



GRAYLING FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 008 ENTRY YEAR: 2012

GIS Compartment Acreage: 1922 County: Oscoda

Revision Date: 8/20/2010

Stand Examiner: Patrick L. Potter

Legal Description: Oscoda County – Greenwood Township, T27N R01E Sections 11, 12, 13 and 14.

Management Goals: To maintain forest health, productivity, sustainability, and diversity throughout the compartment while providing for multiple use within the area. In addition, to maintain a healthy habitat for the endangered species *Dendroica kirtlandii* (Kirtland's Warbler), taking into account warbler management plan directives, species diversity, and visual management.

Soils and Topography: Flat to gently rolling hills. Soils are mostly well-drained Grayling sand with some organic soils consisting of Rifle and Greenwood peat.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Mostly solid state ownership occurs in and around the compartment. There are several private ten acre parcels in the NE1/4 of section 11 and a privately owned forty acres in the SWSW. Section 14 has four ten acre private parcels in the NWNW. Section 13 has an eighty acre private parcel in the SE1/4.

Unique, Natural Features: Kirtland's Warbler (*Dendroica kirtlandii*) an endangered species and pale Agoseris (*Agoseris glauca*), a state threatened species are found in this compartment

Archeological, Historical, and Cultural Features: None known at this time

Special Management Designations or Considerations: The Muskrat KW Management Blocks 4, 15, and 22 are located within this compartment and are designated as a High Conservation Value Area (HCVA).

Watershed and Fisheries Considerations: None at this time

Wildlife Habitat Considerations: The east side of section 11 is a large deer yard and has a high water table.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of ice-contact outwash sand and gravel. The glacial drift thickness varies between 600 and 800 feet. Beneath the glacial drift is the Coldwater Shale. There is not an economic use for the Coldwater Shale. The nearest gravel pit is four miles to the south, and gravel potential is thought to be limited. None of the State land in the compartment has been leased for oil and gas development. The Antrim Shale is the main producing formation in the area.

Vehicle Access: The compartment can be accessed using county roads. Oil and gas right-of-ways provide multiple access opportunities for wheeled vehicles and foot traffic.

Survey Needs: No survey requests are needed.

Recreational Facilities and Opportunities: The Muskrat Lake Snowmobile Trail # 4 and #4/9 runs through section 14 and between sections 12 & 13.

Fire Protection: This compartment contains “high hazard” fuel types, but access should be adequate for suppression activities.

LOTS Compartment Acreage: 1920

- **The following reports are available:**
 - ◆ **Cover Type by Age Class**
 - ◆ **Proposed Treatment Summaries**
 - ◆ **Dedicated Conservation Area Details**
 - ◆ **Listing of Forested Stands**
 - ◆ **Listing of Non-Forested Stands**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**

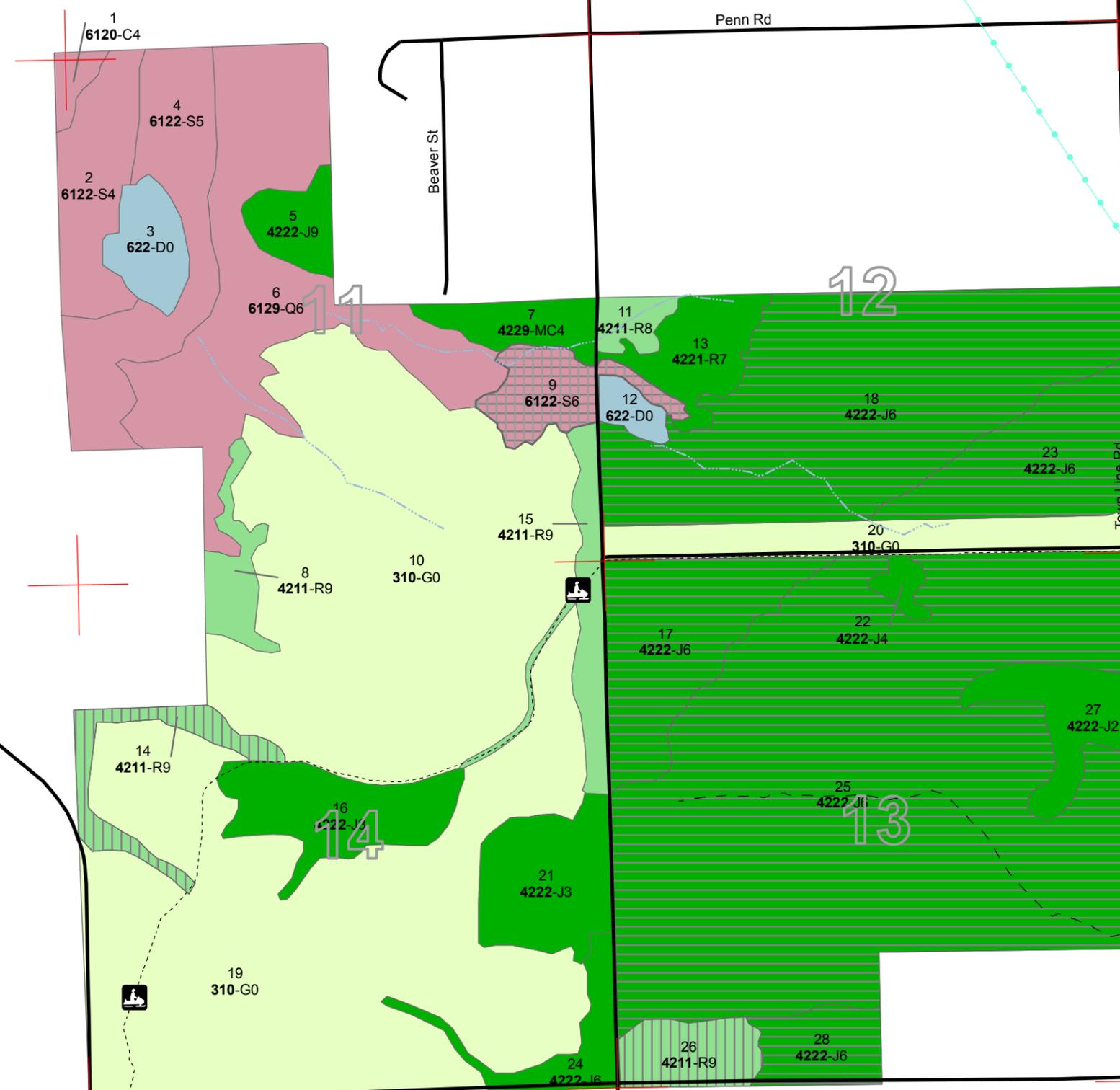
- **The following information is displayed, where pertinent, on the attached compartment maps:**
 - ◆ **Base feature information, stand numbers, cover types, recreation trails and facilities**
 - ◆ **Proposed treatments**
 - ◆ **Proposed road access system**
 - ◆ **Special Conservation areas**

Cover Type & Treatment Map

Compartment 008
 T27N, R01E, Sec. 11-14
 County: Oscoda
 Unit: Grayling
 YOY: 2012
 Acres: 1,922 GIS Calculated
 Stand Examiner: Patrick Potter
 Map Revised: 8/03/2010
 Map Phase: Pre-Review

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

- Legend**
- Miris Corners
 - Paved Roads
 - County Gravel Roads
 - Poor Dirt Roads
 - Power
 - Trails
 - Intermittent Stream/Drain
 - Stream
 - MCCCT Trails
 - Snowmobile Trails
- Treatments**
- Clearcut (w/Reserves, Patch/Strip)
 - Seed Tree (w/Reserves)
 - Shelter Wood (w/Reserves)
- Forest Stands**
- Level 3
- 421 - Planted Pines
 - 422 - Natural Pines
 - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3
- 310 - Herbaceous Openland
 - 622 - Lowland Shrub



11 12
14 13

N

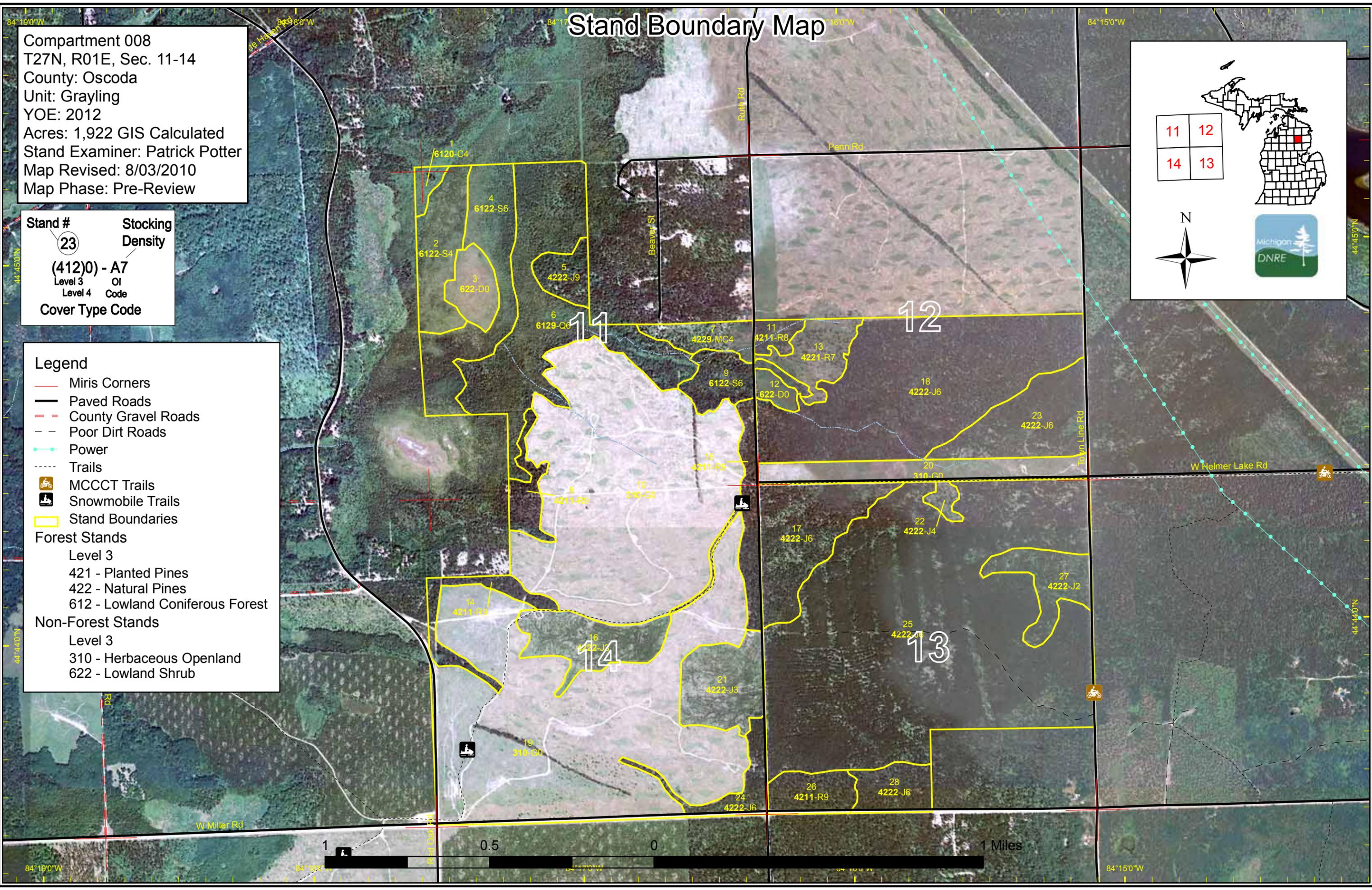
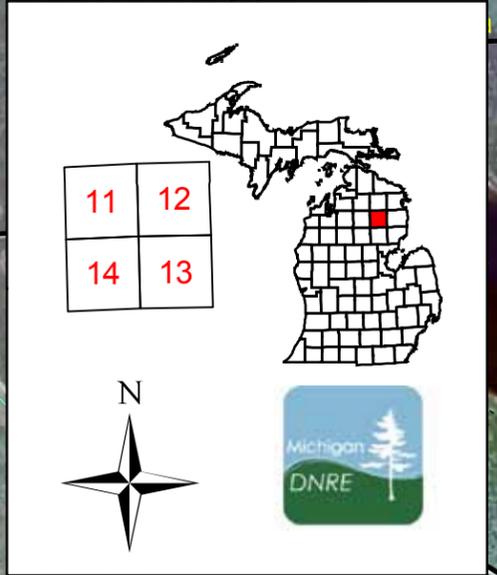


Stand Boundary Map

Compartment 008
 T27N, R01E, Sec. 11-14
 County: Oscoda
 Unit: Grayling
 YOE: 2012
 Acres: 1,922 GIS Calculated
 Stand Examiner: Patrick Potter
 Map Revised: 8/03/2010
 Map Phase: Pre-Review

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

- Legend**
- Miris Corners
 - Paved Roads
 - County Gravel Roads
 - Poor Dirt Roads
 - Power
 - Trails
 - MCCCT Trails
 - Snowmobile Trails
 - Stand Boundaries
- Forest Stands**
- Level 3
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3
 - 310 - Herbaceous Openland
 - 622 - Lowland Shrub



Dedicated & Proposed Special Conservation Area Map

Compartment 008
 T27N, R01E, Sec. 11-14
 County: Oscoda
 Unit: Grayling
 YOE: 2012
 Acres: 1,922 GIS Calculated
 Stand Examiner: Patrick Potter
 Map Revised: 8/03/2010
 Map Phase: Pre-Review

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

- Legend**
- Miris Corners
 - Stand Boundaries
 - Dedicated Special Conservation Areas**
 - Cold Water Streams
 - Kirtland Warbler Habitat
 - Forest Stands**
 - Level 3
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 612 - Lowland Coniferous Forest
 - Non-Forest Stands**
 - Level 3
 - 310 - Herbaceous Openland
 - 622 - Lowland Shrub

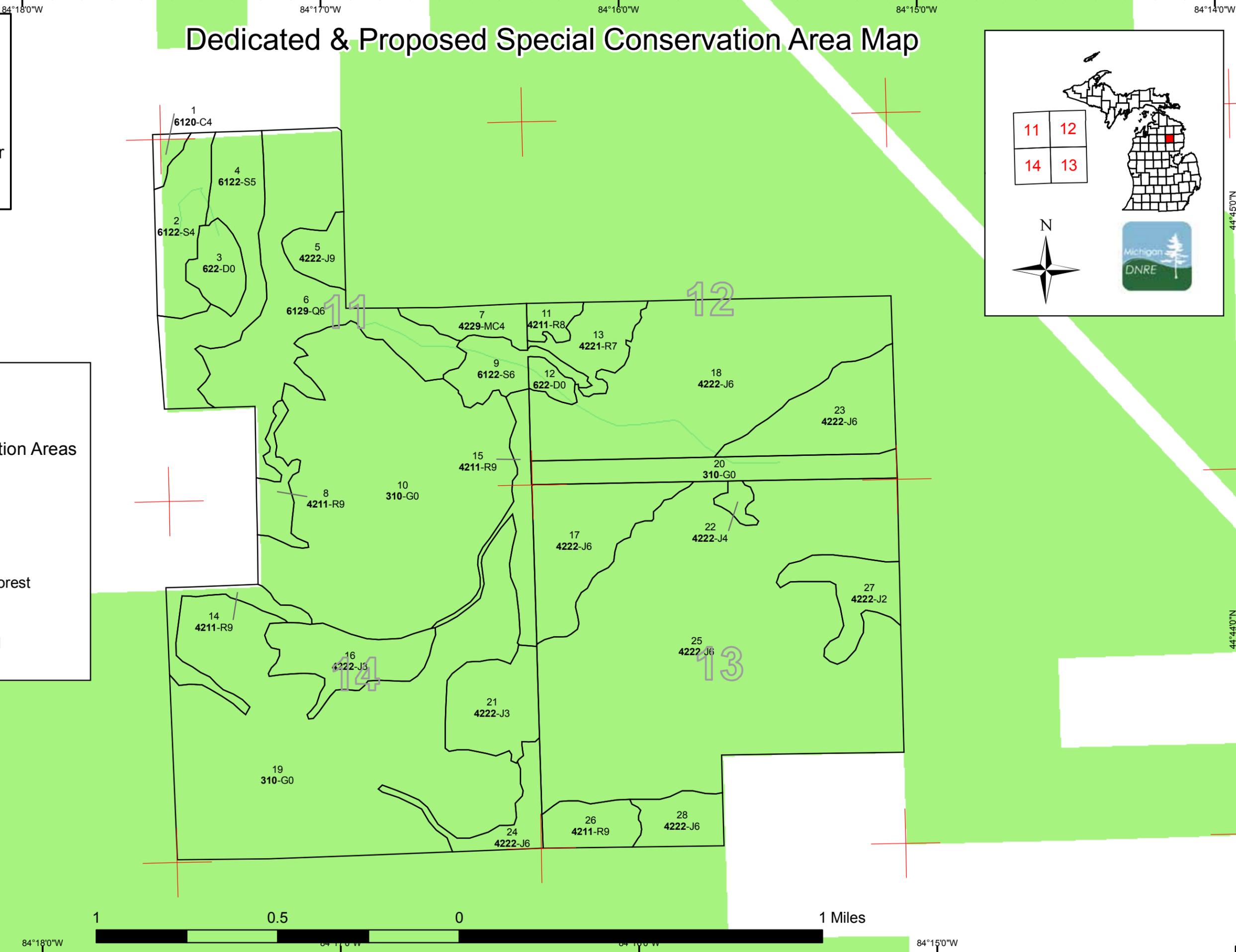
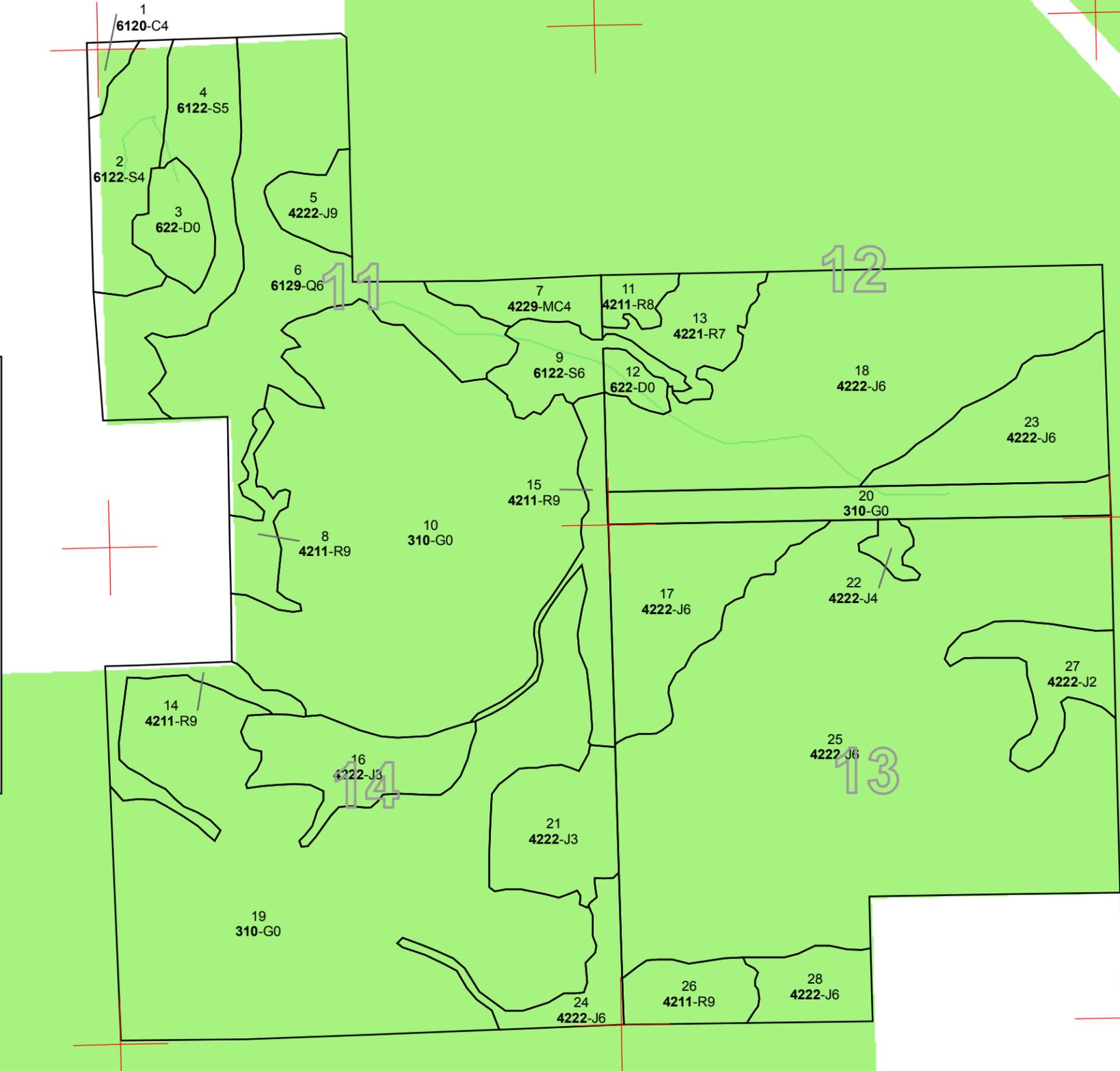
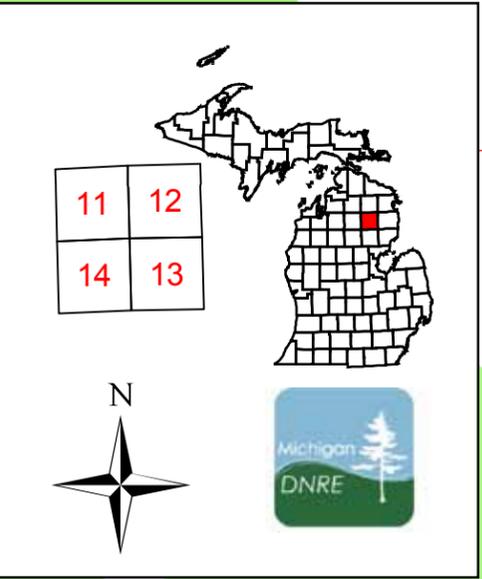


Table 1 – Total Acres by Cover Type and Age Class

Data updated before 2:00 PM



| | Age Class | | | | | | | | | | | | | | Total | |
|---------------------|--------------|----------|-----------|----------|------------|-----------|-----------|----------|------------|----------|----------|------------|----------|----------|----------|-------------|
| | Non-Forested | 1-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90-99 | 100-109 | 110-119 | 120 + | | Uneven Age |
| Cedar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| Herbaceous Openland | 641 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 641 |
| Jack Pine | 0 | 0 | 80 | 0 | 511 | 61 | 56 | 0 | 181 | 0 | 0 | 0 | 0 | 0 | 0 | 890 |
| Lowland Conifers | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 0 | 0 | 0 | 123 |
| Lowland Spruce/Fir | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 89 | 0 | 0 | 0 | 0 | 0 | 0 | 112 |
| Natural Mixed Pines | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| Red Pine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 111 | 0 | 0 | 0 | 0 | 0 | 0 | 111 |
| Treed Bog | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| Total | 666 | 0 | 80 | 0 | 511 | 61 | 97 | 0 | 380 | 0 | 0 | 126 | 0 | 0 | 0 | 1922 |



Table 2 – Proposed Treatment Summaries

Data updated before 2:00 PM

Grayling Mgt. Unit
Year of Entry 2012

Compartment 008
Total Compartment Acres: 1922

Acres by Treatment Type

| | | | | |
|--------------------------|-------------------------|-------------------|---------------------|-----------|
| Commercial Harvest - 802 | Site Prep - 0 | Tree Planting - 0 | Prescribed Burn - 0 | Other - 0 |
| Habitat Cut - 0 | Opening Maintenance - 0 | Tree Seeding - 0 | Pesticide - 0 | |

Cover Type by Harvest Method

| | Clearcut | Selection | Seed Tree | Shelterwood | Thinning | Other - Specify | Total Acres |
|---------------------------|----------|-----------|-----------|-------------|----------|-----------------|-------------|
| Jack Pine | 740 | 0 | 0 | 0 | 0 | 0 | 740 |
| Lowland Spruce/Fir | 0 | 0 | 23 | 0 | 0 | 0 | 23 |
| Red Pine | 0 | 0 | 0 | 39 | 0 | 0 | 39 |
| Total | 740 | 0 | 23 | 39 | 0 | 0 | 802 |



Data updated before 2:00 PM

S
t
a
n
d

| Treatment Name | Acres | Stage1 CoverType | Size Density | Stand Age | Treatment Type | Treatment Method | Cover Type Objective | Approval Status |
|----------------|-------|---------------------|-------------------|-----------|----------------|------------------|----------------------|-----------------------|
| 9 72008009-Cut | 23.1 | 6122 - Black Spruce | High Density Pole | 52 | Harvest | Seed Tree | Black Spruce | Cmpt. Review Proposal |

Prescription Seed tree harvest. Do not treat strip on the east side of Ruth Road.Specs:Other Wildlife may drop a few trees along stand 12's north boundary for habitat.Comments:NextSteps:

| | | | | | | | | |
|-----------------|------|--------------------------|------------------|----|---------|-------------|------------------|-----------------------|
| 14 72008014-Cut | 18.0 | 42110 - Planted Red Pine | High Density Log | 79 | Harvest | Shelterwood | Planted Red Pine | Cmpt. Review Proposal |
|-----------------|------|--------------------------|------------------|----|---------|-------------|------------------|-----------------------|

Prescription Shelterwood/thinning. Leave a mix of residual BA mark area ranging from 40-70 BA.Specs:Other Create a more natural looking stand.Comments:NextSteps:

| | | | | | | | | |
|-----------------|------|---------------------------|-------------------|----|---------|----------|-------------------------|-----------------------|
| 17 72008017-Cut | 60.6 | 42220 - Natural Jack Pine | High Density Pole | 41 | Harvest | Clearcut | Mixed Upland Herbaceous | Cmpt. Review Proposal |
|-----------------|------|---------------------------|-------------------|----|---------|----------|-------------------------|-----------------------|

Prescription Currently being harvestedSpecs:OtherComments:NextSteps:

| | | | | | | | | |
|-----------------|-------|---------------------------|-------------------|----|---------|----------|-------------------------|-----------------------|
| 18 72008018-Cut | 181.1 | 42220 - Natural Jack Pine | High Density Pole | 79 | Harvest | Clearcut | Mixed Upland Herbaceous | Cmpt. Review Proposal |
|-----------------|-------|---------------------------|-------------------|----|---------|----------|-------------------------|-----------------------|

Prescription Currently being harvestedSpecs:OtherComments:NextSteps:

| | | | | | | | | |
|-----------------|------|---------------------------|-------------------|----|---------|----------|-------------------|-----------------------|
| 23 72008023-Cut | 52.7 | 42220 - Natural Jack Pine | High Density Pole | 34 | Harvest | Clearcut | Planted Jack Pine | Cmpt. Review Proposal |
|-----------------|------|---------------------------|-------------------|----|---------|----------|-------------------|-----------------------|

Prescription Part of the KW block 63. Follow KW plan final harvest and replant. Treat with adjacent KW stands.Specs:Other Possible weave south boundary to soften fire break on Helmer Lake Road.Comments:NextSteps:

| | | | | | | | | |
|-----------------|-------|---------------------------|-------------------|----|---------|----------|-------------------|-----------------------|
| 25 72008025-Cut | 424.8 | 42220 - Natural Jack Pine | High Density Pole | 34 | Harvest | Clearcut | Planted Jack Pine | Cmpt. Review Proposal |
|-----------------|-------|---------------------------|-------------------|----|---------|----------|-------------------|-----------------------|

Prescription KW block 63 final harvest and replant. Leave stands 22 & 27 for retention.Specs:Other Work with wildlife biologist to plan simulated vortices.Comments:NextSteps:



S
t
a
n
d

| Treatment Name | Acres | Stage1 CoverType | Size Density | Stand Age | Treatment Type | Treatment Method | Cover Type Objective | Approval Status |
|-----------------|-------|--------------------------|------------------|-----------|----------------|------------------|----------------------|-----------------------|
| 26 72008026-Cut | 20.9 | 42110 - Planted Red Pine | High Density Log | 79 | Harvest | Shelterwood | Planted Red Pine | Cmpt. Review Proposal |

Prescription Do a marking thinning/shelterwood to create more natural looking stand. Stand was planted in 1931, and pruned 1971.

Specs:

Other

Comments:

Next

Steps:

| | | | | | | | | |
|-----------------|------|---------------------------|-------------------|----|---------|----------|-------------------|-----------------------|
| 28 72008028-Cut | 21.2 | 42220 - Natural Jack Pine | High Density Pole | 50 | Harvest | Clearcut | Planted Jack Pine | Cmpt. Review Proposal |
|-----------------|------|---------------------------|-------------------|----|---------|----------|-------------------|-----------------------|

Prescription KW block 63 final harvest and replant

Specs:

Other

Part of the KW block 63. Follow KW plan final harvest and replant. Treat with adjacent KW stands.

Comments:

Next

Steps:

**Total Treatment
Acreage Proposed: 802.4**



S
t
a
n
d

| 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

**Total Treatment
Acreage Proposed: 0**

Data updated before 2:00 PM

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

Year of Entry: 2012



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

Prescription
Specs:

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 0**

S
t
a
n
d

Grayling Mgt. Unit

5 – Forested Stands

Data updated before 2:00 PM

Compartment: 008

Year of Entry: 2012



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|--|-------------------------|-------|--------------|-------------|---|
| 1 | 6120 - Lowland Cedar | Low Density Pole | 2.8 | 101 | | Small pocket of cedar, very wet. |
| 2 | 6122 - Black Spruce | Low Density Pole | 32.0 | 72 | | Scattered pole size and medium/high dense saplings. There is a White pine pocket 1/2 acre in size along the NW corner of stand # 1. As some nice scenic value. Stand was harvested 1958 and we are looking at the residual/non-merchanable which probably 20 years old then. |
| 4 | 6122 - Black Spruce | Medium Density Pole | 56.7 | 71 | | Stand appears to have had all of the cedar removed. |
| 5 | 42220 - Natural Jack Pine | High Density Log | 15.0 | 52 | | This stand is a result of cut that occurred in the late 70's when the red pine was harvested. The JP was around 20 years old then. The adjacent private land owners are fuelwood cutting the oak. It appears to be personal use can see it stacked in their yards. Heavy BF and BS regen. |
| 6 | 6129 - Mixed Coniferous Lowland Forest | High Density Pole | 123.1 | 109 | | Area in the center of stand has had all the cedar removed and has filled in with Black spruce ~(70 years old). Some nice cedar in places 12-16 DBH. |
| 7 | 42290 - Natural Mixed Pine | Low Density Pole | 17.2 | 50 | | Stand salvage cut 1993 |
| 8 | 42110 - Planted Red Pine | High Density Log | 15.4 | 79 | | Stand was planted 1931, Left as a visual barrier last YOE. |
| 9 | 6122 - Black Spruce | High Density Pole | 23.1 | 52 | 81-110 | Stand could be harvested, would need to work from the north and south side. The water is sub-surface and concentrated in the middle of the stand. Stand harvested 1958/some kind of harvest. Wildlife dropped some trees along the shared boundary of stands 8 & 7. |
| 11 | 42110 - Planted Red Pine | Medium Density Log | 8.5 | 79 | 51-80 | could call this stand two-age. Red pine planted 1931, jack pine seeded in after 1964 fire. |
| 13 | 42210 - Natural Red Pine | Low Density Log | 25.2 | 79 | | Stand was final harvested 94-95 except for the red pine. |
| 14 | 42110 - Planted Red Pine | High Density Log | 14.3 | 79 | 111-140 | Stand has a non-authorized ORV trail. RDR report has been submitted, and the CO's have been notified. |
| 15 | 42110 - Planted Red Pine | High Density Log | 26.2 | 79 | | Stand left as a visual and snow barrier last YOE. |
| 16 | 42220 - Natural Jack Pine | High Density Sapling | 39.3 | 17 | | Stand final harvested 1993 |
| 17 | 42220 - Natural Jack Pine | High Density Pole | 60.6 | 41 | | Stand is currently being harvested. |
| 18 | 42220 - Natural Jack Pine | High Density Pole | 181.1 | 79 | | stand is currently being harvested. |

S
t
a
n
d

Grayling Mgt. Unit

5 – Forested Stands

Compartment: 008

Data updated before 2:00 PM

Year of Entry: 2012



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|------------------------------|-------------------------|-------|--------------|-------------|---|
| 21 | 42220 - Natural Jack Pine | High Density Sapling | 40.9 | 17 | | Stand was final harvested 1993. |
| 22 | 42220 - Natural Jack Pine | Low Density Pole | 5.1 | 39 | | Fire spring 1971, salvage cut fall 71, all merchantable trees were harvested. The remaining trees had plenty of space to grow, very branchy with lots of male buds, easy to see the Budworm damage. |
| 23 | 42220 - Natural Jack Pine | High Density Pole | 52.7 | 34 | | Stand harvested 1976 |
| 24 | 42220 - Natural Jack Pine | High Density Pole | 20.2 | 52 | | Found a fire plow line. Stand left for visual and wind break last YOE. |
| 25 | 42220 - Natural Jack Pine | High Density Pole | 424.8 | 34 | 51-80 | Fire occurred spring 1971. Stand was salvage fall 71. The remaining trees were final harvested 1976. Stand is mostly one-two stick with very few larger/older trees. |
| 26 | 42110 - Planted Red Pine | High Density Log | 20.9 | 79 | 141-170 | Stand was planted 1931, and pruned in 1967. A fire burned along the back side, appears to have caused heavier branching less self-pruning. Some nice poles |
| 27 | 42220 - Natural Jack Pine | Medium Density | 28.8 | 34 | | Stand was planted 1929, then salvage cut 1976. Open grown very branchy. |
| 28 | 42220 - Natural Jack Pine | High Density Pole | 21.2 | 50 | 51-80 | Stand was final harvested 1960. Stand is starting to show some decline, a few trees have died. |



| Stand | Cover Type | Acres | Gen Cmts: |
|-------|--------------------------------|-------|---------------------------|
| 3 | 6224 - Treed Bog | 18.4 | Very few trees waist high |
| 10 | 3105 - Mixed Upland Herbaceous | 274.8 | |
| 12 | 6224 - Treed Bog | 7.0 | |
| 19 | 3105 - Mixed Upland Herbaceous | 323.2 | |
| 20 | 3105 - Mixed Upland Herbaceous | 42.9 | |



7 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

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

Data updated before 2:00 PM

| 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.

Data updated before 2:00 PM

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

| Conservation Area | Type | Description |
|-------------------|-----------------------------|---|
| SCA | Cold Water Stream | A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210. |
| HCVA | Designated Critical Habitat | Critical habitat areas are established via a consultative and cooperative process between the DNR and the U.S. Fish and Wildlife service for the recovery of threatened and endangered species, as governed by Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, and the Federal Endangered Species Act of 1973. This is an active program, with proposed species plans in various stages of review. As of now only two exist, Kirtland Warbler Habitat and Piping Plover Habitat. |