



**Crystal Falls Forest Management Unit
Compartment Review Presentation
Compartment # 126 Entry Year: 2013
Compartment Acreage: 1632 (GIS calculated) County: Iron**

Revision Date: 04/04/11

Stand Examiner: Ed Rice

Legal Description: T44N R 32W Sections 4, 5, 8, 9, 16, 17

RMU (if applicable):

Management Goals: Optimize sustainable timber production while enhancing and protecting wildlife habitat. Continue to sustainably balance the aspen age class acres. Protect the riparian areas and transition zones during management activity.

Soil and Topography: Soils are generally silt loams and sandy loams with areas of muck soils in the low ground areas. There are rocky outcrops in the west of the compartment. The topography ranges from fairly steep rolling to flat and drainages.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment is fairly broken in state ownership. Parcels of private ownerships border and are inside the compartment boundary. Active forest management has occurred and will continue within and surrounding the compartment. Deer hunting by far dominates the recreational use patterns.

Unique, Natural Features: None identified

Archeological, Historical, and Cultural Features: Several previously identified and one new occurrence located during inventory.

Special Management Designations or Considerations: None identified

Watershed and Fisheries Considerations: The Deer River (trout stream) runs north – south through the compartment. It is largely bordered by tag alder flats and mixed swamp conifer. 300 foot buffer set backs will be applied during time sale preparation. There are multiple creeks running throughout the compartment.

Wildlife Habitat Considerations: Deer numbers are fair in the area. Wolves also use the compartment and the surrounding area. The compartment falls within the Deerfoot Deeryard Complex. Lowland conifer stands should be maintained and enhanced to continue to provide good winter cover.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and end moraines of coarse-textured glacial till. There is insufficient data to determine the glacial drift thickness. The Precambrian Hemlock Formation and intrusives subcrop below the glacial drift. There is not a current economic use for these rocks. The Porter and Warner abandoned iron mines are located four miles to the west. Part of this compartment was previously leased for metallic exploration and potential may still exist. The nearest gravel pit is located in Section 16. There should be gravel potential in the compartment. There is no economic oil and gas production in the UP.

Vehicle Access: Fair to poor. Access is severely limited during spring breakup. Much of the interior is accessed by winter only unimproved roads. Many are not drivable by 4x4 trucks. Access is also limited from private landowners.

Survey Needs: Corners are needed in section 4 section 9

Recreational Facilities and Opportunities: None

Fire Protection: Much of the compartment is composed of aspen timber types with balsam fir and hazel understory. Northern hardwoods and mixed conifer swamps also predominate. Access for fire suppression is fair overall. There also exist large expanses of bog and tag alder flats. Access for fire suppression vehicles in those forest types is severely limited. Fire suppression in these areas may wish to consider allowing fire to burn through these low ground areas and prevent its spread into the uplands. There are multiple private camps immediately adjacent to the compartment.

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**

Cover Type & Treatment Map

Compartment 126
 T44N, R32W, Sec. 4, 5, 8, 9, 16, 17
 County: Iron
 Unit: Crystal Falls
 YOE: 2013
 Acres: 1,632 GIS Calculated
 Stand Examiner: Ed Rice
 Map Revised: 7/28/2011
 Map Phase: Pre-Review

5	4
8	9
17	16

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

Legend

- Miris Corners
- Remonumented Section Corners
- Gates
- RLS Corners
- Buildings
- Berms
- Bridges
- Railroads
- Paved Roads
- Gravel Roads
- Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Snowmobile Trail
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers

Treatments

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

Forest Stands

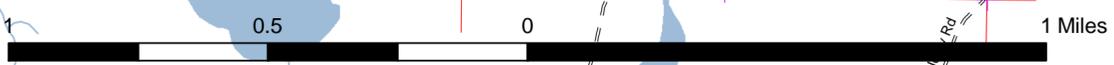
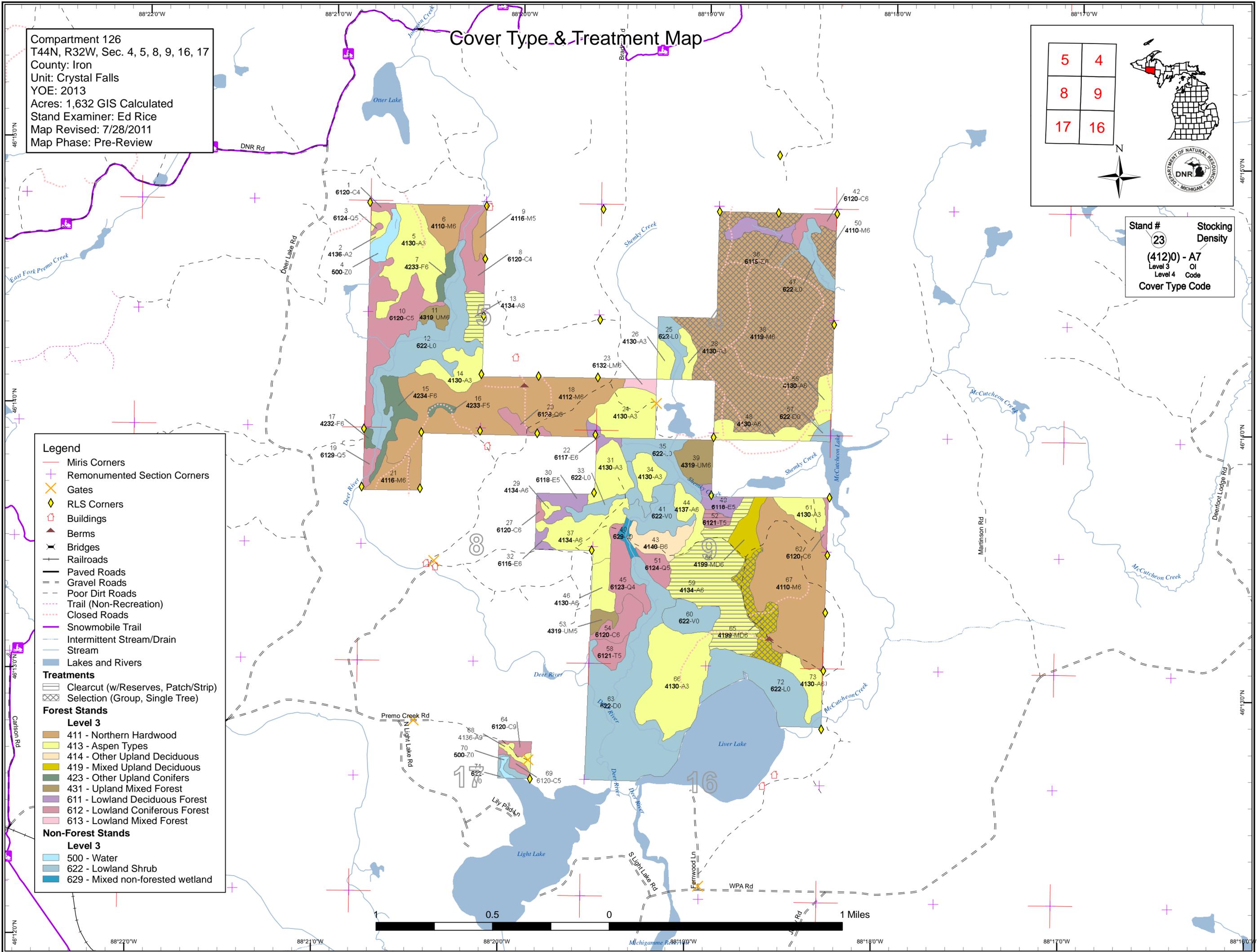
Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 414 - Other Upland Deciduous
- 419 - Mixed Upland Deciduous
- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

Level 3

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



Dedicated & Proposed Special Conservation Area Map

Compartment 126
 T44N, R32W, Sec. 4, 5, 8, 9, 16, 17
 County: Iron
 Unit: Crystal Falls
 YOE: 2013
 Acres: 1,632 GIS Calculated
 Stand Examiner: Ed Rice
 Map Revised: 7/28/2011
 Map Phase: Pre-Review

5	4
8	9
17	16

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

Legend

- Miris Corners
- Remonumented Section Corners
- Stand Boundaries

Dedicated Special Conservation Areas

- Cold Water Streams
- Deer Wintering Areas

Forest Stands

Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 414 - Other Upland Deciduous
- 419 - Mixed Upland Deciduous
- 423 - Other Upland Conifers
- 431 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
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Non-Forest Stands

Level 3

- 500 - Water
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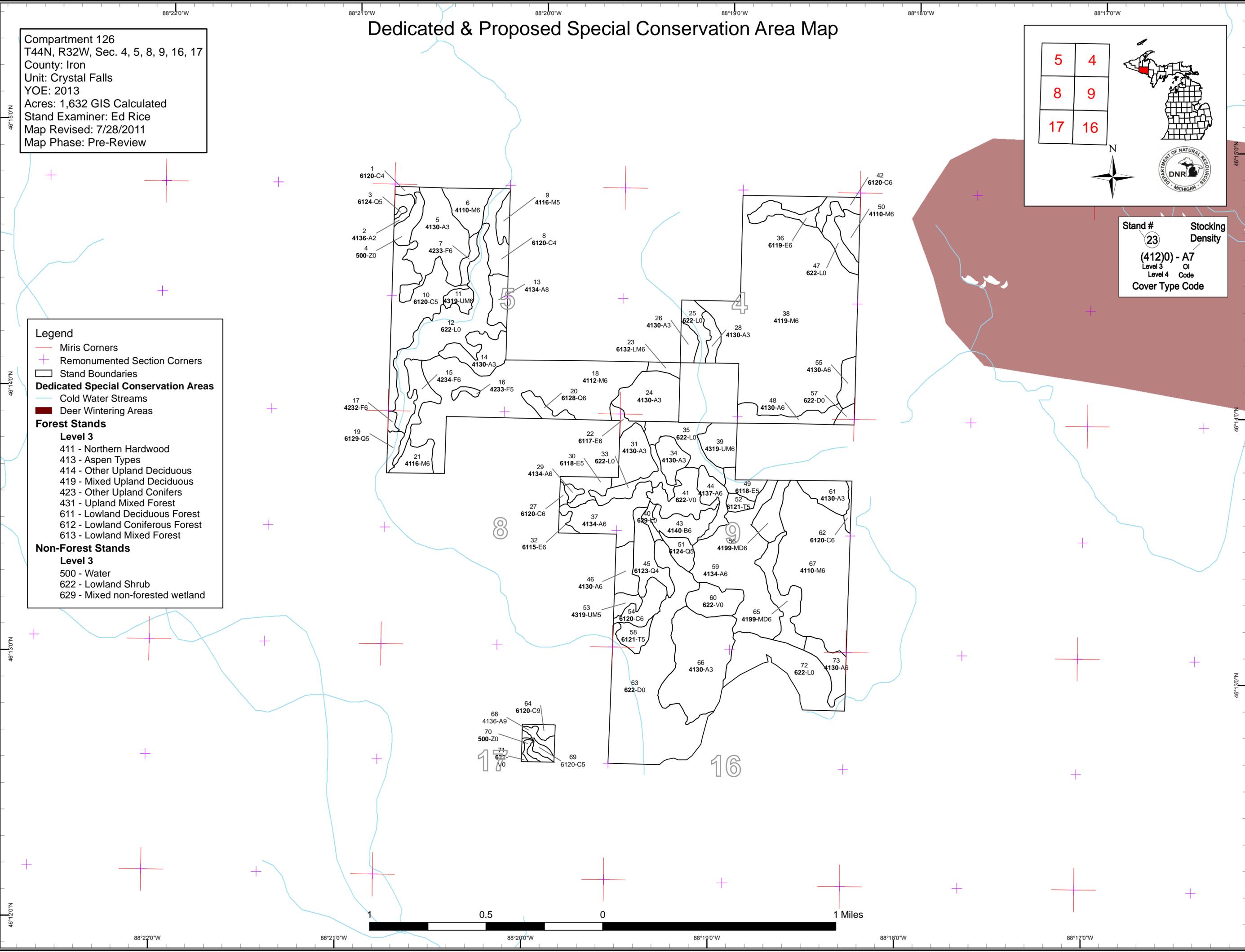
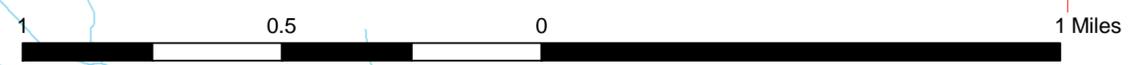
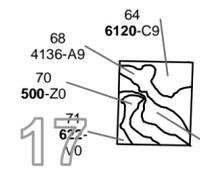
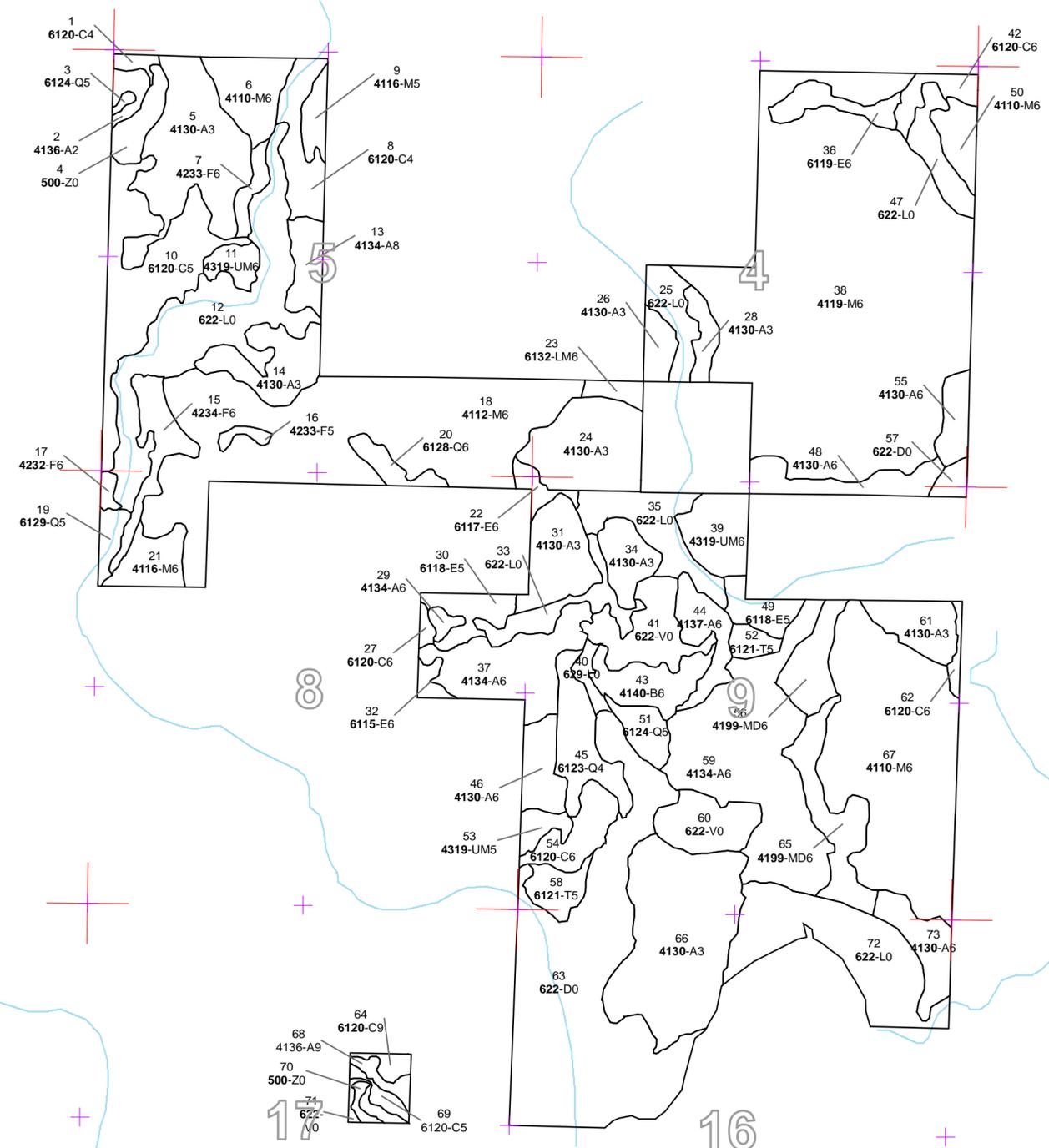


Table 1 – Total Acres by Cover Type and Age Class



	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 +		Unretn Age
Aspen	0	115	117	0	24	25	0	14	34	88	4	0	0	0	0	421
Bog	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
Cedar	0	0	0	0	0	0	0	3	48	6	15	0	0	27	0	98
Lowland Conifers	0	0	0	0	0	20	0	15	0	1	0	5	0	0	0	41
Lowland Deciduous	0	0	0	0	0	9	17	10	0	0	0	0	0	0	0	36
Lowland Mixed Forest	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4
Lowland Shrub	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	174
Mixed Upland Deciduous	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	36
Northern Hardwood	0	0	0	0	0	18	156	9	271	106	0	0	0	0	0	560
Paper Birch	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	16
Tamarack	0	0	0	0	0	0	9	5	0	0	0	0	0	0	0	13
Treed Bog	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	129
Upland Mixed Forest	0	0	0	0	0	0	0	16	11	0	0	0	0	0	0	28
Upland Spruce/Fir	0	0	0	0	0	7	17	0	0	0	0	0	0	0	0	24
Water	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Total	354	115	117	0	24	96	238	73	364	201	19	5	0	27	0	1632



Table 2 – Proposed Treatment Summaries

Crystal Falls Mgt. Unit
Year of Entry 2013

Compartment 126
Total Compartment Acres: 1632

Acres by Treatment Type

Commercial Harvest - 395	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
Aspen	88	0	0	0	0	0	0	88
Mixed Upland Deciduous	0	22	0	0	0	0	0	22
Northern Hardwood	0	280	0	0	0	0	0	280
Tamarack	5	0	0	0	0	0	0	5
Total	93	302	0	0	0	0	0	395



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
13	12126013-Cut	10.3	4134 - Aspen, Spruce/Fir	Medium Density Log	80	Harvest	Clearcut	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<u>Prescription</u> remove merchantable aspen, spruce/fir 2 sticks and larger, all merchantable maple, and most w. birch. leave any cedar, pine, hemlock. apply <u>Specs:</u> 300' buffer to the Deer R. <u>Other</u> Access? - through questionable private landowner. <u>Comments:</u> <u>Next</u> MO is aspen. secondary MO is r. maple, w. birch, and mixed softwood. <u>Steps:</u>									
38	12126038-Cut	270.6	4119 - Mixed Northern Hardwoods	High Density Pole	72	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Cmpt. Review Proposal
<u>Prescription</u> thin to 80 - 90 BA or remove no more than 1/3 BA whichever occurs first. take into consideration large crowns on sawtimber and large amounts <u>Specs:</u> of sunlight that can quickly occur following removal. leave oak, hemlock, w pine, cedar. watch for the drainages in N central and E end of stand. <u>Other</u> will need a 30' temp bridge installed on pvt land for access. <u>Comments:</u> <u>Next</u> MO is mixed hardwood. deer browsing likely will be an issue in successful regeneration establishment. <u>Steps:</u>									
50	12126050-Cut	9.3	4110 - Sugar Maple Association	High Density Pole	67	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Cmpt. Review Proposal
<u>Prescription</u> thin to 90 BA, watch removal of large crowns and the amount of sunlight. maple regen in this area will be very difficult due to the proximity of <u>Specs:</u> wintering deer. <u>Other</u> Apparently no access - swamp, multiple creek channels, and private land. access would have to be through private land. <u>Comments:</u> <u>Next</u> MO is mixed hardwood. Deer browsing likely will be an issue in successful regeneration establishment. <u>Steps:</u>									
52	12126052-Cut	4.6	6121 - Tamarack	Medium Density Pole	60	Harvest	Clearcut	6121 - Tamarack	Cmpt. Review Proposal
<u>Prescription</u> remove merchantable tamarack and b spruce. leave cedar. hard frozen time period, winter cut only <u>Specs:</u> <u>Other</u> <u>Comments:</u> <u>Next</u> MO is tamarack. <u>Steps:</u>									
59	12126059-Cut	77.8	4134 - Aspen, Spruce/Fir	High Density Pole	80	Harvest	Clearcut with Reserves	4134 - Aspen, Spruce/Fir	Cmpt. Review Proposal
<u>Prescription</u> remove merchantable aspen and maple. cut spruce/fir 2 sticks tall and larger. leave scattered w birch component. in areas where stand is <u>Specs:</u> heavier to w birch with little to no aspen component, mark to leave 30 - 40 BA of w birch. leave pine, oak, any hemlock. buffer scattered low ground pockets within the stand along with transition areas to adjacent low ground stands. <u>Other</u> <u>Comments:</u> <u>Next</u> MO is aspen with r. maple and mixed softwood <u>Steps:</u>									

**Table 3 -- Treatments Prescribed
with No Limiting Factor**

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	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
65	12126065-Cut	22.5	4199 - Other Mixed Upland Deciduous	High Density Pole	57	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Cmpt. Review Proposal

Prescription treat as a hardwood stand to furthur the growth of the better quality h maple. mark aspen and w birch for removal to favor the advanced h maple
Specs: growth. keep maple as much as possible. cut fir 2 sticks and larger. avoid creating large openings that will promote aspen regeneration. leave w pine, oak and hemlock

OtherComments:NextSteps:

**Total Treatment
Acreage Proposed: 395.1**

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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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#Error

Prescription
Specs:

Other
Comment:

Next
Steps:

Limiting Factor and No
Treatment Reason

**Total Treatment
Acreage Proposed: 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_OutOfYOE-Cut	6.0				Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal

Prescription: Clearcut 2" dbh and above except cedar, hemlock and pine if present.

Specs:

Other:

Comments:

Next

Steps:

**Total Treatment
Acreage Proposed: 6.0**



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	Low Density Pole	2.4	80		thick alder, very scattered large w pine, scattered y birch. B ash swamp
2	4136 - Aspen, Mixed Conifer	Medium Density	4.6	14		S. end of stand has higher percent of r. pine saplings - beaver cut off most of the regenerating aspen in this area. N. end of stand has better aspen regen with scattered fir saplings.
3	6124 - Lowland Spruce-Fir	Medium Density Pole	0.9	89		scattered r. maple, fairly heavy tag alder. heavier to tamarack on W. end of stand
5	4130 - Aspen	High Density Sapling	47.4	13		Aspen 12 - 16' tall. scattered fir saplings
6	4110 - Sugar Maple Association	High Density Pole	17.2	50	111-140	fair - poor form, high percentage of defect, eutypella present. pockets of heavy H. maple, B. cherry saplings 10 - 20' tall. widely scattered upland cedar. moderate - heavy raspberry in more open areas.
7	42330 - Upland Fir	High Density Pole	5.1	48		fir/spruce 1-2 sticks high. left as a buffer strip along Deer R. fir/spruce 5 - 6 sticks tall in mid -S. part of stand
8	6120 - Lowland Cedar	Low Density Pole	16.6	125		scattered large w. spruce. thick alder. pockets of nearly pure cedar with individual cedar scattered throughout. trace amounts of y. birch and w pine
9	4116 - Mixed N. Hardwood - Aspen	Medium Density Pole	6.2	48	51-80	fairly heavy red and hard maple saplings with pockets of good aspen saplings in more open areas. scattered w. birch snags. aspen has about all fallen out of the stand. heavy windthrow
10	6120 - Lowland Cedar	Medium Density Pole	47.7	70		mainly cedar 8 - 18" dbh. w. birch 6 - 8" dbh throughout stand. light tag alder with areas of heavy alder. multiple drainages/old beaver meadows feeding into the Deer R.
11	4319 - Mixed Upland Forest	High Density Pole	6.3	72		Aspen, spruce and fir are mature and falling out of stand. heavy windthrow occurring. scattered aspen saplings 5 -10 ' tall in the more open areas. widely scattered cherry. much of stand occurs within the 300' buffer to the Deer R.
13	4134 - Aspen, Spruce/Fir	Medium Density Log	10.3	80		Aspen 6 - 7 sticks tall. w spruce 4 - 5 sticks. high % of windthrow on spruce/fir and aspen. heavy deer browse on r. maple seedlings/saplings
14	4130 - Aspen	High Density Sapling	19.7	15		good aspen regen 16' tall, almost a pure aspen stand. widely scattered spruce/fir
15	42340 - Upland Spruce/Fir	High Density Pole	14.6	50		good spruce/fir - heavy deer usage, major travel corridor. much of the stand falls withing buffer to Deer R.
16	42330 - Upland Fir	Medium Density Pole	2.2	40		old landing area growing in. pockets of A3 with scattered low quality, open grown maple and r. oak. scattered w. birch saplings. raspberries



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	42320 - Upland Spruce	High Density Pole	2.0	50		well formed w. spruce. small high ground area adjacent to Deer R. and old logging dam. associated fir saplings and poletimber
18	4112 - Maple, Beech, Cherry Association	High Density Pole	138.8	55	51-80	high stocking of h. maple saplings in areas. majority of stand has understory of dense ironwood saplings. very widely scattered w. pine sawtimber. Past thinning reduced areas of the stand to 40 - 50 BA, extremely thick component of ironwood, cherry and h. maple saplings
19	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	5.0	105		Q/L0 along Deer R. multiple springs/drainages feed into the river. heavy alder in areas. small inclusions of better to good quality b. spruce and tamarack. areas of swamp grass flats immediately adjacent to river
20	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	6.3	68		scattered basswood. good cedar/hemlock at N. end of the stand. widely scattered tag alder
21	4116 - Mixed N. Hardwood - Aspen	High Density Pole	11.9	40	81-110	good h. maple advanced regeneration. stand was not thinned last time with adjacent stand. fair form, heavy to submerchantable maple. W end of stand has higher % of aspen
22	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	4.4	52		SW corner had C6 inclusion. good amounts of b. ash saplings (E3)
23	6132 - Mixed Lowland Forest with Cedar	High Density Pole	4.2	50		W. side heavier to cedar. very wet ground
24	4130 - Aspen	High Density Sapling	31.9	15		A3, 1 - 3" dbh. associated large diameter r. pine and w. pine, scattered w spruce, fir understory. H. maple stump sprouts. associated hazel understory
26	4130 - Aspen	High Density Sapling	6.8	15		good aspen regeneration 10 - 20' tall. scattered w birch saplings. pin cherry, hazel adjacent to beaver pond where beaver had cut off the aspen regen.
27	6120 - Lowland Cedar	High Density Pole	1.7	95		good cedar canopy. good winter deer usage
28	4130 - Aspen	High Density Sapling	6.4	15		good aspen regeneration 10 - 20' tall. along edges of beaver pond where aspen had been cut off by beaver, pin cherry and heavier hazel predominate. Much of previously N end of the stand is converted to beaver dam
29	4134 - Aspen, Spruce/Fir	High Density Pole	2.3	72		Aspen 8 - 12" dbh with associated balm. scattered cedar. fir poletimber and saplings throughout - heavier component in E end of stand. fairly isolated higher ground island among lowlands.
30	6118 - Lowland Deciduous with Cedar	Medium Density Pole	10.0	62		good cedar 8 - 16" dbh. areas heavy to b ash saplings. thick tag alder understory. far W end has slightly higher ground
31	4130 - Aspen	High Density Sapling	20.7	6		aspen regeneration 8 - 10' tall. widely scattered w pine and b cherry. heavy winter deer usage in riparian buffers



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
32	6115 - Lowland Ash	High Density Pole	3.0	52		wet ground, heavy b ash saplings
34	4130 - Aspen	High Density Sapling	11.8	6		aspen regen 4 - 8' tall. heavy winter deer usage in riparian buffer strips
36	6119 - Mixed Lowland Deciduous Forest	High Density Pole	9.5	50		E end heavy to mature balm right along a drainage. W end transitions to b ash/y birch with hemlock at edges
37	4134 - Aspen, Spruce/Fir	High Density Pole	32.0	72		very little understory. aspen in good shape. areas with higher component of w birch, yet aspen still present. S end has an inclusion of smaller aspen 7 - 9" dbh
38	4119 - Mixed Northern Hardwoods	High Density Pole	270.6	72	111-140	good h maple regen, saplings 20 - 25' in NE part of stand - avoid during harvest. Fair - good form with some veneer. sawtimber 12 - 24" dbh 1 - 3 log heights. widely scattered large w pine. areas of small boulders. N central part of stand upland drainages. access is through private.
39	4319 - Mixed Upland Forest	High Density Pole	16.4	67		mature aspen in good shape. good spruce/fir 6 -14" dbh. W end of stand heavier to w birch. scattered windthrow throughout. widely scattered large w pine and tamarack. good winter deer usage.
42	6120 - Lowland Cedar	High Density Pole	7.7	120		good cedar. small deer "yard area" for thermal cover - good winter deer usage. W end of stand heavy to b ash and balm. multiple drainages.
43	4140 - Other Upland Deciduous	High Density Pole	16.1	48		w birch is healthy overall, scattered top die backl - dbhs hold fairly steady around 8", 3 - 4 stick heights. fir/spruce saplings in small pockets. Aspen 6 - 9" dbh 3 - 4 sticks tall. good winter deer usage. far N end of stand heavier to aspen
44	4137 - Aspen, Birch	High Density Pole	13.4	43		w birch 7 - 12" dbh, showing some top die back. aspen 4 - 6 sticks 6 -12" dbh. very dense fir/spruce saplings along old road leading N into stand.
45	6123 - Lowland Fir	Low Density Pole	20.2	40		small cedar groves 12 - 18" dbh, thick tag alder. smaller, higher ground inclusions holding w spruce, fir, aspen, w birch. these areas are not big enough for commercial harvest and the access problems. stand overall is sparse with tag alder filling in between openings. good amounts of small balm 5 - 7" dbh in areas.
46	4130 - Aspen	High Density Pole	11.8	43		Aspen 4 - 8' tall. large, scattered w spruce with pockets of F3. small area of old windthrow on spruce/fir along W edge of stand - heavier hazel understory in this area.
48	4130 - Aspen	High Density Pole	15.3	31		aspen 5 - 7" dbh, 3 - 4 sticks tall. scatted large w pine 18 - 22" dbh. heavier fir in transition area to pre inventory stand # 47. fairly steep N. end - rock outcrops
49	6118 - Lowland Deciduous with Cedar	Medium Density Pole	8.8	40		very wet - thick tag alder understory

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Crystal Falls Mgt. Unit

5 – Forested Stands

Compartment: 126

Year of Entry: 2013



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
50	4110 - Sugar Maple Association	High Density Pole	9.3	67	111-140	fair form - many low forks, eutypella. pockets of sawtimber 14 - 18" dbh. very little understory - lacking 2 - 5" diameter class.
51	6124 - Lowland Spruce-Fir	Medium Density Pole	8.4	61		heavy tag alder. good b spruce, fir saplings 2 - 10' tall. scattered dead tamarack. occasional balm.
52	6121 - Tamarack	Medium Density Pole	4.6	60		good tamarack 6 -12" dbh, 4 - 6 sticks tall. good associated b spruce 4 stick heights. very widely scattered cedar. thick tag alder understory in areas.
53	4319 - Mixed Upland Forest	Medium Density Pole	5.1	70		Aspen 10 - 12" dbh in good shape. heavy windthrow several years ago on spruce/fir - heavy hazel in this area. very S end of stand the spruce/fir has held.
54	6120 - Lowland Cedar	High Density Pole	13.7	92		good cedar. heavy winter deer usage for thermal cover. Heavy tag alder along E edge of stand.
55	4130 - Aspen	High Density Pole	8.5	31		scattered large w spruce, aspen 3 - 8" dbh, 3 - 5 sticks. many submerchantable stems. rock outcrop along W side.
56	4199 - Other Mixed Upland Deciduous	High Density Pole	13.6	57		A6 M6, maple saplings throughout. Aspen is 7 - 9" dbh. areas of rock outcrop in N 1/2. aspen was cut out of the stand in past sale.
58	6121 - Tamarack	Medium Density Pole	8.7	55		tamarack 5 - 8" dbh, 4 sticks tall. very wet area - transition to open bog/creek. majority of associated cedar is dead due to high water.
59	4134 - Aspen, Spruce/Fir	High Density Pole	77.8	80		pockets of thick spruce/fir saplings - F3. w birch is severely falling out of the stand. scattered rock outcrops. very S edge of stand (along bog - pre inventory stand # 48) is heavier to w spruce, upland b spruce and fir. with widely scattered aspen
61	4130 - Aspen	High Density Sapling	13.9	5		good aspen regeneration 8 - 10' tall. very widely scattered large w pine
62	6120 - Lowland Cedar	High Density Pole	2.5	120		fairly thick fir sapling undestory. N end transitions to more upland with higher component of fir. heavy winter deer usage.
64	6120 - Lowland Cedar	High Density Log	3.1	85		good cedar with areas of thick tag alder. very SW has heavy alder with balm, spruce/fir
65	4199 - Other Mixed Upland Deciduous	High Density Pole	22.5	57	81-110	mature aspen with good quality hardwoods coming in underneath. Hardwoods are 4 - 7" dbh.w birch has heavy top die back, some areas of w birch have completely fallen out. very scattered r oak
66	4130 - Aspen	High Density Sapling	68.7	7		good aspen regen 10 - 16' tall

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Crystal Falls Mgt. Unit

5 – Forested Stands

Compartment: 126

Year of Entry: 2013



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
67	4110 - Sugar Maple Association	High Density Pole	106.3	80	81-110	good h maple sawtimber 12 - 20" dbh 1 - 3 log heights. scattered veneer. good form - straight, clear boles with good height to first limbs. moderate to heavy raspberry in areas. rock knob in center of stand. associated high ground cedar in NE part of the stand. very widely scattered r oak
68	4136 - Aspen, Mixed Conifer	High Density Log	3.6	96		pocket of natural r pine (R9) in SW of stand - well formed trees 10 - 12 sticks high. old aspen 7 - 9 sticks tall 14 - 16" dbh. very scattered w pine poletimber. r pine sawtimber scattered throughout the stand. w birch in good shape
69	6120 - Lowland Cedar	Medium Density Pole	3.1	60		cedar 1 - 3 sticks tall. good pure cedar stand. widely scattered b spruce. good winter deer usage
73	4130 - Aspen	High Density Pole	14.4	62		mature aspen, fairly good h maple saplings/poles on higher hillside along the road. Aspen in SE corner of stand is of an older age class but will hold.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
4	50 - Water	8.7	No	Unspecified	old beaver pond
12	622 - Lowland Shrub	63.8	N/A	Unspecified	swamp grass openings interspersed among thick tag alder. widely scattered pockets of cedar, spruce, fir, and tamarack. Deer R. runs through stand. stand was heavily influenced by old logging dam activity.
25	622 - Lowland Shrub	11.4	N/A	Unspecified	tag alder/beaver pond with creek. pockets of half - drowned cedar
33	622 - Lowland Shrub	12.8	N/A	Unspecified	tag alder. scattered b. cherry, aspen, fir/spruce. wet drainage with intermittent creek
35	622 - Lowland Shrub	22.0	N/A	Unspecified	series of old beaver dams and meadows. scattered pockets of cedar, b spruce, and tamarack. Shemky Creek runs through stand
40	629 - Mixed non-forested wetland	3.6	No	Unspecified	tag alder along creek, partly open old beaver meadows. widely scattered poor b spruce and cedar at edges
41	6225 - Bog	20.9	No	Unspecified	open bog. widely scattered stunted b spruce sapling sized trees.
47	622 - Lowland Shrub	11.5	No	Unspecified	heavy tag alder - old beaver meadows. creek runs through stand. Isolated pockets of cedar.
57	6224 - Treed Bog	3.6	No	Unspecified	spruce bog with tal alder along lake. b spruce stunted with scattered cedar.
60	6225 - Bog	17.1	No	Unspecified	leatherleaf bog ringed with b spruce and tamarack. fairly dense b spruce along edges but quickly transitions to open bog
63	6224 - Treed Bog	125.4	No	Unspecified	bog with associated tag alder. creek runs through stand
70	50 - Water	1.6	No	Unspecified	Light Lake
71	6225 - Bog	3.0	No	Unspecified	bog along edge of Light Lake
72	622 - Lowland Shrub	48.7	N/A	Unspecified	heavy tag alder overall. as edges transition towards higher ground, pockets of tamarack and b spruce are present. otherwise widely scattered stunted single trees. leatherleaf bog along Light Lake.



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	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	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.