



**Crystal Falls Forest Management Unit
Compartment Review Presentation
Compartment #177 Entry Year: 2012
Compartment Acreage: 429 County: Iron**

Revision Date: June 8, 2010

Stand Examiner: Linda Lindberg

Legal Description: T43N, R32W Sec. 17; T43N, R33W Sec. 4, 10, 11 & 12; T44N, R33W Sec. 33

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

Management Goals: Some of the stands in this compartment are not easily accessible and will not be managed. The goal with the rest would be to strive toward age class diversity in the aspen and thin the hardwoods every 20 years. At least one parcel is up for sale. A good majority of this compartment is along the Paint River and will be buffer for the river.

Soil and Topography: There is a variety of terrain in this compartment and a lot of it slopes down to the river with quite a bit that is very steep. There is everything from Lupton soil in the low areas to Vilas, Pence, Wabeno and Sarona on the higher ground.

Ownership Patterns, Development, and Land Use in and Around the Compartment: There is a lot of other ownerships within this compartment because it is so scattered along the river. There are many permanent homes and recreational land with some industry land also mixed in.

Unique, Natural Features: The Paint River is the natural feature of this compartment

Archeological, Historical, and Cultural Features: None known

Special Management Designations or Considerations: None known

Watershed and Fisheries Considerations: Of course all stands in this compartment have a river buffer if adjacent to the river.

Wildlife Habitat Considerations: This compartment is comprised of a group of scattered parcels of ownership along the Paint River. Many are wet, inaccessible or too steep to harvest, but some have merchantable timber that can be harvested without risk to the watershed. Wildlife would like to retain as much age class diversity in the aspen as possible.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 100 and 200 feet. The Precambrian Badwater Greenstone and Michigamme Formation subcrop below the glacial drift. The abandoned Crystal Falls iron mines are located just to the south of Section 17-T43N-R32W. Part of this compartment was previously leased for metallic exploration. The nearest gravel pit is located in Section 7-T43N-R32W. Gravel potential appears to be limited in this scattered compartment. There is no economic oil and gas production in the UP.

Vehicle Access: There is either real good access in a vehicle or walking only and private land must be used to access several stands.

Survey Needs: There are a few proposals to cut that would probably need corners

Recreational Facilities and Opportunities: Erickson Landing is a canoe access site

Fire Protection:

Additional Compartment Information: None

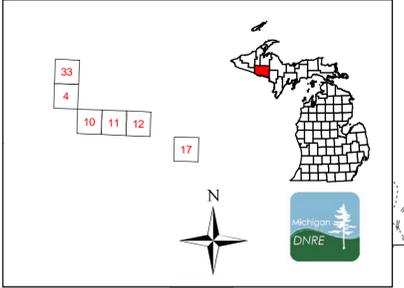
- **The following reports from the Inventory are attached:**
- ◆ **Total Acres by Cover Type and Age Class**
 - ◆ **Proposed Treatment Summary**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**
 - ◆ **Stand Details (Forested and Nonforested)**

- ◆ **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**

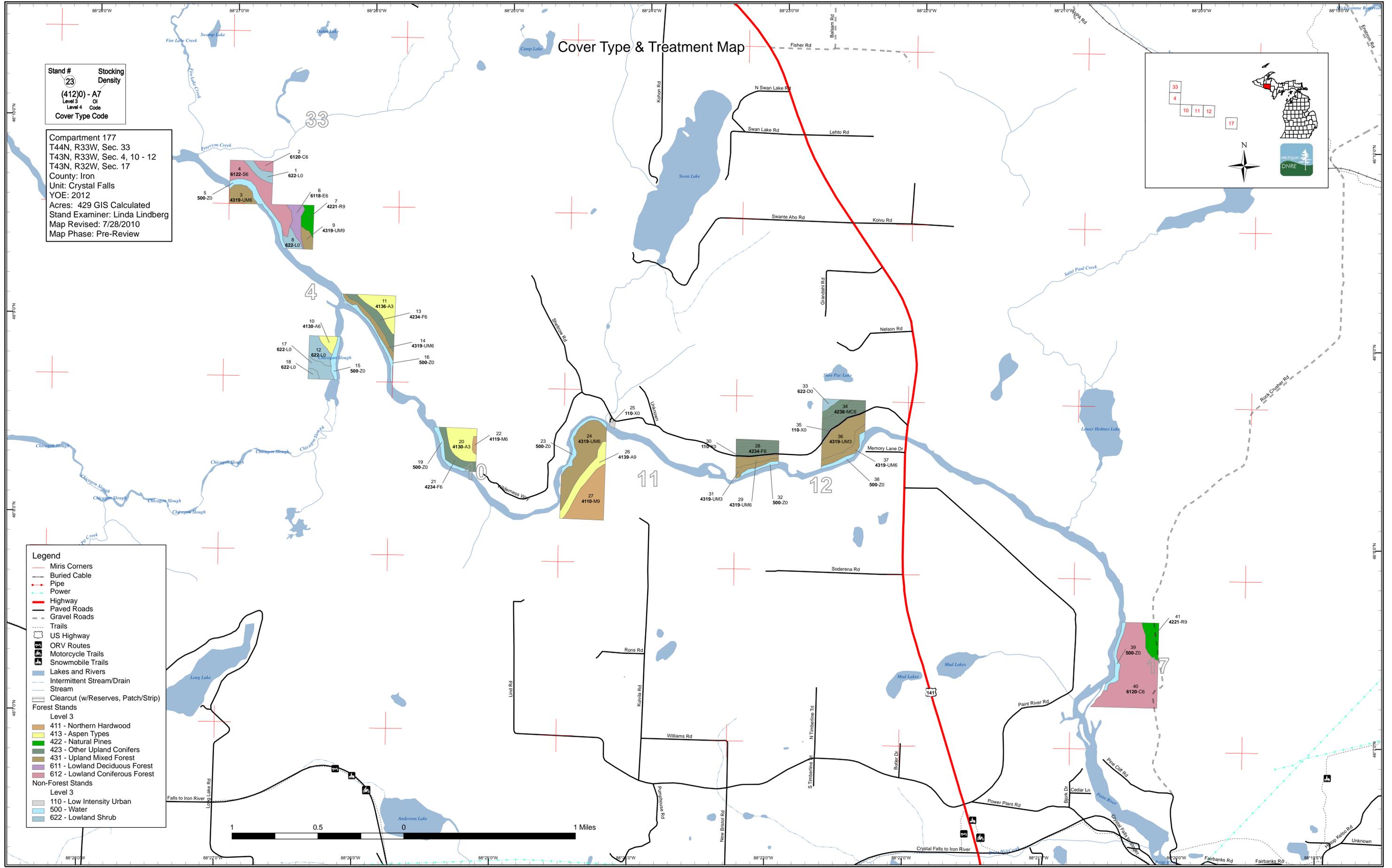
Cover Type & Treatment Map

Stand # **23** Stocking Density
(4120) - A7
 Level 3 OI
 Level 4 Code
 Cover Type Code

Compartment 177
 T44N, R33W, Sec. 33
 T43N, R33W, Sec. 4, 10 - 12
 T43N, R32W, Sec. 17
 County: Iron
 Unit: Crystal Falls
 YOE: 2012
 Acres: 429 GIS Calculated
 Stand Examiner: Linda Lindberg
 Map Revised: 7/28/2010
 Map Phase: Pre-Review



- Legend**
- Miris Corners
 - Buried Cable
 - Pipe
 - Power
 - Highway
 - Paved Roads
 - Gravel Roads
 - Trails
 - US Highway
 - ORV Routes
 - Motorcycle Trails
 - Snowmobile Trails
 - Lakes and Rivers
 - Intermittent Stream/Drain
 - Stream
 - Clearcut (w/Reserves, Patch/Strip)
 - Forest Stands**
 - Level 3
 - 411 - Northern Hardwood
 - 413 - Aspen Types
 - 422 - Natural Pines
 - 423 - Other Upland Conifers
 - 431 - Upland Mixed Forest
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
 - Non-Forest Stands**
 - Level 3
 - 110 - Low Intensity Urban
 - 500 - Water
 - 622 - Lowland Shrub

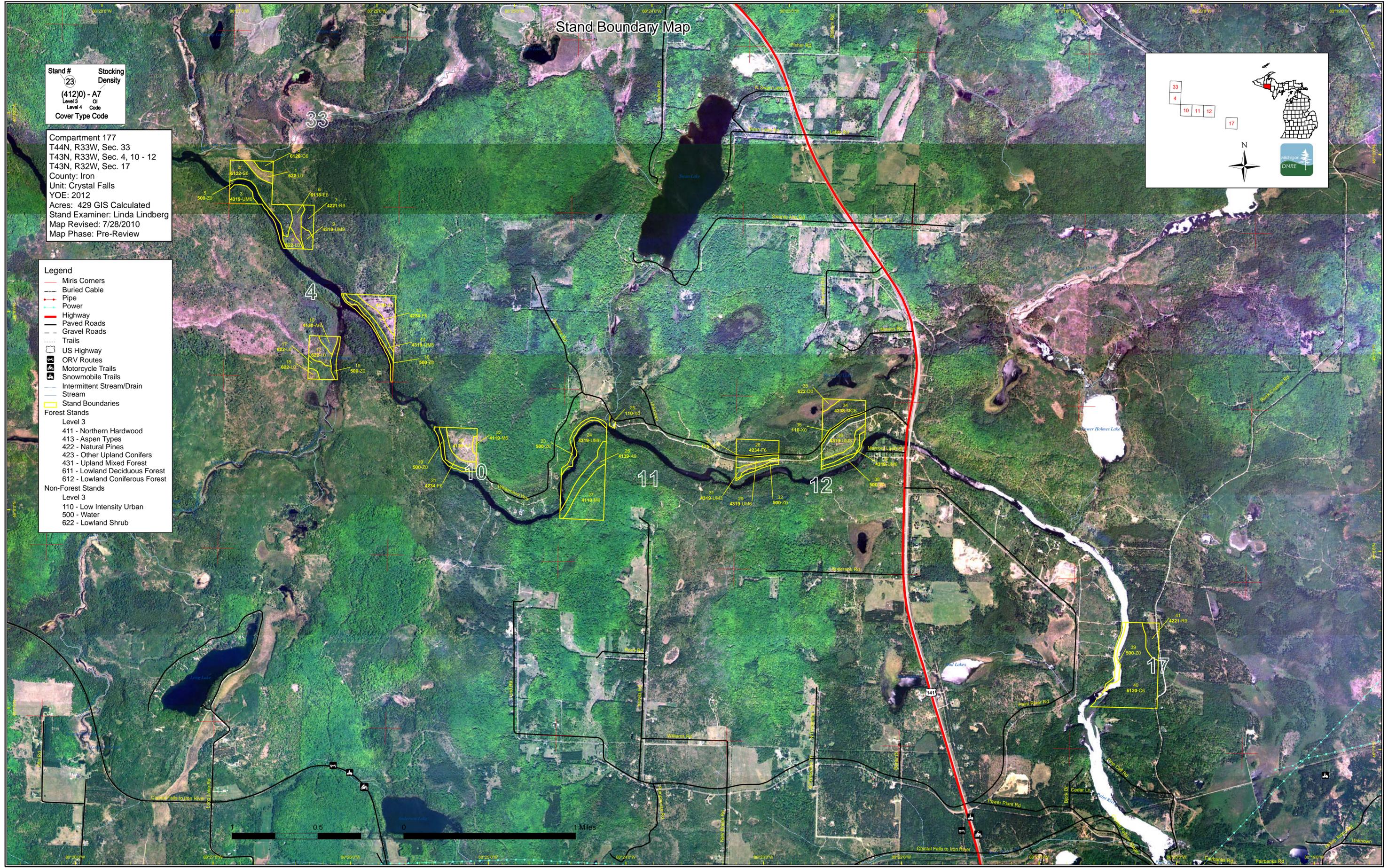
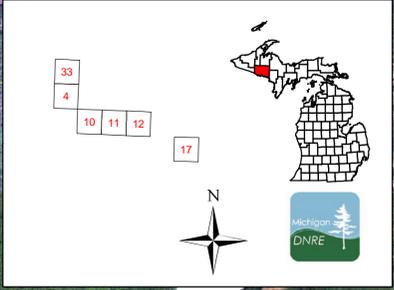


Stand Boundary Map

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

Compartment 177
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Dedicated & Proposed Special Conservation Area Map

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

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 T43N, R33W, Sec. 4, 10 - 12
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 Acres: 429 GIS Calculated
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 Map Revised: 7/28/2010
 Map Phase: Pre-Review

- Legend**
- Miris Corners
 - Stand Boundaries
 - Proposed Special Conservation Areas**
 - ▨ SCA - Special Conservation Area
 - ▩ SCA Removal
 - Dedicated Special Conservation Areas**
 - Deer Wintering Areas
 - Cold Water Lakes
 - Cold Water Streams
 - Boat Access Sites
 - Forest Stands**
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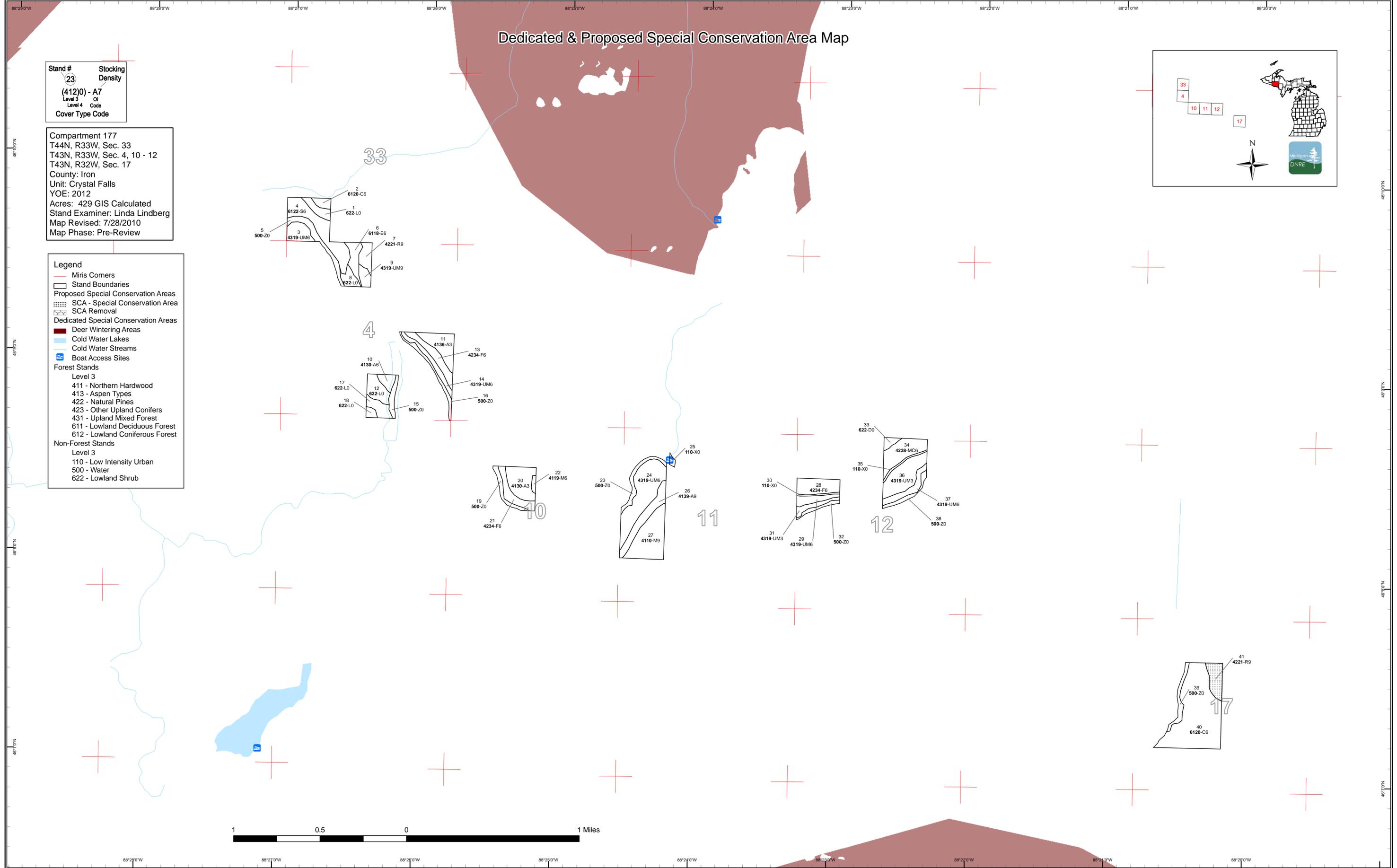
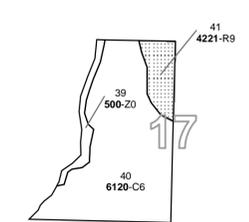
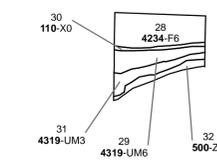
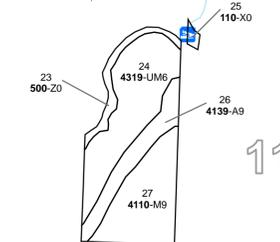
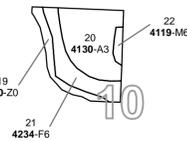
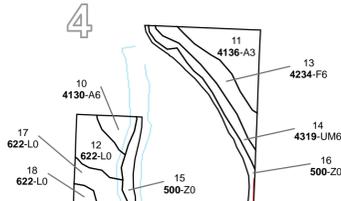
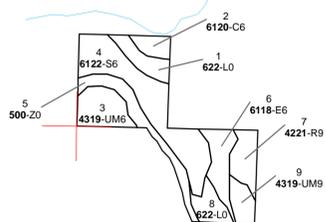
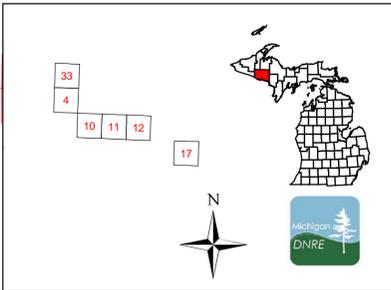


Table 1 – Total Acres by Cover Type and Age Class



	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	32	0	4	0	0	0	0	14	0	0	0	0	0	50
Cedar	0	0	0	0	0	0	0	0	0	0	0	74	0	0	0	74
Lowland Deciduous	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	8
Lowland Shrub	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	25
Northern Hardwood	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	30
Red Pine	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	16
Treed Bog	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Upland Conifers	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	18
Upland Mixed Forest	0	0	26	0	0	0	0	0	0	69	0	0	0	0	0	95
Upland Spruce/Fir	0	0	0	0	0	0	0	0	14	20	0	0	0	0	0	33
Urban	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Water	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Total	79	0	58	0	4	0	38	0	14	146	0	90	0	0	0	429



Table 2 – Proposed Treatment Summaries

Crystal Falls Mgt. Unit
Year of Entry 2012

Compartment 177
Total Compartment Acres: 429.3

Acres by Treatment Type

Commercial Harvest - 27	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
Upland Conifers	13	0	0	0	0	0	13
Upland Spruce/Fir	14	0	0	0	0	0	14
Total	27	0	0	0	0	0	27

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
28 12177028_Edt -Cut	13.7	42340 - Upland Spruce/Fir	High Density Pole	70	Harvest	Clearcut with Reserves	Upland Spruce/Fir	Cmpt. Review Proposal

Prescription Cut all species but leave spruce and balsam 6 inches or less in diameter, 4 inches above the stump. Do not cut cherry, elm, oak, red and white pine and cedar and hemlock if in the stand.

Other Comments: Take Care near Sheltraw Rd. while dropping trees and operating equipment because there is a lot of traffic on that road.

Next Steps: Regeneration survey per work instructions.

34 12177034-Cut	13.0	42380 - Non Pine Upland Conifer, Mixed Deciduous	High Density Pole	80	Harvest	Clearcut with Reserves	Aspen, Spruce/Fir	Cmpt. Review Proposal
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Prescription Leave spruce and balsam 6 inches or less in diameter 4 inches above the stump. Do not cut cherry, elm, oak, red and white pine, cedar or hemlock.

Other Comments: Take Care near Sheltraw Rd. while dropping trees and operating equipment because there is a lot of traffic.

Next Steps: Check for regen. according to certification rules.

**Total Treatment
Acreage Proposed: 26.7**

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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: 177
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012
						General Comments:
2	6120 - Lowland Cedar	High Density Pole	3.4	100	111-140	
3	4319 - Mixed Upland Forest	High Density Pole	9.0	81	81-110	This is the buffer along the river and what was left to cut when the buffer was taken out wouldn't be worth the effort to get to it.
4	6122 - Black Spruce	High Density Pole	25.5	80	81-110	Buffer along the Paint.
6	6118 - Lowland Deciduous with Cedar	High Density Pole	7.7	50	81-110	
7	42210 - Natural Red Pine	High Density Log	6.5	100	111-140	
9	4319 - Mixed Upland Forest	High Density Log	4.4	80	51-80	This could be cut but would not be worth the long distance in and the trouble going through so much private land.
10	4130 - Aspen	High Density Pole	4.4	30		This stand is across two bodies of water and is small and cutting records were be used.
11	4136 - Aspen, Mixed Conifer	High Density Sapling	14.6	10		There is a small hardwood inclusion that was marked when this sale was cut. Not worth going to by itself.
13	42340 - Upland Spruce/Fir	High Density Pole	10.3	80	81-110	This is the buffer for the Paint River
14	4319 - Mixed Upland Forest	High Density Pole	7.1	80	81-110	This stand could have been cut but was too steep so is now part of the buffer.
20	4130 - Aspen	High Density Sapling	17.2	10		This was cut 10 years ago and is up for sale. Thornapples here
21	42340 - Upland Spruce/Fir	High Density Pole	9.3	80	81-110	Buffer along the Paint River and this parcel is uup for sale
22	4119 - Mixed Northern Hardwoods	High Density Pole	1.4	54	81-110	This stand was marked and harvested when the adjoining stand was cut
24	4319 - Mixed Upland Forest	High Density Pole	35.0	85	81-110	This stand would be considered the buffer for the Paint River. Lots of dead and down.. and bluffy, rocky ground. Very steep down to the river and to this stand.
26	4139 - Aspen, Mixed Deciduous	High Density Log	14.2	80	81-110	This stand would be very nice to cut if the slope wasn't so steep. It is also up for sale. There is oak in here also. There is aspen sprouted but it will die because there is no sun.
27	4110 - Sugar Maple Association	High Density Log	28.8	50	81-110	This stand was cut 10 years ago and will be ready again in 10 years if we still own it. Nice stand. This land is for sale. Sweet Cicely is the indicator species.



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Crystal Falls Mgt. Unit

5 – Forested Stands

Compartment: 177

Inventory Method: IFMAP

Year of Entry: 2012



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	42340 - Upland Spruce/Fir	High Density Pole	13.7	70	81-110	I would like to cut one side or the other of this area. There are a tremendous amount of deer tracks and beds in these stands and I would like to save one of the two (this or 34) for habitat. There was a grouse kill in this stand so there may be a hawk interest here.
29	4319 - Mixed Upland Forest	High Density Pole	5.9	80	81-110	This stand is the buffer for the Paint River
31	4319 - Mixed Upland Forest	High Density Sapling	4.4	10		This is an aspen/fir stand with hemlock and white pine left. It is doing well.
34	42380 - Non Pine Upland Conifer, Mixed Deciduous	High Density Pole	17.8	80	81-110	This stand and stand 28 could both be cut but I would like to leave one for habitat. There are many deer tracks and beds and it seems right to leave one for continued use for deer and whatever else. This stand is a little bigger but has more "leave" trees as I would leave hemlock, red and white pine and oak and cherry in both stands but there seems to be a greater concentration of "leave species" here.
36	4319 - Mixed Upland Forest	High Density Sapling	21.6	10		This stand was cut in 2004 and has regenerated well. There was some hemlock present in the stand along with the white pine and these were left and seem to be doing quite well
37	4319 - Mixed Upland Forest	High Density Pole	7.7	80	81-110	This stand is the river buffer
40	6120 - Lowland Cedar	High Density Pole	70.1	100	200+	There is a lot of deer browse in here. Mostly the ash seedlings. There is a rock bluff in the center of this cedar swamp with red pine, balsam and spruce. Very interesting. Not very big and not operable.
41	42210 - Natural Red Pine	High Density Log	9.8	100	141-170	



Stand	Cover Type	Acres	Gen Cmts:
1	6220 - Alder/willow	5.4	
5	50 - Water	9.6	The Paint river
8	6220 - Alder/willow	5.2	
12	6229 - Mixed lowland shrub	9.7	
15	50 - Water	4.1	
16	50 - Water	5.6	The Paint river
17	622 - Lowland Shrub	6.7	
18	6220 - Alder/willow	2.1	
19	50 - Water	4.7	The Paint river
23	50 - Water	6.1	The Paint river
25	11 - Low Intensity Urban	1.1	Access to the Paint river
30	11 - Low Intensity Urban	1.4	
32	50 - Water	2.8	The Paint river
33	6224 - Treed Bog	2.7	There is a steep slope down to the treed bog that would be left too for a buffer and to avoid a dangerous situation when harvesting the next stand over.
35	11 - Low Intensity Urban	2.1	Sheltrow Rd
38	50 - Water	4.1	The Paint River
39	50 - Water	5.6	The Paint River



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
41	Unique Site - SCA	12177041	9.8	Natural stand and not high enough BA to cut



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.
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.