



Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72193

Entry Year 2020

Acreage: 1,249

County Crawford

Management Area: Upper Muskegon

Revision Date: 2018-07-11

Stand Examiner: Thomas Barnes

Legal Description:

T25N R4W Sections 31 and 32

Identified Planning Goals:

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

Soil and topography:

Soil types within this compartment consist of Graycalm-Roselawn Sands with a few pockets of Croswell Sands. Terrain is level to slightly rolling in the east half of the compartment, gradually turning to gently rolling hills in the west half of the compartment.

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

Solid state ownership within this compartment and surrounding this compartment with one exception: 120 acres of private property bordering the north edge of section 31 are managed for timber production and hunting. Compartment 189, to the north of section 31 contains the Fletcher Road Kirtland's Warbler Management Unit. Roscommon County is located to the south and Kalkaska County is located to the west of this compartment.

Unique Natural Features:

Compartment contains several Michigan Impact Monitoring System Plots (MIMS) for Gypsy Moths.

Archeological, Historical, and Cultural Features:

None.

Special Management Designations or Considerations:

A portion of this compartment is within the Fletcher Road Kirtland's Warbler Management Unit, a High Conservation Value Area (HCVA).

Watershed and Fisheries Considerations:

None

Wildlife Habitat Considerations:

Maintain and manage existing cover types for deer, grouse, squirrel and the Kirtland's Warbler.

Mineral Resource and Development Concerns and/or Restrictions

Sand/gravel pits are not located in the area, but potential is very good within the compartment. The compartment is located just southwest of the Beaver Creek Field and northeast of the East Norwich Field. Both fields are producing oil from the Detroit River Group and are undergoing secondary recovery operations currently. The fields are unlikely to expand into the compartment. One well has been drilled within the compartment to test the Richfield and was a dry hole. No known metallic mineral potential exists in this part of the state.

Vehicle Access:

The compartment is easily accessible from Fletcher Road to the north and Moorsetown Road in the south. Hunter Truck Trail also runs just north of the compartment. The compartment itself is broken up into forties by fire break/two-track roads. Many of these 40 roads are not passable by cars, due to fallen trees and brush.

Survey Needs:

None

Recreational Facilities and Opportunities:

Hunting, snowmobiling and ORV riding are the primary forms of recreation within the compartment. The West Higgins-Stratford snowmobile trail #6 runs through the center of section 32, then south between sections 31 and 32 and then along the south side of section 31. The West Higgins 50" ORV trail also runs through the compartment.

Fire Protection:

Fire protection falls under the Beaver Creek Volunteer Fire Department and the Michigan Department of Natural Resources.

Additional Compartment Information:

The following reports from the Inventory are attached:

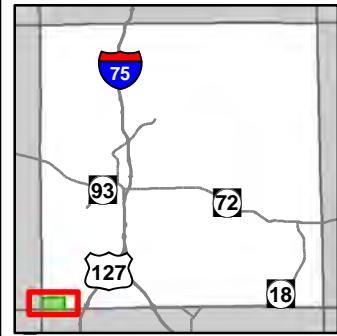
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

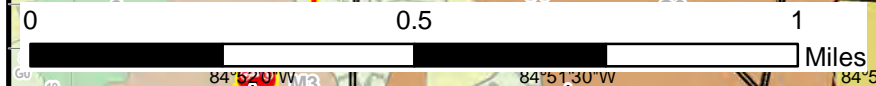
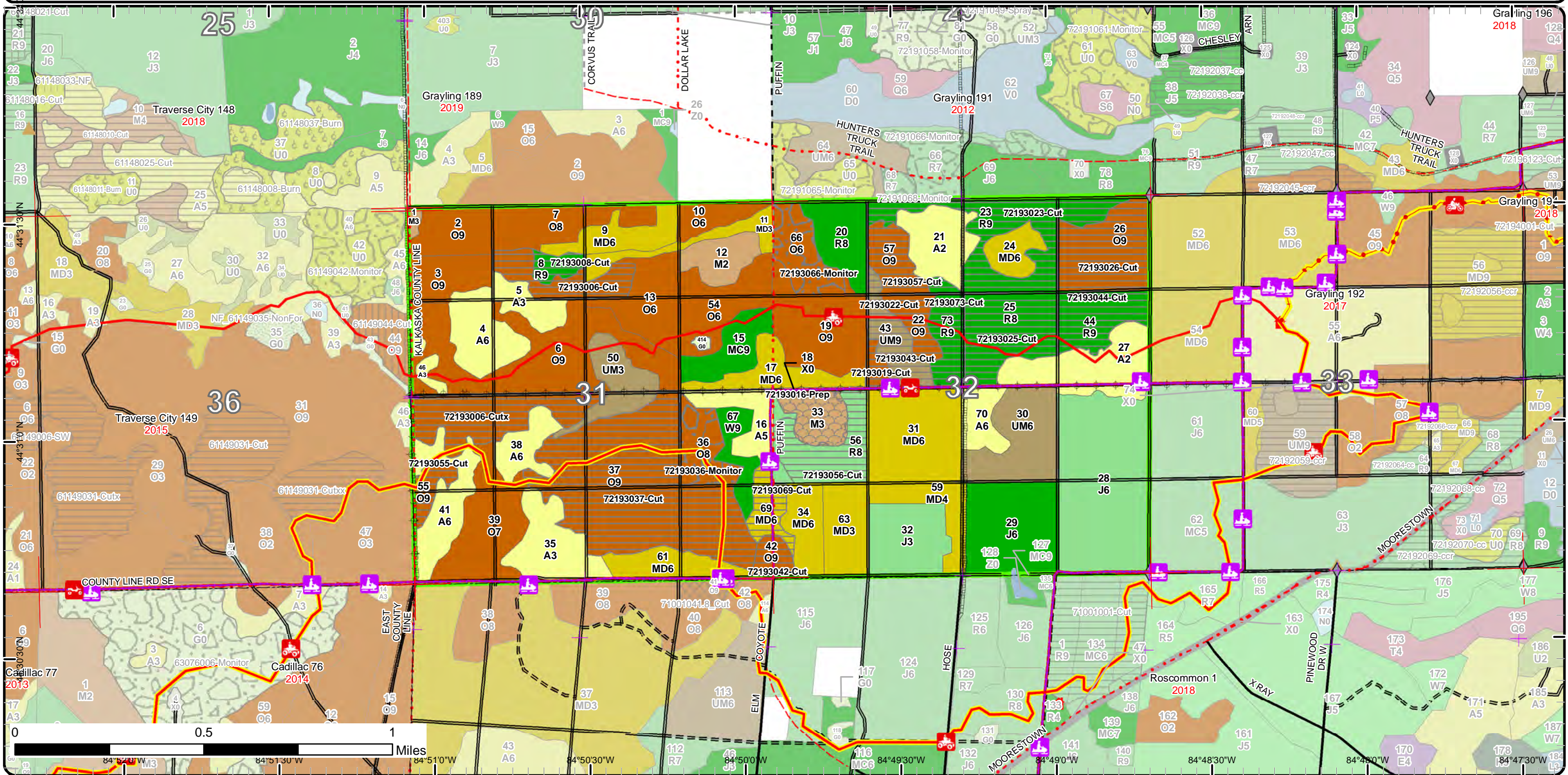
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 193
 T25N, R04W, Sec. 31, 32
 County: Crawford
 Unit: Grayling
 Mgmt Area: Upper Muskegon
 YOE: 2020
 Acres: 1,249 GIS Calculated
 Examiner: Thomas Barnes
 Map Revised: 1/28/2019
 Map Phase: Post-Review

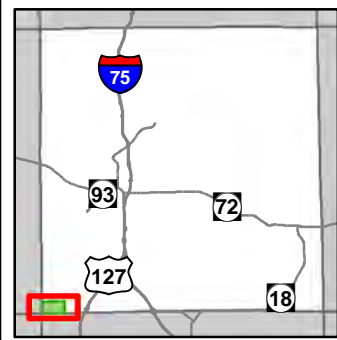


- Miris Corners
- Remonumented Section Corners
- Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- Federal / State - Dirt / Gravel Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
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- MCCCT Trails
- ORV Trails
- ORV Routes
- Snowmobile Trails
- ORV License & Trail Permit
- Designated ATV
- Designated ORV Route
- Designated Snowmobile Trails
- Michigan Cross Country Cycle Trail (MCCCT)
- Berms
- Structures
- Lake/Pond
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Clearcut (w/Reserves)
- Regeneration Survey
- Opening Maintenance
- Site Prep
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- Lakes

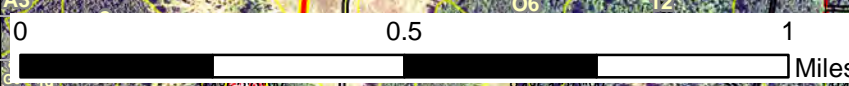
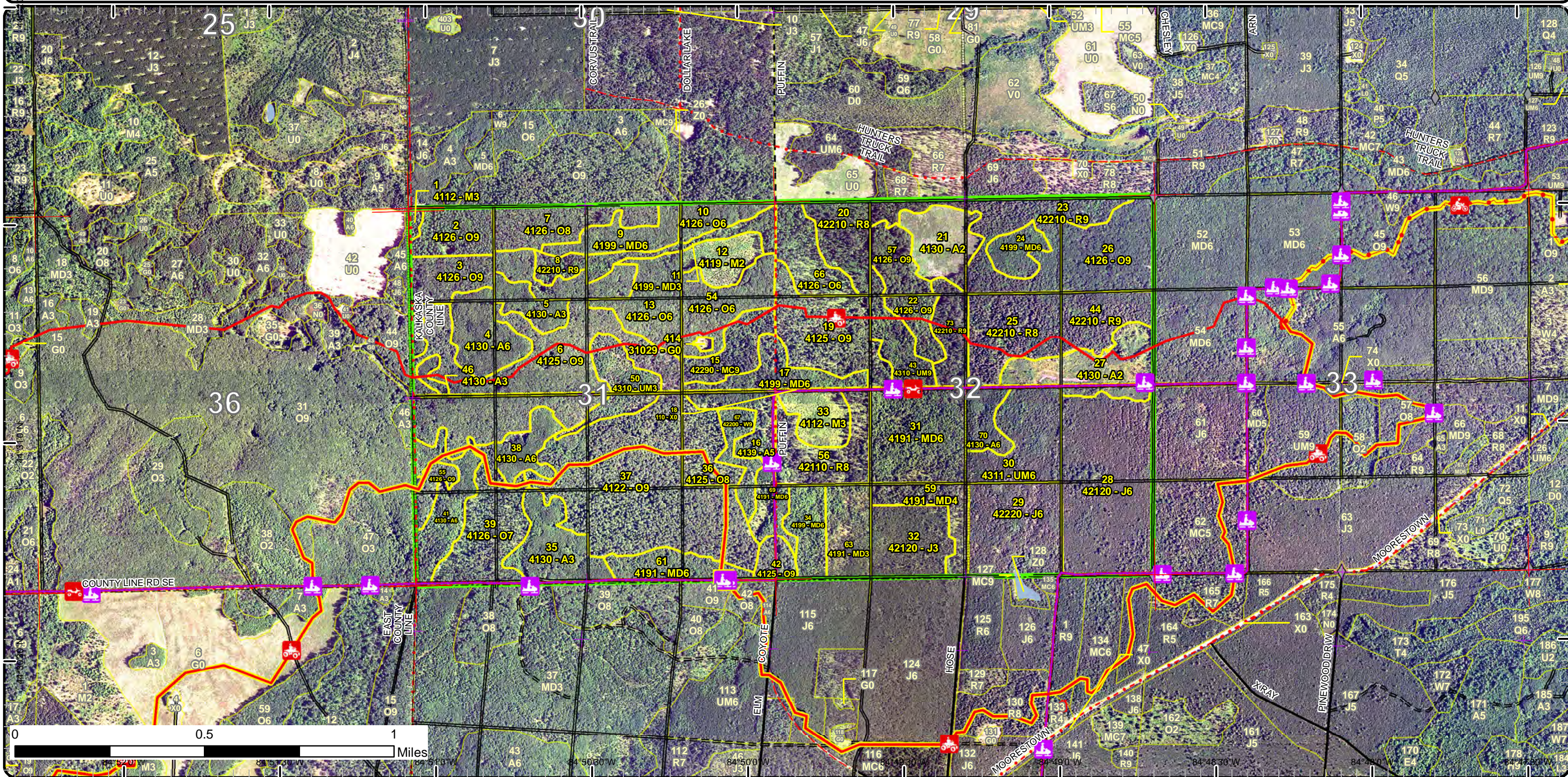


Stand Boundary Map

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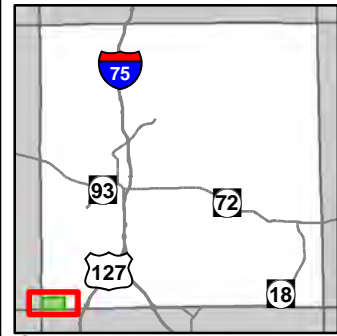
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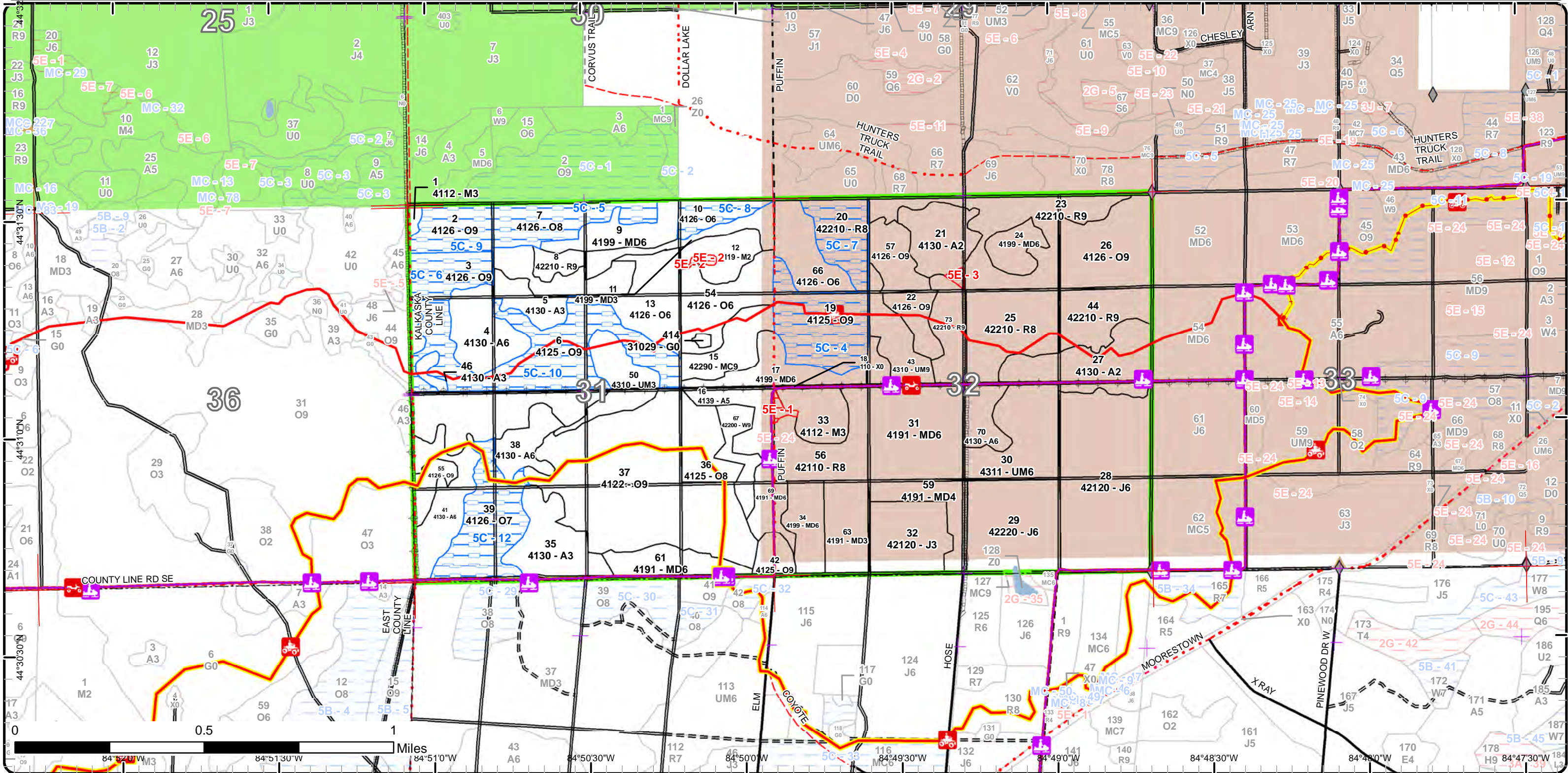
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Special Conservation Areas & Site Conditions Map

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- Designated Snowmobile Trails
- Michigan Cross Country Cycle Trail (MCCCT)
- Berms
- Structures
- Lake/Pond
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 5E: Long-Term Retention
- Stand Boundaries
- Kirtland Warbler Habitat
- Research, Development, and Military Lands



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 | 50 | 0 | 41 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 170 |
| Herbaceous Openland | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Jack Pine | 0 | 0 | 0 | 0 | 98 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 137 |
| Mixed Upland Deciduous | 0 | 0 | 0 | 33 | 95 | 17 | 10 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 170 |
| Natural Mixed Pines | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| Northern Hardwood | 0 | 27 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| Oak | 0 | 0 | 0 | 18 | 0 | 0 | 23 | 24 | 0 | 65 | 361 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 490 |
| Red Pine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 83 | 76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 158 |
| Upland Mixed Forest | 0 | 0 | 17 | 0 | 30 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 |
| Urban | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| White Pine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| Total | 6 | 77 | 17 | 94 | 303 | 56 | 33 | 24 | 114 | 156 | 371 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1248 |



Report 2 – Treatment Summary

Grayling Mgt. Unit

Year of Entry: 2020

Acres of Harvest

Compartment 193

Total Compartment Acres: 1,249

Commercial Harvest - 375
 Harvests with Site Condition - 0
 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 |
|------------------------|------------|-----------|----------------|-----------|-------------|----------|-------------------|----------|----------|-------------|
| Mixed Upland Deciduous | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| Oak | 214 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 214 |
| Red Pine | 136 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 136 |
| Upland Mixed Forest | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| Total | 375 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 375 |

Proposed and Next Step Treatments by Method

| | Harvest | Site Prep | Planting | Seeding | Burning | Pesticide | Monitoring | Other | Non-Forest Mgt. | Total Acres |
|--------------|------------|------------|------------|----------|----------|------------|------------|----------|-----------------|-------------|
| Current | 375 | 14 | 0 | 0 | 0 | 34 | 0 | 1 | | 423 |
| Next Step | 0 | 401 | 207 | 0 | 0 | 221 | 603 | 0 | 0 | 1432 |
| Total | 375 | 415 | 207 | 0 | 0 | 221 | 636 | 0 | 1 | 1855 |



| Stand | Treatment Name | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
|-------|----------------|-------|--------------------------|----------------|-----------|----------|----------------|-------------------------|-------------------------|---------------|----------------------|
| 6 | 72193006-Cut | 16.1 | 4125 - Black, N. Pin Oak | Sawtimber Well | 98 | 81-110 | Harvest | Clearcut with Retention | 4211 - Planted Red Pine | Even-Aged | Draft Field Boundary |

Habitat Cut: No

Site Condition:

Prescription Final harvest with retention, follow standard retention guidelines, place retention along perimeter. Do not put retention along stand 8 interface.

Specs: Include low stump and chipping. Following harvest site prep as needed and plant to red pine.

Next Step SitePrep, Roller Chopping; SitePrep, Scarification; Pesticide, (Inactive)Skidder/Mechanical; Planting, Initial Plant; Monitoring, Artificial

Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Planted red pine at a density to ensure a well stocked pine plantation.

Regen:

Other Could include option to plant around pockets of good oak regeneration, if desired.

Comment:

Proposed Start Date: 10/1 /2019

| | | | | | | | | | | | |
|---|---------------|------|--------------------------|----------------|----|--------|---------|-------------------------|-------------------------------------|-----------|----------------------|
| 6 | 72193006-Cutx | 31.3 | 4125 - Black, N. Pin Oak | Sawtimber Well | 98 | 81-110 | Harvest | Clearcut with Retention | 4199 - Other Mixed Upland Deciduous | Even-Aged | Draft Field Boundary |
|---|---------------|------|--------------------------|----------------|----|--------|---------|-------------------------|-------------------------------------|-----------|----------------------|

Habitat Cut: No

Site Condition:

Prescription Final harvest with retention, follow standard retention and woody biomass guidelines. Portion of retention could lie south of rec trail. Include trail

Specs: protection spec for both orv and snowmobile. Include low stump and chipping, in case natural regen fails. Also include oak wilt spec, pipeline and power line spec. Haul route will use snow trail.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Acceptable regen is a stand contain between 20-30 percent oak, with maple and some pine component. If this fails recommend site prep and

Regen: planting red pine for one rotation.

Other If natural regen fails then site prep as needed and plant to red pine around pockets of oak regen, if present. Do a natural regen check within 5

Comment: years of harvest completion.

Proposed Start Date: 10/1 /2019

| | | | | | | | | | | | |
|---|--------------|-----|--------------------------|----------------|----|--------|---------|----------|-------------------------|-----------|----------------------|
| 8 | 72193008-Cut | 5.6 | 42210 - Natural Red Pine | Sawtimber Well | 76 | 81-110 | Harvest | Clearcut | 4211 - Planted Red Pine | Even-Aged | Draft Field Boundary |
|---|--------------|-----|--------------------------|----------------|----|--------|---------|----------|-------------------------|-----------|----------------------|

Habitat Cut: No

Site Condition:

Prescription Final harvest without retention due to size. Include low stumps and chipping. Following harvest site prep as needed and plant to red pine.

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, (Inactive)Skidder/Mechanical; Planting, Initial Plant; Monitoring, Artificial

Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Planted red pine at a density to ensure a well stock red pine plantation.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

| | | | | | | | | | | | |
|----|---------------|------|---|--------------|---|----------|----------|-----------------|-------------------------|-----------|----------------------|
| 33 | 72193016-Prep | 13.5 | 4112 - Maple, Beech, Cherry Association | Sapling Well | 6 | Immature | SitePrep | Roller Chopping | 4211 - Planted Red Pine | Even-Aged | Draft Field Boundary |
|----|---------------|------|---|--------------|---|----------|----------|-----------------|-------------------------|-----------|----------------------|

Habitat Cut: No

Site Condition:

Prescription Site prep this stand for planting to red pine. This will include roller chopping, herbicide, trenching and planting.

Specs: regen survey

Next Step Pesticide, Skidder - Site Prep; SitePrep, Trenching; Planting, Initial Plant; Pesticide, Skidder - Release; Monitoring, Artificial Regen(1yr);

Treatments: Monitoring, Artificial Regen(3yr)

Acceptable Planted red pine at a density to ensure well stock red pine plantation.

Regen:

Other At compartment review it was decided to plant site to red pine when stand 56 is planted. So site pre

Comment:

Proposed Start Date: 10/1 /2019



| 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 |
|-----------------------|----------------|-------|--------------------------|----------------|-----------|----------|----------------|------------------|-------------------------|---------------|----------------------|
| 19 | 72193019-Cut | 3.8 | 4125 - Black, N. Pin Oak | Sawtimber Well | 94 | 81-110 | Harvest | Clearcut | 4211 - Planted Red Pine | Even-Aged | Draft Field Boundary |

Habitat Cut: No

Site Condition:

Prescription Final harvest without retention. Include low stump, chipping, oak wilt and snow trail spec. Plant around any pockets of natural oak regen.
Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, (Inactive)Skidder/Mechanical; Planting, Initial Plant; Monitoring, Artificial
Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Planted red pine at a density to ensure a well stocked red pine plantation. Plant around any oak regen pockets, if present.
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

| | | | | | | | | | | | |
|----|--------------|-----|---------------------------------|----------------|----|--------|---------|----------|-------------------------|-----------|----------------------|
| 22 | 72193022-Cut | 9.6 | 4126 - White, Black, N. Pin Oak | Sawtimber Well | 85 | 81-110 | Harvest | Clearcut | 4211 - Planted Red Pine | Even-Aged | Draft Field Boundary |
|----|--------------|-----|---------------------------------|----------------|----|--------|---------|----------|-------------------------|-----------|----------------------|

Habitat Cut: No

Site Condition:

Prescription Final harvest without retention. Include low stump, chipping, oak wilt, ORV and snow trail spec. Plant around any pockets of natural oak regen.
Specs: Haul route will use snow trail.

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, (Inactive)Skidder/Mechanical; Planting, Initial Plant; Monitoring, Artificial
Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Planted red pine at a density to ensure a well stocked red pine plantation. Plant around any oak regen pockets, if present.
Regen:

Other Work with trail specialist and clubs on rerouting this portion of trail.
Comment:

Proposed Start Date: 10/1 /2019

| | | | | | | | | | | | |
|----|--------------|------|--------------------------|----------------|----|---------|---------|-------------------------|-------------------------|-----------|----------------------|
| 23 | 72193023-Cut | 41.5 | 42210 - Natural Red Pine | Sawtimber Well | 81 | 111-140 | Harvest | Clearcut with Retention | 4211 - Planted Red Pine | Even-Aged | Draft Field Boundary |
|----|--------------|------|--------------------------|----------------|----|---------|---------|-------------------------|-------------------------|-----------|----------------------|

Habitat Cut: No

Site Condition:

Prescription Final harvest with retention, follow standard retention guidelines. Include low stump, chipping, oak wilt and snow trail spec.
Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, (Inactive)Skidder/Mechanical; Planting, Initial Plant; Monitoring, Artificial
Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Planted red pine at a density to ensure a well stocked red pine plantation.
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

| | | | | | | | | | | | |
|----|--------------|------|--------------------------|------------------|----|------|---------|-------------------------|-------------------------|-----------|----------------------|
| 25 | 72193025-Cut | 31.4 | 42210 - Natural Red Pine | Sawtimber Medium | 79 | 1-50 | Harvest | Clearcut with Retention | 4211 - Planted Red Pine | Even-Aged | Draft Field Boundary |
|----|--------------|------|--------------------------|------------------|----|------|---------|-------------------------|-------------------------|-----------|----------------------|

Habitat Cut: No

Site Condition:

Prescription Final harvest with retention, follow standard retention guidelines. Place retention along perimeter and islands along rec trail, if rec trail is not rerouted. Include rec trail, low stump and chipping spec. Also include snow trail spec as portion of trail may be used for haul route.
Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, (Inactive)Skidder/Mechanical; Planting, Initial Plant; Monitoring, Artificial
Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Planted red pine at a density to ensure a well stocked red pine plantation.
Regen:

Other Work with trail specialist and clubs for a reroute for this portion of the trail.
Comment:

Proposed Start Date: 10/1 /2019



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

| | | | | | | | | | | | |
|----|--------------|------|------------------------------------|-------------------|----|-------------|---------|----------------------------|-------------------------------|-----------|-------------------------|
| 26 | 72193026-Cut | 32.6 | 4126 - White, Black, N. Pin Oak | Sawtimber Well | 93 | 111- 140 | Harvest | Clearcut with Retention | 4319 - Mixed Upland Forest | Even-Aged | Draft Field Boundary |
|----|--------------|------|------------------------------------|-------------------|----|-------------|---------|----------------------------|-------------------------------|-----------|-------------------------|

Habitat Cut: No

Site Condition:

Prescription Final harvest with retention, follow standard retention and woody biomass guidelines. Do not cut any conifers. Include low stump, chipping and
Specs: snow trail spec. Oak wilt spec should also be included.

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Regen: Acceptable regen is mixed hardwoods to include 30-40 percent oak, aspen, maple and conifer. Stand should be of medium to well stocked.

Other Comment: Haul route will use portion of snow trail.

Proposed Start Date: 10/1 /2019

| | | | | | | | | | | | |
|----|----------------------|------|-----------------------------|---------------------|----|-------|------------|---------------------------------|---------------------|-----------|-------------------------|
| 36 | 72193036- Monitor | 15.8 | 4125 - Black, N. Pin Oak | Sawtimber Medium | 94 | 51-80 | Monitoring | Natural Regen (Re-Inventory) | 4129 - Mixed Oak | Even-Aged | Draft Field Boundary |
|----|----------------------|------|-----------------------------|---------------------|----|-------|------------|---------------------------------|---------------------|-----------|-------------------------|

Habitat Cut: No

Site Condition:

Prescription
Specs:

Next Step
Treatments:

Acceptable Regen: oak, aspen, pine maple

Other Comment: Percent to Treat = 100%

Proposed Start Date: 4 /8 /2016

| | | | | | | | | | | | |
|----|--------------|-------|------------------|-------------------|----|-------|---------|----------------------------|---|----------|-------------------------|
| 37 | 72193037-Cut | 100.1 | 4122 - Oak, Pine | Sawtimber Well | 94 | 51-80 | Harvest | Clearcut with Retention | 4199 - Other Mixed Upland Deciduous | Two-Aged | Draft Field Boundary |
|----|--------------|-------|------------------|-------------------|----|-------|---------|----------------------------|---|----------|-------------------------|

Habitat Cut: No

Site Condition:

Prescription Final harvest with retention, follow standard retention guidelines keep retention along edge. Do not cut any of the pine. Include low stump spec
Specs: and encourage chipping as a site prep measure if oak regen fails. Include rec trail specs and also look at retention along trail.

Next Step Monitoring, Natural Regen (Intermediate)
Treatments:

Acceptable Regen: Acceptable regen is an oak component of 25-35 percent of regeneration along with red maple, pine and aspen. If oak is not at acceptable level then remove residual pine and plant to red pine around areas of oak regeneration. Use all necessary site prep.

Other Comment: If oak is not a acceptable levels of 25-35 percent of regen, then remove all residual pine and plant to red pine around areas of good oak regen.

Proposed Start Date: 10/1 /2019

| | | | | | | | | | | | |
|----|--------------|-----|-----------------------------|-------------------|----|-------------|---------|----------|-------------------------------------|-----------|-------------------------|
| 42 | 72193042-Cut | 6.8 | 4125 - Black, N. Pin Oak | Sawtimber Well | 94 | 111- 140 | Harvest | Clearcut | 4139 - Aspen, Mixed Deciduous | Even-Aged | Draft Field Boundary |
|----|--------------|-----|-----------------------------|-------------------|----|-------------|---------|----------|-------------------------------------|-----------|-------------------------|

Habitat Cut: No

Site Condition:

Prescription Final harvest without retention due to size. Add snowmobile spec as well as low stump and chipping. Include drumming log spec as well.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Regen: Stand should regenerate to a medium to well stocked stand of aspen with oak, maple and other associated species. Oak should be a minor component of stand between 10-20 percent of regen.

Other Comment:

Proposed Start Date: 10/1 /2019



| Stand Name | Treatment Name | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
|------------|----------------|-------|----------------------|----------------|-----------|----------|----------------|------------------|-------------------------|---------------|----------------------|
| 43 | 72193043-Cut | 15.4 | 4310 - Pine, Oak Mix | Sawtimber Well | 84 | 111-140 | Harvest | Clearcut | 4211 - Planted Red Pine | Two-Aged | Draft Field Boundary |

Habitat Cut: No

Site Condition:

Prescription Final harvest without retention.. Include low stump, chipping, oak wilt, ORV and snow trail spec. Plant around any pockets of natural oak regen.

Specs: Haul route will use snow trail.

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, (Inactive)Skidder/Mechanical; Planting, Replant; Monitoring, Artificial

Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Regen: Planted red pine at a density to ensure a well stocked red pine plantation. Plant around pockets of oak regen, if present.

Other Comment: Work with trail specialist and clubs on rerouting this portion of the trail.

Proposed Start Date: 10/1 /2019

| | | | | | | | | | | | |
|----|--------------|------|--------------------------|----------------|----|--------|---------|-------------------------|-------------------------|-----------|----------------------|
| 44 | 72193044-Cut | 19.9 | 42210 - Natural Red Pine | Sawtimber Well | 79 | 81-110 | Harvest | Clearcut with Retention | 4211 - Planted Red Pine | Even-Aged | Draft Field Boundary |
|----|--------------|------|--------------------------|----------------|----|--------|---------|-------------------------|-------------------------|-----------|----------------------|

Habitat Cut: No

Site Condition:

Prescription Final harvest with retention, follow standard retention guidelines. Place retention along perimeter and SW of rec trail. Include rec trail, low stump and chipping spec. Also include snow trail spec as portion of trail may be used for haul route.

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, (Inactive)Skidder/Mechanical; Planting, Initial Plant; Monitoring, Artificial

Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Regen: Planted red pine at a density to ensure a well stocked red pine plantation.

Other Comment: This stand is adjacent to the stand with large brush pile. Encourage winning contractor to chip pile.

Proposed Start Date: 10/1 /2019

| | | | | | | | | | | | |
|----|--------------|-----|---------------------------------|----------------|----|--------|---------|----------|----------------------------|-----------|----------------------|
| 55 | 72193055-Cut | 6.8 | 4126 - White, Black, N. Pin Oak | Sawtimber Well | 90 | 81-110 | Harvest | Clearcut | 4319 - Mixed Upland Forest | Even-Aged | Draft Field Boundary |
|----|--------------|-----|---------------------------------|----------------|----|--------|---------|----------|----------------------------|-----------|----------------------|

Habitat Cut: No

Site Condition:

Prescription Final harvest, follow woody biomass guidelines. Portion of retention could lie northwest of rec trail. Include trail protection spec. Include low stump and chipping, in case natural regen fails. Also include oak wilt spec, pipeline and power line spec.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Regen: Acceptable regen is a stand contain between 15-25 percent oak, with maple and some pine component. If this fails recommend site prep and planting red pine for one rotation.

Other Comment: If natural regen fails then site prep as needed and plant to red pine around pockets of oak regen, if present. Do a natural regen check within 5 years of harvest completion.

Proposed Start Date: 10/1 /2019

| | | | | | | | | | | | |
|----|--------------|------|--------------------------|------------------|----|-------|---------|-------------------------|-------------------------|-----------|--------------------------------|
| 56 | 72193056-Cut | 22.3 | 42110 - Planted Red Pine | Sawtimber Medium | 79 | 51-80 | Harvest | Clearcut with Retention | 4211 - Planted Red Pine | Even-Aged | Field Boundary - Ready for VMS |
|----|--------------|------|--------------------------|------------------|----|-------|---------|-------------------------|-------------------------|-----------|--------------------------------|

Habitat Cut: No

Site Condition:

Prescription Harvest the residual overstory with island retention, follow up with roller chopping, herbicide, and planting red pine.

Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, (Inactive)Aerial; Planting, Initial Plant; Monitoring, Artificial Regen(1yr);

Treatments: Monitoring, Artificial Regen(3yr)

Acceptable Regen: Red Pine

Other Comment: This treatment was approved through a variance on 8-24-2016.

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

| | | | | | | | | | | | |
|----|--------------|------|---------------------------------|----------------|----|---------|---------|----------|-------------------------|----------|----------------------|
| 57 | 72193057-Cut | 13.3 | 4126 - White, Black, N. Pin Oak | Sawtimber Well | 94 | 111-140 | Harvest | Clearcut | 4211 - Planted Red Pine | Two-Aged | Draft Field Boundary |
|----|--------------|------|---------------------------------|----------------|----|---------|---------|----------|-------------------------|----------|----------------------|

Habitat Cut: No **Site Condition:**

Prescription Final harvest without retention. Include low stump, chipping, oak wilt and snow trail spec. Plant around any pockets of natural oak regen. Haul route will use snow trail.

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, (Inactive)Skidder/Mechanical; Planting, Initial Plant; Monitoring, Artificial
Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Planted red pine at a density to ensure a well stocked red pine plantation. Plant around pockets of oak regen, if present.
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

| | | | | | | | | | | | |
|----|------------------|------|---------------------------------|-----------------|----|------|------------|------------------------------|------------------|-----------|----------------------|
| 66 | 72193066-Monitor | 17.7 | 4126 - White, Black, N. Pin Oak | Poletimber Well | 27 | 1-50 | Monitoring | Natural Regen (Re-Inventory) | 4129 - Mixed Oak | Even-Aged | Draft Field Boundary |
|----|------------------|------|---------------------------------|-----------------|----|------|------------|------------------------------|------------------|-----------|----------------------|

Habitat Cut: No **Site Condition:**

Prescription regen survey
Specs:

Next Step
Treatments:

Acceptable Oak, red maple, pine.
Regen:

Other Percent to Treat = 100%
Comment:

Proposed Start Date: 4 /21/2015

| | | | | | | | | | | | |
|----|--------------|------|--|-----------------|----|--------|---------|----------|-------------------------------|-----------|----------------------|
| 69 | 72193069-Cut | 10.4 | 4191 - Mixed Upland Deciduous with Conifer | Poletimber Well | 38 | 81-110 | Harvest | Clearcut | 4139 - Aspen, Mixed Deciduous | Even-Aged | Draft Field Boundary |
|----|--------------|------|--|-----------------|----|--------|---------|----------|-------------------------------|-----------|----------------------|

Habitat Cut: No **Site Condition:**

Prescription Final harvest without retention due to size. Add snowmobile spec as well as low stump and chipping. Include drumming log spec as well.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)
Treatments:

Acceptable Stand should regenerate to a medium to well stocked stand of aspen with oak, maple and other associated species.
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

| | | | | | | | | | | | |
|----|--------------|------|--------------------------|----------------|----|--------|---------|-------------------------|-------------------------|-----------|----------------------|
| 73 | 72193073-Cut | 14.9 | 42210 - Natural Red Pine | Sawtimber Well | 87 | 81-110 | Harvest | Clearcut with Retention | 4211 - Planted Red Pine | Even-Aged | Draft Field Boundary |
|----|--------------|------|--------------------------|----------------|----|--------|---------|-------------------------|-------------------------|-----------|----------------------|

Habitat Cut: No **Site Condition:**

Prescription Final harvest with retention, follow standard retention guidelines. Place retention along perimeter and islands along rec trail, if rec trail is not rerouted. Include rec trail, low stump and chipping spec. Also include snow trail spec as portion of trail may be used for haul route.
Specs:

Next Step SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, (Inactive)Skidder/Mechanical; Planting, Initial Plant; Monitoring, Artificial
Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Planted red pine at a density to ensure a well stocked red pine plantation.
Regen:

Other Work with trail specialist and clubs to reroute this portion of the trail.
Comment:

Proposed Start Date: 10/1 /2019



| 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 |
|-----------------------|-------------------|-------|--------------------|-----------------|--------------|-------------|-------------------|------------------------------------|-------------------------|------------------|-------------------------|
| 414 | 72193414-NF | 0.9 | 31029 - Grass (OI) | Nonstocked | | | NonForestMgt | Herbaceous/Crop /Grass Planting | 3102 - Grass | | Draft Field Boundary |

Habitat Cut: No

Site Condition:

Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, native
Specs: tree/shrub planting, mowing, brushing, burning and herbicide application.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

**Total Treatment
Acreage Proposed: 429.7**

Report 4 – Site Conditions

Grayling Mgt. Unit
Thomas Barnes : Examiner

Compartment: 193
Year of Entry: 2020

Availability for Management

| Total Acres | Acres Available | Acres Avail | | Dominant Site Conditions | 5C | 5E |
|----------------|--------------------|----------------|---------------|--------------------------|-----|----|
| | | With Condition | Not Available | | | |
| 170 | 169 | 0 | 1 | Aspen | 0 | 1 |
| 1 | 1 | 0 | 0 | Herbaceous Openland | | |
| 137 | 137 | 0 | 0 | Jack Pine | | |
| 170 | 170 | 0 | 0 | Mixed Upland Deciduous | 0 | |
| 16 | 16 | 0 | 0 | Natural Mixed Pines | 0 | |
| 29 | 28 | 0 | 1 | Northern Hardwood | 0 | 1 |
| 491 | 302 | 189 | 0 | Oak | 189 | 0 |
| 157 | 137 | 19 | 1 | Red Pine | 19 | 1 |
| 63 | 63 | 0 | 0 | Upland Mixed Forest | 0 | |
| 5 | 5 | 0 | 0 | Urban | | |
| 10 | 10 | 0 | 0 | White Pine | | |
| 1,249 | 1,038 | 208 | 3 | Total Forested Acres | 208 | 3 |
| | 83% | 17% | 0% | 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 | Unavailable | 5E: Long-Term Retention | 1 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 2 | Unavailable | 5E: Long-Term Retention | 1 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 3 | Unavailable | 5E: Long-Term Retention | 1 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |

Report 4 – Site Conditions

Grayling Mgt. Unit

Compartment: 193

Thomas Barnes : Examiner

Year of Entry: 2020

| | | | | | | | |
|-----------|-----------|--|----|-------------|-------------|-------------|-------------|
| 4 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 33 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 5 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 23 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 6 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 15 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 7 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 19 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 8 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 10 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |

Report 4 – Site Conditions

Grayling Mgt. Unit

Thomas Barnes : Examiner

Compartment: 193

Year of Entry: 2020

| | | | | | | | |
|------------------|------------------|---|----|-------------|-------------|-------------|-------------|
| 9 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 17 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 10 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 57 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 12 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 34 | 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 | | | | |



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.

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

| Conservation Area | Type | Description |
|-------------------|-----------------------------|--|
| SCA | Research and Military Areas | These areas provide facilities and lands specifically dedicated for research, or other purposes. They include the 5,847 acre Forest Fire Experiment Station, the 12,000 acre Houghton Lake Wildlife Research Area, the Beaver Islands Archipelago Wildlife Research Area (that includes most of Garden Island, all of High and Hog Islands, all state owned land on Beaver, South Fox and North Fox Islands), the Cusino Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research Station, the 125 acre Wyman Nursery, and over 144,000 acres of Military Lands. |
| HCVA | Designated Critical Habitat | Critical habitat areas are established via a consultative and cooperative process between the DNR and the U.S. Fish and Wildlife service for the recovery of threatened and endangered species, as governed by Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, and the Federal Endangered Species Act of 1973. This is an active program, with proposed species plans in various stages of review. As of now only two exist, Kirtland Warbler Habitat and Piping Plover Habitat. |



| Stand | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|-------|---|-----------------|-------|-----------|----------|--|
| 1 | 4112 - Maple, Beech, Cherry Association | Sapling Well | 1.7 | 20 | Immature | <p>Young stand of mostly stump sprout red maple . There is some aspen and cherry stems. Kotar classification for this stand is PArVha. OPIC - FMD: 2008 Notes Harveted in 1999 with stand 4 in the compartment to the north.</p> <p>1998: POOR QUALITY RED MAPLE STAND WITH ASPEN MIXED. RECOMMEND FINAL HARVEST WITH STAND 4, COMPARTMENT 189, IN 1999.</p> |
| 2 | 4126 - White, Black, N. Pin Oak | Sawtimber Well | 16.5 | 89 | 1-50 | <p>Three BA swings were taken stand average 45. Clump maple and oak sprouts of varying heights. Some clump in entering pole size. Also some shrubs in understory. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: Same as last time. Oak understory bigger, but not pole size yet. 1988: REMOVE OVERSTORY WHEN STAND TO SOUTH IS CUT. 1998: NO CUT PRESCRIBED. STAND HAS 30 B.A. OF OAK IN OVERSTORY WITH AN AVERAGE DIAMETER OF 11 INCHES. MANAGING FOR OAK UNDERSTORY AND PROVIDING MASS.</p> |
| 3 | 4126 - White, Black, N. Pin Oak | Sawtimber Well | 15.4 | 89 | 81-110 | <p>Stand was thinned in 2011 under sale 72-035-10-01 Variable Treatment Oak, all aspen and red maple were removed as well as marked oak. All red and white pine were left. Park like understory with very little oak showing above snow. Sapling red maple clump sprouts, many have been browsed. Scattered shrubs too. Three BA swings taken it and avearye of 90. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008: Mature Oak stand. Recommend thinning the to 70 BA. Remove all Aspen and Red Maple. Expecting Oak stump strouts for regeneration. Will except all regeneration that occurs. Should end up with a mixed stand. Sure to get Aspen and Red Maple to regeneration too. 1988: THIN OR CLEAR CUT IN 10 YRS. 1998: THIN IN TEN YEARS OR CLEAR CUT.</p> |
| 4 | 4130 - Aspen | Poletimber Well | 20.9 | 38 | 81-110 | <p>Nice aspen stand, rolling terrain. Hold for another 10 and then cut. Some paper birch is n stand. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: Immature Aspen stand. Hold another 10 years and than decide if needed to be cut for age class diversity in Aspen on the Unit. Stand will be about 37 years old.</p> |
| 5 | 4130 - Aspen | Sapling Well | 10.4 | 28 | Immature | <p>Nice young aspen stand with good stem density. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: Immature Aspen stand (A3M2 3-4 inch dia, 10-20 feet tall).</p> <p>1988: PAST WOOD THEFT, NICE QUALITY, MANAGE FOR SAWLOGS. 1998: STAND WAS CLEAR CUT IN 1991 AND NOW IS AN ASPEN STAND.</p> |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|---|-------------------------------------|---------------------|-------|--------------|-------------|---|
| 6 | 4125 - Black, N. Pin Oak | Sawtimber Well | 104.4 | 98 | 81-110 | <p>Stand was cut in 2004 - 2006 under contract 72-003-04-01. Appears the prior treatment removed all species and some oak. This does have some nice oak log and pole stems. Not much for an understory and no understory over 15ft. Some clump maple and oak re-sprouts as well as single stem regen. Stand was marked down to 75 BA.</p> <p>Eleven QD plots were taken resulting in stand BA of 86. The northern most portion of this stand had some nice red pine scattered about. Kotar classification for this stand is PArVha/PArVVb. Stand was marked down to 75 BA.</p> <p>If oak fails to meet the desired regeneration target, the plan will be to plant to red pine. This plantation will only be for one rotation.</p> <p>OPIC - FMD: 2008 Notes: Mature Oak stand that was thinned last entry year. Contract 720030401 Powerline Oak. Prison crew cut.</p> <p>1988: THIS STAND REPRESENTS ASPEN CLONES FOR CLEAR CUT W/IN STAND 5. 1998: STAND 5 WAS APART OF STAND 6. STAND NUMBERS REVERSED IN 1998 INVENTORY. GOOD QUALITY OAK STAND WHICH SHOULD BE MANAGED FOR OAK SAWTIMBER. RECOMMEND THINNING IN TEN YEARS.</p> |
| 7 | 4126 - White, Black, N. Pin Oak | Sawtimber Medium | 23.3 | 87 | 81-110 | <p>stand is very similar to stand 3. Greater understory presence and pole size white pine. Three BA Swings were taken with stand average of 85. Stand was thinned in 2011 under sale 72-035-10-01 Variable Treatment Oak, all aspen and red maple were removed as well as marked oak. All red and white pine were left. Kotar classification for this stand is PArVha/PArVVb.</p> <p>OPIC - FMD: 2008 Notes: Mature Oak stand. Recommend thinning stand to 70 BA. Remove all Aspen and Red Maple within the stand. Expecting Oak stump strouts for regeneration along with Aspen and Red Maple. Goal is to put growth on good quality on residual trees.</p> <p>1988: CONSIDER CLEAR-CUTTING IN 10YRS. 1998: GYPSY MOTH PLOTS IN NORTH WEST CORNER OF STAND. RECOMMEND THINNING OR PATCH CLEARCUTS IN TEN YEARS.</p> |
| 8 | 42210 - Natural Red Pine | Sawtimber Well | 5.6 | 76 | 81-110 | <p>Mature red pine stems with pole to log sized red maple and oak. Red pine is some what group with hardwoods filling in the areas between gaps. Stand appears healthy at this time. Three BA swings taken with stand average of 90. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 1988: REMNANT JACK PINE FROM OLD CUT - CUT WHEN OAK TO SOUTH IS THINNED. 1998: MOST ALL OF THE JACK PINE IS DEAD AND STAND IS NOW RED PINE. RECOMMEND FINAL HARVEST AND REPLANTING TO RED PINE.</p> |
| 9 | 4199 - Other Mixed Upland Deciduous | Poletimber Well | 15.4 | 73 | 81-110 | <p>Stand is diverse mix of hardwoods and some white pine. Oak and maple are clump sprout origin of pole to small log size. Aspen is found throughout stand in either single stem or small clones. Some aspen is starting to die out. Three BA swings stand average of 103. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: Mature Oak stand with a mix of White Pine throughout the stand.</p> |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|--|--------------------|-------|--------------|-------------|--|
| 10 | 4126 - White, Black, N. Pin Oak | Poletimber Well | 9.8 | 90 | 111-140 | stand is mature Oak stand with pole and toy size. Stand is log size. Very little understory, very park like. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: Mature Oak stand. Can hold another 10 years and than harvest. 1988: THIN TO 40 SQ FT LEAVE NICER OAK IN 10 YRS |
| 11 | 4199 - Other Mixed Upland Deciduous | Sapling Well | 11.9 | 38 | 1-50 | Stand was cut in 1981, final harvest. Stand has come back as a mixed stand of red maple oak and aspen. There is some pine component bat very small. stand is large sapling small pole sized. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: Stand is located in a long narrow valley running sort of east and west. (Frost Pocket). Stand is mixed with Oak, Aspen and Red Maple. Dominant species varies depending on where you are in the valley. |
| 12 | 4119 - Mixed Northern Hardwoods | Sapling Medium | 13.1 | 7 | Immature | Stand was final harvested in 2013 under 72-035-10-01 Variable Treatment Oak. Clump red maple and oak sprouts ranginy from 5-1sft tall. Kotar classification for this stand is PArVha/PArVVb. Old notes expected stand to regen to primarily red maple with some oak. Using that as the acceptable refers stand passes natural regen survey. Stocking levels low to medium density. OPIC - FMD: 2008 Notes: Mature Oak stand mixed with a fair amount of Red Maple. Recommend final harvest and mangle for natural regeneration. Should get some Oak back, but will probably regenerate to mostly Red Maple. Leave a 1 acre retention patch within the stand. |
| 13 | 4126 - White, Black, N. Pin Oak | Poletimber Well | 23.4 | 52 | 111-140 | Mixed stand of Oak, aspen and red maple. stand BA is 135 and look any healthy. Hold for another 10 yrs the consider some type of treatment. Evidence of a raised road bed, could be remnants of an old railroad grade. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: Two aged stand of Oak, Red Maple and some Aspen. Recommend no treatment this entry year. A portion of ORV trail traverses through the stand. |
| 15 | 42290 - Natural Mixed Pine | Sawtimber Well | 15.8 | 79 | 81-110 | Mixed pine stand with fair stem quality. Well developed understory of hardwoods in the large sapling stage. Nice advanced oak regeneration. Ranked understory as low, bat more of a combo of low/medium. Stand has good forest health. ORV/Mccct in part of stand. Three BA swings with stand average of 103. Red pine average BA of 57 and white pine of 46. Stand was harvested in 90/91 all trees removed except red and white pine. Evidence of a raised road bed, could be remnants of an old railroad grade. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: Red and White Pine stand with an understory of Oak and White Pine. Stand was shelterwood cut in 1991and Red Pine was not cut.. |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|--|----------------------|-------|--------------|-------------|---|
| 16 | 4139 - Aspen, Mixed Deciduous | Poletimber Medium | 13.7 | 37 | 51-80 | <p>Stand has a fair amount of open areas. As a result many stems are exhibiting the open grown form. Aspen is primary species alary with clump red maple and oak. In less dense areas are single stems of oak cherry, red maple and jack pine. There is scattered log sized red pine in the northern third of stand. BA is variable from 30 to 140. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: Immature Aspen and Oak stand with lots of Cherry Brush. Some large scattered Red Pine.</p> <p>1988: HAS NOT COME BACK WELL - LOTS OF CHERRY BRUSH. 1998: SAME NOTE AS 1988. THERE IS A SCATTERED MIX OF SOFTWOOD AND HARDWOOD OVERSTORY OF ABOUT 10-20 B.A..</p> |
| 17 | 4199 - Other Mixed Upland Deciduous | Poletimber Well | 16.6 | 47 | 81-110 | <p>Red maple stand with a good component of aspen and some oak. There is scattered Red pine and oak of log to xlog sized stems. Aspen is primary found in clones and not uniformly throughout stand. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: Young Red Maple pole stand mixed with about 10 BA of Red Pine, Aspen and Oak.</p> |
| 19 | 4125 - Black, N. Pin Oak | Sawtimber Well | 36.9 | 94 | 81-110 | <p>Very little understory and what is present is clump red maple. There was some red and white pine in seedling layer. Not much for oak regeneration. Good amount of deer browse. Three BA swings taken with stand average of 85. ORV/cycle trail runs through stand. Stand was harvested under contract 72-033-10-01 in 2012. Remove all Red Maple, White Pine and Aspen. Targeted BA was 80. Kotar classification for this stand is PArVha/PArVVb.</p> <p>Red pine plantation will only be for one rotation.</p> <p>OPIC - FMD: 2008 Notes: Mature Oak stand with some White Pine in the understory along with Red Maple. Recommend a thinning to 60BA Remove all Red Maple, White Pine and Aspen if there is any. Goal is to put growth on remaining residual trees. Prescribe burn after the harvest.</p> |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|------------------------------------|---------------------|-------|--------------|-------------|---|
| 20 | 42210 - Natural Red Pine | Sawtimber Medium | 18.9 | 87 | 1-50 | <p>Low residual BA of red pine left. Stems look in good health. Regeneration is dominated by red maple with areas of oak being very good as well. There is also shrub and aspen regen as well. Stands BA average was 30. Regen is between 5ft tall. Deer browse is also present. Stand was harvested in 2000 under contract 72-002-00-01, North 32 Oak. Stand BA was reduce to 20 BA and all aspen, maple, oak and jack pine were removed. Kotar classification for this stand is PArVha/PArVVb.</p> <p>OPIC - FMD: 2008 Notes: Stand was previously treated with a shelterwood seed cut and than under burned for Red Pine regeneration. However it looks as though Red Maple and Aspen regenerated in its place. Recommend herbiciding stand first and then planting to a low stocking of Pine and Oak acrons.</p> <p>1988: CUT IN 10 YRS WHEN REGENERATION IS LARGE ENOUGH TO SURVIVE THINNING. 1998: CUT ALL EXCEPT RED PINE. PRESCRIBE BURN FOR NATURAL REGENERATION. IF THIS DOES NOT WORK, THEN UNDERPLANT TO RED PINE.</p> <p>2001: STAND WAS HARVESTED(NORTH 32 OAK SALE - 720020001). FTP WAS COMPLETED AND TURNED IN FOR A PRESCRIBED BURN. - P burn was completed in 4/24/04- burn ID 20-32-03. A follow up revealed the red maple has resprouted and is coming back in very heavily- need to re-evaluate stand for additional treatment. SJT (Stand was underburned in april of 2004 under FTP C72-452.)</p> |
| 21 | 4130 - Aspen | Sapling Medium | 20.3 | 4 | Immature | <p>Stand harvest under 72-031-13-01 in summer of 2015. Stand is regenerating to a mix of aspen and red maple with some oak. Density is not consistent over the entire area. Red Pine aspen cleanup. Kotar classification for this stand is PArVha/PArVVb.</p> <p>OPIC - FMD: 2008 Notes: Mature Aspen stand mixed with mature Oak and Red Maple. Some scattered Red Pine. Recommend final harvest with stand 57. Manage for Aspen. Stand will be Aspen and Red Maple mix in the furture. Leave a 1 acre patch for retention.</p> |
| 22 | 4126 - White, Black, N. Pin Oak | Sawtimber Well | 9.6 | 85 | 81-110 | <p>Mixed stand of oaks, red maple and re pine. stem quality is fair and primarily loy size. Understory is red maple and shrub of low to medium density. Stand health does appear to be good Three BA swings were taken with stand average of 110. Kotar classification for this stand is PArVha/PArVVb. Red pine plantation will only be for one rotation.</p> <p>OPIC - FMD: 2008 Notes: Mature Oak stand mixed with Red Maple. Recommend underburn and manage for Oak. Underburn over the next 10 yearsrs 2-3 years apart to eliminate Red Maple. ORV trail traverses through the north part of the stand.</p> |
| 23 | 42210 - Natural Red Pine | Sawtimber Well | 41.6 | 81 | 111-140 | <p>Mature red pine stand with maple and son oak in the understory. Stand health looks good and stem quality is above average. The re is a fair am out of 18" plus diameter stems. Four BA swings taken with stand average of 123. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: OI Stand Year Origin was 1938</p> |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|--|---------------------|-------|--------------|-------------|---|
| 24 | 4199 - Other Mixed Upland Deciduous | Poletimber Well | 9.9 | 58 | 81-110 | Pole sized stand with oak, red maple and aspen as primary species. There is scattered red and white pine. Oak and maple clump sprout origin and still multi stemmed. Some scattered log sized stems. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: Red Maple, Oak Aspen stand mixed. Some larger Red Maple and Oak, but pole timber is dominant. About 1/2 Oak and 1/2 Red Maple. Recommend no treatment this entry year. If harvest is feasible, could cut out the Red Maple and Aspen within the stand. |
| 25 | 42210 - Natural Red Pine | Sawtimber Medium | 31.4 | 79 | 1-50 | <p>Healthy stand with fair quality. Understory is not real dense and made up of hardwood species. Monitoring treat on stand will leave on. Stand was harvested in 2011 under Mr Limpett Mix. Stand was marked down to a residual BA of 46 for red pine, all jack pine, aspen and red maple were removed. Four BA swings with stand average of 68. Red Pine average BA of 48. Fifty inch ORV trail runs through stand. Kotar classification for this stand is PArVha/PArVVb.</p> <p>OPIC - FMD: 2008: Red Pine dominant overstory stand with a mix of understory species of various age classes. Recommend underburn first and followed by a shelterwooe prep cut. Residual of 40-50 BA. ORV trail traverses through this stand.</p> <p>1988: SIMILAR TO ADJACENT RP STANDBUT WITHOUT STRONG UNDERSTORY. EVIDENCE OF PAST SPITTLEBUG DAMAGE 2009: Variance filed to harvest stand before burning instead of burning prior to harvest. Variance approved on 11/20/2009. P.M. 9/2/11 stand treated under Mr Limpett Mix 72- 034-10-01.</p> |
| 26 | 4126 - White, Black, N. Pin Oak | Sawtimber Well | 32.6 | 93 | 111-140 | Mixed oak stand of fair quality stems. Three BA swings were take with stand average being 87. Understory is made up primarily of red maple of varying sapling heights. Oaks are primarily less than 5 feet and spotty. Also a moderate presences of oak seedlings that are again scattered in groups. Stand was harvested in 2000 under contract 72-002-00-01, North 32 Oak. Stand BA was marked down to 70 BA and all aspen and maple were removed. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: Mature Oak stand that was thinned last entry year. (2001 cut) 72-002--00-01 North 32 Oak. 1988: CUT TO 30-50 FT - MANAGE FOR OAK. 1998: RECOMMEND A THINNING, REMOVING 40 B.A. AND LEAVING A RESIDUAL OF 70 B.A. (NORTH 32 OAK SALE - 720020001 |
| 27 | 4130 - Aspen | Sapling Medium | 29.7 | 9 | Immature | <p>Stand was harvested in 2010. Large slash pile was left on landing. Several attempts have been made to try and get pile removed. Moderate oak stump sprouting as well as cherry sprouts. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: Aspen stand with an super canopy of scattered Red Pine. Recommend final harvest and manage for Aspen. Could cut or leave Red Pine. Check with Wildlife and the Silviculturalist. No retention is recommended due to sufficient diversity already present on landscape.</p> <p>1998: STAND ORGIN IS A RESULT OF THE FLETCHER FIRE 1968</p> |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|---|--------------------|-------|--------------|-------------|--|
| 28 | 42120 - Planted Jack Pine | Poletimber Well | 72.8 | 39 | 1-50 | Planted jack pine of small pole large sapling sized trees. Scattered oak and aspen. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 1988: PLANTED WITH J3 BUT HEAVY ENCROACHMENT OF ASPEN SAPS AND OAK SAWLOGS. 1998: JACK PINE PLANTATION 1980. SCATTERED OAK SAWTIMBER AND SOME ASPEN THROUGHOUT THE STAND. APPROXIMATELY 10 B.A. |
| 29 | 42220 - Natural Jack Pine | Poletimber Well | 38.8 | 49 | 81-110 | Planted jack pine with some log sized re and white pine as well as oak. These log species are primarily located south central area surrounding a watered depression. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: Jack Pine plantation (immature stand but does have basal area). Still calling the stand a J3, however the stand could be called a J6 (4"dia and 1 stick tall). |
| 30 | 4311 - Pine, Aspen Mix | Poletimber Well | 30.1 | 36 | 81-110 | Pole sized jack pine stand with scattered pockets of aspen and other hardwood species. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008: HEAVY ENCROACHMENT OF ASPEN OAK AND CHERRY SAPS. Pocket of Aspen throughout portions of the stand. |
| 31 | 4191 - Mixed Upland Deciduous with Conifer | Poletimber Well | 40.3 | 32 | 51-80 | Merge stand with stand 62. Mixed stand of hardwoods with a good red pine component. Majority of hardwoods are clump sprouts and looking healthy. Oak has a modified age as at there is a fair component of long sized stems. Not much of an understory, what is there 7 hardwood. Three BA swings taken with stand average of 100. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 1988: CUT EVERYTHING BUT RED PINE AND OAK UNDER 4 INCHES. 1998: STAND WAS CUT IN 1991. STAND NOW HAS CONVERTED FROM RED PINE IN LAST UPDATED INVENTORY TO AN OAK STAND WITH SCATTERED RED PINE AND ASPEN. |
| 32 | 42120 - Planted Jack Pine | Sapling Well | 25.2 | 35 | Immature | Young jack pine stand with scattered oak logs. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 1988: HEAVY ENCROACHMENT OF ASPEN OAK AND CHERRY IN SPOTS. 1998: OAK AND ASPEN SAPLINGS MIXED. |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|--|---------------------|-------|--------------|-------------|--|
| 33 | 4112 - Maple, Beech, Cherry Association | Sapling Well | 14.3 | 6 | Immature | <p>Stand was final harvested under 72-032-10-01 Olive Oak. Stand has come back primarily to red maple with some oak, aspen and cherry.</p> <p>OPIC - FMD: 2008: Mature Oak stand last treated in 1991. Recommending a final harvest in hopes of getting some Oak stump sprout back. Immature Red Maple already established. Protect the Gypsy Moth Survey plots within the stand (Do not cut these trees). This should also take care of the retention that is needed for the stand.</p> <p>1988: MANAGE FOR SAWLOGS. THIN TO 70 SQ FT. CREATE SMALL ASPEN CLEARCUT UNITS. 1998: STAND WAS CUT IN 1991. GYPSY MOTH SURVEY PLOTS IN THE STAND.</p> <p>I spoke with Roger Mech about the gypsy moth survey plots and he said that they are no longer being used and that they are able to be included in the sale. I have put sufficient retention in the sale area. P. Mohnhey. 7/19/2010.</p> |
| 34 | 4199 - Other Mixed Upland Deciduous | Poletimber Well | 14.5 | 28 | 1-50 | <p>Small diameter mixed stand of aspen, oak and maple. pole/sapling sized. OPIC - FMD: 2008 Notes: Immature stand of mixed species. Species include Aspen, Red Maple and Oak. Stand was last harvested in 1991.</p> <p>1988: CUT - ALLOW STRONG OAK AND MAPLE UNDERSTORY TO DEVELOP. DO NOT CUT RED PINE. 1998: CUT IN 1991. JACK PINE SNAGS DOWN AND STANDING THROUGHOUT STAND INCLUDING OLD TOPS.</p> |
| 35 | 4130 - Aspen | Sapling Well | 25.3 | 28 | Immature | <p>Young aspen stand with good stem density. Kotar classification for this stand is PARVha/PArVVb. OPIC - FMD: 1988: THIS STAND REPRESENTS THE ASPEN CLONES TO BE CLEARCUT W/IN STD 39. 1998: STAND WAS CUT IN 1991.</p> |
| 36 | 4125 - Black, N. Pin Oak | Sawtimber Medium | 15.7 | 94 | 51-80 | <p>Basal area roughly 65 of a mix of oak and white pine. Stumps are sprouting and white pine is seeding in. There is also some aspen found along edges. Deer are browsing on stump sprouts. Monitoring treatment is on this stand Leaving treatment on. Stand was shelterwooded in 2011 under 72-035-10-01 Variable Treatment Oak, all trees greater than 4" were removed. White pine was left as well as some oak. Kotar classification for this stand is PARVha/PArVVb. OPIC - FMD: 2008 Notes: Mature Oak stand. Recommend shelterwood seed tree cut (40% Crown closure -mark to leave). Cut all Red Maple, but leave the White Pine within the stand. Cutting will be similar to cutting to the west that was done last entry year. Should get the same results in regeneration as the stand that was treated last entry year. (Oak stump strouts, Red Maple regeneration and possibly some White Pine and Aspen regeneration. A small part of an ORV trail traverses through the southwest portion of the stand. Do not cut ORV trail marked trees and keep trail cleared at all times.</p> <p>1988: THIN TO 70 - 90 SQ FT. 1998: THINNED IN 1991. PERECHENEY SAND SOIL TYPE.</p> |



| Stand | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|-------|---------------------------------|-----------------|-------|-----------|----------|--|
| 37 | 4122 - Oak, Pine | Sawtimber Well | 100.3 | 94 | 51-80 | <p>Stand is a mixed oak and white pine. Some scattered red pine as well. BA varies depending on how much residual pine that was left. Understory has a good presence of white pine along with clump maple and oak sprouts. There is also a good presence of single stem oak and maple regen. There is also some aspen and deciduous shrub as well. Eight BA swings were taken with stand average of 86. Hybrid oak average BA of 55. white pine BA is 23. white oak BA of 9. Stand was cut in 2001 - 2002 under contract 72-043-00-01. Stand was marked down to 38 BA. All maple, aspen, oak and jack pine not marked were cut, red and white pine were left. Kotar classification for this stand is PARVha/PARVVb. OPIC - FMD: 2008 Notes: Mature Oak stand with scattered White Pine throughout it. Stand was shelterwood seed cut (405 Crown closure with White Pine left).</p> <p>1988: BEGIN PATCH CUTS IN 10 YRS. 1998: GROUP SELECTION(PATCH CUTS) PRESCRIBED. CHANGED PRESCRIPTION TO 40% CROWN CLOSURE. (Timber Sale #72-043-00-01 End Oak. Completed 11-21-2002.) 690</p> |
| 38 | 4130 - Aspen | Poletimber Well | 12.4 | 38 | 111-140 | <p>Young aspen stand cut in 1981. Red maple and oak also present good stem density. Kotar classification for this stand is PARVha/PARVVb. OPIC - FMD: Immature Aspen stand. Stand has some Oak and Red Maple within it also.</p> |
| 39 | 4126 - White, Black, N. Pin Oak | Sawtimber Poor | 33.9 | 92 | 51-80 | <p>Stand was shelterwood in 2011 under 72-035-10-01 Variable Treatment Oak, all trees greater than 4" were removed. White pine was left as well as some oak.</p> <p>Clump maple and oak sprouts with some deciduous shrubs Aspen coming in all edges. Monitoring treatment on stand. Oak will be a component of next stand but less than 30-40% of stand. Accept regen of a mixed stand of maple and oak. Hold R r another 10yrs. Three BA swings taken with stand average of 52. Kotar classification for this stand is PARVha/PARVVb.</p> <p>OPIC - FMD: 2008 Notes: Mature Oak stand. Recommend shelterwood seed cut. (40% crown closure.) Would have final harvested stand, but stand borders Roscommon County and treatment are heavy across from the stand in the south. Should hopefully get stump sprouts from Oak, but stand will probably become a mixed stand of Red Maple, Aspen and Oak for regeneration.</p> <p>1988. THIN TO 70 - 90 SQ FT - MANAGE FOR SAWLOGS. HEAVY WOOD THEFT 1998: THIN STAND IN TEN YEARS.</p> |
| 41 | 4130 - Aspen | Poletimber Well | 22.2 | 38 | 51-80 | <p>Nice aspen stand hold for another 10 or 20 years. Stand is primarily pole sized with a few log stems scattered about. Stand looks health with no signs of fungus on stems. Stand was harvested in 1981. there is scatter oak of log size. Kotar classification for this stand is PARVha/PARVVb. OPIC - FMD: OI Stand Year Origin was 1981</p> |
| 42 | 4125 - Black, N. Pin Oak | Sawtimber Well | 6.8 | 94 | 111-140 | <p>Oak stand where it appears all aspen and maple were removed in 1991. Some oak were removed as well. Two age as aspen and red maple have regenerated well, large sapling small pole. Oak BA roughly 60 and aspen and maple roughly 50. Kotar classification for this stand is PARVha/PARVVb. OPIC - FMD: 2008 Notes: Small mature Oak stand. Could treat the stand the same way as stand 33 with a final harvest or could just leave the stand for sort of big tree management. Check with silviculturalist and wildlife biologist. Snowmobile trails traverses through the stand. 1998: STAND WAS CUT IN 1991. PERECHENY SAND SOIL TYPE.</p> |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|------------------------------------|--------------------|-------|--------------|-------------|---|
| 43 | 4310 - Pine, Oak Mix | Sawtimber Well | 15.4 | 84 | 111-140 | <p>Stands appears to has had all hardwoods removed leaving all red pine. Red pine in dominate canopy position with some oak, co-dominate is primarily red maple along with oak and some aspen. Understory is well developed with large sop small pole size stems. three BA swings were taken with stand average of 125, with red pine average of 75, oak 25 and red maple of 25. Kotar classification for this stand is PARVha/PARVVb.</p> <p>Red pine plantation will only be for one rotation.</p> <p>OPIC - FMD: OI Stand Year Origin was 1945</p> |
| 44 | 42210 - Natural Red Pine | Sawtimber Well | 19.9 | 79 | 81-110 | <p>Red pine stand of log and Xlog size trees. Stand is healthy and of fair quality. Fifty inch ORV trail goes through stand Understory is a mix of hardwood stem ranging from sapling to small pole and heights from 5 t to 40 ft. Four BA swings stand average of 83. Kotar classification for this stand is PARVha/PARVVb. OPIC - FMD: 2008 Notes: Red Pine stand with a mix of hardwood underneath and some scattered hardwoods in the canopy level. Two aged stand which probably resulted from the Fletcher Road Fire. ORV trafil runs through a portion of the stand.</p> |
| 46 | 4130 - Aspen | Sapling Well | 4.8 | 28 | Immature | <p>Young aspen stand harvested in 1991, one of several small aspen cuts within the unit. Red maple and some oak is also present. Kotar classification for this stand is PARVha/PARVVb.OPIC - FMD: 1998: USED OLD SITE INDEX.</p> |
| 50 | 4310 - Pine, Oak Mix | Sapling Well | 17.2 | 12 | Immature | <p>Stand has naturally regenerated to white pine with oak and maple clumps. Some scattered red pine seeded in. Does not appear to have been planted to red pine. Stand was cut in 2004 - 2006 under contract 72-003-04-01. Old notes indicate it was supposed to be replanted to red pine under FTP C72-561. This was a final harvest. Kotar classification for this stand is PARVha/PARVVb.OPIC - FMD: 2008 Notes: Stand was final harvested last entry year. Contract 720030401 Powerline Oak. Prison crew cut. Stand is now a mix of Oak, White Pine and Red Maple. Immature. Stand was to be planted to Red Pine last entry year, but didn't occur.</p> |
| 54 | 4126 - White, Black, N. Pin Oak | Poletimber Well | 23.9 | 65 | 111-140 | <p>Mixed oak Stand with a good component of white pine and red maple. Poor to fair quality of good health. Understory mixture of hard wood species and pine. ORV trail runs through stand. Four BA swings with stand average of 123. Hybrid oak average BA of 55, white oak 25, white pine 23, and red maple of 13. Evidence of a raised road bed, could be remnants of an old railroad grade. Kotar classification for this stand is PARVha/PARVVb. OPIC - FMD: 2008 Notes: Oak stand with a mix of White Pine in the overstory and understory. Recommend no harvest this entry year. Hold another 10 years.</p> |



| Stand | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|-------|--|------------------|-------|-----------|----------|---|
| 55 | 4126 - White, Black, N. Pin Oak | Sawtimber Well | 6.8 | 90 | 81-110 | <p>Stand was cut in 2004 - 2006 under contract 72-003-04-01. Stand was marked down to 75 BA. Three BA swings were taken with Stand average of 90. Park like understory. Kotar classification for this stand is PArVha/PArVVb.</p> <p>OPIC - FMD: 2008 Notes: Stand was treated last entry year. It was thinned to 70 BA. Contract 720030401 Powerline Oak. Prison crew cut. A mature Oak stand with some Red Maple. Recommend doing nothing with the stand at this time. A portion of ORV trail traverses through the stand. 1998: HERBICIDE TO CONTROL RED MAPLE REGENERATION. THIN TO 70 BA.</p> |
| 56 | 42110 - Planted Red Pine | Sawtimber Medium | 25.2 | 79 | 51-80 | <p>This treatment was approved through a variance on 8-24-2016, corresponding timber sale # of 72-050-17-01. Stand was harvested under contract 72-032-10-01.</p> <p>OPIC - FMD: 2008 Notes: Red Pine stand mixed with Red Maple and Aspen in the understory. Recommend removing all Aspen and Red Maple and then underburning the Red Pine in the hopes of getting natural Red Pine regeneration. Full tree skidding permissible in this stand. Will except 40% red pine with the balance to be a mixture of other species. Wait to assess regeneration in ten years.. Leave a one acre patch for retention.</p> |
| 57 | 4126 - White, Black, N. Pin Oak | Sawtimber Well | 13.3 | 94 | 111-140 | <p>Stand is dominated by hybrid oak and white oak with some red pine. Stand residual resembles treatment description. Understory is a mix of red maple, oak, shrub and some aspen along edges. Some red pine was present as seedlings. Three BA swings taken with stand average of 65. Pretty good evidence of deer browse. Stand was harvested in 2000 under contract 72-002-00-01, North 32 Oak. Stand BA was marked down to 70 BA and all aspen and maple were removed. Kotar classification for this stand is PArVha/PArVVb. Red pine plantation will only be for one rotation.</p> <p>OPIC - FMD: 2008 Notes: Mature Oak stand with some Red Pine within the stand. Thinned to 70 BA last entry year and underburned. Prescribe burn with leaf on to hopefully set back the Red Maple competition again. Hope is to encourage Oak stump sprouts, but will except an mix of regeneration.</p> <p>1998: THIN STAND TO 70 B.A. 2000-2001: STAND WAS THINNED (NORTH 32 OAK SALE - 720020001). Stand was underburned 4/23/04 to set back red maple seedlings that were 1-3 inches high, remove grasses and duff in attempt to improve oak seedling regeneration and oak sprouting. See FTP C72-453. (Stand was underburned in april of 2004 under FTP C72-453.)</p> |
| 59 | 4191 - Mixed Upland Deciduous with Conifer | Poletimber Poor | 16.0 | 37 | 1-50 | <p>You my stand of varying stem density and species. Red, white, and jack pine are present. Red and white primarily open grown log form, while jack pine is pole/sapling, at so open grown. Hardwood species include oak, aspen, cherry and red maple. Some oak in log size but mostly, pole/sapling. All other species pole/sapling. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: Immature Oak stand mixed with Red Maple and Cherry Brush.</p> |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|---|--------------------|-------|--------------|-------------|--|
| 61 | 4191 - Mixed Upland Deciduous with Conifer | Poletimber Well | 15.8 | 37 | 81-110 | Stand is two aged, stand was clearcut in 1981 removing all stems greater than 4", however, white pine was not cut. White pine is a mixture of log and pole sized stems of various ages so provided rough estimate of 65 yrs. Hardwood component is result of clump sprouts that are both pole and sapling size. Fair amount of shrubs in understory as well. Kotar classification for this stand is PArVha/PArVVb.OPIC - FMD: 1998: STAND CONTAINS 10 B A OF WHITE PINE POLETIMBER LEFT FROM PREVIOUS CUT IN 1981. |
| 63 | 4191 - Mixed Upland Deciduous with Conifer | Sapling Well | 18.9 | 28 | Immature | Young Mixed stand of jack pine, aspen, oak and maple. Jack pine is concentrated in the southern portion of stand. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 1998: SCATTERED JACK PINE TOP LEFT FROM PREVIOUS •SALE (DECAYING) |
| 66 | 4126 - White, Black, N. Pin Oak | Poletimber Well | 18.3 | 27 | 1-50 | Stand has a low density of small pole sized stems. Species average diameter takes into account regen and residual less than 8". Monitoring treat on stand, stand has good regen of both oak and red maple, however, oak is not tall enough to be evaluated. Going to leave treatment on stand. North end of stand has a greater presence of pole sized stems. Stand was harvested under contract 72-033-10-01 in 2012. Removed Jack, Red and White Pine and all Oak over 8 inches. Protect all Oak under 8 inches. Kotar classification for this stand is PArVha/PArVVb.OPIC - FMD: 2008 Notes: A mixed stand of species. Oak being the dominant species. Stand has White Pine, Jack Pine, and Red Pine scattered through out the stand. An O2 understory Recommend an overstory removal of all Jack, Red and White Pine and all Oak over 8 inches. Protect all Oak under 8 inches. Leave a one acre patch for retention within the stand. |
| 67 | 42200 - Natural White Pine | Sawtimber Well | 10.3 | 94 | 111-140 | White pine stand with some scatters red pine and oak. Overstay log to Xlog size and appears in good health. Well developed understory of red maple clump and Single stem. Some oak and aspen found within the understory. Three BA swings with stand average of 75. Evidence of a raised road bed, could be remnants of an old railroad grade. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008 Notes: White Pine/Red Pine stand with an M3 understory. |
| 69 | 4191 - Mixed Upland Deciduous with Conifer | Poletimber Well | 10.4 | 38 | 81-110 | Mixed stand harvested in 1981, many open grown stems. Kotar classification for this stand is PArVha/PArVVb.OPIC - FMD: 2008 Notes: Immature M3 stand. Last harveted when stand 42 was harvested. |
| 70 | 4130 - Aspen | Poletimber Well | 10.8 | 37 | 81-110 | Nice aspen stand that will be ready to treat during the next inventory cycle. Kotar classification for this stand is PArVha/PArVVb. OPIC - FMD: 2008: HEAVY ENCROACHMENT OF ASPEN OAK AND CHERRY SAPS. Pocket of Aspen throughout portions of the stand. |

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Grayling Mgt. Unit

Report 7 – Forested Stands

Compartment: 193
Year of Entry: 2020



| Stand | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|-------|--------------------------|----------------|-------|-----------|----------|---|
| 73 | 42210 - Natural Red Pine | Sawtimber Well | 14.9 | 87 | 81-110 | <p>Red Pine stand of log/xlog stems, health of stand looks good. Three BA swings taken with stand average of 90, red pine BA was 76.. There is scattered oak throughout. Understory primarily red maple and shrub of medium density. Monitoring treatment on stand with natural red pine as objective. Old notes had fire purposed however, no evidence of fire Stand was harvested in 2011 under Mr Limpett Mix. Stand was marked down to a residual BA of 36 for red pine, all jack pine, aspen and red maple were removed. Kotar classification for this stand is PArVha/PArVVb.</p> <p>OPIC - FMD: Red Pine stand with an M3 understory. Recommend shelterwood cut following an underburn first to set back the Red Maple. Treat with stand 25. approved burn with variance on 7/30/10. 9/2/11 stand treated under Mr Limpett Mix 72-034-10-01.</p> |



| Stand | Cover Type | Acres | Managed Site | General Comments: |
|-------|---------------------------|-------|--------------|--|
| 18 | 110 - Low Intensity Urban | 5.0 | No | Dirt road and powerline. |
| 414 | 31029 - Grass (OI) | 0.9 | Yes | Manage as wildlife opening. Kotar classification for this stand is PARVha/PArVVb. OPIC - FMD: MAN-MADE OPENING - NEED TO CONTROL SWEET FERN AND ESTABLISH GRASS |