

Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 78 Entry Year 2016 Acreage: 1,754 County Dickinson Management Area: Ralph Ground Moraine

Revision Date: 07/25/2014

Stand Examiner: Andy Church

Legal Description:

T41N R28W Sec.16, 19-21

Identified Planning Goals:

Optimize sustainable timber production while enhancing and protecting wildlife habitat. Protect riparian areas during management activities implementing the Best Management Practices guidelines.

Soil and topography:

This compartment is dominated by upland fine sandy loams. Pockets of lowland Cathro mucks are also found throughout. The terrain is quite variable with large rolling hills and rock outcroppings.

Ownership Patterns, Development, and Land Use in and Around the Compartment:

Private land ownership is well represented in and around this compartment. Hunting, fishing, dispersed camping, and trapping are the main recreational use patterns.

Unique Natural Features:

West Branch of Sturgeon River and Moose Lake.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

None.

Watershed and Fisheries Considerations:

Protect water quality for all bodies of water. Implement buffer protections following best management practice guidelines.

Wildlife Habitat Considerations:

Aspen age-class diversity should be improved to provide a wider array of habitat requirements for both game and nongame species. Mesic conifers should be promoted in the upland and transition zones for cover and diversity. There are several veranl ponds that will require protection. Consideration for the presence of woodturtles in this compartment should be considerred near riparian zones.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and medium-textured till. There is insufficient data to determine the glacial drift thickness. The Cambrian Munising Group and the Precambrian Archean granite/gneiss and Michigamme Formation outcrop beneath the glacial drift. There is not a current economic use, although the granite/gneiss might have building stone potential. The Hancock iron mine is located approximately three miles to the east. Part of this compartment was previously leased for metallic exploration and potential may still exist. A gravel pit is located one mile to the north and there should be potential. There is no economic oil and gas production in the UP.

Vehicle Access:

Access is fair. South of the West Branch of Sturgeon River is accessed by Brown's Lake rd. Accessing the North side of the river is through private land.

Survey Needs:

Surveys will be needed.

Recreational Facilities and Opportunities:

None.

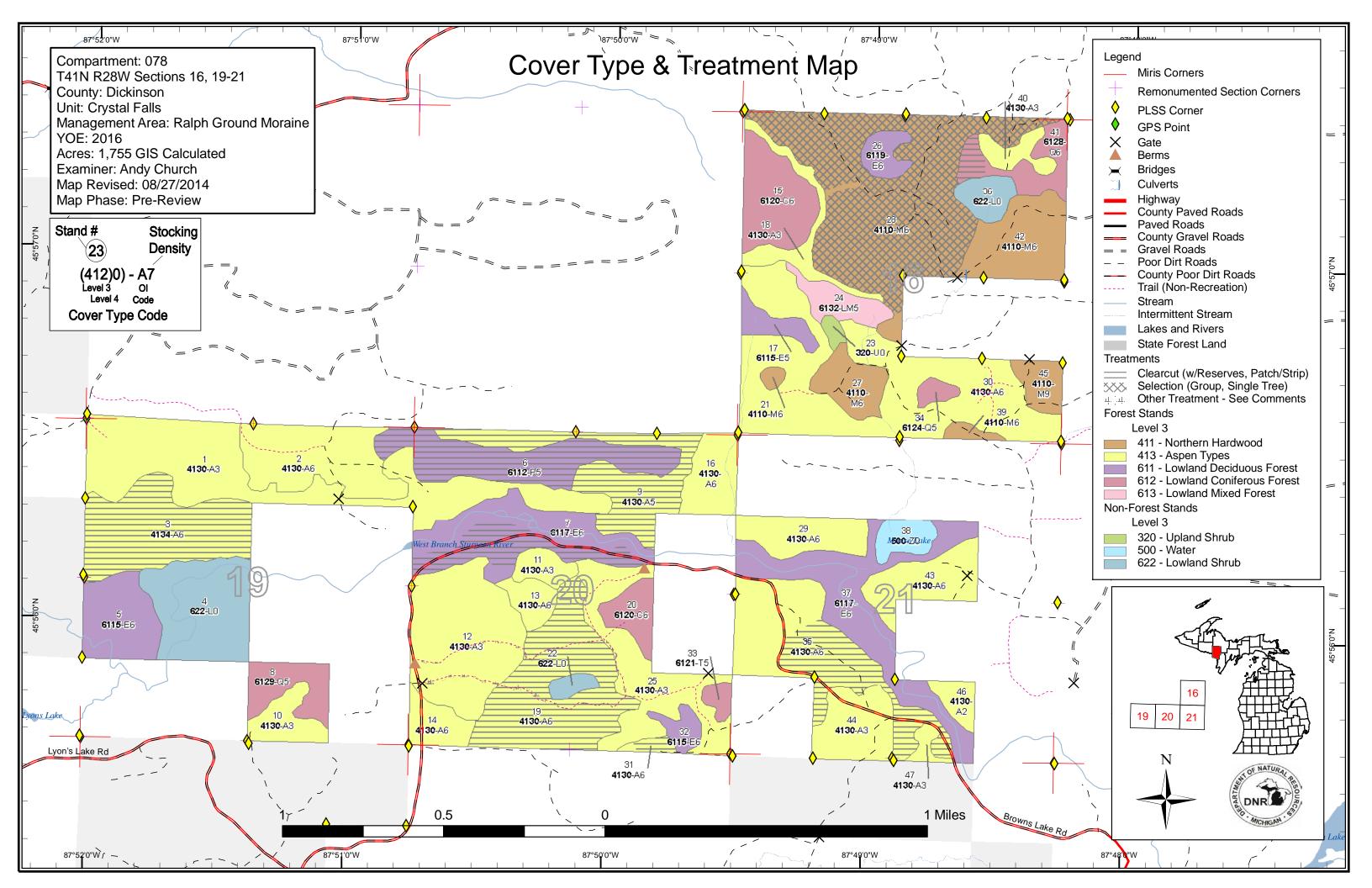
Fire Protection:

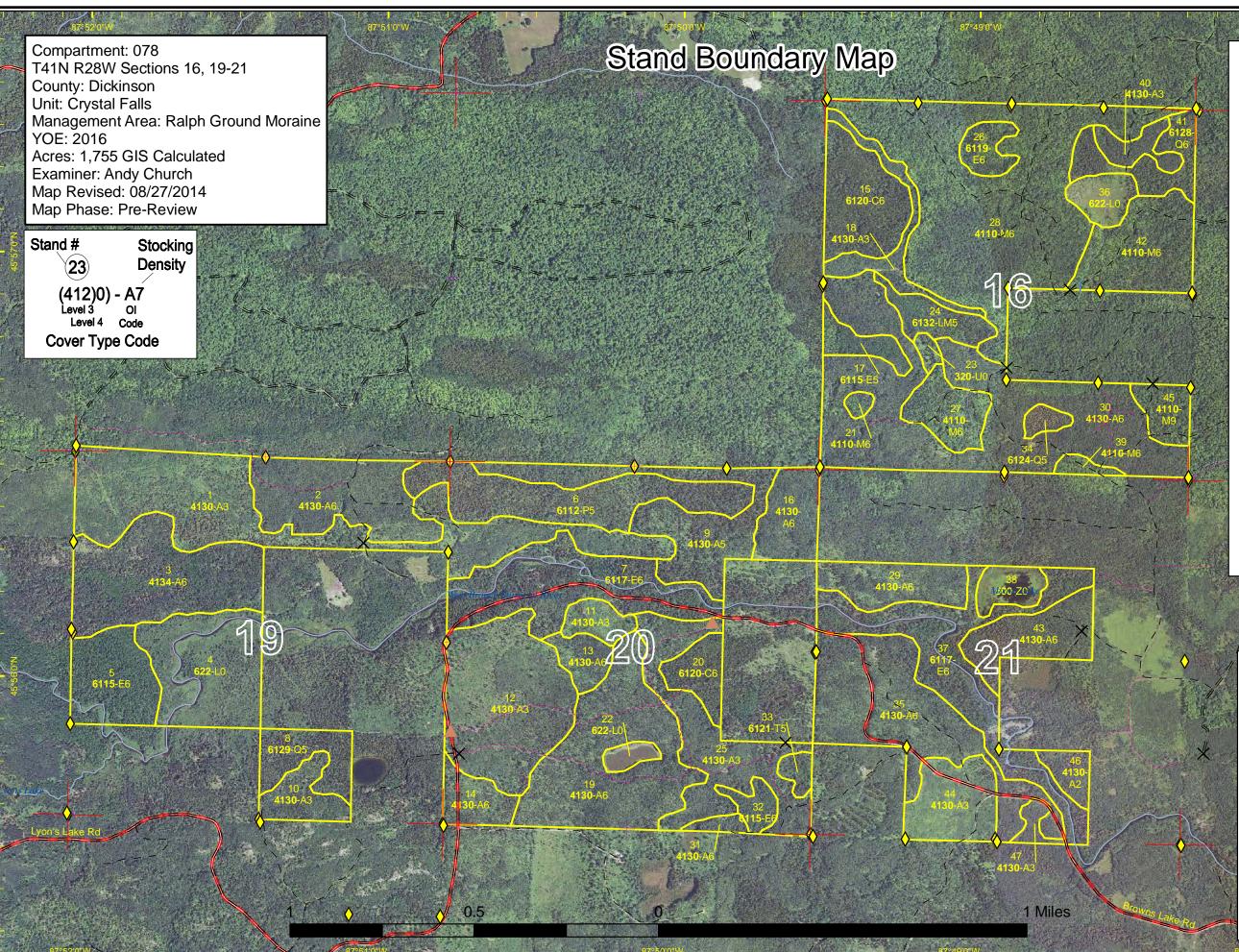
Fire response will be from the Norway or Crystal Falls DNR stations.

Additional Compartment Information:

The following reports from the Inventory are attached: Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

The following information is displayed, where pertinent, on the attached compartment maps: Base feature information, stand boundaries, cover types, and numbers Proposed treatments Site condition boundaries Details on the road access system





Legend

 \diamond

- Miris Corners _____
 - Remonumented Section Corners
 - PLSS Corner
- \diamond **GPS** Point
- Х Gate
- Berms
- Bridges \succ
- Culverts
- Highway
- County Paved Roads
- Paved Roads County Gravel Roads Gravel Roads ____
- _ =
- Poor Dirt Roads _ _
- County Poor Dirt Roads Trail (Non-Recreation) ____
- Stream

_ _ _ _ _

- Intermittent Stream
- Stand Boundaries

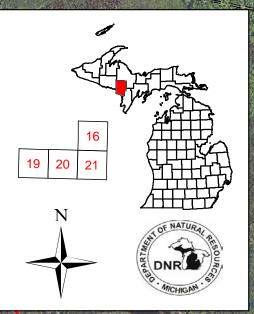
Forest Stands

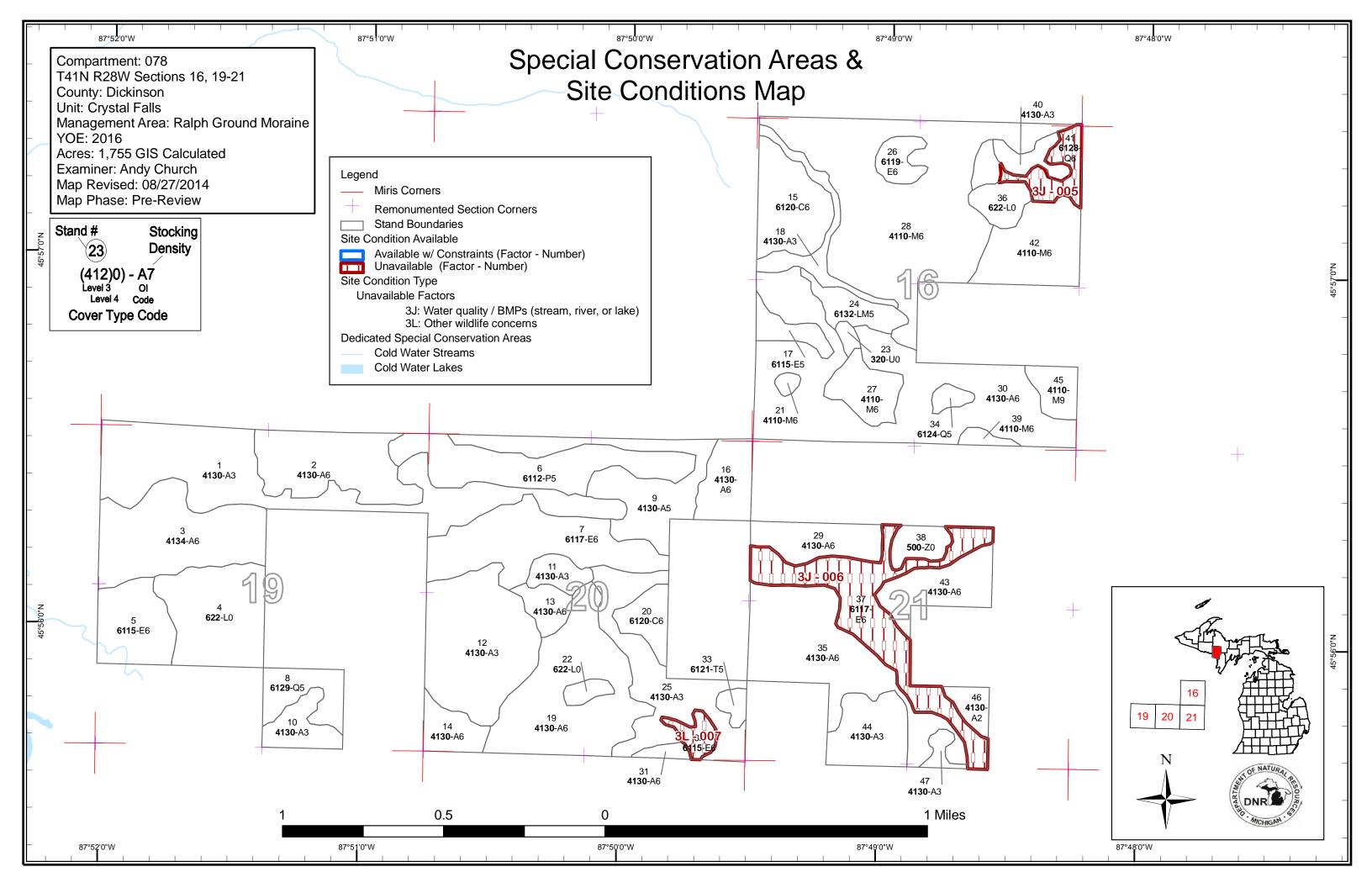
Level 3

- 411 Northern Hardwood 413 Aspen Types 611 Lowland Deciduous Forest
- 612 Lowland Coniferous Forest
- 613 Lowland Mixed Forest
- Non-Forest Stands
 - Level 3

°48'0"

- 320 Upland Shrub 500 Water
- 622 Lowland Shrub





Report 1 – Total Acres by Cover Type and Age Class

Crystal Falls Mgt. Unit Andy Church : Examiner

Compartment 078 Year of Entry 2016



Age Class

	/	6.0	10 ^{.70}	10 ⁻²²		AD-1-D-1-D-1-D-1-D-1-D-1-D-1-D-1-D-1-D-1	000 C	00 00	10'	000 000 000	00°	001.001 201.001	6 ⁷⁷ ,0 ⁷	× 42	er co	ð ^{iði}
					<u> </u>						,			~\ Jr	yer re	
Aspen	43	236	95	137	269	94	131	0	0	0	0	0	0	0	1006	
Cedar	0	0	0	0	0	0	0	0	15	41	0	0	0	0	56	
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	61	0	0	0	0	0	0	0	61	
Lowland Conifers	0	0	0	0	0	5	22	0	23	0	0	0	0	0	50	
Lowland Deciduous	0	0	0	0	0	0	22	107	81	0	0	0	0	0	210	
Lowland Mixed Forest	0	0	0	0	16	0	0	0	0	0	0	0	0	0	16	
Lowland Shrub	78	0	0	0	0	0	0	0	0	0	0	0	0	0	78	
Northern Hardwood	0	0	0	0	0	0	0	69	175	13	0	0	0	0	257	
Tamarack	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5	
Upland Shrub	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Water	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
Total	136	236	95	137	285	104	237	175	295	54	0	0	0	0	1755	



MICHIGAN	Crystal Falls Mgt. Unit Year of Entry 2016				Compartment Total Compartment Acres:	
			Acres by Treatment Type			
	Commercial Harvest - 534	Tree Planting - 0	Other - 0			
	Habitat Cut - 0	Opening Maintena	nce - 8			
			Cover Type by Harvest M	lethod		
	Aspen Types			0 270		
	Aspen Types Lowland Coniferous F	Forest	270 0 0 0 0			
			270 0 0 0 0	0 270		
	Lowland Coniferous F		270 0	0 270 0 6		

Compartment: 078 Crystal Falls Mgt. Unit **Report 3 -- Treatments Prescribed** Year of Entry 2016 with No Limiting Factor s t а Treatment CoverType Size BA Treatment Treatment Cover Type Acres Stand Approval n Method Objective d Name Density Age Range Type Status 74.8 4134 - Aspen, High 65 Clearcut with 413 - Aspen Cmpt. Review 3 12078003-Cut Harvest Spruce/Fir Densitv Reserves Proposal Pole Prescription Final harvest using 2" spec. Leave all cedar, hemlock, pine. Buffer Sturgeon River 100 feet. Recomend winter harvest. Retention: cedar, hemlock, pine, buffer. Specs: Acceptable alternative regen: swamp hardwoods. Expect aspen in upland portions and swamp hardwoods in lowland portions of stand. <u>Other</u> Half of stand is upland, half of stand is lowland ash. Stand is a mix of transition zone, rocks, water. Budworm damage evident on spruce/fir. Comments: <u>Next</u> Steps: Proposed Start Date: 10/01/2015 611 - Lowland 61.0 6112 - Lowland Medium 68 Harvest Clearcut with Cmpt. Review 6 12078006-Cut Aspen Density Reserves **Deciduous Forest** Proposal Pole Prescription Final harvest using 2" spec. Leave all cedar, hemlock, pine. Also leave submerchantable conifers (less than 6" stump). Exclude pure cedar pocket. Recommend winter/dry summer harvest. Specs: Acceptable alternative regen: Aspen/Fir Other Low stocking due to wet terrain and mortality. Most of stand is wet but has upland portions. Entire stand is losing more volume than gaining due to old age. Sensitive soils; rutting risk is high because this stand is on a hillside seep. Comments: Next Steps: Proposed 10/01/2015 Start Date: 30.6 413 - Aspen 12078007-Cut 6117 - Lowland High 73 Harvest Clearcut with Cmpt. Review 7 Deciduous, Mixed Density Reserves Proposal Coniferous Pole Prescription Harvest portion of stand on south side of river. Final harvest using 2" spec. Leave cedar, hemlock, pine. Also leave all submerchantable conifers (less than 6" stump) Buffer river 100 ft. Specs: Retention: cedar, hemlock, pine, buffer. Acceptable alternative regen: mixed conifer Other Lowland stand along Sturgeon River with upland inclusions. Comments: <u>Next</u> Steps: Proposed 10/01/2015 Start Date: Medium 12078009-Cut 56.7 4130 - Aspen 64 Harvest Clearcut with 413 - Aspen Cmpt. Review 9 Density Reserves Proposal Pole Prescription Final harvest using 2" spec. Leave all cedar, hemlock, pine. Also leave submerchantable conifers (less than 6" stump). Buffer Sturgeon River 100 ft. Specs: Acceptable alternative regen: maple/fir Stand is on hillside seep. Mortality evident on aspen. Couple drainages throughout. No bed and bank observed. Stocking is lower due to Other_ Comments: mortality. Losing more volume than gaining <u>Next</u> Steps: Proposed Start Date: 10/01/2015

S t			Crystal Fa	lls Mgt. Unit	Report 3 Treatments Prescribed with No Limiting Factor					Compartment: 078 Year of Entry 2016	UNIOF NATURAL	
a n d		tment ame	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status	
19	12078	019-Cut	89.8	4130 - Aspen	High Density Pole	52		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal	
Preso Spec		Final hai pond 50	vest using 2 ft.	livide stand into 8 Ur " spec. Leave all Ce ve regen: mixed conit	dar, Oak, P					DE. (less than 6" stump)	Buffer vernal	
		Great ca is desire		GEMS project. Earlie	er rotation ag	ges woul	d work well	here because a	spen is offsite. Wh	ole tree skid or scarify	if more conifer	
<u>Othe</u> Com	<u>r</u> ments:	A few sc	attered supe	er canopy pines and	oaks throug	hout. Ma	lybe look a	t opportunities to	encourage conife	r.		
<u>Next</u> Steps	<u>3:</u>											
Propo Start I		10/01/20 ⁻	15									
28	12078	028-Cut	166.2 4	110 - Sugar Maple Association	High Density Pole	85	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal	
Drock	cription	Buffer dr	ainage on w	est side 25 feet. Thi		30 sq ft c	f residual E	3A. Leave all ceo	dar, hemlock, pine.			
<u>Spec</u> Othe	<u>s:</u> <u>r_</u>			in densities. More log ash. Bed and bank			th line, son	ne portions of th	is stand look untrea	ated. Pockets of heavy	y understory,	
Spec Othe Com Com Next Step: Propo	<u>s:</u> ments: <u>s:</u> sed Date:		onwood and		in middle w		th line, son	ne portions of th	Clearcut with	ated. Pockets of heavy 413 - Aspen	Cmpt. Review	
Spec Othe Cominist Next Steps Start I Start I	<u>s:</u> <u>ments:</u> <u>sed</u> Date: 12078	mostly ir 10/01/20 ⁷ 031-Cut	onwood and 15 3.3	ash. Bed and bank 4130 - Aspen	n middle w High Density Pole	est side.		Harvest	Clearcut with Reserves			
Spec Othe Com Next Steps Propo Start I 31	s: <u>ments:</u> s: sed Date: 12078 cription	mostly ir 10/01/20 ⁻ 031-Cut Final han Retentio	onwood and 15 3.3 rvest using 2 n: cedar, he	ash. Bed and bank	n middle w High Density Pole	est side.		Harvest	Clearcut with Reserves		Cmpt. Review	
Spec Othe Com Next Step: Propo Start I 31 Press Spec Othe Com	<u>s:</u> <u>ments:</u> <u>sed</u> <u>Date:</u> 12078 <u>cription</u> <u>s:</u>	mostly ir 10/01/20 031-Cut Final han Retentio Acceptal	3.3 vvest using 2 n: cedar, he ble alternativ	ash. Bed and bank 4130 - Aspen " spec. Leave cedar mlock, pine, buffer.	n middle w High Density Pole	est side.		Harvest	Clearcut with Reserves		Cmpt. Review	
Spec Othe Comining Next Steps Propoo Start I 31 31 Press Spec Othe Comining Next Steps	s: ments: sed Date: 12078 cription s: ments: s:	mostly ir 10/01/20 031-Cut Final han Retentio Acceptal	3.3 vvest using 2 n: cedar, he ble alternativ	ash. Bed and bank 4130 - Aspen " spec. Leave cedar mlock, pine, buffer. re regen: maple/fir.	n middle w High Density Pole	est side.		Harvest	Clearcut with Reserves		Cmpt. Review	
Spec Othe Comining Next Steps Propo Start I 31 31 Press Spec Comining Next Steps Propo	s: <u>ments:</u> <u>sed</u> Date: 12078 cription s: <u>ments:</u> s: sed	mostly ir 10/01/20 031-Cut Final han Retentio Acceptal	15 3.3 rvest using 2 n: cedar, he ble alternativ ond on Wes	ash. Bed and bank 4130 - Aspen " spec. Leave cedar mlock, pine, buffer. re regen: maple/fir.	n middle w High Density Pole	est side.		Harvest	Clearcut with Reserves		Cmpt. Review	
Spec Othe Comining Next Steps Propo Start I 31 31 Press Spec Comining Next Steps Propo	s: <u>ments:</u> <u>sed</u> <u>Date:</u> 12078 <u>ription</u> <u>s:</u> <u>ments:</u> <u>sed</u> <u>Date:</u>	mostly ir 10/01/20 031-Cut Final har Retentio Acceptal Vernal p	15 3.3 rvest using 2 n: cedar, he ble alternativ ond on Wes	ash. Bed and bank 4130 - Aspen " spec. Leave cedar mlock, pine, buffer. re regen: maple/fir.	n middle w High Density Pole	est side.		Harvest	Clearcut with Reserves		Cmpt. Review	
Spec Othe Comm Next Step: Propo Start I 31 Press Spec Comm Next Step: Propo Start I 35 Press	s: <u>sed</u> <u>Date:</u> 12078 <u>sed</u> <u>ription</u> <u>s:</u> <u>c</u> <u>ments:</u> <u>sed</u> <u>Date:</u> 12078	mostly ir 10/01/20 031-Cut Final han Retentio Acceptal Vernal p 10/01/20 035-Cut Cut half Final han	onwood and 15 3.3 rvest using 2 n: cedar, he ble alternativ ond on Wes 15 45.6 of stand this rvest using 2	ash. Bed and bank 4130 - Aspen " spec. Leave cedar mlock, pine, buffer. re regen: maple/fir. t side of stand.	High Density Pole , hemlock, p High Density Pole next YOE p	51 51 bine. Buff 44 er WLD	fer vernal p	Harvest	Clearcut with Reserves e of stand 50 feet.	413 - Aspen	Cmpt. Review Proposal	
Spec Othe Comm Next Steps Propo Start I 31 Press Spec Othe Comm Next Steps Propo Start I 35 Press Spec Othe Othe Othe Comm	s: <u>ments:</u> <u>sed</u> <u>Date:</u> 12078 <u>cription</u> <u>s:</u> <u>c</u> <u>ments:</u> <u>sed</u> <u>Date:</u> 12078 <u>sed</u> <u>Date:</u> 12078	mostly ir 10/01/20 031-Cut Final han Retentio Acceptal Vernal p 10/01/20 035-Cut Cut half Final han Acceptal	onwood and 15 3.3 rvest using 2 n: cedar, he ble alternativ ond on Wes 15 45.6 of stand this vest using 2 ble alternativ	ash. Bed and bank 4130 - Aspen " spec. Leave cedar mlock, pine, buffer. re regen: maple/fir. t side of stand. 4130 - Aspen YOE, the other half " spec. Leave cedar	High Density Pole , hemlock, p High Density Pole next YOE p , hemlock, p	51 51 bine. Buff 44 er WLD	fer vernal p	Harvest	Clearcut with Reserves e of stand 50 feet.	413 - Aspen	Cmpt. Review Proposal Cmpt. Review	
Spec Othe Comm Next Steps Propo Start I 31 Press Spec Othe Comm Next Steps Propo Start I 35 Press Spec Othe Othe Othe Comm	s: ments: sed Date: 12078 cription s: ments: sed Date: 12078 cription s: 12078	mostly ir 10/01/20 031-Cut Final han Retentio Acceptal Vernal p 10/01/20 035-Cut Cut half Final han Acceptal	onwood and 15 3.3 rvest using 2 n: cedar, he ble alternativ ond on Wes 15 45.6 of stand this vest using 2 ble alternativ	ash. Bed and bank 4130 - Aspen " spec. Leave cedar mlock, pine, buffer. re regen: maple/fir. t side of stand. 4130 - Aspen YOE, the other half " spec. Leave cedar re regen: Maple/Fir	High Density Pole , hemlock, p High Density Pole next YOE p , hemlock, p	51 51 bine. Buff 44 er WLD	fer vernal p	Harvest	Clearcut with Reserves e of stand 50 feet.	413 - Aspen	Cmpt. Review Proposal	

Crystal Falls Mgt. Unit

S

Report 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 078 Year of Entry 2016

t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
41	12078041-Cut	5.9	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	81		Harvest	Clearcut with Reserves	613 - Lowland Mixed Forest	Cmpt. Review Proposal
Presc Spec:	s: Recomn Retentio	nend frozer n: cedar, h	ortion of stand away fro n ground operations. nemlock, buffer. tive regen: aspen/map		& bank. I	Final harve	st using 2" spec.	. Leave all cedar &	hemlock. Buffer strea	m 100 ft.
<u>Other</u> Comr	Bed and <u>ments:</u>	bank on e	ast side of stand. Mor	e aspen/fir t	o west.					
<u>Next</u> Steps	<u>s:</u>									
Propos Start E		15								
22	Hunter Walking Trail- NonFor	8.2	622 - Lowland Shrub				Non-Forest Management	Other - Specify	310 - Herbaceous Openland	Cmpt. Review Proposal
Presc Spec:		maintain H	lunter Walking Trail							
<u>Other</u> Comr	<u>.</u> ments:									
<u>Next</u> Steps	<u>s:</u>									
Propos Start E		ed								
Ac	Total Treatmer creage Propose		2.3							

S t		Crystal Falls	Mgt. Unit	Report 4		eatment Site Con	Compartment: 078 Year of Entry 2016	NATURAL PLANT		
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
		#Type!	#Type!							
<u>Presci</u> Specs Other Comm										
<u>Next</u> Steps:	<u>.</u>									
Propo Start [
Limitir	ng Factor									
	Total Treatme reage Propose									

Crystal Falls Mgt. Unit

Compartment 078 Year of Entry 2016

Andy Church : Examiner

Availability for Management

Total	Acres	Acres	D	omina	nt Site	e Conc	litions
Acres	Available	Not Available		No	3L	3J	
1009	1009		Aspen	1,009			
56	56		Cedar	56			
61	61		Lowland Aspen/Balsam Poplar	61			
50	33	16	Lowland Conifers	33		16	
210	129	81	Lowland Deciduous	129	8	73	
16	16		Lowland Mixed Forest	16			
257	257		Northern Hardwood	257			
5	5		Tamarack	5			
1,664	1,566	98	Total Forested Acres	1,566	8	90	
	94%	6%	Relative Percent				

*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
005	Not Available	3J: Water quality / BMPs (stream, river, or lake)	17				
C	Comments:						
006	Not Available	3J: Water quality / BMPs (stream, river, or lake)	73				
(Comments:						
007	Not Available	3L: Other wildlife concerns	8				
V	Comments: VLD comment: No Management Area.	harvest of this lowland hardw	ood due t	o habitat for Black Bear.	Black Bear is a featured sp	pecies in the Ralph Ground	Morraine



Report 6 – 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.

SCA Name SCA Category Detail Type Recommendation Acres

Comments



Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

Conservatio Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical sites of cultural and historical significance that may occur upon bottomlands. They include thousands of Native American settle and British outposts, nineteenth century logging camps, mines the Great Lakes, there are shipwrecks and other remains docur be identified by Natural heritage data from the State Historic Pro- this compartment will be implemented in such a manner as to n the sensitive nature of this information, no further detail about lo	terrestrial areas and Great Lakes ments and burial sites, as well as French and homesteads. Beneath the waters of menting the maritime trade. Such sites may eservation Office. Proposed treatments in maintain the integrity of these sites. Due to
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditi stocked trout populations and those of other coldwater fish spec conditions for coldwater fishes may occur in Michigan lakes if th groundwater inflows, or are located in colder (northern) areas o Director's action and designated as trout resources by Fisheries	cies to persist from year to year. Suitable ney are relatively deep, have substantial f the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen con stocked trout populations and those of other coldwater fish sper year to year. Coldwater streams in Michigan typically provide th contributions of groundwater to their stream flows. Such stream designated as trout resources by Fisheries Order 210.	cies (e.g., slimy sculpin) to persist from ese conditions due to substantial
SCA	Habitat Area	An area that provide some specific need for the life cycle of wild and Waterfowl Production Areas, deer wintering complexes in lo openings and savannas. Habitat areas are distinct from critical endangered or threatened species (such as Kirtland's warbler of general in nature, are not primarily associated with threatened of covered by species recovery plans that are developed in coope	owland conifer communities, grassland habitat designated for recovery of or piping plover areas) in that they are more or endangered species, and are not

S t	Crystal Fall	rystal Falls Mgt. Unit		Report 8	- Forested St	tands Compartment: 078
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	High Density Sapling	123.3	15		drainages throughout
2	4130 - Aspen	High Density Pole	57.0	38		Healthy stand. Fully stocked some areas of stand are wet.
3	4134 - Aspen, Spruce/Fir	High Density Pole	74.8	65		Half of stand is upland, half of stand is lowland ash. Stand is a mix of transition zone, rocks, water. Budworm damage evident on spruce/fir.
5	6115 - Lowland Ash	High Density Pole	35.8	76		Very wet
6	6112 - Lowland Aspen	Medium Density Pole	61.0	68		Low stocking due to wet terrain and mortality. Most of stand is wet but has upland portions. Entire stand is losing more volume than gaining due to old age. Sensitive soils; rutting risk is high because this stand is on a hillside seep.
7	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	70.9	73		Lowland stand along Sturgeon River with upland inclusions.
8	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	22.1	68		
9	4130 - Aspen	Medium Density Pole	56.7	64		Stand is on hillside seep. Mortality evident on aspen. Couple drainages throughout. No bed and bank observed. Stocking is lower due to mortality. Need survey? Losing more volume than gaining.
10	4130 - Aspen	High Density Sapling	17.2	20		Small inclusion of mature aspen near swamp. Supercanopy pines throughout. Rocky and hilly terrain.
11	4130 - Aspen	High Density Sapling	10.8	6		
12	4130 - Aspen	High Density Sapling	84.2	17		Scattered super canopy pines and oaks throughout. Portions of stand were burned in an attempt to recruit conifers. Prescribed fire failed at regenerating conifers.
13	4130 - Aspen	High Density Pole	11.9	34		Just starting to reach merchantable size. Healthy
14	4130 - Aspen	High Density Pole	15.9	34		Just starting to reach merchantable size, healthy.
15	6120 - Lowland Cedar	High Density Pole	40.6	91		
16	4130 - Aspen	High Density Pole	24.2	39		Good looking, healthy stand.
17	6115 - Lowland Ash	Medium Density Pole	11.3	61		Very wet. Majority of stand is immature.

Crystal	Falls	Mat	Unit	
Crystar	i ans	wigt.	Unit	

Report 8 – Forested Stands



S t	Crystal Falls	Crystal Falls Mgt. Unit			- Forested	Stands Compartment: 078 Year of Entry: 2016
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
18	4130 - Aspen	High Density Sapling	19.4	17		
19	4130 - Aspen	High Density Pole	89.8	52		A few scattered super canopy pines and oaks throughout. Maybe look at opportunities to encourage conifer.
20	6120 - Lowland Cedar	High Density Pole	15.3	87		Very healthy swamp conifer stand
21	4110 - Sugar Maple Association	High Density Pole	2.7	71	111-140	Northern hardwood pole stand, very small acreage. Good quality stems. Thick sedge understory.
24	6132 - Mixed Lowland Forest with Cedar	Medium Density Pole	16.3	41		More black ash to west, cedar to east
25	4130 - Aspen	High Density Sapling	62.2	26		Supercanopy mixed conifers and oak found scattered throughout stand.
26	6119 - Mixed Lowland Deciduous Forest	High Density Pole	11.0	62		Bed and bank within stand. Sugar maple and ironwood in understory.
27	4110 - Sugar Maple Association	High Density Pole	21.4	76	81-110	Thinned 2010
28	4110 - Sugar Maple Association	High Density Pole	170.6	85	111-140	Stand varies greatly in densities. More log size trees near north line, some portions of this stand look untreated. Pockets of heavy understory, mostly ironwood and ash. Bed and bank in middle west side.
29	4130 - Aspen	High Density Pole	28.1	39		Healthy stand. Far western couple acres in stand were harvested in 1994
30	4130 - Aspen	High Density Pole	149.9	40		Very healthy stand. Varying ages within this stand; ages are within 10 years. May want to consider breaking up stand next rotation. Several drainages running north/south throughout stand.
31	4130 - Aspen	High Density Pole	4.1	51		Vernal pond on West side of stand.
32	6115 - Lowland Ash	High Density Pole	8.2	81		WET. Low volume due to 2 stick black ash.
33	6121 - Tamarack	Medium Density Pole	5.3	50		Tamarack stand. Mostly tag alder
34	6124 - Lowland Spruce- Fir	Medium Density Pole	5.0	52		Fir/spruce in upland portions of stand. VERY wet (hillside seep?) Bed and bank on south side of stand. Strange hydrology; VERY wet but situated on hillside. Sphagnum on ground.
35	4130 - Aspen	High Density Pole	86.9	44		Poor quality. Aspen breaking up due to poor site.

S t	Crystal Fal	ls Mgt. Unit		Report 8	– Forested	Stands	Compartment: 078 Year of Entry: 2016	OF NATURAL REGOURCES
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		General Comments:	MICHIGAN .
37	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	73.2	87				
39	4110 - Sugar Maple Association	High Density Pole	4.2	81	81-110	Sedge	e in understory; not well stocked	
40	4130 - Aspen	High Density Sapling	10.9	25		Starting to r	each merchantable size. Very he	ealthy
41	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	23.1	81		Bed and bank on	east side of stand. More aspen/ Younger Q type swamp	fir to west.
42	4110 - Sugar Maple Association	High Density Pole	44.4	72	81-110	Thinned 2010. Bed	& bank with culvert to private on stand.	west side of
43	4130 - Aspen	High Density Pole	32.2	45		Aspen is healthy, v 10 acres of stand	vill have more volume next rotati near river is older and has dens understory.	on. Western e fir/spruce
44	4130 - Aspen	High Density Sapling	31.9	6				
45	4110 - Sugar Maple Association	High Density Log	13.3	91	81-110	Thinned 2010. High and straight. Very I	n quality northern hardwood star ittle recruitment. Understory filled	d. Trees tall d with sedge.
46	4130 - Aspen	Medium Density	9.2	17		Overs	tory spruce/fir throughout stand.	
47	4130 - Aspen	High Density Sapling	5.1	21				

Compartment: 078 Year of Entry: 2016



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
4	622 - Lowland Shrub	59.2	Unspecified	Unspecified	
22	622 - Lowland Shrub	5.6	Unspecified	Unspecified	
23	320 - Upland Shrub	3.2	Unspecified	Unspecified	
36	622 - Lowland Shrub	13.0	Unspecified	Unspecified	
38	50 - Water	12.3	Unspecified	Unspecified	