

# **Compartment Review Presentation**

**Crystal Falls Forest Management Unit** 

Compartment 12087 Entry Year 2015 Acreage: 1,793 County Dickinson Management Area: Cassidy Creek

Revision Date: 2013-07-15

## **Stand Examiner:**

## Legal Description:

T41N, R28W sections 30, 31 & 32

## **Identified Planning Goals:**

Maintain aspen type to achieve age class distribution on good aspen sites. Manage hardwood types for sawtimber production as well as maintaining diversity. Retain conifer component.

## Soil and topography:

Soils are mostly sandy loam and muck. Topography is made up of rolling hills to wet bottom lands. There are some rocky areas also.

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

There is fairly coniguous ownership in this compartment but there are a few private camps (80 acres within) and two forties along the edge of the compartment.

#### **Unique Natural Features:**

No Unique Natural Features known.

## Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

## **Special Management Designations or Considerations:**

## Watershed and Fisheries Considerations:

Jansen's creek runs through this compartment

## Wildlife Habitat Considerations:

The upland portion of this compartment was historically dominated by hemlock/white pine and sugarmaple/hemlock forest. Currently aspen occupies 60% of the compartment. Of the aspen, more than 60 percent is less than twently years old and thus provides sufficient habitat conditons for wildlife species requiring early-successional habitats. The southern portion of this compartment was a significant deer yard historically and conditions (historic vegetation, current seed source and habitat suitability) are thus conducive for restoration which would benefit a wide variety of wildlife species that utilize this species. Stands coniguous with mixed swamp conifer stands and associated riparian zones should be protected and expanded as this zone provides critical habitat and travel corridors for a variety of wildlife species. Allowing the trees in this zone to mature would also be beneficial for a whole suite of species that depend on limited mature habitat conditions (e.g. snags, etc...). Hardwood stands scheduled for treatment should be harvested in a manner conducive to providing species diversity and structuaral diversity.

# Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of thin to discontinuous glacial outwash sand and gravel and postglacial alluvium over bedrock. There is insufficient data to determine the glacial drift thickness. 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 five miles to the east. Part of this compartment was previously leased for metallic exploration and potential may still exist. A gravel pit is located three miles to the east and potential appears to be limited. There is no economic oil and gas production in the UP.

#### Vehicle Access:

The Brown's Lake road accesses the Norway Truck Trail which is a county road that goes north and south through the compartment. There are some open roads and some bermed, that get into most areas of the compartment.

There are two corners on the private/state land that will have to be installed.

#### **Recreational Facilities and Opportunities:**

Hunting and fishing would be available here.

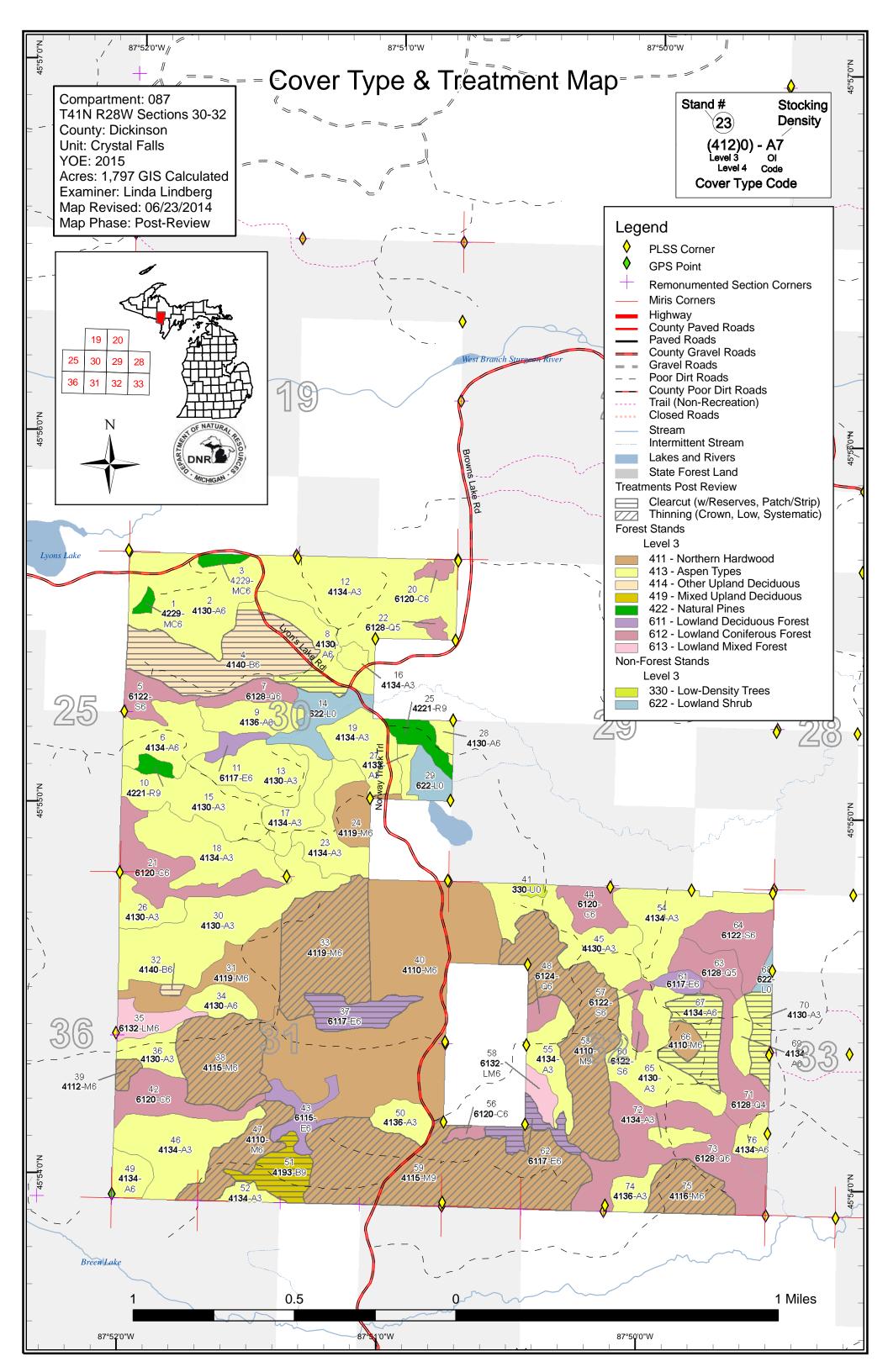
#### **Fire Protection:**

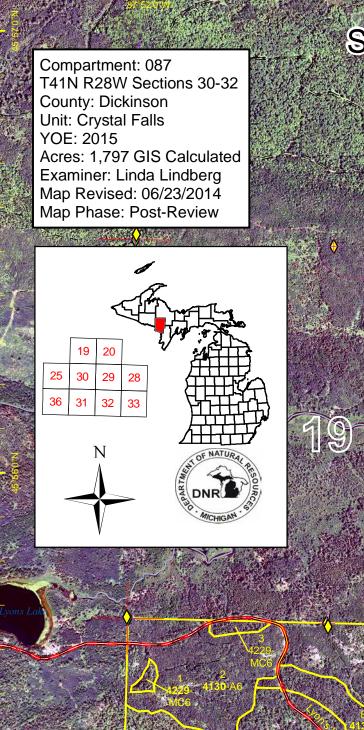
This area is somewhat accessible for fire, with the exception of berms having to be removed. Overall the occurrence of a fire in this compartment is not impossible, but not that prevalent.

## **Additional Compartment Information:**

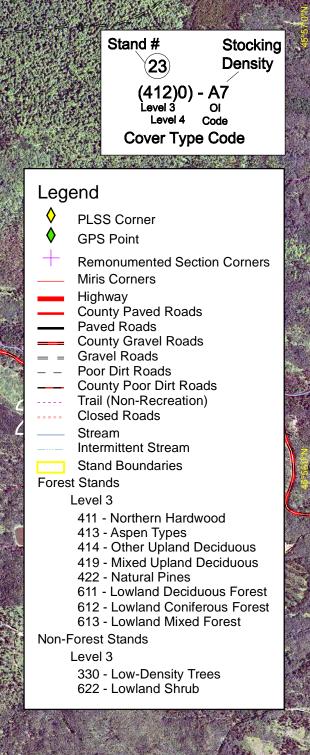
The following reports from the Inventory are attached: Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas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

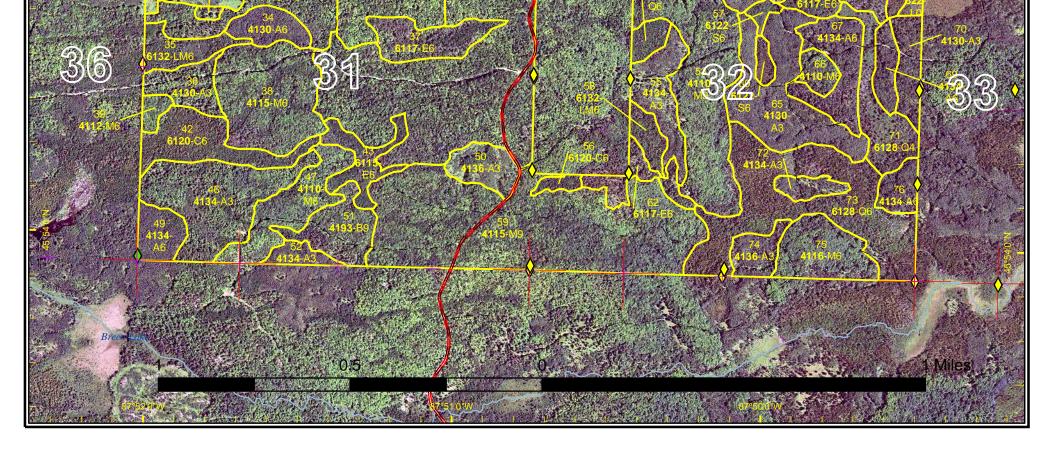
The following information is displayed, where pertinent, on the attached compartment maps: Base feature information, stand boundaries, cover types, and numbers Proposed treatments Site condition boundaries Details on the road access system

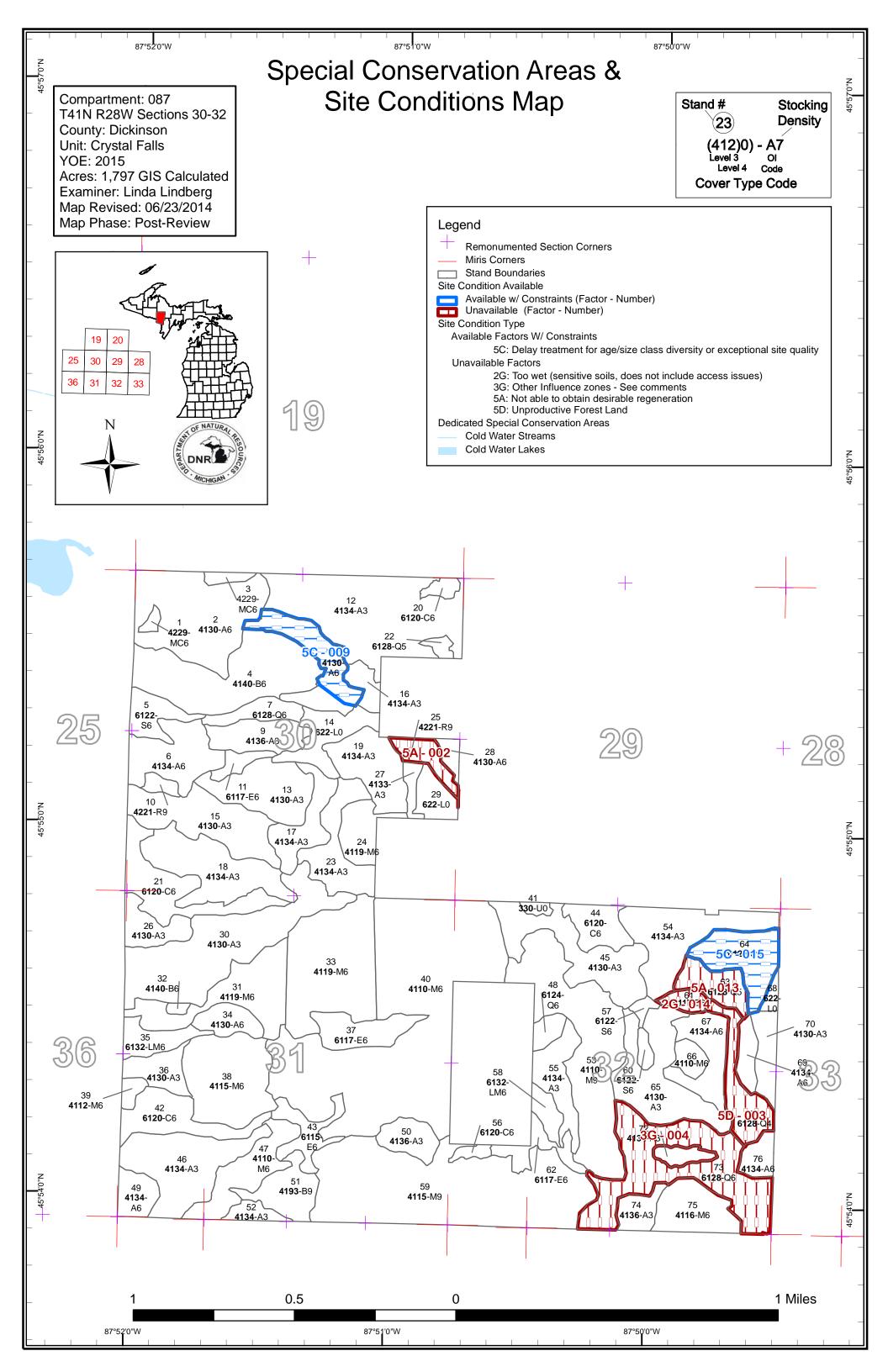


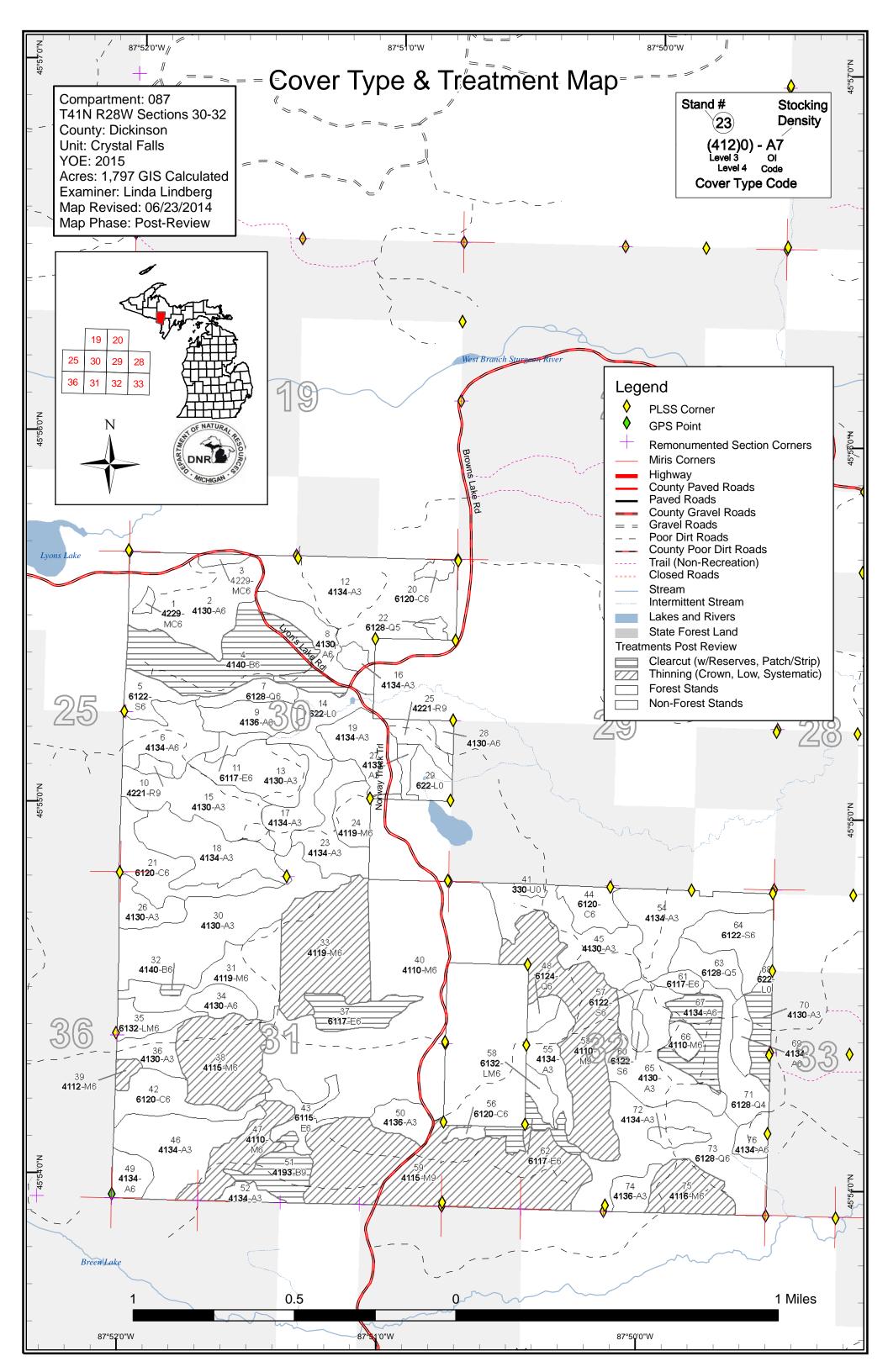


# Stand Boundary Map









# **Report 1 – Total Acres by Cover Type and Age Class**

Crystal Falls Mgt. Unit



Age Class

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	Noc	is of the second	\$ \	81.5 1.5		5		° 8 8	5 <sup>8</sup> ~ ~		80 80 80	\$ \$	200°		67.50 152	Ser in the series of the serie	AL AL	DX Jre	Contraction of the second
Aspen	0	214	131	299	82	0	47	0	0	0	0	0	0	0	0	0	0	0	773
Cedar	0	0	0	0	0	0	0	0	44	30	0	0	0	0	0	0	0	0	74
Low-Density Trees	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lowland Conifers	0	0	0	0	0	0	0	0	18	100	0	0	0	0	0	0	0	0	118
Lowland Deciduous	0	0	0	0	0	0	0	0	36	16	0	0	0	0	0	0	0	0	52
Lowland Mixed Forest	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	18
Lowland Shrub	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	18	25	0	0	0	0	0	0	0	0	43
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
Northern Hardwood	0	0	0	0	0	0	0	0	0	585	0	0	0	0	0	0	0	0	585
Paper Birch	0	0	0	0	0	0	0	0	60	19	0	0	0	0	0	0	0	0	79
Red Pine	0	0	0	0	0	0	0	0	9	3	0	0	0	0	0	0	0	0	12
Total	34	214	131	299	82	0	47	0	203	783	0	0	0	0	0	0	0	0	1793

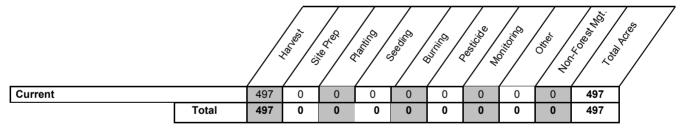


Acres of Harvest Commercial Harvest - 497 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

## Cover Type by Harvest Method

			Contraction of the second	Carlon Carlon	Clearly C	Color Log	North Color	Contraction of the second	And	ob Mo B B B B	to Josephine Market	Se S
Aspen		21	0	0	12	0	0	0	0	0	32	Í
Lowland Deciduous		28	0	0	0	0	0	0	0	0	28	
Northern Hardwood		0	0	0	0	0	352	0	0	0	352	
Paper Birch		85	0	0	0	0	0	0	0	0	85	
	Total	134	0	0	12	0	352	0	0	0	497	

#### Proposed and Next Step Treatments by Harvest Method



Crystal Falls Mgt. Unit **Report 4** -- Treatments Compartment: 87 s Year of Entry: 2015 t а Treatment Stand Size Stand BA Treatment Treatment Cover Type Acres Age Approval n Name CoverType Density Age Range Type Method Objective Structure Status d 4 12087004-Cut 66.3 4140 - Other Poletimber 51-80 Clearcut with 4193 - Birch, Even-Aged Draft Field 79 Harvest Upland Deciduous Well Retention Aspen Boundary Prescription Cut all species that are 2 inches or more dbh except red and white pine, hemlock, cherry, cedar, elm and oak. Cut all spruce and balsam that is 6 inches in diameter at a 4 inch stump. There are quite a few rocky outcrops here that can be left when harvesting is not possible for safety Specs: reasons Next Step Treatments: Acceptable Regen: Other Old next step comments: Regen check next entry Comment: Proposed Start Date: 10/1 /2014 Site Condition: None 32 12087032-Cut 1.4 4140 - Other Poletimber 87 81-110 Harvest Clearcut with 4137 - Aspen, Even-Aged Draft Field Upland Deciduous Well Retention Birch Boundary Prescription This little stand was included in the hardwood last entry but is definitely birch and aspen and since we will be harvesting nearby, this can easily Specs: be accessed (by a skid road going right to it) and cut. Next Step Treatments: Acceptable Regen: Other Old next step comments: Regen check Comment: Proposed Start Date: 10/1 /2014 Site Condition: None 12087033-Cut 4119 - Mixed 61.6 Poletimber 87 111-Harvest Crown Thinning 4110 - Sugar Draft Field 33 Even-Aged Northern Hardwoods Well 140 Maple Boundary Association Prescription Thin stand to 80 BA taking out high risk trees, choose leve trees that are good crop trees and thin around them taking the surrounding Specs: competitors when the crop tree is 8 inches or less in diameter and taking the two biggest competitors in the 8 inch or greater category. Next Step Treatments: Acceptable Regen: Other There are a few ash in this stand that can be marked according to the new regulations for ash. Comment: Proposed Start Date: 10/1 /2014 Site Condition: None

S t		Crysta	I Falls Mgt. Unit		Re	eport 4	Treatme	nts		ment: 87 Entry: 2015	DR NATURAL REPORT
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
37	12087037-Cut	17.2	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	79	51-80	Harvest	Clearcut with Retention	6117 - Lowland Deciduous, Mixed Coniferous	Even-Aged	Draft Field Boundary
Pres Spec		trees 2 inc at a 4 inc		ept red and	white pi	ne, hemlo	ock, cedar, oak	, cherry and elm. C	ut all spruce and	balsam that is	6 inches or
	<u>Step</u> tments:										
<u>Acce</u> Rege	eptable_ en:										
<u>Othe</u> Com			of cedar that will be omments: Regen ch		this sta	ind.					
Prop	osed Start Date	10/1	/2014								
<u>Site</u>	Condition: N	lone									
38	12087038-Cut	43.9	4115 - Y.Birch, Hemlock NH	Poletimber Well	87	111- 140	Harvest	Crown Thinning	4110 - Sugar Maple Association	Even-Aged	Draft Field Boundary
<u>Treat</u> Acce Rege Othe		ext step co	omments: Regen cł	neck							
Prop	osed Start Date	10/1	/2014								
<u>Site</u>	Condition: N	lone									
39	12087039-Cut	3.6	4112 - Maple, Beech, Cherry Association	Poletimber Well	87	111- 140	Harvest	Crown Thinning	4110 - Sugar Maple Association	Even-Aged	Draft Field Boundary
Pres Spec								ood crop trees and t	hin around them		ounding trees
	<u>Step</u> tments:										
<u>Acce</u> Rege	eptable en:										
<u>Othe</u> Com	<u>r</u> ment:										
		40/4	100.1.1								
Prop	osed Start Date	10/1	/2014								

S t		Crystal F	alls Mgt. Unit		Re	eport 4	Treatme	ents	•	tment: 87 Entry: 2015	DRR DR ATURAL OF
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
47	12087047-Cut	23.9 411	0 - Sugar Maple Association	Poletimbe Well	r 87	111- 140	Harvest	Crown Thinning	4110 - Sugar Maple Association	Even-Aged	Draft Field Boundary
Pres Spec								d crop trees and thir atitors when the crop			
	<u>t Step</u> . <u>tments:</u>										
<u>Acce</u> Rege	eptable en:										
<u>Othe</u> Com	er iment:										
Prop	osed Start Date	10/1 /20	)14								
<u>Site</u>	Condition: N	lone									
51	12087051-Cut	17.7 419	93 - Birch, Aspen	Sawtimbe Well	r 87	81-110	Harvest	Clearcut with Retention	4193 - Birch, Aspen	Even-Aged	Draft Field Boundary
<u>Spec</u> <u>Next</u>	cs: inches	or less in dia						k, cedar, elm, cherry e cruising choose a			
Acce Rege	eptable_ en:										
<u>Othe</u> Com	er Stay ou iment:	it of wet area	as. Old next step	comment	s: Rege	n check					
Prop	osed Start Date	10/1 /20	)14								
<u>Site</u>	Condition: N	lone									
53	12087053-Cut	75.3 411	0 - Sugar Maple Association	Sawtimbe Well	r 87	111- 140	Harvest	Crown Thinning	4110 - Sugar Maple Association	Even-Aged	Draft Field Boundary
Pres Spec			taking out high ris npetitors from the					crop trees and thin a	round those sma	aller than 8 incl	nes DBH and
	<u>tStep</u> tments:										
<u>Acce</u> Rege	eptable_ en:										
<u>Othe</u> Com	er iment:										
Prop	osed Start Date	10/1 /20	)14								
Site	Condition: N	lone									

S t		Crystal	Falls Mgt. Unit		Re	eport 4	Treatme	ents	•	tment: 87 Entry: 2015	DRR DRR EF
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
59	12087059-Cut	121.7	4115 - Y.Birch, Hemlock NH	Sawtimber Well	87	111- 140	Harvest	Crown Thinning	4110 - Sugar Maple Association	Even-Aged	Draft Field Boundary
<u>Spec</u> <u>Next</u>			BA taking out high I the two biggest co					around them taking i inches.	the top competito	ors around an	eight inch or
<u>Rege</u> Othe Com Prop		10/1	arts that are fairly h /2014	iigh BA and	parts th	at are of I	ess BA. There	e are also some lowe	er areas that shou	uld be treated a	accordingly.
	12087062-Cut	10.5	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	r 84	81-110	Harvest	Clearcut with Retention	6117 - Lowland Deciduous, Mixed Coniferous	Even-Aged	Draft Field Boundary
<u>Spec</u> <u>Next</u>			ies that are 2 inche inches at a 4 inch		except	red and w	hite pine, ceda	ar, hemlock, cherry,	elm and oak. Cu	t all spruce an	d balsam that
<u>Reg</u> e <u>Othe</u>		nd has are	eas that are all ced	ar and that p	part wou	ıld be left.	Old next ste	p comments: Reger	n check		
Prop	osed Start Date: Condition: N		/2014								
67	12087067-Cut	20.5	4134 - Aspen, Spruce/Fir	Poletimber Well	54	51-80	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary
<u>Pres</u> Spec			ches or more in dia nan 6 inches at a 4			d white p	ine, cedar, her	nlock, oak, cherry ar	nd elm if present.	Also cut all s	pruce and
	<u>Step</u> tments:										
<u>Acce</u> Rege	eptable_ en:										
<u>Othe</u> Com	er Old ne iment:	ext step co	omments: Regen s	urvey							
	osed Start Date:		/2014								
<u>Site</u>	Condition: N	one									

S t		Crystal	Falls Mgt. Unit		Re	eport 4	Treatme	nts	-	tment: 87 Entry: 2015	OF NATURAL PLAN
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age		Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
70	12087070- Cut_Monitor	11.5	4130 - Aspen	Sapling Well	2	Unspec ified	Harvest	Seed Tree	4134 - Aspen, Spruce/Fir	Unspecified	Field Boundary
Presc Spec:	<u>cription</u> s:										
<u>Next</u> Treat	<u>Step</u> ments:										
<u>Acce</u> Rege	<u>ptable</u> n:										
<u>Other</u> Comr		and has alr	ready been put up fo	or harvest v	with the	adjoining	compartment.	Old next step cor	nments: Monitor	regen per next	inventory cycle
Propo	osed Start Date	<u>:</u> 10/1 /:	2022								
<u>Site</u>	Condition: N	lone									
75	12087075-Cut		4116 - Mixed N. Hardwood - Aspen	Poletimbe Well	r 87	111- 140	Harvest	Crown Thinning	4110 - Sugar Maple Association	Even-Aged	Draft Field Boundary
Presc Spec:			BA taking out high ri tree is 8 inches or l							king all or mos	t of the
<u>Next</u> Treat	<u>Step</u> ments:										
<u>Acce</u> Rege	<u>ptable</u> <u>n:</u>										
<u>Other</u> Comr	-	ext step co	mments:								
Propo	osed Start Date	<u>:</u> 10/1 /	2014								
<u>Site</u>	Condition: N	lone									
Ad	Total Treatme creage Propos		7.0								

Crystal Falls Mgt. Unit

Compartment: 87 Year of Entry: 2015

# Linda Lindberg : Examiner

**Dominant Site Conditions** 

	3G	5A	5C	5D
Aspen			19	
Cedar				
Low-Density Trees				
Lowland Conifers	65	14		19
Lowland Deciduous				
Lowland Mixed Forest				
Lowland Shrub			0	
Lowland Spruce/Fir			24	
Natural Mixed Pines				
Northern Hardwood				
Paper Birch				
Red Pine		9		
Total Forested Acres	65	23	44	19
Relative Percent				

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
2	Unavailable	5A: Not able to obtain desirable regeneration	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: This stand has beer	n harvested and the aspen wa	is taken o	ut and the pine is the resi	dual and it is good like that		
3	Unavailable	5D: Unproductive Forest Land	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: This has scattered t	rees and would not be worth	harvesting	g and there is a culvert so	I assume a creek runs three	ough some time.	

		ll Falls Mgt. Unit ndberg : Examiner		Report 5 – Site Cond	tions	Compartment: 87 Year of Entry: 2015		
4	Unavailable	3G: Other Influence zones - See comments	65	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified	
(	Comments:							
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	20	Unspecified	Unspecified	Unspecified	Unspecified	
(	Comments:							
11	Unavailable	5A: Not able to obtain desirable regeneration	0	Unspecified	Unspecified	Unspecified	Unspecified	
(	Comments:							
13	Unavailable	5A: Not able to obtain desirable regeneration	14	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: Most of the tamara	ick is dead and scattered						
14	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: creek running throu	ugh						
15	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25	Unspecified	Unspecified	Unspecified	Unspecified	
(	Comments:							

Crystal Falls Mgt. Unit

Compartment: 87 Year of Entry: 2015

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	Comments: creek running throu	ugh						
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Crystal Falls Mgt. Unit

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14	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments: creek running throu	ugh							
15	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25	Unspecified	Unspecified	Unspecified	Unspecified		
(	Comments:								

Crystal Falls Mgt. Unit

Compartment: 87 Year of Entry: 2015

# Linda Lindberg : Examiner

**Dominant Site Conditions** 

	3G	5A	5C	5D
Aspen			19	
Cedar				
Low-Density Trees				
Lowland Conifers	65	14		19
Lowland Deciduous				
Lowland Mixed Forest				
Lowland Shrub			0	
Lowland Spruce/Fir			24	
Natural Mixed Pines				
Northern Hardwood				
Paper Birch				
Red Pine		9		
Total Forested Acres	65	23	44	19
Relative Percent				

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
2	Unavailable	5A: Not able to obtain desirable regeneration	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: This stand has beer	n harvested and the aspen wa	is taken o	ut and the pine is the resi	dual and it is good like that		
3	Unavailable	5D: Unproductive Forest Land	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: This has scattered t	rees and would not be worth	harvesting	g and there is a culvert so	I assume a creek runs three	ough some time.	

	Crystal Falls Mgt. Unit Linda Lindberg : Examiner						Compartment: 87 Year of Entry: 2015		
4	Unavailable	3G: Other Influence zones - See comments	65	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified		
(	Comments:								
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	20	Unspecified	Unspecified	Unspecified	Unspecified		
(	Comments:								
11	Unavailable	5A: Not able to obtain desirable regeneration	0	Unspecified	Unspecified	Unspecified	Unspecified		
(	Comments:								
13	Unavailable	5A: Not able to obtain desirable regeneration	14	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments: Most of the tamara	ick is dead and scattered							
14	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments: creek running throu	ugh							
15	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25	Unspecified	Unspecified	Unspecified	Unspecified		
(	Comments:								

Crystal Falls Mgt. Unit

Compartment: 87 Year of Entry: 2015

# Linda Lindberg : Examiner

**Dominant Site Conditions** 

	3G	5A	5C	5D
Aspen			19	
Cedar				
Low-Density Trees				
Lowland Conifers	65	14		19
Lowland Deciduous				
Lowland Mixed Forest				
Lowland Shrub			0	
Lowland Spruce/Fir			24	
Natural Mixed Pines				
Northern Hardwood				
Paper Birch				
Red Pine		9		
Total Forested Acres	65	23	44	19
Relative Percent				

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
2	Unavailable	5A: Not able to obtain desirable regeneration	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: This stand has beer	n harvested and the aspen wa	is taken o	ut and the pine is the resi	dual and it is good like that		
3	Unavailable	5D: Unproductive Forest Land	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: This has scattered t	rees and would not be worth	harvesting	g and there is a culvert so	I assume a creek runs three	ough some time.	

	Crystal Falls Mgt. Unit Linda Lindberg : Examiner						Compartment: 87 Year of Entry: 2015		
4	Unavailable	3G: Other Influence zones - See comments	65	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified		
(	Comments:								
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	20	Unspecified	Unspecified	Unspecified	Unspecified		
(	Comments:								
11	Unavailable	5A: Not able to obtain desirable regeneration	0	Unspecified	Unspecified	Unspecified	Unspecified		
(	Comments:								
13	Unavailable	5A: Not able to obtain desirable regeneration	14	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments: Most of the tamara	ick is dead and scattered							
14	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified		
	Comments: creek running throu	ugh							
15	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25	Unspecified	Unspecified	Unspecified	Unspecified		
(	Comments:								

Crystal Falls Mgt. Unit

Compartment: 87 Year of Entry: 2015

# Linda Lindberg : Examiner

**Dominant Site Conditions** 

	3G	5A	5C	5D
Aspen			19	
Cedar				
Low-Density Trees				
Lowland Conifers	65	14		19
Lowland Deciduous				
Lowland Mixed Forest				
Lowland Shrub			0	
Lowland Spruce/Fir			24	
Natural Mixed Pines				
Northern Hardwood				
Paper Birch				
Red Pine		9		
Total Forested Acres	65	23	44	19
Relative Percent				

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
2	Unavailable	able 5A: Not able to obtain 9 Unspecified desirable regeneration		Unspecified	Unspecified	Unspecified	
	Comments: This stand has beer	n harvested and the aspen wa	is taken o	ut and the pine is the resi	dual and it is good like that		
3	Unavailable	5D: Unproductive Forest Land	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: This has scattered t	rees and would not be worth	harvesting	g and there is a culvert so	I assume a creek runs three	ough some time.	

	Crystal Falls Mgt. Unit Linda Lindberg : Examiner			Report 5 – Site Cond	tions	Compartment: 87 Year of Entry: 2015		
4	Unavailable	3G: Other Influence zones - See comments	65	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified	
(	Comments:							
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	20	Unspecified	Unspecified	Unspecified	Unspecified	
(	Comments:							
11	Unavailable	5A: Not able to obtain desirable regeneration	0	Unspecified	Unspecified	Unspecified	Unspecified	
(	Comments:							
13	Unavailable	5A: Not able to obtain desirable regeneration	14	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: Most of the tamara	ick is dead and scattered						
14	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: creek running throu	ugh						
15	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25	Unspecified	Unspecified	Unspecified	Unspecified	
(	Comments:							

Crystal Falls Mgt. Unit

Compartment: 87 Year of Entry: 2015

# Linda Lindberg : Examiner

**Dominant Site Conditions** 

	3G	5A	5C	5D
Aspen			19	
Cedar				
Low-Density Trees				
Lowland Conifers	65	14		19
Lowland Deciduous				
Lowland Mixed Forest				
Lowland Shrub			0	
Lowland Spruce/Fir			24	
Natural Mixed Pines				
Northern Hardwood				
Paper Birch				
Red Pine		9		
Total Forested Acres	65	23	44	19
Relative Percent				

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
2	Unavailable	able 5A: Not able to obtain 9 Unspecified desirable regeneration		Unspecified	Unspecified	Unspecified	
	Comments: This stand has beer	n harvested and the aspen wa	is taken o	ut and the pine is the resi	dual and it is good like that		
3	Unavailable	5D: Unproductive Forest Land	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: This has scattered t	rees and would not be worth	harvesting	g and there is a culvert so	I assume a creek runs three	ough some time.	

	Crystal Falls Mgt. Unit Linda Lindberg : Examiner			Report 5 – Site Cond	tions	Compartment: 87 Year of Entry: 2015		
4	Unavailable	3G: Other Influence zones - See comments	65	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified	
(	Comments:							
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	20	Unspecified	Unspecified	Unspecified	Unspecified	
(	Comments:							
11	Unavailable	5A: Not able to obtain desirable regeneration	0	Unspecified	Unspecified	Unspecified	Unspecified	
(	Comments:							
13	Unavailable	5A: Not able to obtain desirable regeneration	14	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: Most of the tamara	ick is dead and scattered						
14	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: creek running throu	ugh						
15	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25	Unspecified	Unspecified	Unspecified	Unspecified	
(	Comments:							



#### 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.

Conservati Area	ion Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen con stocked trout populations and those of other coldwater fish s conditions for coldwater fishes may occur in Michigan lakes groundwater inflows, or are located in colder (northern) area Director's action and designated as trout resources by Fishe	pecies to persist from year to year. Suitable if they are relatively deep, have substantial s of the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen of stocked trout populations and those of other coldwater fish s year to year. Coldwater streams in Michigan typically provide contributions of groundwater to their stream flows. Such stree designated as trout resources by Fisheries Order 210.	pecies (e.g., slimy sculpin) to persist from these conditions due to substantial

# **Report 8 – Forested Stands**

DNR BORRES	)
MICHIGAN	

S t	Crystal Falls	s Mgt. Unit		Report 8	- Forested S	Stands Compartment: 87 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42290 - Natural Mixed Pine	Poletimber Well	1.9	89	81-110	This is a rock. Inoperable.
2	4130 - Aspen	Poletimber Well	58.8	27	Unspecified	4-6 inch aspen, a few conifers.
3	42290 - Natural Mixed Pine	Poletimber Well	3.1	89	51-80	rock top. inoperable.
4	4140 - Other Upland Deciduous	Poletimber Well	59.7	79	51-80	This stand should be cut. There are some rocky places that will be inoperable.
5	6122 - Black Spruce	Poletimber Well	12.2	79	51-80	Creek runs through stand.
6	4134 - Aspen, Spruce/Fir	Poletimber Well	28.0	38	Unspecified	
7	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	10.1	79	81-110	Creek runs through stand.
8	4130 - Aspen	Poletimber Well	25.8	50	51-80	hold until next year of entry
9	4136 - Aspen, Mixed Conifer	Sapling Well	17.6	18	Unspecified	
10	42210 - Natural Red Pine	Sawtimber Well	3.5	86	Unspecified	up on a rock and not accessable
11	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	5.3	79	51-80	
12	4134 - Aspen, Spruce/Fir	Sapling Well	78.9	27	Unspecified	Many rocks in stand. Rock tops have some conifer and aspen left. Most of stand 2-3 inch aspen.
13	4130 - Aspen	Sapling Well	29.3	28	Unspecified	
15	4130 - Aspen	Sapling Well	38.2	7	Unspecified	
16	4134 - Aspen, Spruce/Fir	Sapling Well	7.1	17	Unspecified	
17	4134 - Aspen, Spruce/Fir	Sapling Well	17.9	7	Unspecified	
18	4134 - Aspen, Spruce/Fir	Sapling Well	38.7	15	Unspecified	Rocky, rock bluffs
19	4134 - Aspen, Spruce/Fir	Sapling Well	26.0	8	Unspecified	

S t			Crystal Falls Mgt. Unit Report 8 – Forested Stands			Stands Compartment: 87 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	6120 - Lowland Cedar	Poletimber Well	3.6	79	51-80	Lots of tag alder.
21	6120 - Lowland Cedar	Poletimber Well	30.4	80	81-110	Mostly cedar. Creek runs through. Some of the non cedar areas have been cut with not much regen.
22	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	2.8	74	Unspecified	Old but small diameter, 2-6 inches and 20-25 feet tall.
23	4134 - Aspen, Spruce/Fir	Sapling Well	24.4	38	Unspecified	
24	4119 - Mixed Northern Hardwoods	Poletimber Well	14.0	87	51-80	Ironwood regeneration, leatherwood.
25	42210 - Natural Red Pine	Sawtimber Well	9.5	74	51-80	This stand was cut 8 years ago. Aspen removed, pine thinned. Red, white and jack pine, oak residual.
26	4130 - Aspen	Sapling Well	13.2	15	Unspecified	conifers mostly on south edge.
27	4133 - Aspen, Mixed Pine	Sapling Well	4.2	27	Unspecified	
28	4130 - Aspen	Poletimber Well	3.8	38	Unspecified	Red pine inclusion on right side of road.
30	4130 - Aspen	Sapling Well	70.2	6	Unspecified	Lots of cedar sprigs. Rock outcrop inclusions.
31	4119 - Mixed Northern Hardwoods	Poletimber Well	35.9	87	51-80	
32	4140 - Other Upland Deciduous	Poletimber Well	1.4	87	81-110	
33	4119 - Mixed Northern Hardwoods	Poletimber Well	61.5	87	111-140	Some areas very thick, some very thin. More white birch in the south, looks good but old and large and should be cut. Beech and black ash on south of stand.
34	4130 - Aspen	Poletimber Well	10.5	38	Unspecified	Aspen and hardwood regeneration throughout.
35	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	11.5	79	81-110	More cedar in middle of stand.
36	4130 - Aspen	Sapling Well	12.5	15	Unspecified	
37	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	17.2	79	51-80	B. ash understory regeneration.

S t	Crystal Falls Mgt. Unit			Report 8	– Forested	Stands Compartment: 87 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
38	4115 - Y.Birch, Hemlock NH	Poletimber Well	43.9	87	111-140	A few spruce in understory.
39	4112 - Maple, Beech, Cherry Association	Poletimber Well	3.6	87	111-140	
40	4110 - Sugar Maple Association	Poletimber Well	176.9	87	51-80	Ironwood 3-5 feet tall everywhere.
42	6120 - Lowland Cedar	Poletimber Well	23.5	79	141-170	Some areas 100% cedar, then b. ash then mixed. Grassy where ther is more black ash.
43	6115 - Lowland Ash	Poletimber Well	13.1	79	Unspecified	Ash swale.
44	6120 - Lowland Cedar	Poletimber Well	13.9	79	51-80	
45	4130 - Aspen	Sapling Well	38.1	25	Unspecified	Hemlock and a few other conifers. Hilly.
46	4134 - Aspen, Spruce/Fir	Sapling Well	42.3	16	Unspecified	Scattered clumps of conifers.
47	4110 - Sugar Maple Association	Poletimber Well	23.9	87	111-140	
48	6124 - Lowland Spruce- Fir	Poletimber Well	5.2	79	51-80	
49	4134 - Aspen, Spruce/Fir	Poletimber Well	10.2	38	Unspecified	
50	4136 - Aspen, Mixed Conifer	Sapling Well	11.7	5	Unspecified	
51	4193 - Birch, Aspen	Sawtimber Well	17.7	87	81-110	Plan to look at this stand with TMS to determine if a cut is recommended. May want to take out paper birch.
52	4134 - Aspen, Spruce/Fir	Sapling Well	5.3	38	Unspecified	
53	4110 - Sugar Maple Association	Sawtimber Well	75.3	87	111-140	
54	4134 - Aspen, Spruce/Fir	Sapling Well	38.1	8	Unspecified	
55	4134 - Aspen, Spruce/Fir	Sapling Well	18.2	27	Unspecified	
56	6120 - Lowland Cedar	Poletimber Well	2.8	79	81-110	

S t	Crystal Fall	Crystal Falls Mgt. Unit			B – Forested	Stands Compartment: 87 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
57	6122 - Black Spruce	Poletimber Well	2.6	79	51-80	
58	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	6.6	79	81-110	
59	4115 - Y.Birch, Hemlock NH	Sawtimber Well	122.0	87	111-140	Heavy sedge. Aspen, oak and hemlock present.
60	6122 - Black Spruce	Poletimber Well	3.1	79	Unspecified	
61	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	5.3	82	81-110	This has a lot of Black Ash but other species as well . My concern is the culvert by the road and if there is a creek here or not.
62	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	10.6	84	81-110	Lots of blowdown. Spruce and other regeneration present.
63	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Medium	14.2	82	51-80	This is scattered and there is a lot of tag alder in here.
64	6122 - Black Spruce	Poletimber Well	24.5	82	81-110	A lot of blowdown. Spruce/fir regen.
65	4130 - Aspen	Sapling Well	41.3	25	Unspecified	
66	4110 - Sugar Maple Association	Poletimber Well	6.0	87	81-110	
67	4134 - Aspen, Spruce/Fir	Poletimber Well	20.8	54	51-80	
69	4134 - Aspen, Spruce/Fir	Poletimber Well	7.8	25	Unspecified	
70	4130 - Aspen	Sapling Well	11.5	2	Unspecified	Stand harvested 11/12/13 with Hingsight Aspen sale #12-013-11- 01.
71	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Poor	19.7	81	Unspecified	
72	4134 - Aspen, Spruce/Fir	Sapling Well	5.7	20	Unspecified	
73	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	66.4	89	51-80	
74	4136 - Aspen, Mixed Conifer	Sapling Well	9.1	20	Unspecified	

S t a n d	Crystal Falls Mgt. Unit			Report 8 – Forested Stands		Ads Compartment: 87 Year of Entry: 2015
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
75	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	21.9	87	111-140	Some blown down and ddead, lots of cankers.
76	4134 - Aspen, Spruce/Fir	Poletimber Well	7.7	25	Unspecified	

Compartment: 87 Year of Entry: 2015



Stand	Cover Type	Acres	Managed Site	General Comments:
14	6220 - Alder/willow	18.6	No	
29	6220 - Alder/willow	10.1	No	
41	3302 - Low Density Conifer Trees	2.2	No	
68	6220 - Alder/willow	2.9	No	