



GRAYLING FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 010 ENTRY YEAR: 2013

Compartment Acreage: 2209 County: OSCODA

Revision Date: 7/24/11

Stand Examiner: Lucas Merrick

Legal Description: Elmer Township, T27N R02E sections 8, 9, 17, 20

Management Goals: To maintain forest health, productivity, sustainability, species diversification, and structural diversity throughout the compartment while providing for multiple use and visual management.

Soil and Topography: The terrain is level with a couple areas of rolling hills. A few big holes or deep depressions can be found in the northern portions of the compartment. The soils are primarily composed of Grayling and Graycalm sands. Leafriver muck is found in the lowland areas.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Multiple private parcels can be found in the center of the compartment. A Consumers Power overhead transmission line splits section 17 and runs along the eastern edge of section 20.

Unique, Natural Features: Per Michigan Natural Features there is potential for loon in Muskrat Lake. Secretive locust may occur in bogs. Potential for dusted skipper, grizzled skipper, Henry's elfin, and red-legged spittlebug in grassy openings and open jack pine or oak. Red-shouldered hawk and goshawk may be present. Bald eagle and osprey could be seen along lakes. There is potential for Kirtland's warbler and prairie warbler in areas of young jack pine.

Plant species that could be present are rough fescue, pale agoseris, Hill's thistle, and Alleghany plum in pine barrens/dry sand prairie.

Archeological, Historical, and Cultural Features: The historical Elmer Township Cemetery is found in T27N R2E Section 8 SW1/4 SW1/4 along the north side of the snowmobile trail. Documents indicate this cemetery dates back to 1893.

Special Management Designations or Considerations: None at this time.

Watershed and Fisheries Considerations: A portion of Muskrat Lake is found within the compartment. This shallow lake is subject to winterkill. Seasonal creeks are found in the northeast portions of section 20.

Wildlife Habitat Considerations: Promote the expansion of aspen and oak cover types. Protect mast producing shrubs whenever possible. Efforts should be made to enhance dead and down woody debris and standing snags.

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 within one mile to the east, and gravel potential is thought to be good. There are no leases for oil and gas development in the Compartment. The Antrim Shale is the main producing formation in the area and has been developed to the north of the compartment. The Antrim appears to be losing potential, due to the thickness of overburden, and may never be drilled in this area. Some of the Antrim wells to the north have been abandoned.

Vehicle Access: This compartment can easily be accessed by county roads. Multiple forest roads aid in accessing interior portions.

Survey Needs: Potential for surveyor assistance may be needed in the northwest of section 17.

Recreational Facilities and Opportunities: Dispersed recreation occurs throughout the compartment. Muskrat Lake provides canoeing, fishing and hunting opportunities. Recreational trails that can be found are Snowmobile Trail #4/9, Mio ORV Trail, Mio ORV Route, and the Mio to Meadows MCCCT Trail. The Muskrat Lake ORV Trail Parking Lot is found at the intersection of Helmer Lake and Richardson Roads. The former Muskrat Lake SF Campground is located directly west of this compartment on the south shore of Muskrat Lake. This site still provides water access to the public.

Fire Protection: There are a couple larger jack pine plantations but currently deciduous species dominate the compartment. The Consumers Power line serves as an excellent fuel break. The potential for extreme fire behavior does exist to the compartments adjacent in the west. These compartments consist of very large young jack pine plantations.

Additional Compartment Information: There was a large wind event in the southeast of section 20. Timber salvage operations occurred on public and private property.

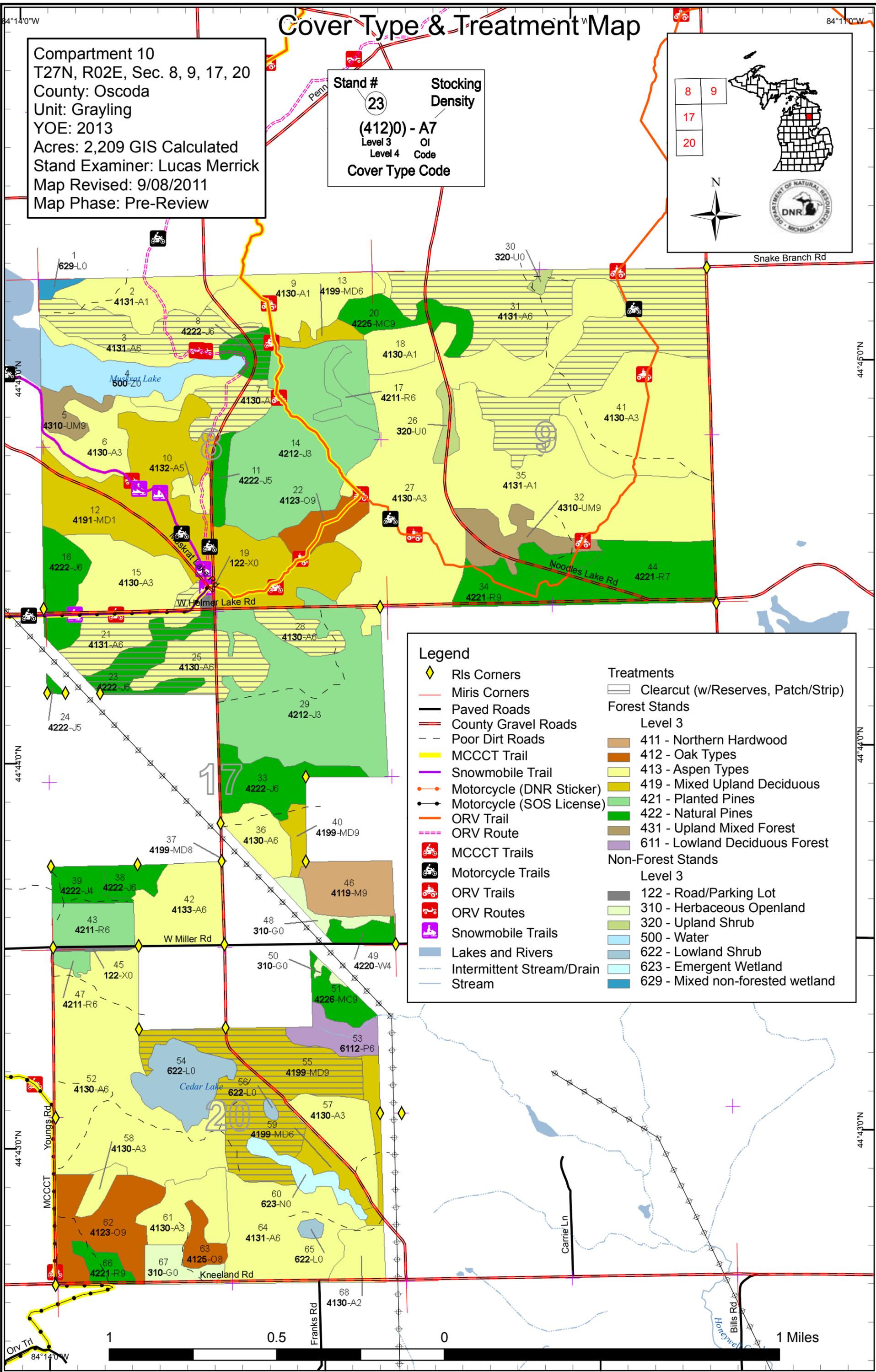
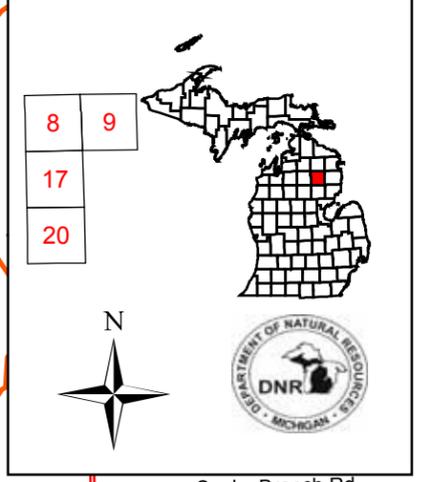
- **The following reports are available:**
 - ◆ **Total Acres by Cover Type and Age Class**
 - ◆ **Proposed Treatment Summaries**
 - ◆ **Dedicated Conservation Area Details**
 - ◆ **Listing of Forested Stands**
 - ◆ **Listing of Non-Forested Stands**
 - ◆ **Proposed Treatments with No Limiting Factor**
 - ◆ **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**
 - ◆ **Dedicated & Proposed Special Conservation Areas**

Cover Type & Treatment Map

Compartment 10
 T27N, R02E, Sec. 8, 9, 17, 20
 County: Oscoda
 Unit: Grayling
 YOE: 2013
 Acres: 2,209 GIS Calculated
 Stand Examiner: Lucas Merrick
 Map Revised: 9/08/2011
 Map Phase: Pre-Review

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



Legend

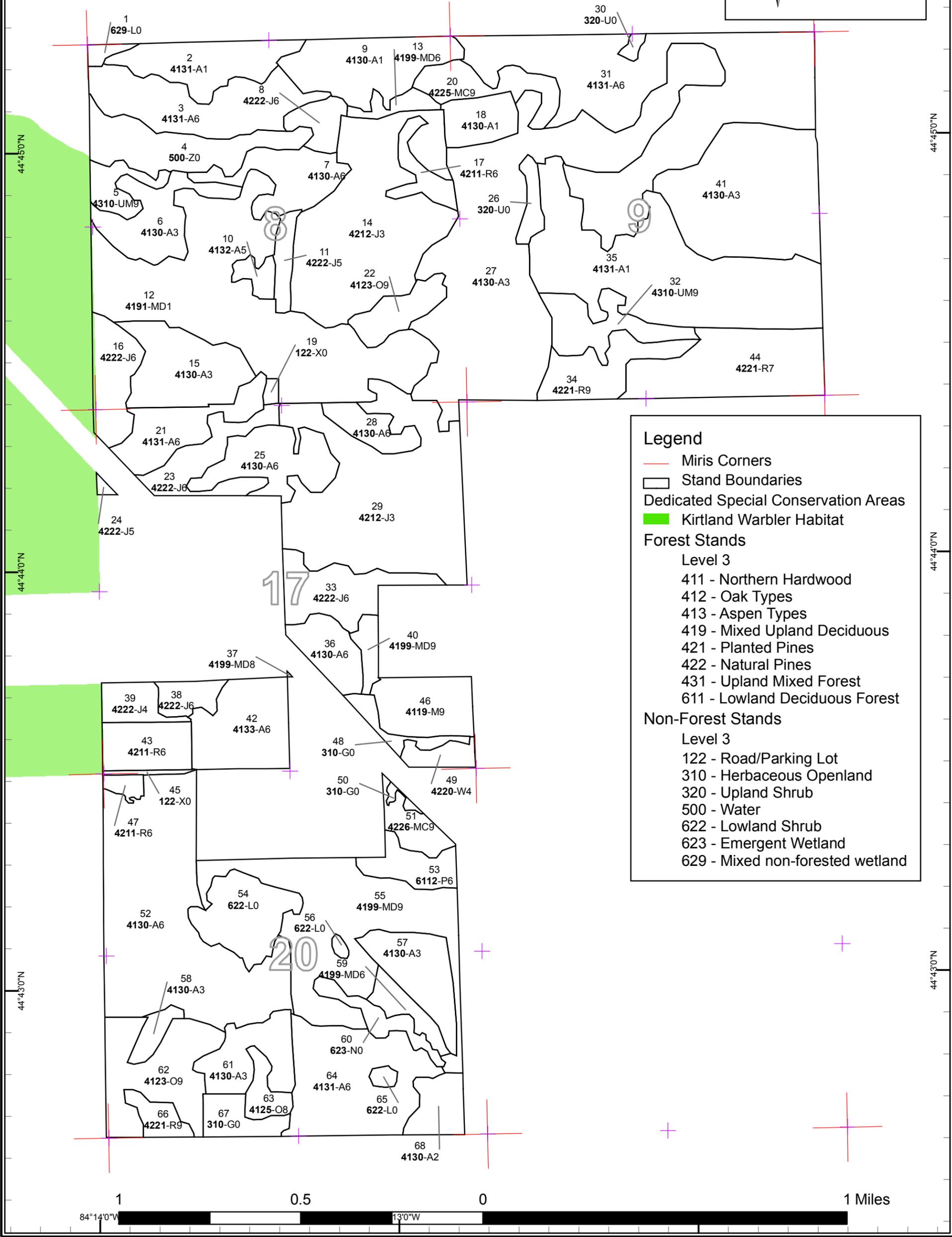
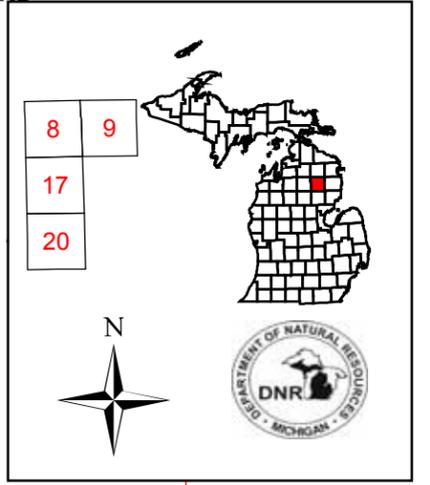
| | |
|---|---|
| <ul style="list-style-type: none"> ◆ RIs Corners — Miris Corners — Paved Roads — County Gravel Roads - - - Poor Dirt Roads — MCCCT Trail — Snowmobile Trail — Motorcycle (DNR Sticker) — Motorcycle (SOS License) — ORV Trail — ORV Route 🛵 MCCCT Trails 🛵 Motorcycle Trails 🛵 ORV Trails 🛵 ORV Routes 🛵 Snowmobile Trails 🌊 Lakes and Rivers — Intermittent Stream/Drain — Stream | <ul style="list-style-type: none"> ▭ Clearcut (w/Reserves, Patch/Strip) <p>Forest Stands</p> <p>Level 3</p> <ul style="list-style-type: none"> 411 - Northern Hardwood 412 - Oak Types 413 - Aspen Types 419 - Mixed Upland Deciduous 421 - Planted Pines 422 - Natural Pines 431 - Upland Mixed Forest 611 - Lowland Deciduous Forest <p>Non-Forest Stands</p> <p>Level 3</p> <ul style="list-style-type: none"> 122 - Road/Parking Lot 310 - Herbaceous Openland 320 - Upland Shrub 500 - Water 622 - Lowland Shrub 623 - Emergent Wetland 629 - Mixed non-forested wetland |
|---|---|



Dedicated & Proposed Special Conservation Area Map

Compartment 10
 T27N, R02E, Sec. 8, 9, 17, 20
 County: Oscoda
 Unit: Grayling
 YOE: 2013
 Acres: 2,209 GIS Calculated
 Stand Examiner: Lucas Merrick
 Map Revised: 9/08/2011
 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
- Kirtland Warbler Habitat
- Forest Stands
 - Level 3
 - 411 - Northern Hardwood
 - 412 - Oak Types
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 431 - Upland Mixed Forest
 - 611 - Lowland Deciduous Forest
- Non-Forest Stands
 - Level 3
 - 122 - Road/Parking Lot
 - 310 - Herbaceous Openland
 - 320 - Upland Shrub
 - 500 - Water
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland
 - 629 - Mixed non-forested wetland



| | 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 + | | Uneren Age |
| Aspen | 0 | 288 | 62 | 391 | 81 | 72 | 95 | 27 | 0 | 149 | 0 | 0 | 0 | 0 | 0 | 1164 |
| Herbaceous Openland | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| Jack Pine | 0 | 0 | 108 | 0 | 133 | 40 | 0 | 32 | 11 | 24 | 0 | 0 | 0 | 0 | 0 | 347 |
| Lowland Aspen/Balsam Poplar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 16 |
| Lowland Shrub | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 |
| Marsh | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| Mixed Upland Deciduous | 0 | 146 | 0 | 10 | 0 | 0 | 0 | 7 | 0 | 0 | 94 | 7 | 0 | 0 | 0 | 264 |
| Natural Mixed Pines | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 32 |
| Northern Hardwood | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 0 | 27 |
| Oak | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 54 | 0 | 0 | 0 | 0 | 69 |
| Red Pine | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 81 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 125 |
| Upland Mixed Forest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 36 |
| Upland Shrub | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| Urban | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Water | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| White Pine | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Total | 121 | 434 | 170 | 401 | 214 | 147 | 103 | 191 | 11 | 197 | 187 | 7 | 27 | 0 | 0 | 2209 |



Table 2 – Proposed Treatment Summaries

Grayling Mgt. Unit
Year of Entry 2013

Compartment 010
Total Compartment Acres: 2209

Acres by Treatment Type

| | | | | |
|--------------------------|-------------------------|-------------------|---------------------|-----------|
| Commercial Harvest - 388 | 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 |
|-------------------------------|-----|----------|-----------|-----------|-------------|----------|-----------------|-------------|
| Aspen | 274 | 0 | 0 | 0 | 0 | 0 | 0 | 274 |
| Jack Pine | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| Mixed Upland Deciduous | 84 | 0 | 0 | 0 | 0 | 0 | 0 | 84 |
| Total | 388 | 0 | 0 | 0 | 0 | 0 | 0 | 388 |



| S t a n d | Treatment Name | Acres | Stage1 CoverType | Size Density | Stand Age | Treatment Type | Treatment Method | Cover Type Objective | Approval Status |
|--|-------------------|-------|---------------------------|-------------------|--------------|-------------------|------------------------|--|-----------------------|
| 3 | 72010003-Cut | 36.5 | 4131 - Aspen, Oak | High Density Pole | 51 | Harvest | Clearcut with Reserves | 4121 - Oak, Aspen | Cmpt. Review Proposal |
| <p><u>Prescription</u> AOI outline has been adjusted to account for Muskrat Lake buffer. Use retention as means to protect and buffer the ORV trail. Leave some of the larger red pine scattered throughout. There are a couple pockets with larger "relic" pine.</p> <p><u>Specs:</u></p> <p><u>Other</u> Management objective is a moderate to fully stocked stand of mixed species dominated by aspen and oak. If adequate regeneration is not established trench and plant red pine.</p> <p><u>Comments:</u></p> <p><u>Next</u> monitor regen</p> <p><u>Steps:</u></p> | | | | | | | | | |
| 7 | 72010007-Cut | 18.7 | 4130 - Aspen | High Density Pole | 69 | Harvest | Clearcut with Reserves | 4130 - Aspen | Cmpt. Review Proposal |
| <p><u>Prescription</u> Final harvest- expand aspen component where possible. See "other coments" field for retention comments.</p> <p><u>Specs:</u></p> <p><u>Other</u> A buffer along Muskrat Lk has been created. This area was excluded from the AOI outline. This should be considered retention for the sale.</p> <p><u>Comments:</u> The only in sale area retention should be used to protect/buffer the ORV trail. Management objective is a moderate to fully stocked aspen stand with intermittent mixed species found throughout. If regen fails plant to red pine.</p> <p><u>Next</u> monitor regen</p> <p><u>Steps:</u></p> | | | | | | | | | |
| 8 | 72010008-Cut | 6.5 | 42220 - Natural Jack Pine | High Density Pole | 76 | Harvest | Clearcut with Reserves | 42290 - Natural Mixed Pine | Cmpt. Review Proposal |
| <p><u>Prescription</u> Leave red pine and white pine, mark some individual jack pine to leave also. Do not leave islands within harvest area.</p> <p><u>Specs:</u></p> <p><u>Other</u> Treat east of road. Management objective is a mixe pine stand - moderate stocking is acceptable. If natural regen fails, replant stand with red or jack pine.</p> <p><u>Comments:</u></p> <p><u>Next</u> monitor regen</p> <p><u>Steps:</u></p> | | | | | | | | | |
| 21 | 72010021-Cut | 26.3 | 4131 - Aspen, Oak | High Density Pole | 44 | Harvest | Clearcut | 4131 - Aspen, Oak | Cmpt. Review Proposal |
| <p><u>Prescription</u> Final harvest retention will not be applied to this stand in order to maximize aspen/oak regeneration. However a couple trees can be marked to leave to provide vertical structure.</p> <p><u>Specs:</u></p> <p><u>Other</u> Note- the AOI outline buffers the ORV Parking Lot.</p> <p><u>Comments:</u></p> <p><u>Next</u> monitor regen</p> <p><u>Steps:</u></p> | | | | | | | | | |
| 23 | 72010023-Cut | 22.7 | 42220 - Natural Jack Pine | High Density Pole | 68 | Harvest | Clearcut with Reserves | 42221 - Natural Jack Pine, Mixed Deciduous | Cmpt. Review Proposal |
| <p><u>Prescription</u> Final harvest. Mark out small leave islands scattered throughout the sale.</p> <p><u>Specs:</u></p> <p><u>Other</u> Allow adjacent aspen to encroach. Make attempts to protect oak regen. A moderately stocked jack pine with mixed deciduous trees is the managment objective. If natural regen fails, plant stand with jack pine.</p> <p><u>Comments:</u></p> <p><u>Next</u> monitor regen</p> <p><u>Steps:</u></p> | | | | | | | | | |



| S t a n d | Treatment Name | Acres | Stage1 CoverType | Size Density | Stand Age | Treatment Type | Treatment Method | Cover Type Objective | Approval |
|-----------------------|----------------|-------|---------------------|-------------------|--------------|-------------------|---------------------|-------------------------|--------------------------|
| | | | | | | | | | Status |
| 25 | 72010025-Cut | 31.7 | 4130 - Aspen | High Density Pole | 58 | Harvest | Clearcut | 4130 - Aspen | Cmpt. Review Proposal |

Prescription: Final harvest no retention to maximize aspen regen. Make sure to remove the smaller maple. There are a couple larger oaks/maples along road
Specs: that may be left for aesthetics.

Other
Comments:

Next monitor regen
Steps:

| | | | | | | | | | |
|----|--------------|------|--------------|-------------------|----|---------|----------|--------------|--------------------------|
| 28 | 72010028-Cut | 12.9 | 4130 - Aspen | High Density Pole | 58 | Harvest | Clearcut | 4130 - Aspen | Cmpt. Review Proposal |
|----|--------------|------|--------------|-------------------|----|---------|----------|--------------|--------------------------|

Prescription: Final harvest- no retention to maximize the aspen regen in a small area. .
Specs:

Other Would suggest extending boundary into adjacent jack pine stand to allow for expansion.
Comments:

Next monitor regen
Steps:

| | | | | | | | | | |
|----|--------------|-------|-------------------|-------------------|----|---------|---------------------------|-------------------|--------------------------|
| 31 | 72010031-Cut | 148.0 | 4131 - Aspen, Oak | High Density Pole | 84 | Harvest | Clearcut with Reserves | 4131 - Aspen, Oak | Cmpt. Review Proposal |
|----|--------------|-------|-------------------|-------------------|----|---------|---------------------------|-------------------|--------------------------|

Prescription: Final harvest. Leave multiple retention islands 3-6% of harvest area.
Specs:

Other A variable stand. Age, quality, and composition varies. Management objective is the same- A well stocked stand dominated by aspen/oak with
Comments: other various mixed deciduous and conifer species currently making up stand composition. Note that recent harvest along western edge has been buffered by excluding a small portion of stand from AOI outline.

Next Monitor regen
Steps:

| | | | | | | | | | |
|----|--------------|------|--|------------------|----|---------|---------------------------|--|--------------------------|
| 55 | 72010055-Cut | 84.3 | 4199 - Other Mixed Upland Deciduous | High Density Log | 95 | Harvest | Clearcut with Reserves | 4199 - Other Mixed Upland Deciduous | Cmpt. Review Proposal |
|----|--------------|------|--|------------------|----|---------|---------------------------|--|--------------------------|

Prescription: Leave 5-10% of sale area in retention islands.
Specs:

Other Did not walk portion directly north of Cedar Lk... The rest of the areas around the bog were dry and operable.
Comments:

Next Monitor regen
Steps:

**Total Treatment
Acreage Proposed: 387.5**

Table 4 -- Treatments Prescribed with a Limiting Factor



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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

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 |
|----------------|-------|------------------|--------------|-----------|----------------|------------------|----------------------|-----------------|
|----------------|-------|------------------|--------------|-----------|----------------|------------------|----------------------|-----------------|

Prescription
Specs:

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 0**

| Stand | Grayling Mgt. Unit | | 5 – Forested Stands | | | Compartment: 010 | General Comments: |
|-------|--|----------------------|---------------------|-----------|----------|---------------------|--|
| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | Year of Entry: 2013 | |
| 2 | 4131 - Aspen, Oak | Low Density Sapling | 32.5 | 5 | | | A regenerating mixed stand. ORV trail runs through it. |
| 3 | 4131 - Aspen, Oak | High Density Pole | 50.0 | 51 | 51-80 | | Average quality quaking aspen, oak declining. Well established witch hazel understory along rd. |
| 5 | 4310 - Pine, Oak Mix | High Density Log | 11.5 | 91 | 111-140 | | Stand is adjacent to Muskrat Lake. |
| 6 | 4130 - Aspen | High Density Sapling | 29.8 | 18 | | | A regenerating aspen stand. |
| 7 | 4130 - Aspen | High Density Pole | 26.9 | 69 | | | Aspen stand adjacent to Muskrat Lk. |
| 8 | 42220 - Natural Jack Pine | High Density Pole | 10.6 | 76 | | | A jack pine stand with a healthy mixed pine and oak understory. |
| 9 | 4130 - Aspen | Low Density Sapling | 41.6 | 1 | | | Will be planted to red pine. ORV trail in stand. FTP#C72-647 |
| 10 | 4132 - Aspen, Jack Pine | Medium Density Pole | 6.0 | 43 | | | Pretty good oak understory. |
| 11 | 42220 - Natural Jack Pine | Medium Density Pole | 8.3 | 68 | | | Old buffer? |
| 12 | 4191 - Mixed Upland Deciduous with Conifer | Low Density Sapling | 145.9 | 6 | | | Some residual slash left from harvest. Advanced regen and cherry brush present. |
| 13 | 4199 - Other Mixed Upland Deciduous | High Density Pole | 6.8 | 62 | 81-110 | | A narrow strip of aspen, oak, and red maple. |
| 14 | 42121 - Planted Jack Pine, Mixed Deciduous | High Density Sapling | 107.8 | 17 | | | A jack pine plantation with pockets of aspen. |
| 15 | 4130 - Aspen | High Density Sapling | 39.3 | 6 | | | A regenerating aspen stand. |
| 16 | 42220 - Natural Jack Pine | High Density Pole | 23.7 | 86 | 81-110 | | Over mature jack pine stand, an excellent oak understory. |
| 17 | 42110 - Planted Red Pine | High Density Pole | 10.8 | 49 | 111-140 | | A red pine plantation. |
| 18 | 4130 - Aspen | Low Density Sapling | 16.2 | 1 | | | This stand is scheduled for trenching and planting (red pine) |
| 20 | 42250 - Pine, Oak | High Density Log | 20.7 | 65 | 111-140 | | This stand was in the middle of two other stands that were cut out of entry during the red pine project. |
| 21 | 4131 - Aspen, Oak | High Density Pole | 27.7 | 44 | 51-80 | | Variable stand, looks like several small fuel wood jobs have occurred in stand. |



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Grayling Mgt. Unit

5 – Forested Stands

Compartment: 010

Year of Entry: 2013



| Stand | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|-------|-------------------------------------|----------------------|-------|-----------|----------|---|
| 22 | 4123 - Red Oak | High Density Log | 15.5 | 89 | 81-110 | A mature oak ridge. Evidence of illegal fuel wood cutting. |
| 23 | 42220 - Natural Jack Pine | High Density Pole | 23.2 | 68 | | New stand added. 2 age classes of jack pine present. Average quality northern pin oak understory. |
| 24 | 42220 - Natural Jack Pine | Medium Density Pole | 1.1 | 40 | | Majority of stand on a hillside. |
| 25 | 4130 - Aspen | High Density Pole | 31.7 | 58 | | Aspen and oak are starting to decline. |
| 27 | 4130 - Aspen | High Density Sapling | 168.5 | 25 | | A regenerating aspen stand. |
| 28 | 4130 - Aspen | High Density Pole | 12.9 | 58 | | A pole size aspen stand. |
| 29 | 42120 - Planted Jack Pine | High Density Sapling | 121.3 | 30 | | Jack pine plantation. |
| 31 | 4131 - Aspen, Oak | High Density Pole | 149.2 | 84 | 81-110 | A mixed stand. White pine seeding in- in the east, areas w/ a heavy red maple understory. |
| 32 | 4310 - Pine, Oak Mix | High Density Log | 24.0 | 66 | 81-110 | Good red pine with average to below average oak. |
| 33 | 42220 - Natural Jack Pine | High Density Pole | 29.2 | 46 | 111-140 | A variable mixed pine stand. Trees aged out from 30's to 70's |
| 34 | 42210 - Natural Red Pine | High Density Log | 25.5 | 65 | 81-110 | A natural red pine stand. Variable in size and quality. |
| 35 | 4131 - Aspen, Oak | Low Density Sapling | 118.6 | 5 | | A regenerating aspen/oak/red maple stand w/ multiple sawlog size class islands. Canopy cover is closer to 50%. Advanced red pine and white pine present throughout. A kettle hole in stand. |
| 36 | 4130 - Aspen | High Density Pole | 17.8 | 36 | 111-140 | Average quality aspen stand. A red pine and oak pocket is present in stand along the power line(approx 1 acre). |
| 37 | 4199 - Other Mixed Upland Deciduous | Medium Density Log | 0.1 | 86 | | Possible fence/garden trespass. |
| 38 | 42220 - Natural Jack Pine | High Density Pole | 9.7 | 44 | 51-80 | A natural jack pine stand. |
| 39 | 42220 - Natural Jack Pine | Low Density Pole | 11.7 | 38 | 1-50 | Open area slowly filling in with jack pine. |
| 40 | 4199 - Other Mixed Upland Deciduous | High Density Log | 6.8 | 104 | 51-80 | A mature mixed stand. |



| Stand | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|-------|---------------------------------------|----------------------|-------|-----------|----------|---|
| 41 | 4130 - Aspen | High Density Sapling | 86.5 | 26 | | Birch, big tooth aspen and other misc species found throughout. |
| 42 | 4133 - Aspen, Mixed Pine | High Density Pole | 37.9 | 45 | 81-110 | A mixed upland stand. |
| 43 | 42110 - Planted Red Pine | High Density Pole | 20.7 | 49 | 111-140 | A recently thinned red pine stand. |
| 44 | 42210 - Natural Red Pine | Low Density Log | 55.9 | 64 | 1-50 | This stand was shelterwooded last entry year. Extensive illegal trails throughout stand created by individuals cutting fire wood. |
| 46 | 4119 - Mixed Northern Hardwoods | High Density Log | 27.2 | 115 | 111-140 | An outstanding example of an excellent quality northern hdwd stand. Small ponds present, majority hold water seasonally. |
| 47 | 42110 - Planted Red Pine | High Density Pole | 4.1 | 49 | 141-170 | A recently thinned red pine stand. Very little understory. |
| 49 | 42200 - Natural White Pine | Low Density Pole | 8.0 | 50 | 1-50 | Open grown white pine that has filled in an old open area. |
| 51 | 42260 - Natural Pine, Mixed Deciduous | High Density Log | 11.4 | 91 | 111-140 | Pockets of low areas. Thick understory. Northern portions are primarily made up of pole size white pine. |
| 52 | 4130 - Aspen | High Density Pole | 135.9 | 26 | 81-110 | A variable stand. |
| 53 | 6112 - Lowland Aspen | High Density Pole | 16.1 | 92 | | New stand added. Small "feeder" stream runs through stand. |
| 55 | 4199 - Other Mixed Upland Deciduous | High Density Log | 94.2 | 95 | 81-110 | A variable mixed stand. Good quality oak and aspen. |
| 57 | 4130 - Aspen | High Density Sapling | 27.4 | 3 | | A regenerating aspen stand. Looks like pine was not harvested. |
| 58 | 4130 - Aspen | High Density Sapling | 6.7 | 18 | | A regenerating aspen pocket. |
| 59 | 4199 - Other Mixed Upland Deciduous | High Density Pole | 10.3 | 28 | 51-80 | A well established younger oak component present. |
| 61 | 4130 - Aspen | High Density Sapling | 25.5 | 18 | | A regenerating aspen stand. |
| 62 | 4123 - Red Oak | High Density Log | 44.5 | 98 | 51-80 | Looks like a previous harvest removed all species except oak. There is some epicormic branching. |
| 63 | 4125 - Black, N. Pin Oak | Medium Density Log | 9.1 | 95 | 51-80 | Oak stand, majority of other species removed. |
| 64 | 4131 - Aspen, Oak | High Density Pole | 63.2 | 36 | 81-110 | A above average aspen/oak stand. Areas of extreme hills and valleys. Some spots on hills look like they were not harvested. |

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Grayling Mgt. Unit

5 – Forested Stands

Compartment: 010
Year of Entry: 2013



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|-----------------------------|---------------------|-------|--------------|-------------|--|
| 66 | 42210 - Natural Red Pine | High Density Log | 8.5 | 89 | 111-140 | A natural red pine stand with black oak and white pine. White pine starting to establish in understory. |
| 68 | 4130 - Aspen | Medium Density | 12.6 | 4 | | Salvage area. Tornado damage from 2007 |



| Stand | Cover Type | Acres | Managed Site | Management Priority (Objective) | General Comments: |
|-------|----------------------------------|-------|--------------|---------------------------------|--|
| 1 | 629 - Mixed non-forested wetland | 3.0 | No | Unspecified | |
| 4 | 50 - Water | 37.2 | N/A | Unspecified | Muskrat Lake |
| 19 | 122 - Road/Parking Lot | 1.8 | N/A | Unspecified | ORV parking lot. |
| 26 | 3204 - Mast Producing Shrub | 6.9 | N/A | Unspecified | Open area slowly filling in. Road is an old rr grade. |
| 30 | 3203 - Upland Blueberry | 2.0 | N/A | Unspecified | A blueberry opening. |
| 45 | 122 - Road/Parking Lot | 1.9 | N/A | Unspecified | County Road 608 |
| 48 | 3102 - Grass | 7.6 | N/A | Unspecified | A grass stand filling in with white pine and jack pine. |
| 50 | 3102 - Grass | 1.8 | N/A | Unspecified | Grassy opening. |
| 54 | 6229 - Mixed lowland shrub | 31.1 | N/A | Unspecified | "Cedar Lake" Blueberry and grasses mixed in with open water. |
| 56 | 6229 - Mixed lowland shrub | 1.3 | N/A | Unspecified | Very wet. |
| 60 | 6233 - Wet Meadow | 11.1 | N/A | Unspecified | Water levels look to fluctuate seasonally. |
| 65 | 6229 - Mixed lowland shrub | 2.3 | N/A | Unspecified | Red pine and paper birch present as well. |
| 67 | 3102 - Grass | 12.6 | Yes | Unspecified | Maintained opening. |



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 |
|-------------------|-----------------------------|---|
| 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. |