

## **Compartment Review Presentation**

**Shingleton Forest Management Unit** 

Compartment 41079 Entry Year 2020 Acreage: 2,163

**County Schoolcraft** 

Management Area: Lake Michigan Shoreline

Revision Date: 2018-07-16

Stand Examiner: Adam Petrelius

**Legal Description:** 

41N R16W Sections 15, 16, 20-22, 28, 29

## **Identified Planning Goals:**

Multiple resource management for current and future generations.

## Soil and topography:

The topography within the compartment consists of a series of ridges and low areas paralleling the Lake Michigan shoreline. Slight elevation changes occur with values ranging from 597-620 feet. The majority of the compartment is dominated by cedar and mixed conifer swamps. The major soil types found, in order of abundance, are Carbondale/Lupton/Tawas, Wurtsmith/Tawas/Deford, Dawson/Greenwood/Loxley, and Dawson/Kinross Mucks. Habitat types within the compartment, in order of abundance, are Unclassified (Limestone Rock Land), PArV, PArVAa, and PVE. It lies within the Lakeshore Marsh and Thompson Plains Land Type Association, and the Lake Michigan Shoreline Management Area.

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

State land within this compartment was acquired between 1927 and 1978. Private land borders the majority of the compartment boundary. There is no state forest land adjacent to the compartment. Indian Lake State Park lies along the northwestern edge and the Thompson State Fish Hatchery lies along the southwestern edge. Private ownership surrounding the compartment is a mixture of small tracts and medium blocks of land. These parcels consist of permanent houses, businesses, and undeveloped land. The southeastern boundary has the most active development along the Lake Michigan Shoreline. Future problems, with increased development of the area, include illegal roads/trails, littering, and trespass.

### **Unique Natural Features:**

This compartment contains unique ecosystems and species which contribute towards the biodiversity of landscape. The entire compartment is categorized as an Ecological Reference Area (ERA) for Wooded Dune and Swale Complex. The majority of compartment is also a Special Conservation Area (SCA) for deer wintering complex.

## Archeological, Historical, and Cultural Features:

Archeological sites are located within or near compartment boundaries.

#### **Special Management Designations or Considerations:**

Forest management activities are planned and implemented to prevent damage and strengthen the quality of the unique ecosystems and species located within the compartment.

#### **Watershed and Fisheries Considerations:**

The western region of this compartment contains Thompson Creek. Thompson Creek is a designated Type 1 trout stream less than 50'width. A 300' buffer is recommended for Thompson Creek in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope; buffers are recommended to protect these areas in accordance with Best Management Practices.

Southern regions of this compartment contain several unnamed waterbodies. 100' plus 5' per 1% increase in slope; buffers are recommended to protect shoreland areas adjacent to unnamed waterbodies in accordance with Best Management Practices.

The eastern region of this compartment contains Southtown Creek. Southtown Creek is a non-designated stream reach less than 50' width. 100' plus 5' per 1% increase in slope; buffers are recommended to protect Southtown Creek riparian areas in accordance with Best Management Practices.

#### Wildlife Habitat Considerations:

This compartment lies between Indian Lake State Park and Lake Michigan in the Escanaba/Door Peninsula ecological

sub-subsection. The cover types can be classified as old sandy beach ridges interspersed with lowland coniferous swamps in a wooded dune and swale complex. Conditions found here support a wide variety of neo-tropical migratory birds that feed on insects from the branches of conifers on the north side of Lake Michigan during the northward migration. The compartment also provides cover for wintering deer. The integrity of this complex will be maintained by allowing natural processes to continue.

## Mineral Resource and Development Concerns and/or Restrictions

An active sand/gravel pit is located less than one mile west. There is some sand & gravel potential within the compartment, but development potential appears to be limited. The water table is very shallow and much of the compartment is covered by wetlands. There is no known metallic mineral potential in this area, and there is no history of mineral leasing. There is no commercial oil and gas production in the UP.

#### **Vehicle Access:**

The compartment is surrounded by a county road, state highway, and US highway. There are no forest roads which lead into the compartment. A few old roads created by timbersales in the past are still visible, but there is no vehicle access to the compartment. A railroad track, powerline, and snowmobile trail all travel east/west through the compartment. Foot access is also difficult due to the thick lowland forest types found here.

#### **Survey Needs:**

None needed.

## **Recreational Facilities and Opportunities:**

One snowmobile trail travels east/west and is closed to vehicles during summer months. Opportunities for hunting, fishing, and other forms of recreational activity exist within the compartment. Recreational use in the compartment is very minimal due to access. Indian Lake State Park borders the northwestern boundary.

### **Fire Protection:**

Response time to fires within this compartment from the Thompson field office will be variable. The Thompson field office is adjacent to this compartment, but the lack of road system will be difficult. The compartment receives little use throughout fire season and a lightening caused fire is more likely that a human caused fire. Weather conditions here are typically cooler with higher humidity values than other areas of the management unit. Numerous water sources exist.

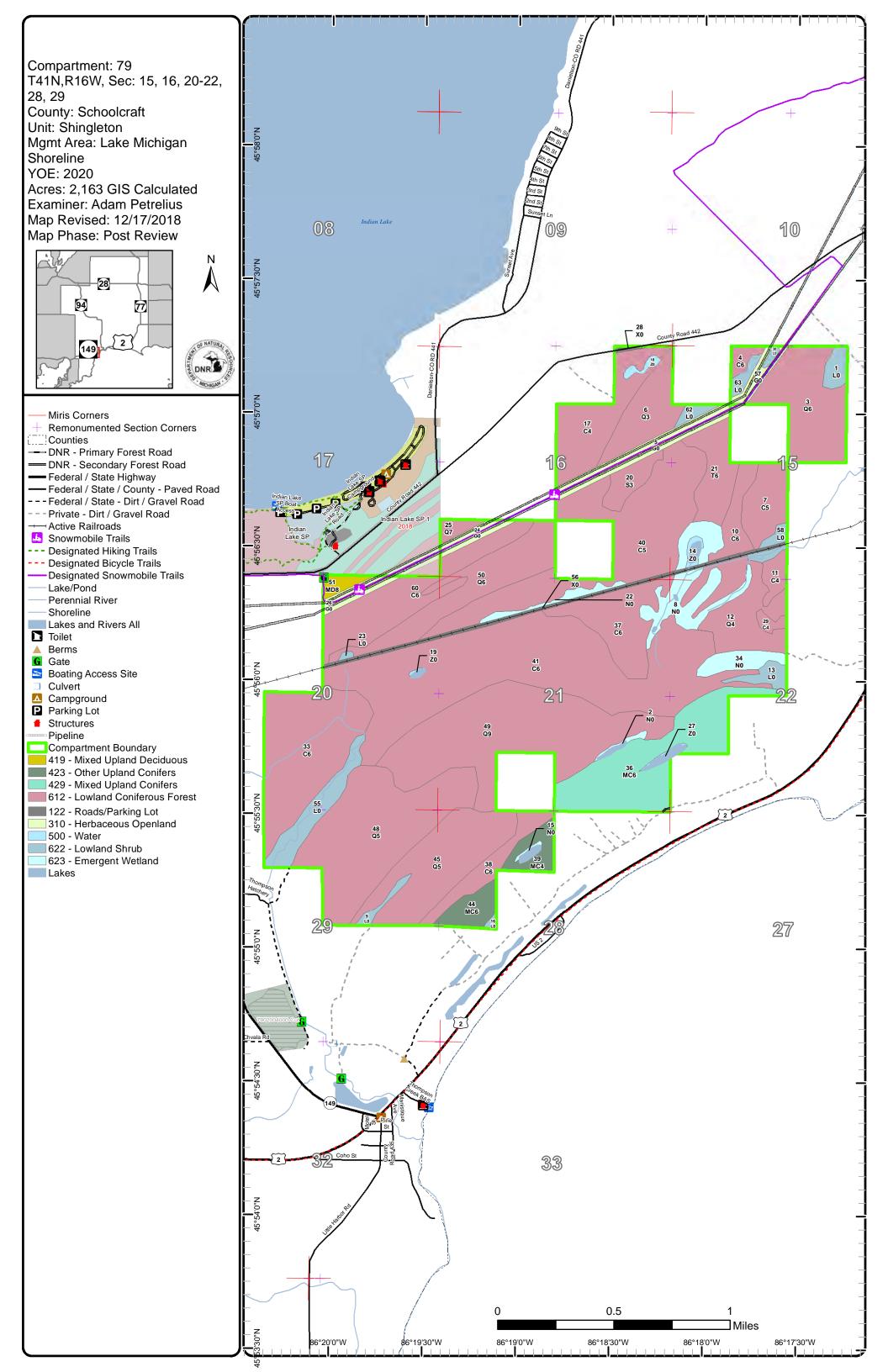
## **Additional Compartment Information:**

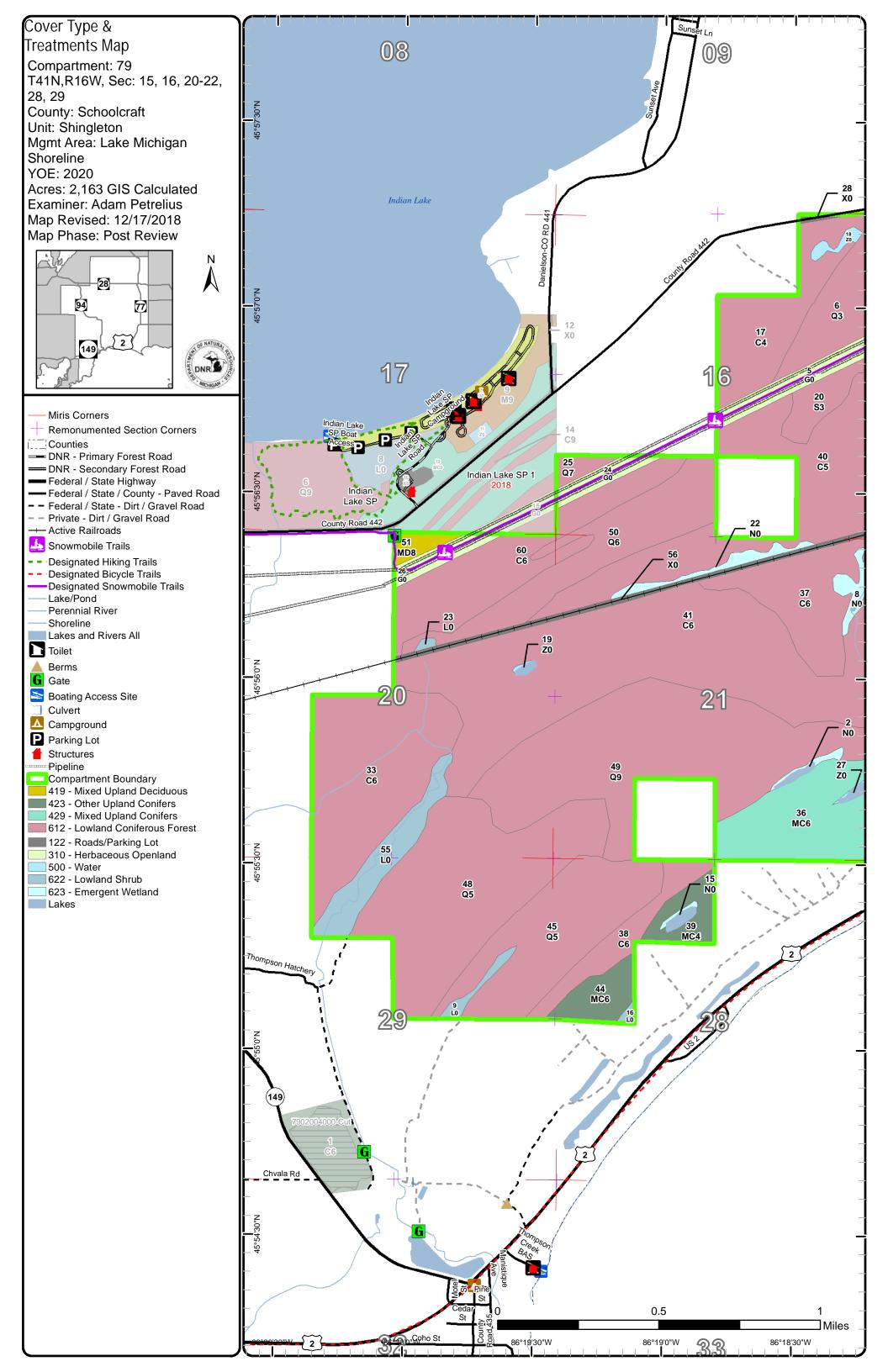
The following reports from the Inventory are attached:

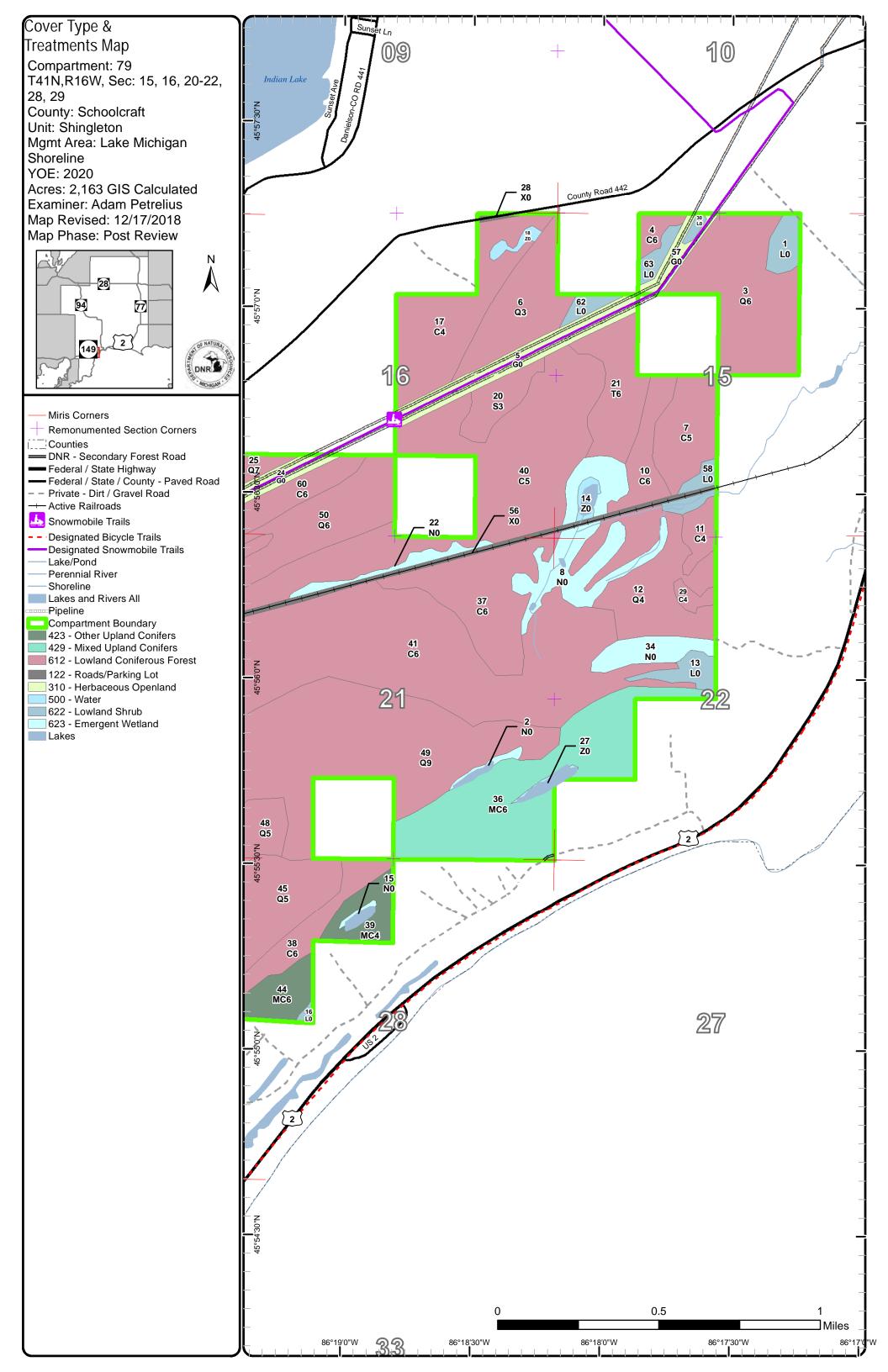
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

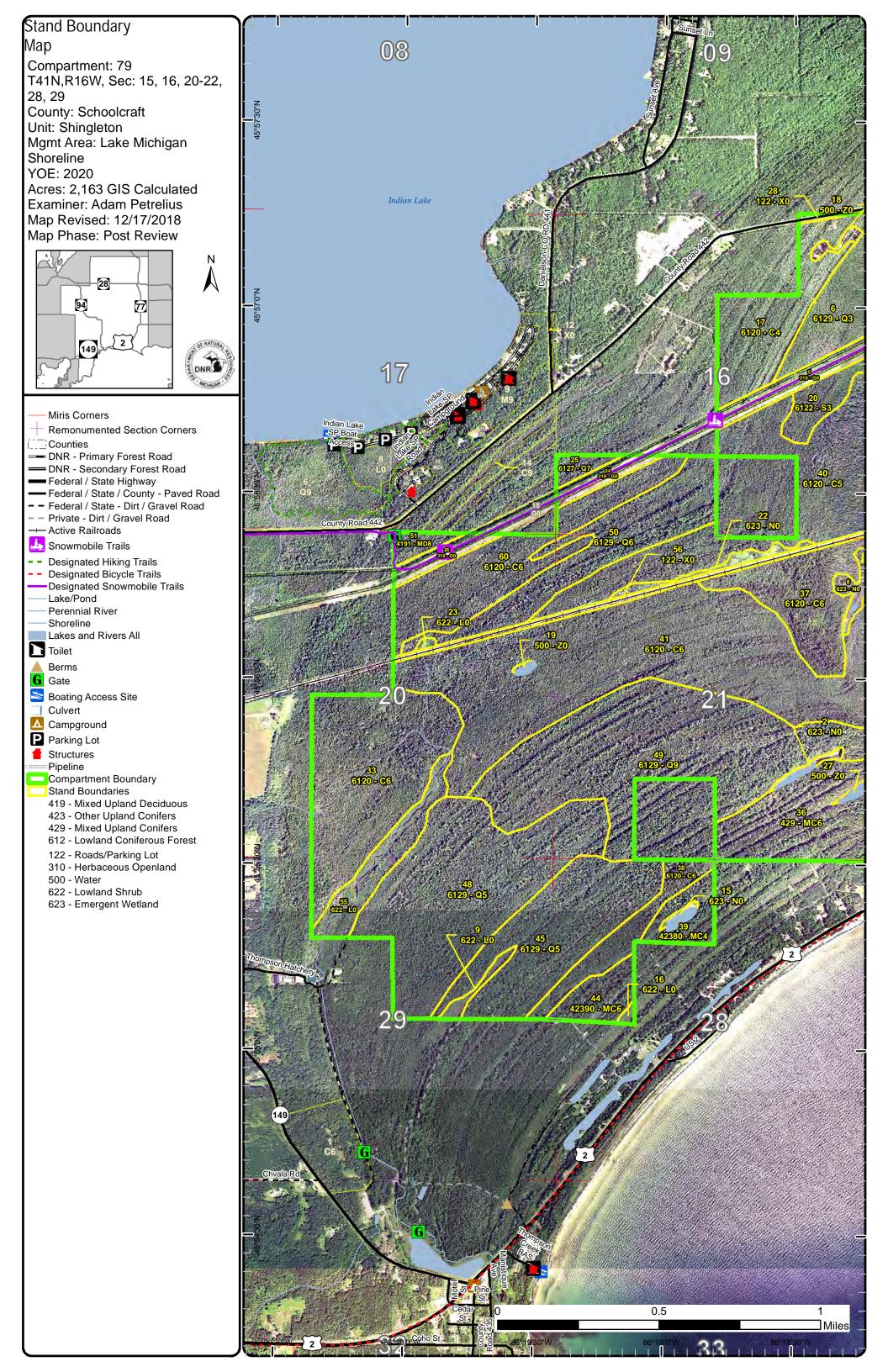
The following information is displayed, where pertinent, on the attached compartment maps:

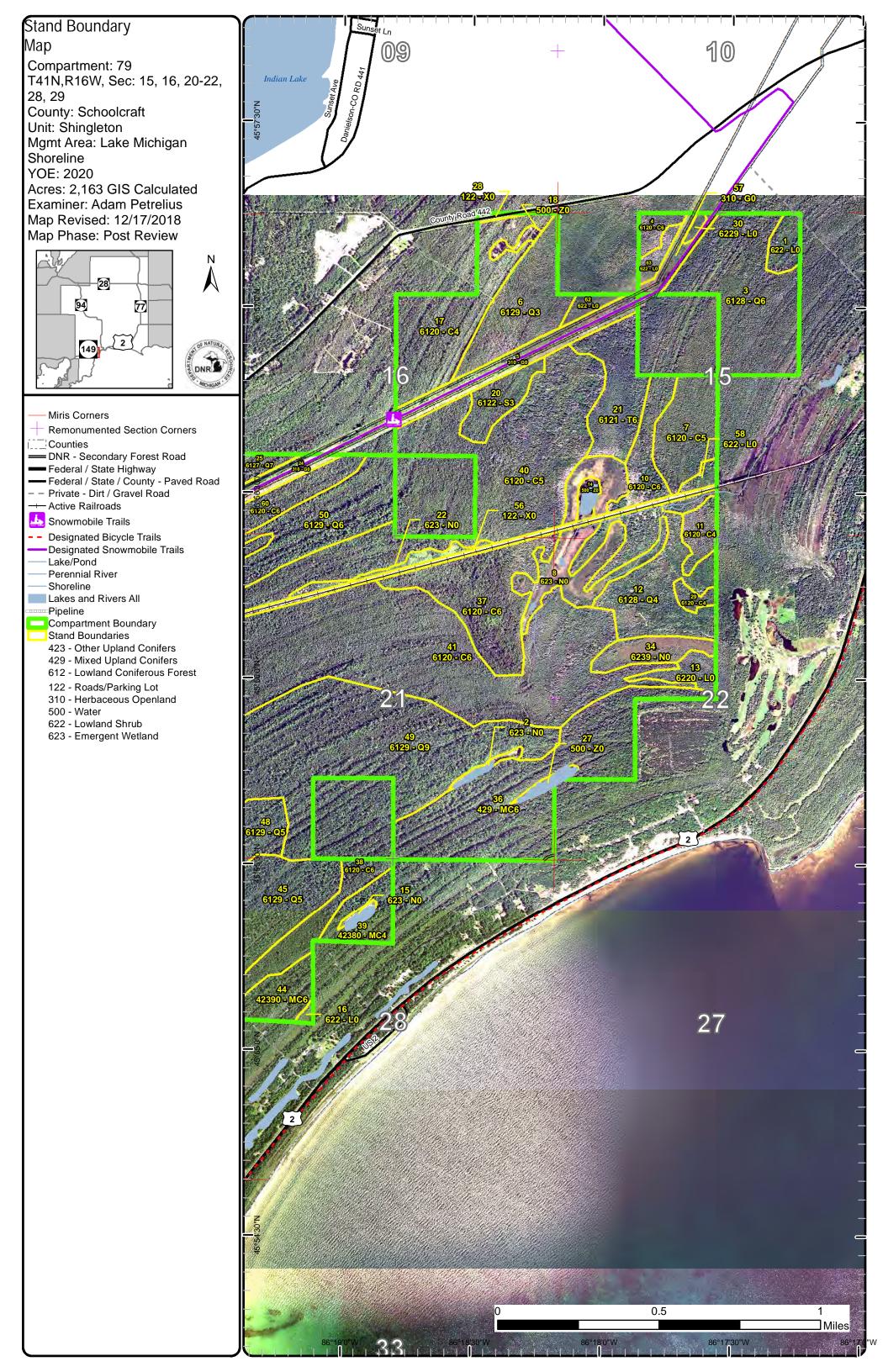
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

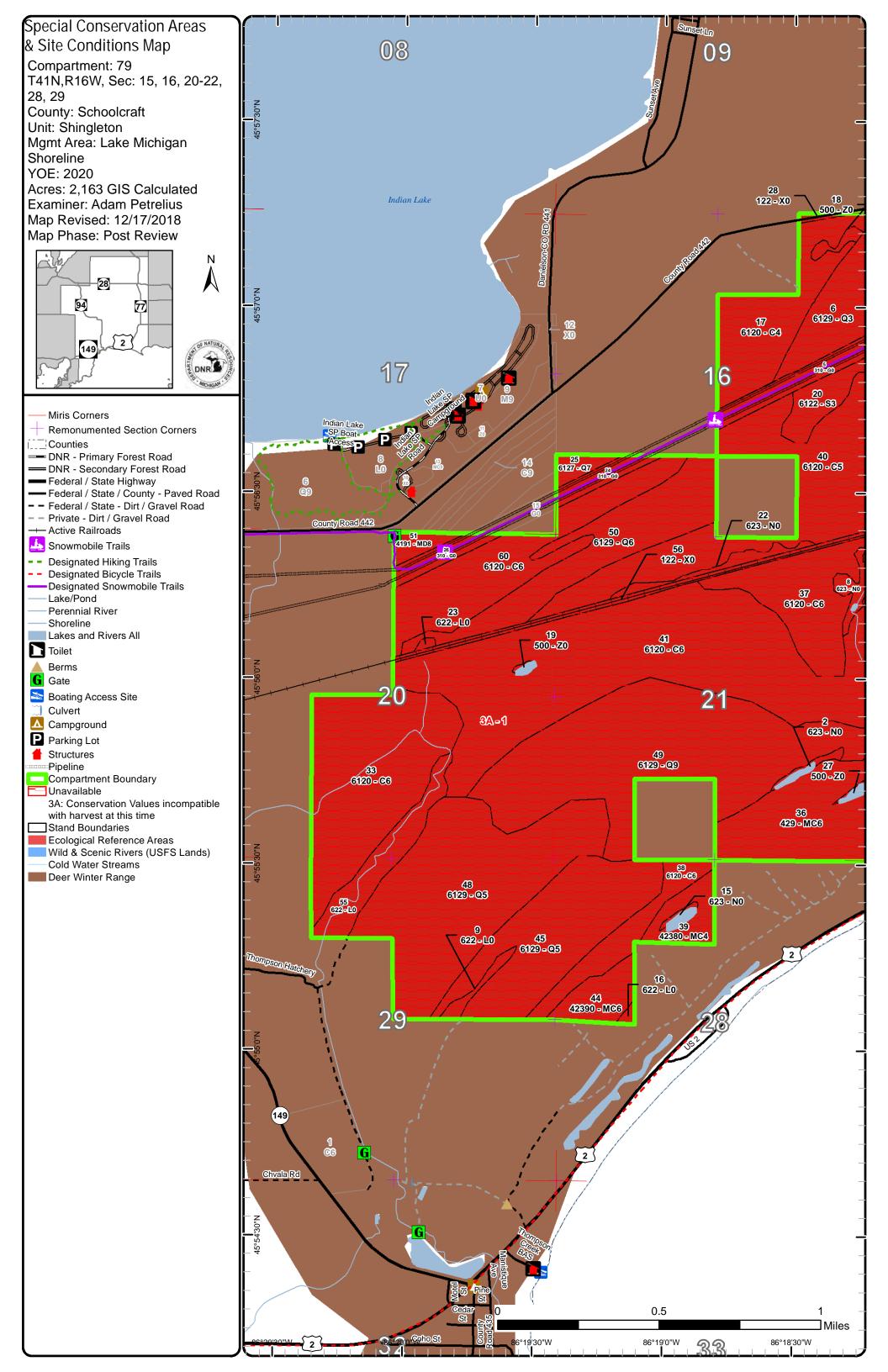


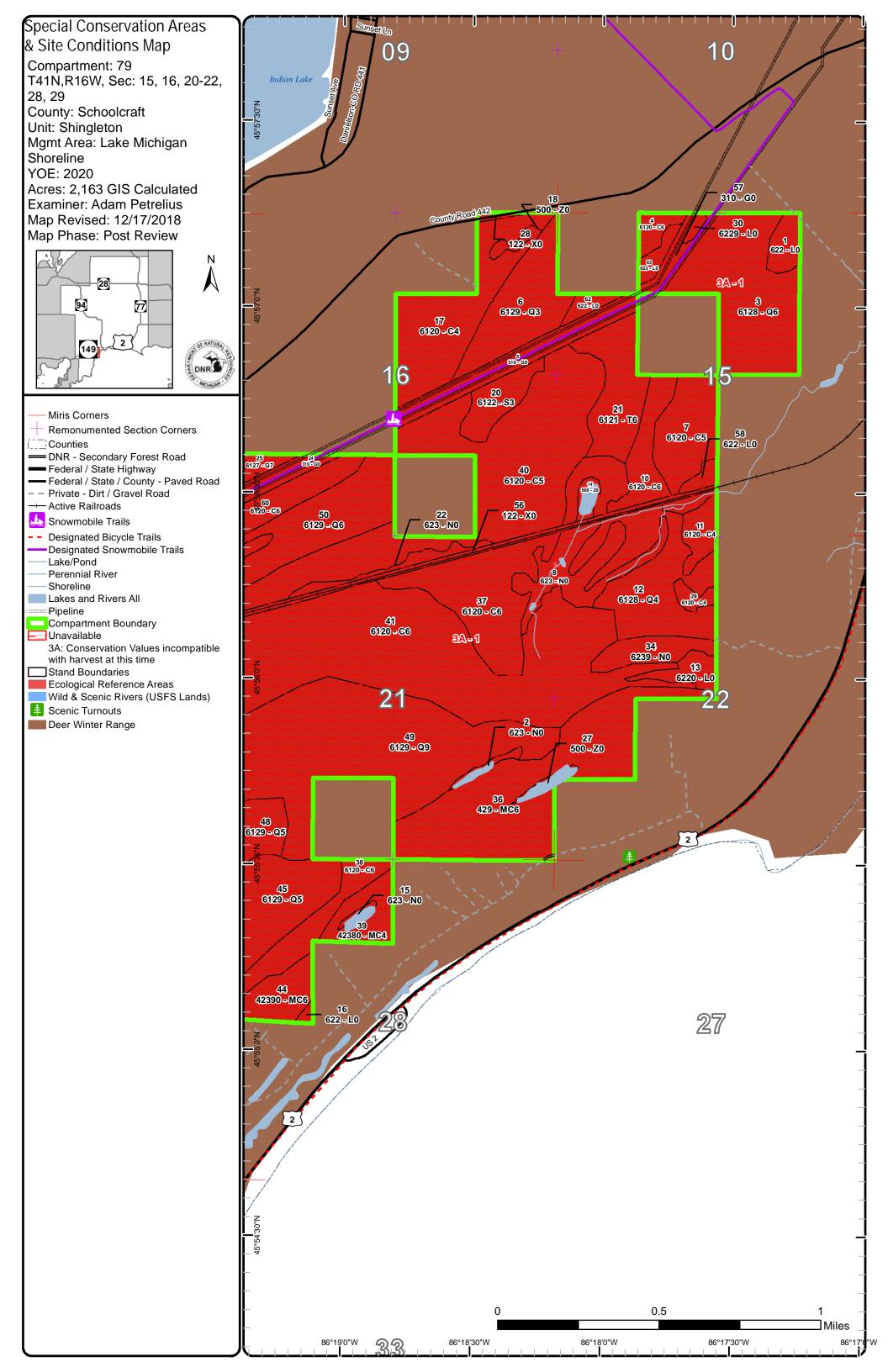












Shingleton Mgt. Unit

Compartment 79 Year of Entry 2020

**Adam Petrelius : Examiner** 

## Age Class

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|------------------------|------------------|--|---|---|---|-------|-------|--------------|-----|--|-------|-----|------|--------|--|--|-----|--------------------|---|
| Cedar                  | 0                | 0  | 0 | 0   | 0   | 0     | 30    | 176          | 196 | 0                                      | 376   | 145 | 0    | 0      | 0  | 0  | 0   | 0                  | 922                                       |
| Herbaceous Openland    | 63               | 0  | 0 | 0   | 0   | 0     | 0     | 0            | 0   | 0                                      | 0     | 0   | 0    | 0      | 0  | 0  | 0   | 0                  | 63  |
| Lowland Conifers       | 0                | 0  | 0 | 0   | 68  | 0     | 46    | 0            | 0   | 349                                    | 92    | 204 | 0    | 0      | 0  | 0  | 0   | 0                  | 759                                       |
| Lowland Shrub          | 81               | 0  | 0 | 0   | 0   | 0     | 0     | 0            | 0   | 0                                      | 0     | 0   | 0    | 0      | 0  | 0  | 0   | 0                  | 81  |
| Lowland Spruce/Fir     | 0                | 0  | 0 | 0   | 0   | 18    | 0     | 0            | 0   | 0                                      | 0     | 0   | 0    | 0      | 0  | 0  | 0   | 0                  | 18  |
| Marsh                  | 80               | 0  | 0 | 0   | 0   | 0     | 0     | 0            | 0   | 0                                      | 0     | 0   | 0    | 0      | 0  | 0  | 0   | 0                  | 80  |
| Mixed Upland Deciduous | 0                | 0  | 0 | 0   | 0   | 0     | 0     | 0            | 8   | 0                                      | 0     | 0   | 0    | 0      | 0  | 0  | 0   | 0                  | 8   |
| Tamarack               | 0                | 0  | 0 | 0   | 0   | 0     | 0     | 0            | 39  | 0                                      | 0     | 0   | 0    | 0      | 0  | 0  | 0   | 0                  | 39  |
| Upland Conifers        | 0                | 0  | 0 | 0   | 20  | 0     | 21    | 0            | 0   | 0                                      | 117   | 0   | 0    | 0      | 0  | 0  | 0   | 0                  | 158                                       |
| Urban                  | 23               | 0  | 0 | 0   | 0   | 0     | 0     | 0            | 0   | 0                                      | 0     | 0   | 0    | 0      | 0  | 0  | 0   | 0                  | 23  |
| Water                  | 12               | 0  | 0 | 0   | 0   | 0     | 0     | 0            | 0   | 0                                      | 0     | 0   | 0    | 0      | 0  | 0  | 0   | 0                  | 12  |
| Total                  | 259              | 0  | 0 | 0   | 88  | 18    | 97    | 176          | 243 | 349                                    | 585   | 349 | 0    | 0      | 0  | 0  | 0   | 0                  | 2163                                      |



# **Report 2 – Treatment Summary**

# Shingleton Mgt. Unit Year of Entry: 2020

## **Acres of Harvest**

Compartment 79
Total Compartment Acres: 2,163

Commercial Harvest Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 0

Report 3 -- Treatments Compartment: s Year of Entry: t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type Approval** n Age Density Age Name CoverType Range Type Method Objective Structure Status d

#Type!

**Habitat Cut: Site Condition:** 

Prescription Specs:

Next Step

Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date:

**Total Treatment** Acreage Proposed:

0.0

Mgt. Unit

Compartment: 79

Shingleton Mgt. Unit

Acres

Adam Petrelius : Examiner Year of Entry: 2020

Availability for Management

Total Acres Acres Avail

**Dominant Site Conditions** 

| Domina                     | 710100        | Adres Avan     | 7 101 00  | i otal |
|----------------------------|---------------|----------------|-----------|--------|
| 3A                         | Not Available | With Condition | Available | Acres  |
| Cedar 922                  | 922           | 0              | 0         | 922    |
| Herbaceous Openland 63     | 63            | 0              | 0         | 63     |
| Lowland Conifers 759       | 759           | 0              | 0         | 759    |
| Lowland Shrub 81           | 81            | 0              | 0         | 81     |
| Lowland Spruce/Fir 18      | 18            | 0              | 0         | 18     |
| Marsh 80                   | 80            | 0              | 0         | 80     |
| Mixed Upland Deciduous 8   | 8             | 0              | 0         | 8      |
| Tamarack 39                | 39            | 0              | 0         | 39     |
| Upland Conifers 157        | 157           | 0              | 0         | 157    |
| Urban 23                   | 23            | 0              | 0         | 23     |
| Water 12                   | 12            | 0              | 0         | 12     |
| Total Forested Acres 2,163 | 2,163         |                | 0         | 2,163  |
| Relative Percent           | 100%          |                | 0%        |        |

\*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<br>No. |             | Dominant Site Condition  | Acres | Other Site Condition | Other Site Condition | Other Site Condition | Other Site Condition |
|-------------|-------------|--|-------|----------------------|----------------------|----------------------|----------------------|
| 1           | Unavailable | 3A: Conservation Values incompatible with harvest at this time | 2,163 | Unspecified          | Unspecified          | Unspecified          | Unspecified          |
|             | Comments:   |  |       |                      |                      |                      |                      |

Mgt. Unit

Compartment: #Type! Year of Entry:



## Report 5 - 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 |              |             |                |       |
|          |              |             |                |       |

Shingleton Mgt. Unit Compartment: 79
Year of Entry 2020



## Report 6 - 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 | on Type                       | Description   | ERA = Ecological Reference Area<br>HCVA = High Conservation Value Area<br>SCA = Special Conservation Area  |
|--------------|-------------------------------|---|--|
| SCA          | Cold Water<br>Stream          | A coldwater stream has temperature and dissolved oxygen condistocked trout populations and those of other coldwater fish speci year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.   | es (e.g., slimy sculpin) to persist from se conditions due to substantial  |
| SCA          | Habitat Area                  | An area that provide some specific need for the life cycle of wildliand Waterfowl Production Areas, deer wintering complexes in low openings and savannas. Habitat areas are distinct from critical ham endangered or threatened species (such as Kirtland's warbler or general in nature, are not primarily associated with threatened or covered by species recovery plans that are developed in cooperations.  | wland conifer communities, grassland<br>abitat designated for recovery of<br>piping plover areas) in that they are more<br>endangered species, and are not   |
| SCA          | Visual<br>Management Area     | An area of general social appreciation that is managed to recogn Examples of these areas include scenic vistas, scenic or natural   |  |
| ERA          | Ecological<br>Reference Areas | Ecological Reference Areas (ERAs) are high quality examples of identified as Element Occurrences (EOs) by the Michigan Natura context of their natural community classification system. Element (Excellent) or B (Good) and a Global (G) or State (S) element (rathreatened (2), or rare (3) serve as an initial base of ERAs. They the State. The system is comprised of individual or associations managed for restoration and maintenance of natural ecological p submit recommendations for lands as ERAs using the DNR Constitution. | Il Features Inventory (MNFI) within the toccurrences with viability ranks of A rity) ranking of endangered (1), may be located upon any ownership in of natural community types that are rocesses and values. The public may |

| s<br>t      |  |                      |       | Report 7     | – Forested  | Stands Compartment: 79 Year of Entry: 2020  |
|-------------|--|----------------------|-------|--------------|-------------|---|
| a<br>n<br>d | Level 4<br>Cover Type                            | Size<br>Density      | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:  |
| 3           | 6128 - Lowland<br>Coniferous, Mixed<br>Deciduous | Poletimber<br>Well   | 85.2  | 98           | 51-80       |   |
| 4           | 6120 - Lowland Cedar                             | Poletimber<br>Well   | 7.4   | 57           | 51-80       |   |
| 6           | 6129 - Mixed Coniferous<br>Lowland Forest        | Sapling Well         | 46.3  | 57           | 1-50        |   |
| 7           | 6120 - Lowland Cedar                             | Poletimber<br>Medium | 34.7  | 70           | 81-110      |   |
| 10          | 6120 - Lowland Cedar                             | Poletimber<br>Well   | 22.1  | 50           | 111-140     | Flooded stand. Now has scattered swamp hardwood and conifers. Alder throughout.   |
| 11          | 6120 - Lowland Cedar                             | Poletimber<br>Poor   | 11.3  | 100          | 1-50        | flooding issues   |
| 12          | 6128 - Lowland<br>Coniferous, Mixed<br>Deciduous | Poletimber<br>Poor   | 67.7  | 32           | 1-50        | Stand is a mixture of aspen and upland spruce. Pockets of lowland conifer and lowland brush present also. Good regeneration of mixed species. |
|             |  |                      |       |              |             | Cut with the "Rough Rider" sale in 1984.  |
| 17          | 6120 - Lowland Cedar                             | Poletimber<br>Poor   | 65.2  | 68           | 1-50        | Mortality of cedar within stand most likely due to water drainage issues caused by adjacent road.   |
| 20          | 6122 - Black Spruce                              | Sapling Well         | 17.9  | 48           | 1-50        |   |
| 21          | 6121 - Tamarack                                  | Poletimber<br>Well   | 39.3  | 79           | 81-110      |   |
| 25          | 6127 - Lowland Pine                              | Sawtimber<br>Poor    | 7.1   | 90           | 1-50        | Subcanopy is replacing white pine canopy.   |
| 29          | 6120 - Lowland Cedar                             | Poletimber<br>Poor   | 4.8   | 100          | 1-50        | flooding issues   |
| 33          | 6120 - Lowland Cedar                             | Poletimber<br>Well   | 128.5 | 109          | 81-110      |   |
| 36          | 429 - Mixed Upland<br>Conifers                   | Poletimber<br>Well   | 117.0 | 98           | 81-110      | Stand is a mixture of pine ridges and mixed conifer low areas.  Ridges within this stand are steeper than the rest of the compartment.        |
| 37          | 6120 - Lowland Cedar                             | Poletimber<br>Well   | 61.2  | 93           | 111-140     |   |
| 38          | 6120 - Lowland Cedar                             | Poletimber<br>Well   | 29.4  | 68           | 51-80       |   |

| S<br>t      | Shingleton   | Mgt. Unit            |       | Report 7     | – Forested S | Stands          | Compartment: 79<br>Year of Entry: 2020                                  | DNR          |
|-------------|--|----------------------|-------|--------------|--------------|-----------------|---|--------------|
| a<br>n<br>d | Level 4<br>Cover Type                                  | Size<br>Density      | Acres | Stand<br>Age | BA<br>Range  |                 | General<br>Comments:  | Michigan     |
| 39          | 42380 - Non Pine<br>Upland Conifer, Mixed<br>Deciduous | Poletimber<br>Poor   | 19.5  | 38           | 1-50         |                 | aspen and upland spruce/fir. Some<br>d conifer present. Good regenerati |              |
| 40          | 6120 - Lowland Cedar                                   | Poletimber<br>Medium | 161.1 | 73           | 81-110       |                 |   |              |
| 41          | 6120 - Lowland Cedar                                   | Poletimber<br>Well   | 314.8 | 98           | 51-80        |                 |   |              |
| 44          | 42390 - Mixed Non-Pine<br>Upland Conifers              | Poletimber<br>Well   | 20.6  | 58           | 51-80        |                 |   |              |
| 45          | 6129 - Mixed Coniferous<br>Lowland Forest              | Poletimber<br>Medium | 102.9 | 86           | 51-80        | Stand harvested | d in past. Sub-canopy is now a par                                      | t of canopy. |
| 48          | 6129 - Mixed Coniferous<br>Lowland Forest              | Poletimber<br>Medium | 168.0 | 88           | 51-80        |                 |   |              |
| 49          | 6129 - Mixed Coniferous<br>Lowland Forest              | Sawtimber<br>Well    | 203.8 | 106          | 81-110       |                 |   |              |
| 50          | 6129 - Mixed Coniferous                                | Poletimber<br>Well   | 77.8  | 87           | 81-110       |                 |   |              |

Lowland Forest

4191 - Mixed Upland Deciduous with Conifer

6120 - Lowland Cedar

51

60

Well

Sawtimber

Medium

Poletimber

Well

7.8

81.8

73

67

81-110

51-80

Compartment: 79 Year of Entry: 2020



| Cover Type                | Acres   | Managed<br>Site  | General Comments:   |
|---------------------------|---|--|---|
| 622 - Lowland Shrub       | 9.9   | No   |   |
| 623 - Emergent Wetland    | 3.3   | No   |   |
| 310 - Herbaceous Openland | 30.7  | No   | OPIC - FMD: ERA-Wooded Dune and Swale Complex, SCA - Deeryard Pipeline, powerline, and snowmobile trail.  |
| 623 - Emergent Wetland    | 50.0  | No   |   |
| 622 - Lowland Shrub       | 5.1   | No   |   |
| 6220 - Alder/willow       | 10.3  | No   |   |
| 500 - Water               | 4.1   | No   |   |
| 623 - Emergent Wetland    | 1.8   | No   |   |
| 622 - Lowland Shrub       | 1.5   | No   | OPIC - FMD: ERA-Wooded Dune and Swale Complex, SCA - Deeryard SCA-<br>Potential Old Growth<br>Mixed Stand   |
| 500 - Water               | 3.4   | No   |   |
| 500 - Water               | 1.1   | No   | OPIC - FMD: ERA-Wooded Dune and Swale Complex, SCA - Deeryard   |
| 623 - Emergent Wetland    | 8.3   | No   |   |
| 622 - Lowland Shrub       | 1.1   | No   | OPIC - FMD: ERA-Wooded Dune and Swale Complex, SCA - Deeryard   |
| 310 - Herbaceous Openland | 10.8  | No   | OPIC - FMD: ERA-Wooded Dune and Swale Complex, SCA - Deeryard Pipeline, powerline, and snowmobile trail.  |
| 310 - Herbaceous Openland | 11.6  | No   | OPIC - FMD: ERA-Wooded Dune and Swale Complex, SCA - Deeryard Pipeline, powerline, and snowmobile trail.  |
| 500 - Water               | 3.5   | No   |   |
| 122 - Road/Parking Lot    | 1.7   | No   | OPIC - FMD: ERA-Wooded Dune and Swale Complex<br>County Road 442  |
|                           | 622 - Lowland Shrub 623 - Emergent Wetland 310 - Herbaceous Openland 623 - Emergent Wetland 622 - Lowland Shrub 6220 - Alder/willow 500 - Water 623 - Emergent Wetland 622 - Lowland Shrub 500 - Water 500 - Water 623 - Emergent Wetland 622 - Lowland Shrub 310 - Herbaceous Openland 310 - Herbaceous Openland | 622 - Lowland Shrub       9.9         623 - Emergent Wetland       30.7         623 - Emergent Wetland       50.0         622 - Lowland Shrub       5.1         6220 - Alder/willow       10.3         500 - Water       4.1         623 - Emergent Wetland       1.8         622 - Lowland Shrub       1.5         500 - Water       3.4         500 - Water       1.1         623 - Emergent Wetland       8.3         622 - Lowland Shrub       1.1         310 - Herbaceous Openland       10.8         310 - Herbaceous Openland       11.6         500 - Water       3.5 | Cover Type         Acres         Site           622 - Lowland Shrub         9.9         No           623 - Emergent Wetland         3.3         No           310 - Herbaceous Openland         30.7         No           623 - Emergent Wetland         50.0         No           622 - Lowland Shrub         10.3         No           500 - Water         4.1         No           623 - Emergent Wetland         1.8         No           622 - Lowland Shrub         1.5         No           500 - Water         3.4         No           500 - Water         1.1         No           623 - Emergent Wetland         8.3         No           622 - Lowland Shrub         1.1         No           310 - Herbaceous Openland         10.8         No           310 - Herbaceous Openland         11.6         No           500 - Water         3.5         No |

Compartment: 79 Year of Entry: 2020



| Stand | Cover Type                    | Acres | Managed<br>Site | General Comments:  |
|-------|-------------------------------|-------|-----------------|--|
| 30    | 6229 - Mixed lowland shrub    | 1.9   | No              | OPIC - FMD: ERA-Wooded Dune and Swale Complex Pipeline, powerline, and snowmobile trail.   |
| 34    | 6239 - Mixed Emergent Wetland | 17.0  | No              | OPIC - FMD: ERA-Wooded Dune and Swale Complex, SCA - Deeryard SCA-<br>Potential Old Growth. Former marsh type that is filling in with mixed lowland conifer<br>species which are mostly cedar. |
| 55    | 622 - Lowland Shrub           | 32.1  | No              |  |
| 56    | 122 - Road/Parking Lot        | 21.5  | No              | OPIC - FMD: ERA-Wooded Dune and Swale Complex, SCA - Deeryard Railroad.  |
| 57    | 310 - Herbaceous Openland     | 10.0  | No              | OPIC - FMD: ERA-Wooded Dune and Swale ComplexPipeline, powerline, and snowmobile trail.  |
| 58    | 622 - Lowland Shrub           | 8.0   | No              |  |
| 62    | 622 - Lowland Shrub           | 5.3   | No              | OPIC - FMD: ERA-Wooded Dune and Swale Complex<br>Flooded, cedar snags present.   |
| 63    | 622 - Lowland Shrub           | 5.9   | No              | Flooded, cedar snags present.  |