



**Crystal Falls Forest Management Unit
Compartment Review Presentation
Compartment #185 Entry Year: 2012
Compartment Acreage: 1081 County: Iron**

Revision Date: June 15, 2010

Stand Examiner: Linda Lindberg

Legal Description: T45N, R31W, Sections 7 and 8

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

Management Goals: More than half of this compartment is aspen so the goal is to move toward good age class diversity. Some of the hardwoods are ready to cut again and will be. There is some remnant blown down timber from 2005 in this compartment but this will be dealt with accordingly. Most of the wet areas will be left because of their sensitive nature.

Soil and Topography: The soil moves from Lupton and Greenwood to different phases of Sundog. There are low areas and very steep hilly areas depending where you go. There are also some rolling hills.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This is a fairly contiguous compartment and access is good to most of it.

Unique, Natural Features: The Fence River is along the south edge of this compartment.

Archeological, Historical, and Cultural Features: None known.

Special Management Designations or Considerations: None.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations: This compartment is located along the Fence River in northeast Iron County on the north edge of an extensive aspen type that changes to upland northern hardwood. Maintaining

intolerant types is preferred, however, much spruce/fir has been lost in this compartment, so further loss of the type or conversion to aspen is not recommended.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and coarse-textured glacial till. There is insufficient data to determine the glacial drift thickness. The Precambrian Hemlock Formation, Randville Dolomite and Archean granite and gneiss subcrop below the glacial drift. The Randville is quarried for marble/stone twelve miles to the south. The Porter and Warner abandoned iron mines are located eleven miles to the southwest. Section 8 was previously leased for metallic exploration. A gravel pit is located in the center of Section 8 and there appears to be potential. There is no economic oil and gas production in the UP.

Vehicle Access: There is a fairly good travel system though out this compartment.

Survey Needs: There will be several corners that will need to be added to this compartment in order to set up the timber sales.

Recreational Facilities and Opportunities: Camp creek and the Fence River are both considered trout streams.

Fire Protection:

Additional Compartment Information: Text

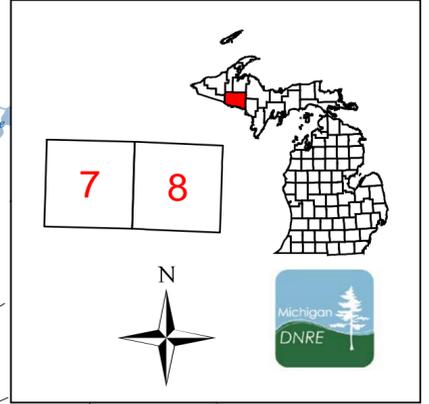
- **The following reports from the Inventory are attached:**
 - ◆ **Total Acres by Cover Type and Age Class**
 - ◆ **Proposed Treatment Summary**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**
 - ◆ **Stand Details (Forested and Nonforested)**
 - ◆ **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**

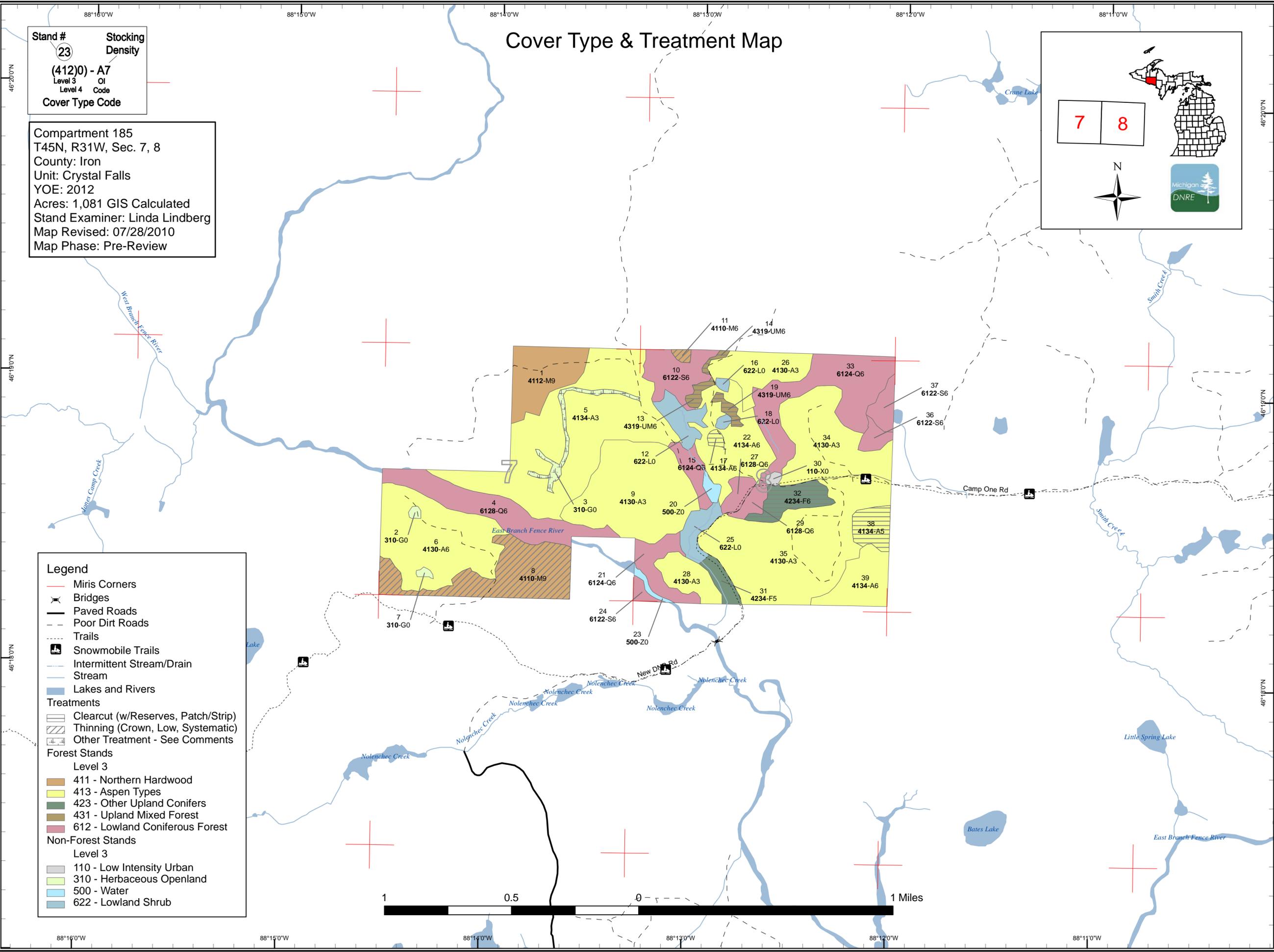
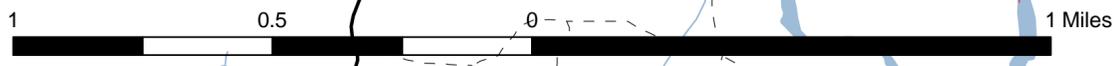
Cover Type & Treatment Map

Stand #
(4120) - A7
 Level 3 OI
 Level 4 Code
 Cover Type Code

Compartment 185
 T45N, R31W, Sec. 7, 8
 County: Iron
 Unit: Crystal Falls
 YOE: 2012
 Acres: 1,081 GIS Calculated
 Stand Examiner: Linda Lindberg
 Map Revised: 07/28/2010
 Map Phase: Pre-Review



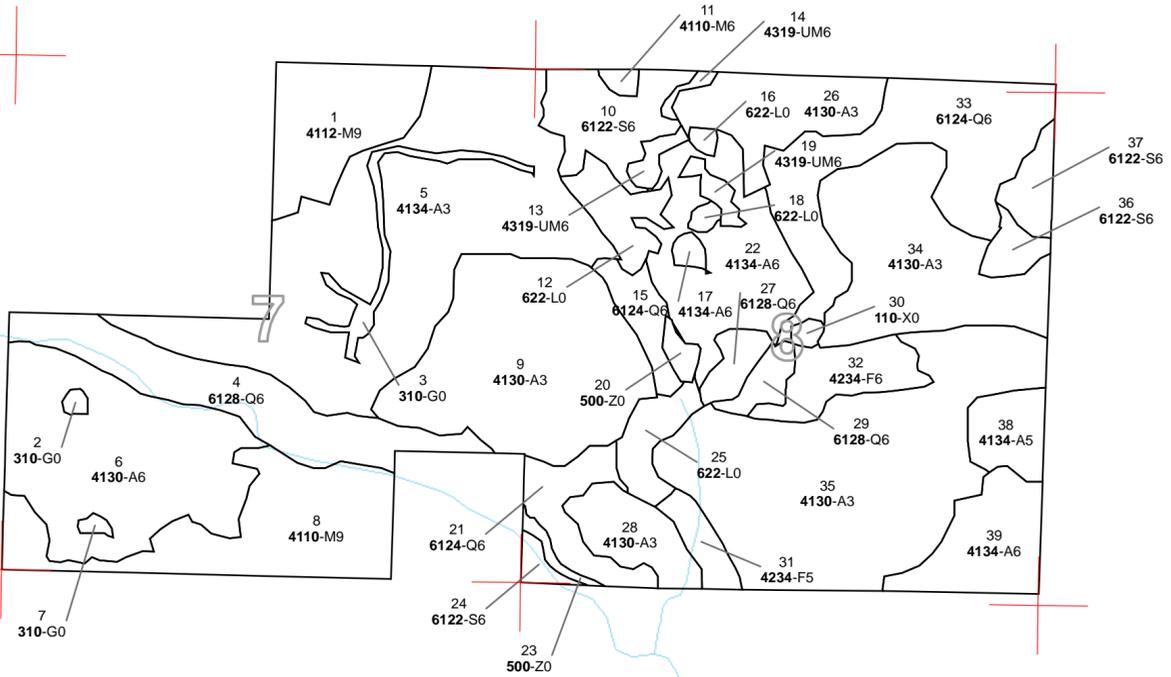
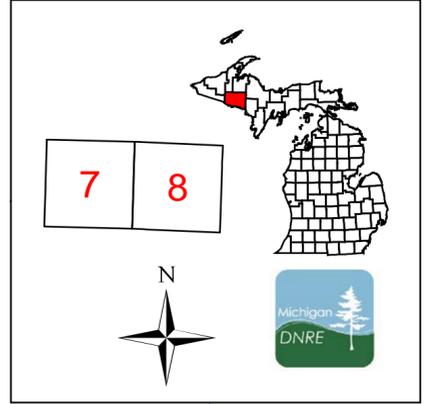
- Legend**
- Miris Corners
 - ✕ Bridges
 - Paved Roads
 - - - Poor Dirt Roads
 - ⋯ Trails
 - 🚙 Snowmobile Trails
 - ⋯ Intermittent Stream/Drain
 - Stream
 - 🌊 Lakes and Rivers
 - Treatments**
 - ▭ Clearcut (w/Reserves, Patch/Strip)
 - ▨ Thinning (Crown, Low, Systematic)
 - ▩ Other Treatment - See Comments
 - Forest Stands**
 - Level 3
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 423 - Other Upland Conifers
 - 431 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
 - Non-Forest Stands**
 - Level 3
 - 110 - Low Intensity Urban
 - 310 - Herbaceous Openland
 - 500 - Water
 - 622 - Lowland Shrub



Dedicated & Proposed Special Conservation Area Map

Stand #
 (4120) - A7
 Level 3 OI
 Level 4 Code
 Cover Type Code

Compartment 185
 T45N, R31W, Sec. 7, 8
 County: Iron
 Unit: Crystal Falls
 YOE: 2012
 Acres: 1,081 GIS Calculated
 Stand Examiner: Linda Lindberg
 Map Revised: 07/28/2010
 Map Phase: Pre-Review



- Legend**
- Miris Corners
 - Stand Boundaries
 - Proposed Special Conservation Areas**
 - ▨ SCA - Special Conservation Area
 - ▩ SCA Removal
 - Dedicated Special Conservation Areas**
 - Cold Water Streams
 - Forest Stands**
 - Level 3
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 423 - Other Upland Conifers
 - 431 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
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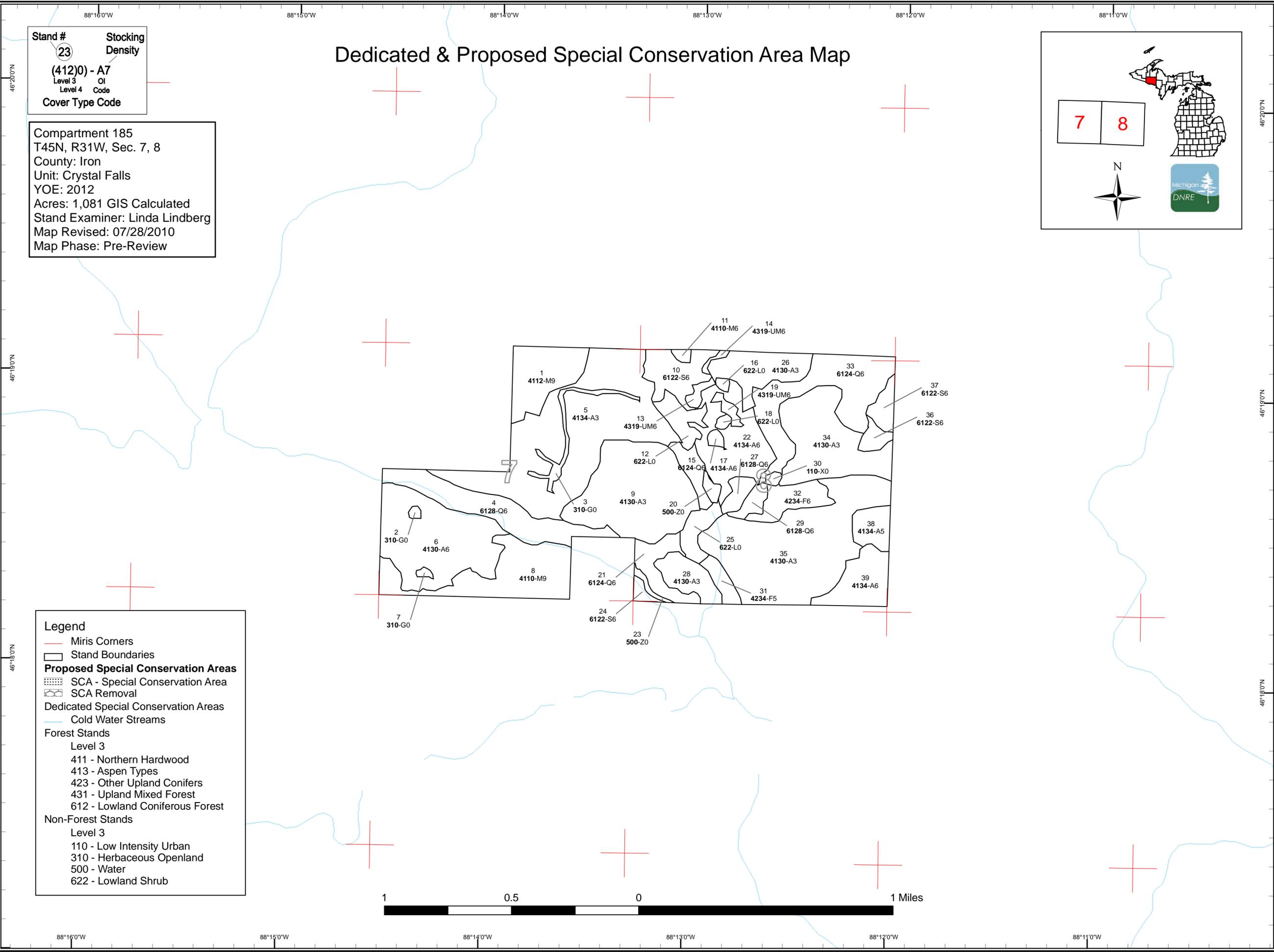
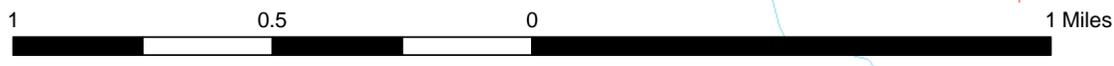


Table 1 – Total Acres by Cover Type and Age Class



	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	0	181	277	135	48	0	0	2	14	0	0	0	0	29	686
Herbaceous Openland	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Lowland Conifers	0	0	0	0	0	0	0	0	73	51	37	0	0	0	0	161
Lowland Shrub	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	45	0	0	0	0	0	0	45
Northern Hardwood	0	0	0	0	0	0	62	0	0	0	0	0	0	0	41	103
Upland Mixed Forest	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9
Upland Spruce/Fir	0	0	0	0	0	0	0	0	0	19	9	0	0	0	0	28
Urban	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Water	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	49	0	181	277	135	48	62	0	129	85	46	0	0	0	69	1081



Table 2 – Proposed Treatment Summaries

Crystal Falls Mgt. Unit
Year of Entry 2012

Compartment 185
Total Compartment Acres: 1081

Acres by Treatment Type

Commercial Harvest - 109	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 9	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
Aspen	17	0	0	0	0	0	17
Northern Hardwood	0	0	0	0	64	0	64
Upland Mixed Forest	9	0	0	0	0	0	9
Upland Spruce/Fir	19	0	0	0	0	0	19
Total	45	0	0	0	64	0	109



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
8	12185008-Cut1	62.2	4110 - Sugar Maple Association	High Density Log	55	Harvest	Crown Thinning	Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription</u> Mark this stand to 70 to 90 basal area leaving diversity and best tree in place. Thin around crop trees and make sure to leave some wildlife trees in the stand.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u></p>									
11	12185011-Cut	2.1	4110 - Sugar Maple Association	High Density Pole	50	Harvest	Crown Thinning	Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription</u> Thin stand from 70 to 90 basal area leaving diversity and best tree in place. Thin around crop trees.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Check for regeneration according to work instructions</p>									
13	12185013-Cut	3.6	4319 - Mixed Upland Forest	High Density Pole	75	Harvest	Clearcut with Reserves	Mixed Upland Forest	Cmpt. Review Proposal
<p><u>Prescription</u> Cut all species except oak, elm, cherry, hemlock, cedar and red and white pine. Cut all spruce and balsam that is 6 inches or larger at a 4 inch stump.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Check for regeneration according to work instructions.</p>									
14	12185014-Cut	1.7	4319 - Mixed Upland Forest	High Density Pole	75	Harvest	Clearcut with Reserves	Mixed Upland Forest	Cmpt. Review Proposal
<p><u>Prescription</u> Cut all species except oak, elm, cherry, hemlock, cedar, red and white pine. Cut all spruce and balsam that is 6 inches or larger at a 4 inch stump.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Check regeneration according to work instructions</p>									
17	12185017-Cut	2.3	4134 - Aspen, Spruce/Fir	High Density Pole	75	Harvest	Clearcut with Reserves	Aspen, Spruce/Fir	Cmpt. Review Proposal
<p><u>Prescription</u> Cut all species except cherry, elm, oak, hemlock, cedar and red and white pine. Cut all spruce and balsam that is 6 inches or larger at a 4 inch stump.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u> Regeneration check according to work instructions.</p>									



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
19	12185019-Cut	3.8	4319 - Mixed Upland Forest	High Density Pole	75	Harvest	Clearcut with Reserves	Mixed Upland Forest	Cmpt. Review Proposal

Prescription: Cut all species except, oak, elm, cherry, hemlock, cedar, and red and white pine. Cut all spruce and balsam that is larger than 6 inches at a 4 inch stump

Other
Comments:

Next
Steps: Regeneration check according to work instructions

32	12185032-Cut	19.3	42340 - Upland Spruce/Fir	High Density Pole	85	Harvest	Clearcut with Reserves	Upland Spruce/Fir	Cmpt. Review Proposal
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Prescription: Clearcut all but reserve areas which will be marked with red boundary paint. Also, leave oak, elm, cherry, hemlock, cedar, and red and white pine. Also cut all spruce and balsam except those smaller than 6 inch diameter at a 4 inch stump.

Other
Comments:

Next
Steps: Regeneration check per work instructions

38	12185038-Cut	14.4	4134 - Aspen, Spruce/Fir	Medium Density Pole	89	Harvest	Clearcut with Reserves	Aspen, Spruce/Fir	Cmpt. Review Proposal
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Prescription: Cut all species except oak, elm, cherry, hemlock, cedar, and red and white pine. Cut all spruce and balsam that is larger than 6 inches at a 4" stump.

Other
Comments:

Next
Steps: Check for regeneration according to work instructions.

3	NF_12185003- NonFor	9.4	Non-Forested		0	Non-Forest Management	Other - Specify	Cool Season Grass	Cmpt. Review Proposal
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Prescription: Opening Maintenance: Disc, Seed & Fertilize and Berm Hunter Walking Trail.

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 118.7**

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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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Prescription
Specs:

Other
Comment:

Next
Steps:

Limiting Factor and No
Treatment Reason

Total Treatment
Acreage Proposed: 0

Stand	Crystal Falls Mgt. Unit		5 – Forested Stands			Compartment: 185
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012
General Comments:						
1	4112 - Maple, Beech, Cherry Association	High Density Log	38.6	Uneven Age	51-80	
4	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	50.9	84		
5	4134 - Aspen, Spruce/Fir	High Density Sapling	157.5	24		
6	4130 - Aspen	High Density Pole	88.4	22		
8	4110 - Sugar Maple Association	High Density Log	62.2	55	111-140	
9	4130 - Aspen	High Density Sapling	94.4	10		
10	6122 - Black Spruce	High Density Pole	25.6	75	81-110	
11	4110 - Sugar Maple Association	High Density Pole	2.1	Uneven Age	111-140	
13	4319 - Mixed Upland Forest	High Density Pole	3.6	75	81-110	
14	4319 - Mixed Upland Forest	High Density Pole	1.7	75	81-110	
15	6124 - Lowland Spruce-Fir	High Density Pole	10.9	95		
17	4134 - Aspen, Spruce/Fir	High Density Pole	2.3	75	81-110	
19	4319 - Mixed Upland Forest	High Density Pole	3.8	75	81-110	
21	6124 - Lowland Spruce-Fir	High Density Pole	18.7	95	81-110	
22	4134 - Aspen, Spruce/Fir	High Density Pole	47.9	43	81-110	
24	6122 - Black Spruce	High Density Pole	3.5	75		
26	4130 - Aspen	High Density Sapling	31.4	26		
27	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	7.4	95	51-80	



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Crystal Falls Mgt. Unit

5 – Forested Stands

Compartment: 185

Inventory Method: IFMAP

Year of Entry: 2012



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	4130 - Aspen	High Density Sapling	19.1	15		
29	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	6.8	75		
31	42340 - Upland Spruce/Fir	Medium Density Pole	8.5	95		
32	42340 - Upland Spruce/Fir	High Density Pole	19.3	85	81-110	
33	6124 - Lowland Spruce- Fir	High Density Pole	65.9	75	81-110	
34	4130 - Aspen	High Density Sapling	67.7	15		
35	4130 - Aspen	High Density Sapling	134.7	34		
36	6122 - Black Spruce	High Density Pole	6.6	70	81-110	
37	6122 - Black Spruce	High Density Pole	9.2	75	81-110	
38	4134 - Aspen, Spruce/Fir	Medium Density Pole	14.4	89	81-110	
39	4134 - Aspen, Spruce/Fir	High Density Pole	28.7	Uneven Age	81-110	



Stand	Cover Type	Acres	Gen Cmts:
2	3102 - Grass	1.3	
3	3105 - Mixed Upland Herbaceous	9.4	seeded road system
7	3102 - Grass	1.3	
12	6223 - Inundated Shrub Swamp	14.2	
16	6229 - Mixed lowland shrub	1.5	
18	6220 - Alder/willow	1.7	
20	50 - Water	3.2	
23	50 - Water	2.5	The Fence River
25	6229 - Mixed lowland shrub	12.6	
30	11 - Low Intensity Urban	1.7	



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.

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

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