



Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32004

Entry Year 2018

Acreage: 1,389

County Marquette

Management Area: Dead Horse Moraines

Revision Date: 2016-10-12

Stand Examiner: Kevin LaBumbard

Legal Description:

T45N, R23W, Sections 19, 30, 31

Identified Planning Goals:

Improve the quality of the Northern Hardwoods stands through selective management while maintaining species diversity, (including the conifer content) and den trees for wildlife. Considerations for species diversity, coarse woody debris, and BMP's will be included with every harvest plan.

Soil and topography:

Terrain is relatively level to gently rolling, with sandy ridges suddenly rising from the lowlands. Soils range from organics and mucks in the bog areas to well drained sands. Major soil associations include: Carbondale-Lupton-Rifle-Tacoosh-Angelica, and Rubicon-Croswell-Tawas ad Kinross.

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

This compartment is primarily boarded by additional state land, but private ownership lies adjacent especially to the north and south.

Unique Natural Features:

Archeological, Historical, and Cultural Features:

No concerns.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

This compartment lies on the break between the Chocolay River and Whitefish River watersheds. The northern portion of this compartment contains many small springs which combine to produce the headwaters of the Chocolay River. The southern portion drains to Sucker Creek. No treatments are proposed near any surface water at this time. As always best management practices should be used when working around surface water.

Wildlife Habitat Considerations:

Compartment 004 is found within the Dead Horse Moraines Management Area; on Ground Moraines in southeastern Marquette, southwestern Alger, and northwestern Delta Counties. The dominant Natural Communities are poor conifer swamps, mesic northern forests, and dry northern forests. Major forest cover types include Northern Hardwood, Aspen, and Mixed Lowland Conifer. This management area contains a large proportion of hardwood forest which regenerates well partly due to the heavier snow cover and lower deer numbers than the southern portion of this Management Area. The most significant wildlife management issues in the management area are: mast (hard and soft); mature forest (upland deciduous, especially aspen and mixed forest with little understory); coarse woody debris, early successional forest, and deer wintering complexes.

The following have been identified as featured species for the Dead Horse Moraines Management Area: black bear, pileated woodpecker, ruffed grouse, and white-tailed deer.

Mineral Resource and Development Concerns and/or Restrictions

Sections 19, 30 & 31, T45N-R23W, Marquette County. Surface sediments consist of medium-textured glacial till. The glacial drift thickness varies between 10 and 50 feet. The Ordovician Prairie du Chien Group subgroups below the glacial drift. This formation could be used for stone. A gravel pit is located in section 31 and potential appears to be good on uplands. Abandoned iron mines are located nine miles to the west. This compartment has not been leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access:

Vehicle access to the compartment is poor, with much of the access blocked by private ownership. Existing roads are built on heavy, poorly drained loams, which limits most land management activities to the winter months. Stack Grade needs grading and fill in low spots. A few culverts need replacing. Should be winter only for harvesting and hauling equipment with surrounding wetlands and wet soils.

Survey Needs:

none needed at this time.

Recreational Facilities and Opportunities:

Recreation opportunities in compartment 4 are fairly poor due to the poor access. In addition, this area receives a very heavy snowfall, further limiting access except for snowshoeing or backcountry skiing. Hunting success for ruffed grouse and whitetail deer is only fair.

Fire Protection:

This compartment has a low risk for wildfire.

Additional Compartment Information:**The following reports from the Inventory are attached:**

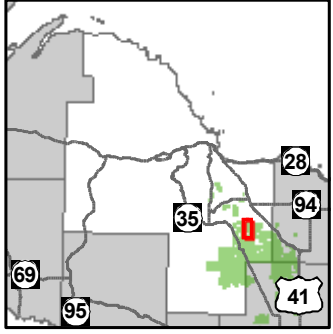
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

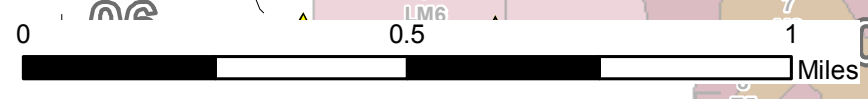
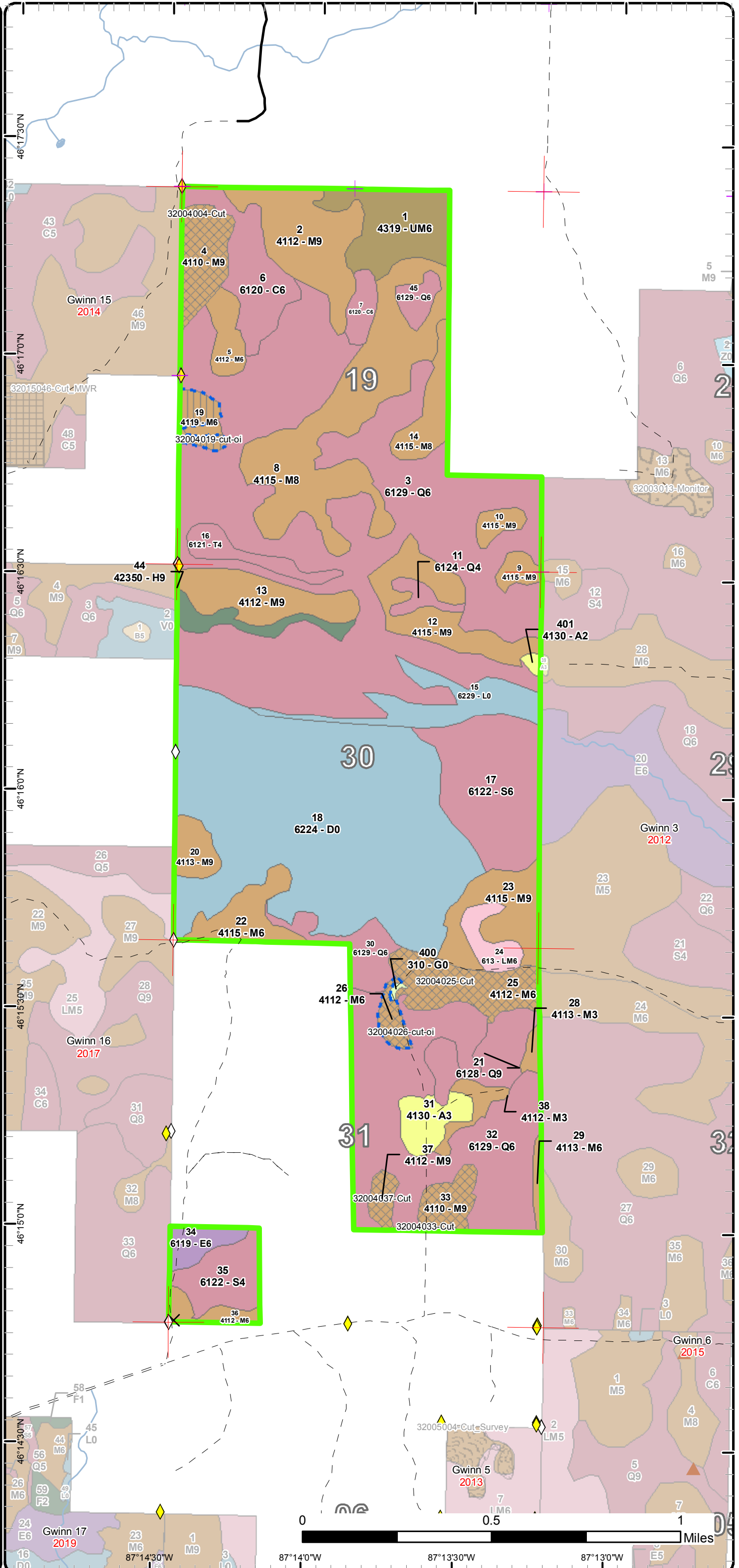
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 4
 T45N, R23W, Sec. 19, 30, 31
 County: Marquette
 Unit: Gwinn
 Mgmt Area: Dead Horse Moraines
 YOE: 2018
 Acres: 1388.9 GIS Calculated
 Examiner: Kevin LaBumbard
 Map Revised: 2/8/2017
 Map Phase: Post-Review



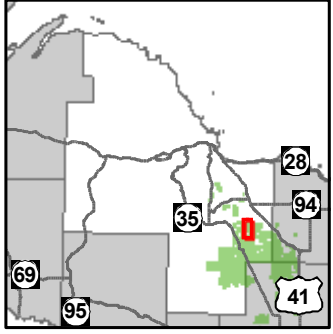
- Miris Corners
- Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- ✕ Gate
- ▲ Berms
- Paved Roads
- Gravel Roads
- Poor Dirt Roads
- Rivers
- Compartment Boundary
- Treatments with Site Conditions
- ▨ Selection (Group, Single Tree)
- ▨ Shelter Wood (w/Reserves)
- 411 - Northern Hardwood
- 413 - Aspen Types
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 310 - Herbaceous Openland
- 622 - Lowland Shrub
- Lakes



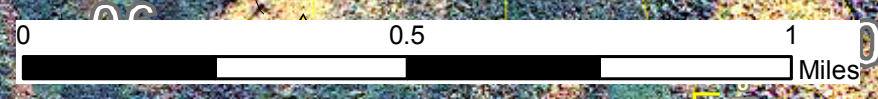
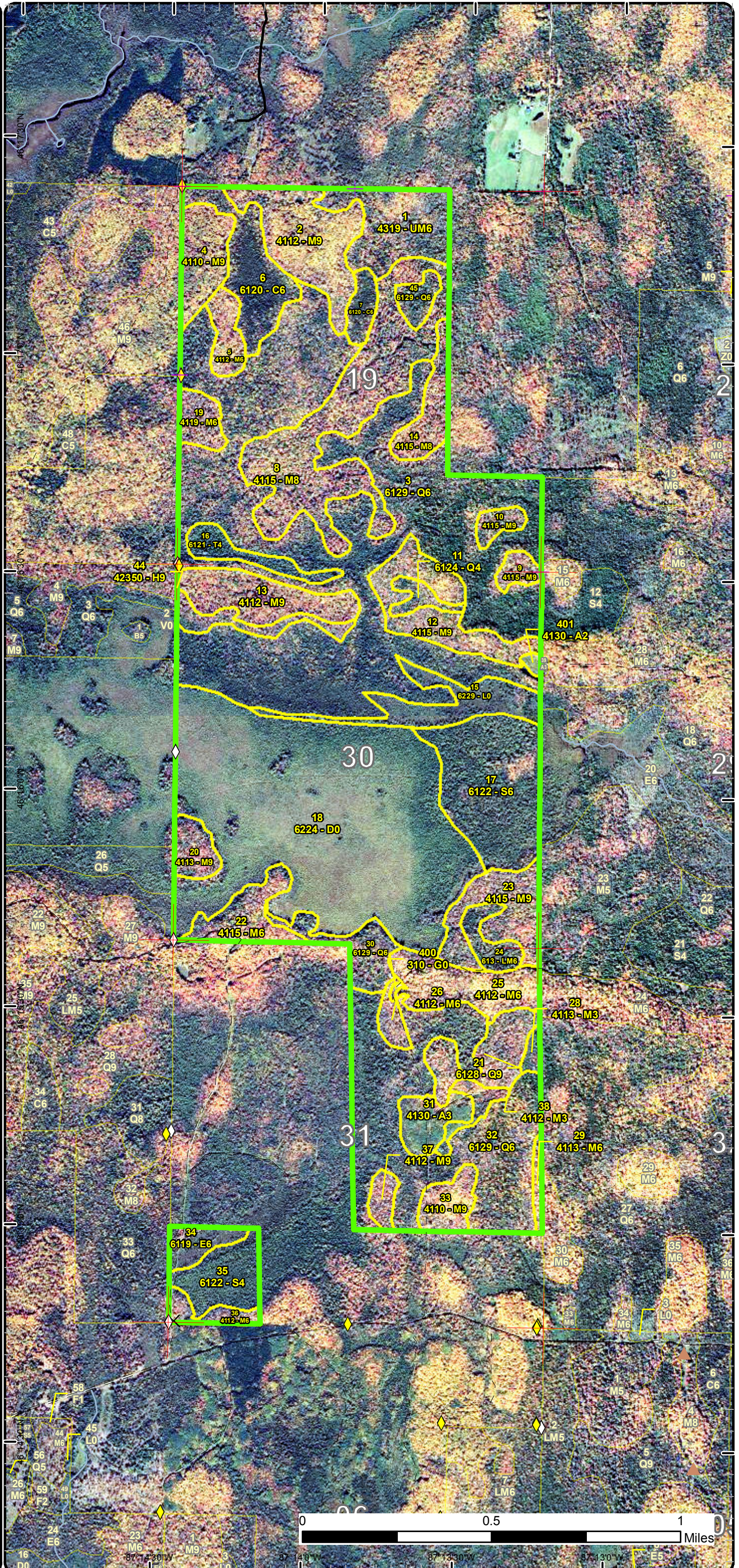
87°14'0"W 87°13'30"W 87°13'0"W

Stand Boundary Map

Compartment: 4
 T45N, R23W, Sec. 19, 30, 31
 County: Marquette
 Unit: Gwinn
 Mgmt Area: Dead Horse Moraines
 YOE: 2018
 Acres: 1388.9 GIS Calculated
 Examiner: Kevin LaBumbard
 Map Revised: 2/8/2017
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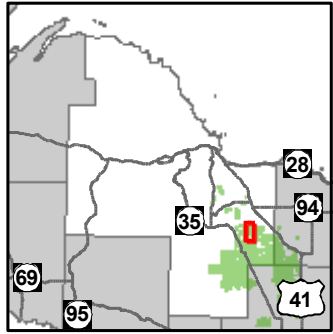


- Miris Corners
- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- X Gate
- ▲ Berms
- Paved Roads
- Gravel Roads
- - Poor Dirt Roads
- Rivers
- Compartment Boundary
- Stand Boundaries
- 411 - Northern Hardwood
- 413 - Aspen Types
- 423 - Other Upland Conifers
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- 611 - Lowland Deciduous Forest
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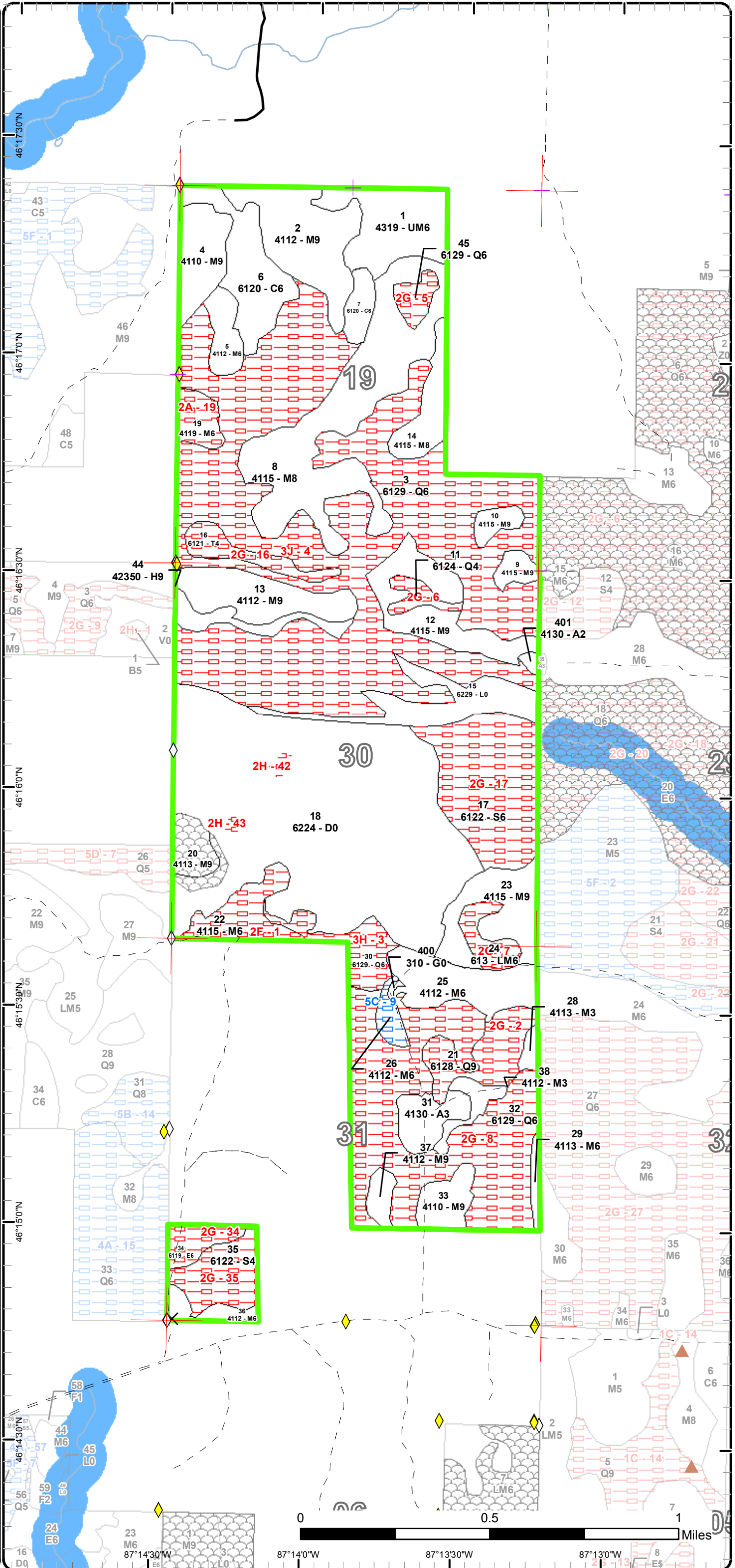


Special Conservation Areas & Site Conditions Map

Compartment: 4
 T45N, R23W, Sec. 19, 30, 31
 County: Marquette
 Unit: Gwinn
 Mgmt Area: Dead Horse Moraines
 YOE: 2018
 Acres: 1388.9 GIS Calculated
 Examiner: Kevin LaBumbard
 Map Revised: 2/8/2017
 Map Phase: Post-Review



- Miris Corners
- Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- ✕ Gate
- ▲ Berms
- Paved Roads
- Gravel Roads
- Poor Dirt Roads
- Rivers
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2A: Adjacent landowner denied access
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3H: Deer Wintering Areas
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Cold Water Streams
- High Priority Trout Stream Buffer



Report 1 – Total Acres by Cover Type and Age Class

Gwinn Mgt. Unit

Compartment 4

Year of Entry 2018

Kevin LaBumbard : Examiner



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 | 2 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| Cedar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 |
| Hemlock | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| Herbaceous Openland | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Lowland Conifers | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 482 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 505 |
| Lowland Deciduous | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| Lowland Mixed Forest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| Lowland Shrub | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| Lowland Spruce/Fir | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 |
| Northern Hardwood | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 357 | 393 |
| Tamarack | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| Treed Bog | 246 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 246 |
| Upland Mixed Forest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| Total | 276 | 0 | 2 | 24 | 0 | 0 | 0 | 0 | 6 | 589 | 93 | 21 | 0 | 0 | 0 | 0 | 0 | 380 | 1390 |



Report 2 – Treatment Summary

Gwinn Mgt. Unit

Compartment 4

Year of Entry: 2018

Acres of Harvest

Total Compartment Acres: 1,389

Commercial Harvest - 68
 Harvests with Site Condition - 14
 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 |
|-------------------|--------------|----------|-----------|----------------|-----------|-------------|----------|-------------------|----------|----------|-------------|
| Northern Hardwood | | 0 | 74 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 82 |
| | Total | 0 | 74 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 82 |

Proposed and Next Step Treatments by Method

| | | Harvest | Site Prep | Planting | Seeding | Burning | Pesticide | Monitoring | Other | Non-Forest Mgt. | Total Acres |
|-----------|--------------|-----------|-----------|----------|----------|----------|-----------|------------|----------|-----------------|-------------|
| Current | | 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 82 |
| Next Step | | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 0 | 0 | 74 |
| | Total | 82 | 0 | 0 | 0 | 0 | 0 | 74 | 0 | 0 | 155 |



| 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 |
|-----------------------|-------------------|-------|-----------------------------------|-------------------|--------------|-------------|-------------------|--------------------------|----------------------------|------------------|-------------------------|
| 4 | 32004004-Cut | 20.5 | 4110 - Sugar Maple Association | Sawtimber Well | 100 | 111- 140 | Harvest | Single Tree Selection | 411 - Northern Hardwood | Uneven- Aged | Draft Field Boundary |

Habitat Cut: No**Site Condition:**

Prescription Individual tree selection of poorer quality trees retaining most of the minor species component of the stand. Favor yellow birch, cherry, retain
Specs: hemlock, cedar, white pine if present. Reduce BA to 70-90, target 80.

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

Acceptable Sugar maple, red maple.
Regen:

Other Favoring black cherry-Black Bear, Ruffed Grouse and keeping all cedar, hemlock if present -Deer
Comment:

Proposed Start Date: 10/01/2017

| | | | | | | | | | | | |
|----|---------------------|-----|------------------------------------|--------------------|-----|--------|---------|-------------|--------------------------------------|--|-------------------------------|
| 19 | 32004019-cut- oi | 7.9 | 4119 - Mixed Northern Hardwoods | Poletimber Well | 100 | 81-110 | Harvest | Shelterwood | 41199 - Northern Hardwood (OI) | | Terminated - Pending Edits |
|----|---------------------|-----|------------------------------------|--------------------|-----|--------|---------|-------------|--------------------------------------|--|-------------------------------|

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

Prescription OPIC - FMD: M6M7, Pockets of S, F, H. Originally contract marked and sold in 1999, this sale was taken back by the State and reassigned in
Specs: 2004. The stand is fair quality hardwood, mostly soft maple with pockets of spruce, fir, and hemlock. Access wil

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2007

| | | | | | | | | | | | |
|----|--------------|------|---|--------------------|-----|--------|---------|--------------------------|----------------------------|-----------------|-------------------------|
| 25 | 32004025-Cut | 29.2 | 4112 - Maple, Beech, Cherry Association | Poletimber Well | 180 | 81-110 | Harvest | Single Tree Selection | 411 - Northern Hardwood | Uneven- Aged | Draft Field Boundary |
|----|--------------|------|---|--------------------|-----|--------|---------|--------------------------|----------------------------|-----------------|-------------------------|

Habitat Cut: No**Site Condition:**

Prescription Individual tree selection of poorer quality stems retaining most of the minor species component of the stand. Favor yellow birch, cherry, retain
Specs: hemlock, cedar, white pine if/where present. Reduce BA to 70-90, target 80.

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

Acceptable All hardwoods, hemlock.
Regen:

Other Keeping all cedar, hemlock if present -Deer
Comment:

Proposed Start Date: 10/01/2017

| | | | | | | | | | | | |
|----|---------------------|-----|---|--------------------|----|-------------|---------|-----------------|--------------------------------------|--|-------------------------|
| 26 | 32004026-cut- oi | 5.6 | 4112 - Maple, Beech, Cherry Association | Poletimber Well | 78 | 111- 140 | Harvest | Group Selection | 41199 - Northern Hardwood (OI) | | Draft Field Boundary |
|----|---------------------|-----|---|--------------------|----|-------------|---------|-----------------|--------------------------------------|--|-------------------------|

Habitat Cut: No**Site Condition: Age-Class or Site Quality**

Prescription OPIC - FMD: Former F stand, most of the fir is dead and down. The hardwood is mostly soft maple, with lots of clumps and low forks. About 5-
Specs: 10 basal area of hemlock poles and occasional cherry. Stand contains a scattering of supercanopy white spruce,

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

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2007



| 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 |
|-----------------------|-------------------|-------|-----------------------------------|-------------------|--------------|-------------|-------------------|---------------------|-------------------------------|------------------|-------------------------|
| 33 | 32004033-Cut | 12.6 | 4110 - Sugar Maple Association | Sawtimber Well | 180 | 81-110 | Harvest | Group Selection | 4319 - Mixed Upland Forest | Even-Aged | Draft Field Boundary |

Habitat Cut: No**Site Condition:**

Prescription Group selection of poorer quality soft maple retaining most of the minor species component of the stand. Favor yellow birch, cherry, retain
Specs: hemlock, cedar, white pine.

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

Acceptable Any hardwoods, hemlock.
Regen:

Other Favoring black cherry-Black Bear, Ruffed Grouse and keeping all cedar, hemlock if present -Deer
Comment:

Proposed Start Date: 10/01/2017

| | | | | | | | | | | | |
|----|--------------|-----|---|-------------------|-----|--------|---------|-----------------|-------------------------------|-----------|-------------------------|
| 37 | 32004037-Cut | 5.7 | 4112 - Maple, Beech, Cherry Association | Sawtimber Well | 180 | 81-110 | Harvest | Group Selection | 4319 - Mixed Upland Forest | Even-Aged | Draft Field Boundary |
|----|--------------|-----|---|-------------------|-----|--------|---------|-----------------|-------------------------------|-----------|-------------------------|

Habitat Cut: No**Site Condition:**

Prescription Group selection of poorer quality soft maple retaining most of the minor species component of the stand. Favor yellow birch, cherry, retain
Specs: hemlock, cedar, white pine.

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

Acceptable All hardwoods, hemlock.
Regen:

Other Favoring black cherry-Black Bear, Ruffed Grouse and keeping all cedar, hemlock if present -Deer
Comment:

Proposed Start Date: 10/01/2017

**Total Treatment
Acreage Proposed: 81.5**

Report 4 – Site Conditions

Gwinn Mgt. Unit

Kevin LaBumbard : Examiner

Compartment: 4

Year of Entry: 2018

Availability for Management

| Total Acres | Acres Available | Acres Avail With Condition | Acres Not Available |
|-------------|-----------------|----------------------------|---------------------|
| 15 | 15 | 0 | 0 |
| 39 | 39 | 0 | 0 |
| 11 | 11 | 0 | 0 |
| 1 | 1 | 0 | 0 |
| 505 | 0 | 0 | 505 |
| 9 | 0 | 0 | 9 |
| 10 | 0 | 0 | 10 |
| 29 | 29 | 0 | 0 |
| 84 | 0 | 0 | 84 |
| 394 | 361 | 6 | 27 |
| 12 | 0 | 0 | 12 |
| 246 | 243 | 0 | 3 |
| 35 | 35 | 0 | 0 |
| 1,389 | 733 | 6 | 650 |
| | 53% | 0% | 47% |

Dominant Site Conditions

| | Dominant Site Conditions | | | | | | |
|----------------------|--------------------------|----|----|-----|----|----|-----|
| | 5C | 2A | 2F | 2G | 2H | 3H | 3J |
| Aspen | | | | | | | |
| Cedar | | | | | | | |
| Hemlock | | | | | | | |
| Herbaceous Openland | | | | | | | |
| Lowland Conifers | | | | 154 | | 17 | 334 |
| Lowland Deciduous | | | | 9 | | | |
| Lowland Mixed Forest | | | | 10 | | | |
| Lowland Shrub | | | | | | | |
| Lowland Spruce/Fir | | | | 84 | | | |
| Northern Hardwood | 6 | 8 | 19 | | | | |
| Tamarack | | | | 12 | | | |
| Treed Bog | | | | | 3 | | |
| Upland Mixed Forest | | | | | | | |
| Total Forested Acres | 6 | 8 | 19 | 269 | 3 | 17 | 334 |
| 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 | 2F: Too steep | 19 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 6/6/16: Rough, not operable terrain on knoll rising above bog, and poor access to stand. Large, overmature white pine, yellow birch, and good hemlock component create unique habitat. | | | | | | | |
| 2 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 23 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |

Report 4 – Site Conditions

Gwinn Mgt. Unit

Kevin LaBumbard : Examiner

Compartment: 4

Year of Entry: 2018

| | | | | | | | |
|--|-------------|---|-----|---|-------------|-------------|-------------|
| 3 | Unavailable | 3H: Deer Wintering Areas | 17 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: Productive hemlock stand that is unique to this area and providing excellent wildlife habitat. Active deer yard. | | | | | | | |
| 4 | Unavailable | 3J: Water quality / BMPs (stream, river, or lake) | 334 | 2G: Too wet (sensitive soils, does not include access issues) | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 5 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 7 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 6 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 6 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 7 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 10 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 8 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 118 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |

Report 4 – Site Conditions

Gwinn Mgt. Unit

Kevin LaBumbard : Examiner

Compartment: 4

Year of Entry: 2018

| | | | | | | | |
|--|--------------------|---|----|---|-------------|-------------|-------------|
| 9 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 6 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: Harvest in FY 2017 with adjacent stand 25. Unable to edit treatment details. | | | | | | | |
| 16 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 12 | 3J: Water quality / BMPs (stream, river, or lake) | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 17 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 62 | 3J: Water quality / BMPs (stream, river, or lake) | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 19 | Unavailable | 2A: Adjacent landowner denied access | 8 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 34 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 9 | 3J: Water quality / BMPs (stream, river, or lake) | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 35 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 22 | 3J: Water quality / BMPs (stream, river, or lake) | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |

Report 4 – Site Conditions

Gwinn Mgt. Unit

Kevin LaBumbard : Examiner

Compartment: 4

Year of Entry: 2018

| | | | | | | | |
|------------------|-------------|--|---|---|-------------|-------------|-------------|
| 42 | Unavailable | 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) | 2 | 3J: Water quality / BMPs (stream, river, or lake) | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 43 | Unavailable | 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) | 1 | 3J: Water quality / BMPs (stream, river, or lake) | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |

**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 |
|-----------------|----------------------|--------------------|-----------------------|--------------|
| | Potential Old Growth | | SCA Removal | 14 |

Comments

This area no longer meets the criteria to be classified as a Special Conservation Area.



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 | Cold Water Stream | A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210. |
| SCA | Riparian Area | A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity. |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|--|---------------------|-------|--------------|-------------|--|
| 1 | 4319 - Mixed Upland Forest | Poletimber Well | 34.8 | 85 | 51-80 | OPIC - FMD: M5F4. Stand was schedule with stand 8 and originally sold in 1999. Sale was taken back by the state and reassigned in 2004. Cutting finally completed March of 2008 under contract #034-04-01 by RLR. 2016-Stand is almost an E type..split almost 50-50 hardwood/softwood. Lots of hemlock with good hemlock regeneration. Multiple small ridges with swales between. Occasional large supercanopy white pine and white spruce. Headwaters of the Chocolay develop within and adjacent to this stand. |
| 2 | 4112 - Maple, Beech, Cherry Association | Sawtimber Well | 41.2 | 100 | 81-110 | The stand has quite variable, including topography, and contains a small ridge or hill top of almost pure sugar maple sawtimber. There is a good distribution of large diameter trees, including yellow birch, soft maple, and hard maple. Hemlock and cherry are also present in the stand. The south peninsula dips to lowlands and contains more soft maple and fir. 2016-see above. Access limited due to Chocolay River headwaters and private property. |
| 3 | 6129 - Mixed Coniferous Lowland Forest | Poletimber Well | 334.0 | 88 | 111-140 | OPIC - FMD: A mix of swamp conifers but with a significant component of hemlock. 2016-LF too wet. |
| 4 | 4110 - Sugar Maple Association | Sawtimber Well | 20.5 | 100 | 111-140 | OPIC - FMD: Stand was treated under permit #012-94-1. M6M7 with scattered cherry and yellow birch. Excellent maple regeneration 4-8' tall. 2016-Stand ready for second thinning. |
| 5 | 4112 - Maple, Beech, Cherry Association | Poletimber Well | 10.9 | 100 | 81-110 | OPIC - FMD: Treated by Nelson under sale #12-94-1. Stand has lower timber productivity with a higher percentage of soft maple. 2016-still plenty of crown room. Delay treatment until next entry. |
| 6 | 6120 - Lowland Cedar | Poletimber Well | 31.4 | 85 | 171-200 | OPIC - FMD: Very dense cedar pole stand. |
| 7 | 6120 - Lowland Cedar | Poletimber Well | 7.9 | 85 | 171-200 | OPIC - FMD: Very nice cedar pole stand. |
| 8 | 4115 - Y.Birch, Hemlock NH | Sawtimber Medium | 89.0 | 100 | 81-110 | OPIC - FMD: M6M7, Pockets of S, F, H. Originally contract marked and sold in 1999, this sale was taken back by the State and reassigned in 2004. The stand is fair quality hardwood, mostly soft maple with pockets of spruce, fir, and hemlock. Cutting finally completed March of 2008 under permit # 034-04-01 by RLR. |
| 9 | 4115 - Y.Birch, Hemlock NH | Sawtimber Well | 5.5 | 100 | 81-110 | OPIC - FMD: M6M7F4, this stand is an island of mostly soft maple and scattered yellow birch with an occasional large white pine and hemlock, over fir and soft maple seedlings. Section corner wp bearing tree looks like a signature tree. |
| 10 | 4115 - Y.Birch, Hemlock NH | Sawtimber Well | 5.7 | 100 | 81-110 | OPIC - FMD: M6M7F4, another island of mixed hardwood with scattered fir, hemlock and white pine. |
| 11 | 6124 - Lowland Spruce- Fir | Poletimber Poor | 5.9 | 88 | 1-50 | OPIC - FMD: Swale within stand 12 |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|--|---------------------|-------|--------------|-------------|--|
| 12 | 4115 - Y.Birch, Hemlock NH | Sawtimber Well | 33.0 | 100 | 81-110 | OPIC - FMD: Poor quality, very wet, small diameter soft maple, yellow birch with fir, hemlock, cedar on the fringed. Access very limited. |
| 13 | 4112 - Maple, Beech, Cherry Association | Sawtimber Well | 29.3 | 100 | 81-110 | OPIC - FMD: Good to fair quality hardwood site that drops to a wetter hemlock stand along the southern edge. Terrain varies from a sandy ridge in the north to wetter soils in the south. The southern portion of the stand contains much more hemlock and fir, while cherry and huge yellow birch are scattered thru the stand. Marking prescriptions will retain all yellow birch, cherry, as well as all cedar, hemlock, white pine and supercanopy white spruce if present. Access will be from the west and must be obtained from Plum Creek. 2009-Treated under permit # 004-08-01. 2016-Excellent mixed hardwood regeneration from the 2009 treatment. |
| 14 | 4115 - Y.Birch, Hemlock NH | Sawtimber Medium | 16.1 | 100 | 51-80 | OPIC - FMD: M6M7, Pockets of S, F, H. Originally contract marked and sold in 1999, this sale was taken back by the State and reassigned in 2004. The stand is fair quality hardwood, mostly soft maple with pockets of spruce, fir, and hemlock. Cutting finally completed March of 2008 under permit # 034-04-01 by RLR. |
| 16 | 6121 - Tamarack | Poletimber Poor | 12.0 | 85 | 1-50 | OPIC - FMD: Tamarack swamp with white pine and occasional black spruce. Understory is a mix of stunted black spruce and tamarack. |
| 17 | 6122 - Black Spruce | Poletimber Well | 62.1 | 92 | 51-80 | OPIC - FMD: Very wet stunted black spruce and tamarack bog with small black spruce in the understory. |
| 19 | 4119 - Mixed Northern Hardwoods | Poletimber Well | 9.8 | 100 | 81-110 | OPIC - FMD: M6M7, Pockets of S, F, H. Originally contract marked and sold in 1999, this sale was taken back by the State and reassigned in 2004. The stand is fair quality hardwood, mostly soft maple with pockets of spruce, fir, and hemlock. Access will be over private land and much of the sale can only be cut when the ground is frozen. |
| 20 | 4113 - R.Maple, Conifer | Sawtimber Well | 10.2 | 100 | 81-110 | OPIC - FMD: SCA-Hardwood island surrounded by black spruce/sphagnum bog. Hardwood is mostly poor quality soft maple with pockets of large diameter hemlock, yellow birch, fir, and an occasional white pine. Numerous pink lady slippers in the understory. Excellent candidate for biodiversity reference area. |
| 21 | 6128 - Lowland Coniferous, Mixed Deciduous | Sawtimber Well | 22.9 | 180 | 111-140 | OPIC - FMD: Treated under permit # 040-88-01 cutting wasn't finished until 1994. The ridgetop and north slope contains more sugar maple, hemlock, and yellow birch while south of the ridge consists of almost pure soft maple. 6/6/16: Created new stand for low, wet hemlock areas. No treatment. |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|--|--------------------|-------|--------------|-------------|--|
| 22 | 4115 - Y.Birch, Hemlock NH | Poletimber Well | 19.2 | 180 | 81-110 | <p>OPIC - FMD: Treated in 1994, current stocking levels are all over the place. Scattered throughout the stand are large cherry, and huge yellow birch. The stand also contains pockets of hemlock. The understory is primarily soft maple with a lighter stocking of fir.</p> <p>6/6/16: Rough, not operable terrain on knoll rising above bog, and poor access to stand. Large, overmature white pine, yellow birch, and good hemlock component create unique habitat.</p> |
| 23 | 4115 - Y.Birch, Hemlock NH | Sawtimber Well | 28.8 | 100 | 81-110 | <p>OPIC - FMD: M6M7, CUT PRMT # 046-88-01, FINISHED 1994 Originally sold under permit # 046-88-01, cutting was completed in 1994. Basal area is still too low for another thinning. Stand is primarily a soft maple stand with yellow birch, cherry, and a few large white pine. Scattered hemlock pockets. Regeneration is M3/F2.</p> |
| 24 | 613 - Lowland Mixed Forest | Poletimber Well | 10.0 | 86 | 51-80 | <p>OPIC - FMD: Depression of black spruce, some soft maple and scattered white pine over tag alder.</p> |
| 25 | 4112 - Maple, Beech, Cherry Association | Poletimber Well | 29.2 | 180 | 81-110 | <p>OPIC - FMD: Treated under permit # 040-88-01 cutting wasn't finished until 1994. The ridgetop and north slope contains more sugar maple, hemlock, and yellow birch while south of the ridge consists of almost pure soft maple.</p> <p>6/6/16: Same comments as previous; except created new stand out low hemlock spots .</p> |
| 26 | 4112 - Maple, Beech, Cherry Association | Poletimber Well | 5.6 | 78 | 111-140 | <p>OPIC - FMD: Former F stand, most of the fir is dead and down. The hardwood is mostly soft maple, with lots of clumps and low forks. About 5-10 basal area of hemlock poles and occasional cherry. Stand contains a scattering of supercanopy white spruce, and fir. Winter access only through private land. Retain all white pine, cedar, hemlock, and other supercanopy conifers. ***Tried to negotiate, but not enough volume and prices too high.</p> <p>6/6/16: Remnant white pine, hemlock in knoll over wetland. Difficult access.</p> |
| 28 | 4113 - R.Maple, Conifer | Sapling Well | 3.1 | 27 | Immature | <p>OPIC - FMD: M2F1, 10-15' tall, sprouts from sale # 040-88-01.</p> |
| 29 | 4113 - R.Maple, Conifer | Poletimber Well | 3.8 | 100 | 81-110 | <p>OPIC - FMD: Cut the winter of 2005 under permit # 003-02-01. Good regen from seed and stump sprouting.</p> |
| 30 | 6129 - Mixed Coniferous Lowland Forest | Poletimber Well | 16.8 | 85 | 81-110 | <p>OPIC - FMD: Excellent hemlock stand between two hardwood ridges.</p> <p>6/6/16: Unique rolling topography and great hemlock growth. Potential old growth stand.</p> |
| 31 | 4130 - Aspen | Sapling Well | 13.8 | 28 | Immature | <p>OPIC - FMD: A3, 2-5" 20-30' tall.</p> |
| 32 | 6129 - Mixed Coniferous Lowland Forest | Poletimber Well | 118.4 | 80 | 51-80 | <p>OPIC - FMD: Lowland conifer swamp stand.</p> |

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Report 7 – Forested Stands

Compartment: 4
Year of Entry: 2018

| Stand | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|-------|---|-----------------|-------|-----------|----------|---|
| 33 | 4110 - Sugar Maple Association | Sawtimber Well | 12.6 | 180 | 81-110 | OPIC - FMD: Predominantly sugar maple with occasional large yellow birch, cherry, hemlock, and white spruce. About 10 ba of mixed softwoods. The maple has low forks and often in clumps. |
| 34 | 6119 - Mixed Lowland Deciduous Forest | Poletimber Well | 9.3 | 94 | 81-110 | OPIC - FMD: E4Q4Q3, stand is mostly black ash, red maple with cedar. |
| 35 | 6122 - Black Spruce | Poletimber Poor | 21.9 | 94 | 1-50 | OPIC - FMD: Very wet, thin black spruce swamp with tamarack, and occasional white pine. |
| 36 | 4112 - Maple, Beech, Cherry Association | Poletimber Well | 7.5 | 100 | 81-110 | OPIC - FMD: Narrow band of hardwoods between private land to the south and black spruce swamp to the north. 6/6/16 Field notes: Low-moderate quality red maple stand with hemlock and yellow birch components. |
| 37 | 4112 - Maple, Beech, Cherry Association | Sawtimber Well | 5.7 | 180 | 81-110 | OPIC - FMD: 2016- Mostly high ground with lower areas. Red maple with cherry, scattered yellow birch and heavy fir understory. |
| 38 | 4112 - Maple, Beech, Cherry Association | Sapling Well | 7.0 | 28 | Immature | OPIC - FMD: M3,F2,A1 10-20' tall. |
| 44 | 42350 - Upland Hemlock | Sawtimber Well | 10.9 | 85 | 81-110 | OPIC - FMD: Excellent hemlock stand with large yellow birch on the southern edge of stand 13. |
| 45 | 6129 - Mixed Coniferous Lowland Forest | Poletimber Well | 6.9 | 88 | 81-110 | OPIC - FMD: A mix of cedar, hemlock, black spruce and yellow birch. |
| 401 | 4130 - Aspen | Sapling Medium | 1.5 | 18 | Immature | OPIC - FMD: G-GRASS OPENING Former grass opening fully stocked to aspen saplings with birch. |



| Stand | Cover Type | Acres | Managed Site | General Comments: |
|-------|----------------------------|-------|--------------|--|
| 15 | 6229 - Mixed lowland shrub | 28.8 | No | OPIC - FMD: Tag alder |
| 18 | 6224 - Treed Bog | 245.5 | No | OPIC - FMD: Stunted black spruce and tamarack with tag alder. Multiple small islands within. |
| 400 | 310 - Herbaceous Openland | 0.6 | No | OPIC - FMD: G-GRASS OPENING |