



Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12075

Entry Year 2019

Acreage: 846

County Dickinson

Management Area: Ralph Ground Moraine

Revision Date: 2017-08-18

Stand Examiner: Mike Brodeur

Legal Description:

T41N, R30W, Sections 9, 16, 17, 20, 21

Identified Planning Goals:

Improve Northern Hardwoods, Aspen, lowland types and grass openings.

Soil and topography:

Moderately well drained soils on rolling hills to poorly drained soils in lowlands.

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

State lands surrounded by private ownership's, residences.

Unique Natural Features:

Granite bluffs throughout the compartment.

Archeological, Historical, and Cultural Features:

None noted.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

Badwater Creek is within this compartment. 100 foot buffers needed. For all other riparian areas, including vernal pools and intermittent streams, BMPs should be followed to maintain canopy cover and prevent erosion into waterbodies.

Wildlife Habitat Considerations:

Featured species include American woodcock, black bear, northern goshawk, ruffed grouse, and white-tailed deer. The steep terrain creates many hills and valleys, supporting great habitat for black bear and deer. The compartment is made up of state game lands as well.

Mineral Resource and Development Concerns and/or Restrictions

A gravel pit is located one mile to the south and there may be some sand and gravel potential within the compartment. The former Groveland iron mine is located approximately four miles to the northeast. There does not appear to be any iron ore potential within the compartment. On the outer margins of the compartment, along fault zones, there may be potential for other metallic minerals. A portion of this compartment was leased more than 30 years ago. There is no economic oil and gas production in the UP.

Vehicle Access:

Good through State from the east and south and private from the north.

Survey Needs:

No survey needs required at this time, all corners along perimeter are installed.

Recreational Facilities and Opportunities:

Popular local hunting area.

Fire Protection:

Minimal fire risk due to large hardwood component in this compartment.

Additional Compartment Information:

The following reports from the Inventory are attached:

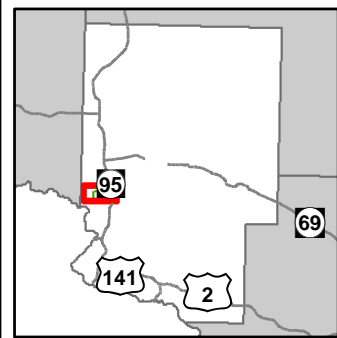
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

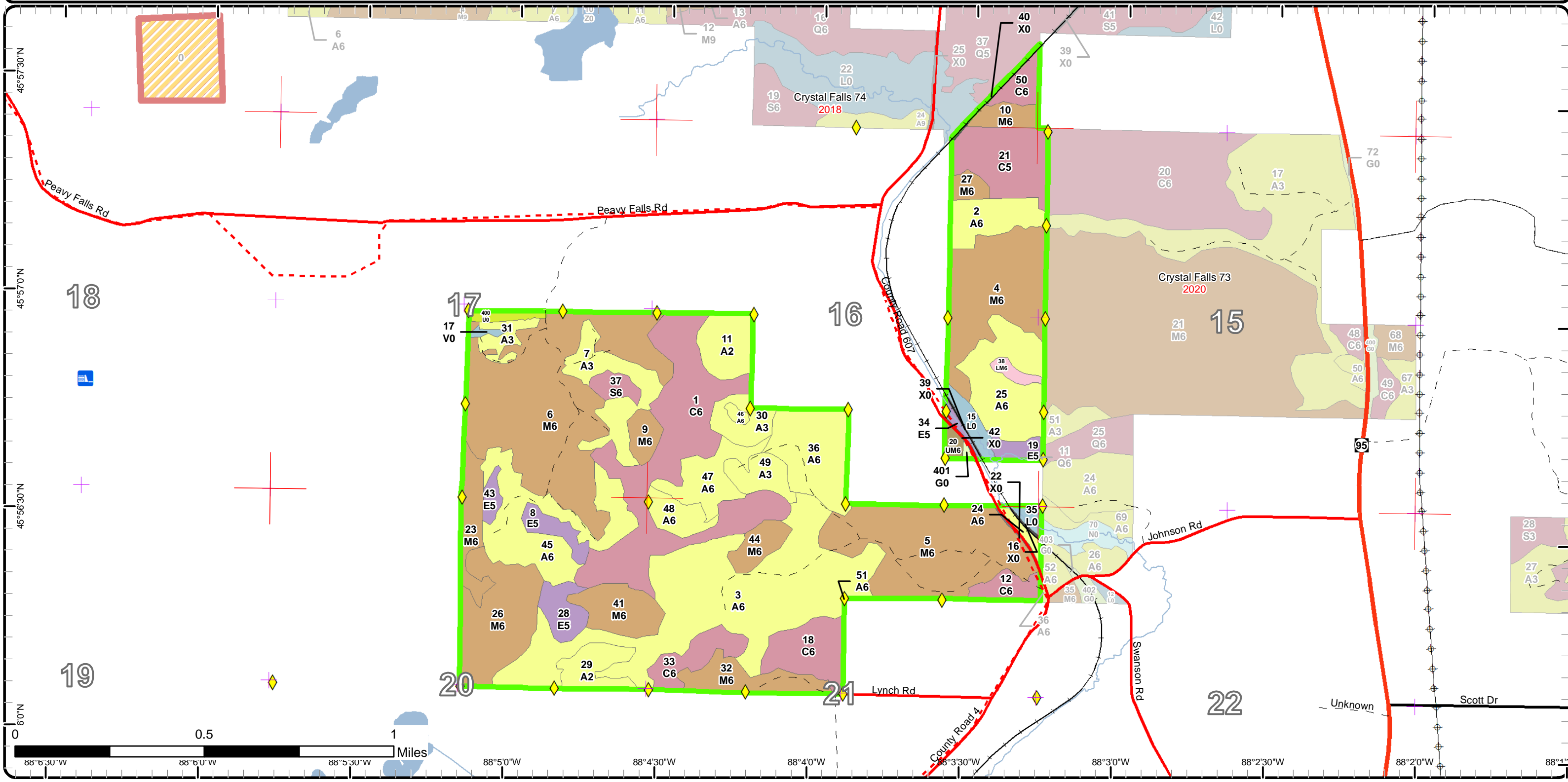
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 75
 T41N, R30W, Sec. 16-17, 20-21
 County: Dickinson
 Unit: Crystal Falls
 Mgmt Area: Ralph Ground
 Moraine
 YOE: 2019
 Acres: 845.7 GIS Calculated
 Examiner: Mike Brodeur
 Map Revised: 11/30/2017
 Map Phase: Post-Review

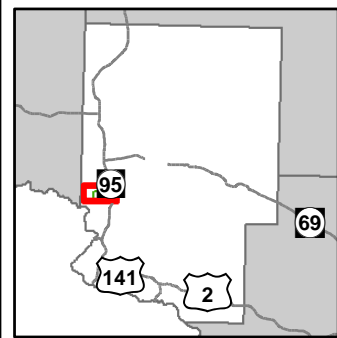


- Miris Corners
- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- Counties
- Dams
- ✈ Airport
- - - Designated Bicycle Trails
- Highway
- County Paved Roads
- Paved Roads
- - - Poor Dirt Roads
- - - Closed
- Active Railroads
- Streams
- Lakes and Rivers All
- Lakes
- Compartment Boundary
- 411 - Northern Hardwood
- 413 - Aspen
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 122 - Roads/Parking Lot
- 123 - Other High Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 622 - Lowland Shrub



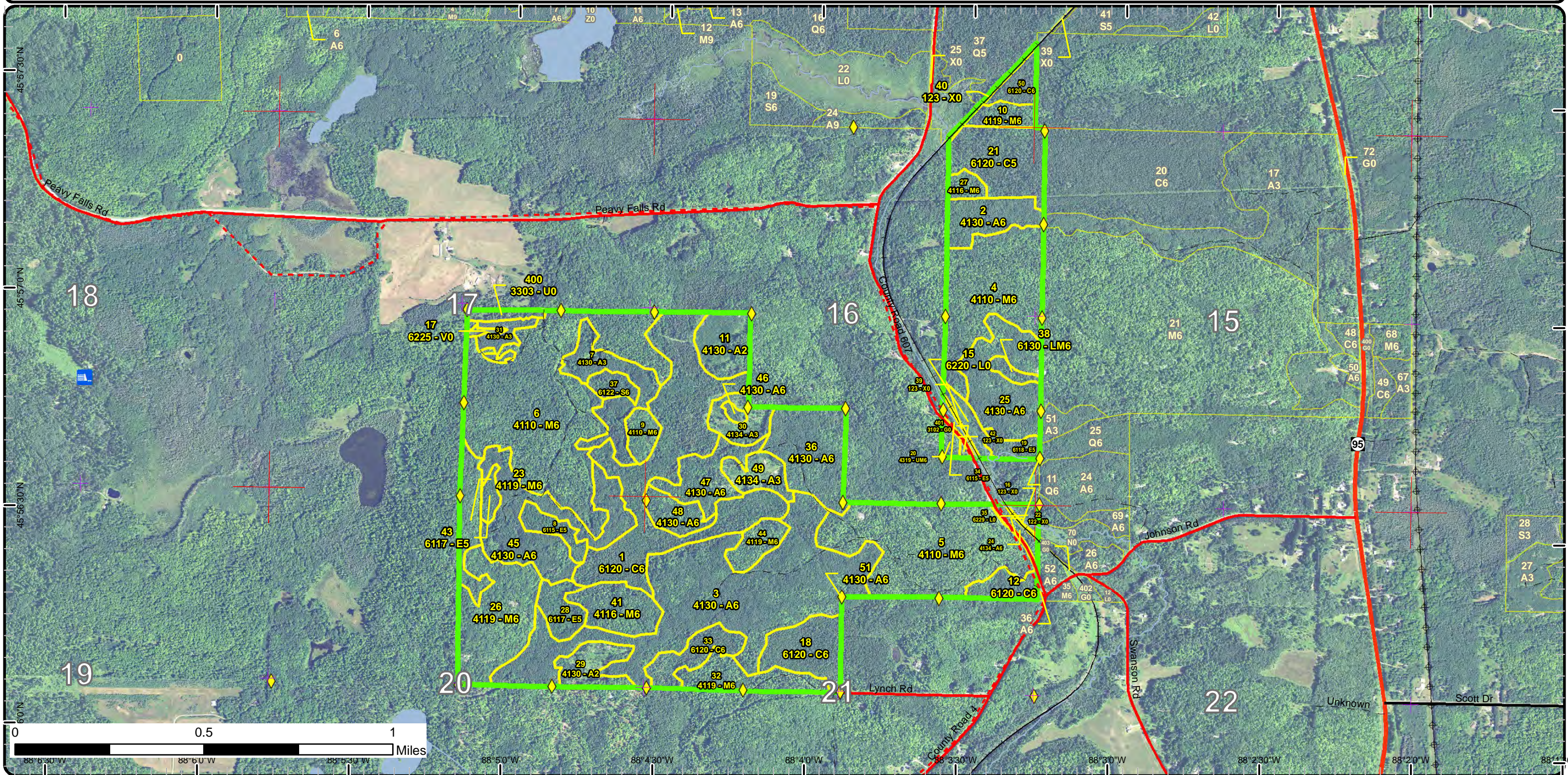
Stand Boundary Map

Compartment: 75
 T41N, R30W, Sec. 16-17, 20-21
 County: Dickinson
 Unit: Crystal Falls
 Mgmt Area: Ralph Ground
 Moraine
 YOE: 2019
 Acres: 845.7 GIS Calculated
 Examiner: Mike Brodeur
 Map Revised: 11/30/2017
 Map Phase: Post-Review



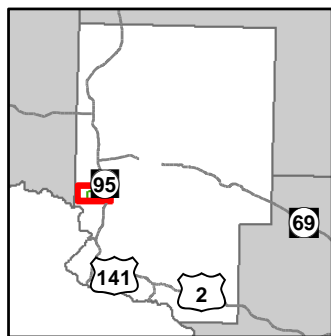
- Miris Corners
- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- Counties
- Dams
- Airport
- - - Designated Bicycle Trails
- Highway
- County Paved Roads
- Paved Roads
- - - Poor Dirt Roads
- - - Closed
- Active Railroads
- Streams
- Lakes and Rivers All
- Powerline
- Compartment Boundary
- Stand Boundaries
- 411 - Northern Hardwood
- 413 - Aspen
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 122 - Roads/Parking Lot
- 123 - Other High Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low Density Trees

622 - Lowland Shrub

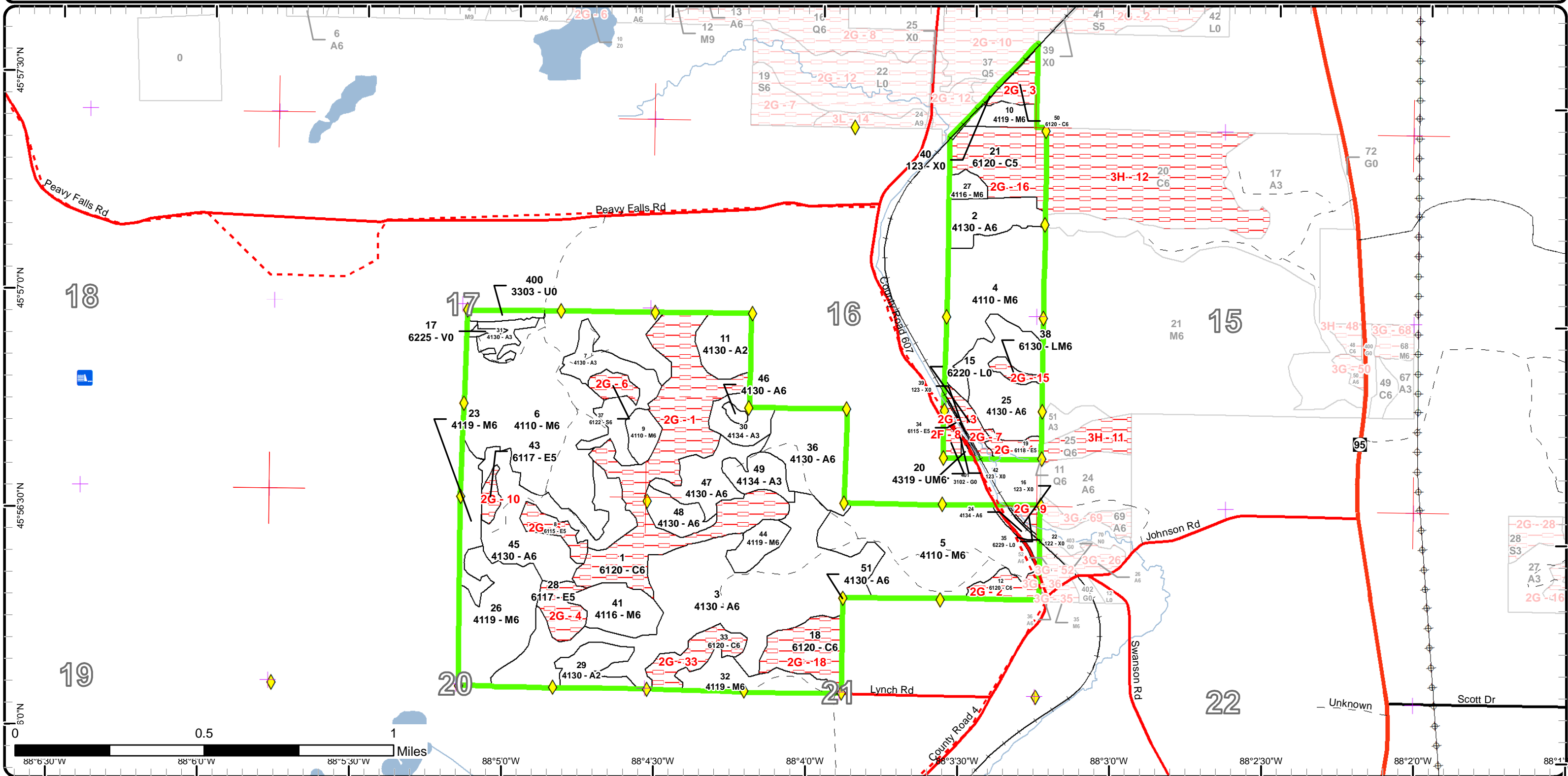


Special Conservation Areas & Site Conditions Map

Compartment: 75
 T41N, R30W, Sec. 16-17, 20-21
 County: Dickinson
 Unit: Crystal Falls
 Mgmt Area: Ralph Ground
 Moraine
 YOE: 2019
 Acres: 845.7 GIS Calculated
 Examiner: Mike Brodeur
 Map Revised: 11/30/2017
 Map Phase: Post-Review



- Miris Corners
- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- Counties
- Dams
- ✈ Airport
- - - Designated Bicycle Trails
- Highway
- County Paved Roads
- Paved Roads
- - - Poor Dirt Roads
- - - Closed
- Active Railroads
- Streams
- Lakes and Rivers All
- Powerline
- Compartment Boundary
- - - Unavailable
- - - 2F: Too steep
- - - 2G: Too wet (sensitive soils, does not include access issues)
- Stand Boundaries
- Cold Water Streams



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 | 45 | 0 | 66 | 167 | 47 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 328 |
| Bog | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Cedar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 135 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 148 |
| Herbaceous Openland | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Low-Density Trees | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Lowland Deciduous | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| Lowland Mixed Forest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Lowland Shrub | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Lowland Spruce/Fir | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Northern Hardwood | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 11 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 288 | 317 |
| Upland Mixed Forest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Urban | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Total | 18 | 45 | 0 | 66 | 167 | 47 | 0 | 0 | 13 | 18 | 183 | 0 | 0 | 0 | 0 | 0 | 0 | 290 | 846 |



Report 2 – Treatment Summary

Crystal Falls Mgt. Unit
Year of Entry: 2019

Acres of Harvest

Compartment 75
Total Compartment Acres: 846

Commercial Harvest - 84
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 |
|-------------------|----------|-----------|----------------|-----------|-------------|-----------|-------------------|----------|----------|-------------|
| Aspen | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Low-Density Trees | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Northern Hardwood | 0 | 0 | 0 | 0 | 0 | 78 | 0 | 0 | 0 | 78 |
| Total | 3 | 0 | 0 | 0 | 0 | 78 | 0 | 0 | 3 | 84 |

Proposed and Next Step Treatments by Method

| | Harvest | Site Prep | Planting | Seeding | Burning | Pesticide | Monitoring | Other | Non-Forest Mgt. | Total Acres |
|--------------|-----------|-----------|----------|----------|----------|-----------|------------|----------|-----------------|-------------|
| Current | 84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 |
| Next Step | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 0 | 0 | 81 |
| Total | 84 | 0 | 0 | 0 | 0 | 0 | 81 | 0 | 0 | 165 |



| Stand Name | Treatment Name | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
|------------|----------------|-------|--------------------------------|-----------------|-----------|----------|----------------|------------------|-------------------------|---------------|-----------------------------------|
| 9 | 12075009-Cut | 6.2 | 4110 - Sugar Maple Association | Poletimber Well | 79 | 141-170 | Harvest | Crown Thinning | 411 - Northern Hardwood | Uneven-Aged | Proposal - Approval Pending Edits |

Habitat Cut: No**Site Condition:**

Prescription This stand is to be thinned to a residual basal area of 70 - 90 ft² per acre. cut all aspen. Do not cut red oak, white pine, cedar or hemlock. This thinning will release the crowns of future crop trees and concentrate growth on higher quality residual stems.

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

Acceptable Northern hardwood mix of sugar maple, basswood, white ash and hemlock.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

| | | | | | | | | | | | |
|----|--------------|------|---------------------------------|-----------------|----|---------|---------|----------------|-------------------------|-------------|-----------------------------------|
| 23 | 12075023-Cut | 12.2 | 4119 - Mixed Northern Hardwoods | Poletimber Well | 94 | 111-140 | Harvest | Crown Thinning | 411 - Northern Hardwood | Uneven-Aged | Proposal - Approval Pending Edits |
|----|--------------|------|---------------------------------|-----------------|----|---------|---------|----------------|-------------------------|-------------|-----------------------------------|

Habitat Cut: No**Site Condition:**

Prescription This stand is to be thinned to a residual basal area of 70 - 90 ft² per acre. Cut all aspen. Do not cut any hemlock, elm, black ash, red oak, white pine or cedar. Exclude any drains. This thinning will release the crowns of future crop trees and concentrate growth on higher quality residual stems.

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

Acceptable Northern hardwood mix of sugar maple, basswood, white ash and red oak.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

| | | | | | | | | | | | |
|----|--------------|-----|--------------------------|-----------------|----|--------|---------|-------------------------|-------------|-----------|-----------------------------------|
| 24 | 12075024-Cut | 2.7 | 4134 - Aspen, Spruce/Fir | Poletimber Well | 94 | 81-110 | Harvest | Clearcut with Retention | 413 - Aspen | Even-Aged | Proposal - Approval Pending Edits |
|----|--------------|-----|--------------------------|-----------------|----|--------|---------|-------------------------|-------------|-----------|-----------------------------------|

Habitat Cut: No**Site Condition:**

Prescription Cut all trees with one or more pulpwood sticks. Do not cut red and white pine, cedar, hemlock or oak.

Next Step Monitoring, Natural Regen (Intermediate)
Treatments:

Acceptable Mix of aspen, spruce, balsam and hardwood.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

| | | | | | | | | | | | |
|----|--------------|------|---------------------------------|-----------------|----|--------|---------|----------------|-------------------------|-------------|-----------------------------------|
| 26 | 12075026-Cut | 35.6 | 4119 - Mixed Northern Hardwoods | Poletimber Well | 91 | 81-110 | Harvest | Crown Thinning | 411 - Northern Hardwood | Uneven-Aged | Proposal - Approval Pending Edits |
|----|--------------|------|---------------------------------|-----------------|----|--------|---------|----------------|-------------------------|-------------|-----------------------------------|

Habitat Cut: No**Site Condition:**

Prescription This stand is to be thinned to a residual basal area of 70 - 90 ft² per acre. Cut all aspen. Do not cut any hemlock, red oak, white pine or cedar.

Specs: Exclude any drains. This thinning will release the crowns of future crop trees and concentrate growth on higher quality residual stems.

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

Acceptable Northern hardwood mix of sugar maple, basswood, white ash and red oak.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018



| 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 |
|-----------------------|-------------------|-------|-------------------------------------|--------------------|--------------|-------------|-------------------|---------------------|----------------------------|------------------|---|
| 41 | 12075041-Cut | 16.0 | 4116 - Mixed N. Hardwood - Aspen | Poletimber Well | 91 | 81-110 | Harvest | Crown Thinning | 411 - Northern Hardwood | Uneven- Aged | Proposal - Approval Pending Edits |

Habitat Cut: No**Site Condition:**

Prescription This stand is to be thinned to a residual basal area of 70 - 90 ft² per acre. Cut all aspen. Do not cut hemlock, red oak, white pine or cedar. This thinning will release the crowns of future crop trees and concentrate growth on higher quality residual stems.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Northern hardwood mix of sugar maple, basswood and white ash.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

| | | | | | | | | | | | |
|----|--------------|-----|------------------------------------|--------------------|----|-------------|---------|----------------|----------------------------|-----------------|---|
| 44 | 12075044-Cut | 8.2 | 4119 - Mixed Northern Hardwoods | Poletimber Well | 91 | 111- 140 | Harvest | Crown Thinning | 411 - Northern Hardwood | Uneven- Aged | Proposal - Approval Pending Edits |
|----|--------------|-----|------------------------------------|--------------------|----|-------------|---------|----------------|----------------------------|-----------------|---|

Habitat Cut: No**Site Condition:**

Prescription This stand is to be thinned to a residual basal area of 70 - 90 ft² per acre. Cut all aspen. Do not cut any hemlock, red oak, white pine or cedar.

Specs: This thinning will release the crowns of future crop trees and concentrate growth on higher quality residual stems.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Northern hardwood mix of sugar maple, basswood and white ash.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

| | | | | | | | | | | | |
|-----|--------------|-----|-----------------------------------|------------|--|-----------------|---------|-----------------|---------------------------------|--|---|
| 400 | 12075400-Cut | 3.3 | 3303 - Mixed Low Density Trees | Nonstocked | | Unspec ified | Harvest | Other - Specify | 310 - Herbaceous Openland | | Proposal - Approval Pending Edits |
|-----|--------------|-----|-----------------------------------|------------|--|-----------------|---------|-----------------|---------------------------------|--|---|

Habitat Cut: No**Site Condition:**

Prescription Return forested opening to non forested conditions. Cut all trees 2" and above. Do not cut aspen, to prevent aspen sprouts.

Specs:

Next Step

Treatments:

Acceptable Return to open area.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

**Total Treatment
Acreage Proposed: 84.2**

Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Mike Brodeur : Examiner

Compartment: 75

Year of Entry: 2019

Availability for Management

| Total Acres | Acres Available | Acres Avail | | Dominant Site Conditions | 2F | 2G | 3G | 3H |
|----------------|--------------------|----------------|---------------|--------------------------|----|-----|----|----|
| | | With Condition | Not Available | | | | | |
| 328 | 328 | 0 | 0 | Aspen | | 0 | 0 | |
| 1 | 1 | 0 | 0 | Bog | | | | |
| 149 | 0 | 0 | 149 | Cedar | | 149 | | 0 |
| 1 | 1 | 0 | 0 | Herbaceous Openland | | | | |
| 3 | 3 | 0 | 0 | Low-Density Trees | | | | |
| 25 | 0 | 0 | 25 | Lowland Deciduous | | 25 | | 0 |
| 3 | 0 | 0 | 3 | Lowland Mixed Forest | | 3 | | |
| 8 | 0 | 0 | 8 | Lowland Shrub | | 8 | 0 | |
| 5 | 0 | 0 | 5 | Lowland Spruce/Fir | | 5 | | |
| 317 | 317 | 0 | 0 | Northern Hardwood | | 0 | | |
| 2 | 0 | 0 | 2 | Upland Mixed Forest | 2 | | | |
| 5 | 5 | 0 | 0 | Urban | | | 0 | |
| 846 | 654 | | 192 | Total Forested Acres | 2 | 190 | 0 | 0 |
| | 77% | | 23% | 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 | 2G: Too wet (sensitive soils, does not include access issues) | 77 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 2 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 7 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |

Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Mike Brodeur : Examiner

Compartment: 75

Year of Entry: 2019

| | | | | | | | |
|------------------|--------------------|--|---|-------------|-------------|-------------|-------------|
| 3 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 7 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 4 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 9 | Unspecified | 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) | 5 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 7 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 5 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |

Report 4 – Site Conditions

Crystal Falls Mgt. Unit
Mike Brodeur : Examiner

Compartment: 75
Year of Entry: 2019

| | | | | | | | |
|------------------|-------------|---|----|---|---|-------------|-------------|
| 8 | Unavailable | 2F: Too steep | 2 | 2G: Too wet (sensitive soils, does not include access issues) | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 9 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 3 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 10 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 3 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 11 | Unavailable | 3H: Deer Wintering Area - habitat is incompatible with harvest at this time | 12 | 1C: Other dept or div proc/practices | 2G: Too wet (sensitive soils, does not include access issues) | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 12 | Unavailable | 3H: Deer Wintering Area - habitat is incompatible with harvest at this time | 81 | 1C: Other dept or div proc/practices | 2G: Too wet (sensitive soils, does not include access issues) | Unspecified | Unspecified |
| Comments: | | | | | | | |

Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Mike Brodeur : Examiner

Compartment: 75

Year of Entry: 2019

| | | | | | | | |
|------------------|--------------------|--|----|---|-------------|-------------|-------------|
| 13 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 2 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 14 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 5 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 15 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 3 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 16 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 27 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 18 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 19 | 5A: Not able to obtain desirable regeneration | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |

Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Mike Brodeur : Examiner

Compartment: 75

Year of Entry: 2019

| | | | | | | | |
|------------------|-------------|---|----|---|-------------|-------------|-------------|
| 33 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 12 | 5A: Not able to obtain desirable regeneration | 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 | 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. |



| Stand | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|-------|---------------------------------|-------------------|-------|-----------|----------|---|
| 1 | 6120 - Lowland Cedar | Poletimber Well | 77.4 | 94 | 141-170 | OPIC - FMD: Areas of black ash and tag alder (2007). Very wet, standing water, dense cedar. Plenty of black ash saps along edges and in pockets throughout. Thick pockets of tag alder throughout. |
| 2 | 4130 - Aspen | Poletimber Well | 15.5 | 40 | 111-140 | OPIC - FMD: OI Stand Year Origin was 1977. Q aspen to the west side of stand is upland mix, poles. Northeast side of stand is wet with avg DBH of 4" Q aspen. There is a cedar/B ash drain in this stand. |
| 3 | 4130 - Aspen | Poletimber Well | 111.8 | 37 | 111-140 | OPIC - FMD: F and Q inclusions. (2007) |
| 4 | 4110 - Sugar Maple Association | Poletimber Well | 46.8 | 91 | 81-110 | OPIC - FMD: MUCH A3 ON WEST SIDE. SOME OAK. GOOD MAPLE REPRODUCTION.(1997) Highly varied stand. Hilly. Small E inclusions. Some F type in understory. Unmarked hardwood will meet retention goals.Follow up with regeneration check. (2007) Harvested 2012 with "3 of 3" sale #12-016-09-01. |
| 5 | 4110 - Sugar Maple Association | Poletimber Well | 65.4 | 91 | 81-110 | OPIC - FMD: 2 of 3 TS cut 2013. Slash throughout stand. |
| 6 | 4110 - Sugar Maple Association | Poletimber Well | 99.8 | 91 | 81-110 | OPIC - FMD: MUCH DOWNED WOOD. ASPEN IN SCATTERED PATCHES. NICE BASSWOOD.(1997) Highly varied stand (terrain, poles v logs, species mixture). Unmarked hardwood will meet retention goals. Follow up with regeneration check.(2007) Harvested 2012 with "1 of 3" sale #12-014-09-01. Rolling terrain, good woods roads running throughout stand. |
| 7 | 4130 - Aspen | Sapling Well | 20.9 | 28 | Immature | OPIC - FMD: ASPEN REGENERATION POOR ON MUCH OF STAND,MUCH GRASS AND BERRIES.(1997). Mostly upland with small low, wet areas. North canopy closure around 75-100, south canopy closure around 50-75 due to open herbaceous areas. |
| 8 | 6115 - Lowland Ash | Poletimber Medium | 6.5 | 91 | 81-110 | OPIC - FMD: OI Stand Year Origin was 1926. Wet, standing water with clumps of black ash surrounded by tag alder. |
| 9 | 4110 - Sugar Maple Association | Poletimber Well | 6.2 | 79 | 141-170 | OPIC - FMD: OI Stand Year Origin was 1938. Good hardwood stand. Hemlock mixed in along east side, with a small hemlock stand on the south end. |
| 10 | 4119 - Mixed Northern Hardwoods | Poletimber Well | 6.5 | 88 | 81-110 | Along rail road. R maple mix with oversized breaking up Q aspen. |
| 11 | 4130 - Aspen | Sapling Medium | 14.2 | 4 | Immature | OPIC - FMD: 2 of 3 TS cut 2013: southeast corner only had birch and aspen removed. Rest of stand was clearcut. Southeast corner is sugar maple/white ash. |
| 12 | 6120 - Lowland Cedar | Poletimber Well | 7.3 | 77 | 171-200 | OPIC - FMD: Transition zone from hardwood into Q type was included in this stand. W and B ash, yellow birch, hemlock in stand (2007) . Stand is wet and mucky. Quaking aspen is large pulp to oversized and breaking up. Deer browse. |



| Stand | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|-------|--|-------------------|-------|-----------|----------|---|
| 18 | 6120 - Lowland Cedar | Poletimber Well | 18.6 | 94 | 201+ | OPIC - FMD: OI Stand Year Origin was 1923. Stand is wet with standing water. Heavy black ash whips along edges of stand, lower density in interior of stand. |
| 19 | 6118 - Lowland Deciduous with Cedar | Poletimber Medium | 5.0 | 94 | 111-140 | OPIC - FMD: WAS PART OF STAND 1.(1997) E inclusion.(2007) Lowland mix with solid alder along southern edge. Unable to locate SE corner monument. |
| 20 | 4319 - Mixed Upland Forest | Poletimber Well | 2.3 | 180 | 81-110 | OPIC - FMD: WAS PART OF STAND 1.(1997) Aspen , F and hdwd along co rd. (2007). Significant slope from road to top of granite bluff. South end of stand is cedar swamp. |
| 21 | 6120 - Lowland Cedar | Poletimber Medium | 26.5 | 94 | 141-170 | OPIC - FMD: WAS PART OF STAND 1.(1997) Retain thermal cover(2007).Wet, swampy stand, large areas alder with islands of cedar mix. |
| 23 | 4119 - Mixed Northern Hardwoods | Poletimber Well | 12.3 | 94 | 111-140 | OPIC - FMD: WAS PART OF STAND 1.(1997). Southern end of stand is lowland hardwood mix, rest of stand is northern hardwood mix. |
| 24 | 4134 - Aspen, Spruce/Fir | Poletimber Well | 2.7 | 94 | 81-110 | OPIC - FMD: WAS PART OF STAND 1.(1997) Small stand between Bass Lake road and rail road line. Travel and water influence zone.(2007). |
| 25 | 4130 - Aspen | Poletimber Well | 31.6 | 40 | 111-140 | OPIC - FMD: WAS PART OF STAND 2(1997) |
| 26 | 4119 - Mixed Northern Hardwoods | Poletimber Well | 35.6 | 91 | 81-110 | Rising terrain, from east to west. Granite bluffs along west side of stand. |
| 27 | 4116 - Mixed N. Hardwood - Aspen | Poletimber Well | 4.1 | 87 | 81-110 | OPIC - FMD: WAS PART OF STAND 13.(1997) Mostly maple with scattered aspen, spruce fir understory. (2007). Mix of hardwood, aspen, b fir. granite knob in middle of stand. |
| 28 | 6117 - Lowland Deciduous, Mixed Coniferous | Poletimber Medium | 9.1 | 91 | 51-80 | OPIC - FMD: WAS PART OF STAND 8.(1997). Wet saturated soils, standing water. |
| 29 | 4130 - Aspen | Sapling Medium | 11.3 | 4 | Immature | OPIC - FMD: 2 of 3 TS cut 2013 |
| 30 | 4134 - Aspen, Spruce/Fir | Sapling Well | 9.6 | 4 | Immature | OPIC - FMD: 2 of 3 TS cut 2013 |
| 31 | 4130 - Aspen | Sapling Well | 5.9 | 28 | Immature | OPIC - FMD: OI Stand Year Origin was 1989 |
| 32 | 4119 - Mixed Northern Hardwoods | Poletimber Well | 15.7 | 91 | 81-110 | OPIC - FMD: 2 of 3 TS cut 2013. Oak in stand, rather hilly. |
| 33 | 6120 - Lowland Cedar | Poletimber Well | 12.1 | 94 | 141-170 | OPIC - FMD: OI Stand Year Origin was 1923. Stand is wet with standing water. |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|--|----------------------|-------|--------------|-------------|--|
| 34 | 6115 - Lowland Ash | Poletimber Medium | 1.5 | 94 | 81-110 | OPIC - FMD: Between Bass Lk rd and creek. (2007). Standing water with b ash and alder. |
| 36 | 4130 - Aspen | Poletimber Well | 28.4 | 37 | 81-110 | OPIC - FMD: OI Stand Year Origin was 1980. Upland to lowland, southwest to northeast. Pockets of bigtooth aspen mixed in, growing straight. Cedar/black ash along northern edge of stand. Small creek along northern edge of stand draining towards corner to the northeast. |
| 37 | 6122 - Black Spruce | Poletimber Well | 4.9 | 91 | 81-110 | OPIC - FMD: OI Stand Year Origin was 1926. Wet, standing water. |
| 38 | 6130 - Fir, Aspen, Maple | Poletimber Well | 2.9 | 94 | 81-110 | OPIC - FMD: OI Stand Year Origin was 1923. Spruce/fir mix with large, breaking up aspen. |
| 41 | 4116 - Mixed N. Hardwood - Aspen | Poletimber Well | 16.0 | 91 | 81-110 | OPIC - FMD: F and Q inclusions. (2007). Not a very good hardwood stand, sugar maple/basswood in the middle with quaking aspen along edges. |
| 43 | 6117 - Lowland Deciduous, Mixed Coniferous | Poletimber Medium | 3.3 | 91 | 51-80 | OPIC - FMD: OI Stand Year Origin was 1926. Wet, standing water, island of mixed trees asurrounded by tag alder. |
| 44 | 4119 - Mixed Northern Hardwoods | Poletimber Well | 8.2 | 91 | 111-140 | OPIC - FMD: OI Stand Year Origin was 555 |
| 45 | 4130 - Aspen | Poletimber Well | 39.4 | 28 | Immature | OPIC - FMD: OI Stand Year Origin was 1989 |
| 46 | 4130 - Aspen | Poletimber Well | 1.4 | 37 | 81-110 | OPIC - FMD: Was a portion of stand 30 divided out. (2007) |
| 47 | 4130 - Aspen | Poletimber Well | 16.4 | 30 | 111-140 | Mix of aspen and hardwood, original stand was divided up for age class distribution. |
| 48 | 4130 - Aspen | Poletimber Well | 9.0 | 30 | 111-140 | Mix of aspen and hardwood, original stand was divided up for age class distribution. |
| 49 | 4134 - Aspen, Spruce/Fir | Sapling Well | 9.4 | 4 | Immature | OPIC - FMD: 2 of 3 TS cut 2013. |
| 50 | 6120 - Lowland Cedar | Poletimber Well | 6.7 | 88 | 141-170 | along rail road |
| 51 | 4130 - Aspen | Poletimber Well | 0.0 | 37 | 111-140 | OPIC - FMD: F and Q inclusions. (2007) |



| Stand | Cover Type | Acres | Managed Site | General Comments: |
|-------|----------------------------------|-------|--------------|--|
| 15 | 6220 - Alder/willow | 5.4 | No | OPIC - FMD: OI Stand Year Origin was... Standing water, heavy tag alder with islands of b spruce and q aspen. |
| 16 | 123 - Other High Intensity Urban | 0.5 | No | Railroad |
| 17 | 6225 - Bog | 1.1 | No | OPIC - FMD: OI Stand Year Origin was |
| 22 | 122 - Road/Parking Lot | 1.1 | No | OPIC - FMD: OI Stand Year Origin was |
| 35 | 6229 - Mixed lowland shrub | 2.5 | No | OPIC - FMD: OI Stand Year Origin was... Alder lowland with cedar, b spruce, w spruce and r maple along north and east edge of stand and islands. |
| 39 | 123 - Other High Intensity Urban | 0.7 | No | Railroad |
| 40 | 123 - Other High Intensity Urban | 1.7 | No | OPIC - FMD: RR, NENE sec 16. (2007). Railroad grade. |
| 42 | 123 - Other High Intensity Urban | 0.7 | No | OPIC - FMD: Between Bass Lk rd and creek. (2007). Standing water with b ash and alder. |
| 400 | 3303 - Mixed Low Density Trees | 3.3 | Yes | OPIC - FMD: OI Stand Year Origin was... Grass opening that is disappearing due to infiltration of white spruce, black spruce, sugar maple, quaking aspen, tamarack, balsam fir and paper birch. Clear cut to return to grass opening. Possible candidate for post harvest burn to promote grassland. |
| 401 | 3102 - Grass | 0.6 | No | OPIC - FMD: OI Stand Year Origin was |