

Crystal Falls Forest Management Unit Compartment Review Presentation Compartment # 41 Entry Year: 2013

Compartment Acreage: 3465 County: Dickinson

Revision Date: 06/01/11

Stand Examiner: Scott Sebero

Legal Description: T43N, R28W, Sec. 6, 7, 18

T43N, R29W, Sec. 1, 2, 3, 10, 11, 12, 13, 14

T44N, R29W, Sec. 35, 36

RMU (if applicable):

Management Goals: Our management goals in this compartment are to develop age class distribution in aspen types, maintain health of conifer types and increase acreage where possible, and to develop the quality while maintaining diversity in hardwood types.

Soil and Topography: Land is nearly level to hilly with a mix of Pemene and Emmet soils that are well-drained loamy and sandy soils on ground moraines, end moraines and outwash plains. Some areas contain rock outcrops up to 50 feet in height. Some narrow depressions contain Cathro soils that are poorly drained black muck.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Ownership patterns in and around this compartment consist mostly of State lands with a few private parcels and camps. These lands are used mainly for hunting and managed for forest products.

Unique, Natural Features: The Ford River is the southern border and the N. Branch of the Ford is the northern border of the compartment.

Archeological, Historical, and Cultural Features: None.

Special Management Designations or Considerations: None.

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations: All species of wildlife need to be considered and a full range of habitat conditions should be provided. Conditions from early-successional to old growth must be provided to meet these needs. Riparian and transition zones were set aside in prior years of entry to provide some of these habitat requirements. To increase age-class diversity stands that are 40-50 years old and are being scheduled

for harvest should have only a portion of the previous acreage cut. Openings will be maintained as logistics permit.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of end moraines of medium-textured glacial till. The glacial drift thickness varies between 0 and 100 feet. The Cambrian Munising Formation and Precambrian granite and gneiss subcrop below the glacial drift. There is not an economic use for these rocks, although the granite might have building stone potential. The topo indicates a rock (Randville?) quarry is located five miles to the south. Groveland Iron mine is located approximately nine miles to the southwest. The area around the compartment was previously leased for metallic exploration and a portion of the Compartment was recently leased. A gravel pit is indicated two miles to the southwest. There appears to be gravel potential in the compartment. There is no economic oil and gas production in the UP currently.

Vehicle Access: Vehicle access is from Turner Road, Hintz Road and associated trail roads.

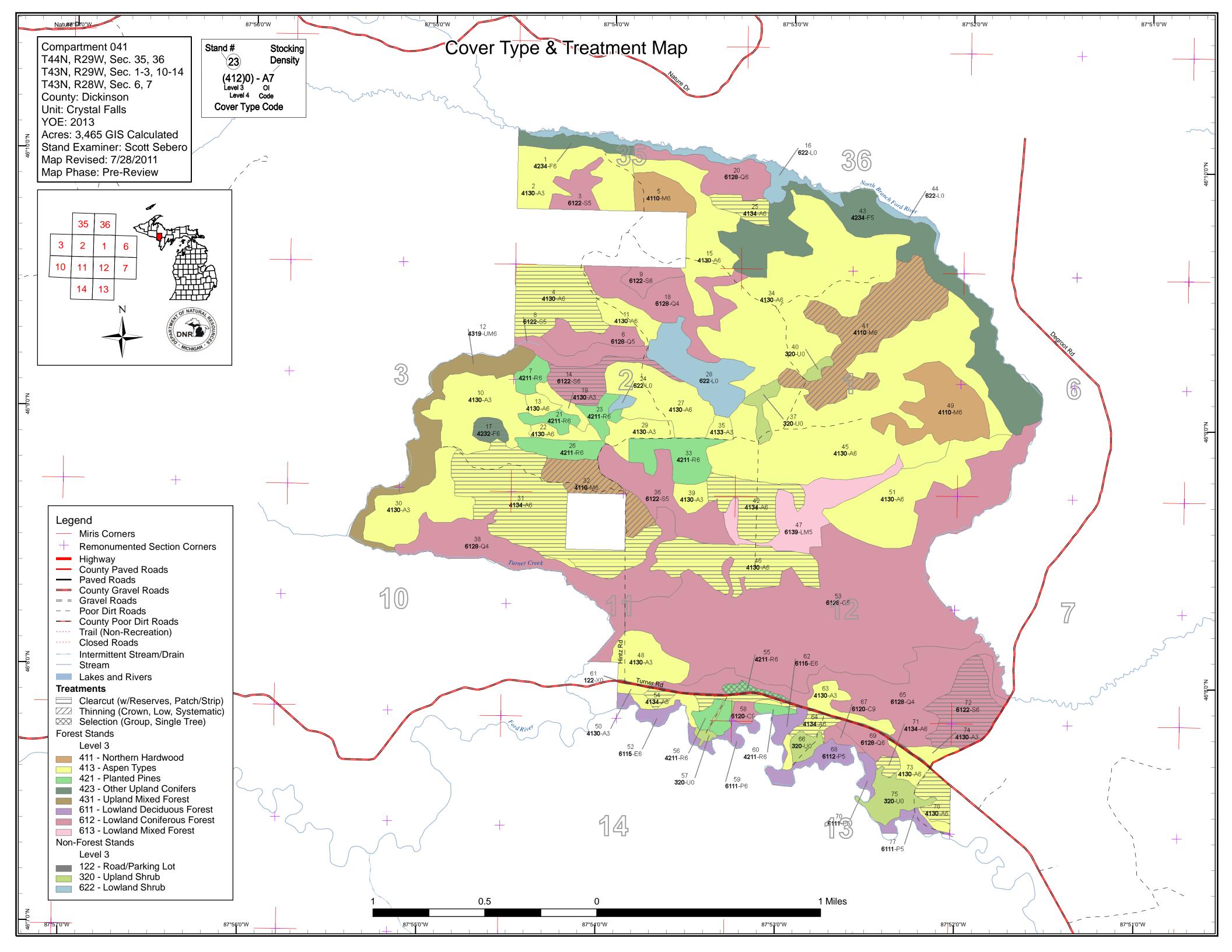
Survey Needs: Three interior corners will be needed in T43N, R29W, Sec. 11.

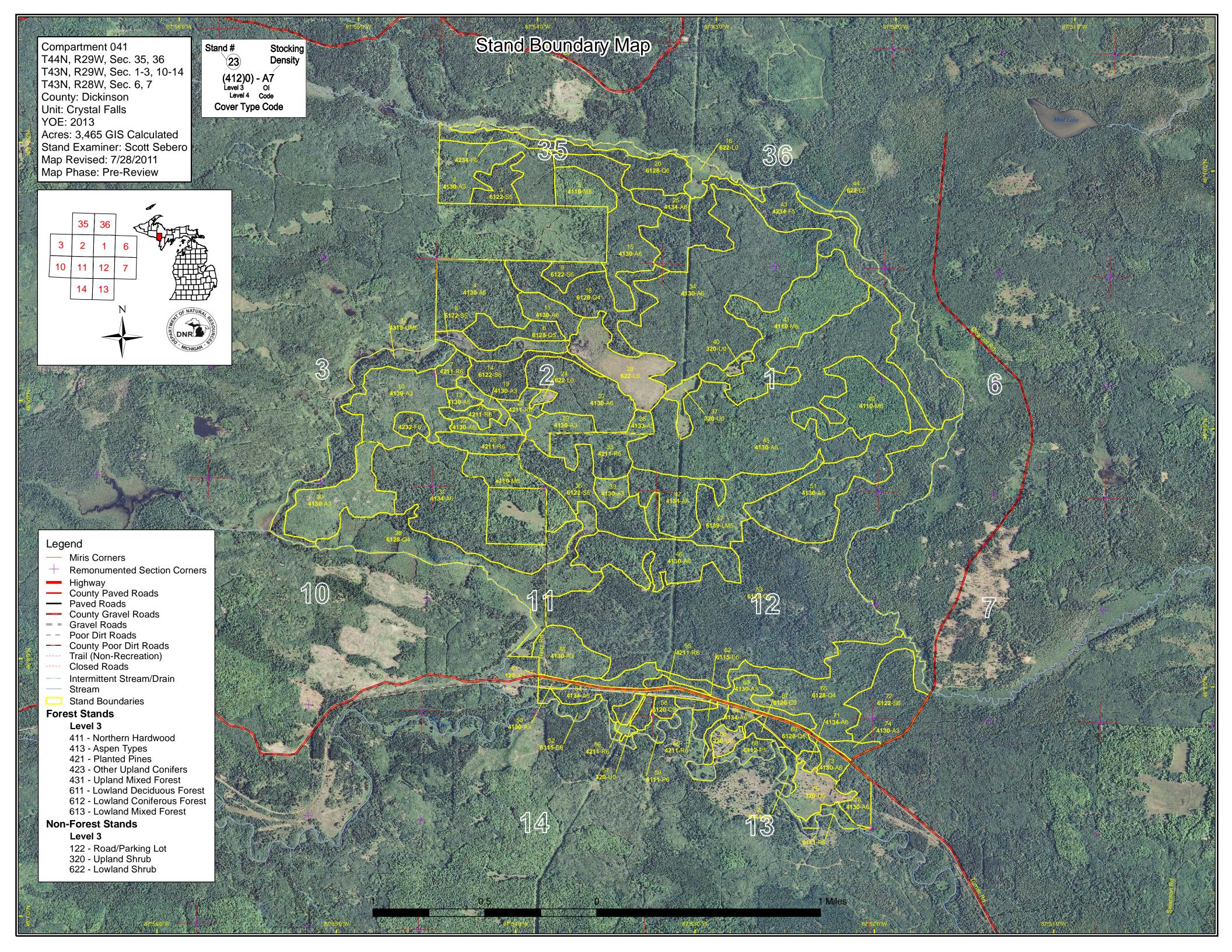
Recreational Facilities and Opportunities: None.

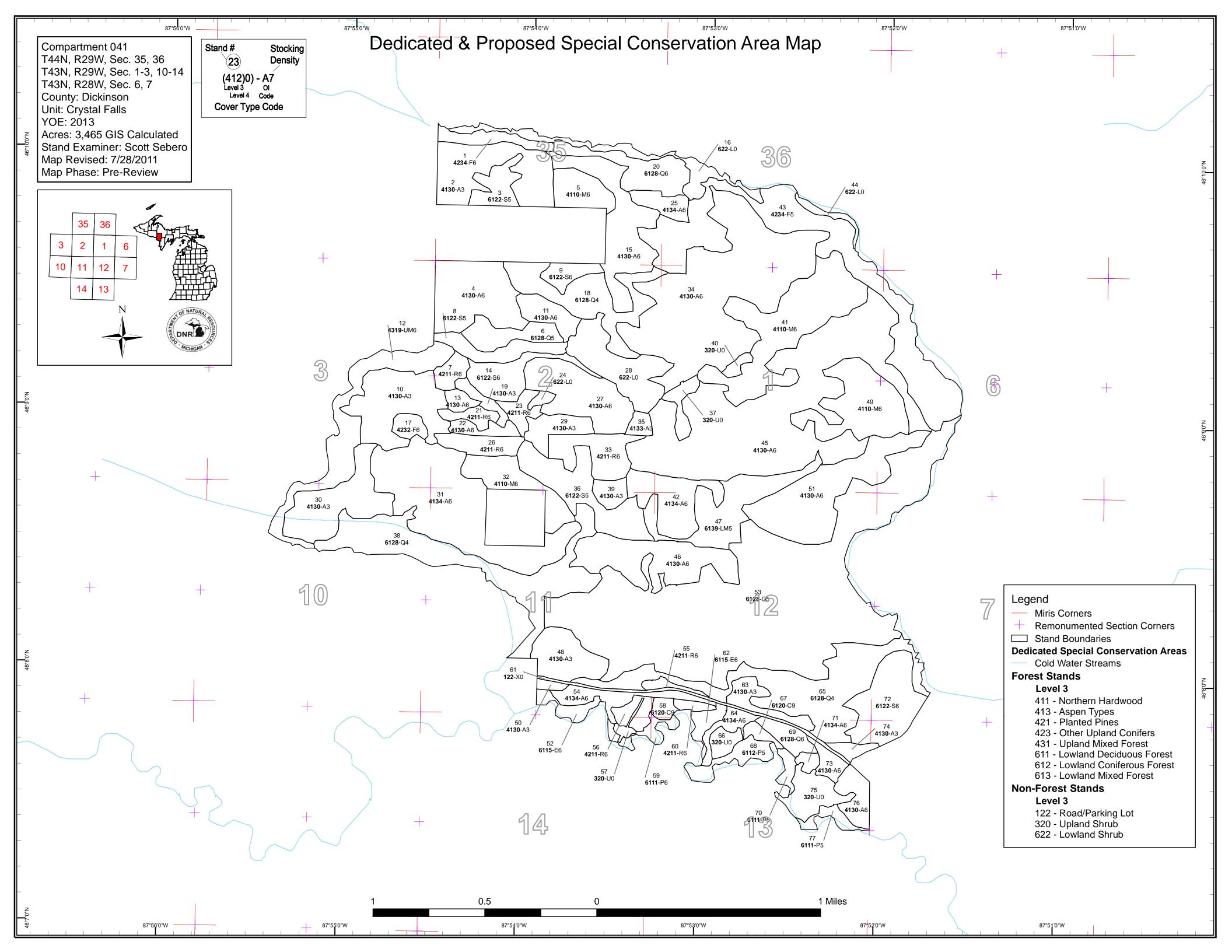
Fire Protection:

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







3465

Crystal Falls Mgt. Unit

Scott Sebero : Examiner

160

107

178

117

694

109

68



							Age	Class									
	¥or	Sign of the second seco	6,7	0.79	P. P. P.	\$6.00 \	D. D	\$	80.00	R. P.	\$.	85.00	80,00	70,70	× 0, 3, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	S /	, So Co
Aspen	0	107	178	117	694	0	68	0	0	332	0	0	0	0	0	1496	
Cedar	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	11	
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	0	0	43	0	0	0	0	0	43	
Lowland Conifers	0	0	0	0	0	0	0	0	0	862	0	0	0	0	0	862	
Lowland Deciduous	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	20	
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	61	0	0	0	0	0	61	
Lowland Shrub	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95	
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	205	0	0	0	0	0	205	
Northern Hardwood	0	0	0	0	0	0	0	0	0	243	0	0	0	0	0	243	
Red Pine	0	0	0	0	0	109	0	0	0	0	0	0	0	0	0	109	
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	68	0	0	0	0	0	68	İ
Upland Shrub	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	
Upland Spruce/Fir	0	0	0	0	0	0	0	0	0	187	0	0	0	0	0	187	
Urban	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	

2032

0

Total



Table 2 – Proposed Treatment Summaries

Crystal Falls Mgt. Unit

Compartment 041 Year of Entry 2013 **Total Compartment Acres: 3465**

Acres by Treatment Type

Commercial Harvest - 630 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

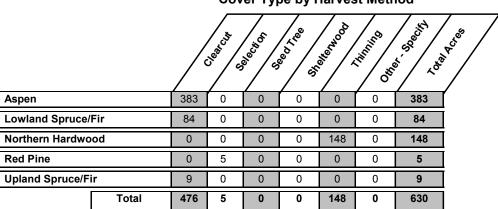


Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 041 Year of Entry 2013

t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
4	12041004-Cut	68.2	4130 - Aspen	High Density Pole	50	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription Cut all aspen and mixed hardwood with a 2" DBH or more. Cut all spruce and balsam with a stump diameter of 6" or more. Leave all red and white pine, cedar, hemlock and oak. Specs:

Other Retention will be along Q-types to the south and east. 100 foot buffer along creek to south.

Comments:

Regen survey per work constructions.

<u>Next</u> Steps:

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Cmpt. Review 12041014-Cut 30.8 6122 - Black Spruce High Density Pole 85 Harvest Clearcut with 6122 - Black Spruce Reserves Proposal

Prescription Cut all aspen and mixed hardwood 2" DBH or greater. Cut all mixed softwood, except cedar and hemlock, with a stump diameter of 6" or more. Specs:

100 foot buffer on creek to north. Retention will be along north side of stand. Other_

Comments:

Next Scarify after harvest. Regen survey per work constructions. Trench and hand plant if natural regen isn't at acceptable levels.

Steps:

12041017-Cut 42320 - Upland High Density Pole 42320 - Upland 9 1 Harvest Clearcut with Cmpt. Review Spruce Reserves Spruce Proposal

Prescription Cut all aspen and mixed hardwood 2" DBH or greater. Cut all mixed softwood, except cedar and hemlock, that have a stump diameter of 6" or

Specs:

Retention will be along small drainage within stand. Other_

Comments:

Scarify stand after harvest. Regen survey per work constructions. <u>Next</u> Trench and hand plant if natural regen isn't at acceptable levels. Steps:

12041025-Cut 14.4 High Density Pole 25 4134 - Aspen, Harvest Clearcut with 4134 - Aspen, Cmpt. Review Spruce/Fir Reserves Spruce/Fir Proposal

Prescription Cut all aspen and mixed hardwood with a 2" DBH or more. Cut all spruce and balsam with a stump diameter of 6" or more. Leave all red and

Specs:

white pine, cedar, hemlock and oak.

Retention will be along Q-type to the north. Other_

Comments:

Next Regen survey per work constructions.

Steps:

12041031-Cut 141.2 4134 - Aspen, High Density Pole 85 Harvest Clearcut with 4134 - Aspen, Cmpt. Review Spruce/Fir Reserves Spruce/Fir Proposal

Prescription Cut all aspen and mixed hardwood 2" DBH or more. Cut all spruce and balsam with a stump diameter of 6" or more. Leave all white pine, cedar, Specs:

hemlock, oak and red pine except cut every third row and trees chewed badly by porcupines in small red pine plantation.

Retention will be along Q-type to the south. 300 foot buffer from Turner creek removed from harvest area. Other_

Comments:

Regen survey per work constructions.

<u>Next</u> Steps:

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s t		Crysta	al Falls Mgt. Unit			eatments Pre Limiting Fac		Compartment: 041 Year of Entry 2013	OF NATURAL PRODUCTION OF NATURAL PROPURED TO STATE OF NATURAL PROPURED TO
a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
32 1	2041032-Cut	36.5	4110 - Sugar Maple Association	High Density Pole	85	Harvest	Crown Thinning	4110 - Sugar Maple Association	Cmpt. Review Proposal
Prescri Specs:			BA. Remove aspen and trees chewed badl					, hemlock, oak and red p	oine except cut
Other Commo Next Steps:		on will be	e in no cut species.						
	2041041-Cut	111.9	4110 - Sugar Maple Association	High Density Pole	85	Harvest	Crown Thinning	4110 - Sugar Maple Association	Cmpt. Review Proposal
Prescri Specs:	ption Thin sta	ind to 80	BA. Remove aspen	and poorer quality ha	ardwood	I stems first. Lea	ave all red and white pir	ne, cedar, hemlock and o	oak.
Other Comme		on will be	e in no cut species.						
Next Steps:									
42 1	2041042-Cut	45.0	4134 - Aspen, Spruce/Fir	High Density Pole	85	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
Prescri Specs:			nd mixed hardwood wit ur, hemlock and oak.	th a 2" DBH or more	. Cut al	I spruce and bal	sam with a stump diame	eter of 6" or more. Leav	e all red and
Other Comme		on will be	e along L-types on the	east and west.					
Next Steps:	Regen	survey pe	er work constructions.						
46 1	2041046-Cut	73.1	4130 - Aspen	High Density Pole	85	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
Prescri Specs:			nd mixed hardwood 2" nlock and oak.	DBH or more. Cut a	all spruc	e and balsam wi	th a stump diameter of	6" or more. Leave all re	d and white
Other Comme		on will be	e along Q-type to the s	south.					
Next Steps:	Regen	survey pe	er work constructions.						
54	12041054- Cut_small	11.8	4134 - Aspen, Spruce/Fir	High Density Pole	85	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
Prescri Specs:		•	nd mixed hardwood 2' l nlock and oak.	DBH or more. Cut a	III spruce	e and balsam wi	th a stump diameter of (6" or more. Leave all re	d and white
Other Comme		on will be	e along E-type to the s	outh. Buffer for stre	am will	be added.			
Next Steps:	Regen	survey pe	er work constructions.						

12041055-Cut 4.9 55

Retention will be along Q-type to the north.

42110 - Planted High Density Pole 49

Group Selection 42110 - Planted Red Cmpt. Review Harvest Red Pine Proposal

<u>Prescription</u> Cut all aspen and mixed hardwood 2" or more. Cut all spruce and balsam with a stump diameter of 6" or more. No red pine will be cut. Specs:

<u>Other</u> Comments:

<u>Next</u> Steps:

Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 041 Year of Entry 2013

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a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
64	12041064-Cut	8.5	4134 - Aspen, Spruce/Fir	High Density Pole	85	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal

Prescription Cut all aspen and mixed hardwood 2" DBH or more. Cut all spruce and balsam with a stump diameter of 6" or more. Leave all red and white

Specs: pine, cedar, hemlock and oak.

Other Retention will be along E-type to the west. 300 foot buffer for river has been removed from harvest area..

Comments:

<u>Next</u> Regen survey per work constructions.

Steps:

s

4134 - Aspen, 71 12041071-Cut 4.6 High Density Pole 85 Harvest Clearcut with 4134 - Aspen, Cmpt. Review Spruce/Fir Reserves Spruce/Fir Proposal

Prescription Cut all aspen and mixed hardwood 2" DBH or more. Cut all spruce and balsam with a stump diameter of 6" or more. Leave all red and white

Specs: pine, cedar, hemlock and oak.

Other_ Retention will be along Q-type to the north.

Comments:

<u>Next</u> Regen survey per work constructions.

Steps:

12041072-Cut 53.6 6122 - Black Spruce High Density Pole Clearcut with 6122 - Black Spruce Harvest Cmpt. Review

Reserves

Proposal

Prescription Cut all aspen and mixed hardwood 2" DBH or greater. Cut all mixed softwood, except cedar and hemlock, that have a stump diameter of 6" or Specs:

300 foot buffer for river has been removed from harvest area. Retention will be this buffer. Other_

Comments:

Scarify stand after harvest. Regen survey per work constructions. <u>Next</u>

Trench and hand plant black spruce if natural regen isn't at acceptable levels. Steps:

12041076-Cut 16.1 High Density Pole 84 Clearcut with 4130 - Aspen 4130 - Aspen Harvest Cmpt. Review Reserves Proposal

Prescription Cut all aspen and mixed hardwood 2" DBH or more. Cut all spruce and balsam with a stump diameter of 6" or more. Leave all red and white Specs: pine, cedar, hemlock and oak.

300 foot buffer from river has been removed from harvest area. Retention will be this buffer... Other_

Comments:

Next

Regen survey per work constructions.

Steps:

Total Treatment

Acreage Proposed: 629.6

Crystal Falls Mgt. Unit Table 4 -- Treatments Prescribed with Compartment: 041 a Limiting Factor s Year of Entry 2013 t **Treatment** n **Treatment Acres** Stage1 Size Stand **Treatment Cover Type Approval** Name CoverType Density Method Objective Status Age Type d #Error **Prescription** Specs: <u>Other</u> Comment: <u>Next</u> Steps: Limiting Factor and No

Total Treatment
Acreage Proposed:

Treatment Reason

0

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

Year of Entry: 2013

Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
12060_OutOfY OE-Cut	6.0				Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
Prescription Clea	arcut 2" db	h and above except	cedar, hemlock a	and pine if p	present.			
Other Comments:								

Next Steps:

Total Treatment Acreage Proposed: 6.0

S	Crystal Falls Mg			5 – Fo	orested Stands	Compartment: 041 Year of Entry: 2013	DNR DNR
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	MICHIGAN .
1	42340 - Upland Spruce/Fir	High Density Pole	16.4	85	81-110		
2	4130 - Aspen	High Density Sapling	68.9	16			
3	6122 - Black Spruce	Medium Density Pole	20.3	85	51-80		
4	4130 - Aspen	High Density Pole	68.2	50	81-110		
5	4110 - Sugar Maple Association	High Density Pole	25.5	85	81-110		_
6	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	24.7	85	51-80		
7	42110 - Planted Red Pine	High Density Pole	11.0	49	81-110		
8	6122 - Black Spruce	Medium Density Pole	23.2	85	1-50		
9	6122 - Black Spruce	High Density Pole	13.0	85	81-110		
10	4130 - Aspen	High Density Sapling	69.1	18			
11	4130 - Aspen	High Density Pole	19.2	37	81-110		_
12	4319 - Mixed Upland Forest	High Density Pole	68.2	85	51-80		
13	4130 - Aspen	High Density Pole	6.8	37	81-110		
14	6122 - Black Spruce	High Density Pole	30.8	85	51-80		
15	4130 - Aspen	High Density Pole	68.7	37	81-110		
17	42320 - Upland Spruce	High Density Pole	9.1	85	81-110		
18	6128 - Lowland Coniferous, Mixed Deciduous	Low Density Pole	64.9	85	1-50		
19	4130 - Aspen	High Density Sapling	8.6	5			

s t	Crystal Falls Mgt. Unit			5 – Fo	orested Stands	Compartment: 041	NR NATURAL PROPERTY OF THE PARTY OF THE PART
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	M/CHIGAN .
20	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	37.1	85	51-80		
21	42110 - Planted Red Pine	High Density Pole	9.7	49	51-80		
22	4130 - Aspen	High Density Pole	10.5	37	81-110		
23	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	12.2	49	51-80		
25	4134 - Aspen, Spruce/Fir	High Density Pole	14.4	85	81-110		
26	42110 - Planted Red Pine	High Density Pole	19.3	49	81-110		
27	4130 - Aspen	High Density Pole	62.3	37	51-80		
29	4130 - Aspen	High Density Sapling	19.9	5			
30	4130 - Aspen	High Density Sapling	61.6	7			
31	4134 - Aspen, Spruce/Fir	High Density Pole	142.5	85	81-110		
32	4110 - Sugar Maple Association	High Density Pole	36.5	85	111-140		
33	42110 - Planted Red Pine	High Density Pole	34.9	49	51-80		
34	4130 - Aspen	High Density Pole	229.9	37	81-110		
35	4133 - Aspen, Mixed Pine	High Density Sapling	6.5	5			
36	6122 - Black Spruce	Medium Density Pole	59.0	85	51-80		
38	6128 - Lowland Coniferous, Mixed Deciduous	Low Density Pole	116.9	85	1-50		
39	4130 - Aspen	High Density Sapling	10.8	5	1-50		
41	4110 - Sugar Maple Association	High Density Pole	111.9	85	111-140		

S t	Crystal Fall	s Mgt. Unit		5 – Fo	orested Stands	Compartment: 041 Year of Entry: 2013	TOF NATURAL PROPERTY OF NA
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	MICHIGAN .
42	4134 - Aspen, Spruce/Fir	High Density Pole	45.0	85	81-110		
43	42340 - Upland Spruce/Fir	Medium Density Pole	161.9	85	51-80		
45	4130 - Aspen	High Density Pole	286.6	37	81-110		
46	4130 - Aspen	High Density Pole	73.1	85	81-110		
47	6139 - Mixed Lowland Forest	Medium Density Pole	61.2	85	51-80		
48	4130 - Aspen	High Density Sapling	36.6	18			
49	4110 - Sugar Maple Association	High Density Pole	68.9	85	81-110		
50	4130 - Aspen	High Density Sapling	3.3	18			
51	4130 - Aspen	High Density Pole	92.6	26	51-80		
52	6115 - Lowland Ash	High Density Pole	10.2	85	81-110		
53	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	483.9	85	51-80		
54	4134 - Aspen, Spruce/Fir	High Density Pole	21.8	85	81-110		
55	42110 - Planted Red Pine	High Density Pole	4.9	49	81-110		
56	42110 - Planted Red Pine	High Density Pole	11.9	49	81-110		
58	6120 - Lowland Cedar	High Density Log	5.8	85	81-110		
 59	6111 - Lowland Balsam Poplar	High Density Pole	10.3	85	81-110		
60	42110 - Planted Red Pine	High Density Pole	4.6	49	81-110		
62	6115 - Lowland Ash	High Density Pole	9.6	85	81-110		

S t	Crystal Falls	s Mgt. Unit		5 – Fo	orested Stands	Compartment: 041 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
63	4130 - Aspen	High Density Sapling	17.5	26		
64	4134 - Aspen, Spruce/Fir	High Density Pole	11.5	85	81-110	
65	6128 - Lowland Coniferous, Mixed Deciduous	Low Density Pole	120.2	85	1-50	
67	6120 - Lowland Cedar	High Density Log	5.6	85	111-140	
68	6112 - Lowland Aspen	Medium Density Pole	17.6	85	1-50	
69	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	13.9	85	51-80	
70	6111 - Lowland Balsam Poplar	Medium Density Pole	6.4	85	1-50	
71	4134 - Aspen, Spruce/Fir	High Density Pole	4.6	85	81-110	
72	6122 - Black Spruce	High Density Pole	58.6	85	51-80	
73	4130 - Aspen	High Density Pole	9.7	36	51-80	
74	4130 - Aspen	High Density Sapling	6.8	26		
	4130 - Aspen	High Density Pole	18.9	84	81-110	
77	6111 - Lowland Balsam Poplar	Medium Density Pole	8.5	85	51-80	

Compartment: 041 Year of Entry: 2013



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
16	622 - Lowland Shrub	31.4	N\A	Unspecified	
24	622 - Lowland Shrub	3.4	N\A	Unspecified	
28	622 - Lowland Shrub	54.2	N\A	Unspecified	
37	320 - Upland Shrub	11.5	N\A	Unspecified	
40	320 - Upland Shrub	4.6	N\A	Unspecified	
44	622 - Lowland Shrub	5.9	N\A	Unspecified	
57	320 - Upland Shrub	3.5	N\A	Unspecified	
61	122 - Road/Parking Lot	10.9	N\A	Unspecified	
66	320 - Upland Shrub	9.0	N\A	Unspecified	
75	320 - Upland Shrub	25.7	N\A	Unspecified	

Compartment: 041
Year of Entry: 2013



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

Compartment: 041
Year of Entry 2013



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	Туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area	
Stream stocked trout populations and those of other control year to year. Coldwater streams in Michigan ty		stocked trout populations and those of other year to year. Coldwater streams in Michigan contributions of groundwater to their stream	colved oxygen conditions that allow naturally-reproduced or coldwater fish species (e.g., slimy sculpin) to persist from ypically provide these conditions due to substantial lows. Such streams are established by Director's action and order 210.	