



Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 144

Entry Year 2016

Acreage: 3,150

County Schoolcraft

Management Area: Danaher Kingston Outwash

Revision Date: 02/21/2014

Stand Examiner: Rick James-Hill

Legal Description:

T47N R15W Sections 3, 4, 9-11, 13-15

Identified Planning Goals:

The Kingston Plains and the Danaher Plains are large openings that are managed for a suite of open-land species including sharp-tailed grouse, merlin and upland sandpiper. Vegetative management in the Danaher Kingston Outwash management area will emphasize maintaining these large opening complexes; providing timber products; protecting unique areas and threatened, endangered and special concern species; and providing for forest based recreational uses. Wildlife habitat management objectives include enhancing the large opening complexes and providing opportunities for hunting and other wildlife related recreation. Timber management objectives include improving the age-class distribution of jack pine and red pine; and consolidating smaller plantations and openings into larger stands to better suit management objectives. Expected issues in this 10-year planning period include illegal use of off-road vehicles, introduced pests and diseases such as jack pine budworm and beech bark disease, and introduction and spread of invasive species.

Soil and topography:

Soils throughout most of the compartment are Rubicon Sand, with ridges of Wallace fine sand and low areas of Spaulding and Greenwood Peat near Stanley Lake. Terrain is flat to rolling with sandy ridges.

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

The entire compartment is state owned land. The Forest Land Group owns the land to the west and north of the compartment (previously owned by Shelter Bay Forests). The compartment lies within the Grand Marais Sandy End Moraine and Outwash Sub-subsection (VIII.2.2).

Unique Natural Features:

This compartment has large areas of grass with good habitat for sharp tail grouse. The Fox River and Stanley Lake also border the compartment.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations:

Excellent. The Little Fox River runs alongside of this compartment. It is a high-quality, high-value tributary to the Fox River. Excellent brook trout fishing can be found in the Fox River system. Stanley Lake is found at the headwaters of the Little Fox River. It is a shallow impoundment with a fisheries community consisting of bullheads, small pike, and small yellow perch.

Wildlife Habitat Considerations:

This compartment is bounded on the east by Stanley Lake and the Little Fox River and lies on the northwest edge of a large opening complex corridor. General Land Office notes indicate that the first surveyors found uplands dominated by hemlock, white pine, balsam fir, yellow birch, red maple, and red pine. Lowlands contained black spruce, tamarack, hemlock and white pine.

Current vegetation is substantially altered from pre-settlement days. The northern portion of the compartment contains several hundred acres of red pine plantations. The southern portion of the compartment is dominated grassy openings and jack pine.

Wildlife habitat objectives include eliminating scotch pine from the landscape, maintaining large grassy openings,

protecting the Little Fox River corridor, and promoting age, species and structural diversity with northern hardwood stands.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. There is insufficient data to determine the glacial drift thickness. The Ordovician Black River Group and Prairie du Chien Formation subcrop below the glacial drift. These rocks are used for stone/dolomite. There are not any gravel pits in the area and potential appears limited. There is no commercial oil and gas production in the UP.

Vehicle Access:

There are a number of two track roads throughout the compartment.

Survey Needs:

None at this time.

Recreational Facilities and Opportunities:

There are no DNR recreational facilities within the compartment; but camping and fishing are common along the west side of Stanley Lake, and along the Little Fox River. This is also a favorite area for blueberry picking.

Fire Protection:

The compartment is mainly upland and access good but a mix of grass and pine fuel types give the compartment fair potential for large fire occurrence. Public use of Stanley lake and the Little Fox River increase the potential for human caused fire starts.

Additional Compartment Information:

The following reports from the Inventory are attached:

- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

The following information is displayed, where pertinent, on the attached compartment maps:

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

Stand Boundary Map

Compartment: 144
 T47N R15W
 02 03 04 09 10 11 13 14 15
 T48N R15W
 34
 County: Schoolcraft
 Unit: Shingleton
 Management Area: Danaher Kingston Outwash
 YOE: 2016
 Acres: 3,150 GIS Calculated
 Examiner: Rick James-Hill
 Map Revised: 07/30/2014
 Map Phase: Pre-Review

Legend

- Miris Corners
- Hiking Trails
- Snowmobile Trails
- Snowmobile Trail
- Ski Trail
- Hiking Trail
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Stream
- Intermittent Stream
- Lakes and Rivers
- Stand Boundaries

Forest Stands

Level 3

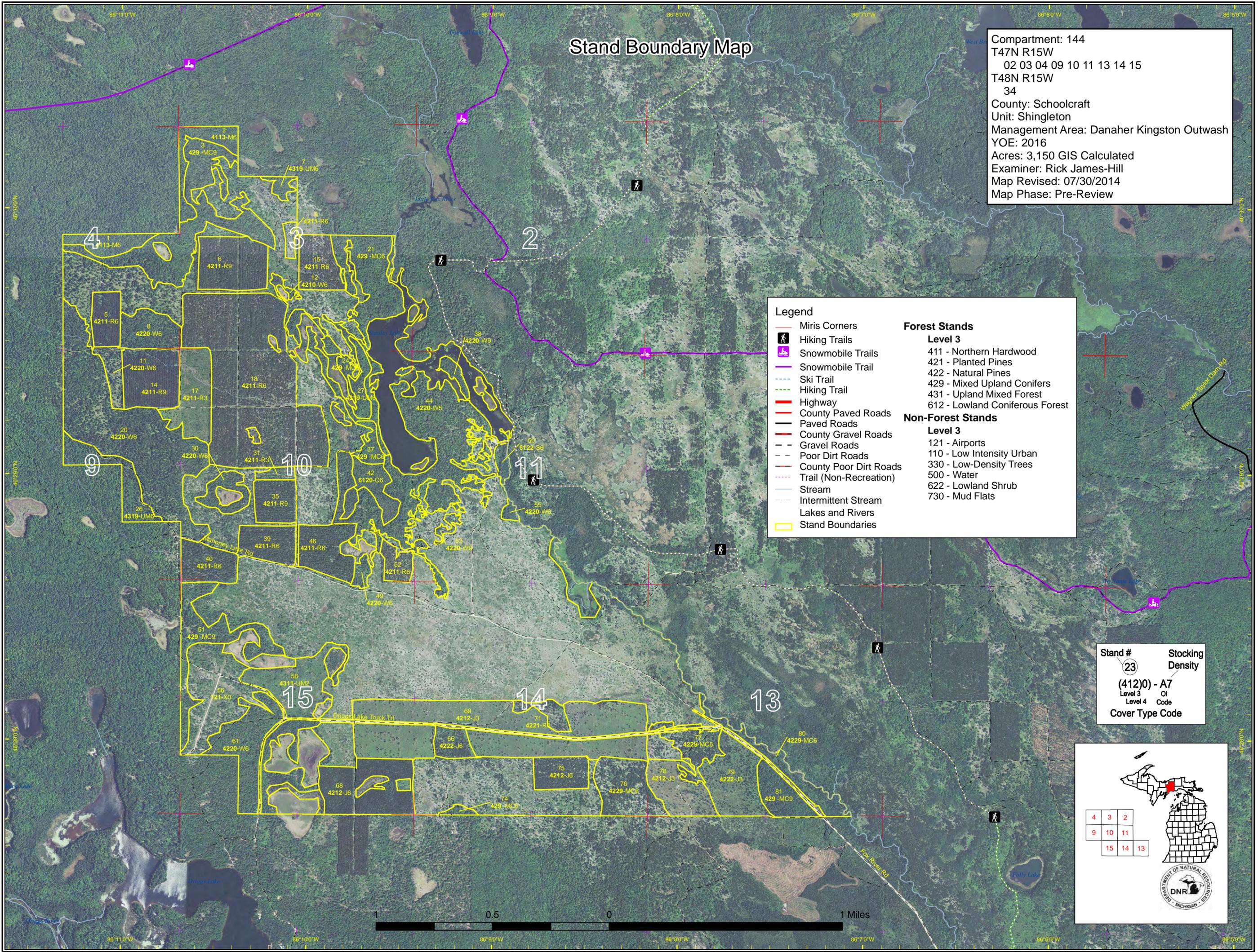
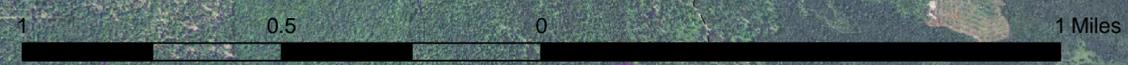
- 411 - Northern Hardwood
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

Non-Forest Stands

Level 3

- 121 - Airports
- 110 - Low Intensity Urban
- 330 - Low-Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 730 - Mud Flats

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



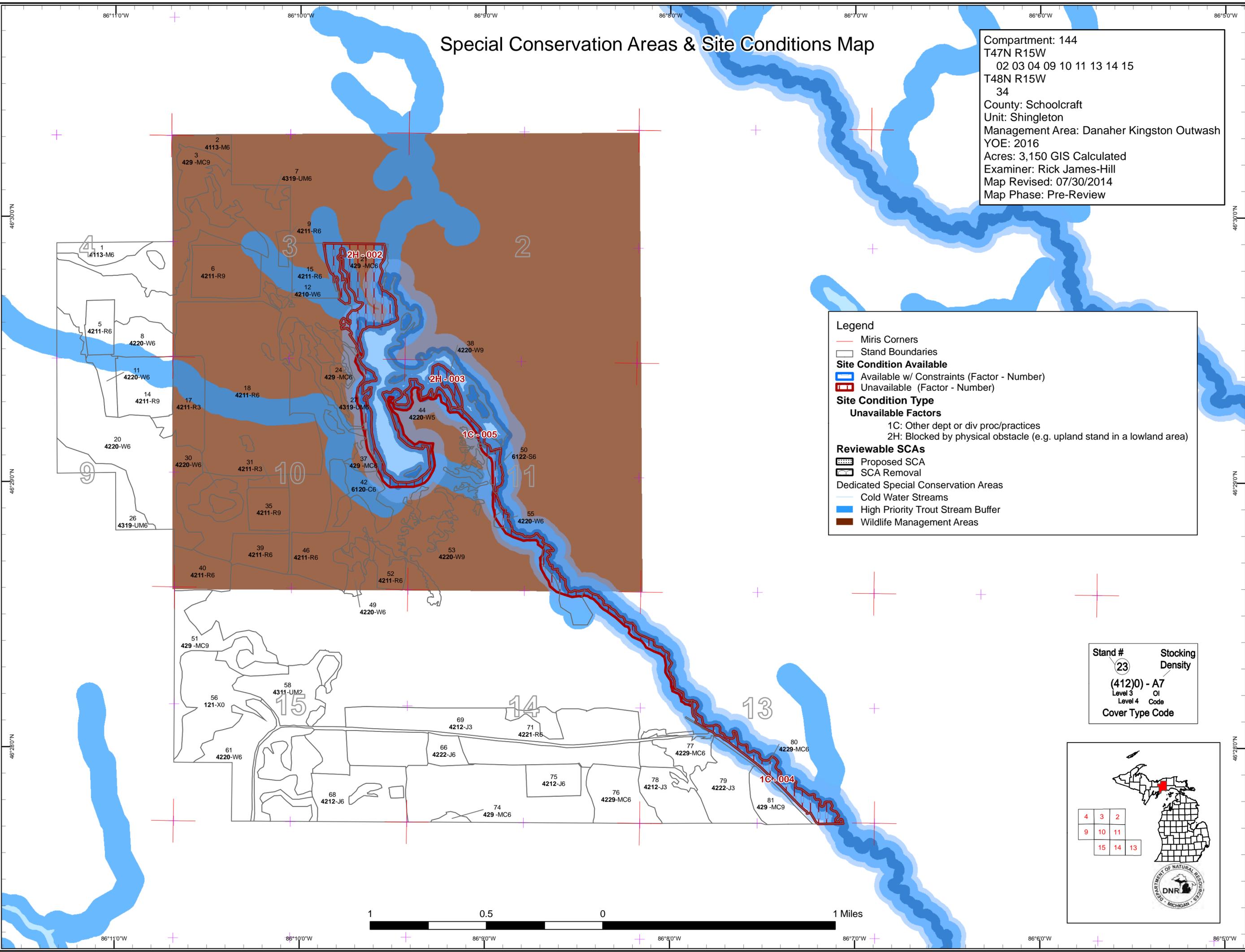
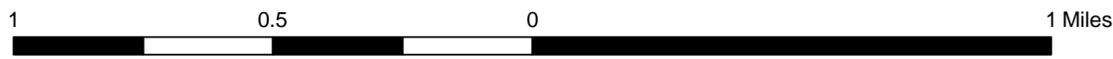
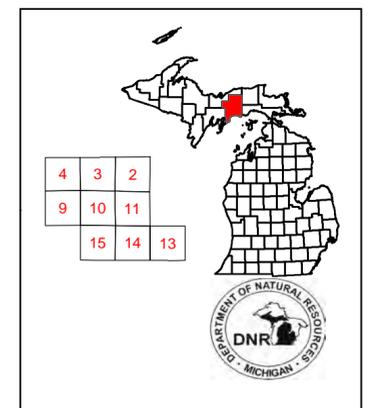
Special Conservation Areas & Site Conditions Map

Compartment: 144
 T47N R15W
 02 03 04 09 10 11 13 14 15
 T48N R15W
 34
 County: Schoolcraft
 Unit: Shingleton
 Management Area: Danaher Kingston Outwash
 YOE: 2016
 Acres: 3,150 GIS Calculated
 Examiner: Rick James-Hill
 Map Revised: 07/30/2014
 Map Phase: Pre-Review

Legend

- Miris Corners
- Stand Boundaries
- Site Condition Available**
 - Available w/ Constraints (Factor - Number)
 - Unavailable (Factor - Number)
- Site Condition Type**
 - Unavailable Factors**
 - 1C: Other dept or div proc/practices
 - 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- Reviewable SCAs**
 - Proposed SCA
 - SCA Removal
- Dedicated Special Conservation Areas**
 - Cold Water Streams
 - High Priority Trout Stream Buffer
 - Wildlife Management Areas

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



Report 1 – Total Acres by Cover Type and Age Class



| | Age Class | | | | | | | | | | | | | Total | |
|---------------------|-------------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|-----------|----------|----------|----------|----------|-------------|
| | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90-99 | 100-109 | 110-119 | 120 + | | Uneten Age |
| Bog | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| Cedar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 17 |
| Jack Pine | 198 | 44 | 13 | 21 | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 328 |
| Low-Density Trees | 1116 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1116 |
| Lowland Shrub | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| Lowland Spruce/Fir | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Natural Mixed Pines | 0 | 0 | 0 | 0 | 22 | 23 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 83 |
| Northern Hardwood | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| Red Pine | 0 | 38 | 5 | 5 | 0 | 443 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 502 |
| Sand, Soil | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Treed Bog | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| Upland Conifers | 0 | 0 | 0 | 9 | 3 | 55 | 127 | 0 | 0 | 49 | 0 | 0 | 0 | 0 | 244 |
| Upland Mixed Forest | 43 | 0 | 0 | 0 | 0 | 12 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 87 |
| Urban | 84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 |
| Water | 158 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 158 |
| White Pine | 0 | 0 | 0 | 0 | 5 | 170 | 227 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 427 |
| Total | 1661 | 82 | 18 | 34 | 83 | 708 | 472 | 25 | 17 | 49 | 0 | 0 | 0 | 0 | 3150 |



Report 2 – Proposed Treatment Summaries

Shingleton Mgt. Unit
Year of Entry 2016

Compartment 144
Total Compartment Acres: 3,150

Acres by Treatment Type

| | | |
|-------------------------|-------------------------|-----------|
| Commercial Harvest - 80 | Tree Planting - 0 | Other - 0 |
| Habitat Cut - 0 | Opening Maintenance - 0 | |

Cover Type by Harvest Method

| | <i>Clear cut</i> | <i>Selection</i> | <i>Seed Tree</i> | <i>Shelterwood</i> | <i>Thinning</i> | <i>Other - Specify</i> | <i>Total Acres</i> |
|------------------------------|------------------|------------------|------------------|--------------------|-----------------|------------------------|--------------------|
| Mixed Upland Conifers | 0 | 0 | 0 | 22 | 0 | 0 | 22 |
| Planted Pines | 0 | 0 | 0 | 0 | 58 | 0 | 58 |
| Total | 0 | 0 | 0 | 22 | 58 | 0 | 80 |

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| Stand | Treatment Name | Acres | CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Approval Status |
|-------|----------------|-------|--------------------------|-------------------|-----------|----------|----------------|------------------|--------------------------|-----------------------|
| 5 | 41144005-Cut | 18.3 | 42110 - Planted Red Pine | High Density Pole | 52 | 200+ | Harvest | Crown Thinning | 42110 - Planted Red Pine | Cmpt. Review Proposal |

Prescription Thin this stand using rows taken previously for access. focus on removing defect and suppressed trees.

Specs:

Other Some road work may be needed in sand blow out areas.

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015

| | | | | | | | | | | |
|----|--------------|------|--------------------------|------------------|----|------|---------|--------------|-------------------------|-----------------------|
| 14 | 41144014-Cut | 39.7 | 42110 - Planted Red Pine | High Density Log | 51 | 200+ | Harvest | Low Thinning | 4211 - Planted Red Pine | Cmpt. Review Proposal |
|----|--------------|------|--------------------------|------------------|----|------|---------|--------------|-------------------------|-----------------------|

Prescription Thin this stand using rows taken previously for access. Focus on removing defect and suppressed trees.

Specs:

Other Some road work may be needed in sand blow out areas.

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015

| | | | | | | | | | | |
|----|--------------|------|-----------------------------|------------------|----|--------|---------|----------------------------|---------------------------|-----------------------|
| 81 | 41144081-Cut | 21.9 | 429 - Mixed Upland Conifers | High Density Log | 58 | 81-110 | Harvest | Shelter Wood with Reserves | 4220 - Natural White Pine | Cmpt. Review Proposal |
|----|--------------|------|-----------------------------|------------------|----|--------|---------|----------------------------|---------------------------|-----------------------|

Prescription Cut this sale using a shelterwood system. Leave some islands along the Fox River road using red line. This area was effected by a fire in 1988

Specs: so the species other than pine are smaller. Leave about 30-40 sq. ft. of red and white pine by marking to leave or marking to cut.

Other

Comments:

Next Acceptable regeneration includes red pine, white pine and paper birch, maple, jack pine, fir and spruce

Steps:

Proposed

Start Date: 10/01/2015

| | | | | | | | | | | |
|----|-----------------|-------|---------------------------|----------------------|---|--|---------------------|-------------------------------|--------------------------|-----------------------|
| 69 | 41144069-Survey | 166.3 | 42120 - Planted Jack Pine | High Density Sapling | 3 | | Regeneration Survey | Artificial Regeneration (3yr) | 4212 - Planted Jack Pine | Cmpt. Review Proposal |
|----|-----------------|-------|---------------------------|----------------------|---|--|---------------------|-------------------------------|--------------------------|-----------------------|

Prescription This stand is a combination of 6 stands that all had jack pine budworm in 2003. They were salvage harvested in 2006 and 2005 in two sales
Specs: (Wardles Pine sale #41-011-06-01 and 450 JP Salvage Sale #41-029-04-01). Some stands were trenched and seeded in 2005, subsequent regeneration checks failed stand was added to the planting list in 2008. Stands were trenched and planted in 2010 under 2 FTPs (C41-1193, C41-1280). First year check results cared out in 2011 ranged from 296 T/A to 600 T/A. third year Checks are scheduled for 2014 decisions about replanting will be made after the results of these checks are analyzed.

Other This stand is on land acquired using wildlife funds, this stand will benefit the featured species of Shape Tail Grouse by creating a temporary opening, within a mosaic of opening/plantation habitat, which will benefit sharp-tailed grouse and other open-land dependent species. It will also benefit Kirtland Warbler by being managed in part to promote a large patch of highly stocked jack pine forest to benefit Kirtland's Warbler. In addition Spruce Grouse will benefit by striving to balance age classes of jack pine within the MA which will serve to perpetuate older age classes of this short-needed cover type. Small openings will be naturally created in the stand post-harvest. Finally Red Crossbill will benefit as the stand ages retention by mature, cone producing red pine, white pine, and white spruce in order to supply conifer seeds for Red crossbill life requisite.

Next If the 2014 counts fail combine FTPs to streamline paperwork.

Steps:

Proposed

Start Date: 02/21/2014

**Total Treatment
Acreage Proposed: 246.2**

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

#Type! #Type!

Prescription

Specs:

Other

Comment:

Next

Steps:

Proposed

Start Date: #Type!

Limiting Factor

**Total Treatment
Acreage Proposed: 0.0**

Report 5 – Site Conditions

Shingleton Mgt. Unit

Compartment 144

Rick James-Hill : Examiner

Year of Entry 2016

Availability for Management

| Availability for Management | | | Dominant Site Conditions | | | |
|-----------------------------|-----------------|---------------------|--------------------------|-------|----|----|
| Total Acres | Acres Available | Acres Not Available | | No | 2H | 1C |
| 17 | 17 | | Cedar | 17 | | |
| 328 | 328 | | Jack Pine | 328 | | |
| 5 | 1 | 4 | Lowland Spruce/Fir | 1 | | 4 |
| 83 | 60 | 23 | Natural Mixed Pines | 60 | | 23 |
| 37 | 37 | | Northern Hardwood | 37 | | |
| 501 | 501 | | Red Pine | 501 | | |
| 244 | 185 | 59 | Upland Conifers | 185 | 49 | 10 |
| 87 | 86 | 1 | Upland Mixed Forest | 86 | | 1 |
| 426 | 398 | 29 | White Pine | 398 | 6 | 23 |
| 1,729 | 1,614 | 116 | Total Forested Acres | 1,614 | 55 | 61 |
| | 93% | 7% | Relative Percent | | | |

**Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

| Site No. | Dominant Site Cond Availability | Dominant Site Condition | Acres | Other Site Condition | Other Site Condition | Other Site Condition | Other Site Condition |
|------------------|---------------------------------|---|-------|---|---|--|--------------------------------------|
| 002 | Not Available | 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) | 49 | 2E: Road needed | 3J: Water quality / BMPs (stream, river, or lake) | 2D: Portable Bridge Needed (Dept. bridge will be adequate) | 1C: Other dept or div proc/practices |
| Comments: | | | | | | | |
| 003 | Not Available | 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) | 6 | 2E: Road needed | 3J: Water quality / BMPs (stream, river, or lake) | | |
| Comments: | | | | | | | |
| 004 | Not Available | 1C: Other dept or div proc/practices | 23 | 3J: Water quality / BMPs (stream, river, or lake) | | | |
| Comments: | | | | | | | |

Report 5 – Site Conditions

Shingleton Mgt. Unit

Compartment 144

Rick James-Hill : Examiner

Year of Entry 2016

| | | | | |
|-----|---------------|---|----|--|
| 005 | Not Available | 1C: Other dept or div proc/practices | 61 | 3J: Water quality / BMPs (stream, river, or lake) |
|-----|---------------|---|----|--|

Comments:



Report 6 – 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.

| SCA Name | SCA Category | Detail Type | Recommendation | Acres |
|----------|--------------|-------------|----------------|-------|
| Comments | | | | |



Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

| Conservation Area | Type | Description |
|-------------------|---------------------|---|
| SCA | Archaeological Site | An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available. |
| SCA | Cold Water Lake | A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200. |
| 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. |
| SCA | Habitat Area | An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies. |
| SCA | Riparian Area | A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity. |
| 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. |



| Stand | Shingleton Mgt. Unit | | Report 8 – Forested Stands | | | Compartment: 144 Year of Entry: 2016 |
|-------|-----------------------------|----------------------|----------------------------|--------------|-------------|--|
| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 1 | 4113 - R.Maple, Conifer | High Density Pole | 17.0 | 67 | 81-110 | This is a poor hardwood site when the site is cut evenage management should be considered. |
| 2 | 4113 - R.Maple, Conifer | High Density Pole | 19.6 | 67 | 81-110 | This is a poor hardwood site when the site is cut evenage management should be considered, There is a small creek along the south edge of the stand that will have to be buffered when the stand is harvested. |
| 3 | 429 - Mixed Upland Conifers | High Density Log | 83.1 | 67 | 81-110 | This stand is an all age mix of trees filling in openings, Clearcut in the next 10-30 years. There is a small pond in the western half of this stand, as well as a seasonal drain. |
| 5 | 42110 - Planted Red Pine | High Density Pole | 18.3 | 52 | 200+ | This stand was thinned 20 years ago. At that time the method used to thin the stand was a row thin that took 2 rows then left 4 the theory was to allow operability. |
| 6 | 42110 - Planted Red Pine | High Density Log | 42.1 | 52 | 111-140 | This stand was third row thinned in 2006 (sale #41-023-06-01 Stanley RP Rows) residual was 120 sq. ft. of red pine. Evaluate for further treatment next entry period. |
| 7 | 4319 - Mixed Upland Forest | High Density Pole | 5.1 | 67 | 81-110 | This is a poor hardwood site when the site is cut even age management should be considered. |
| 8 | 42200 - Natural White Pine | High Density Pole | 24.9 | 73 | 81-110 | This stand was thinned under sale # 41-059-97-01 in 1997. |
| 9 | 42110 - Planted Red Pine | High Density Pole | 4.7 | 33 | 51-80 | This is a poor hardwood site when the site is cut even age management should be considered. |
| 11 | 42200 - Natural White Pine | High Density Pole | 12.9 | 54 | 1-50 | White pine filling in a grass opening this stand was coded as grass 10 years ago. A variety of sizes and ages compose the stand. |
| 12 | 42100 - Planted White Pine | High Density Pole | 3.1 | 68 | 51-80 | Small stand Surrounding bog, leave for BMPs. |
| 14 | 42110 - Planted Red Pine | High Density Log | 39.7 | 51 | 200+ | This stand was thinned 20 years ago. At that time the method used to thin the stand was a row thin that took 2 rows then left 4 the theory was to allow operability. |
| 15 | 42110 - Planted Red Pine | High Density Pole | 25.0 | 52 | 81-110 | This stand was third row thinned in 2006 (sale #41-023-06-01 Stanley RP Rows) residual was 120 sq. ft. of red pine. Evaluate for further treatment next entry period. Road work was done to access this site at that time including culverts and weirs. There is an intermittent stream within the stand that was dealt with at that time as well. |
| 17 | 42110 - Planted Red Pine | High Density Sapling | 37.9 | 10 | | Planted in 2006 under c41-865 passed counts in 2007 and 2011 FTP was closed in 2011. Currently stocking is adequate and trees look good. |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|-----------------------------|----------------------|-------|--------------|-------------|---|
| 18 | 42110 - Planted Red Pine | High Density Pole | 206.1 | 51 | 111-140 | This stand was third row thinned in 2006 (sales #41-007-06-01 Mahoney Red Pine, #41-023-06-01 Stanley RP Rows) residual was 102 sq. ft. of red pine. Evaluate for further treatment next entry period. |
| 20 | 42200 - Natural White Pine | High Density Pole | 148.4 | 69 | 51-80 | Stand was thinned in 41-059-97-01. There is some variability in size and age. The stand is also expanding into surrounding grass stand which helps contribute to the diversity of the stand. |
| 21 | 429 - Mixed Upland Conifers | High Density Pole | 49.4 | 90 | 81-110 | Stand has difficult access with creek crossings, steep slopes, small drains and bogs in the stand. The stand should be factor limited. |
| 24 | 429 - Mixed Upland Conifers | High Density Pole | 33.2 | 50 | 51-80 | Stand is steep area with bogs at the bottom of the hills. |
| 26 | 4319 - Mixed Upland Forest | High Density Pole | 27.9 | 69 | 81-110 | Thinned in 41-059-97-01 Stand is of poor to moderate quality and could be managed evenaged or unevenaged. |
| 27 | 4319 - Mixed Upland Forest | High Density Pole | 11.5 | 50 | 81-110 | There is a lot of oak, hemlock and white pine in the understory. Let the stand grow for a while and allow these species to develop further. |
| 30 | 42200 - Natural White Pine | High Density Pole | 14.1 | 59 | 1-50 | This stand was cut in 1997, and surrounds a pond when stand is entered again buffer the pond. |
| 31 | 42110 - Planted Red Pine | High Density Sapling | 5.3 | 28 | | Part of an experimental planting for grub control. Treatments were affective, although drought impacts complicated results somewhat. Unfortunately, none of the pesticides we used are available today. |
| 35 | 42110 - Planted Red Pine | High Density Log | 21.2 | 52 | 81-110 | This stand was third row thinned in 2006 (sale #41-007-06-01 Mahoney Red Pine) residual was 102 sq. ft. of red pine. Evaluate for further treatment next entry period. |
| 37 | 429 - Mixed Upland Conifers | High Density Pole | 8.7 | 38 | 51-80 | Primarily a fir stand on a steep hill with Stanley Lake on one side and bogs on the other. Traces of beech, spruce and cedar are present in the stand. |
| 38 | 42200 - Natural White Pine | High Density Log | 5.7 | 68 | 81-110 | Stand is an island on Stanley Lake as a result it is factor limited. |
| 39 | 42110 - Planted Red Pine | High Density Pole | 23.9 | 52 | 111-140 | This stand was third row thinned in 2006 (sales #41-007-06-01 Mahoney Red Pine) residual was 102 sq. ft. of red pine. Evaluate for further treatment next entry period. |
| 40 | 42110 - Planted Red Pine | High Density Pole | 24.7 | 52 | 81-110 | This stand was third row thinned in 2006 (sale #41-007-06-01 Mahoney Red Pine) residual was 97 sq. ft. of red pine. Evaluate for further treatment next entry period. |
| 42 | 6120 - Lowland Cedar | High Density Pole | 17.2 | 81 | | There is a small creek flowing toward Stanly Lake within the stand. |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|---|---------------------|-------|--------------|-------------|--|
| 44 | 42201 - Natural White Pine, Mixed Deciduous | Medium Density Pole | 136.3 | 50 | 1-50 | White pine stand surrounding the southwest shore of Stanley Lake. The stand was thinned 20 years ago. The area is an informal camping area and access site for Stanley Lake. There are 3 to 5 sites currently in use by the public in this stand. |
| 46 | 42110 - Planted Red Pine | High Density Pole | 31.0 | 52 | 81-110 | This stand was third row thinned in 2006 (sale #41-007-06-01 Mahoney Red Pine) residual was 102 sq. ft. of red pine. Evaluate for further treatment next entry period. |
| 49 | 42200 - Natural White Pine | High Density Pole | 5.2 | 49 | 51-80 | White pine filling in a grass opening this stand was coded as grass 20 years ago. A variety of sizes and ages compose the stand. |
| 50 | 6122 - Black Spruce | High Density Pole | 5.5 | 50 | | This stand is in the Fox River corridor. It should be factor limited as a result. |
| 51 | 429 - Mixed Upland Conifers | High Density Log | 44.3 | 62 | 81-110 | Mix of species along the edge of airport opening stand is expanding out into surrounding opening and as a result has a mix of ages. |
| 52 | 42110 - Planted Red Pine | High Density Pole | 11.4 | 52 | 81-110 | This stand was third row thinned in 2006 (sale #41-007-06-01 Mahoney Red Pine) residual was 100 sq. ft. of red pine. Evaluate for further treatment next entry period. |
| 53 | 42200 - Natural White Pine | High Density Log | 3.7 | 50 | 51-80 | White pine filling in a grass opening this stand was coded as grass 10 years ago. A variety of sizes and ages compose the stand. |
| 55 | 42200 - Natural White Pine | High Density Pole | 2.9 | 50 | 81-110 | This stand is in the Fox River corridor. It should be factor limited as a result. |
| 58 | 4311 - Pine, Aspen Mix | Medium Density | 42.8 | 3 | | This stand was cut under sale # 41-011-06-01 Wardles Pine. Residual is approx. 8 sq. ft. of white and red pine. Regeneration has been checked and is questionable; further evaluation is needed to decide if supplemental pine should be planted to supplement the current regeneration present on site. |
| 61 | 42200 - Natural White Pine | High Density Pole | 69.3 | 68 | 51-80 | This stand was thinned in 1990 enter site again when understory becomes pulp sized. The east side of the stand should be left during any harvest operations as it buffers a few seasonal ponds and bogs. |
| 66 | 42220 - Natural Jack Pine | High Density Pole | 12.8 | 25 | | Stand originated during the fox river fire in 1988. |
| 68 | 42120 - Planted Jack Pine | High Density Pole | 52.3 | 46 | | Stand has a small white pine inclusion and bog that need to be dealt with when stand is prepped for harvest. Evaluate for harvest next entry period. |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|-----------------------------|----------------------|-------|--------------|-------------|---|
| 69 | 42120 - Planted Jack Pine | High Density Sapling | 166.3 | 3 | | This stand is a combination of 6 stands that all had jack pine budworm in 2003. They were salvage harvested in 2006 and 2005 in two sales (Wardles Pine sale #41-011-06-01 and 450 JP Salvage Sale #41-029-04-01). Some stands were trenched and seeded in 2005, subsequent regeneration checks failed stand was added to the planting list in 2008. Stands where trenched and planted in 2010 under 2 FTPs (C41-1193, C41-1280). First year check results cared out in 2011 ranged from 296 T/A to 600 T/A. third year Checks are scheduled for 2014 decisions about replanting will be made after the results of these checks are analyzed. |
| 71 | 42210 - Natural Red Pine | High Density Pole | 10.3 | 65 | 51-80 | |
| 74 | 429 - Mixed Upland Conifers | High Density Pole | 3.0 | 45 | 81-110 | White pine filling in a grass opening. A variety of sizes and ages compose the stand. |
| 75 | 42120 - Planted Jack Pine | High Density Pole | 20.8 | 36 | | Look into harvesting in 20 years. |
| 76 | 42290 - Natural Mixed Pine | High Density Pole | 38.0 | 65 | | |
| 77 | 42290 - Natural Mixed Pine | High Density Pole | 22.4 | 44 | 51-80 | This stand is a mix of ages and species there is lots of jack pine filling in the north side of the stand. |
| 78 | 42120 - Planted Jack Pine | High Density Sapling | 31.8 | 4 | | This was a Scotch pine stand that was clear cut, jack pine was planted under FTP c41-1277 the stand was planted in 2010 at a cost of \$114.38 per ac. The first year regeneration check was in 2012 with 383 T/A. The third year check was 573 T/A and 123 V/A FTP will be closed as the stand meets minimum stocking requirements with the volunteers included. |
| 79 | 42220 - Natural Jack Pine | High Density Sapling | 44.3 | 11 | | Stand was clearcut approximately 20 years ago and planted in 2003 Ftp has been closed. Stocking looks adequate with some gaps that should fill in over time. |
| 80 | 42290 - Natural Mixed Pine | High Density Pole | 22.6 | 52 | 81-110 | Burned in 1987 the understory is result of the fire. This stand is in the Fox River corridor. It should be factor limited as a result. |
| 81 | 429 - Mixed Upland Conifers | High Density Log | 21.9 | 58 | 81-110 | The easternmost part of this stand may have been affected by a fire in the late 80s, but off the road more than a chain there was no evidence of effects. This stand has mature hardwood as well as some larger conifer species. |



| Stand | Cover Type | Acres | Managed Site | Management Priority (Objective) | General Comments: |
|-------|-------------------------|-------|--------------|---------------------------------|-------------------|
| 4 | 50 - Water | 2.5 | Unspecified | Unspecified | |
| 10 | 330 - Low-Density Trees | 226.4 | Unspecified | Unspecified | |
| 13 | 50 - Water | 1.1 | Unspecified | Unspecified | |
| 16 | 6225 - Bog | 1.2 | Unspecified | Unspecified | |
| 19 | 622 - Lowland Shrub | 3.9 | Unspecified | Unspecified | |
| 22 | 6225 - Bog | 13.8 | Unspecified | Unspecified | |
| 23 | 330 - Low-Density Trees | 1.8 | Unspecified | Unspecified | |
| 25 | 6225 - Bog | 1.6 | Unspecified | Unspecified | |
| 28 | 6225 - Bog | 1.5 | Unspecified | Unspecified | |
| 29 | 6225 - Bog | 2.4 | Unspecified | Unspecified | |
| 32 | 50 - Water | 3.8 | Unspecified | Unspecified | |
| 33 | 730 - Mud Flats | 1.0 | Unspecified | Unspecified | |
| 34 | 330 - Low-Density Trees | 39.8 | Unspecified | Unspecified | |
| 36 | 50 - Water | 97.0 | Unspecified | Unspecified | |
| 41 | 6225 - Bog | 3.9 | Unspecified | Unspecified | |
| 43 | 6225 - Bog | 1.1 | Unspecified | Unspecified | |
| 45 | 6225 - Bog | 3.2 | Unspecified | Unspecified | |
| 47 | 330 - Low-Density Trees | 2.9 | Unspecified | Unspecified | |



| Stand | Cover Type | Acres | Managed Site | Management Priority (Objective) | General Comments: |
|-------|----------------------------------|-------|--------------|---------------------------------|-------------------|
| 48 | 50 - Water | 5.5 | Unspecified | Unspecified | |
| 54 | 50 - Water | 13.1 | Unspecified | Unspecified | |
| 56 | 121 - Airport | 60.4 | Unspecified | Unspecified | |
| 57 | 6224 - Treed Bog | 4.8 | Unspecified | Unspecified | |
| 59 | 3302 - Low Density Conifer Trees | 740.1 | No | Low | |
| 60 | 6225 - Bog | 2.4 | Unspecified | Unspecified | |
| 62 | 50 - Water | 24.2 | Unspecified | Unspecified | |
| 63 | 6224 - Treed Bog | 13.3 | Unspecified | Unspecified | |
| 64 | 6221 - Fen | 5.6 | Unspecified | Unspecified | |
| 65 | 50 - Water | 10.7 | Unspecified | Unspecified | |
| 67 | 6225 - Bog | 3.7 | Unspecified | Unspecified | |
| 70 | 330 - Low-Density Trees | 1.9 | Unspecified | Unspecified | |
| 72 | 11 - Low Intensity Urban | 23.2 | Unspecified | Unspecified | |
| 73 | 330 - Low-Density Trees | 102.7 | Unspecified | Unspecified | |