



Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12110

Entry Year 2017

Acreage: 1,642

County Dickinson

Management Area: Cassidy Creek

Revision Date: 2015-08-05

Stand Examiner: Andrew Church

Legal Description:

T39N R28W Sections 5-8

Identified Planning Goals:

Optimize sustainable timber production while enhancing and protecting wildlife habitat. Protect riparian areas during management activity implementing the Best Management Practices guidelines.

Soil and topography:

The soil type is dominated by rock outcrops with some smaller portions of fine sandy loams. The terrain is steep.

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

The majority of this compartment is contiguous State of Michigan ownership with private landowners on the West and South sides. Hunting, fishing, trapping, and camping are the main recreational use patterns.

Unique Natural Features:

Sturgeon River and Black Creek. Sturgeon Dam is present but not in operation at this time.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features are known.

Special Management Designations or Considerations:

Eagle, Loon, and Wood Turtle considerations.

Watershed and Fisheries Considerations:

Black Creek and the Sturgeon River flow through this compartment. Streams, regardless of their size or frequency of flow, are connected to downstream waters and strongly influence their function. Additionally, wetlands and open waters in riparian areas and floodplains are physically, chemically, and biologically integrated with rivers via functions that improve downstream water quality. These systems act as effective buffers to protect downstream waters from pollution and are essential components of river food webs. BMP's should be implemented to control sediment sources from adjacent uplands. Fine sediments such as silt and sand negatively affect natural reproduction of fish, decrease the diversity of aquatic invertebrate and fish taxa, and result in lower overall fish populations.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of thin to discontinuous till over bedrock and glacial outwash sand and gravel and post-glacial alluvium. Glacial drift thickness may vary from 0 to 50 feet. Archean granite/gneiss and the Proterozoic Chocoday Group and Michigamme Formation underlie the glacial drift. There is not a current economic use for these rocks, but the granite/gneiss has building/dimension stone potential. Abandoned iron mines of the Loretto area are located in Section 7. Part of this compartment was previously leased for metallic mineral exploration and potential may still exist. A gravel pit is located just to the south (Section 18) but potential appears to be limited due to thin and variable drift thickness. There is no economic oil and gas production in the UP.

Vehicle Access:

Access to compartment is from paved County Road 573. The Black Creek Trail forest road is the main access point. Due to terrain, roads in this compartment are limited.

Survey Needs:

Some corners may need to be established.

Recreational Facilities and Opportunities:

A couple small boat launches are present in the SW portion of compartment.

Fire Protection:

Fire response will be from Norway DNR office.

Additional Compartment Information:

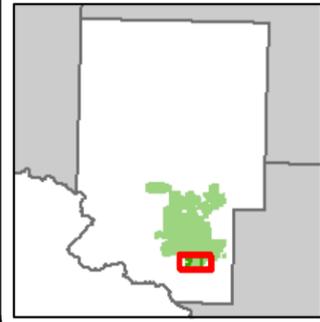
The following reports from the Inventory are attached:

- 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**

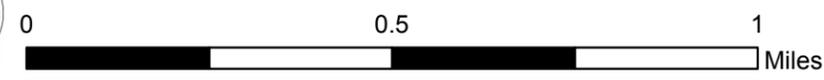
The following information is displayed, where pertinent, on the attached compartment maps:

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

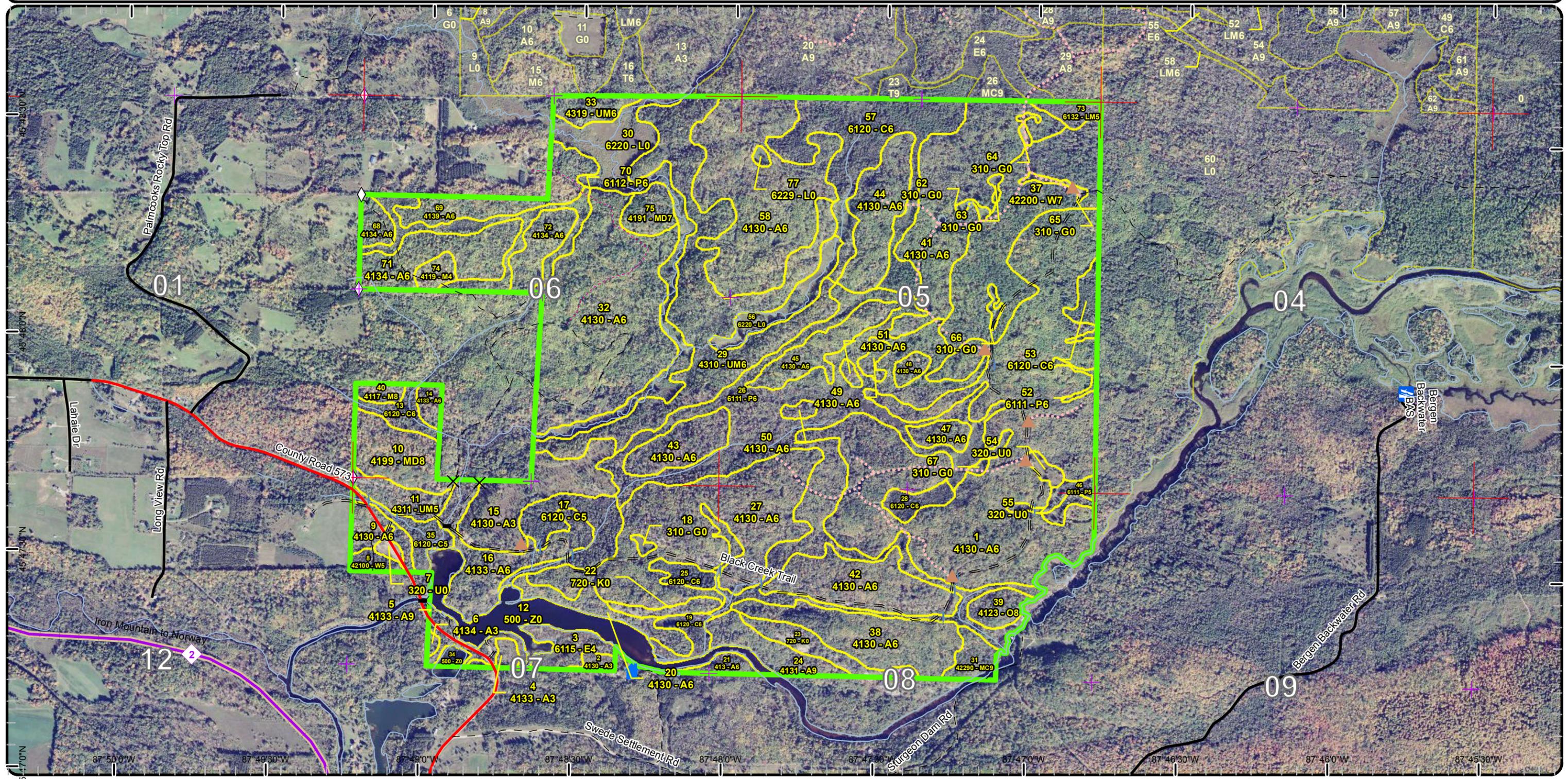
Stand Boundary Map



Compartment: 110
 T39NR28W 05-08
 County: Dickinson
 Unit: Crystal Falls
 Mgmt Area: Cassidy Creek
 YOE: 2017
 Acres: 1642 GIS Calculated
 Examiner: Andrew Church
 Map Revised: 8/27/2015
 Map Phase: Pre-Review

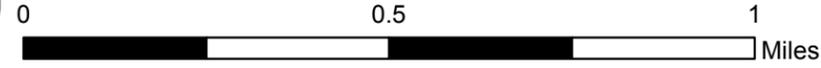
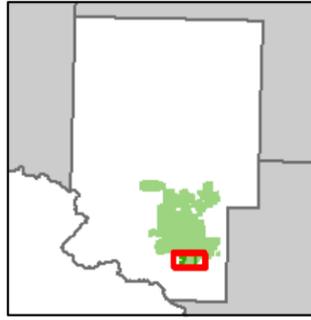


- ✚ Remonumented Section Corners
- ◇ Field Grade GPS Corners
- Miris Corners
- County Paved Roads
- Paved Roads
- Gravel Roads
- - Poor Dirt Roads
- - - Trail (Non-Recreation)
- ⋯ Closed Roads
- Snowmobile
- Designated Railtrails
- ✕ Gate
- ▲ Berms
- ✕ Bridges
- Culverts
- Boating Access Site
- Rivers
- Stand Boundaries
- Forest Covertypes
 - 411 - Northern Hardwood
 - 412 - Oak Types
 - 413 - Aspen
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
- Non-Forest Covertypes
 - 310 - Herbaceous Openland
 - 320 - Upland Shrub
 - 500 - Water
 - 622 - Lowland Shrub
 - 720 - Exposed Rock
- 422 - Natural Pines
- 430 - Upland Mixed Forests
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

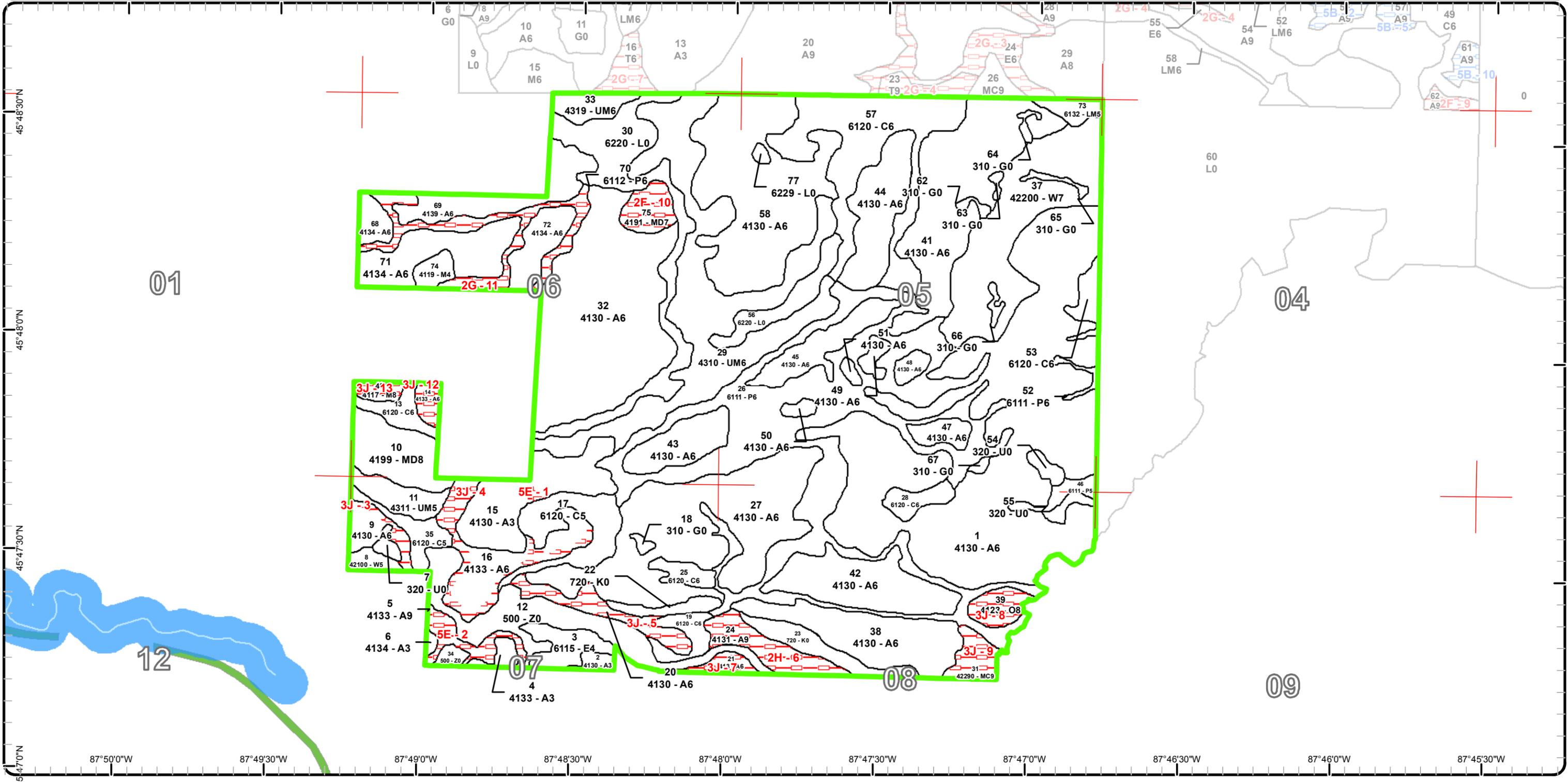


Special Conservation Areas & Site Conditions Map

Compartment: 110
 T39NR28W 05-08
 County: Dickinson
 Unit: Crystal Falls
 Mgmt Area: Cassidy Creek
 YOE: 2017
 Acres: 1642 GIS Calculated
 Examiner: Andrew Church
 Map Revised: 8/27/2015
 Map Phase: Pre-Review



- Miris Corners
- Stand Boundaries
- Site Condition
- Unavailable
- Unavailable Factors
 - 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)
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention Special Conservation Areas
- Cold Water Streams
- High Priority Trout Stream Buffer
- Rail-Trail Corridor



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 | 41 | 1 | 0 | 780 | 0 | 28 | 40 | 42 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 937 |
| Cedar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 12 | 0 | 97 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 124 |
| Exposed Rock | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| Herbaceous Openland | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| Lowland Aspen/Balsam Poplar | 0 | 0 | 0 | 0 | 158 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 181 |
| Lowland Deciduous | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 11 |
| Lowland Mixed Forest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Lowland Shrub | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 |
| Mixed Upland Deciduous | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 33 |
| Natural Mixed Pines | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 9 |
| Northern Hardwood | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 9 |
| Oak | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Upland Mixed Forest | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 98 | 117 |
| Upland Shrub | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Water | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 |
| White Pine | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69 |
| Total | 137 | 41 | 1 | 0 | 938 | 15 | 28 | 58 | 77 | 8 | 180 | 12 | 0 | 9 | 0 | 0 | 0 | 136 | 1640 |



Report 2 – Treatment Summary

Crystal Falls Mgt. Unit
Year of Entry: 2017

Compartment 110
Total Compartment Acres: 1,642

Acres of Harvest

Commercial Harvest - 50
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 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 |
| Total | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 |

Proposed and Next Step Treatments by Method

| | Harvest | Site Prep | Planting | Seeding | Burning | Pesticide | Monitoring | Other | Non-Forest Mgt. | Total Acres |
|--------------|-----------|-----------|----------|----------|----------|-----------|------------|-----------|-----------------|-------------|
| Current | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | | 60 |
| Next Step | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 0 | | 50 |
| Total | 50 | 0 | 0 | 0 | 0 | 50 | 0 | 10 | | 110 |



| S t a n d | Treatment Name | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
|-----------------------|-------------------|-------|--------------------|--------------------|--------------|-----------------|-------------------|----------------------------|-------------------------|------------------|--------------------|
| 9 | 12110009-Cut | 5.5 | 4130 - Aspen | Poletimber Well | 65 | Unspec ified | Harvest | Clearcut with Retention | 413 - Aspen | Even-Aged | Proposal |

Habitat Cut: No**Site Condition:**

Prescription Final Harvest using 2" spec. Leave Oak, Pine, Hemlock. Buffer creek to North and Sturgeon River minimum of 100 feet accounting for slope
Specs: factor in BMP manual.

Next Step
Treatments:

Acceptable Aspen, Maple, Fir, Spruce, Pine, Birch
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

| | | | | | | | | | | | |
|----|--------------|------|-----------------------------|--------------------|----|-----------------|---------|----------------------------|-------------|-----------|----------|
| 16 | 12110016-Cut | 15.9 | 4133 - Aspen, Mixed Pine | Poletimber Well | 67 | Unspec ified | Harvest | Clearcut with Retention | 413 - Aspen | Even-Aged | Proposal |
|----|--------------|------|-----------------------------|--------------------|----|-----------------|---------|----------------------------|-------------|-----------|----------|

Habitat Cut: No**Site Condition:**

Prescription Final Harvest using 2" spec. Leave Oak. Mark some White Pine to leave for diversity. Buffer Sturgeon River, Black Creek, and 2 unnamed
Specs: tributaries a minimum of 100 feet accounting for slope factor in BMP manual.

Next Step
Treatments:

Acceptable Aspen, Maple, Spruce, Fir, Pine, Birch
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

| | | | | | | | | | | | |
|----|-------------|-----|--------------------|------------|--|-----------------|--------------|-----------------|---------------------------------|--|----------|
| 54 | 12110054-NF | 3.0 | 320 - Upland Shrub | Nonstocked | | Unspec ified | NonForestMgt | Other - Specify | 310 - Herbaceous Openland | | Proposal |
|----|-------------|-----|--------------------|------------|--|-----------------|--------------|-----------------|---------------------------------|--|----------|

Habitat Cut: Yes**Site Condition:**

Prescription Open condition maintained by burning or mechanical treatment.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

| | | | | | | | | | | | |
|----|-------------|-----|------------------------------|------------|--|-----------------|--------------|-----------------|---------------------------------|--|----------|
| 62 | 12110062-NF | 1.3 | 310 - Herbaceous Openland | Nonstocked | | Unspec ified | NonForestMgt | Other - Specify | 310 - Herbaceous Openland | | Proposal |
|----|-------------|-----|------------------------------|------------|--|-----------------|--------------|-----------------|---------------------------------|--|----------|

Habitat Cut: Yes**Site Condition:**

Prescription Maintain open condition by burning or mechanical treatment.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016



| S t a n d | Treatment Name | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
|-----------------------|-------------------|-------|------------------------------|-----------------|--------------|-----------------|-------------------|---------------------|---------------------------------|------------------|--------------------|
| 63 | 12110063-NF | 1.0 | 310 - Herbaceous Openland | Nonstocked | | Unspec ified | NonForestMgt | Other - Specify | 310 - Herbaceous Openland | | Proposal |

Habitat Cut: Yes**Site Condition:**

Prescription Maintain open condition by burning or mechanical treatment.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

| | | | | | | | | | | | |
|----|-------------|-----|------------------------------|------------|--|-----------------|--------------|-----------------|---------------------------------|--|----------|
| 64 | 12110064-NF | 1.3 | 310 - Herbaceous Openland | Nonstocked | | Unspec ified | NonForestMgt | Other - Specify | 310 - Herbaceous Openland | | Proposal |
|----|-------------|-----|------------------------------|------------|--|-----------------|--------------|-----------------|---------------------------------|--|----------|

Habitat Cut: Yes**Site Condition:**

Prescription Maintain in open condition by burning or mechanical treatment.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

| | | | | | | | | | | | |
|----|-------------|-----|------------------------------|------------|--|-----------------|--------------|-----------------|---------------------------------|--|----------|
| 65 | 12110065-NF | 1.8 | 310 - Herbaceous Openland | Nonstocked | | Unspec ified | NonForestMgt | Other - Specify | 310 - Herbaceous Openland | | Proposal |
|----|-------------|-----|------------------------------|------------|--|-----------------|--------------|-----------------|---------------------------------|--|----------|

Habitat Cut: Yes**Site Condition:**

Prescription Maintain open condition by burning or mechanical treatment.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

| | | | | | | | | | | | |
|----|-------------|-----|------------------------------|------------|--|-----------------|--------------|-----------------|---------------------------------|--|----------|
| 66 | 12110066-NF | 1.5 | 310 - Herbaceous Openland | Nonstocked | | Unspec ified | NonForestMgt | Other - Specify | 310 - Herbaceous Openland | | Proposal |
|----|-------------|-----|------------------------------|------------|--|-----------------|--------------|-----------------|---------------------------------|--|----------|

Habitat Cut: Yes**Site Condition:**

Prescription Maintain open condition by burning or mechanical treatment.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016



| S t a n d | Treatment Name | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
|-----------------------|-------------------|-------|-----------------------------|--------------------|--------------|-----------------|-------------------|----------------------------|-------------------------|------------------|--------------------|
| 68 | 12110068-Cut | 6.2 | 4134 - Aspen, Spruce/Fir | Poletimber Well | 58 | Unspec ified | Harvest | Clearcut with Retention | 413 - Aspen | Even-Aged | Proposal |

Habitat Cut: No**Site Condition:**

Prescription Final Harvest using 2" spec. Leave Cedar, Hemlock, Oak, Pine.

Specs:

Next Step

Treatments:

Acceptable Aspen, Maple, Spruce, Fir, Pine, Birch

Regen:

Other Since access is through private landowner, could hold for 1 entry to wait for neighboring stands to become merchantable then harvest to avoid repeated entries. Old next step comments:

Proposed Start Date: 10/1 /2016

| | | | | | | | | | | | |
|----|--------------|------|----------------------------------|--------------------|----|-----------------|---------|----------------------------|-------------|-----------|----------|
| 69 | 12110069-Cut | 22.3 | 4139 - Aspen, Mixed Deciduous | Poletimber Well | 58 | Unspec ified | Harvest | Clearcut with Retention | 413 - Aspen | Even-Aged | Proposal |
|----|--------------|------|----------------------------------|--------------------|----|-----------------|---------|----------------------------|-------------|-----------|----------|

Habitat Cut: No**Site Condition:**

Prescription Final Harvest using 2" spec. Leave Cedar, Hemlock, Oak, Pine. Buffer Black Creek a minimum of 100 feet accounting for slope factor in BMP

Specs: manual.

Next Step

Treatments:

Acceptable Aspen, Maple, Fir, Spruce, Pine, Birch

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

**Total Treatment
Acreage Proposed: 59.8**

Report 5 – Site Conditions

Crystal Falls Mgt. Unit
Andrew Church : Examiner

Compartment: 110
Year of Entry: 2017

Dominant Site Conditions

| | 2F | 2G | 2H | 3J | 5E |
|-----------------------------|----|----|----|----|----|
| Aspen | | | 16 | 41 | 10 |
| Cedar | | | | 0 | |
| Exposed Rock | | | | | |
| Herbaceous Openland | | | | | |
| Lowland Aspen/Balsam Poplar | | 23 | | | |
| Lowland Deciduous | | | | | |
| Lowland Mixed Forest | | | | | |
| Lowland Shrub | | | | | |
| Mixed Upland Deciduous | 10 | | | | |
| Natural Mixed Pines | | | | 9 | |
| Northern Hardwood | | | | 4 | |
| Oak | | | | 8 | |
| Upland Mixed Forest | | | | | |
| Upland Shrub | | | | | |
| Water | | | | | |
| White Pine | | | | | |
| Total Forested Acres | 10 | 23 | 16 | 61 | 10 |
| Relative Percent | | | | | |

**Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

| Site No. | Dominant Site Cond Availability | Dominant Site Condition | Acres | Other Site Condition | Other Site Condition | Other Site Condition | Other Site Condition |
|---|---------------------------------|-------------------------|-------|----------------------------------|---|----------------------|----------------------|
| 1 | Unavailable | 5E: Long-Term Retention | 1 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 2 | Unavailable | 5E: Long-Term Retention | 9 | 3D: Recreational / Scenic values | 3J: Water quality / BMPs (stream, river, or lake) | Unspecified | Unspecified |
| Comments: High recreational area. Boat launch within stand. Buffer to Lake. Aesthetic buffer along 573. | | | | | | | |

Report 5 – Site Conditions

Crystal Falls Mgt. Unit
Andrew Church : Examiner

Compartment: 110
Year of Entry: 2017

| | | | | | | | |
|---|--------------------|---|----|---|-------------|-------------|-------------|
| 3 | Unavailable | 3J: Water quality / BMPs (stream, river, or lake) | 4 | 3D: Recreational / Scenic values | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 4 | Unavailable | 3J: Water quality / BMPs (stream, river, or lake) | 15 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 5 | Unavailable | 3J: Water quality / BMPs (stream, river, or lake) | 13 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: Majority of this stand is within 100 feet of Sturgeon River | | | | | | | |
| 6 | Unavailable | 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) | 16 | 3J: Water quality / BMPs (stream, river, or lake) | Unspecified | Unspecified | Unspecified |
| Comments: Rock cliff to North, Sturgeon River to South. No access for this approx 11 acres of timber. | | | | | | | |
| 7 | Unavailable | 3J: Water quality / BMPs (stream, river, or lake) | 5 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| 8 | Unavailable | 3J: Water quality / BMPs (stream, river, or lake) | 8 | 2F: Too steep | Unspecified | Unspecified | Unspecified |
| Comments: Rugged terrain bordering Sturgeon River. Erosion concerns exist. | | | | | | | |

Report 5 – Site Conditions

Crystal Falls Mgt. Unit
Andrew Church : Examiner

Compartment: 110
Year of Entry: 2017

| | | | | | | | |
|--|--------------------|--|----|---|---------------|-------------|-------------|
| 9 | Unavailable | 3J: Water quality / BMPs (stream, river, or lake) | 9 | 3A: Potential old growth / biodiversity | 2F: Too steep | Unspecified | Unspecified |
| Comments: Rugged terrain bordering Sturgeon River. Erosion concerns present. Possible Type 1 Old growth as no sign of harvesting is present. | | | | | | | |
| 10 | Unavailable | 2F: Too steep | 10 | 3J: Water quality / BMPs (stream, river, or lake) | Unspecified | Unspecified | Unspecified |
| Comments: Stand is situated on top of a rock. Very little harvestable volume exists. Black Creek is the Northern border. | | | | | | | |
| 11 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 23 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: Portions of this stand are operable once the Balsam Poplar matures. The pockets of pure Black Ash are not operable. | | | | | | | |
| 12 | Unavailable | 3J: Water quality / BMPs (stream, river, or lake) | 4 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: Steep bank to Black Creek tributary. | | | | | | | |
| 13 | Unavailable | 3J: Water quality / BMPs (stream, river, or lake) | 4 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: Small acreage next to Black Creek tributaries | | | | | | | |

Mgt. Unit

Compartment: #Type!

Year of Entry:



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

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

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



Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

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



| Stand | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|-------|-------------------------------------|-------------------|-------|-----------|-------------|--|
| 1 | 4130 - Aspen | Poletimber Well | 230.6 | 38 | Unspecified | Harvested in late 1970s. Aspen is just reaching merchantability size. Scattered supercanopy Pine and Oaks throughout. Many seeps and drains. |
| 2 | 4130 - Aspen | Sapling Well | 2.8 | 5 | Immature | Scattered supercanopy Pine and Oaks found throughout cut. Upland A6 buffer along Sturgeon River to North |
| 3 | 6115 - Lowland Ash | Poletimber Poor | 11.1 | 41 | 1-50 | Stream running through middle of stand. More Ash and Tag closer to Sturgeon River. |
| 4 | 4133 - Aspen, Mixed Pine | Sapling Well | 3.5 | 5 | Immature | Harvested 2010. Many supercanopy Pines, Oaks, and conifers mixed throughout. More Aspen regen around edges of stand and on West side of road. Mature timber along buffer of Sturgeon River and county road. Within stand is an unofficial boat launch. |
| 5 | 4133 - Aspen, Mixed Pine | Sawtimber Well | 9.3 | 74 | Unspecified | Thick conifer understory. High recreational use area bordering Sturgeon River. Boat launch within stand. |
| 6 | 4134 - Aspen, Spruce/Fir | Sapling Well | 1.0 | 15 | Immature | Scattered supercanopy Oaks and Pines found throughout. |
| 8 | 42100 - Planted White Pine | Poletimber Medium | 4.2 | 47 | 1-50 | This is a White Pine plantation with a few Red Pine along South. More Pine regen in bigger canopy gaps. Too early to remove overstory. |
| 9 | 4130 - Aspen | Poletimber Well | 9.4 | 65 | Unspecified | More conifer component on East side of road. Budworm damage evident. |
| 10 | 4199 - Other Mixed Upland Deciduous | Sawtimber Medium | 22.9 | 94 | 1-50 | Large overstory Oak wolf trees. More pole-sized trees to West. Beech Bark Disease observed. Heavy sedge layer. Small pocket of young Aspen in middle of stand. More Maple/Fir on North aspect slope. Wait for understory to become manageable. |
| 11 | 4311 - Pine, Aspen Mix | Poletimber Medium | 11.0 | 49 | 51-80 | Creek on South side of stand. Steep South aspect but still operable when ready. Scattered supercanopy Pine and Oaks. |
| 13 | 6120 - Lowland Cedar | Poletimber Well | 7.8 | 94 | Unspecified | Tributary to Black creek within stand. |
| 14 | 4133 - Aspen, Mixed Pine | Poletimber Well | 4.2 | 74 | Unspecified | Most of Birch has fallen out of stand. Aspen in decline. Pocket of Red Pine on top of hill. Stand is situated on top of hill sloping down to stream. |
| 15 | 4130 - Aspen | Sapling Well | 34.7 | 4 | Immature | Harvested 2011. Many different species of trees retained in overstory from last cut. Pines and Oak found throughout. |
| 16 | 4133 - Aspen, Mixed Pine | Poletimber Well | 30.7 | 67 | Unspecified | Black Creek flows through stand on Western finger. 2 unnamed tributaries to Sturgeon River on far East side of stand. Varying densities and ages of Aspen throughout stand. Higher stocking levels to South. |



| Stand | Crystal Falls Mgt. Unit | | Report 8 – Forested Stands | | | Compartment: 110 Year of Entry: 2017 | |
|-------|---------------------------------|----------------------|----------------------------|--------------|-------------|--|--|
| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: | |
| 17 | 6120 - Lowland Cedar | Poletimber Medium | 21.9 | 96 | Unspecified | | |
| 19 | 6120 - Lowland Cedar | Poletimber Well | 7.8 | 64 | Unspecified | Stream through stand. Pure Black Ash near Sturgeon River and NW parts of stand. | |
| 20 | 4130 - Aspen | Poletimber Well | 13.1 | 71 | Unspecified | Rugged terrain bordering Sturgeon River. Scattered supercanopy Pines throughout. | |
| 21 | 413 - Aspen | Poletimber Well | 4.7 | 105 | Unspecified | Entire stand within Riparian management zone. According last inventory cycle, it is a mix of Aspen/Maple/Black Ash. | |
| 24 | 4131 - Aspen, Oak | Sawtimber Well | 15.6 | 79 | 81-110 | Stand bounded by rock cliff to North, rivers to West and South. Accessing stand will be a problem due to these physical obstacles. Small lowland Aspen/Maple/Fir inclusion on far Western side of stand. | |
| 25 | 6120 - Lowland Cedar | Poletimber Well | 5.4 | 71 | Unspecified | Healthy Cedar stand. Spruce/Fir within stand is hit by budworm. | |
| 26 | 6111 - Lowland Balsam Poplar | Poletimber Well | 151.4 | 38 | Unspecified | Large drainage system through the rocks. Some areas are pure Cedar, some areas pure Ash but the majority is lowland Aspen. Most of this stand was cut in late 70s. Some very small upland inclusions, less than 1 acre in size, are located in this stand. | |
| 27 | 4130 - Aspen | Poletimber Well | 95.9 | 38 | Unspecified | Harvested in late 1970s. Aspen is just reaching merchantability size. Scattered supercanopy Pine and Oaks throughout. | |
| 28 | 6120 - Lowland Cedar | Poletimber Well | 6.7 | 74 | Unspecified | | |
| 29 | 4310 - Pine, Oak Mix | Poletimber Well | 98.5 | 73 | 51-80 | Most of this stand was not harvested in the 70s because it was too rugged and/or due to riparian concerns. Large boulders, many seeps and drains leading to Black Creek are found throughout stand. Black Ash and BAM in lowland areas of stand. Look at opportunities to treat when adjacent stands mature. | |
| 31 | 42290 - Natural Mixed Pine | Sawtimber Well | 8.6 | 125 | 81-110 | Remnant stand that shows no signs of ever being harvested. Terrain is very rugged. Large cliffs near the river. High erosion concerns within stand due to steep hillsides. | |
| 32 | 4130 - Aspen | Poletimber Well | 104.6 | 34 | Unspecified | Various drainages littered throughout stand. Scattered supercanopy Pines found mostly on the rocktops. Very healthy young Aspen stand just starting to reach merchantability. | |
| 33 | 4319 - Mixed Upland Forest | Poletimber Well | 8.4 | 98 | 51-80 | This stand should be managed with the adjacent compartment to the North as that is the only access. Appears to be a mix of Northern Hardwood/Aspen with some lowland portions near Black Creek. | |
| 35 | 6120 - Lowland Cedar | Poletimber Medium | 9.0 | 99 | Unspecified | 2 streams within stand. | |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|---------------------------------|-------------------|-------|--------------|-------------|--|
| 37 | 42200 - Natural White Pine | Sawtimber Poor | 65.3 | 95 | 1-50 | Many pole sized Pines filling in canopy gaps. Some small areas within stand are pure Aspen/Fir. Understory was harvested in 70s. Sub-merchantable Spruce/Fir hit hard by budworm. Recruitment of mixed Pines present. Stand should be managed for a Mixed Conifer objective. Southern and Northern portions of stand has the most Pine stocking. |
| 38 | 4130 - Aspen | Poletimber Well | 37.8 | 39 | Unspecified | Rugged site but still harvestable. Pocket of Red and White Pines located on far Western side of stand. |
| 39 | 4123 - Red Oak | Sawtimber Medium | 8.1 | 87 | 51-80 | Rugged site with little rock chutes throughout. Eastern boundary is a rock cliff leading to the old Sturgeon Dam. Understory of White Pine present in stand. |
| 40 | 4117 - Mixed N. Hardwood - Pine | Sawtimber Medium | 3.8 | 110 | 51-80 | Very diverse stand. Pinned in between rock wall to North and creeks to South and East. Red Pine on far Western boundary of stand. WLD notified of point within stand. |
| 41 | 4130 - Aspen | Poletimber Well | 67.4 | 38 | Unspecified | Harvested in late 1970s. Aspen is just reaching merchantability size. Scattered supercanopy Pine and Oaks throughout. Many drainages and seeps. |
| 42 | 4130 - Aspen | Poletimber Well | 35.6 | 38 | Unspecified | Harvested in late 1970s. Aspen is just reaching merchantability size. Pockets of Oak and Pine throughout stand. |
| 43 | 4130 - Aspen | Poletimber Well | 17.5 | 39 | 51-80 | Stand is just starting to reach merchantable size. Spruce/Fir in understory being hit hard by Budworm but not losing much volume as Spruce/Fir is not merchantable. Stand is very rugged with boulders and steep areas. Lowland drains are present within stand. Some scattered supercanopy Pines mixed throughout. |
| 44 | 4130 - Aspen | Poletimber Well | 29.2 | 38 | Unspecified | Harvested in late 1970s. Aspen is just reaching merchantability size. Scattered supercanopy Pine and Oaks throughout. |
| 45 | 4130 - Aspen | Poletimber Well | 18.0 | 38 | Unspecified | Harvested in late 1970s. Aspen is just reaching merchantability size. Scattered supercanopy Pine and Oaks throughout. |
| 46 | 6111 - Lowland Balsam Poplar | Poletimber Medium | 5.0 | 38 | Unspecified | Parts of this stand are wet meadow. |
| 47 | 4130 - Aspen | Poletimber Well | 6.3 | 38 | Unspecified | Harvested in late 1970s. Aspen is just reaching merchantability size. |
| 48 | 4130 - Aspen | Poletimber Well | 3.7 | 38 | Unspecified | Harvested in late 1970s. Aspen is just reaching merchantability size. |
| 49 | 4130 - Aspen | Poletimber Well | 3.4 | 38 | Unspecified | Harvested in late 1970s. Aspen is just reaching merchantability size. |
| 50 | 4130 - Aspen | Poletimber Well | 2.2 | 38 | Unspecified | Harvested in late 1970s. Aspen is just reaching merchantability size. |



| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|---|----------------------|-------|--------------|-------------|--|
| 51 | 4130 - Aspen | Poletimber Well | 1.6 | 38 | Unspecified | Harvested in late 1970s. Aspen is just reaching merchantability size. |
| 52 | 6111 - Lowland Balsam Poplar | Poletimber Well | 2.0 | 38 | Unspecified | Wet drainage |
| 53 | 6120 - Lowland Cedar | Poletimber Well | 6.6 | 102 | Unspecified | |
| 57 | 6120 - Lowland Cedar | Poletimber Well | 58.5 | 98 | Unspecified | Thick Cedar stand with pockets of pure Tamarack and pure Black Ash. Bed and bank running through middle of stand. Finger extending to South is Black Ash/BAM. |
| 58 | 4130 - Aspen | Poletimber Well | 85.0 | 38 | Unspecified | Most of stand is just starting to reach merchantability size. MANY wet drainages throughout. Scattered Pine and Oak in stand. |
| 68 | 4134 - Aspen, Spruce/Fir | Poletimber Well | 6.2 | 58 | Unspecified | Drainages surround stand. |
| 69 | 4139 - Aspen, Mixed Deciduous | Poletimber Well | 22.3 | 58 | Unspecified | Extremely variable stand. Small low quality Hardwood inclusion. Western finger is rock wall with low volume. Stand is fully stocked with Aspen to North. Small drainage in Northern portion. Access through private. |
| 70 | 6112 - Lowland Aspen | Poletimber Well | 22.9 | 76 | Unspecified | Very wet lowland drainage. Some parts of stand were harvested in the 70s and coming back to Aspen. The unharvested portions are solid Black Ash. |
| 71 | 4134 - Aspen, Spruce/Fir | Poletimber Well | 28.0 | 36 | Unspecified | Numerous drainages are surrounding and mixed throughout the rocks within stand. Aspen starting to reach merchantability size. Scattered supercanopy Oaks present. Small pockets of mature Aspen within stand, particularly West and South edges. |
| 72 | 4134 - Aspen, Spruce/Fir | Poletimber Well | 13.3 | 36 | Unspecified | Aspen/Fir stand on top of rock outcroppings. Scattered supercanopy Oaks. Windthrow on top of rocks due to shallow soils. |
| 73 | 6132 - Mixed Lowland Forest with Cedar | Poletimber Medium | 5.4 | 63 | Unspecified | |
| 74 | 4119 - Mixed Northern Hardwoods | Poletimber Poor | 5.1 | 63 | 1-50 | Hardwood stand on rock. Poor form and low volume. Large Oaks throughout. |
| 75 | 4191 - Mixed Upland Deciduous with Conifer | Sawtimber Poor | 9.6 | 95 | 1-50 | Very rugged. Situated on top of a rock. Low volume due to lack of soil. Hemlock on NW hillside. |



| Stand | Cover Type | Acres | Managed Site | General Comments: |
|-------|----------------------------|-------|--------------|---|
| 7 | 320 - Upland Shrub | 2.2 | No | |
| 12 | 500 - Water | 39.0 | No | Sturgeon River |
| 18 | 310 - Herbaceous Openland | 1.2 | No | |
| 22 | 720 - Exposed Rock | 5.5 | No | Some small inaccessible Oaks and Pines growing on top of rock |
| 23 | 720 - Exposed Rock | 12.4 | No | Some small inaccessible Oaks and Pines growing on top of rock |
| 30 | 6220 - Alder/willow | 46.2 | No | |
| 34 | 500 - Water | 2.5 | No | Sturgeon River |
| 54 | 320 - Upland Shrub | 3.0 | No | Parts of this opening are WET |
| 55 | 320 - Upland Shrub | 2.8 | No | Parts of this opening are WET |
| 56 | 6220 - Alder/willow | 13.1 | No | |
| 62 | 310 - Herbaceous Openland | 1.3 | No | |
| 63 | 310 - Herbaceous Openland | 1.0 | No | |
| 64 | 310 - Herbaceous Openland | 1.3 | No | |
| 65 | 310 - Herbaceous Openland | 1.8 | No | |
| 66 | 310 - Herbaceous Openland | 1.5 | No | |
| 67 | 310 - Herbaceous Openland | 1.0 | No | |
| 77 | 6229 - Mixed lowland shrub | 1.2 | No | |