



Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41116

Entry Year 2017

Acreage: 1,376

County Schoolcraft

Management Area: Bullock Ranch

Revision Date: 2015-08-04

Stand Examiner: Sheila Clark

Legal Description:

T45N R14W Section 1; T46N R14W Sections 35 & 36

Identified Planning Goals:

Timber production and wildlife habitat management. This compartment is adjacent to the Bullock Ranch area which has traditionally been managed for wildlife species using large openings.

Soil and topography:

The topography consists of flat, low, wet ground with steep, high ridges and islands. Large marshland with Markey- Mucky Peat, Deford Muck and Carbondale-Lupton-Tawas Muck soils; islands of pine with Seney- Deford Complex and Deford-Au Gres-Rubicon Deep Water Table Complex soils.

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

Seney National Wildlife Refuge borders the compartment on the south, the remainder of the compartment is surrounded by state owned land.

Unique Natural Features:

Vasey's Rush is located in marshy areas that flood during seasonal flooding.

Archeological, Historical, and Cultural Features:

None identified at this time.

Special Management Designations or Considerations:

None.

Watershed and Fisheries Considerations:

The Clark Ditch is found in this compartment. Clark Ditch is classified as warm-water, therefore, beaver are not a concern here. However, BMP's should be followed to prevent sediment from entering this system.

Wildlife Habitat Considerations:

This compartment lies south of M-28 and 1.5 miles west of Seney. The entire compartment lies within the Seney marsh/ridge complex. Surveyor notes indicate that marsh dominated the pre-settlement landscape of this compartment. Areas that were forested at that time consisted primarily of tamarack with smaller amounts of white and red pine mixed in. While the marsh remains largely intact, the current forest areas are now dominated by red pine and jack pine. Featured species in this compartment are beaver, gray jay, and sharp-tailed grouse. Wildlife habitat objectives in this compartment include maintaining the integrity of the wetland complex while providing a diversity of forest conditions on the forested ridges.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel. There is insufficient data to determine the glacial drift thickness. The Ordovician Utica Shale subcrops below the glacial drift. The Utica does not have a current economic use. Gravel pits are not found in the general area and potential appears to be limited. There is no commercial oil and gas production in the UP.

Vehicle Access:

Most of this compartment is inaccessible by vehicles.

Survey Needs:

None at this time.

Recreational Facilities and Opportunities:

There are no DNR recreational facilities within the compartment, but the area is used for bear and deer hunting.

Fire Protection:

Fires are generally caused by lightning strikes. Organic soils sometimes cause difficulty in fire suppression. Lack of roads makes access to fires difficult.

Additional Compartment Information:

The following reports from the Inventory are attached:

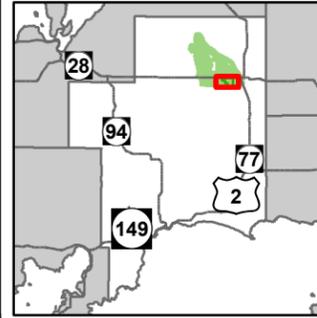
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

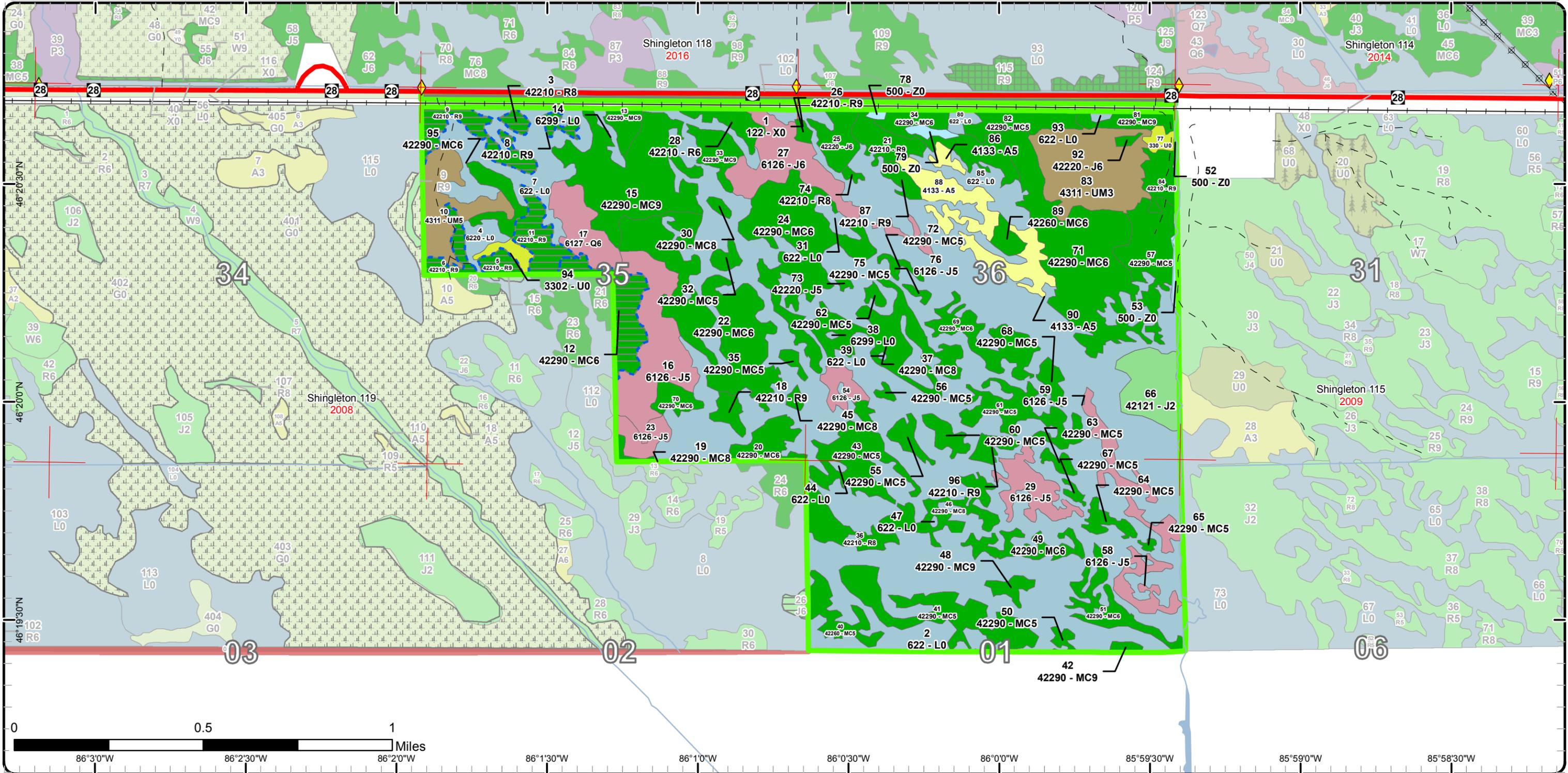
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments

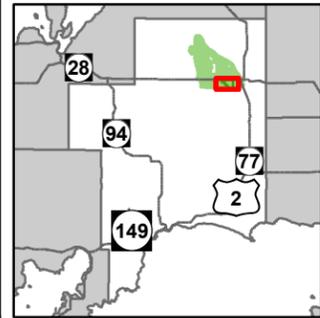
Compartment: 116
 T45N, R14W, Sec: 1
 T46N, R14W, Sec: 25, 26
 County: Schoolcraft
 Unit: Shingleton
 Mgmt Area: Bullock Ranch
 YOE: 2017
 Acres: 1376 GIS Calculated
 Examiner: Sheila Clark
 Map Revised: 8/25/2015
 Map Phase: Review



- ✚ Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- Miris Corners
- Highway
- - Poor Dirt Roads
- Railroads
- Rivers
- Lakes
- ⊕ Powerline
- ▨ Treatments with Site Conditions
- ▭ Clearcut (w/Reserves)
- Other Treatment - See Comments
- Forest Covertype
 - 413 - Aspen
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 430 - Upland Mixed Fores
 - 612 - Lowland Coniferous Forest
- Non-Forest Covertype
 - 122 - Roads/Parking Lot
 - 330 - Low Density Trees
 - 500 - Water
- 622 - Lowland Shrub

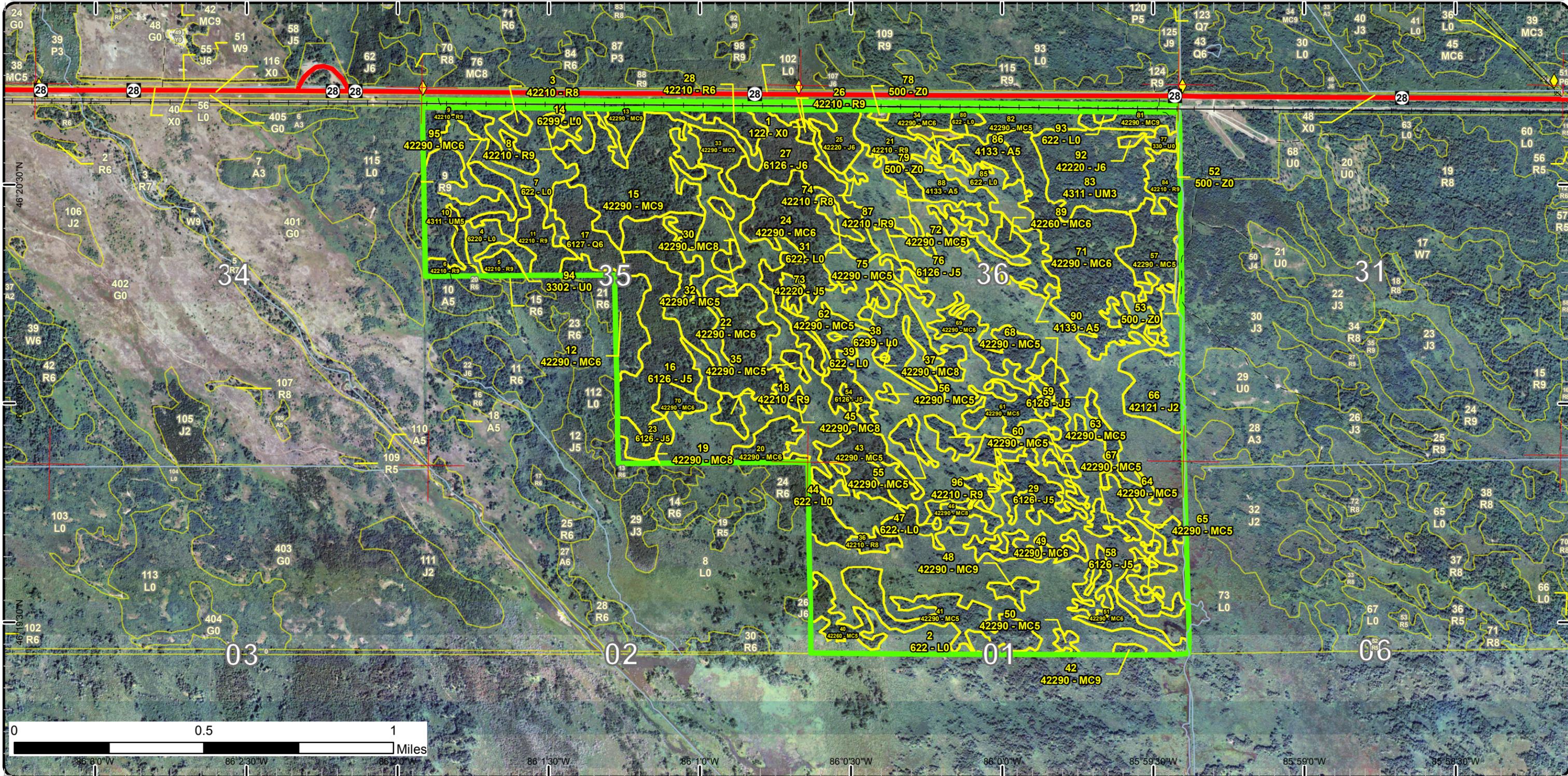


Stand Boundary Map



Compartment: 116
 T45N, R14W, Sec: 1
 T46N, R14W, Sec: 25, 26
 County: Schoolcraft
 Unit: Shingleton
 Mgmt Area: Bullock Ranch
 YOE: 2017
 Acres: 1376 GIS Calculated
 Examiner: Sheila Clark
 Map Revised: 8/25/2015
 Map Phase: Review

- ✚ Remonumented Section Corners
 - ◆ Survey Grade GPS Corners
 - Miris Corners
 - Highway
 - - Poor Dirt Roads
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 - ▭ Stand Boundaries
- Forest Covertype
- 413 - Aspen
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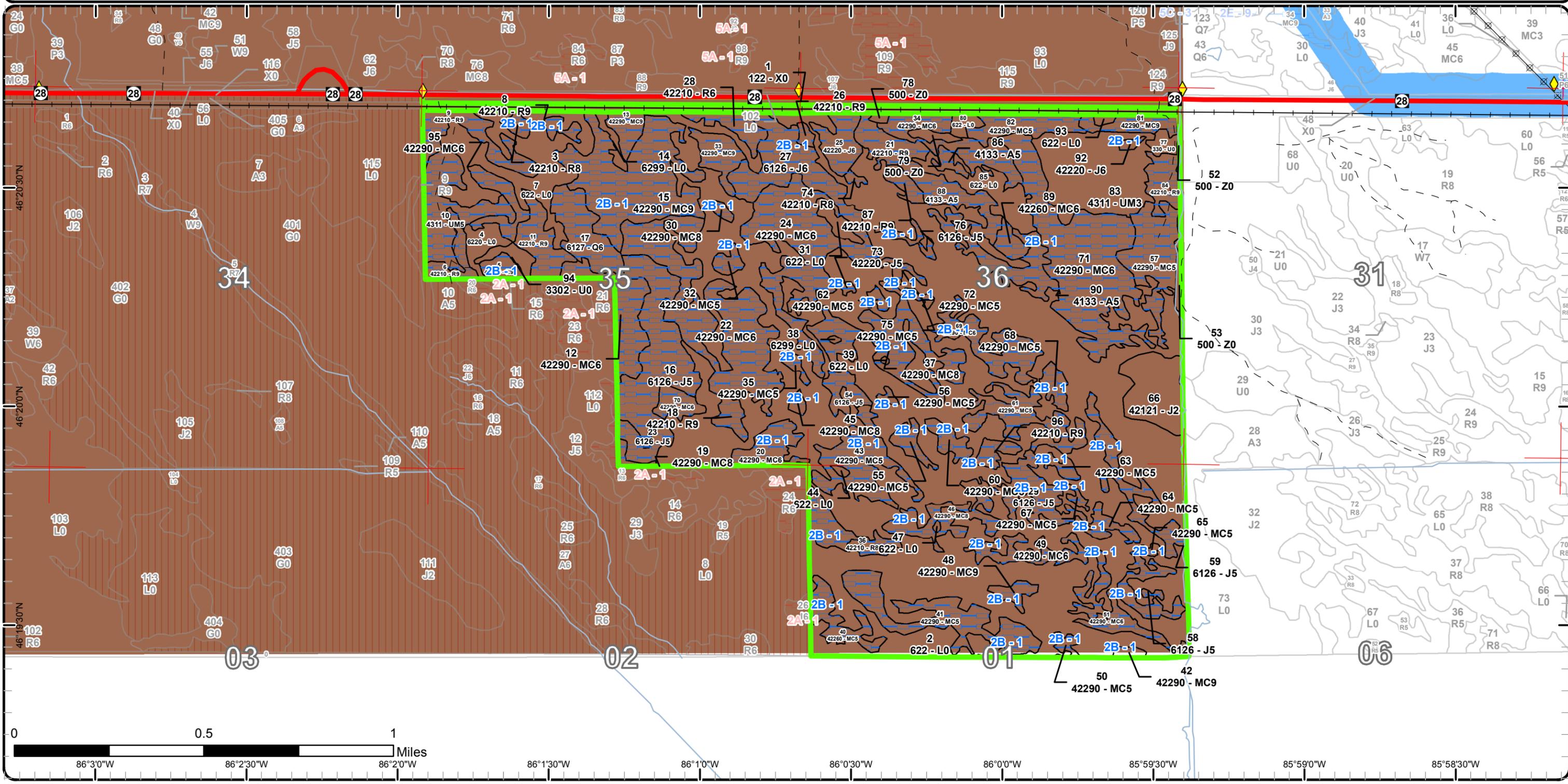


Special Conservation Areas & Site Conditions Map

Compartment: 116
 T45N, R14W, Sec: 1
 T46N, R14W, Sec: 25, 26
 County: Schoolcraft
 Unit: Shingleton
 Mgmt Area: Bullock Ranch
 YOE: 2017
 Acres: 1376 GIS Calculated
 Examiner: Sheila Clark
 Map Revised: 8/25/2015
 Map Phase: Review



- ✦ Remonumented Section Corners Available Factors W/ Constraints
- ◆ Survey Grade GPS Corners
- Miris Corners
- Highway
- - Poor Dirt Roads
- Railroads
- Rivers
- ⊕ Powerline
- Stand Boundaries
- Site Condition
- Available w/ Constraints
- 2B: Unknown if access through adjacent landowner(s) is possible
- Special Conservation Areas
- Cold Water Streams
- High Priority Trout Stream Buffer
- Wildlife Management Areas
- Other SCA (No Category Assigned)



Report 1 – Total Acres by Cover Type and Age Class



Age Class

| | Non-Forest | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90-99 | 100-109 | 110-119 | 120-129 | 130-139 | 140-149 | 150+ | Uneven-Aged | Total |
|---------------------|------------|----------|-----------|-----------|----------|-----------|------------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|-------------|
| Aspen | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| Jack Pine | 0 | 0 | 18 | 6 | 0 | 31 | 54 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 128 |
| Low-Density Trees | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Lowland Conifers | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| Lowland Shrub | 558 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 558 |
| Natural Mixed Pines | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 395 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 469 |
| Red Pine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 82 |
| Upland Mixed Forest | 0 | 0 | 20 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 |
| Urban | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| Water | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Total | 597 | 0 | 38 | 43 | 0 | 31 | 155 | 511 | 0 | 1375 |



Report 2 – Treatment Summary

Shingleton Mgt. Unit
Year of Entry: 2017

Acres of Harvest

Compartment 116
Total Compartment Acres: 1,376

Commercial Harvest -
Harvests with Site Condition - 52
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method

| | Clearcut | Selection | Patch Clearcut | Seed Tree | Shelterwood | Thinning | Overstory Removal | Salvage | Other | Total Acres |
|---------------------|-----------|-----------|----------------|-----------|-------------|----------|-------------------|----------|----------|-------------|
| Natural Mixed Pines | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| Red Pine | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| Total | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 |

Proposed and Next Step Treatments by Method

| | Harvest | Site Prep | Planting | Seeding | Burning | Pesticide | Monitoring | Other | Non-Forest Mgt. | Total Acres |
|--------------|-----------|-----------|----------|----------|----------|-----------|------------|----------|-----------------|-------------|
| Current | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 |
| Next Step | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 0 | 0 | 52 |
| Total | 52 | 0 | 0 | 0 | 0 | 0 | 52 | 0 | 0 | 104 |



| S t a n d | Treatment Name | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
|-----------------------|-------------------|-------|-----------------------------|---------------------|--------------|-------------|-------------------|----------------------------|------------------------------|------------------|--------------------|
| 3 | 41116003-Cut | 2.1 | 42210 - Natural Red Pine | Sawtimber Medium | 67 | 111- 140 | Harvest | Clearcut with Retention | 31021 - Cool Season Grass | | Proposal |

Habitat Cut: No **Site Condition: Unknown Access**

Prescription Harvest all merchantable timber. Leave some larger trees, not to exceed 20 ba along M-28 as a visual buffer. Less than 3% retention is acceptable because it is being managed for wildlife. Red line will be used to keep equipment out of open wetlands to protect Vasey's Rush.

Next Step
Treatments:

Acceptable The objective is no trees, however, if trees return it is acceptable.
Regen:

Other This stand is part of the Bullock Ranch and is being converted to grass to improve wildlife openings. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

| | | | | | | | | | | | |
|---|--------------|-----|-----------------------------|-------------------|----|-------------|---------|----------|------------------------------|--|----------|
| 5 | 41116005-Cut | 3.6 | 42210 - Natural Red Pine | Sawtimber Well | 65 | 111- 140 | Harvest | Clearcut | 31021 - Cool Season Grass | | Proposal |
|---|--------------|-----|-----------------------------|-------------------|----|-------------|---------|----------|------------------------------|--|----------|

Habitat Cut: No **Site Condition: Unknown Access**

Prescription Harvest all merchantable timber. Less than 3% retention is acceptable because it is being managed for wildlife. Red line will be used to keep equipment out of open wetlands to protect Vasey's Rush.

Next Step
Treatments:

Acceptable This stand is being cut for wildlife no other activities are needed at this time.
Regen:

Other This stand is part of the Bullock Ranch and is being converted to grass to improve wildlife openings. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

| | | | | | | | | | | | |
|---|--------------|-----|-----------------------------|-------------------|----|-------------|---------|----------|------------------------------|--|----------|
| 6 | 41116006-Cut | 5.7 | 42210 - Natural Red Pine | Sawtimber Well | 65 | 171- 200 | Harvest | Clearcut | 31021 - Cool Season Grass | | Proposal |
|---|--------------|-----|-----------------------------|-------------------|----|-------------|---------|----------|------------------------------|--|----------|

Habitat Cut: No **Site Condition: Unknown Access**

Prescription Harvest all merchantable timber. Less than 3% retention is acceptable because it is being managed for wildlife. Red line will be used to keep equipment out of open wetlands to protect Vasey's Rush.

Next Step
Treatments:

Acceptable The objective is no trees, however, if trees return it is acceptable.
Regen:

Other This stand is part of the Bullock Ranch and is being converted to grass to improve wildlife openings. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

| | | | | | | | | | | | |
|---|--------------|-----|-----------------------------|-------------------|----|--------|---------|----------------------------|------------------------------|--|----------|
| 8 | 41116008-Cut | 2.3 | 42210 - Natural Red Pine | Sawtimber Well | 65 | 81-110 | Harvest | Clearcut with Retention | 31021 - Cool Season Grass | | Proposal |
|---|--------------|-----|-----------------------------|-------------------|----|--------|---------|----------------------------|------------------------------|--|----------|

Habitat Cut: No **Site Condition: Unknown Access**

Prescription Harvest all merchantable timber. Leave some larger trees, not to exceed 20 ba along M-28 as a visual buffer. Less than 3% retention is acceptable because it is being managed for wildlife. Red line will be used to keep equipment out of open wetlands to protect Vasey's Rush.

Next Step
Treatments:

Acceptable This stand is part of the Bullock Ranch and is being converted to grass to improve wildlife openings.
Regen:

Other This stand is part of the Bullock Ranch and is being converted to grass to improve wildlife openings. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016



| S t a n d | Treatment Name | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
|---|-------------------|-------|---------------------------------------|--------------------|--------------|-------------|-------------------|----------------------------|------------------------------|------------------|-------------------------|
| 9 | 41116009-Cut | 12.3 | 42210 - Natural Red Pine | Sawtimber Well | 65 | 111- 140 | Harvest | Clearcut with Retention | 31021 - Cool Season Grass | | Proposal |
| Habitat Cut: No | | | Site Condition: Unknown Access | | | | | | | | |
| <u>Prescription</u> Harvest all merchantable timber. Leave some larger trees, not to exceed 20 ba along M-28 as a visual buffer. Less than 3% retention is acceptable because it is being managed for wildlife. Red line will be used to keep equipment out of open wetlands to protect Vasey's Rush. | | | | | | | | | | | |
| <u>Specs:</u> | | | | | | | | | | | |
| <u>Next Step</u> | | | | | | | | | | | |
| <u>Treatments:</u> | | | | | | | | | | | |
| <u>Acceptable</u> The objective is no trees, however, if trees return it is acceptable. | | | | | | | | | | | |
| <u>Regen:</u> | | | | | | | | | | | |
| <u>Other</u> This stand is part of the Bullock Ranch and is being converted to grass to improve wildlife openings. Old next step comments: | | | | | | | | | | | |
| <u>Comment:</u> | | | | | | | | | | | |
| <u>Proposed Start Date:</u> 10/1 /2016 | | | | | | | | | | | |
| 11 | 41116011-Cut | 10.7 | 42210 - Natural Red Pine | Sawtimber Well | 65 | 171- 200 | Harvest | Clearcut | 31021 - Cool Season Grass | | Proposal |
| Habitat Cut: No | | | Site Condition: Unknown Access | | | | | | | | |
| <u>Prescription</u> Harvest all merchantable timber. Less than 3% retention is acceptable because it is being managed for wildlife. Red line will be used to keep equipment out of open wetlands to protect Vasey's Rush. | | | | | | | | | | | |
| <u>Specs:</u> | | | | | | | | | | | |
| <u>Next Step</u> | | | | | | | | | | | |
| <u>Treatments:</u> | | | | | | | | | | | |
| <u>Acceptable</u> The objective is no trees, however, if trees return it is acceptable. | | | | | | | | | | | |
| <u>Regen:</u> | | | | | | | | | | | |
| <u>Other</u> This stand is part of the Bullock Ranch and is being converted to grass to improve wildlife openings. Old next step comments: | | | | | | | | | | | |
| <u>Comment:</u> | | | | | | | | | | | |
| <u>Proposed Start Date:</u> 10/1 /2016 | | | | | | | | | | | |
| 12 | 41116012-Cut | 15.3 | 42290 - Natural Mixed Pine | Poletimber Well | 64 | 141- 170 | Harvest | Clearcut | 31021 - Cool Season Grass | | Proposal |
| Habitat Cut: No | | | Site Condition: Unknown Access | | | | | | | | |
| <u>Prescription</u> Harvest all merchantable timber. Less than 3% retention is acceptable because it is being managed for wildlife. Red line will be used to keep equipment out of open wetlands to protect Vasey's Rush. | | | | | | | | | | | |
| <u>Specs:</u> | | | | | | | | | | | |
| <u>Next Step</u> | | | | | | | | | | | |
| <u>Treatments:</u> | | | | | | | | | | | |
| <u>Acceptable</u> The objective is no trees, however, if trees return it is acceptable. | | | | | | | | | | | |
| <u>Regen:</u> | | | | | | | | | | | |
| <u>Other</u> This stand is part of the Bullock Ranch and is being converted to grass to improve wildlife openings. Old next step comments: | | | | | | | | | | | |
| <u>Comment:</u> | | | | | | | | | | | |
| <u>Proposed Start Date:</u> 10/1 /2016 | | | | | | | | | | | |
| 15 | 41119015-Cut | 0.9 | 42110 - Planted Red Pine | Poletimber Well | 65 | 111- 140 | Harvest | Clearcut | 31021 - Cool Season Grass | | Draft Field Boundary |
| Habitat Cut: Yes | | | Site Condition: Denied Access | | | | | | | | |
| <u>Prescription</u> Harvest all merchantable timber. Less than 3% retention is acceptable because it is being managed for wildlife. Red line will be used to keep equipment out of open wetlands to protect Vasey's Rush. | | | | | | | | | | | |
| <u>Specs:</u> | | | | | | | | | | | |
| <u>Next Step</u> | | | | | | | | | | | |
| <u>Treatments:</u> | | | | | | | | | | | |
| <u>Acceptable</u> The objective is no trees, however, if trees return it is acceptable. | | | | | | | | | | | |
| <u>Regen:</u> | | | | | | | | | | | |
| <u>Other</u> This stand is part of the Bullock Ranch and is being converted to grass to improve wildlife openings. | | | | | | | | | | | |
| <u>Comment:</u> | | | | | | | | | | | |
| Old next step comments: | | | | | | | | | | | |
| <u>Proposed Start Date:</u> 7 /13/2015 | | | | | | | | | | | |



| S t a n d | Treatment Name | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
|-----------------------|-------------------|-------|-------------------------|-----------------|--------------|-------------|-------------------|---------------------|---------------------------|------------------|--------------------|
| 20 | 41119020-Cut | 2.7 | 4221 - Natural Red Pine | Poletimber Well | 65 | 111-140 | Harvest | Clearcut | 31021 - Cool Season Grass | | Draft Proposal |

Habitat Cut: No **Site Condition: Denied Access**

Prescription Harvest all merchantable timber. Less than 3% retention is acceptable because it is being managed for wildlife. Red line will be used to keep
Specs: equipment out of open wetlands to protect Vasey's Rush.

Next Step
Treatments:

Acceptable The objective is no trees, however, if trees return it is acceptable.
Regen:

Other This stand is part of the Bullock Ranch and is being converted to grass to improve wildlife openings. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2007

| | | | | | | | | | | | |
|----|--------------|-----|-------------------------|-----------------|----|--------|---------|----------|---------------------------|--|----------------|
| 21 | 41119021-Cut | 5.7 | 4221 - Natural Red Pine | Poletimber Well | 64 | 81-110 | Harvest | Clearcut | 31021 - Cool Season Grass | | Draft Proposal |
|----|--------------|-----|-------------------------|-----------------|----|--------|---------|----------|---------------------------|--|----------------|

Habitat Cut: No **Site Condition: Denied Access**

Prescription Harvest all merchantable timber. Less than 3% retention is acceptable because it is being managed for wildlife. Red line will be used to keep
Specs: equipment out of open wetlands to protect Vasey's Rush.

Next Step
Treatments:

Acceptable The objective is no trees, however, if trees return it is acceptable.
Regen:

Other This stand is part of the Bullock Ranch and is being converted to grass to improve wildlife openings. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2007

| | | | | | | | | | | | |
|----|--------------|------|--------------------------|-----------------|----|---------|---------|----------|---------------------------|--|----------------|
| 23 | 41119023-Cut | 14.7 | 42210 - Natural Red Pine | Poletimber Well | 65 | 111-140 | Harvest | Clearcut | 31021 - Cool Season Grass | | Draft Proposal |
|----|--------------|------|--------------------------|-----------------|----|---------|---------|----------|---------------------------|--|----------------|

Habitat Cut: No **Site Condition: Denied Access**

Prescription Harvest all merchantable timber. Less than 3% retention is acceptable because it is being managed for wildlife. Red line will be used to keep
Specs: equipment out of open wetlands to protect Vasey's Rush.

Next Step
Treatments:

Acceptable The objective is no trees, however, if trees return it is acceptable.
Regen:

Other This stand is part of the Bullock Ranch and is being converted to grass to improve wildlife openings. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2017

**Total Treatment
Acreage Proposed: 76.0**

Dominant Site Conditions

2B

| | |
|----------------------|------------|
| Aspen | 27 |
| Jack Pine | 111 |
| Low-Density Trees | |
| Lowland Conifers | 15 |
| Lowland Shrub | |
| Natural Mixed Pines | 471 |
| Red Pine | 82 |
| Upland Mixed Forest | 20 |
| Urban | |
| Water | |
| Total Forested Acres | 724 |
| 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 |
|---|---------------------------------|--|-------|----------------------|----------------------|----------------------|----------------------|
| 1 | Available | 2B: Unknown if access through adjacent landowner(s) is possible | 724 | 2E: Road needed | Unspecified | Unspecified | Unspecified |
| Comments: Railroad has pulled access. | | | | | | | |

Mgt. Unit

Compartment: #Type!

Year of Entry:



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.

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

| Conservation Area | Type | Description |
|--------------------------|-------------|--------------------|
|--------------------------|-------------|--------------------|



| Stand | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|-------|----------------------------|-------------------|-------|-----------|----------|---|
| 3 | 42210 - Natural Red Pine | Sawtimber Medium | 2.1 | 67 | 111-140 | Stand was cut in 1997. The understory is dominated by aspen. |
| 5 | 42210 - Natural Red Pine | Sawtimber Well | 3.6 | 65 | 111-140 | Stand was marked in the past, but never cut. Could be harvested. |
| 6 | 42210 - Natural Red Pine | Sawtimber Well | 5.7 | 65 | 171-200 | Stand was marked, but never cut. Lots of suppressed red pine poles that will not recover. |
| 8 | 42210 - Natural Red Pine | Sawtimber Well | 2.3 | 65 | 81-110 | This stand is visible from M-28. It was thinned last entry. Soil=Deford-AuGres-Rubicon Deep Water Table Complex. 2015 - Stands look healthy. |
| 9 | 42210 - Natural Red Pine | Sawtimber Well | 12.3 | 65 | 111-140 | Stand was cut in 1997, opening stand for aspen. Stand could be cut if needed. |
| 10 | 4311 - Pine, Aspen Mix | Poletimber Medium | 19.6 | 18 | 81-110 | Stand was cut in 1997, opening stand for aspen. Stand could be cut if needed. |
| 11 | 42210 - Natural Red Pine | Sawtimber Well | 10.8 | 65 | 171-200 | 2005 - Previously thinned. Higher ground has blueberry & nice red pine; lower ground has taller shrubs & some red pine looks stressed. Thin with s.21 c119. Soil=Deford-AuGres-Rubicon Deep Water Table Complex.2015 - While this stand was thinned, it is heavily stocked. |
| 12 | 42290 - Natural Mixed Pine | Poletimber Well | 15.3 | 64 | 141-170 | 2005-Thin with stand 21, c.119. Blueberry on higher ground; mountain holly, wild raisin and other taller shrubs on lower ground. Soil=Deford-AuGres-Rubicon Deep Water Table Complex.2015-A couple of acres to the north was marked to be harvested with stand 21 in compartment 119. TS# 41-004-08-01. However, was never cut. |
| 13 | 42290 - Natural Mixed Pine | Sawtimber Well | 5.0 | 60 | 141-170 | Soil = Deford-AuGres-Rubicon Deep Water Table Complex. There is low ground incorporated in the stand. Stand is healthy. |
| 15 | 42290 - Natural Mixed Pine | Sawtimber Well | 44.7 | 65 | 141-170 | The north part of the stand is visible from M-28. The ridges have nice red pine; the lower ground has a mix of red pine, jack pine, white pine and b.spruce. Some of the ridges have been previously thinned. 98=jack pine & b.spruce Soil=Deford-AuGres-Rubicon Deep Water Table Complex.2015 - There is a heavy understory with logs on the north and poles in the south. The stand has variable stocking, with a small pocket of black spruce. |
| 16 | 6126 - Lowland Jack Pine | Poletimber Medium | 31.8 | 53 | 51-80 | Low ground, seasonally wet. Mountain Holly, wild raisin and other med to tall shrubs. Soil=Carbondale-Lupton-Tawas Mucks. |
| 17 | 6127 - Lowland Pine | Poletimber Well | 14.7 | 65 | 81-110 | The stand has variable stocking with scattered white pine logs. |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|----------------------------|-------------------|-------|--------------|-------------|---|
| 18 | 42210 - Natural Red Pine | Sawtimber Well | 3.8 | 65 | 141-170 | |
| 19 | 42290 - Natural Mixed Pine | Sawtimber Medium | 1.6 | 60 | 111-140 | 2005-Part of stands 118 & 24 in adjacent comp.119. Treat with these stands with the 2008 YOE. Cut all jack pine and aspen; thin red and white pine where necessary. Soil=Deford-AuGres-Rubicon Deep Water Table Complex. |
| 20 | 42290 - Natural Mixed Pine | Poletimber Well | 8.9 | 60 | 141-170 | Surrounded my marsh; difficult access, though pine ridges were previously thinned. Higher ground with red pine and blueberry; lower ground with aspen, jack pine, white pine and b.spruce and taller shrubs. Soil=Deford-AuGres-Rubicon Deep Water Table Complex. |
| 21 | 42210 - Natural Red Pine | Sawtimber Well | 8.5 | 65 | 51-80 | Stand was thinning in 1999. Ridges of red pine with aspen growing underneath. Aspen regeneration heavier in lower ground. Soil = Deford-AuGres-Rubicon Deep Water table Complex and Seney-Deford Complex. |
| 22 | 42290 - Natural Mixed Pine | Poletimber Well | 50.3 | 65 | 111-140 | |
| 23 | 6126 - Lowland Jack Pine | Poletimber Medium | 6.4 | 25 | 51-80 | soil=Deford Muck. Stand is low ground and no activity is needed. |
| 24 | 42290 - Natural Mixed Pine | Poletimber Well | 40.4 | 65 | 141-170 | This stand is surrounded by marsh. On the higher ground is red and white pine. In the lower ground jack pine, tamarack and black spruce. |
| 25 | 42220 - Natural Jack Pine | Poletimber Well | 8.5 | 47 | 111-140 | |
| 26 | 42210 - Natural Red Pine | Sawtimber Well | 1.4 | 65 | 171-200 | Ridge with red pine; visible from M-28. Thin when harvesting adjacent stand 27. Soil=Carbondale-Lupton-Tawas Mucks |
| 27 | 6126 - Lowland Jack Pine | Poletimber Well | 22.8 | 47 | 51-80 | Some jack pine starting to die, overall healthy. |
| 28 | 42210 - Natural Red Pine | Poletimber Well | 6.3 | 60 | 171-200 | |
| 29 | 6126 - Lowland Jack Pine | Poletimber Medium | 12.3 | 60 | 141-170 | Narrow, flat ridge in large marsh; difficult access. Lower ground has more jack pine, red pine and aspen and taller shrubs. If it becomes possible to harvest here, remove all trees. Soil=Deford-AuGres-Rubicon Deep Water Table Complex |
| 30 | 42290 - Natural Mixed Pine | Sawtimber Medium | 1.3 | 65 | 141-170 | Pine island. |
| 32 | 42290 - Natural Mixed Pine | Poletimber Medium | 2.6 | 65 | 141-170 | Pine island surrounded by marsh. Soil is Deford-AuGres-Rubicon Deep Water Table Complex. |



| Stand | Shingleton Mgt. Unit | | Report 8 – Forested Stands | | | Compartment: 116 Year of Entry: 2017 |
|-------|---------------------------------------|-------------------|----------------------------|--------------|-------------|---|
| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 33 | 42290 - Natural Mixed Pine | Sawtimber Well | 7.6 | 65 | 141-170 | The north part of the stand is visible from M-28. The ridges have nice red pine; the lower ground has a mix of red pine, jack pine, white pine and b.spruce. Some of the ridges have been previously thinned. 98=jack pine & b.spruce Soil=Deford-AuGres-Rubicon Deep Water Table Complex. 2015 - There is a heavy understory with logs on the north and poles in the south. The stand has variable stocking, with a small pocket of black spruce. |
| 34 | 42290 - Natural Mixed Pine | Poletimber Well | 15.3 | 65 | 81-110 | The stand could be harvested. |
| 35 | 42290 - Natural Mixed Pine | Poletimber Medium | 1.6 | 65 | 141-170 | Pine ridge surrounded by marsh. |
| 36 | 42210 - Natural Red Pine | Sawtimber Medium | 9.8 | 65 | 141-170 | Looks healthy. |
| 37 | 42290 - Natural Mixed Pine | Sawtimber Medium | 25.6 | 60 | 141-170 | Red pine log ridge surrounded by marsh. Soil = Deford-AuGres-Rubicon Deep Water Table Complex. PARV |
| 40 | 42260 - Natural Pine, Mixed Deciduous | Poletimber Medium | 8.8 | 60 | 141-170 | Pine ridge surrounded by swamp. Soil = Deford-AuGres-Rubicon-Deep Water Table Complex PARV |
| 41 | 42290 - Natural Mixed Pine | Poletimber Medium | 23.9 | 60 | 141-170 | Pine ridges surrounded by marsh. Jack pine and aspen are starting to recruit to pole size class. |
| 42 | 42290 - Natural Mixed Pine | Sawtimber Well | 1.4 | 60 | 141-170 | Pine ridge surrounded by marsh. Soil = Deford-AuGres-Rubicon-Deep Water Table Complex PARV. |
| 43 | 42290 - Natural Mixed Pine | Poletimber Medium | 18.6 | 60 | 141-170 | Pine ridge surrounded by marsh. Jack pine and aspen are younger. Red pine looks good. Soil = Deford-AuGres-Rubicon-Deep Water Table Complex PARV |
| 45 | 42290 - Natural Mixed Pine | Sawtimber Medium | 1.3 | 60 | 141-170 | Small pine island surrounded by marsh. Soil =Deford Muck. Higher ground with red pine, white pine and blueberry; lower ground with jack pine, aspen and tag alder. |
| 46 | 42290 - Natural Mixed Pine | Sawtimber Medium | 12.0 | 60 | 171-200 | Small pine island surrounded by marsh. Soil =Deford Muck. Higher ground with red pine, white pine and blueberry; lower ground with jack pine, aspen and tag alder. |
| 48 | 42290 - Natural Mixed Pine | Sawtimber Well | 3.2 | 60 | 141-170 | Small pine island surrounded by marsh. Soil =Deford Muck. Higher ground with red pine, white pine and blueberry; lower ground with jack pine, aspen and tag alder. |
| 49 | 42290 - Natural Mixed Pine | Poletimber Well | 8.1 | 60 | 141-170 | Small pine island surrounded by marsh. Soil =Deford Muck. Higher ground with red pine, white pine and blueberry; lower ground with jack pine, aspen and tag alder. |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|-------------------------------|----------------------|-------|--------------|-------------|---|
| 50 | 42290 - Natural Mixed Pine | Poletimber Medium | 1.8 | 60 | 141-170 | Small pine island surrounded by marsh. Soil =Deford Muck. Higher ground with red pine, white pine and blueberry; lower ground with jack pine, aspen and tag alder. |
| 51 | 42290 - Natural Mixed Pine | Poletimber Well | 11.0 | 60 | 141-170 | Small pine island surrounded by marsh. Soil =Deford Muck. Higher ground with red pine, white pine and blueberry; lower ground with jack pine, aspen and tag alder. |
| 54 | 6126 - Lowland Jack Pine | Poletimber Medium | 5.3 | 60 | 141-170 | Lower than surrounding pine ridges, predominately jack pine. |
| 55 | 42290 - Natural Mixed Pine | Poletimber Medium | 3.9 | 60 | 111-140 | Pine ridge surrounded by swamp. Higher ground has red pine and blueberry; the lower ground has more jack pine, aspen and shrubs. Soil = Deford-AuGres-Rubicon-Deep Water Table Complex PARV |
| 56 | 42290 - Natural Mixed Pine | Poletimber Medium | 1.0 | 60 | 141-170 | Pine ridge surrounded by swamp. Higher ground has red pine and blueberry; the lower ground has more jack pine, aspen and shrubs. Soil = Deford-AuGres-Rubicon-Deep Water Table Complex PARV |
| 57 | 42290 - Natural Mixed Pine | Poletimber Medium | 19.2 | 53 | 141-170 | This is a variable stand with red pine logs and saplings. The jack pine varies in age from 5 sticks to 2 sticks. The red pine is on the higher ground and the jack pine in the low ground. |
| 58 | 6126 - Lowland Jack Pine | Poletimber Medium | 7.9 | 50 | 141-170 | Small low, ridge in marsh, difficult to access. Flat. low ground frequently flooded due to beavers; areas of dead trees. Soil = Deford-AuGres-Rubicon-Deep Water Table Complex PARV |
| 59 | 6126 - Lowland Jack Pine | Poletimber Medium | 11.3 | 50 | 111-140 | Flat, low ridge in large marsh frequently flooded due to beavers; areas of dead trees. |
| 60 | 42290 - Natural Mixed Pine | Poletimber Medium | 4.3 | 60 | 141-170 | Narrow, flat ridge in large marsh; difficult access. Lower ground has more jack pine and aspen and taller shrubs. If it becomes possible to harvest here, remove all trees. Soil=Deford-AuGres-Rubicon Deep Water Table Complex |
| 61 | 42290 - Natural Mixed Pine | Poletimber Medium | 15.1 | 60 | 141-170 | Narrow, flat ridge in large marsh; difficult access. Lower ground has more jack pine and aspen and taller shrubs. If it becomes possible to harvest here, remove all trees. Soil=Deford-AuGres-Rubicon Deep Water Table Complex |
| 62 | 42290 - Natural Mixed Pine | Poletimber Medium | 1.4 | 60 | 141-170 | Ridge in marsh; very difficult access. Higher ground has red pine and blueberry; the lower ground has more jack pine, aspen and tall shrubs. This stand is prescribed at this time so that it can be harvested in conjunction with the factor limited jack pine stands to the south. Soil=Deford-AuGres-Rubicon Deep Water Table Complex PARV |
| 63 | 42290 - Natural Mixed Pine | Poletimber Medium | 2.1 | 60 | 141-170 | Ridge in marsh; very difficult access. Higher ground has red pine and blueberry; the lower ground has more jack pine, aspen and tall shrubs. This stand is prescribed at this time so that it can be harvested in conjunction with the factor limited jack pine stands to the south. Soil=Deford-AuGres-Rubicon Deep Water Table Complex PARV |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|---|----------------------|-------|--------------|-------------|---|
| 64 | 42290 - Natural Mixed Pine | Poletimber Medium | 3.9 | 60 | 141-170 | Ridge in marsh; very difficult access. Higher ground has red pine and blueberry; the lower ground has more jack pine, aspen and tall shrubs. This stand is prescribed at this time so that it can be harvested in conjunction with the factor limited jack pine stands to the south. Soil=Deford-AuGres-Rubicon Deep Water Table Complex PArV |
| 65 | 42290 - Natural Mixed Pine | Poletimber Medium | 0.6 | 60 | 141-170 | Ridge in marsh; very difficult access. Higher ground has red pine and blueberry; the lower ground has more jack pine, aspen and tall shrubs. This stand is prescribed at this time so that it can be harvested in conjunction with the factor limited jack pine stands to the south. Soil=Deford-AuGres-Rubicon Deep Water Table Complex PArV |
| 66 | 42121 - Planted Jack Pine, Mixed Deciduous | Sapling Medium | 17.6 | 15 | Immature | Counts by TMS indicate that this stand is regenerating and no additional work is necessary. Soil=Deford Muck & Deford-AuGres-Rubicon Deep Water Table Complex. Count 673. |
| 67 | 42290 - Natural Mixed Pine | Poletimber Medium | 1.1 | 60 | 141-170 | Ridge in marsh; very difficult access. Higher ground has red pine and blueberry; the lower ground has more jack pine, aspen and tall shrubs. This stand is prescribed at this time so that it can be harvested in conjunction with the factor limited jack pine stands to the south. Soil=Deford-AuGres-Rubicon Deep Water Table Complex PArV |
| 68 | 42290 - Natural Mixed Pine | Poletimber Medium | 3.6 | 60 | 141-170 | Ridge in marsh; very difficult access. Higher ground has red pine and blueberry; the lower ground has more jack pine, aspen and tall shrubs. This stand is prescribed at this time so that it can be harvested in conjunction with the factor limited jack pine stands to the south. Soil=Deford-AuGres-Rubicon Deep Water Table Complex PArV |
| 69 | 42290 - Natural Mixed Pine | Poletimber Well | 14.1 | 60 | 141-170 | Ridge in marsh; very difficult access. Higher ground has red pine and blueberry; the lower ground has more jack pine, aspen and tall shrubs. This stand is prescribed at this time so that it can be harvested in conjunction with the factor limited jack pine stands to the south. Soil=Deford-AuGres-Rubicon Deep Water Table Complex PArV |
| 70 | 42290 - Natural Mixed Pine | Poletimber Well | 4.9 | 60 | 141-170 | Higher ground with red pine, white pine and blueberry; lower ground with jack pine, b.spruce, aspen and taller shrubs. Soil=Deford-AuGres-Rubicon Deep Water Table Complex 35=white pine and jack pine |
| 71 | 42290 - Natural Mixed Pine | Poletimber Well | 54.4 | 54 | 141-170 | Mainly Jack Pine, with Aspen on the flatter areas, and Red Pine on the ridges. Soil=Deford-AuGres-Rubicon Deep Water Table Complex PArV |
| 72 | 42290 - Natural Mixed Pine | Poletimber Medium | 2.0 | 60 | 141-170 | Ridge in marsh; very difficult access. Higher ground has red pine and blueberry; the lower ground has more jack pine, aspen and tall shrubs. This stand is prescribed at this time so that it can be harvested in conjunction with the factor limited jack pine stands to the south. Soil=Deford-AuGres-Rubicon Deep Water Table Complex PArV |
| 73 | 42220 - Natural Jack Pine | Poletimber Medium | 0.7 | 60 | 141-170 | |



| Stand | Shingleton Mgt. Unit | | Report 8 – Forested Stands | | | Compartment: 116 Year of Entry: 2017 |
|-------|---------------------------------------|----------------------|----------------------------|--------------|-------------|---|
| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 74 | 42210 - Natural Red Pine | Sawtimber Medium | 0.9 | 60 | 141-170 | Ridge in marsh; very difficult access. Higher ground has red pine and blueberry; the lower ground has more jack pine, aspen and tall shrubs. Soil=Deford-AuGres-Rubicon Deep Water Table Complex PArV |
| 75 | 42290 - Natural Mixed Pine | Poletimber Medium | 1.1 | 55 | 141-170 | Ridge in marsh; very difficult access. Higher ground has red pine and blueberry; the lower ground has more jack pine, aspen and tall shrubs. Soil=Deford-AuGres-Rubicon Deep Water Table Complex PArV |
| 76 | 6126 - Lowland Jack Pine | Poletimber Medium | 2.8 | 55 | 141-170 | Narrow, flat, low ridge in large marsh; difficult access. Soil=Markey Mucky Peat |
| 81 | 42290 - Natural Mixed Pine | Sawtimber Well | 6.5 | 65 | 141-170 | Thinned in 1999. Along M-28, next to Clark Ditch. Red pine was hand planted with inmates in 2002. Soil=Deford-AuGres-Rubicon Deep Water Table Complex. PArV |
| 82 | 42290 - Natural Mixed Pine | Poletimber Medium | 10.2 | 65 | 51-80 | Along M-28. Cut in 1999. Ridges with more red pine, flat areas with more aspen regen. Soil=Deford-AuGres-Rubicon Deep Water Table Complex and Seney-Deford Complex. |
| 83 | 4311 - Pine, Aspen Mix | Sapling Well | 37.1 | 26 | Immature | Cut in 1989. Variable density & species; stand includes small areas of jack pine and openings. Soil=Seney-Deford Complex. PArVAa. |
| 84 | 42210 - Natural Red Pine | Sawtimber Well | 7.4 | 67 | 141-170 | Thinned in 1999. Along M-28, next to Clark Ditch. Red pine was hand planted with inmates in 2002. Soil=Deford-AuGres-Rubicon Deep Water Table Complex. PArV. |
| 86 | 4133 - Aspen, Mixed Pine | Poletimber Medium | 2.2 | 50 | 81-110 | |
| 87 | 42210 - Natural Red Pine | Sawtimber Well | 3.4 | 65 | 141-170 | Small knoll with red pine, lots of poles. Aspen on lower ground around edges. Soil=Deford-AuGres-Rubicon Deep Water Table Complex. PArV |
| 88 | 4133 - Aspen, Mixed Pine | Poletimber Medium | 13.6 | 50 | 81-110 | This is an open grown aspen stand with a variety of ages and stocking. The edges are starting to fill in with aspen. There are pockets of tag alder on the lower ground. No activity. |
| 89 | 42260 - Natural Pine, Mixed Deciduous | Poletimber Well | 3.5 | 65 | 111-140 | |
| 90 | 4133 - Aspen, Mixed Pine | Poletimber Medium | 11.1 | 50 | 81-110 | Slightly higher ground than surrounding ground. Aspen starting to fill in edges. |
| 92 | 42220 - Natural Jack Pine | Poletimber Well | 0.9 | 65 | 111-140 | Jack pine is starting to get old. Assume this was a pocket left from previous harvest. No mention of long term retention, so could be harvested with surrounding stands. |
| 95 | 42290 - Natural Mixed Pine | Poletimber Well | 7.1 | 65 | 111-140 | Stand is healthy leave. |

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Shingleton Mgt. Unit

Report 8 – Forested Stands

Compartment: 116
Year of Entry: 2017



| S t a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|-----------------------|-----------------------------|-------------------|-------|--------------|-------------|---|
| 96 | 42210 - Natural Red Pine | Sawtimber Well | 3.6 | 60 | 171-200 | Surrounded by marsh; difficult access. Higher ground with red pine, white pine and blueberry; lower ground with jack pine, aspen and taller shrubs. Soil=Deford-AuGres-Rubicon Deep Water Table Complex |



| Stand | Cover Type | Acres | Managed Site | General Comments: |
|-------|---------------------------|-------|--------------|--|
| 1 | 122 - Road/Parking Lot | 26.8 | No | Southern part of M-28 and strip of land between M-28 and the railroad. |
| 2 | 622 - Lowland Shrub | 493.6 | No | This is marshland surrounding red pine ridges. Alder, willow and other tall shrubs scattered throughout. Some scattered trees between islands. Soils = Markey Mucky peat and Deford Muck. If cut pine island may need crane mats to cross these areas. |
| 4 | 6220 - Alder/willow | 5.4 | No | Mostly low ground with tag alder. Scattered white pine on higher areas with aspen along the edges. |
| 7 | 622 - Lowland Shrub | 35.8 | No | |
| 14 | 6299 - Lowland Shrub (OI) | 2.3 | No | This is a drain with tag alder and scattered white pine logs. |
| 31 | 622 - Lowland Shrub | 3.5 | No | |
| 38 | 6299 - Lowland Shrub (OI) | 0.3 | No | |
| 39 | 622 - Lowland Shrub | 0.2 | No | |
| 44 | 622 - Lowland Shrub | 0.6 | No | |
| 47 | 622 - Lowland Shrub | 0.3 | No | |
| 52 | 500 - Water | 0.6 | No | Part of Clark's Ditch. |
| 53 | 500 - Water | 2.7 | No | Part of Clark's Ditch and a small sliver of land on the east side of the ditch. |
| 77 | 330 - Low-Density Trees | 2.5 | No | . Soil=Deford-AuGres-Rubicon Deep Water Table Complex. PARV. |
| 78 | 500 - Water | 0.7 | No | Small pond |
| 79 | 500 - Water | 1.9 | No | Small pond |
| 80 | 622 - Lowland Shrub | 2.4 | No | Low tag alder stand with aspen starting to grown in through the edges. |
| 85 | 622 - Lowland Shrub | 12.7 | No | Lowland shrub with scattered trees. |
| 93 | 622 - Lowland Shrub | 0.9 | No | |



| Stand | Cover Type | Acres | Managed Site | General Comments: |
|-------|----------------------------------|-------|--------------|-------------------|
| 94 | 3302 - Low Density Conifer Trees | 3.3 | No | |