



**Newberry Forest Management Unit**  
**Compartment Review Presentation**  
**Compartment #96**                      **Entry Year: 2013**  
**Compartment Acreage: 1793**        **County: Luce**

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**Revision Date:** 9/14/11

**Stand Examiner:** Keith Magnusson

**Legal Description:** T46N R12W Sections 5, 8 & 17

**RMU (if applicable):** This compartment is located within the Danaher Kingston Outwash 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/08\\_Danaher\\_Kingston\\_Outwash\\_MA\\_Summary.pdf](http://www.midnr.com/publications/pdfs/forestslandwater/Ecosystem/EUP/final-MAsummaries/08_Danaher_Kingston_Outwash_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 compartment is predominately sandy outwash plains where the topography is level to slightly rolling. The southern end of the compartment drops off the sand plains into level lowland swamp.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** The compartment is mostly state land excluding 120 acres that is privately owned. The compartment is completely surrounded by state land. The privately owned parcels within the compartment have seasonal cabins on them and are primarily used for recreation and hunting camps. The State land in this area has been historically managed for timber production as well as providing habitat for wildlife. It has also provided opportunities for recreational activities such as hunting, snowmobiling, ORV riding, wildlife viewing and berry picking.

**Unique, Natural Features:** MNFI lists the potential for sharp-tailed grouse and grasshopper sparrow as well as some limited potential for Kirtland's warbler. Small potential for goshawk. Potential for incurvate emerald, ebony boghaunter, Frigga fritillary and Freija fritillary in bog habitat in south half of section 17. Potential for Hill's thistle and Canada rice-grass in dry grassy openings. MNFI also lists that the area west of section 5 and northwest of section 8 as being pine barrens.

**Archeological, Historical, and Cultural Features:** None listed.

**Special Management Designations or Considerations:** This compartment is part of the Danaher Plains Kingston Outwash Plains management area. The northern portions of this compartment as well as adjacent areas to it have historically been managed by the DNR for sharp-tailed grouse habitat. This was accomplished through timber harvesting efforts as well as prescribed burning to maintain openings for the grouse. These items should be considered when making management recommendations.

**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 96 lies in western Luce county in the Grand Marais Sandy End Moraine and Outwash ecological sub-subsection. The compartment has a large opening in the northern portion that is managed for sharptail grouse, and otherwise consists of jack pine stands, upland mixed and mixed conifer and a small amount of red pine, aspen and lowland mixed conifer. Kirtland's warbler have been recorded immediately adjacent to this compartment in the past.

Wildlife objectives will be met by burning the large opening to maintain it as a functional opening for sharptailed grouse (featured species). Jack pine stands will be managed in larger blocks when possible to benefit Kirtland's warblers (featured species). 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 nesting birds) and oak for mast production for deer and squirrels. Scattered residual red and white pine will benefit red crossbills (featured species) and black bear.

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

Sections 5, 8 and 17, T46N-R12W, Luce County

Surface sediments consist of glacial outwash sand and gravel, postglacial alluvium and peat and muck. There is insufficient data to determine the glacial drift thickness. The Ordovician Stonington Formation and Utica Shale subcrop below the glacial drift. The Stonington could be used for stone. A gravel pit is located three miles to the south. Potential appears to be limited in the compartment. There is no economic oil and gas production in the UP.

**Vehicle Access:** There are several sand two tracks leading from County Road 421 that provide relatively good access into the compartment (see inventory map).

**Survey Needs:** If timber harvest treatments occur, some survey corners will need to be established in Section 17 where they interface with the interior private land parcels within the compartment (see inventory map for what corners will be needed).

**Recreational Facilities and Opportunities:** There are no recreational facilities within the compartment but the opportunities that exist would be hunting, ORV riding, wildlife viewing and berry picking.

**Fire Protection:** This compartment has potential for large fire growth. Initial attack response for the compartment is covered by the Seney Field Office Protection Area. Most of the compartment is upland sandy soils which will allow good operability of 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:**

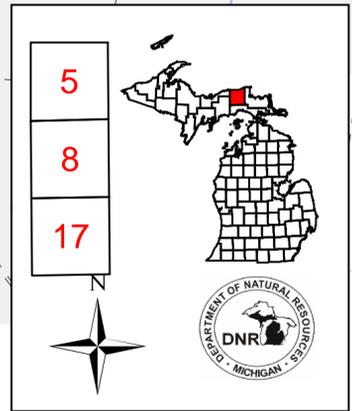
- ◆ **Base feature information, stand boundaries, cover types, and numbers**
- ◆ **Proposed treatments**
- ◆ **Details on the road access system**



# Cover Type & Treatment Map

Compartment 096  
 T46N, R12W, Sec. 5, 8, 17  
 County: Luce  
 Unit: Newberry  
 YOE: 2013  
 Acres: 1,793 GIS Calculated  
 Stand Examiner: Keith Magnusson  
 Map Revised: 10/31/2011  
 Map Phase: Pre-Review

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



**Legend**

- Miris Corners
- Remonumented Section Corners
- Survey Corners
- Structures
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Motorcycle (DNR Sticker)
- Motorcycle (SOS License)
- ORV Trail
- ORV Route
- Stream
- Intermittent Stream
- Lakes and Rivers

**Non-Forest Regeneration**

- Natural
- Planted

**Treatments**

- Clearcut (w/Reserves, Patch/Strip)
- Seed Tree (w/Reserves)
- Shelter Wood (w/Reserves)
- Planting (tree species)
- Prescribed Burn

**Forest Stands**

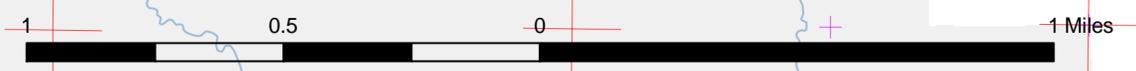
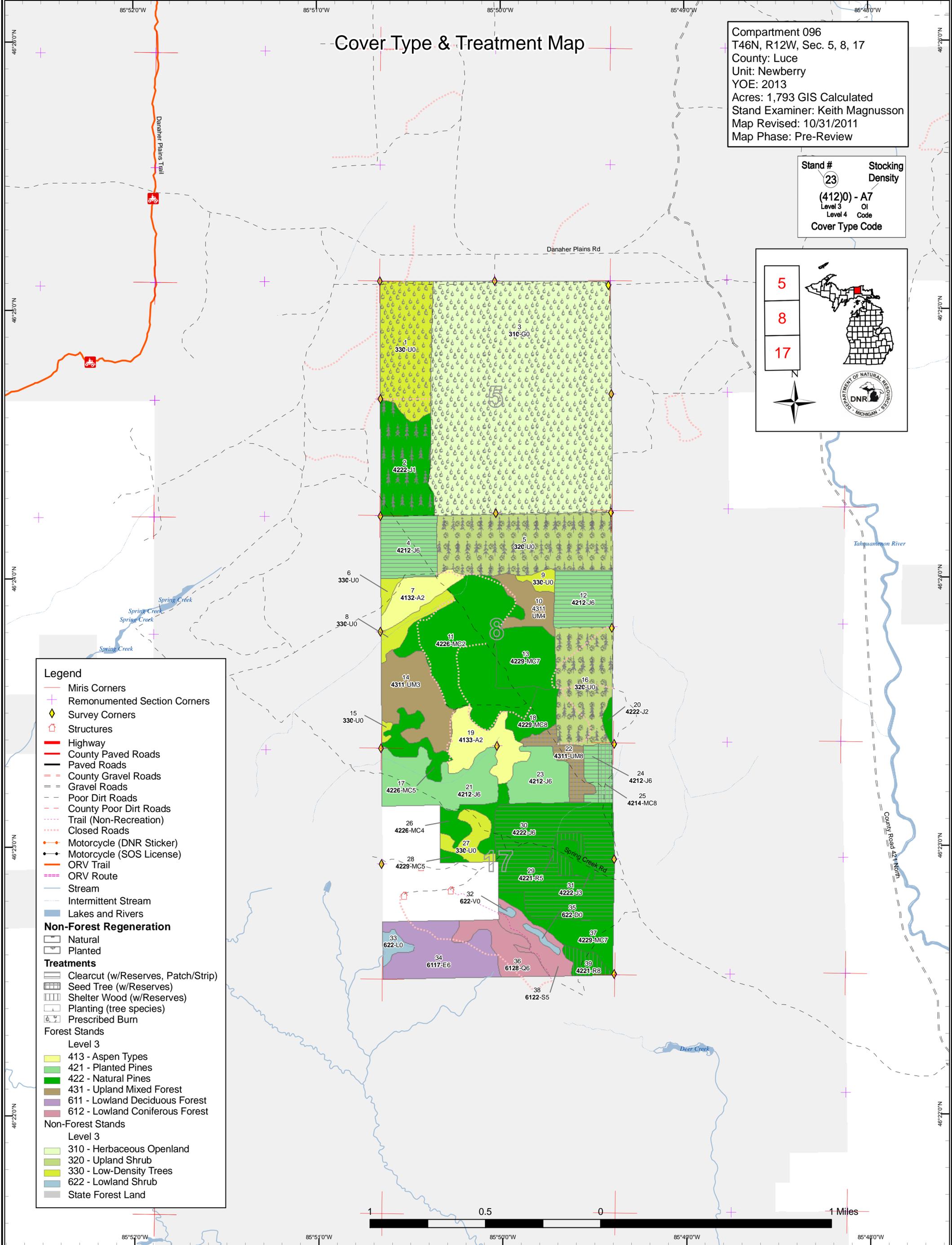
Level 3

- 413 - Aspen Types
- 421 - Planted Pines
- 422 - Natural Pines
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest

**Non-Forest Stands**

Level 3

- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 622 - Lowland Shrub
- State Forest Land



# Stand Boundary Map

Compartment 096  
 T46N, R12W, Sec. 5, 8, 17  
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 Unit: Newberry  
 YOE: 2013  
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 Stand Examiner: Keith Magnusson  
 Map Revised: 10/31/2011  
 Map Phase: Pre-Review

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

5  
8  
17

**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)
- Closed Roads
- Motorcycle (DNR Sticker)
- Motorcycle (SOS License)
- ORV Trail
- ORV Route
- Intermittent Stream/Drain
- Stream
- Stand Boundaries

**Forest Stands**

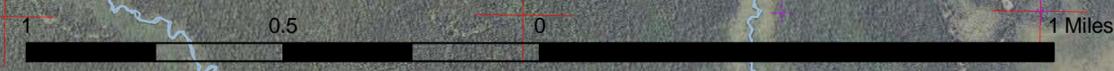
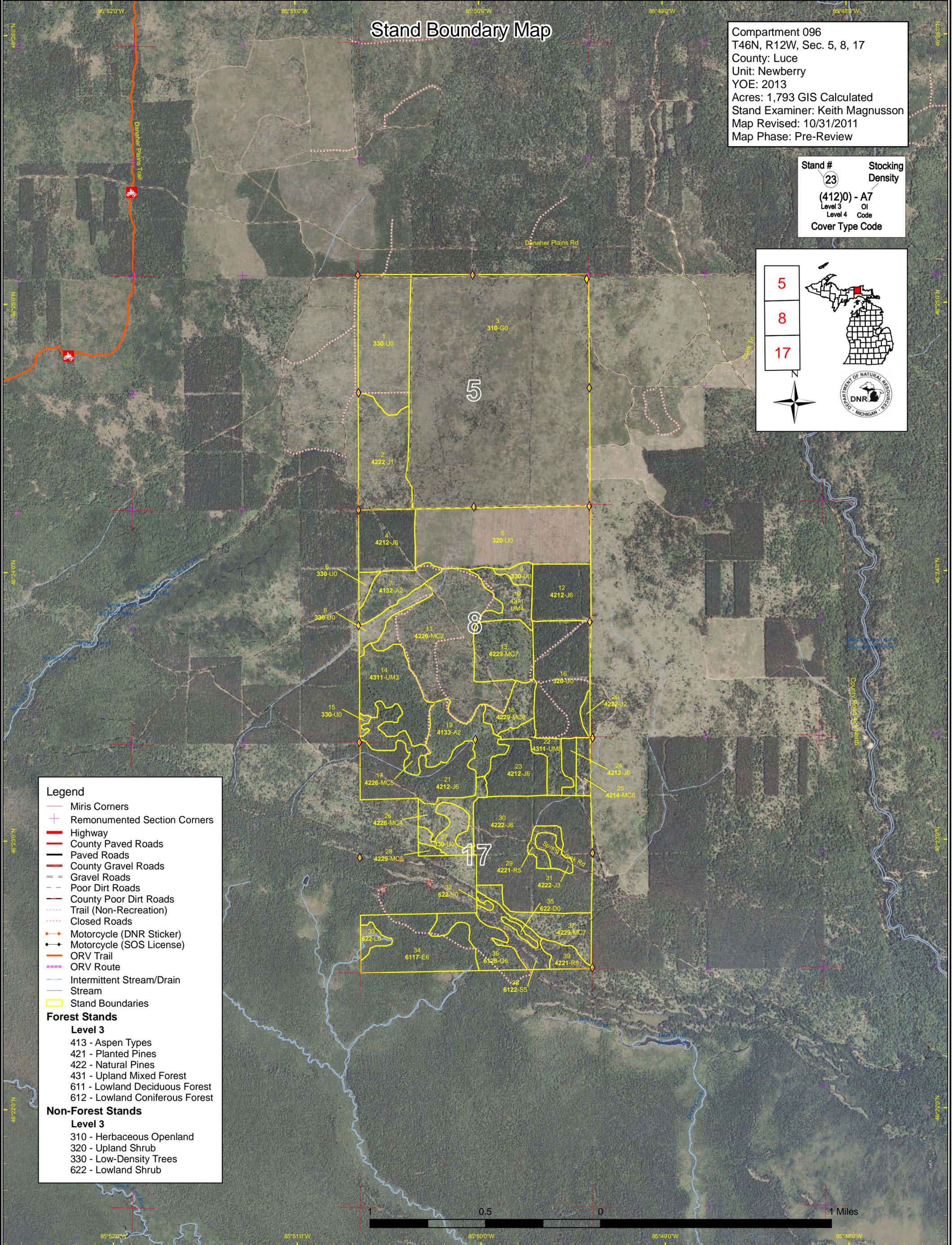
**Level 3**

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- 421 - Planted Pines
- 422 - Natural Pines
- 431 - Upland Mixed Forest
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- 612 - Lowland Coniferous Forest

**Non-Forest Stands**

**Level 3**

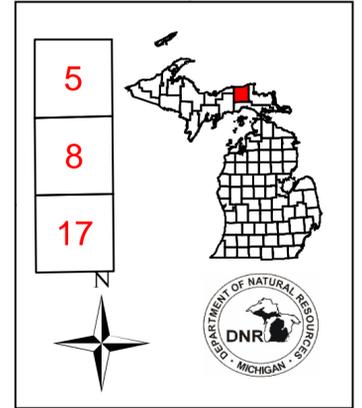
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- 622 - Lowland Shrub



# Dedicated & Proposed Special Conservation Area Map

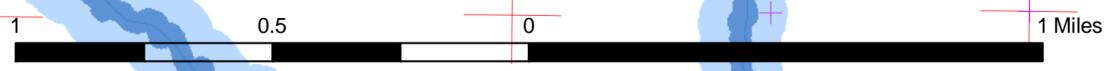
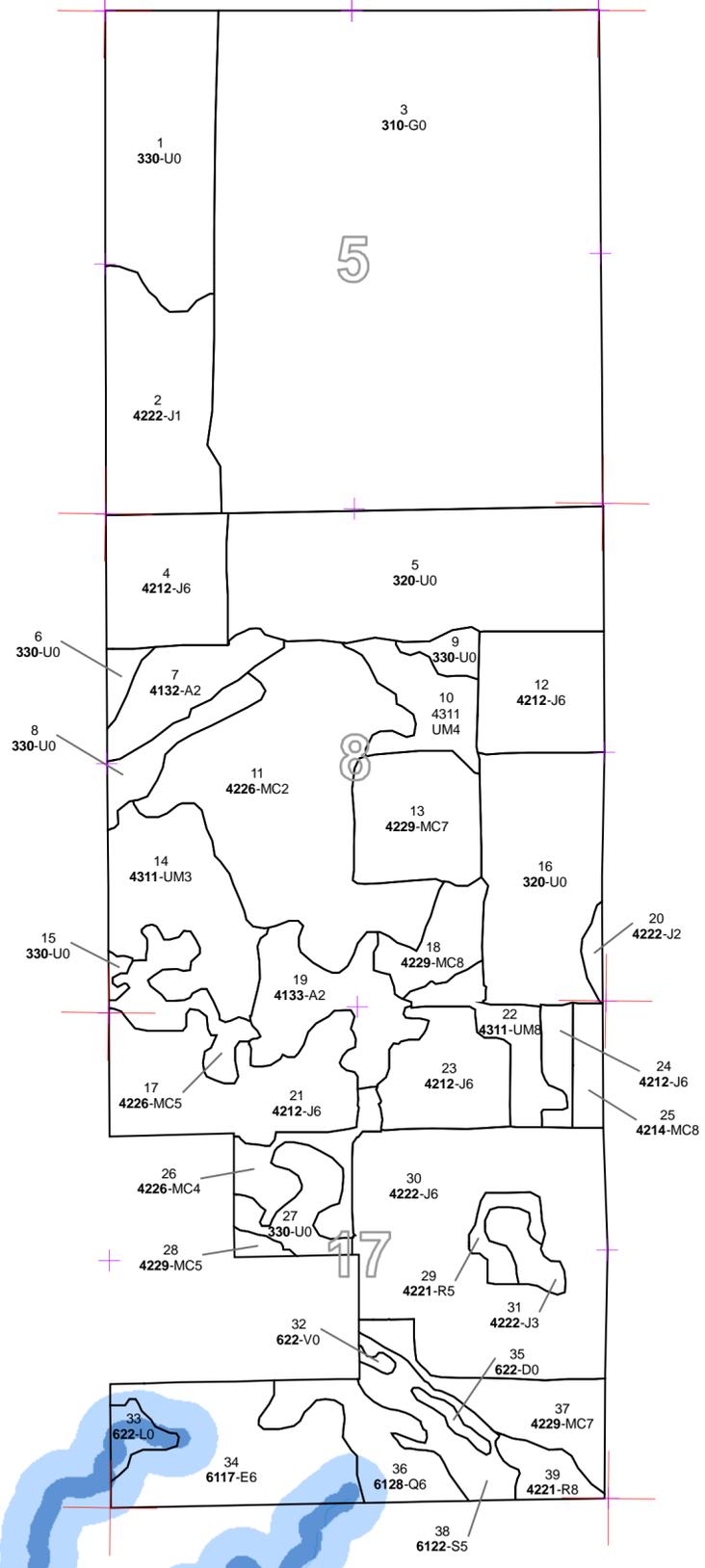
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 Stocking Density  
 (4120) - A7  
 Level 3 OI  
 Level 4 Code  
 Cover Type Code

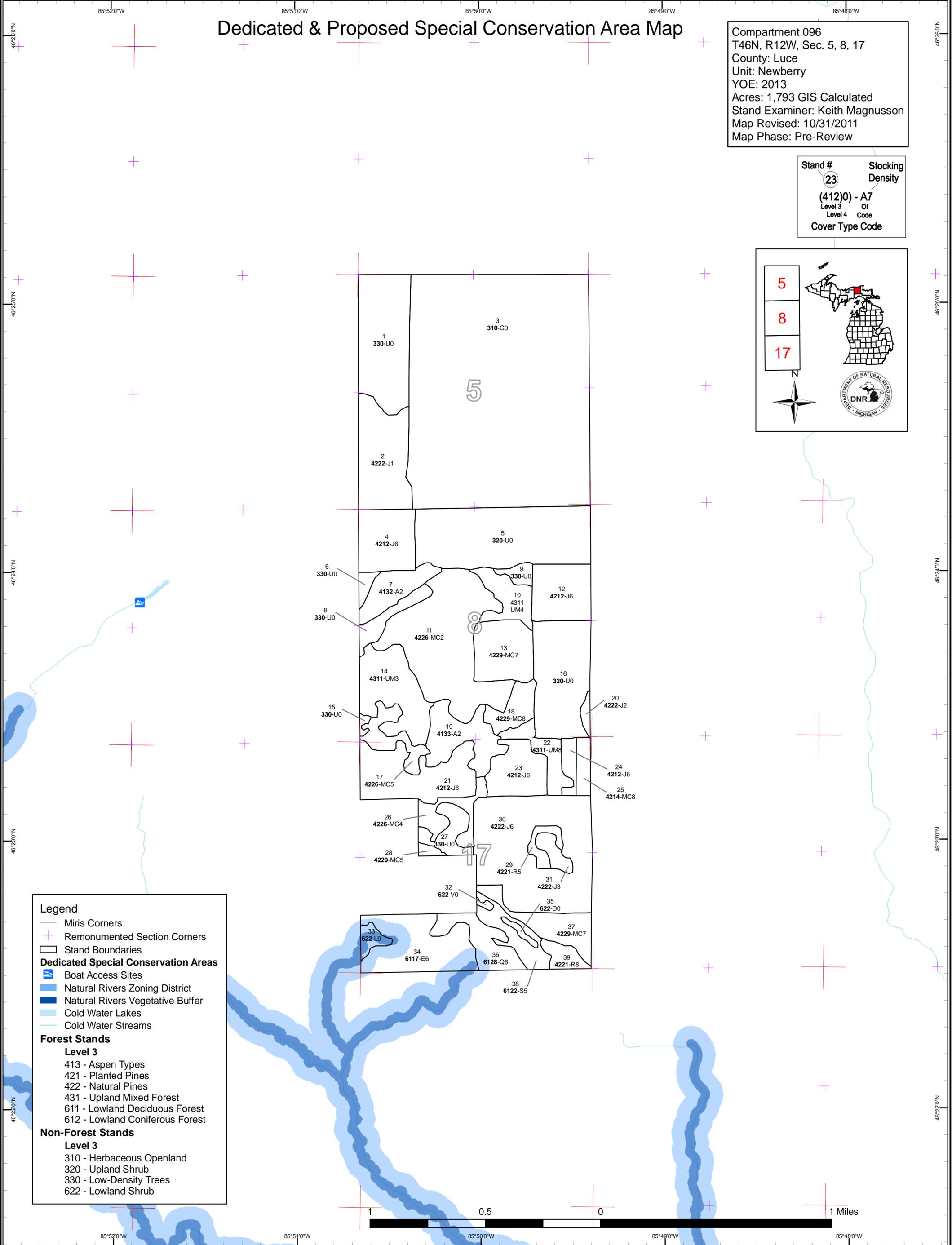


**Legend**

- Miris Corners
- + Remonumented Section Corners
- Stand Boundaries
- Dedicated Special Conservation Areas**
- ☒ Boat Access Sites
- ▒ Natural Rivers Zoning District
- ▓ Natural Rivers Vegetative Buffer
- ▒ Cold Water Lakes
- ▒ Cold Water Streams
- Forest Stands**
- Level 3**
- 413 - Aspen Types
- 421 - Planted Pines
- 422 - Natural Pines
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3**
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 622 - Lowland Shrub



85°52'0"W 85°51'0"W 85°50'0"W 85°49'0"W 85°48'0"W



**Table 1 – Total Acres by Cover Type and Age Class**

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 +    |           | Unretn Age  |
| Aspen               | 0            | 0        | 25        | 0          | 0        | 0        | 39         | 0         | 0         | 0          | 0        | 0        | 0        | 0        | 0         | 64          |
| Bog                 | 1            | 0        | 0         | 0          | 0        | 0        | 0          | 0         | 0         | 0          | 0        | 0        | 0        | 0        | 0         | 1           |
| Herbaceous Openland | 498          | 0        | 0         | 0          | 0        | 0        | 0          | 0         | 0         | 0          | 0        | 0        | 0        | 0        | 0         | 498         |
| Jack Pine           | 0            | 0        | 9         | 66         | 0        | 0        | 321        | 0         | 0         | 0          | 0        | 0        | 0        | 0        | 0         | 396         |
| Low-Density Trees   | 125          | 0        | 0         | 0          | 0        | 0        | 0          | 0         | 0         | 0          | 0        | 0        | 0        | 0        | 0         | 125         |
| Lowland Conifers    | 0            | 0        | 0         | 0          | 0        | 0        | 0          | 0         | 0         | 28         | 0        | 0        | 0        | 0        | 0         | 28          |
| Lowland Deciduous   | 0            | 0        | 0         | 0          | 0        | 0        | 0          | 0         | 0         | 63         | 0        | 0        | 0        | 0        | 0         | 63          |
| Lowland Shrub       | 7            | 0        | 0         | 0          | 0        | 0        | 0          | 0         | 0         | 0          | 0        | 0        | 0        | 0        | 0         | 7           |
| Lowland Spruce/Fir  | 0            | 0        | 0         | 0          | 0        | 0        | 0          | 0         | 22        | 0          | 0        | 0        | 0        | 0        | 0         | 22          |
| Natural Mixed Pines | 0            | 0        | 0         | 127        | 0        | 0        | 3          | 20        | 42        | 0          | 0        | 0        | 0        | 0        | 69        | 260         |
| Planted Mixed Pines | 0            | 0        | 0         | 0          | 0        | 0        | 10         | 0         | 0         | 0          | 0        | 0        | 0        | 0        | 0         | 10          |
| Red Pine            | 0            | 0        | 0         | 0          | 0        | 0        | 0          | 0         | 0         | 19         | 0        | 0        | 0        | 0        | 0         | 19          |
| Treed Bog           | 3            | 0        | 0         | 0          | 0        | 0        | 0          | 0         | 0         | 0          | 0        | 0        | 0        | 0        | 0         | 3           |
| Upland Mixed Forest | 0            | 0        | 55        | 0          | 0        | 0        | 0          | 20        | 0         | 0          | 0        | 0        | 0        | 0        | 23        | 98          |
| Upland Shrub        | 198          | 0        | 0         | 0          | 0        | 0        | 0          | 0         | 0         | 0          | 0        | 0        | 0        | 0        | 0         | 198         |
| <b>Total</b>        | <b>832</b>   | <b>0</b> | <b>89</b> | <b>194</b> | <b>0</b> | <b>0</b> | <b>373</b> | <b>40</b> | <b>64</b> | <b>110</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>92</b> | <b>1793</b> |



## Table 2 – Proposed Treatment Summaries

**Newberry Mgt. Unit**  
**Year of Entry 2013**

**Compartment 096**  
**Total Compartment Acres: 1793**

### Acres by Treatment Type

|                          |                         |                     |                       |           |
|--------------------------|-------------------------|---------------------|-----------------------|-----------|
| Commercial Harvest - 274 | Site Prep - 0           | Tree Planting - 260 | Prescribed Burn - 578 | 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> |
|----------------------------|-----------------|------------------|------------------|--------------------|-----------------|------------------------|--------------------|
| <b>Jack Pine</b>           | 226             | 0                | 0                | 0                  | 0               | 0                      | 226                |
| <b>Planted Mixed Pines</b> | 0               | 0                | 10               | 0                  | 0               | 0                      | 10                 |
| <b>Red Pine</b>            | 0               | 0                | 0                | 19                 | 0               | 0                      | 19                 |
| <b>Upland Mixed Forest</b> | 0               | 0                | 20               | 0                  | 0               | 0                      | 20                 |
| <b>Total</b>               | <b>226</b>      | <b>0</b>         | <b>30</b>        | <b>19</b>          | <b>0</b>        | <b>0</b>               | <b>274</b>         |



| S<br>t<br>a<br>n<br>d  | Treatment<br>Name | Acres | Stage1<br>CoverType           | Size<br>Density       | Stand<br>Age | Treatment<br>Type | Treatment<br>Method        | Cover Type<br>Objective       | Approval<br>Status       |
|--|-------------------|-------|-------------------------------|-----------------------|--------------|-------------------|----------------------------|-------------------------------|--------------------------|
| 4  | 42096004-Cut      | 41.5  | 42120 - Planted<br>Jack Pine  | High Density Pole     | 52           | Harvest           | Clearcut with<br>Reserves  | 42220 - Natural Jack<br>Pine  | Cmpt. Review<br>Proposal |
| <p><u>Prescription</u> Final harvest jack pine. Leave any deciduous tree species as reserves. Leave old/large red pine/white pine as residual (1 tree/ 5 acres). Leave<br/><u>Specs:</u> no more than 10 BA residual.</p> <p><u>Other</u><br/><u>Comments:</u></p> <p><u>Next</u><br/><u>Steps:</u> Scarify stand to encourage natural jack pine regeneration. Monitor for jack pine regeneration. Acceptable regeneration would be jack pine, red<br/>pine, white pine and oak. If natural regeneration fails, plant stand to jack pine.</p>  |                   |       |                               |                       |              |                   |                            |                               |                          |
| 12   | 42096012-Cut      | 39.6  | 42120 - Planted<br>Jack Pine  | High Density Pole     | 52           | Harvest           | Clearcut with<br>Reserves  | 42220 - Natural Jack<br>Pine  | Cmpt. Review<br>Proposal |
| <p><u>Prescription</u> Cut all jack pine and leave any deciduous tree species as reserves. Leave old/large red pine/white pine as residual (1 tree/ 5 acres). Leave no<br/><u>Specs:</u> more than 10 BA residual.</p> <p><u>Other</u><br/><u>Comments:</u></p> <p><u>Next</u><br/><u>Steps:</u> Scarify stand after harvest to encourage natural jack pine regeneration. Monitor stand for regeneration. Acceptable regeneration would be jack<br/>pine, red pine, white pine and oak. If regeneration fails, machine plant to jack pine.</p>   |                   |       |                               |                       |              |                   |                            |                               |                          |
| 22   | 42096022-Cut      | 20.0  | 4311 - Pine, Aspen<br>Mix     | Medium Density<br>Log | 65           | Harvest           | Seed Tree with<br>Reserves | 4311 - Pine, Aspen<br>Mix     | Cmpt. Review<br>Proposal |
| <p><u>Prescription</u> Remove all jack pine, aspen and some red pine and white pine. Leave all oak. Leave a few larger aspen and red maple (1 tree/ 5 acres).<br/><u>Specs:</u> Residual BA should be no more than 30 BA.</p> <p><u>Other</u><br/><u>Comments:</u></p> <p><u>Next</u><br/><u>Steps:</u> Scarify stand after harvest to encourage natural jack pine regeneration. Monitor stand for regeneration. Acceptable regeneration would be jack<br/>pine, red pine, white pine, aspen and oak. If regeneration fails, machine plant to jack pine.</p>   |                   |       |                               |                       |              |                   |                            |                               |                          |
| 24   | 42096024-Cut      | 8.4   | 42120 - Planted<br>Jack Pine  | High Density Pole     | 52           | Harvest           | Clearcut with<br>Reserves  | 42220 - Natural Jack<br>Pine  | Cmpt. Review<br>Proposal |
| <p><u>Prescription</u> Final harvest all jack pine and aspen, leave some but not all of the red and white pine present in stand (leave the old platey barked pine). Leave<br/><u>Specs:</u> a few large aspen (1 tree / 5 acres). Leave no more that 20 BA total.</p> <p><u>Other</u><br/><u>Comments:</u></p> <p><u>Next</u><br/><u>Steps:</u> Scarify stand after harvest to encourage natural jack pine regeneration. Monitor stand for regeneration. Acceptable regeneration would be jack<br/>pine, red pine, white pine, aspen and oak. If regeneration fails, machine plant to jack pine.</p> |                   |       |                               |                       |              |                   |                            |                               |                          |
| 25   | 42096025-Cut      | 9.8   | 42140 - Planted<br>Mixed Pine | Medium Density<br>Log | 52           | Harvest           | Seed Tree with<br>Reserves | 42290 - Natural<br>Mixed Pine | Cmpt. Review<br>Proposal |
| <p><u>Prescription</u> Remove all jack pine, aspen and some red pine and white pine (leave old platey barked pine). Leave all oak. Leave a few large aspen trees (1<br/><u>Specs:</u> tree / 5 acres). Leave no more than 10 BA of residual trees total.</p> <p><u>Other</u><br/><u>Comments:</u></p> <p><u>Next</u><br/><u>Steps:</u> Scarify stand after harvest to encourage natural jack pine regeneration. Monitor stand for regeneration. Acceptable regeneration would be jack<br/>pine, red pine, white pine, aspen and oak. If regeneration fails, machine plant to jack pine.</p>          |                   |       |                               |                       |              |                   |                            |                               |                          |



| Stand   | Treatment Name    | Acres | Stage1 CoverType          | Size Density         | Stand Age | Treatment Type | Treatment Method       | Cover Type Objective      | Approval Status       |
|---|-------------------|-------|---------------------------|----------------------|-----------|----------------|------------------------|---------------------------|-----------------------|
| 29  | 42096029-Cut      | 7.9   | 42210 - Natural Red Pine  | Medium Density Pole  | 85        | Harvest        | Shelterwood            | 42210 - Natural Red Pine  | Cmpt. Review Proposal |
| <u>Prescription</u> Shelterwood stand by removing approx. half of the red pine basal area to encourage regeneration.<br><u>Specs:</u><br><u>Other Comments:</u><br><u>Next Steps:</u> Scarify stand after harvest to encourage natural red pine regeneration. Acceptable regeneration would be jack pine, red pine, white pine, aspen and oak.  |                   |       |                           |                      |           |                |                        |                           |                       |
| 30  | 42096030-Cut      | 136.0 | 42220 - Natural Jack Pine | High Density Sapling | 52        | Harvest        | Clearcut with Reserves | 42220 - Natural Jack Pine | Cmpt. Review Proposal |
| <u>Prescription</u> Final harvest all jack pine and aspen, leave old/large red pine/white pine as residual (1 tree/ 5 acres). Leave a few pole sized paper birch as they exist (1 tree / 5 acres). Leave no more than 10 BA residual.<br><u>Specs:</u><br><u>Other Comments:</u><br><u>Next Steps:</u> Scarify stand after harvest to encourage natural jack pine regeneration. Monitor stand for regeneration. Acceptable regeneration would be jack pine, red pine, white pine, aspen and oak. If regeneration fails, machine plant to jack pine. |                   |       |                           |                      |           |                |                        |                           |                       |
| 39  | 42096039-Cut      | 10.6  | 42210 - Natural Red Pine  | Medium Density Log   | 81        | Harvest        | Shelterwood            | 42210 - Natural Red Pine  | Cmpt. Review Proposal |
| <u>Prescription</u> Shelterwood stand to encourage regeneration. Leave some birch (1 tree / acre) as well some non red pine species (1 tree/ acre). Residual BA should be no more than 50.<br><u>Specs:</u><br><u>Other Comments:</u><br><u>Next Steps:</u> Scarify stand after harvest to encourage natural red pine regeneration. Acceptable regeneration would be jack pine, red pine, white pine, aspen and oak.  |                   |       |                           |                      |           |                |                        |                           |                       |
| 2   | 42096002-Plant    | 62.9  | 42220 - Natural Jack Pine | Low Density Sapling  | 20        | Tree Planting  | Machine Plant          | 42220 - Natural Jack Pine | Cmpt. Review Proposal |
| <u>Prescription</u> There are some thin areas in the western portions of stand that are more open. Plant more jack pine in sparse areas to increase stocking levels.<br><u>Specs:</u><br><u>Other Comments:</u><br><u>Next Steps:</u> Regeneration survey after planting occurs. Acceptable regeneration is jack pine.  |                   |       |                           |                      |           |                |                        |                           |                       |
| 5   | NF_42096005-Plant | 122.5 | Non-Forested              |                      | 0         | Tree Planting  | Hand Plant             | 42120 - Planted Jack Pine | Cmpt. Review Proposal |
| <u>Prescription</u> Hand plant jack pine along the trenches that were plowed in.<br><u>Specs:</u><br><u>Other Comments:</u> Stand was trenched in the summer of 2011. FTP#42-716.<br><u>Next Steps:</u> Hand plant jack pine. Monitor plantation for survival success.  |                   |       |                           |                      |           |                |                        |                           |                       |
| 16  | NF_42096016-Plant | 75.0  | Non-Forested              |                      | 0         | Tree Planting  | Hand Plant             | 42120 - Planted Jack Pine | Cmpt. Review Proposal |
| <u>Prescription</u> Mechanically trench stand and hand plant stand to jack pine.<br><u>Specs:</u><br><u>Other Comments:</u> FTP#42-717.<br><u>Next Steps:</u> Hand plant stand and then monitor plantation for seedling survival.   |                   |       |                           |                      |           |                |                        |                           |                       |



| Stand  | Treatment Name   | Acres         | Stage1 CoverType | Size Density | Stand Age | Treatment Type  | Treatment Method | Cover Type Objective             | Approval Status       |
|--|------------------|---------------|------------------|--------------|-----------|-----------------|------------------|----------------------------------|-----------------------|
| 1  | NF_42096001-Burn | 79.8          | Non-Forested     |              | 0         | Prescribed Burn | Unspecified      | 3302 - Low Density Conifer Trees | Cmpt. Review Proposal |
| <p><u>Prescription</u> Rx Burn to kill jack pine trees present, enhance grasses present and promote sharp-tailed grouse habitat.</p> <p><u>Specs:</u></p> <p><u>Other</u> Area was burned in May of 1991, FTP W42-246.. Soil type is Vilas loamy sand. Some scattered jack pine. Jack pine is scattered and is now 5-20' tall, 2-4"DBH. It is encroaching/filling in open stand as time goes by. Willow spp and cherry present.</p> <p><u>Comments:</u></p> <p><u>Next</u> Monitor site for native grass species present.</p> <p><u>Steps:</u></p>   |                  |               |                  |              |           |                 |                  |                                  |                       |
| 3  | NF_42096003-Burn | 498.4         | Non-Forested     |              | 0         | Prescribed Burn | Unspecified      | 3101 - Poverty Grass, Cladonia   | Cmpt. Review Proposal |
| <p><u>Prescription</u> Rx burn to kill jack pine trees present, enhance grasses present and promote sharp-tailed grouse habitat. Also prescribe burn stand 406 of Compartment 97. This is part of stand 3 but into the adjacent compartment. All roads/burn perimeter are established.</p> <p><u>Specs:</u></p> <p><u>Other</u> Cover type consists of poverty grass, sweet fern, bracken fern, rough fescue, etc., with scattered jack pine, willow spp., red maple, mixed aspen, pin cherry and red pine. Blueberry present also. Area was Rx burned in April of 1997, FTP W42-398. It was burned again in May of 2003, FTP W42-499/500. Soil type is Vilas loamy sand. Scattered jack pine is 5-20' tall 2-4" DBH. Some areas of stand are filling in with trees and becoming forested. May want to consider burning or loppng some trees off if an open condition is desired. A burn may enhance grasses present.</p> <p><u>Comments:</u></p> <p><u>Next</u> Monitor site for native grass species present.</p> <p><u>Steps:</u></p> |                  |               |                  |              |           |                 |                  |                                  |                       |
| <b>Total Treatment Acreage Proposed:</b>   |                  | <b>1112.4</b> |                  |              |           |                 |                  |                                  |                       |

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| Treatment Name | Acres | Stage1 CoverType | Size Density | Stand Age | Treatment Type | Treatment Method | Cover Type Objective | Approval Status |
|----------------|-------|------------------|--------------|-----------|----------------|------------------|----------------------|-----------------|
|----------------|-------|------------------|--------------|-----------|----------------|------------------|----------------------|-----------------|

#Error

Prescription  
Specs:

Other  
Comment:

Next  
Steps:

Limiting Factor and No  
Treatment Reason

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**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> |       |                          |                  |           |                |                  |                          |                       |
| <b>Total Treatment Acreage Proposed:</b>   |       | <b>3.9</b>               |                  |           |                |                  |                          |                       |



| Stand | Level 4 Cover Type                    | Size Density         | Acres | Stand Age  | BA Range | General Comments:  |
|-------|---------------------------------------|----------------------|-------|------------|----------|--|
| 2     | 42220 - Natural Jack Pine             | Low Density Sapling  | 62.9  | 20         |          | Stand consists of jack pine approximately 15-25' tall 2-4" DBH with a grass understory. Area was burned in May of 1991. Area has filled in with jack pine regeneration.  |
| 4     | 42120 - Planted Jack Pine             | High Density Pole    | 41.5  | 52         |          | Stand was planted in the fall of 1959. There is a strip of red pine planted on the far west edge of this stand. Jack pine is doing well and looks healthy. Could possibly treat this stand, the trees are large enough for commercial harvest. Recommend leaving for another 10 years to let trees get larger as well as letting the surrounding stands that were recently harvested get established. Talk about at pre-review.                            |
| 7     | 4132 - Aspen, Jack Pine               | Medium Density       | 25.3  | 17         |          | Stand is the result of sale # 001-94 cut in 1994. There are mixed aspen, white/jack pine, red maple and cherry regenerating. Bracken fern/grass in understory. Stand is sparse in places. Some clumps of june berry, and willow also.  |
| 10    | 4311 - Pine, Aspen Mix                | Low Density Pole     | 23.1  | Uneven Age |          | Stand is a mixed bag of species. Red/white/jack pine along with aspen and a few larger red maple. Stand varies in age classes and density and is regenerating to gradually fill more of the stand in with no real discernable age class.   |
| 11    | 42260 - Natural Pine, Mixed Deciduous | Medium Density       | 127.1 | 20         |          | Stand mostly jack pine with a mix of white pine and aspen. Grasses, bracken fern, sweet fern and rough fescue present. Most of area was roller chopped in the early 90's.  |
| 12    | 42120 - Planted Jack Pine             | High Density Pole    | 39.6  | 52         |          | Stand was planted in 1959. Scattered red maple throughout. Could possibly treat this stand, the trees are large enough for commercial harvest. Recommend leaving for another 10 years to let trees get larger as well as letting the surrounding stands that were recently harvested get established. Talk about at pre-review.  |
| 13    | 42290 - Natural Mixed Pine            | Low Density Log      | 41.5  | 79         |          | This land was purchased in 1998. Stand harvested on 2003 TS#003-03-01. Red and white pine were left as residual. Stand was scarified in 2004 FTP# 42-581. Regeneration count completed 4/25/2007 = 920 t/ac (293 A, 451 M, 117 W, 59 R). Secondary regeneration count done again on 6/5/08 = 521 t/ac (98J 1' ht, 130W, 293A). Stand has regenerated, jack pine came in better in open areas now 3-5' tall. Pockets of mature red and white pine in stand. |
| 14    | 4311 - Pine, Aspen Mix                | High Density Sapling | 55.3  | 16         |          | Stand was harvested in 1995 - sale #028-95. They harvested all species except white/red pine, oak. Some scattered red maple left in overstory as well. Stand is regenerating to aspen with a mix of white pine and jack pine.  |
| 17    | 42260 - Natural Pine, Mixed Deciduous | Medium Density Pole  | 20.1  | 61         |          | Part of stand was treated "Spring Creek Aspen" (004-03-01). Completed 12/10/03. Red pine and white pine were left as well as a few white birch seed trees. Aspen regeneration throughout. White pine saplings present as well. Stand is a two storied stand now with aspen in the lower storied.   |



|    | Level 4<br>Cover Type                         | Size<br>Density        | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:   |
|----|---|------------------------|-------|--------------|-------------|--|
| 18 | 42290 - Natural Mixed<br>Pine                 | Medium<br>Density Log  | 18.7  | Uneven Age   |             | Stand is a mix of white pine, red pine, jack pine, aspen and red maple. Stand is an opening that is filling in over time, still some somewhat open areas throughout stand. There are a variety of tree sizes from sawlog to sapling in the red and white pine with no real discernable age class. Jack pine, aspen and red maple is sapling sized for the most part.   |
| 19 | 4133 - Aspen, Mixed<br>Pine                   | Medium<br>Density      | 39.1  | 50           |             | Stand harvested as "Spring Creek Aspen" (004-03-01). Completed 12/10/03. Stand is now mostly aspen and white pine regeneration. Overstory of white pine, red pine, red maple, oak and paper birch left as residual from sale.  |
| 20 | 42220 - Natural Jack<br>Pine                  | Medium<br>Density      | 3.5   | 26           |             | Jack pine in stand is approx. 10-30' tall 3-7"DBH. Some white pine regeneration present also.  |
| 21 | 42120 - Planted Jack<br>Pine                  | High Density<br>Pole   | 61.5  | 52           |             | Stand is a jack pine plantation - planted in 1959. It has an aspen component. Also has a mix of birch, red and white pine. They planted through and around the aspen/pine trees that were here at that time. Jack pine is growing up nicely. Aspen is beginning to show signs of decline.  |
| 22 | 4311 - Pine, Aspen Mix                        | Medium<br>Density Log  | 20.0  | 65           | 51-80       | Stand is a mixed bag of tree species of most all size classes. Tree spp. include mixed aspen, red/white/jack pine, red maple and paper birch. Mostly aspen and pine spp. regenerating. Some oak seedlings present also. Some areas of stand are open with bracken fern, grasses and hazel in the understory. In areas where there is aspen in the overstory, white pine seems to be regenerating nicely in the understory. |
| 23 | 42121 - Planted Jack<br>Pine, Mixed Deciduous | High Density<br>Pole   | 34.0  | 52           |             | Stand is a jack pine plantation - planted in 1959. It has an aspen component. Also has a mix of birch, red and white pine. They planted through and around the aspen/pine trees that were here at that time. Jack pine is growing up nicely. Aspen is beginning to show signs of decline.  |
| 24 | 42120 - Planted Jack<br>Pine                  | High Density<br>Pole   | 8.4   | 52           | 111-140     | Stand is a jack pine plantation - planted in 1959. It has an aspen component. Also has a mix of red and white pine, aspen, red maple and oak. Jack pine is growing up nicely. Aspen is beginning to show signs of decline.   |
| 25 | 42140 - Planted Mixed<br>Pine                 | Medium<br>Density Log  | 9.8   | 52           |             | Stand is mix of species (red/white/jack pine and aspen) that vary in size, density and age. Jack pine was planted. Looks as though jack pine planted through and around the some red and white pine trees that were here at that time, and some are older.   |
| 26 | 42260 - Natural Pine,<br>Mixed Deciduous      | Low Density<br>Pole    | 19.4  | Uneven Age   |             | Stand is filling in with various tree species - Oak, red maple, red/white/jack pine and mixed aspen. Some sawlog sized pine present. Stand is an opening that is filling in over time. There are a variety of tree sizes from sawlog to sapling in the red and white pine with no real discernable age class. The oak in here are decent with fairly large crowns - good mast trees.                                       |
| 28 | 42290 - Natural Mixed<br>Pine                 | Medium<br>Density Pole | 2.9   | 50           |             |  |
| 29 | 42210 - Natural Red<br>Pine                   | Medium<br>Density Pole | 7.9   | 85           | 81-110      | Possibly treat stand if surrounding jack pine plantation is treated.   |



|    | Level 4<br>Cover Type                            | Size<br>Density         | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:   |
|----|--|-------------------------|-------|--------------|-------------|--|
| 30 | 42220 - Natural Jack<br>Pine                     | High Density<br>Pole    | 136.0 | 52           |             | Stand is a jack pine plantation - planted in 1959. It has an aspen component. Also has a mix of red and white pine. Occasional large red and white pine that is older than they planted through and around. Jack pine is growing up nicely. Aspen is beginning to show signs of decline.   |
| 31 | 42220 - Natural Jack<br>Pine                     | High Density<br>Sapling | 8.8   | 17           |             | Area was cut and scarified in 1984. Jack pine came back thick. Is now 10-30' tall 3-5"DBH.   |
| 34 | 6117 - Lowland<br>Deciduous, Mixed<br>Coniferous | High Density<br>Pole    | 63.0  | 84           |             | Stand is lowland hardwoods/conifers. Stand is situated mostly on low ground where some areas look to be very wet at times. Some small intermittent drainages present throughout stand and it may prove difficult to treat due to nature of ground, it would need to be treated in winter if harvested. There is a small sand ridge running the length of the stand where there is an old road evident (see map). Stand falls in the E. Branch Fox River watershed. |
| 36 | 6128 - Lowland<br>Coniferous, Mixed<br>Deciduous | High Density<br>Pole    | 28.3  | 84           |             | Low ground. Lowland conifers of mixed ages. Cedar, spruce, white pine, hemlock, paper birch, red maple present. Thick tag alder in places along with balsam fir/cedar reproduction. Stand is of special concern because it is in low ground and falls in E. Branch Fox River watershed.  |
| 37 | 42290 - Natural Mixed<br>Pine                    | Low Density<br>Log      | 30.5  | Uneven Age   |             | Stand is a mix of red/white/jack pine, oak, aspen and red maple. Stand is diverse with density and size classes with no real discernable age class. Trees are gradually filling in a stand that was more open. There is bracken fern, reindeer moss and grass ground cover.  |
| 38 | 6122 - Black Spruce                              | Medium<br>Density Pole  | 22.2  | 76           |             | Stand falls on the edge of the plains and consists of irregular topography. Stand is a complex of narrow upland sand ridges with lowlands intermixed around and throughout. The upland type supports red and white pine and spruce. The lowland types are mostly spruce with cedar, red maple, p. birch, hemlock.  |
| 39 | 42210 - Natural Red<br>Pine                      | Medium<br>Density Log   | 10.6  | 81           | 111-140     | Decent red pine stand, some utility poles quality red pine trees present.  |



| Stand | Cover Type                       | Acres | Managed Site | Management Priority (Objective) | General Comments:                                |
|-------|----------------------------------|-------|--------------|---------------------------------|--|
| 1     | 3302 - Low Density Conifer Trees | 79.8  | Yes          | Medium (NonForested)            |  |
| 3     | 3101 - Poverty Grass, Cladonia   | 498.4 | Yes          | Medium (NonForested)            |  |
| 5     | 3203 - Upland Blueberry          | 122.5 | Planted      | Jack Pine                       | Regeneration check will be needed in 2014.       |
| 6     | 3302 - Low Density Conifer Trees | 4.7   | No           | Low (NonForested)               |  |
| 8     | 3302 - Low Density Conifer Trees | 14.5  | No           | Low (NonForested)               |  |
| 9     | 3303 - Mixed Low Density Trees   | 6.5   | No           | Low (NonForested)               |  |
| 15    | 3303 - Mixed Low Density Trees   | 1.8   | No           | Low (NonForested)               |  |
| 16    | 3203 - Upland Blueberry          | 75.0  | Planted      | Jack Pine                       | Stand will be trenched and planted to jack pine. |
| 27    | 3303 - Mixed Low Density Trees   | 17.3  | No           | Low (NonForested)               |  |
| 32    | 6225 - Bog                       | 1.3   | No           | Low (NonForested)               |  |
| 33    | 6229 - Mixed lowland shrub       | 7.1   | No           | Low (NonForested)               |  |
| 35    | 6224 - Treed Bog                 | 3.0   | No           | Low (NonForested)               |  |



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

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

| Stand | SCA Type | SCA Name | Acres | Comments |
|-------|----------|----------|-------|----------|
|-------|----------|----------|-------|----------|



**8 – DEDICATED CONSERVATION AREA DETAILS**

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

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

| Conservation Area | Type              | Description   |
|-------------------|-------------------|---|
| SCA               | 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.   |