Crystal Falls Forest Management Unit
Compartment Review Presentation
Compartment \# 40 Entry Year: 2014
Compartment Acreage: 2162 County: Dickinson

Revision Date: 05/16/12

Stand Examiner: Scott Sebero
Legal Description: T43N, R29W, Sec. 11, 13, 14, 15, 23, 24

## RMU (if applicable):

Management Goals: Our management goals in this compartment are to develop age class distribution in aspen types, maintain health of conifer types and increase acreage where possible, and to develop the quality while maintaining diversity in hardwood types.

Soil and Topography: Land is nearly level to hilly with a mix of Pemene and Emmet soils that are welldrained loamy and sandy soils on ground moraines, end moraines and outwash plains. Some areas contain rock outcrops. Some narrow depressions contain Cathro soils that are poorly drained black muck.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Ownership patterns in and around this compartment consist mostly of State lands with a few private parcels and camps. These lands are used mainly for hunting and managed for forest products.

Unique, Natural Features: The Ford River is the southern border and the N. Branch of the Ford is the northern border of the compartment.

Archeological, Historical, and Cultural Features: None.
Special Management Designations or Considerations: None.

## Watershed and Fisheries Considerations:

Wildlife Habitat Considerations: This compartment is adjacent to the Henderson Deer Wintering Complex. Openings that were created during the ELF project have been maintained as hunter walking trails. The conifer component in upland hardwood and aspen stands should be maintained and promoted to provide for cover and food for deer, grouse and variety of other wildlife species. This is particularly important in transition zones between upland deciduous and lowland conifer types. Underplantings of hemlock and pine were done to promote mesic conifer in hardwood stands that were harvested in the last year of entry. Losses of conifer to spruce budworm, make cedar, hemlock and pine more essential than ever to provide life requisites for wildlife in the area.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of medium-textured glacial till. The glacial drift thickness varies between 50 and 100 feet. The Cambrian Munising Group, Precambrian Archean granite/gneiss and the Michigamme Formation subcrop below the glacial drift. There is not an economic use for these rocks, although the granite/gneiss may have dimension stone potential. Randville Dolomite marble quarries are located two miles to the south. Groveland Iron mine is located approximately eight miles to the southwest. The compartment was previously leased for metallic exploration and Section $13 \& 14$ are currently leased. A gravel pit is located two miles to the west and there appears to be potential. There is no economic oil and gas production in the UP.

Vehicle Access: Vehicle access is from Pirlot Road and associated trail roads.

Survey Needs: None.

Recreational Facilities and Opportunities: None.

## Fire Protection:

Additional Compartment Information: None.
> The following reports from the Inventory are attached:

- Total Acres by Cover Type and Age Class
- Proposed Treatment Summary
- Proposed Treatments - No Limiting Factors
- Proposed Treatments - With Limiting Factors
- Stand Details (Forested and Nonforested)
- Dedicated and Proposed Special Conservation Areas
$>$ The following information is displayed, where pertinent, on the attached compartment maps:
- Base feature information, stand boundaries, cover types, and numbers
- Proposed treatments
- Details on the road access system





# Table 1 - Total Acres by Cover Type and Age Class 

Crystal Falls Mgt. Unit

## Scott Sebero : Examiner

Age Class



| S |  | Crystal Falls Mgt. Unit |  | Table 3 -- Treatments Prescribed with No Limiting Factor |  |  |  |  | Compartment: 040 <br> Year of Entry 2014 <br> Cover Type Objective |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \mathrm{n} \\ & \mathrm{~d} \end{aligned}$ | Treatment Name | Acres | CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method |  | Approval Status |
| 2 | 12040002-Cut | 9.6 | 42110 - Planted Red Pine | High Density Pole | 47 | 81-110 | Harvest | Systematic Thinning | 42110 - Planted Red Pine | Cmpt. Review Proposal |
| Prescription About 10 acres in the NE portion of the stand were not treated when last cut in 1997. Propose to remove merchantable aspen and spruce/fir and Specs: to row thin red pine where needed in this portion of the stand. |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |
| Next |  |  |  |  |  |  |  |  |  |  |
| Steps: |  |  |  |  |  |  |  |  |  |  |
| Proposed |  |  |  |  |  |  |  |  |  |  |
| Start Date: 10/01/2013 |  |  |  |  |  |  |  |  |  |  |
| 7 | 12040007-Cut | 84.3 | 4110 - Sugar Maple Association | High Density Pole | $82$ | 141-170 | Harvest | Crown Thinning | 4110 - Sugar Maple Association | Cmpt. Review Proposal |
| Prescription Mark stand down to a BA of 80 . Use completete marker. Leave pine, oak, cedar and hemlock. Focus on cutting sawlog sized ash. Reduce Specs: ash BA to 10 sq. ft . |  |  |  |  |  |  |  |  |  |  |
| Other <br> Comments: |  |  |  |  |  |  |  |  |  |  |
| Next <br> Steps: |  |  |  |  |  |  |  |  |  |  |
| Proposed |  |  |  |  |  |  |  |  |  |  |
| Start Date: 10/01/2013 |  |  |  |  |  |  |  |  |  |  |
| 10 | 12040010-Cut | $15.0$ | 4134 - Aspen, Spruce/Fir | High Density Pole | $82$ | $51-80$ | Harvest | Clearcut with Reserves | 4134 - Aspen, Spruce/Fir | Cmpt. Review Proposal |
| Prescription Cut all aspen and mixed hardwood two inches or more DBH. Cut all spruce, balsam and jack pine with one or more pulpwood sticks. No red or Specs: white pine, cedar, hemlock or oak will be cut. |  |  |  |  |  |  |  |  |  |  |
| Other Comments: |  |  |  |  |  |  |  |  |  |  |
| Next regen survey. |  |  |  |  |  |  |  |  |  |  |
| Proposed |  |  |  |  |  |  |  |  |  |  |
| Start Date: 10/01/2013 |  |  |  |  |  |  |  |  |  |  |
| 11 | 12040011-Cut | 23.4 | $42110 \text { - Planted }$ Red Pine | High Density Pole | $47$ | 141-170 | Harvest | Systematic Thinning | 42110 - Planted Red Pine | Cmpt. Review Proposal |
| Prescription Remove every third row of red pine. Cut all aspen, spruce, balsam, jack pine and mixed hardwood with one or more pulpwood sticks. No oak Specs: will be cut. |  |  |  |  |  |  |  |  |  |  |
| Other <br> Comments: |  |  |  |  |  |  |  |  |  |  |
| Next |  |  |  |  |  |  |  |  |  |  |
| Proposed |  |  |  |  |  |  |  |  |  |  |



| S |  | Crystal Falls Mgt. Unit |  | Table 3 -- Treatments Prescribed with No Limiting Factor |  |  |  |  | Compartment: 040 Year of Entry 2014 | Approval Status |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \mathbf{a} \\ & \mathbf{n} \\ & \mathbf{d} \end{aligned}$ | Treatment Name | Acres | CoverType | Size <br> Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective |  |
| 32 | 12040032-Cut | 22.3 | 4130 - Aspen | High Density Pole | 40 | 81-110 | Harvest | Clearcut with Reserves | 4130 - Aspen | Cmpt. Review Proposal |
| Prescription Cut all aspen and mixed hardwood two inches or more DBH. Cut all spruce, balsam and jack pine with one or more pulpwood sticks. No red or Specs: white pine, cedar, hemlock or oak. |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |
| Next regen survey |  |  |  |  |  |  |  |  |  |  |
| Steps: |  |  |  |  |  |  |  |  |  |  |
| Proposed |  |  |  |  |  |  |  |  |  |  |
| Start Date: 10/01/2013 |  |  |  |  |  |  |  |  |  |  |
| 34 | 12040034-Cut | 411.7 | 4110 - Sugar Maple Association | High Density Pole | $82$ | $141-170$ | Harvest | Crown Thinning | 4110 - Sugar Maple Association | Cmpt. Review Proposal |
| Prescription Mark stand down to a BA of 80 . Use completete marker. Leave pine, oak, cedar and hemlock. Focus cutting on sawlog sized ash. Reduce Specs: ash BA to 10 sq. ft. |  |  |  |  |  |  |  |  |  |  |
| Other Comments: |  |  |  |  |  |  |  |  |  |  |
| Next |  |  |  |  |  |  |  |  |  |  |
| Proposed |  |  |  |  |  |  |  |  |  |  |
| Start Date: 10/01/2013 |  |  |  |  |  |  |  |  |  |  |
| 48 | 12040048-Cut | 49.1 | 6122 - Black Spruce | High Density Pole | $82$ | $81-110$ | Harvest | Clearcut with Reserves | 6128 - Lowland Coniferous, Mixed Deciduous | Cmpt. Review Proposal |
| Prescription Cut all aspen and mixed hardwood two inches or more DBH. Cut all spruce, balsam and jack pine with one or more pulpwood stick. No red or Specs: white pine, cedar, hemlock or oak. Buffer creek with standard BMP distance. |  |  |  |  |  |  |  |  |  |  |
| Other Comments: |  |  |  |  |  |  |  |  |  |  |
| $\underline{\text { Next }}$ Steps: regen survey |  |  |  |  |  |  |  |  |  |  |
| Proposed |  |  |  |  |  |  |  |  |  |  |
| Start Date: 10/01/2013 |  |  |  |  |  |  |  |  |  |  |
| 50 | 12040050-Cut | $6.0$ | 4140 - Other Upland Deciduous | High Density Pole | $82$ | $81-110$ | Harvest | Clearcut with Reserves | 4193 - Birch, Aspen | Cmpt. Review Proposal |
| Prescription Cut all aspen and mixed hardwood two inches or more DBH. Cut all spruce, balsam and jack pine with one or more pulpwood sticks. No red or Specs: white pine, cedar, hemlock or oak will be cut. |  |  |  |  |  |  |  |  |  |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |
| $\underline{\text { Next }}$ Steps: regen survey |  |  |  |  |  |  |  |  |  |  |
| Proposed |  |  |  |  |  |  |  |  |  |  |

Crystal Falls Mgt. Unit
Table 3 -- Treatments Prescribed
Compartment: 040 with No Limiting Factor

Year of Entry 2014

| a <br> $\mathbf{n}$ <br> $\mathbf{d}$ | Treatment <br> Name | Acres | CoverType | Size <br> Density | Stand <br> Age | BA <br> Range | Treatment <br> Type | Treatment <br> Method | Cover Type <br> Objective |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{5 1}$ | 12040051-Cut | 14.4 | $4116-$ Mixed N. <br> Hardwood - Aspen | High <br> Density <br> Approval <br> Status |  |  |  |  |  |
|  |  |  | 82 | $111-140$ | Harvest | Crown Thinning | 4110-Sugar Maple | Cmpt. Review <br> Association |  |
| Proposal |  |  |  |  |  |  |  |  |  |

Prescription Mark stand down to a BA of 80 . Use completete marker. Leave pine, oak, cedar and hemlock. Focus cutting on sawlog size ash. Reduce ash Specs: $\quad B A$ to 10 sq . ft.

Other
Comments:
Next
Steps:
$\begin{array}{ll}\text { Proposed } \\ \text { Start Date: } & 10 / 01 / 2013\end{array}$


Total Treatment Acreage Proposed: 829.0


Total Treatment Acreage Proposed:

0 $\begin{array}{cccccc}\text { 12091001-Cut } & 31.4 & \begin{array}{c}\text { 4110-Sugar Maple } \\ \text { Association }\end{array} & \begin{array}{c}\text { High } \\ \text { Density Log }\end{array} & 87\end{array} \quad$ Harvest $\quad \begin{gathered}\text { Single Tree } \\ \text { Selection }\end{gathered} \quad \begin{gathered}\text { 4110-Sugar Maple }\end{gathered} \quad \begin{gathered}\text { Cmpt. Review } \\ \text { Proposal - }\end{gathered}$

Prescription Mark trees to 80 BA leaving best tree in place according to the Compleat Marker but focusing on White Ash to avoid Emerald Ash borer Specs: devastation. Create canopy gaps for regeneration

Other
Comments:
Next Regen check according to certification
Steps:
Proposed
Start Date: 10/01/2013

## Total Treatment Acreage Proposed: 31.4



| S Crystal Falls Mgt. Unit <br> $\mathbf{t}$ <br> $\mathbf{n}$ <br> $\mathbf{n}$ | Level 4 <br> Cover Type | Size <br> Density | Acres | Stand <br> Age | BA <br> Range |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 3}$ | $4110-$ Sugar Maple <br> Association | High Density <br> Log | 114.6 | 82 | $111-140$ |


| S | Crystal Falls | Mgt. Unit | 5 - Forested Stands |  |  | Compartment: 040 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \mathrm{n} \\ & \mathrm{~d} \end{aligned}$ | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 45 | 4130 - Aspen | High Density Sapling | 7.6 | 22 |  |  |
| 46 | 6120 - Lowland Cedar | High Density Pole | 4.1 | 82 | 111-140 |  |
| 47 | 4130 - Aspen | High Density Sapling | 22.9 | 22 |  |  |
| 48 | 6122 - Black Spruce | High Density Pole | 49.1 | 82 | 81-110 | Small stream, about 2 feet wide, flowing through stand. |
| 49 | 4130 - Aspen | High Density Pole | 10.2 | 38 | 51-80 |  |
| 50 | 4140 - Other Upland Deciduous | High Density Pole | 6.0 | 82 | 81-110 | A few scattered large B.T. aspen. 14 inch plus diameter. |
| 51 | 4116 - Mixed N. Hardwood - Aspen | High Density Pole | 14.4 | 82 | 111-140 |  |
| 52 | 4130 - Aspen | High Density Sapling | 8.7 | 23 |  |  |
| 53 | 4130 - Aspen | High Density Sapling | 51.3 | 15 |  |  |
| 55 | 4130 - Aspen | High Density Sapling | 44.6 | 22 |  |  |


| Stand | Cover Type | Acres | Managed Site | Management Priority (Objective) | General Comments: |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | 3205 - Mixed Upland Shrub | 3.7 | No | Unspecified |  |
| 12 | 3205 - Mixed Upland Shrub | 4.2 | No | Unspecified |  |
| 18 | 3205 - Mixed Upland Shrub | 23.5 | No | Unspecified | Old Elf line. |
| 19 | 6229 - Mixed lowland shrub | 4.5 | No | Unspecified |  |
| 22 | 6229 - Mixed lowland shrub | 8.6 | No | Unspecified |  |
| 29 | 3205 - Mixed Upland Shrub | 34.8 | No | Unspecified |  |
| 31 | 6229 - Mixed lowland shrub | 15.5 | No | Unspecified |  |
| 37 | 3205 - Mixed Upland Shrub | 11.0 | No | Unspecified |  |
| 42 | 3205 - Mixed Upland Shrub | 7.3 | No | Unspecified |  |
| 54 | 6229 - Mixed lowland shrub | 6.0 | No | Unspecified |  |
| 56 | 6229 - Mixed lowland shrub | 11.8 | No | Unspecified |  |

## 7 - 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.
Stand SCA Type SCA Name Acres Comments


## 8 - DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a $1 / 4$ mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

| Conservation <br> Area | Type | Description |
| :---: | :---: | :--- |
| SCA | Cold Water <br> Stream | A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or <br> stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from <br> year to year. Coldwater streams in Michigan typically provide these conditions due to substantial <br> contributions of groundwater to their stream flows. Such streams are established by Director's action and <br> designated as trout resources by Fisheries Order 210. |
| HCVA = High Conservation Value Area |  |  |

