



Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12154

Entry Year 2015

Acreage: 729

County Iron

Management Area: Ralph Ground Moraine

Revision Date: 2013-06-28

Stand Examiner:

Legal Description:

T42N R31W sec 1, 2

Identified Planning Goals:

Optimize sustainable timber production while enhancing and protecting wildlife habitat. The compartment is dominated by quality red pine forest. Utility pole production is occurring and should be promoted. In several areas aspen is growing offsite and should not be encouraged in future treatments. Aspen age class acres are heavily weighed to ages 20 years and younger. Protect the riparian areas and transition zones during management activity.

Soil and topography:

Very fine sandy loam soils occupy the majority of the compartment. There are small inclusions of muck soils along the lakes, stream and lowland areas. The topography overall is fairly flat.

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

The compartment is fairly contiguous in state ownership. There are large blocks of industrial forest land adjacent to the compartment with smaller parcels of private land along the boundary.

Unique Natural Features:

No Unique Natural Features known.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

None identified

Watershed and Fisheries Considerations:

Erickson and Emerson Lake are within the compartment boundary. Camp 6 Creek (trout stream) also runs through the western portion of the compartment. No aspen management will be occurring this entry period.

Wildlife Habitat Considerations:

Deer numbers are high in the area. The compartment falls within deer obligate winter range. Deer and large amounts of deer sign were observed utilizing the entire compartment for winter range. The limited acreage of lowland conifer stands were especially being used. These should be maintained and enhanced to continue to provide quality winter shelter.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium in places thin to discontinuous over bedrock. The glacial drift thickness varies between 10 and 100 feet. The Precambrian Hemlock and Michigamme Formations subcrop below the glacial drift. There is not a current economic use for these rocks. The abandoned Hope and Cayia iron mines are located to the north. Part of this compartment was previously leased for metallic exploration and potential may still exist. The nearest gravel pit is located six miles to the southeast, but there could be some potential. There is no economic oil and gas production in the UP.

Vehicle Access:

Overall there is good access. Access is severely limited during spring breakup.

Survey Needs:

T42N R31W NW1/16, NE1/16, and N 1/16 corners section 2
W 1/16, E1/16, and N 1/16 corners section 1

Recreational Facilities and Opportunities:

Snowmobile trail #16 runs through the compartment

Fire Protection:

Though this compartment is dominated by red pine with drier soils, the large fire growth potential is fairly low. There exists little in the way of ladder fuels, it is expected any fire in this area would be confined to surface fire with isolated tree torching. Direct attack would likely be a successful strategy. Access for fire suppression equipment is good and dependent upon the location of a fire, water sources may be available nearby or may be some distance away. There are several camps and homes adjacent to the 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**

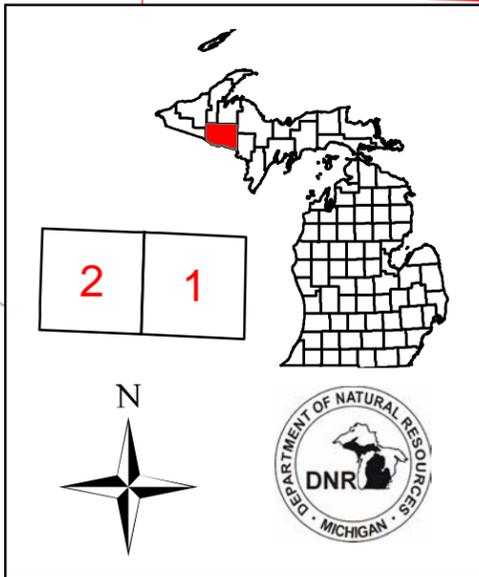
The following information is displayed, where pertinent, on the attached compartment maps:

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

Cover Type & Treatment Map

Compartment: 154
 T42N R31W Sections 1, 2
 County: Iron
 Unit: Crystal Falls
 YOE: 2015
 Acres: 721 GIS Calculated
 Examiner: Ed Rice
 Map Revised: 06/23/2014
 Map Phase: Post-Review

Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



Legend

- Miris Corners
- Remonumented Section Corners
- DNR Survey Grade Corner
- PLSS Corner
- Unclassified Corners
- Berms
- Snowmobile Trails
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Snowmobile Trail
- Stream
- Intermittent Stream
- Lakes and Rivers
- State Forest Land

Treatments Post Review

- Clearcut (w/Reserves, Patch/Strip)
- Shelter Wood (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Selection (Group, Single Tree)

Non-Forest Stands

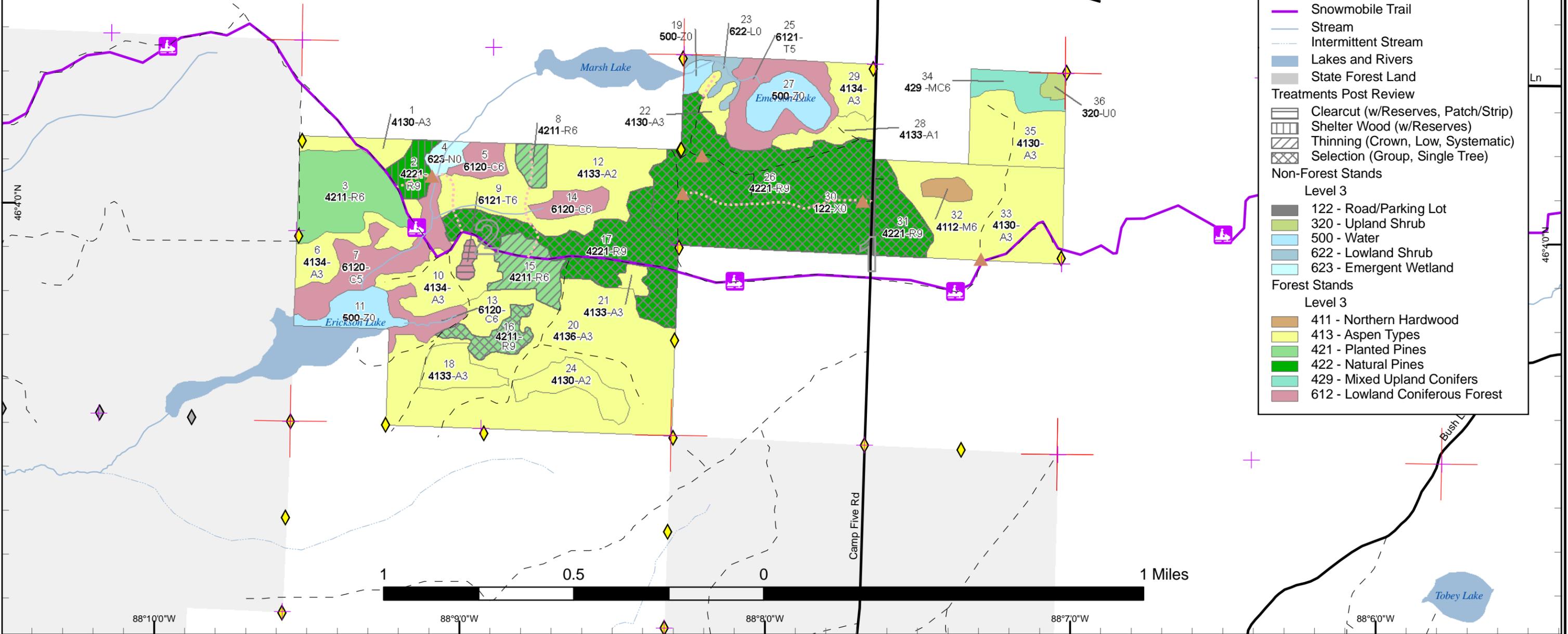
Level 3

- 122 - Road/Parking Lot
- 320 - Upland Shrub
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland

Forest Stands

Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 612 - Lowland Coniferous Forest



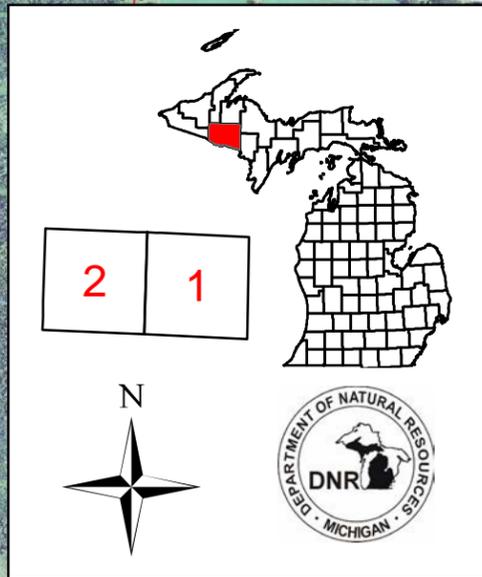
88°10'0"W 88°9'0"W 88°8'0"W 88°7'0"W 88°6'0"W

46°50'0"N 46°40'0"N

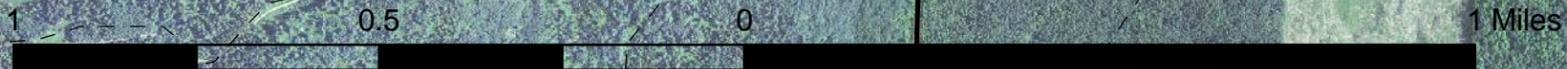
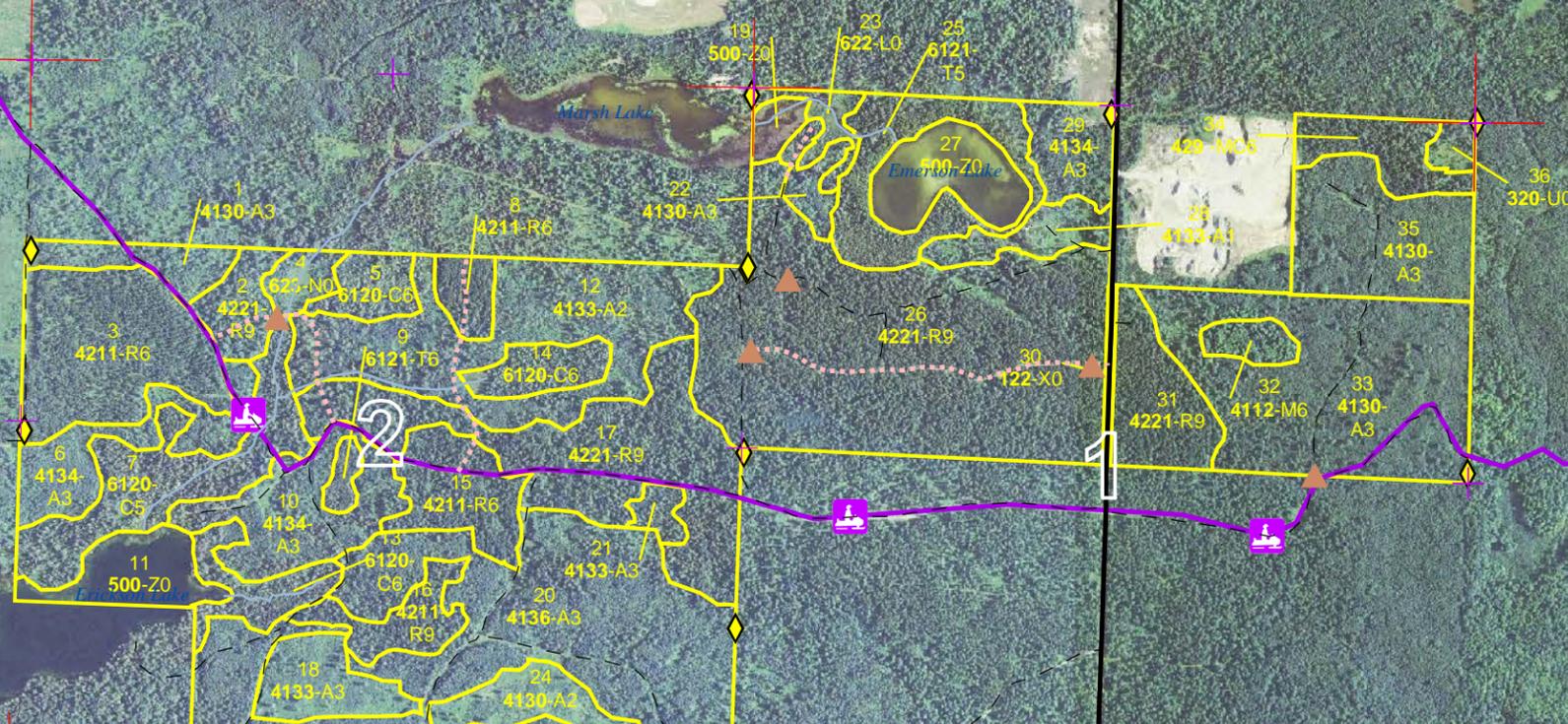
Stand Boundary Map

Compartment: 154
 T42N R31W Sections 1, 2
 County: Iron
 Unit: Crystal Falls
 YOE: 2015
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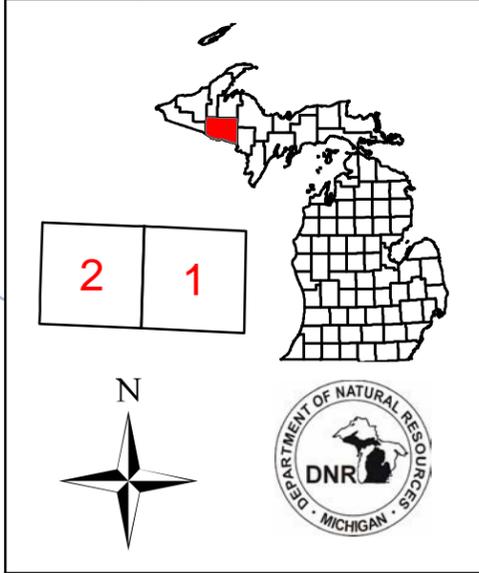
- ### Legend
- Miris Corners
 - + Remonumented Section Corners
 - ◆ DNR Survey Grade Corner
 - ◆ PLSS Corner
 - ◆ Unclassified Corners
 - ▲ Berms
 - Snowmobile Trails
 - Highway
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Cover Type & Treatment Map

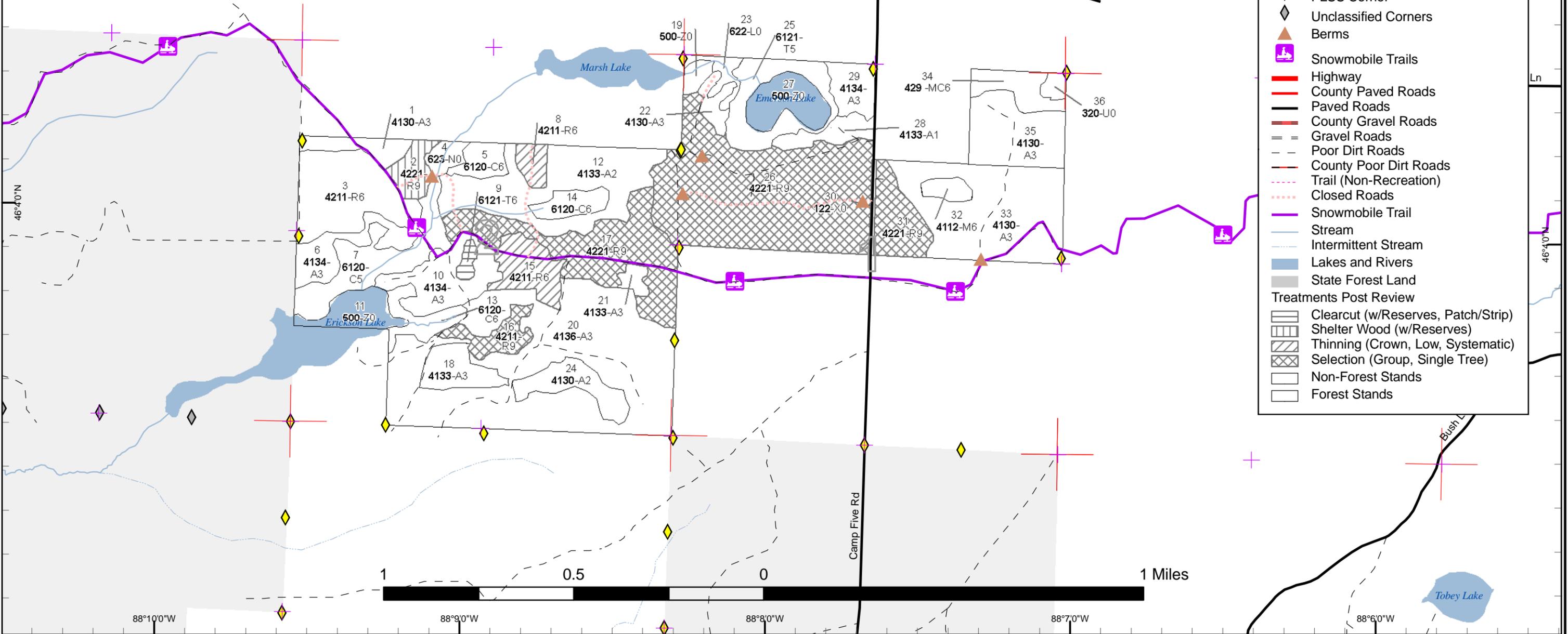
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- Shelter Wood (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Selection (Group, Single Tree)
- Non-Forest Stands
- Forest Stands



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 | 26 | 127 | 199 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 352 |
| Cedar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 |
| Lowland Shrub | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Marsh | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Northern Hardwood | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Red Pine | 0 | 0 | 0 | 0 | 0 | 48 | 15 | 128 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 238 |
| Tamarack | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| Upland Conifers | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| Upland Shrub | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Urban | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Water | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| Total | 45 | 26 | 127 | 199 | 0 | 62 | 35 | 130 | 47 | 0 | 51 | 0 | 722 |



Report 2 – Treatment Summary

Crystal Falls Mgt. Unit
Year of Entry: 2015

Compartment 154
Total Compartment Acres: 729

Acres of Harvest

Commercial Harvest - 206
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 |
|--------------|----------|------------|----------------|-----------|-------------|-----------|-------------------|----------|----------|-------------|
| Red Pine | 0 | 176 | 0 | 0 | 8 | 20 | 0 | 0 | 0 | 204 |
| Tamarack | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Total | 2 | 176 | 0 | 0 | 8 | 20 | 0 | 0 | 0 | 206 |

Proposed and Next Step Treatments by Harvest Method

| | Harvest | Site Prep | Planting | Seeding | Burning | Pesticide | Monitoring | Other | Non-Forest Mgt. | Total Acres |
|--------------|------------|-----------|----------|----------|----------|-----------|------------|----------|-----------------|-------------|
| Current | 206 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 206 |
| Total | 206 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 206 |



| 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 |
|---|-------------------|-------|-----------------------------|--------------------|--------------|-----------------|-------------------|-------------------------------|-------------------------------|------------------|-------------------------|
| 2 | 12154002-Cut | 7.8 | 42210 - Natural Red Pine | Sawtimber Well | 62 | 81-110 | Harvest | Shelterwood with Retention | 42290 - Natural Mixed Pine | Two-Aged | Draft Field Boundary |
| <p><u>Prescription</u> shelterwood to 30 - 40 BA. For leave trees select large windfirm r pine and w pine. Concentrate on leaving majority of w pine in the stand where possible. leave w birch, aspen, and w spruce. scarify after a cut.</p> <p><u>Specs:</u></p> <p><u>Next Step</u> <u>Treatments:</u></p> <p><u>Acceptable</u> <u>Regen:</u></p> <p><u>Other</u> good form on r pine but is fairly limby - clear boles to 16'. scattered r pine saplings 16 - 20' tall with semi open areas throughout the stand from a previous cut. pockets of aspen saplings 20 - 30' tall and scattered r pine seedlings 2 - 3' tall Old next step comments: mechanical scarification. MO is mixed red and white pine, no alternate.</p> <p><u>Comment:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2014</p> <p>Site Condition: None</p> | | | | | | | | | | | |
| 8 | 12154008-Cut | 5.2 | 42110 - Planted Red Pine | Poletimber Well | 42 | 141- 170 | Harvest | Systematic Thinning | 42210 - Natural Red Pine | Even-Aged | Draft Field Boundary |
| <p><u>Prescription</u> row thin every 3rd row or take 2 rows, leave 3 if needed for equipment width access. keep spruce/fir understory where possible. leave any w pine, w birch present</p> <p><u>Specs:</u></p> <p><u>Next Step</u> <u>Treatments:</u></p> <p><u>Acceptable</u> <u>Regen:</u></p> <p><u>Other</u> planted r pine with thick spruce/fir understory. low to fair amount of defect present</p> <p><u>Comment:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2014</p> <p>Site Condition: None</p> | | | | | | | | | | | |
| 9 | 12154009-Cut | 2.4 | 6121 - Tamarack | Poletimber Well | 69 | Unspec ified | Harvest | Clearcut with Retention | 6121 - Tamarack | Even-Aged | Draft Field Boundary |
| <p><u>Prescription</u> remove all merchantable tamarack and b spruce. leave submerch b spruce and any w pine or cedar.</p> <p><u>Specs:</u></p> <p><u>Next Step</u> <u>Treatments:</u></p> <p><u>Acceptable</u> <u>Regen:</u></p> <p><u>Other</u> little winter deer usage. MO is tamarack, fully expected to regenerate</p> <p><u>Comment:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2014</p> <p>Site Condition: None</p> | | | | | | | | | | | |
| 15 | 12154015-Cut | 14.9 | 42110 - Planted Red Pine | Poletimber Well | 51 | 141- 170 | Harvest | Systematic Thinning | 42110 - Planted Red Pine | Even-Aged | Draft Field Boundary |
| <p><u>Prescription</u> row thin E 1/2 of the stand. remove 1/3 - create approx 12' wide rows - may have to mark rows by compass if plantation rows can not be followed. keep w pine as much as possible</p> <p><u>Specs:</u></p> <p><u>Next Step</u> <u>Treatments:</u></p> <p><u>Acceptable</u> <u>Regen:</u></p> <p><u>Other</u> areas of stand have not been thinned. W end was cut in past treatment with 16 - 20' tall aspen. single aspen trees are throughout with denser pockets.</p> <p><u>Comment:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2014</p> <p>Site Condition: None</p> | | | | | | | | | | | |



| 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 |
|-----------------------|----------------|-------|--------------------------|----------------|-----------|----------|----------------|-----------------------|----------------------------|---------------|----------------------|
| 16 | 12154016-Cut | 9.2 | 42110 - Planted Red Pine | Sawtimber Well | 49 | 141-170 | Harvest | Single Tree Selection | 42140 - Planted Mixed Pine | Uneven-Aged | Draft Field Boundary |

Prescription thin to 120 BA or remove no more than 1/3 BA. equipment access trails will need to be created. leave w pine as much as possible, protect
Specs: aspen saplings.

Next Step
Treatments:

Acceptable
Regen:

Other r pine 8 - 14" dbh. scattered aspen sapling pockets, areas of thick spruce saplings
Comment:

Proposed Start Date: 10/1 /2014

Site Condition: None

| | | | | | | | | | | | |
|----|--------------|------|--------------------------|----------------|----|---------|---------|-----------------------|----------------------------|-------------|----------------------|
| 17 | 12154017-Cut | 47.1 | 42210 - Natural Red Pine | Sawtimber Well | 70 | 111-140 | Harvest | Single Tree Selection | 42290 - Natural Mixed Pine | Uneven-Aged | Draft Field Boundary |
|----|--------------|------|--------------------------|----------------|----|---------|---------|-----------------------|----------------------------|-------------|----------------------|

Prescription lightly thin to 100 BA targeting utility poles for removal. keep w pine, oak, spruce/fir, w birch. begin moving stand towards wind firmness for
Specs: future shelterwood.

Next Step
Treatments:

Acceptable
Regen:

Other r pine 12 - 16" dbh w pine 10 - 26" dbh small openings scattered throughout with hazel and aspen/r maple saplings. widely scattered oak
Comment:

Proposed Start Date: 10/1 /2014

Site Condition: None

| | | | | | | | | | | | |
|----|--------------|-------|--------------------------|----------------|----|---------|---------|-----------------------|----------------------------|-------------|----------------------|
| 26 | 12154026-Cut | 103.3 | 42210 - Natural Red Pine | Sawtimber Well | 69 | 141-170 | Harvest | Single Tree Selection | 42290 - Natural Mixed Pine | Uneven-Aged | Draft Field Boundary |
|----|--------------|-------|--------------------------|----------------|----|---------|---------|-----------------------|----------------------------|-------------|----------------------|

Prescription thin to approx 120 BA targeting utility poles for removal. leave w pine unless occasional tree needs to be cut for equipment access. leave
Specs: spruce, fir, w birch, oak.

Next Step
Treatments:

Acceptable
Regen:

Other well formed r pine poles 7 - 14" dbh. scattered spruce/fir throughout. heavy hazel understory. widely scattered r oak. winter deer usage
Comment:

Proposed Start Date: 10/1 /2014

Site Condition: None

| | | | | | | | | | | | |
|----|--------------|------|--------------------------|----------------|----|---------|---------|-----------------------|----------------------------|-------------|----------------------|
| 31 | 12154031-Cut | 16.2 | 42210 - Natural Red Pine | Sawtimber Well | 69 | 111-140 | Harvest | Single Tree Selection | 42290 - Natural Mixed Pine | Uneven-Aged | Draft Field Boundary |
|----|--------------|------|--------------------------|----------------|----|---------|---------|-----------------------|----------------------------|-------------|----------------------|

Prescription thin to approx 120 BA, targeting removal of utility poles. only cut w pine if necessary leave w birch, w pine, spruce.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other well formed r pine - clear boles with potential for utility poles.
Comment:

Proposed Start Date: 10/1 /2014

Site Condition: None



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| Treatment Name | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
|----------------|-------|-----------------|--------------|-----------|----------|----------------|------------------|----------------------|---------------|-----------------|
|----------------|-------|-----------------|--------------|-----------|----------|----------------|------------------|----------------------|---------------|-----------------|

Total Treatment
Acreage Proposed: 206.3

Report 5 – Site Conditions

Mgt. Unit

: Examiner

Compartment:

Year of Entry:

Dominant Site Conditions

| |
|----------------------|
| Aspen |
| Cedar |
| Lowland Shrub |
| Marsh |
| Northern Hardwood |
| Red Pine |
| Tamarack |
| Upland Conifers |
| Upland Shrub |
| Urban |
| Water |
| Total Forested Acres |
| 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.*

Mgt. Unit

Compartment: #Type!

Year of Entry:



Report 6 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

| SCA Name | SCA Category | Detail Type | Recommendation | Acres |
|----------|--------------|-------------|----------------|-------|
|----------|--------------|-------------|----------------|-------|

Comments



Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

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

| Conservation Area | Type | Description |
|-------------------|-------------------|---|
| SCA | Cold Water Lake | A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200. |
| 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 | 4130 - Aspen | Sapling Well | 8.3 | 29 | Unspecified | aspen sapling stand with scattered aspen just moving into poletimber size class 4 - 5" dbh. aspen should not be propagated on this site, very low quality - pine site |
| 2 | 42210 - Natural Red Pine | Sawtimber Well | 7.9 | 62 | 81-110 | good form on r pine but is fairly limby - clear boles to 16'. scattered r pine saplings 16 - 20' tall with semi open areas throughout the stand from a previous cut. pockets of aspen saplings 20 - 30' tall and scattered r pine seedlings 2 - 3' tall |
| 3 | 42110 - Planted Red Pine | Poletimber Well | 33.5 | 44 | 141-170 | E1/2 of stand row thinned last entry - wide rows providing good access for future thinnings. W1/2 has higher BA due to not being thinned. pockets of poletimber aspen throughout W1/2 of stand. |
| 5 | 6120 - Lowland Cedar | Poletimber Well | 6.8 | 93 | Unspecified | cedar 6 - 14" dbh. unfrozen springs throughout stand. small inclusion of tag alder and tamarack saplings (T2) in NW of stand |
| 6 | 4134 - Aspen, Spruce/Fir | Sapling Well | 16.2 | 29 | Unspecified | good mix of aspen saplings and w spruce. scattered areas of semi open. W end heavier to pure aspen |
| 7 | 6120 - Lowland Cedar | Poletimber Medium | 26.8 | 93 | Unspecified | areas of thick tag alder. W end heavier to b spruce and tamarack. progressing E in stand cedar becomes predominate. small high ground ridge inclusion along lake edge - heavy old windthrow with upland w spruce, b spruce and tamarack. Aspen, r pine, w spruce buffer from previous adjacent cut along N stand edge. cedar age estimated off of adjacent stand 5 |
| 8 | 42110 - Planted Red Pine | Poletimber Well | 5.2 | 42 | 141-170 | planted r pine with thick spruce/fir understory. low to fair amount of defect present |
| 9 | 6121 - Tamarack | Poletimber Well | 2.4 | 69 | Unspecified | good tamarack. B spruce sapling understory |
| 10 | 4134 - Aspen, Spruce/Fir | Sapling Well | 21.7 | 18 | Unspecified | Aspen 16 - 20' tall. w spruce sapling/poletimber component. scattered small tamarack poletimber lowland inclusions. W end of stand has upland spruce. |
| 12 | 4133 - Aspen, Mixed Pine | Sapling Medium | 47.4 | 17 | Unspecified | aspen saplings 16 - 20' tall with associated r pine sawtimber/poletimber. w spruce poletimber component. semi open areas where r pine is more heavily stocked. small groves of r pine, w pine throughout. R pine 3 - 15' tall |
| 13 | 6120 - Lowland Cedar | Poletimber Well | 9.3 | 93 | Unspecified | extremely wet - unfrozen springs throughout and creek running into Erickson Lk. cedar 6 - 14" dbh. N end of stand heavy to tag alder. cedar age estimated off of adjacent stand 7 |
| 14 | 6120 - Lowland Cedar | Poletimber Well | 7.4 | 94 | Unspecified | cedar 8 - 12" dbh. E end heavier to tamarack |
| 15 | 42110 - Planted Red Pine | Poletimber Well | 14.9 | 51 | 141-170 | areas of stand have not been thinned. W end was cut in past treatment with 16 - 20' tall aspen. single aspen trees are throughout with denser pockets. |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|---|-------------------|-------|--------------|-------------|---|
| 16 | 42110 - Planted Red Pine | Sawtimber Well | 9.2 | 49 | 141-170 | r pine 8 - 14" dbh. scattered aspen sapling pockets, areas of thick spruce saplings |
| 17 | 42210 - Natural Red Pine | Sawtimber Well | 47.1 | 70 | 111-140 | r pine 12 - 16" dbh w pine 10 - 26" dbh small openings scattered throughout with hazel and aspen/r maple saplings. widely scattered oak |
| 18 | 4133 - Aspen, Mixed Pine | Sapling Well | 11.7 | 8 | Unspecified | aspen 8 - 12' tall with r pine and w pine throughout |
| 20 | 4136 - Aspen, Mixed Conifer | Sapling Well | 121.9 | 26 | Unspecified | aspen 1 - 3" dbh 20 - 30' tall. w spruce saplings throughout 4 - 20' tall. pockets of good r pine saplings. widely scattered oak. small groves of r pine, w pine sawtimber. NW end of stand has high percentage of dense spruce saplings. areas of aspen sapling mortality, notable along S edge of preinv stand 19 |
| 21 | 4133 - Aspen, Mixed Pine | Sapling Well | 3.0 | 29 | Unspecified | aspen 16 - 20' tall with associated r pine. w spruce was left from previous cut |
| 22 | 4130 - Aspen | Sapling Well | 5.1 | 22 | Unspecified | very thick hazel understory. N end of stand was held in previous cut for buffer to lowlands - old windthrow with scattered aspen. aspen, w birch, fir saplings naturally regenerating 10 -15 yrs old |
| 24 | 4130 - Aspen | Sapling Medium | 13.5 | 8 | Unspecified | E1/2 of stand has poor to no aspen regen - scattered r maple stump sprouts. Much of r maple regen has been heavily browsed and did not regenerate. This area of stand held a high percent of w birch pre cut - likely why there is very little regen in this section of the stand. overall stand is not an aspen site - grass and sweet fern, suited to pine. |
| 25 | 6121 - Tamarack | Poletimber Medium | 20.0 | 57 | Unspecified | tamarack 3 - 6" dbh with scattered 10 - 12" dbh trees. S end of stand is heavier to b spruce saplings and small poletimber 4 - 6" dbh. |
| 26 | 42210 - Natural Red Pine | Sawtimber Well | 103.5 | 69 | 141-170 | well formed r pine poles 7 - 14" dbh. scattered spruce/fir throughout. heavy hazel understory. widely scattered r oak |
| 28 | 4133 - Aspen, Mixed Pine | Sapling Poor | 8.3 | 25 | Unspecified | windthrow area previously cut. pockets of A3 interspersed with open, blackberry and hazel. highly mixed stand. areas with r pine, spruce/fir regen. |
| 29 | 4134 - Aspen, Spruce/Fir | Sapling Well | 9.9 | 25 | Unspecified | aspen 20 - 30' tall with scattered poletimber trees 5 - 6" dbh. good conifer component |
| 31 | 42210 - Natural Red Pine | Sawtimber Well | 16.2 | 69 | 111-140 | well formed r pine - clear boles with potential for utility poles. |
| 32 | 4112 - Maple, Beech, Cherry Association | Poletimber Well | 4.3 | 47 | 51-80 | low quality stand. E end has heavier ironwood understory. scattered widthrow throughout. |
| 33 | 4130 - Aspen | Sapling Well | 58.5 | 18 | Unspecified | aspen 25' tall with r maple 4 - 6" dbh. associated r pine sawtimber, widely scattered oak |

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Crystal Falls Mgt. Unit

Report 8 – Forested Stands

Compartment: 154
Year of Entry: 2015



| Stand | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|-------|-----------------------------|-----------------|-------|-----------|-------------|---|
| 34 | 429 - Mixed Upland Conifers | Poletimber Well | 10.4 | 46 | Unspecified | mix of w pine and spruce with a minor component of j pine. associated aspen poletimber with pockets of A2 30' tall. |
| 35 | 4130 - Aspen | Sapling Well | 27.0 | 29 | Unspecified | aspen 25 - 30' tall with scattered trees just moving into poletimber size class 5 - 6" dbh. widely scattered oak |



| Stand | Cover Type | Acres | Managed Site | General Comments: |
|-------|----------------------------|-------|--------------|--|
| 4 | 6233 - Wet Meadow | 4.5 | No | semi open marsh with creek. Tamarack saplings and alder throughout - heavier at edges of stand. old trout rearing pond that was drained some time ago. |
| 11 | 500 - Water | 12.0 | No | Erickson Lake |
| 19 | 500 - Water | 3.2 | No | Marsh Lake |
| 23 | 6229 - Mixed lowland shrub | 4.7 | No | swamp grass and tag alder with widely scattered cedar and spruce |
| 27 | 500 - Water | 14.8 | No | Emerson Lake |
| 30 | 122 - Road/Parking Lot | 1.5 | No | Camp 5 Rd |
| 36 | 3205 - Mixed Upland Shrub | 2.5 | No | semi open area with low quality b cherry and spruce saplings |