



**Crystal Falls Forest Management Unit  
Compartment Review Presentation  
Compartment #132    Entry Year: 2014  
Compartment Acreage: 724    County: Iron**

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**Revision Date:** May 7, 2012

**Stand Examiner:** Linda Lindberg

**Legal Description:** T45N, R34W, Sections 16,20 and 21

**RMU (if applicable):** Text

**Management Goals:** This is a deeryard and we are trying to manage the aspen with even, sustainable age classes while also, thinning the hardwood and maintaining buffers along both the Net River and the Portage Creek. One aspen stand has died out with the drought conditions and is converting to conifers which is more conducive to the soil type. There is a pine stand along the river that is mostly in the river buffer.

**Soil and Topography:** The soil includes Iron River Loam, Hiawatha fine sandy loam and Baraga loam. There are some hills in this compartment and some rather steep areas but most is rolling and accessible.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** Access to most parcels is through private land but the DNR has a good relationship with landowners and we have always been able to harvest when necessary.

**Unique, Natural Features:** Text

**Archeological, Historical, and Cultural Features:** Text

**Special Management Designations or Considerations:** Text

**Watershed and Fisheries Considerations:** Text

**Wildlife Habitat Considerations:** This compartment lies in the southern 1/3 of the Cable Lake-Porter Lake Deer Wintering Complex along the Net River and Porter Creek. This area has an active eagles nest, support many deer during the winter. Wolves have been well established in this area for many years. This compartment is also an important corridor for migrating wildlife. Conifer cover is critical to the use of both lowlands and uplands.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of an end moraine of coarse-textured glacial till. There is insufficient data to determine the glacial drift thickness. The Precambrian Michigamme Formation subcrops below the glacial drift. There is not an economic use for the Michigamme. The Porter and Warner abandoned iron mines are located six miles to the southeast. This compartment has not been previously leased for metallic exploration, but potential may exist. The nearest gravel pit is located four miles to the east, but there should be potential. There is no economic oil and gas production in the UP.

**Vehicle Access:** There are main roads which get us close to comp 132 stands and there are primitive roads into the stands but most go through private land first.

**Survey Needs:** Some corners will need to be established.

**Recreational Facilities and Opportunities:** Text

**Fire Protection:** Text

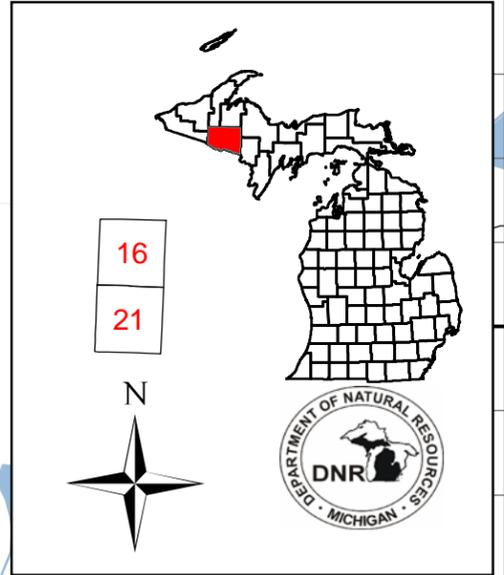
**Additional Compartment Information:** Text

- **The following 5 reports from the Operations Inventory System (OIPC) are attached:**
  - ◆ **Cover Type by Age Class**
  - ◆ **Cover Type by Management Objective**
  - ◆ **Compartment Volume Summary**
  - ◆ **Proposed Treatments – No Limiting Factors**
  - ◆ **Proposed Treatments – With Limiting Factors**
  
- **The following information is displayed, where pertinent, on the attached compartment maps:**
  - ◆ **Base feature information, stand numbers, cover types**
  - ◆ **Proposed treatments**
  - ◆ **Proposed road access system**
  - ◆ **Suggested potential old growth**

# Cover Type & Treatment Map

Compartment: 132  
 T45N R34W Sec. 16, 21  
 County: Iron  
 Unit: Crystal Falls  
 YOE: 2014  
 Acres: 716 GIS Calculated  
 Examiner: Linda Lindberg  
 Map Revised: 07/13/2012  
 Map Phase: Pre-Review

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



### Legend

- Miris Corners
- Remonumented Section Corners
- Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Stream
- Intermittent Stream
- Snowmobile Trail
- Lakes and Rivers

### Treatments

- Clearcut (w/Reserves, Patch/Strip)
- Selection (Group, Single Tree)

### Forest Stands

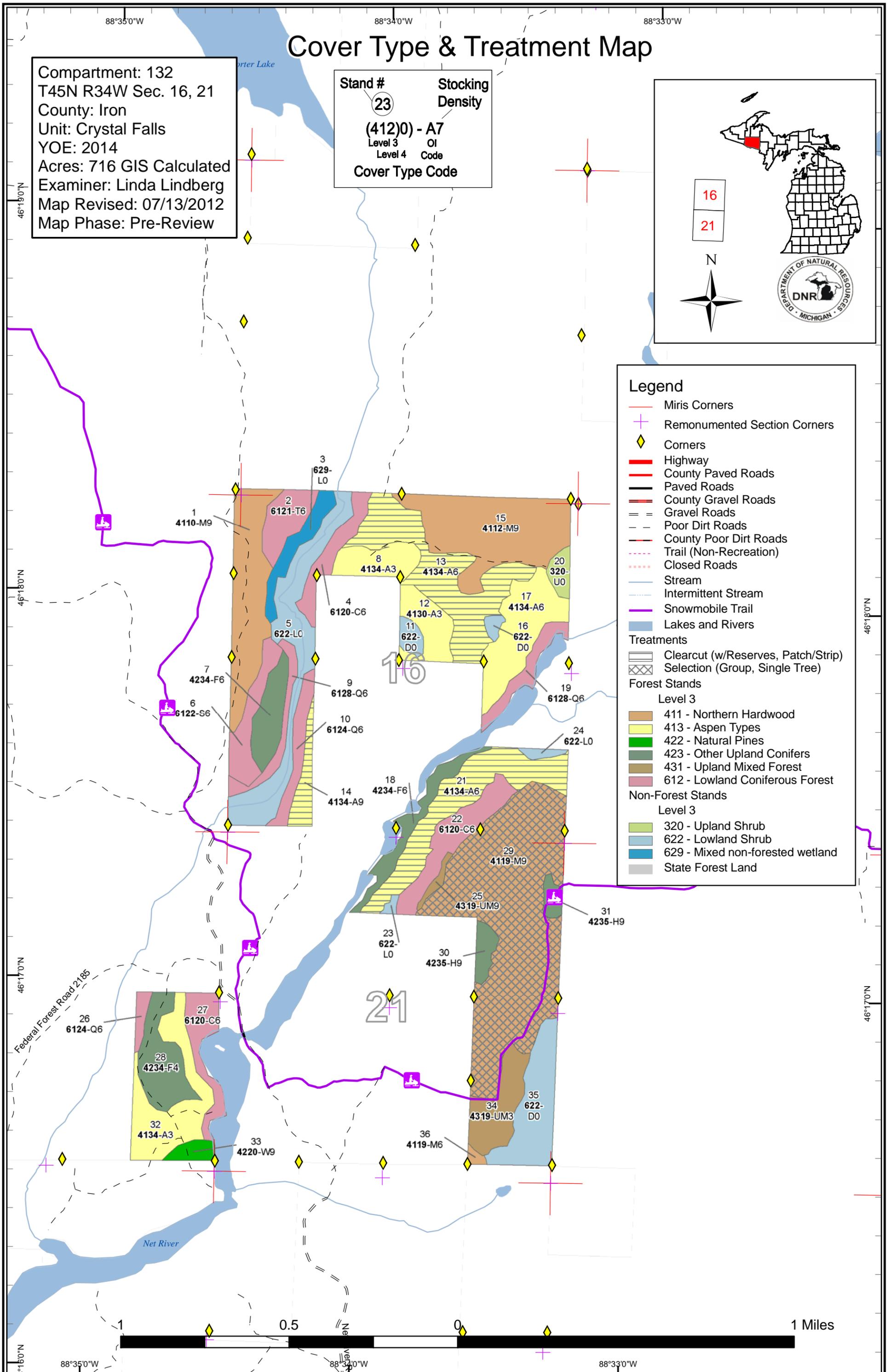
Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest

### Non-Forest Stands

Level 3

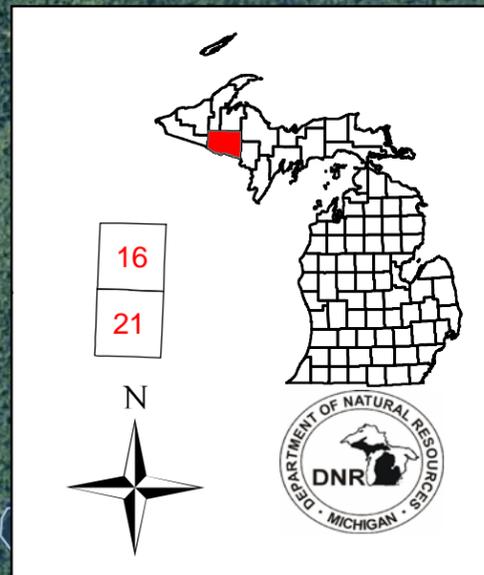
- 320 - Upland Shrub
- 622 - Lowland Shrub
- 629 - Mixed non-forested wetland
- State Forest Land



# Stand Boundary Map

Compartment: 132  
 T45N R34W Sec. 16, 21  
 County: Iron  
 Unit: Crystal Falls  
 YOY: 2014  
 Acres: 716 GIS Calculated  
 Examiner: Linda Lindberg  
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## Legend

- Remonumented Section Corners
- Corners
- Miris Corners
- 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
- Stand Boundaries

## Forest Stands

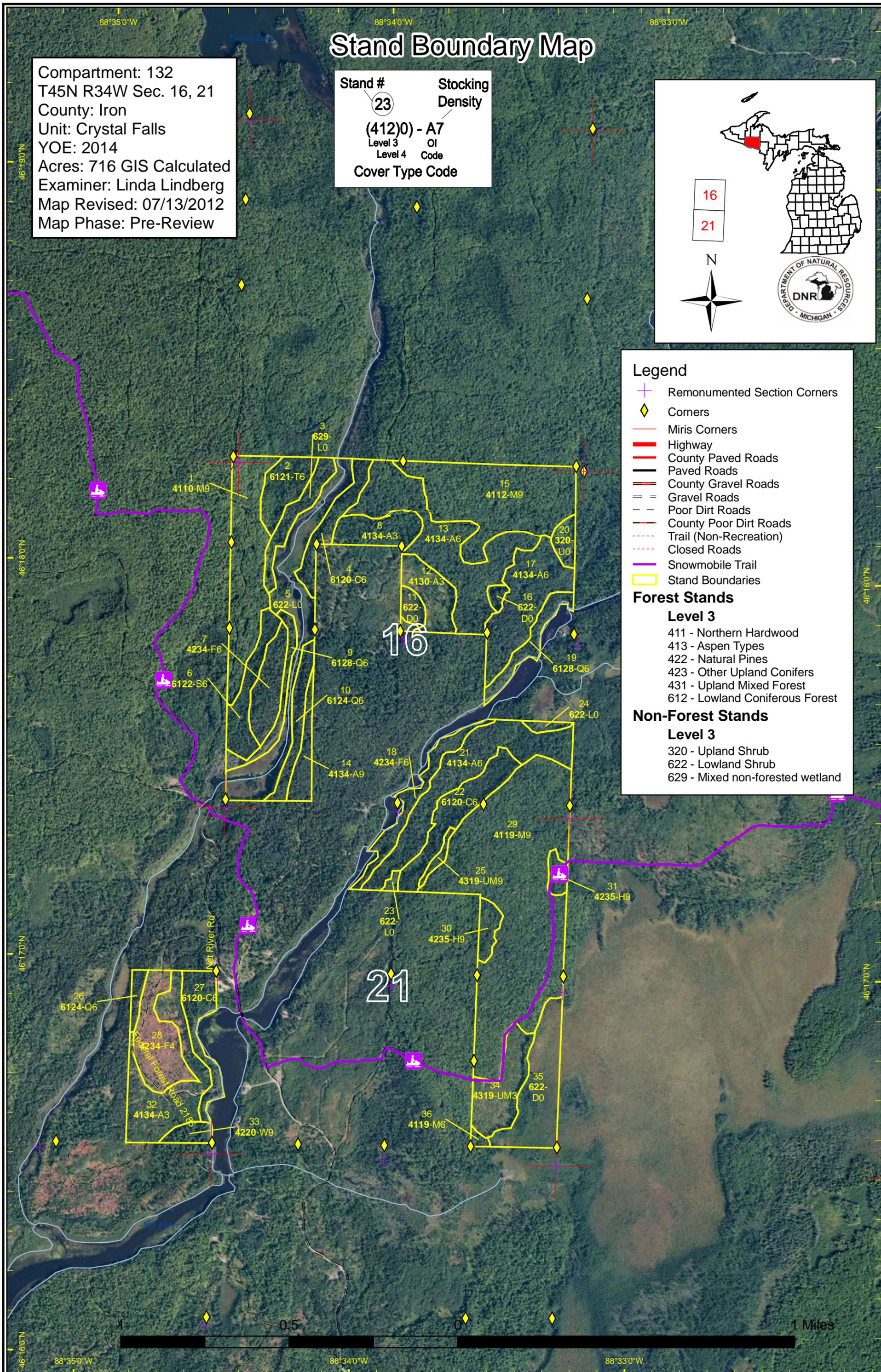
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## Non-Forest Stands

### Level 3

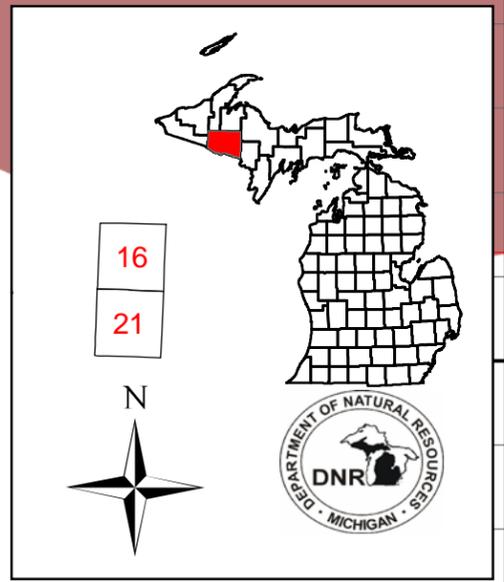
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- 622 - Lowland Shrub
- 629 - Mixed non-forested wetland



# Dedicated & Proposed Special Conservation Area Map

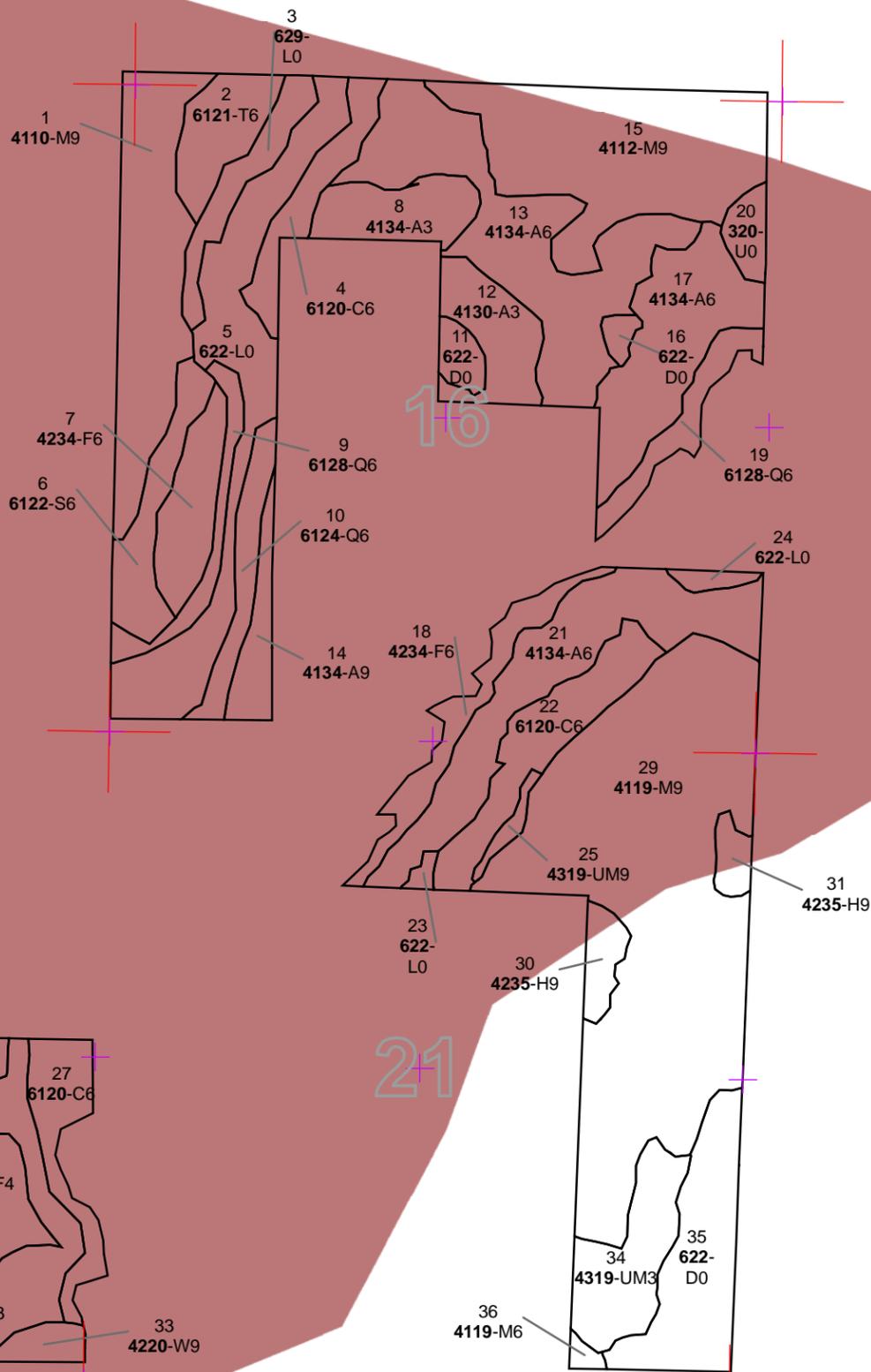
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**Stand #**  
 23  
**Stocking Density**  
 (412)0 - A7  
 Level 3 OI  
 Level 4 Code  
**Cover Type Code**



## Legend

- Remonumented Section Corners
- Miris Corners
- Stand Boundaries
- Dedicated Special Conservation Areas**
- Deer Wintering Areas
- Forest Stands**
- Level 3**
- 411 - Northern Hardwood
- 413 - Aspen Types
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3**
- 320 - Upland Shrub
- 622 - Lowland Shrub
- 629 - Mixed non-forested wetland



88°35'0"W 88°34'0"W 88°33'0"W 88°32'0"W

46°19'0"N

46°18'0"N

46°17'0"N

46°18'0"N

46°17'0"N

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



	Age Class														Total
	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 +	Uneten Age	
Aspen	0	29	0	32	0	0	83	0	49	0	0	0	0	0	193
Cedar	0	0	0	0	0	0	0	0	48	0	0	0	0	0	48
Hemlock	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9
Lowland Conifers	0	0	0	0	0	0	0	0	24	8	0	0	0	0	32
Lowland Shrub	56	0	0	0	0	0	0	0	0	0	0	0	0	0	56
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15
Northern Hardwood	0	0	0	0	0	0	0	0	232	0	0	0	0	0	232
Tamarack	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13
Treed Bog	35	0	0	0	0	0	0	0	0	0	0	0	0	0	35
Upland Mixed Forest	0	20	0	0	0	0	0	0	2	0	0	0	0	0	22
Upland Shrub	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Upland Spruce/Fir	0	0	0	22	0	0	0	13	0	14	0	0	0	0	50
White Pine	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5
<b>Total</b>	<b>96</b>	<b>49</b>	<b>0</b>	<b>54</b>	<b>0</b>	<b>0</b>	<b>83</b>	<b>13</b>	<b>364</b>	<b>51</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>716</b>



## Table 2 – Proposed Treatment Summaries

**Crystal Falls Mgt. Unit**  
**Year of Entry 2014**

**Compartment 132**  
**Total Compartment Acres: 715.7**

### Acres by Treatment Type

Commercial Harvest - 236	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

### Cover Type by Harvest Method

		Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
<b>Aspen</b>	100	0	0	0	0	0	0	100
<b>Northern Hardwood</b>	0	133	0	0	0	0	0	133
<b>Upland Mixed Forest</b>	2	0	0	0	0	0	0	2
<b>Total</b>	<b>103</b>	<b>133</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>236</b>



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
13	12132013-Cut	51.7	4134 - Aspen, Spruce/Fir	High Density Pole	60	81-110	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<u>Prescription:</u> Cut all trees 2 inches and larger except red and white pine, cedar, hemlock, oak, elm and cherry. Cut all spruce and balsam that is 6 inches and <u>Specs:</u> larger at a 4 inch stump.										
<u>Other Comments:</u>										
<u>Next Steps:</u> Regen survey according to certification										
<u>Proposed Start Date:</u> 10/01/2013										
14	12132014-Cut	8.5	4134 - Aspen, Spruce/Fir	High Density Log	84	51-80	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<u>Prescription:</u> Cut all trees 2 inches and larger except red and white pine, hemlock, cedar, oak and cherry. Cut all spruce and balsam that is greater than 6 <u>Specs:</u> inches in diameter at a 4 inch stump.										
<u>Other Comments:</u>										
<u>Next Steps:</u> Regen Survey according to certification										
<u>Proposed Start Date:</u> 10/01/2013										
21	12132021-Cut	40.2	4134 - Aspen, Spruce/Fir	High Density Pole	83	51-80	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<u>Prescription:</u> Cut all trees 2 inches and smaller except red and white pine, hemlock, cedar, oak and elm and cherry. Cut all spruce and balsam that is 6 inches <u>Specs:</u> or greater at a 4 inch stump.										
<u>Other Comments:</u>										
<u>Next Steps:</u> Regen survey according to certification.										
<u>Proposed Start Date:</u> 10/01/2013										
29	12132029-Cut	133.0	4119 - Mixed Northern Hardwoods	High Density Log	85	111-140	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<u>Prescription:</u> Mark trees to a BA of 80 leaving the best tree in place. Do not cut red and white pine, cedar, hemlock, oak and elm. Thin around crop trees <u>Specs:</u> according to the complete marker. Make canopy gaps in stand.										
<u>Other Comments:</u>										
<u>Next Steps:</u> Regen survey according to certification										
<u>Proposed Start Date:</u> 10/01/2013										
<b>Total Treatment Acreage Proposed:</b>		<b>233.5</b>								

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

Prescription  
Specs:

Other  
Comment:

Next  
Steps:

Proposed  
Start Date: #Error

Limiting Factor and No  
Treatment Reason

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

**Out of YOE -- Treatments  
Prescribed with No Limiting Factor**

Year of Entry: 2014



Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
12091001-Cut	31.4	4110 - Sugar Maple Association	High Density Log	87		Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal - Incomplete

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 devastation. Create canopy gaps for regeneration

Other Comments:

Next Steps: Regen check according to certification

Proposed Start Date: 10/01/2013

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**Total Treatment  
Acreage Proposed: 31.4**



Stand	Crystal Falls Mgt. Unit			5 – Forested Stands		Compartment: 132 Year of Entry: 2014
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4110 - Sugar Maple Association	High Density Log	40.6	85	81-110	
2	6121 - Tamarack	High Density Pole	13.5	92	51-80	
4	6120 - Lowland Cedar	High Density Pole	12.2	84	81-110	
6	6122 - Black Spruce	High Density Pole	14.6	92	81-110	
7	42340 - Upland Spruce/Fir	High Density Pole	14.4	92	81-110	
8	4134 - Aspen, Spruce/Fir	High Density Sapling	14.1	10	1-50	
9	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	8.3	97	51-80	
10	6124 - Lowland Spruce- Fir	High Density Pole	10.8	84	51-80	
12	4130 - Aspen	High Density Sapling	14.9	10		
13	4134 - Aspen, Spruce/Fir	High Density Pole	51.7	60	81-110	
14	4134 - Aspen, Spruce/Fir	High Density Log	8.5	84	51-80	
15	4112 - Maple, Beech, Cherry Association	High Density Log	57.0	85	81-110	
17	4134 - Aspen, Spruce/Fir	High Density Pole	31.6	60	111-140	
18	42340 - Upland Spruce/Fir	High Density Pole	13.3	77	51-80	
19	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	9.7	84	81-110	
21	4134 - Aspen, Spruce/Fir	High Density Pole	40.2	83	51-80	
22	6120 - Lowland Cedar	High Density Pole	21.3	85	81-110	
25	4319 - Mixed Upland Forest	High Density Log	2.3	80	111-140	

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## Crystal Falls Mgt. Unit

## 5 – Forested Stands

Compartment: 132  
Year of Entry: 2014

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
26	6124 - Lowland Spruce- Fir	High Density Pole	3.4	84	81-110	
27	6120 - Lowland Cedar	High Density Pole	14.4	84	51-80	
28	42340 - Upland Spruce/Fir	Low Density Pole	22.2	31		
29	4119 - Mixed Northern Hardwoods	High Density Log	133.0	85	111-140	
30	42350 - Upland Hemlock	High Density Log	5.6	84	81-110	
31	42350 - Upland Hemlock	High Density Log	3.9	84	81-110	
32	4134 - Aspen, Spruce/Fir	High Density Sapling	32.2	31		
33	42200 - Natural White Pine	High Density Log	4.7	100	81-110	
34	4319 - Mixed Upland Forest	High Density Sapling	20.0	10		
36	4119 - Mixed Northern Hardwoods	High Density Pole	1.3	84	81-110	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
3	629 - Mixed non-forested wetland	10.8	No	Unspecified	
5	6229 - Mixed lowland shrub	42.0	No	Unspecified	
11	6224 - Treed Bog	4.1	No	Unspecified	
16	6224 - Treed Bog	2.1	No	Unspecified	
20	3205 - Mixed Upland Shrub	4.9	Yes	Aspen	
23	6229 - Mixed lowland shrub	1.2	No	Unspecified	
24	6229 - Mixed lowland shrub	2.1	N/A	Unspecified	
35	6224 - Treed Bog	28.7	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.

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

Conservation Area	Type	Description
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.