



**Crystal Falls Forest Management Unit**  
**Compartment Review Presentation**  
**Compartment #58**                      **Entry Year: 2012**  
**Compartment Acreage: 2323**   **County: Dickinson**

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**Revision Date:** 5-23-2010

**Stand Examiner:** Debbie Goupell

**Legal Description:** T42N R28W Sec 6, 7  
T42N R29W Sec 1, 2, 11, 12  
T43N R29W Sec 35, 36

**Identified Planning Goals ('Management Area' or 'RMU', if applicable):**

**Management Goals:** This compartment has a good degree of upland with some wet types would throughout. Just about half of the compartment is aspen, 80% of it is under 50 years old. Management of all stands is to balance age class and allow best suited species to continue to grow on best suited sites. We will protect all bodies of water, especially Gene's Pond and the Sturgeon River.

**Soil and Topography:** The majority of the upland is dominated by Pemene-Rock outcrop complex which has gently rolling, well-drained Pemene soil intermingled with areas of rock outcrop. Other upland soils, mostly the hardwoods, include Emmet fine sandy loam which is a rolling, well-drained soil and Pemene fine sandy loam. Lowland soils are Carbondale and Cathro mucks and Ensley fine sandy loam.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** This compartment is all State-owned land, used by loggers, hunters, fisherpeople, campers, trappers, general recreationists. State land surrounds much of the compartment boundary.

**Unique, Natural Features:** Gene's Pond, Sturgeon River

**Archeological, Historical, and Cultural Features:** None known

**Special Management Designations or Considerations:** Dedicated Management Area SCA; eagle nest

**Watershed and Fisheries Considerations:** Protect water quality for all bodies of water, particularly the Sturgeon River and Gene's Pond. Promote long lived conifer species along these waterbodies and use adequate buffer protection.

**Wildlife Habitat Considerations:**

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of coarse-textured glacial till. The glacial drift thickness varies between 0 and 50 feet. The Cambrian Munising Formation, and Precambrian Randville Dolomite and Archean granite/gneiss and Volcanics subcrop below the glacial drift. The Randville is used as a dimension stone. The other formations do not have a current economic use, although some might have dimension stone potential. There is a rock quarry located in the NE/4 of Section 2. The Groveland Iron mine is located approximately five miles to the southwest. Part of this area was previously leased for metallic exploration and potential may still exist. A gravel pit is located two miles to the northeast. There may be some gravel potential. There is no economic oil and gas production in the UP.

**Vehicle Access:** North Wells Grade comes in from the west and follows the northwest compartment boundary; closed trails go throughout the rest.

**Survey Needs:** None needed

**Recreational Facilities and Opportunities:** Hunting, camping, fishing, trapping, hiking, canoeing.

**Fire Protection:** Felch protection area. Access to most upland stands is poor to fair, access to some swamp types would be difficult.

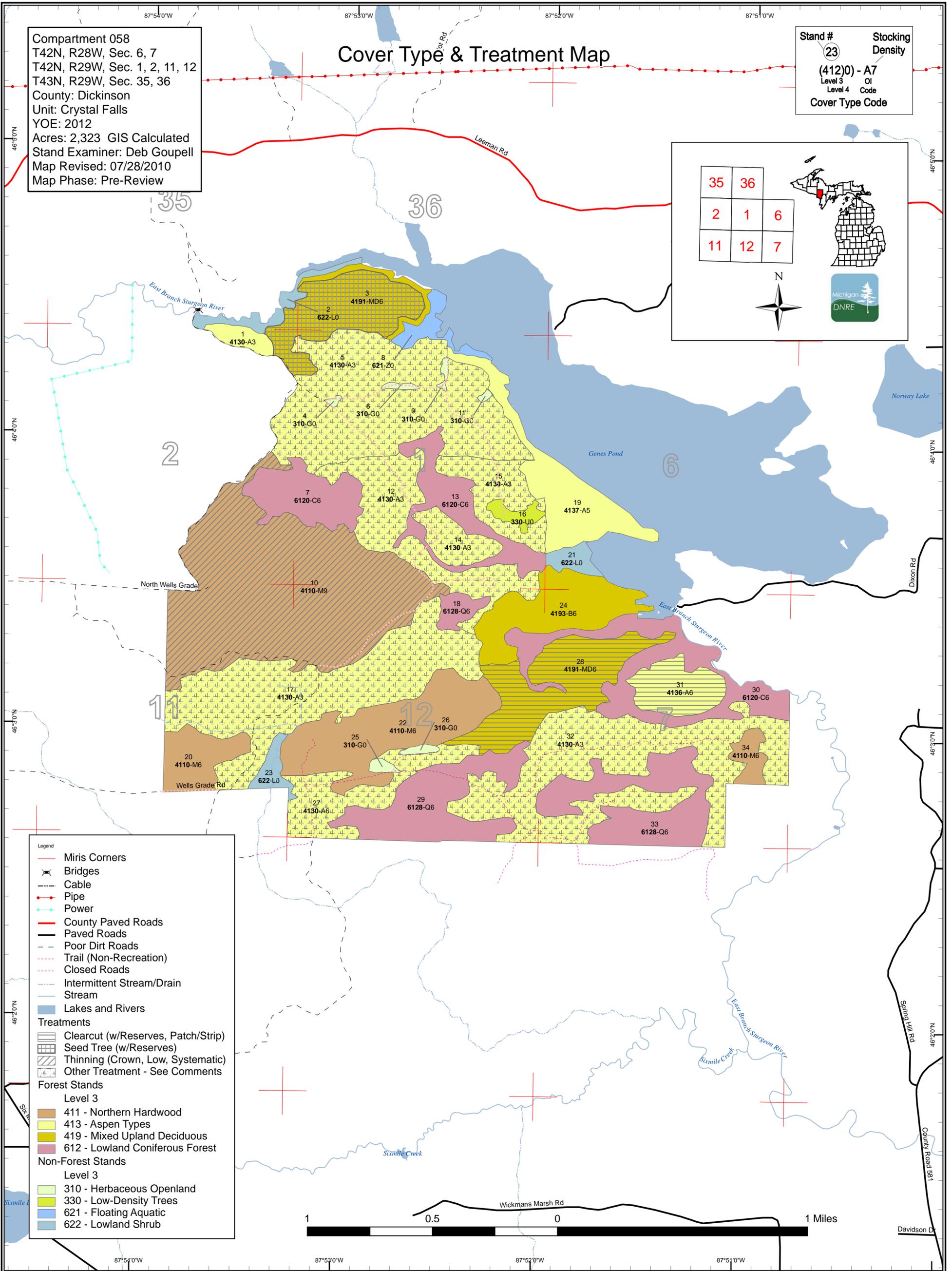
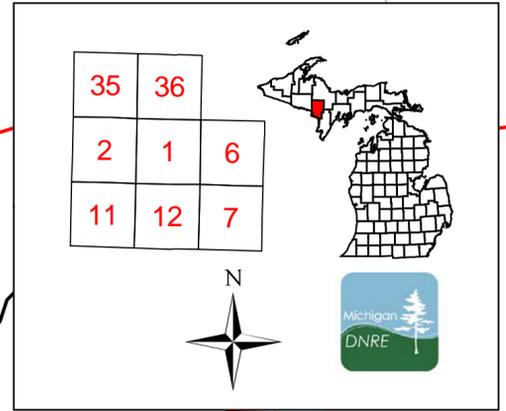
**Additional Compartment Information:** Text

- **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**

# Cover Type & Treatment Map

Compartment 058  
 T42N, R28W, Sec. 6, 7  
 T42N, R29W, Sec. 1, 2, 11, 12  
 T43N, R29W, Sec. 35, 36  
 County: Dickinson  
 Unit: Crystal Falls  
 YOE: 2012  
 Acres: 2,323 GIS Calculated  
 Stand Examiner: Deb Goupell  
 Map Revised: 07/28/2010  
 Map Phase: Pre-Review

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



**Legend**

- Miris Corners
- Bridges
- Cable
- Pipe
- Power
- County Paved Roads
- Paved Roads
- Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers

**Treatments**

- Clearcut (w/Reserves, Patch/Strip)
- Seed Tree (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Other Treatment - See Comments

**Forest Stands**

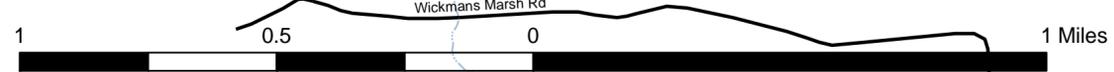
Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 612 - Lowland Coniferous Forest

**Non-Forest Stands**

Level 3

- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 621 - Floating Aquatic
- 622 - Lowland Shrub







**Table 1 – Total Acres by Cover Type and Age Class**



	Age Class														Total	
	Non-Forested	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +		Uneven Age
Aspen	0	221	386	249	0	64	0	119	0	0	0	0	0	0	0	1040
Cedar	0	0	0	0	0	0	0	0	0	150	57	0	0	0	207	
Herbaceous Openland	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
Low-Density Trees	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
Lowland Conifers	0	0	0	0	0	0	0	0	107	91	0	0	0	0	198	
Lowland Shrub	40	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
Mixed Upland Deciduous	0	0	0	0	0	93	0	0	106	0	0	0	0	0	199	
Northern Hardwood	0	0	0	0	0	0	0	0	521	0	0	0	0	0	521	
Paper Birch	0	0	0	0	0	0	0	0	81	0	0	0	0	0	81	
Water	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17	
<b>Total</b>	<b>78</b>	<b>221</b>	<b>386</b>	<b>249</b>	<b>0</b>	<b>157</b>	<b>0</b>	<b>119</b>	<b>186</b>	<b>628</b>	<b>241</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>2323</b>	



## Table 2 – Proposed Treatment Summaries

**Crystal Falls Mgt. Unit**  
**Year of Entry 2012**

**Compartment 058**  
**Total Compartment Acres: 2323**

### Acres by Treatment Type

Commercial Harvest - 571	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 908	Tree Seeding - 0	Pesticide - 0	

### Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
<b>Aspen</b>	42	0	0	0	0	0	<b>42</b>
<b>Mixed Upland Deciduous</b>	106	0	82	0	0	0	<b>187</b>
<b>Northern Hardwood</b>	0	0	0	0	341	0	<b>341</b>
<b>Total</b>	<b>147</b>	<b>0</b>	<b>82</b>	<b>0</b>	<b>341</b>	<b>0</b>	<b>571</b>



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
3	12058003-Cut	81.8	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	45	Harvest	Seed Tree with Reserves	Natural Pine, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription:</u> Cut everything 2" dbh and up except for red pine or white pine, cedar or hemlock if found. Buffer around interior pond. PREVIEW: hold oak & <u>Specs:</u> black spruce in northeast. Buffer 100' along water  <u>Other</u> Refer to OFS/MNFI layer before sale set up <u>Comments:</u>  <u>Next</u> Anchor chaining particularly around residual pines after harvest to promote natural pine regeneration. Regeneration check after site prep per <u>Steps:</u> WIs. Acceptable regen species: red maple, aspen, balsam, spruce, pine, birch.									
10	12058010-Cut	341.4	4110 - Sugar Maple Association	High Density Log	87	Harvest	Crown Thinning	Sugar Maple Association	Cmpt. Review Proposal
<u>Prescription:</u> Thin to BA 80, favoring minor species, target removal of poorly formed trees and crown competitors of crop trees. Do not cut hemlock, pine or <u>Specs:</u> cedar.  <u>Other</u> pockets of white ash regeneration in north 3-4 feet tall; far north/NE has red maple along swamp edge; ironwood thicker in more open areas; 15 <u>Comments:</u> plots taken w/BA average of 126.6  <u>Next</u> Regeneration check post harvest per WIs. <u>Steps:</u>									
28	12058028-Cut	105.6	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	76	Harvest	Clearcut with Reserves	Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<u>Prescription:</u> Cut all species 2" dbh and greater except for red pine, white pine, cedar, hemlock (if found) <u>Specs:</u>  <u>Other</u> West half of stand is very rocky/bouldery (=difficult road building) with smaller diameter trees; east half of stand has larger aspen located on <u>Comments:</u> rock knob  <u>Next</u> Acceptable regeneration species: maple, birch, spruce, fir, aspen, pine. Perform regen check as required by WIs <u>Steps:</u>									
31	12058031-Cut	41.9	4136 - Aspen, Mixed Conifer	High Density Pole	68	Harvest	Clearcut with Reserves	Aspen, Mixed Conifer	Cmpt. Review Proposal
<u>Prescription:</u> Clearcut all species 2" dbh and greater except for white pine, red pine, cedar, hemlock (if found). <u>Specs:</u>  <u>Other</u> smaller diameter trees on rock knob <u>Comments:</u>  <u>Next</u> Regeneration check as required per WIs <u>Steps:</u>									
5	12058005- NonFor	236.8	4130 - Aspen	High Density Sapling	21	Non-Forest Management	Other - Specify	Cool Season Grass	Cmpt. Review Proposal
<u>Prescription:</u> Opening Maintenance: Disc, Seed & Fertilize, and Berm Hunter Walking Trail. <u>Specs:</u>  <u>Other</u> <u>Comments:</u>  <u>Next</u> <u>Steps:</u>									



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
12	12058012- NonFor	98.7	4130 - Aspen	High Density Sapling	13	Non-Forest Management	Other - Specify	Cool Season Grass	Cmpt. Review Proposal
<u>Prescription</u> . Opening Maintenance: Disc, Seed & Fertilize, Berm Hunter Walking Trail.									
<u>Specs:</u>									
<u>Other</u> <u>Comments:</u>									
<u>Next</u> <u>Steps:</u>									
14	12058014- NonFor	27.6	4130 - Aspen	High Density Sapling	13	Non-Forest Management	Other - Specify	Cool Season Grass	Cmpt. Review Proposal
<u>Prescription</u> . Opening Maintenance: Disc, Seed & Fertilize, Berm Hunter Walking Trail.									
<u>Specs:</u>									
<u>Other</u> <u>Comments:</u>									
<u>Next</u> <u>Steps:</u>									
15	12058015- NonFor	47.7	4130 - Aspen	High Density Sapling	13	Non-Forest Management	Other - Specify	Cool Season Grass	Cmpt. Review Proposal
<u>Prescription</u> . Opening Maintenance: Disc, Seed & Fertilize and Berm Hunter Walking Trail.									
<u>Specs:</u>									
<u>Other</u> <u>Comments:</u>									
<u>Next</u> <u>Steps:</u>									
17	12058017- NonFor	212.0	4130 - Aspen	High Density Sapling	14	Non-Forest Management	Other - Specify	Cool Season Grass	Cmpt. Review Proposal
<u>Prescription</u> . Opening Maintenance: Disc, Seed & Fertilize, Berm Hunter Walking Trail.									
<u>Specs:</u>									
<u>Other</u> <u>Comments:</u>									
<u>Next</u> <u>Steps:</u>									
27	12058027- NonFor	63.6	4130 - Aspen	High Density Pole	43	Non-Forest Management	Other - Specify	Cool Season Grass	Cmpt. Review Proposal
<u>Prescription</u> . Opening maintenance: Disc, Seed & Fertilize and Berm Hunter Walking Trail.									
<u>Specs:</u>									
<u>Other</u> <u>Comments:</u>									
<u>Next</u> <u>Steps:</u>									
32	12058032- NonFor	221.4	4130 - Aspen	High Density Sapling	3	Non-Forest Management	Other - Specify	Cool Season Grass	Cmpt. Review Proposal
<u>Prescription</u> . Opneing Maintenance: Disc, Seed and Fertilize, Berm Hunter Walking Trail.									
<u>Specs:</u>									
<u>Other</u> <u>Comments:</u>									
<u>Next</u> <u>Steps:</u>									

**Table 3 -- Treatments Prescribed  
with No Limiting Factor**S  
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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
Total Treatment Acreage Proposed:		1478.4						

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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#Error

Prescription  
Specs:

Other  
Comment:

Next  
Steps:

Limiting Factor and No  
Treatment Reason

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**Total Treatment**  
**Acreage Proposed: 0**

S t a n d	Crystal Falls Mgt. Unit		5 – Forested Stands			Compartment: 058
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012
General Comments:						
1	4130 - Aspen	High Density Sapling	12.4	26		
3	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	93.3	45		
5	4130 - Aspen	High Density Sapling	236.8	21		
7	6120 - Lowland Cedar	High Density Pole	55.6	96		
10	4110 - Sugar Maple Association	High Density Log	341.4	87	111-140	
12	4130 - Aspen	High Density Sapling	98.7	13		
13	6120 - Lowland Cedar	High Density Pole	57.2	106		
14	4130 - Aspen	High Density Sapling	27.6	13		
15	4130 - Aspen	High Density Sapling	47.7	13		
17	4130 - Aspen	High Density Sapling	212.0	14		
18	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	12.6	86		
19	4137 - Aspen, Birch	Medium Density Pole	77.6	69		
20	4110 - Sugar Maple Association	High Density Pole	39.5	86	81-110	
22	4110 - Sugar Maple Association	High Density Pole	125.4	82	111-140	
24	4193 - Birch, Aspen	High Density Pole	80.6	78		
27	4130 - Aspen	High Density Pole	63.6	43		
28	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	105.6	76		
29	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	90.5	98		



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Crystal Falls Mgt. Unit

**5 – Forested Stands**

Compartment: 058

Inventory Method: IFMAP

Year of Entry: 2012



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
<b>30</b>	6120 - Lowland Cedar	High Density Pole	94.7	96		
<b>31</b>	4136 - Aspen, Mixed Conifer	High Density Pole	41.9	68		
<b>32</b>	4130 - Aspen	High Density Sapling	221.4	3		
<b>33</b>	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	94.5	84		
<b>34</b>	4110 - Sugar Maple Association	High Density Pole	14.4	82	81-110	



Stand	Cover Type	Acres	Gen Cmts:
2	622 - Lowland Shrub	17.0	
4	310 - Herbaceous Openland	1.0	
6	310 - Herbaceous Openland	2.0	
8	621 - Floating Aquatic	16.6	
9	310 - Herbaceous Openland	1.8	
11	310 - Herbaceous Openland	1.0	
16	330 - Low-Density Trees	9.1	
21	622 - Lowland Shrub	11.4	
23	622 - Lowland Shrub	11.7	
25	310 - Herbaceous Openland	3.2	
26	310 - Herbaceous Openland	2.8	



### 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.

Inventory Method: IFMAP

Stand	SCA Type	SCA Name	Acres	Comments
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## 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 Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Concentrated Recreation Area	Facilities that are designed and maintained for routine or heavy recreational use, including State Parks, State Forest campgrounds, motorized and non-motorized trails, trailheads, staging areas and public access sites.
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.

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