



**CRYSTAL FALLS FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

**COMPARTMENT #146 - ENTRY YEAR: 2010
Compartment Acreage: 719 - County: Iron**

Revision Date: July 2, 2008

Stand Examiner: Scott Sebero

Legal Description: T43N, R31W, Sections 9, 16, 17 and 20

Management Goals: Develop age class distribution in aspen type. Maintain health of conifer types and increase acreage where possible. Develop buffers on streams. Maintain and improve road system.

Soil and Topography: Rocky with rock outcrops and seeps to lowland swamps and drainages.

Ownership Patterns, Development, and Land Use in and Around the Compartment: State lands mixed with company lands and private parcels. Lands used mainly for hunting and fishing.

Unique, Natural Features: Michigamme River and Clarks Creek.

Archeological, Historical, and Cultural Features: None known.

Special Management Designations or Considerations: None known.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations: Common loon and numerous bald eagle occurrences to the north; red-shouldered hawk to the east. Osprey and Freija fritillary to southwest. Loon to southwest. Potential for red-shouldered hawk, moose and gray wolf. Potential for osprey and eagle. Potential for wood turtle.

Mineral, Oil and Gas Considerations: Surface sediments consist of medium-textured till thin to discontinuous over bedrock. The glacial drift thickness varies between 10 and 50 feet. The Precambrian Intrusive and Hemlock Formation subcrop below the glacial drift. These rocks do not have a current economic use. The Crystal Falls abandoned iron mines are located just to the southwest and Lake Ellen is located two miles to the north. Sections 9 and 16 are currently leased for metallic exploration. Gravel pits are not located in the area, but there may be some potential. There is no economic oil and gas production in the UP.

Vehicle Access: Old M-69, Peterson Road, Way Dam Road and connected woods roads. Access is poor.

Survey Needs: Possible trespass and two corners needed for future t-sale.

Recreational Facilities and Opportunities: Hunting, but access is limited.

Fire Protection:

Additional Compartment Information:

- **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**

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Michigan Department of Natural Resources - Operations Inventory System
Individual Compartment Report

COPPER COUNTRY STATE FOREST

CRYSTAL FALLS FOREST MGT UNIT

IRON COUNTY

COMPARTMENT: 146

Table 3

(acres shown in boxes)

STAND AGE CLASS

COVER TYPE	Not Coded	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150-159	All Aged	Total
Aspen		106	169		39	59				97									470
Cedar										36				9					45
Grass	12																		12
Lowlnd Brush	5																		5
Lowlnd Poplr								6		7									13
Mx Swmp Cnfr										89									89
Non Stocked	2																		2
Red Pine						15													15
Rock	23																		23
Spruce Fir										22									22
Swamp Hrdwds										6									6
Upland Hdwds										15									15
Water	2																		2
Total	44	106	169		39	74		6		272				9					719

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Michigan Department of Natural Resources - Operations Inventory System
Individual Compartment Report

COPPER COUNTRY STATE FOREST

CRYSTAL FALLS FOREST MGT UNIT

IRON COUNTY

COMPARTMENT: 146

Table 3A

(acres shown in boxes)

MANAGEMENT OBJECTIVE TYPE

COVER TYPE	A	S	V	C	G	H	J	I	L	P	N	Q	X	O	B	R	K	Y	F	E	T	D	U	M	Z	W	Total
A Aspen	470																										470
C Cedar				45																							45
G Grass					12																						12
L LowInd Brush									5																		5
P LowInd Poplr										13																	13
Q Mx Swmp Cnfr												89															89
X Non Stocked													2														2
R Red Pine															15												15
K Rock																	23										23
F Spruce Fir																			22								22
E Swamp Hrdwds																				6							6
M Upland Hdwds																								15			15
Z Water																									2		2
Total	470			45	12				5	13		89	2		15	23			22	6				15	2		719

COPPER COUNTRY STATE FOREST

CRYSTAL FALLS FOREST MGT UNIT

IRON COUNTY

COMPARTMENT: **146**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	4550 Cds	Hardwood	2625 Cds
Softwood	3198 Cds	Softwood	872 Cds
Sum TotVol	7748 Cds	Sum CutVol	3497 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	122
719			

CRYSTAL FALLS FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 146 Entry Year: 2010

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
7	A6	24	79	60	aspen (upland)	mature	final harvest	1		
comnts Fmd : Retention will be in clumps around rock outcrops within stand.										
11	A6	44	79	60	aspen (upland)	mature	final harvest	1		
comnts Fmd : Rough rocky ground with wet areas. Scattered pockets of cedar. Winter cut. Buffer ash and cedar pockets and mark out drainages as much as possible. No cut spec on cedar and ash. Retention will be in clumps around pockets of cedar and ash within stand.										
15	A6	2	79	60	aspen (upland)	mature	final harvest	1		
comnts Fmd : Retention will be along the Q-type to the South.										
16	A6	2	79	60	aspen (upland)	mature	final harvest	1		
comnts Fmd : Retention will be along the Q-type to the East.										
32	F6	12	79	45	spruce-fir (uplands-including upland black spruce)	mature	final harvest	1		
comnts Fmd : Rough rocky ground with wet areas. Scattered pockets of cedar. Winter cut. Retention will be in clumps around pockets of cedar.										
34	F6	5	58	55	balsam poplar & swamp aspen and swamp white birch	immature	final harvest	1		
comnts Fmd : Wet ground. Winter cut. Retention will be along C-type.										
35	F6	6	79	45	spruce-fir (uplands-including upland black spruce)	mature	final harvest	1		
comnts Fmd : Retention will be along C-type.										
36	F6	2	79	45	spruce-fir (uplands-including upland black spruce)	mature	final harvest	1		
comnts Fmd : Retention will be along P-type to the North.										
Total Acres.....		97								

CRYSTAL FALLS FOREST MGT UNIT

**Proposed Treatments
With Limiting Factors**

Compartment: 146 **Entry Year: 2010**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
40	A6	3	79	60	aspen (upland)	mature	final harvest	1		

TREATMENT LIMITING FACTORS: Interest group (name in comments)

comnts Fmd : 1/4 undivided interest. Retention will be along the P-type to the South.

42	A6	22	79	60	aspen (upland)	mature	final harvest	1		
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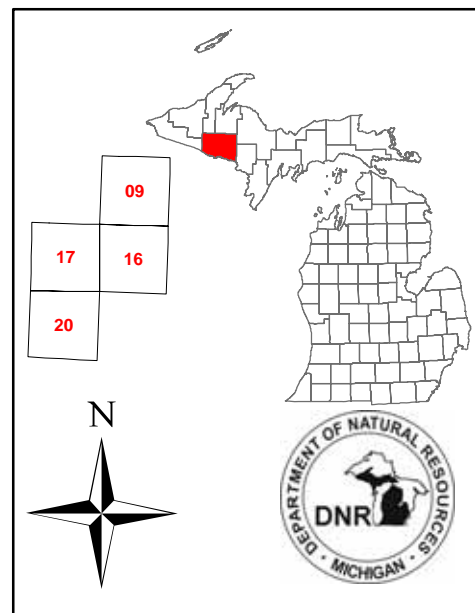
TREATMENT LIMITING FACTORS: Interest group (name in comments)

comnts Fmd : 1/4 undivided interest. Aspen old and dying. Retention will be along the P-type to the NW.

Total Acres..... 25

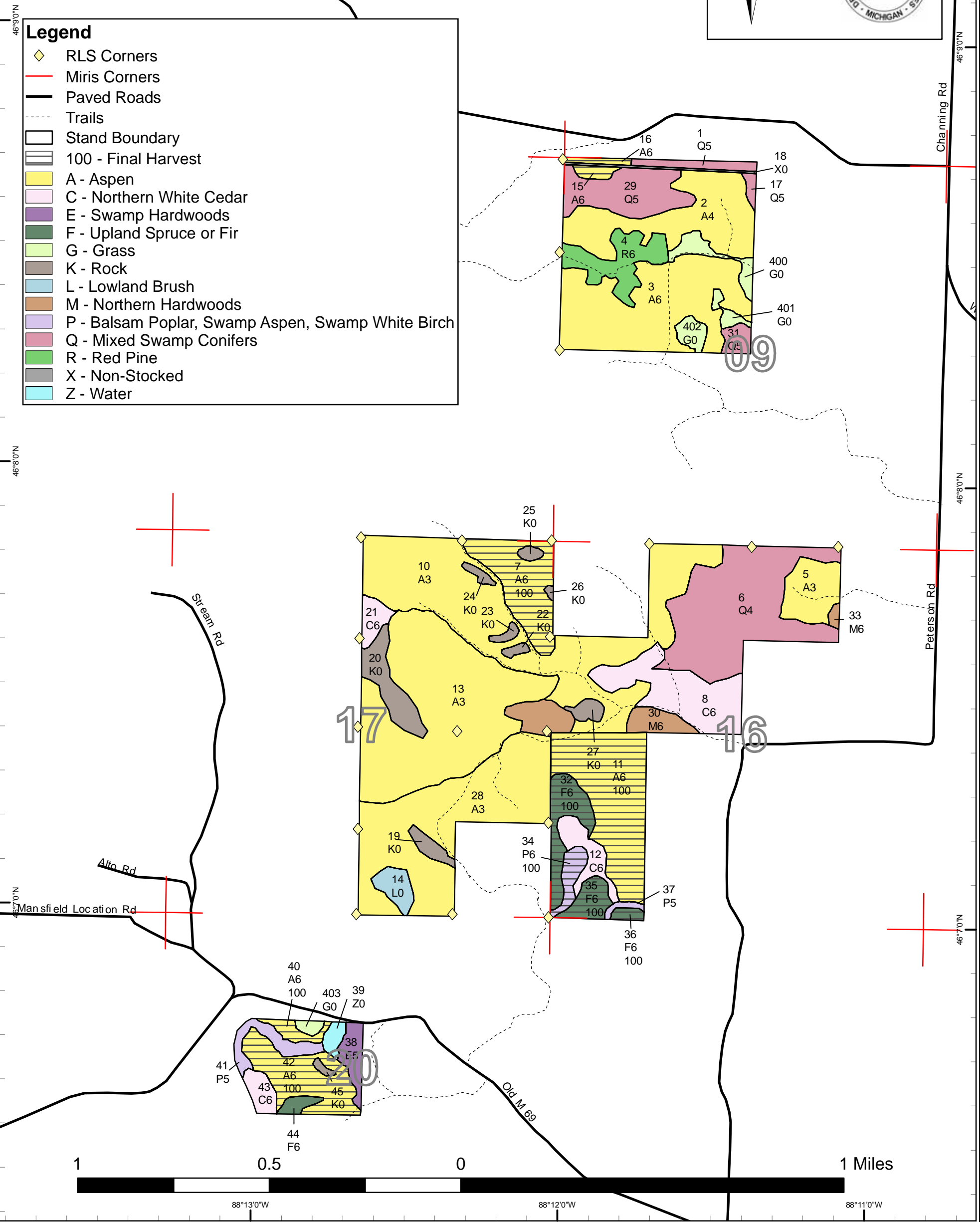
Covertime & Treatment Map

Compartment 146
 T43N, R31W, Sec. 9, 16, 17, 20
 County: Iron
 Unit: Crystal Falls
 YOE: 2010
 Acres: 719 GIS Calculated
 Stand Examiner: Scott Sebero
 Map Revised: 7/10/2008
 Map Phase: Pre-Review



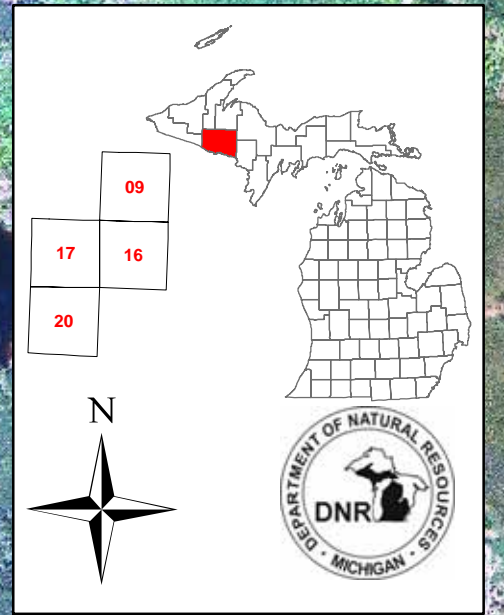
Legend

- ◆ RLS Corners
- Miris Corners
- Paved Roads
- Trails
- Stand Boundary
- 100 - Final Harvest
- A - Aspen
- C - Northern White Cedar
- E - Swamp Hardwoods
- F - Upland Spruce or Fir
- G - Grass
- K - Rock
- L - Lowland Brush
- M - Northern Hardwoods
- P - Balsam Poplar, Swamp Aspen, Swamp White Birch
- Q - Mixed Swamp Conifers
- R - Red Pine
- X - Non-Stocked
- Z - Water

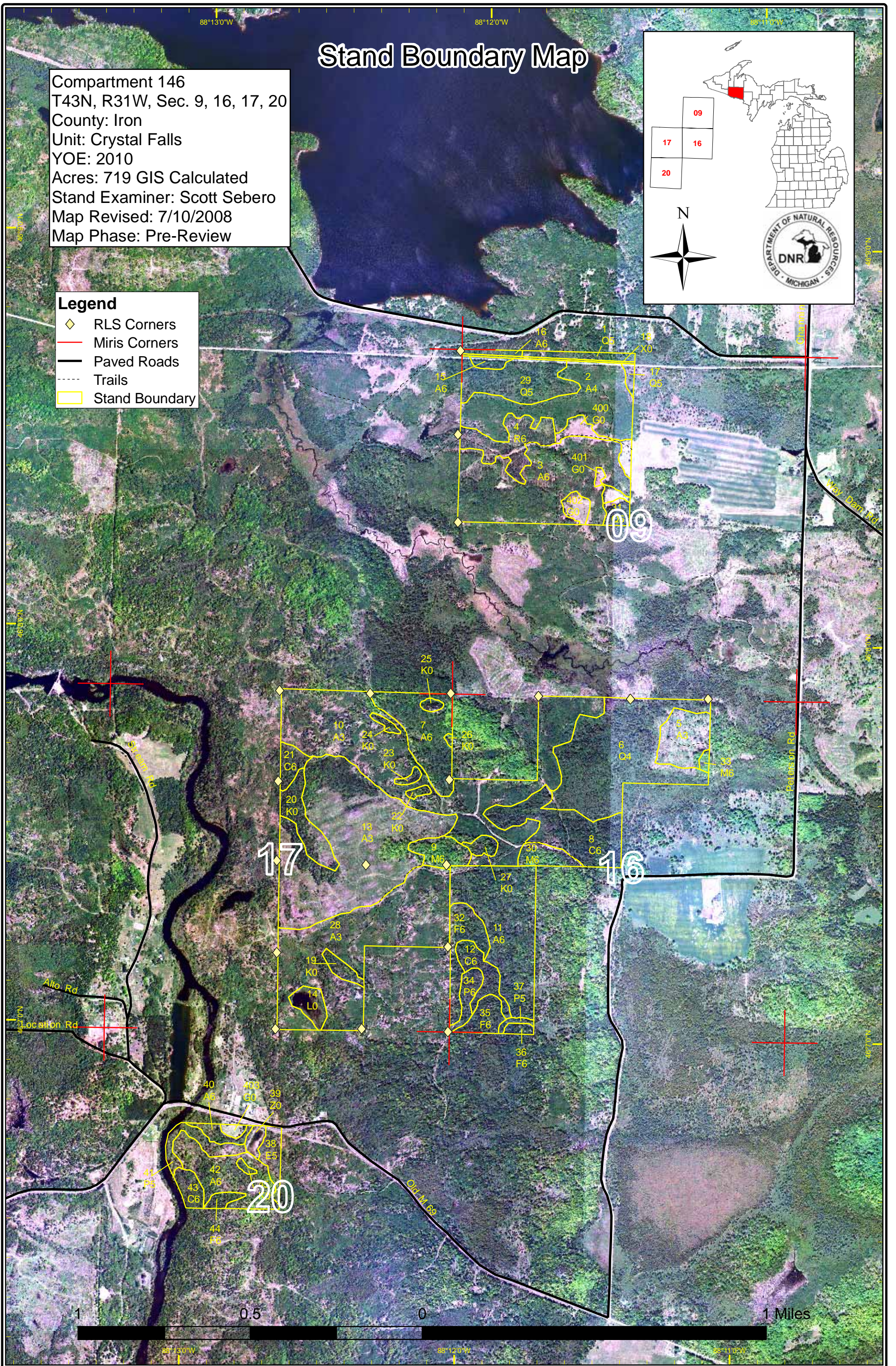


Stand Boundary Map

Compartment 146
T43N, R31W, Sec. 9, 16, 17, 20
County: Iron
Unit: Crystal Falls
YOE: 2010
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Stand Examiner: Scott Sebero
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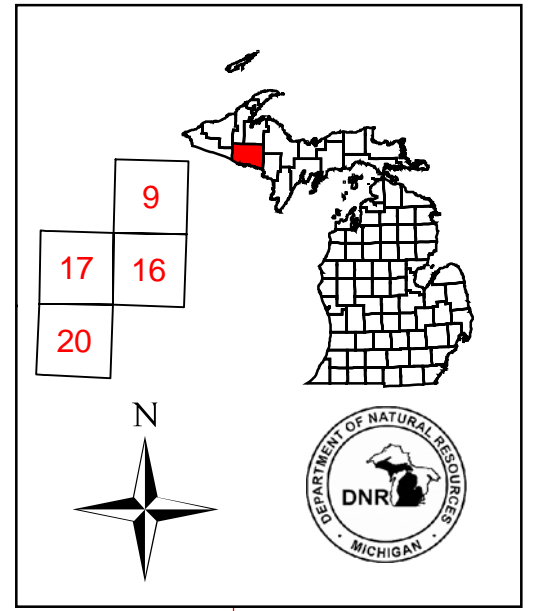
- Legend**
- ◆ RLS Corners
 - Miris Corners
 - Paved Roads
 - - - Trails
 - Stand Boundary



88°13'0"W 88°12'0"W 88°11'0"W

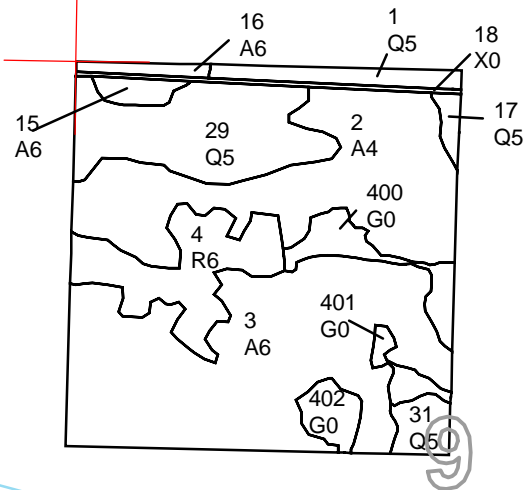
Dedicated & Proposed Special Conservation Area Map

Compartment 146
 T43N, R31W, Sec. 9, 16, 17, 20
 County: Iron
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 Acres: 719 GIS Calculated
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 Map Phase: Pre-Review



46°9'0"N

46°9'0"N

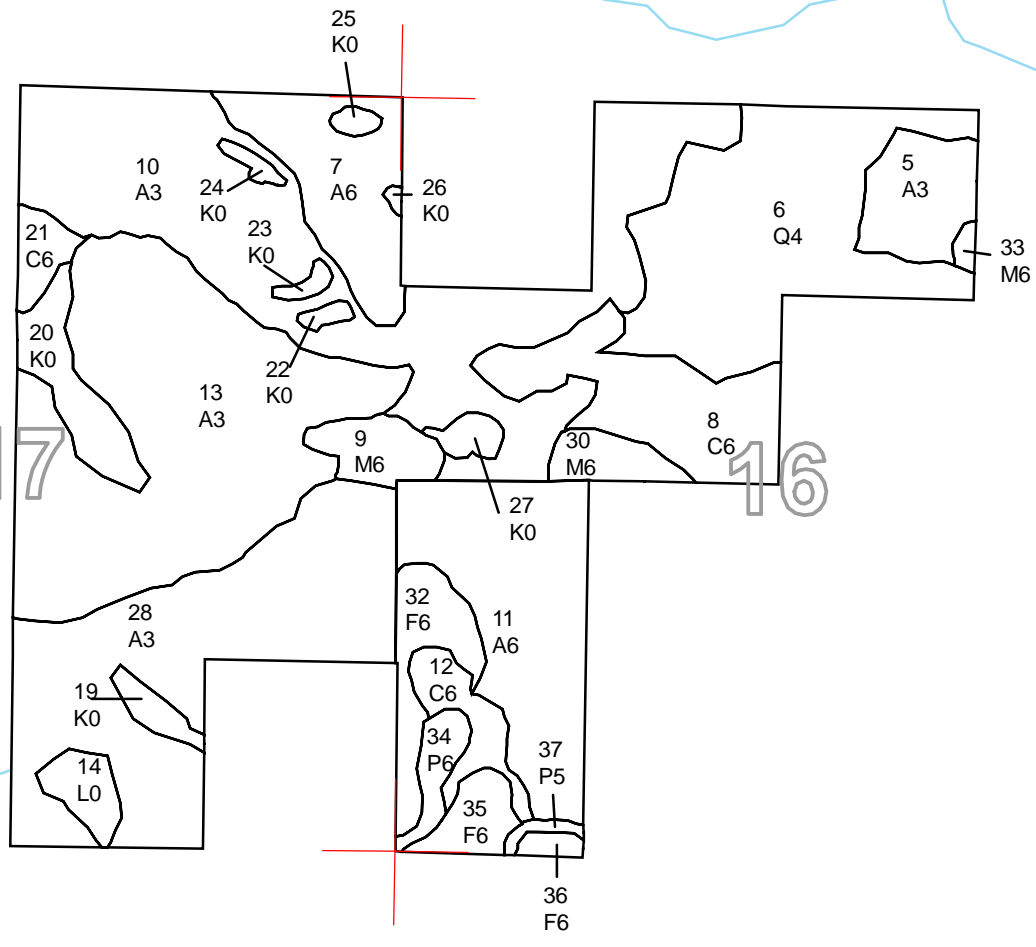


Legend

- Miris Corners
- Stand Boundary
- Cold Water Streams

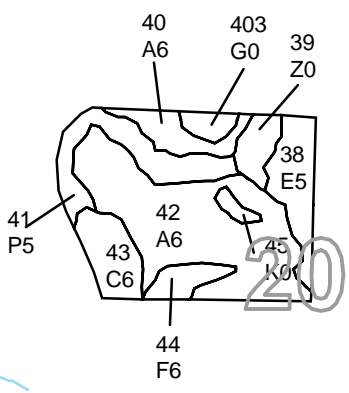
46°8'0"N

46°8'0"N



46°7'0"N

46°7'0"N



88°13'0"W 88°12'0"W 88°11'0"W



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	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
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.