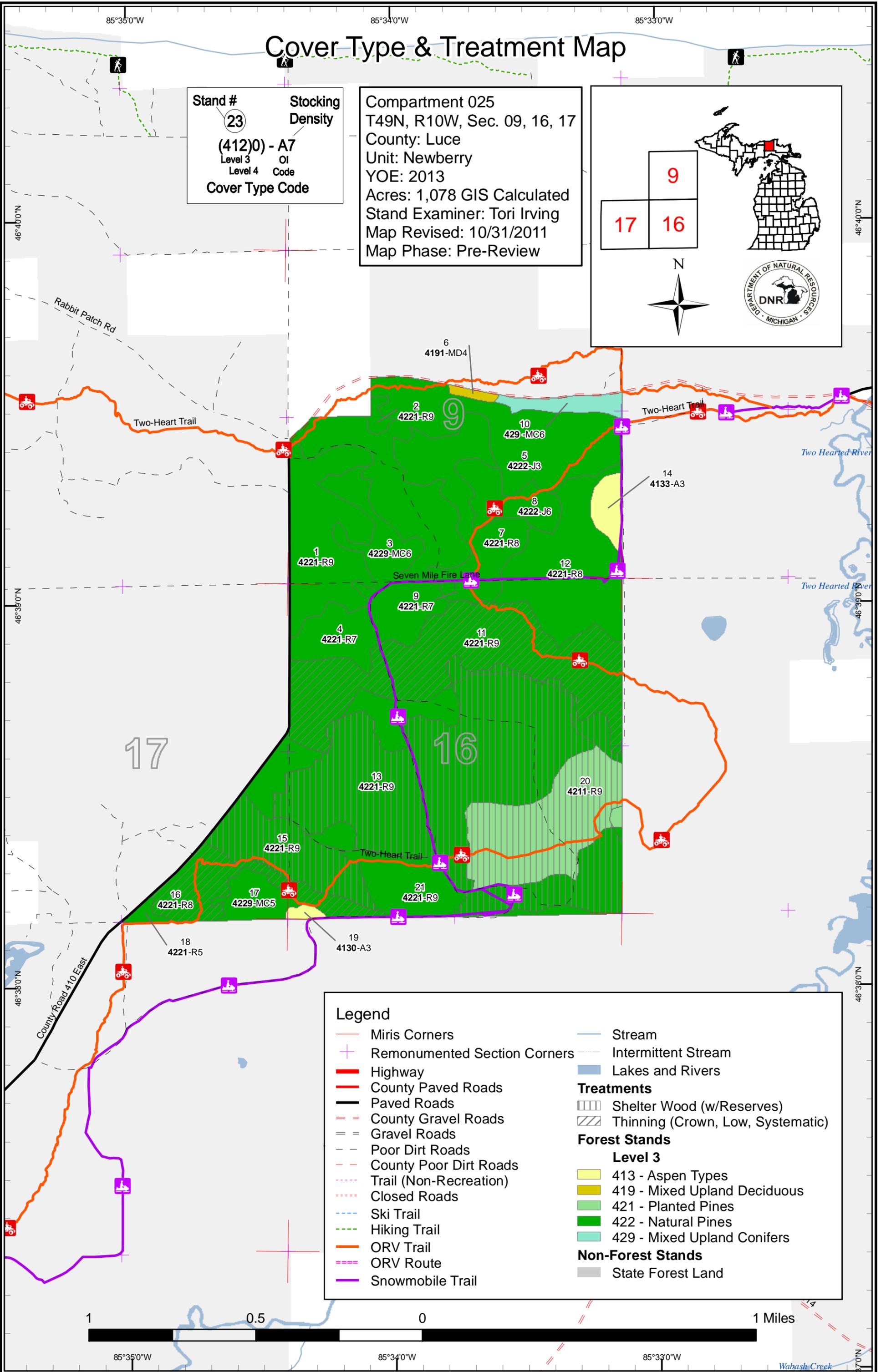
Stand #
23
(412)0 - A7
 Level 3
 Level 4
 Cover Type Code

Stocking
 Density
 OI
 Code

Compartment 025
 T49N, R10W, Sec. 09, 16, 17
 County: Luce
 Unit: Newberry
 YOE: 2013
 Acres: 1,078 GIS Calculated
 Stand Examiner: Tori Irving
 Map Revised: 10/31/2011
 Map Phase: Pre-Review

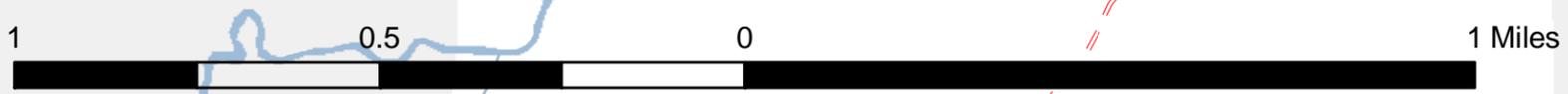
9
 17 16

N



Legend

	Miris Corners		Stream
	Remonumented Section Corners		Intermittent Stream
	Highway		Lakes and Rivers
	County Paved Roads	Treatments	
	Paved Roads		Shelter Wood (w/Reserves)
	County Gravel Roads		Thinning (Crown, Low, Systematic)
	Gravel Roads	Forest Stands	
	Poor Dirt Roads	Level 3	
	County Poor Dirt Roads		413 - Aspen Types
	Trail (Non-Recreation)		419 - Mixed Upland Deciduous
	Closed Roads		421 - Planted Pines
	Ski Trail		422 - Natural Pines
	Hiking Trail		429 - Mixed Upland Conifers
	ORV Trail	Non-Forest Stands	
	ORV Route		State Forest Land
	Snowmobile Trail		



85°35'0"W 85°34'0"W 85°33'0"W

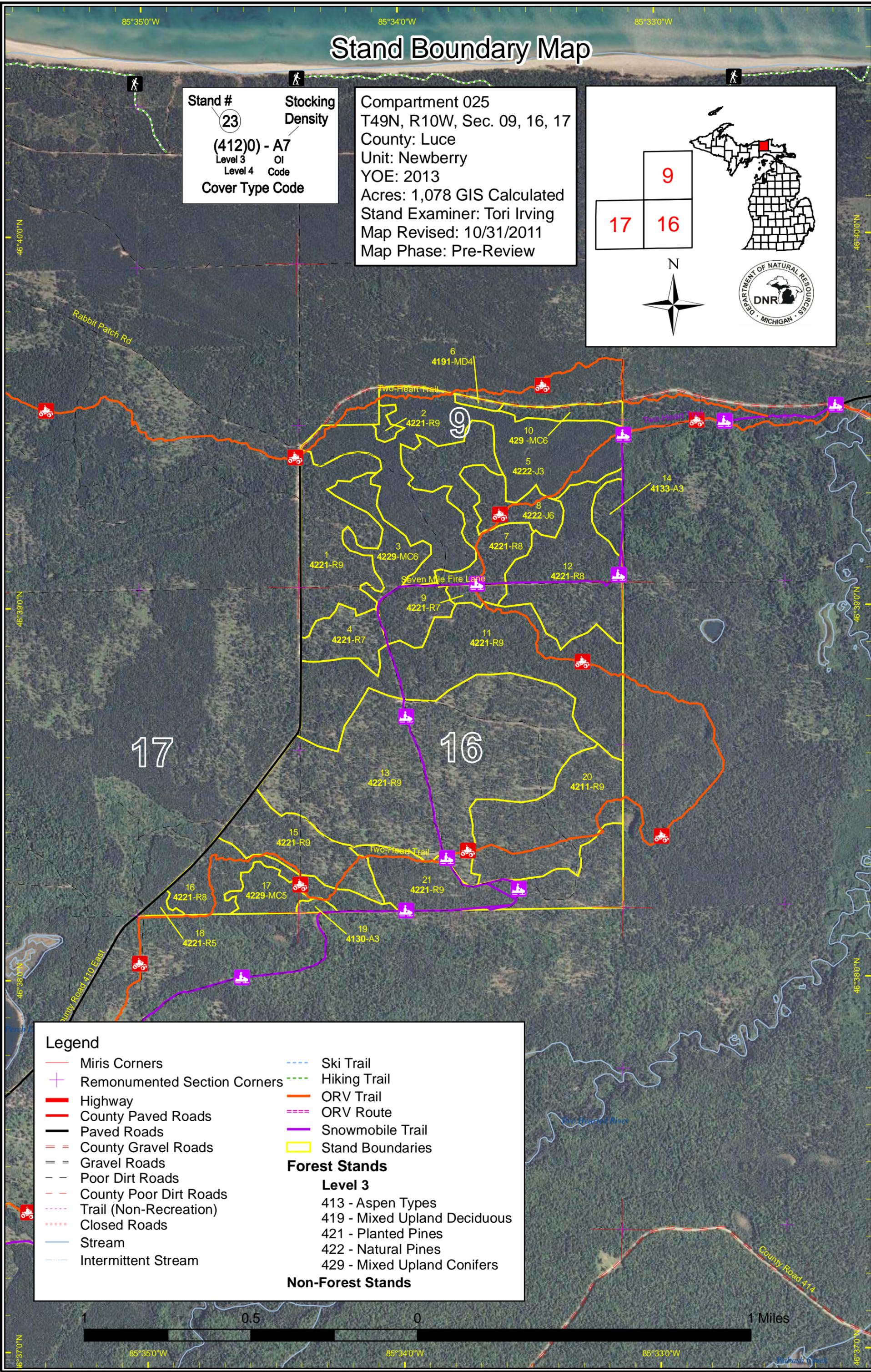
Wabash Creek

Stand Boundary Map

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

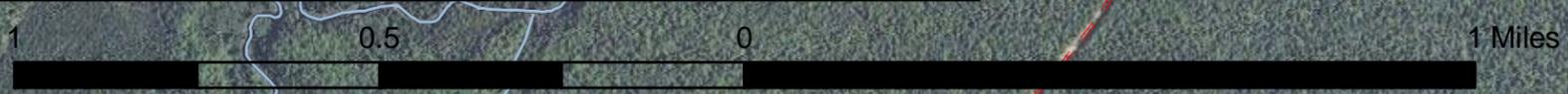
Stocking
 Density
 OI
 Code

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Legend

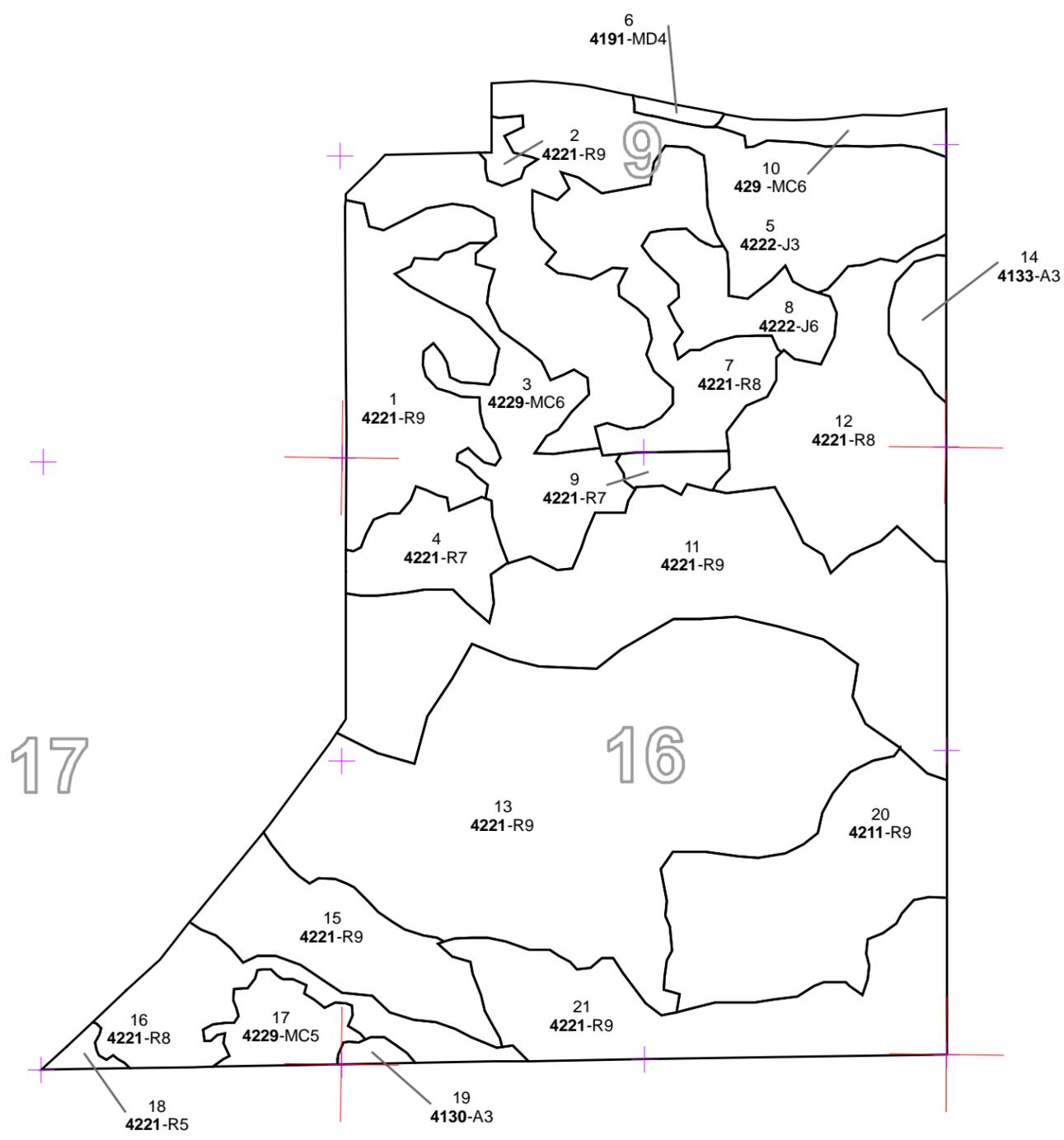
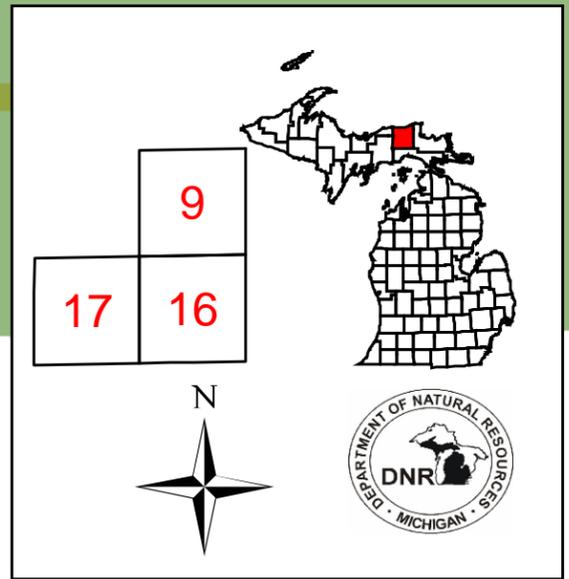
—+— Miris Corners	--- Ski Trail
+ Remonumented Section Corners	--- Hiking Trail
— Highway	— ORV Trail
— County Paved Roads	--- ORV Route
— Paved Roads	— Snowmobile Trail
--- County Gravel Roads	— Stand Boundaries
--- Gravel Roads	
--- Poor Dirt Roads	Forest Stands
--- County Poor Dirt Roads	Level 3
--- Trail (Non-Recreation)	413 - Aspen Types
--- Closed Roads	419 - Mixed Upland Deciduous
— Stream	421 - Planted Pines
--- Intermittent Stream	422 - Natural Pines
	429 - Mixed Upland Conifers
	Non-Forest Stands



Dedicated & Proposed Special Conservation Area Map

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

Compartment 025
 T49N, R10W, Sec. 09, 16, 17
 County: Luce
 Unit: Newberry
 YOE: 2013
 Acres: 1,078 GIS Calculated
 Stand Examiner: Tori Irving
 Map Revised: 10/31/2011
 Map Phase: Pre-Review



Legend

- Miris Corners
- + Remonumented Section Corners
- Stand Boundaries
- Dedicated Special Conservation Areas**
- Natural Rivers Zoning District
- Natural Rivers Vegetative Buffer
- Critical Coastal Habitat (Piping Plover)
- ▲ Campgrounds
- Non_Dedicated Natural Areas and National Natural Landmarks
- Cold Water Lakes
- Cold Water Streams

Forest Stands

Level 3

- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers

Non-Forest Stands

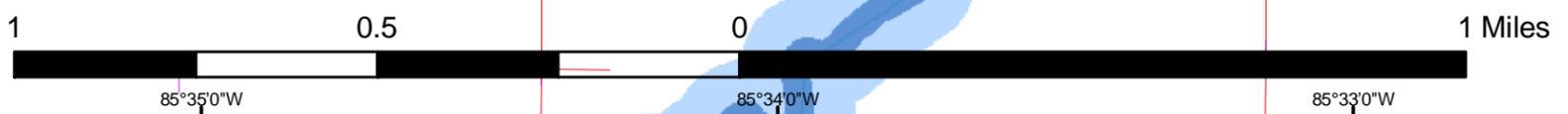


Table 1 – Total Acres by Cover Type and Age Class



	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	3	10	0	0	0	0	0	0	0	0	0	0	0	13
Jack Pine	0	0	0	0	135	0	0	23	0	0	0	0	0	0	0	158
Mixed Upland Deciduous	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
Natural Mixed Pines	0	0	0	0	0	0	47	0	17	0	0	0	0	0	0	64
Red Pine	0	0	0	0	0	0	0	51	766	7	6	0	0	0	0	830
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	11
Total	0	0	3	10	135	3	47	74	782	7	6	11	0	0	0	1078



Table 2 – Proposed Treatment Summaries

Newberry Mgt. Unit
Year of Entry 2013

Compartment 025
Total Compartment Acres: 1078

Acres by Treatment Type

Commercial Harvest - 531	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>
Red Pine		0	0	0	366	164	0	531
Total		0	0	0	366	164	0	531



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
11	42025011-Cut	127.3	42110 - Planted Red Pine	High Density Log	72	Harvest	Crown Thinning	42210 - Natural Red Pine	Cmpt. Review Proposal

Prescription: Thin stand to 70-80 residual BA to release the advanced regeneration under the canopy. Remove all jack pine and most of the white pine from the canopy. Protect understory regeneration. Per WLD: Leave any oak and some birch.

Other Comments:

Next Steps:

13	42025013-Cut	322.0	42210 - Natural Red Pine	High Density Log	71	Harvest	Shelter Wood with Reserves	42210 - Planted Red Pine	Cmpt. Review Proposal
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Prescription: Shelterwood/seed tree the area to 20-40 residual BA. ** This Rx covers stands 13, 20, & 21.

Specs:

Other Comments: This AOI was treated as a part of the Red Pine Project as sale #42-036-09-01 C025 Phase II RP Project. It includes OI stands: 30, 37, 38, 50, and 51. AOI is currently under contract until December 31, 2012.

Next Steps: Scarify after timber sale is complete. Acceptable species mix includes: red pine, jack pine, and scattered miscellaneous species. If scarification fails, plant the AOI with red pine. Monitor regeneration success.

15	42025015-Cut	44.4	42110 - Planted Red Pine	High Density Log	71	Harvest	Shelter Wood with Reserves	42211 - Natural Red Pine, Mixed Deciduous	Cmpt. Review Proposal
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Prescription: Treat stand with a heavy shelterwood. Take all jack pine that occurs, remove large canopy white pine. Target residual BA 40-50. Per WLD:

Specs: Leave some birch and some large canopy white pine at a ratio of 1 tree/5 acres.

Other Comments:

Next Steps: Scarify stand after harvesting is complete. Monitor regeneration. Acceptable regeneration mix is red pine and a small component of jack pine.

16	42025016-Cut	37.2	42110 - Planted Red Pine	Medium Density Log	71	Harvest	Crown Thinning	42210 - Natural Red Pine	Cmpt. Review Proposal
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Prescription: Thin stand to release pole and sapling sized red pine and jack pine. Leave all aspen unless removal is needed for maneuverability. Remove

Specs: about half of the white pine volume. Target residual BA is 70-90. Per WLD: Leave some birch.

Other Comments:

Next Steps:

**Total Treatment
Acreage Proposed: 530.9**

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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
<p><u>Prescription:</u> 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"</p> <p><u>Specs:</u> (MNFI). Focus on the 8-18 inch DBH class. Residual BA 10-20 to allow for successful pine regeneration.</p> <p><u>Other Comments:</u> 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.</p> <p><u>Next Steps:</u> 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.</p>								

**Total Treatment
Acreage Proposed: 3.9**



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42210 - Natural Red Pine	High Density Log	64.0	77	81-110	Old Stands: 20 (1934) & 21 (1908). Stand 21 cut as 410 Red Pine (Sale # 008-03-01) complete in 8/1/2005. On the south east edge of the stand there are some large, mature jack pine and some large red pine trees with a lot of regeneration around the base. Some trees have 20-30 seedlings around the base. Additional BA swing:
2	42210 - Natural Red Pine	High Density Log	3.5	80	1-50	Old OI Stand 2 (1976). Portions of stand were aerial seeded from helicopter in 1976. Scarified in 1976, and planted in 1983. ORV trail runs through the stand.
3	42290 - Natural Mixed Pine	High Density Pole	47.0	51	51-80	This stand has a large range of sizes and densities. Some areas of this stand are really thick with unmerchantable trees and some parts, especially the west side, have large jack pine trees that are merchantable. On the lower end of the 75-100% canopy cover. Good red pine regeneration under the large trees, about 5-10 under each large tree.
4	42210 - Natural Red Pine	Low Density Log	22.9	71	1-50	Old OI Stand 34 Cut as part of Sale #5-93. FTP 42-424; scarification completed 4/98. Stocking survey completed 5/21/2003 - 182 trees per acre.
5	42220 - Natural Jack Pine	High Density Sapling	135.0	35		This stand was multiple stands during the last entry year. There have been multiple treatments done to this stand. The northwest corner of the stand was part of sale #23-79, treated with FTP #42-138 and planted in 1983. The central part of the stand was aerial seeded by helicopter in 1976. The west part of the stand was scarified in 1972 and planted in 1976. The snowmobile and ORV trail runs through various parts of the stand. The jack pine is really thick throughout the entire stand. There are some super canopy red pine trees scattered throughout the stand.
6	4191 - Mixed Upland Deciduous with Conifer	Low Density Pole	2.5	40	1-50	Jack pine was removed in 1984. There is one clump of spruce in the stand. The stand is sparse but is starting to fill in with red maple shrubs.
7	42210 - Natural Red Pine	Medium Density Log	51.1	67	51-80	Parts of the stand were aerial seeded in 1976 and planted in 1939. Part of stand was treated as Sale#41-83. The stand is sparse in some areas. There is some white birch scattered in the canopy.
8	42220 - Natural Jack Pine	High Density Pole	23.0	66		
9	42210 - Natural Red Pine	Low Density Log	6.5	90	1-50	
10	429 - Mixed Upland Conifers	High Density Pole	11.1	100		The jack pine in the stand was removed in 1984 as part of sale #009-83. This stand has large super-canopy red and white pine with a really thick understory. There is a ridge running east-west through the stand and it also serves as the stand boundary. There is an RDR in the stand that has been signed and blocked to ward off any further damage to the ridge side.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
11	42210 - Natural Red Pine	High Density Log	139.6	72	111-140	Very high red pine regeneration in the stand. Some scattered jack pine throughout the stand. Really good red pine regeneration under the red pine trees.
12	42210 - Natural Red Pine	Medium Density Log	72.7	71	1-50	This stand was part of sale#11-83. There are some Xlog sized white pine and jack pine is scattered through the stand. There is some good regeneration under the large red pine trees. Most of the regen is red/white pine with a few scattered red maple and jack pine.
13	42210 - Natural Red Pine	High Density Log	235.2	71	111-140	Part of this stand is currently under contract as part of the Red Pine Project 036-09.
14	4133 - Aspen, Mixed Pine	High Density Sapling	10.5	22		Aspen cut in 1989. Large super canopy red/white pine. Most of the red maple distribution is along the road edge.
15	42210 - Natural Red Pine	High Density Log	44.4	71	111-140	
16	42210 - Natural Red Pine	Medium Density Log	37.2	71	141-170	The west part of the stand was cut as part if sale#5-93 and scarified with FTP#42-424 in 1998. Stocking survey completed 5/21/2003 - 159 trees per acre.
17	42290 - Natural Mixed Pine	Medium Density Pole	16.7	71	111-140	Mixed upland pine stand some aspen clones scattered through stand. There is some red maple in the canopy but not enough to account for a portion of the canopy. Old OI Stand 46. Pine planted in 1940. Add'l BA swings: 10 WP; 20 Q Aspen; 90 RP
18	42210 - Natural Red Pine	Medium Density Pole	3.1	85	81-110	Old OI Stand #43, heavier red pine component than white pine component.
19	4130 - Aspen	High Density Sapling	2.7	14	1-50	This stand was treated with 42026 as part of Sale #11-97.
20	42110 - Planted Red Pine	High Density Log	77.8	71	81-110	***Stand harvested as "Canoe Camp Pine Mix" (009-03-01. Completed 07/14/05. FTP = C42-592. Scarification yet to be completed as of 09/13/05. Check regeneration in 2007. If scarification was unsuccessful, then plant. ****2008-For the Red Pine Project, this stand will be harvested via shelterwood/seed tree treatment, followed by scarification for natural red pine regeneration. Stand is currently an R5/R6 with open areas of R4. Residual red pine BA needs to be lowered to promote better natural red pine regeneration. Red pine BA avg of 50 sq ft, ranging from 30-90 sq ft. Management objective is red pine. Some regeneration of jack pine and scattered miscellaneous sp

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Newberry Mgt. Unit

5 – Forested Stands

Compartment: 025
Year of Entry: 2013



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	42210 - Natural Red Pine	High Density Log	72.0	71	81-110	Planted in 1940. ORV Trail. ***Stand harvested as "Canoe Camp Pine Mix" (009-03-01. Completed 07/14/05. FTP = C42- 592. Scarification yet to be completed as of 09/13/05. Check regeneration in 2007. If scarification was unsuccessful, then plant. ****2008-For the Red Pine Project, this stand will be harvested via shelterwood/seed tree treatment, followed by scarification for natural red pine regeneration. Stand is currently an R5/R6 with open areas of R4. Residual red pine BA needs to be lowered to promote better natural red pine regeneration. Red pine BA avg of 50 sq ft, ranging from 30-90 sq ft.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:



7 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

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

Stand	SCA Type	SCA Name	Acres	Comments



8 – DEDICATED CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
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