

Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12150 Entry Year 2015 Acreage: 1,492 County Iron Management Area: Michigamme Reservoir

Revision Date: 2013-07-08

Stand Examiner:

Legal Description:

T44N-R32W sections 28, 29, 31, 32 and 33. T43N-R32W sections 4 and 5.

Identified Planning Goals:

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

Soil and topography:

Land is nearly level to hilly with a mix of Sarona soils that are excessively drained to well-drained, loamy and sandy soils on ground moraines and end moraines and Cathro soils that are irregular depressions within these moraines that are poorly drained black muck.

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

Ownership

patterns in this compartment consist mostly of State lands and timber company lands with some small private parcels and hunting camps. Lands in and around this compartment are used mainly for hunting and managed for forest products.

Unique Natural Features:

No Unique Natural Features known.

Archeological, Historical, and Cultural Features:

There are known concerns within the compartment. All proposed management activities have taken these concerns into consideration.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

Upper Holmes Lake and Holmes Creek.

Wildlife Habitat Considerations:

This compartment has had limited access until the last 30 years because of the terrain and drainages. Less than 20% of this compartment is typed lowland conifer or hardwood type, but there is potential for expansion of these types in the future. Past treatments in the aspen types have resulted in fragmentation and creation of islands of lowland types. Attempts should be made in the future to restore and expand the continuity of these types. Due to spruce budworm, natural conifer losses in addition to harvests of the spruce and fir to pre-emptively prevent losses, the remaining conifer types, hemlock, cedar, pine and sub-merchantible conifer should be retained in the uplands and lowlands to provide habitat components important to wildlife species such as; deer, bear, fisher, marten, and blackburnian warblers.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and an end moraine of coarsetextured till. There is insufficient data to determine the glacial drift thickness. The Precambrian Hemlock, Randville Dolomite, Intrusive and Archean Granite/Gneiss subcrop below the glacial drift. The Randville and the Granite/Gneiss could be used for decorative or building stone. Abandoned iron mines are located five miles to the southwest. This compartment was not previously leased for metallic exploration, but leases are located in this general area and potential may exist. The nearest gravel pit is three miles to the west, but there should be potential in the compartment. There is no economic oil and gas production in the UP.

Vehicle Access:

Survey Needs:

None.

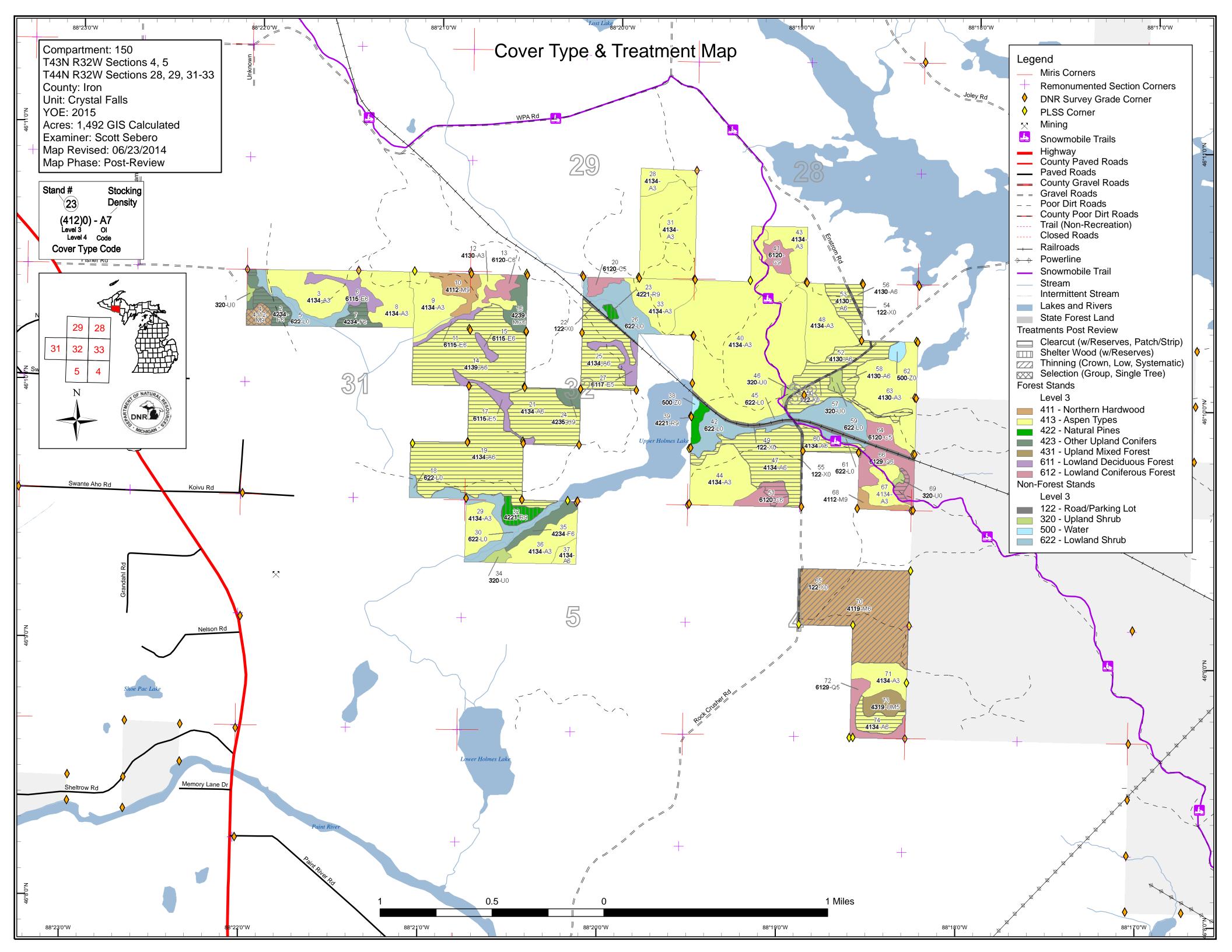
Recreational Facilities and Opportunities:

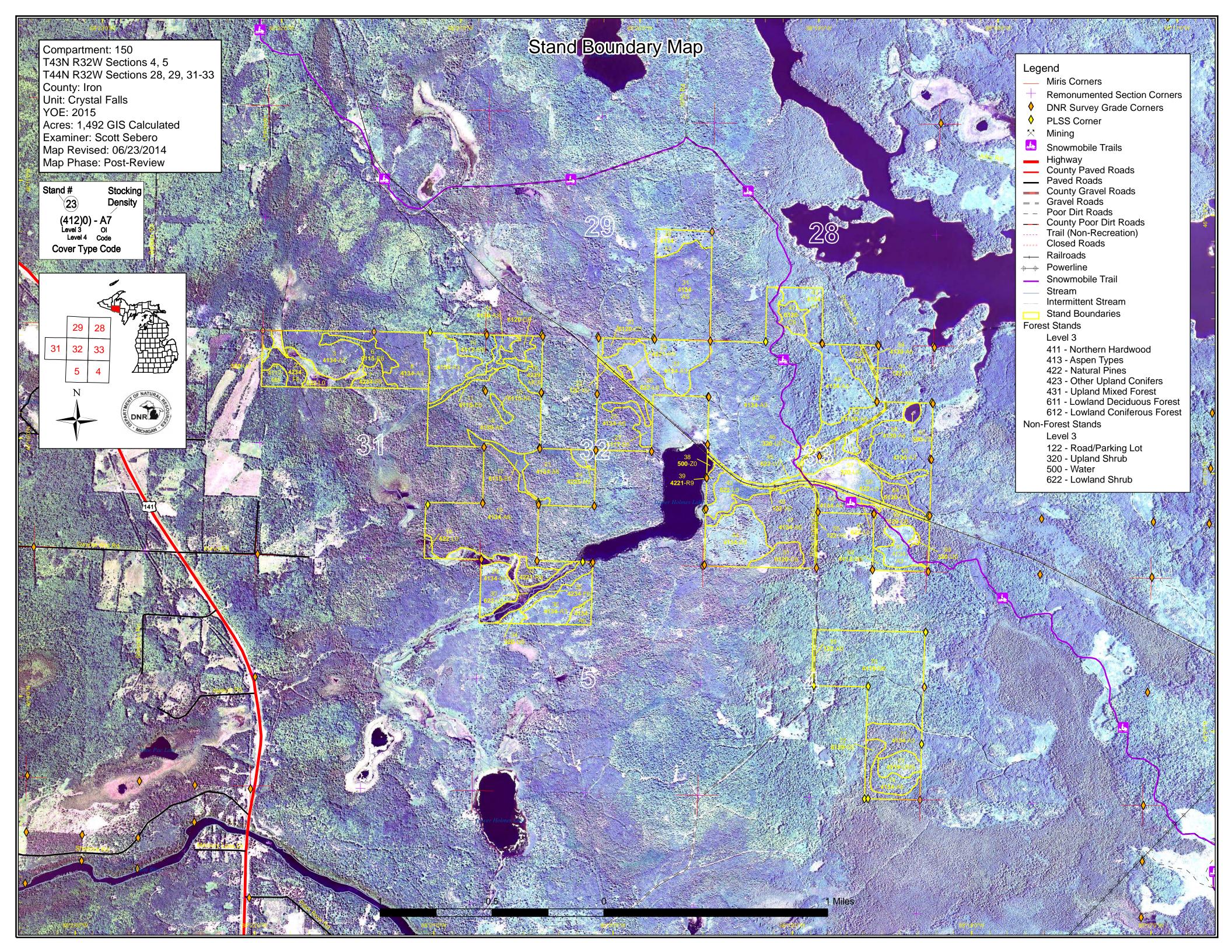
Fire Protection:

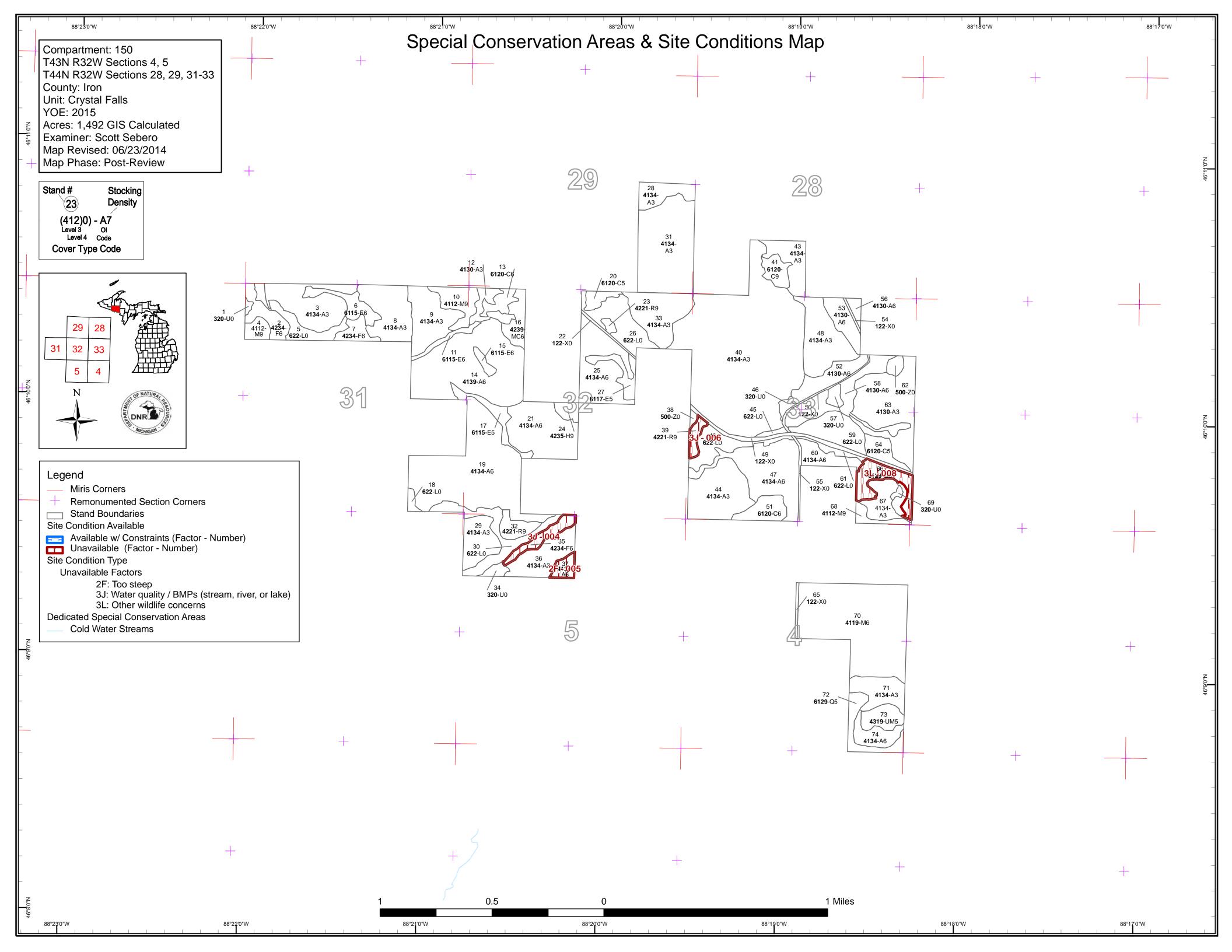
Additional Compartment Information:

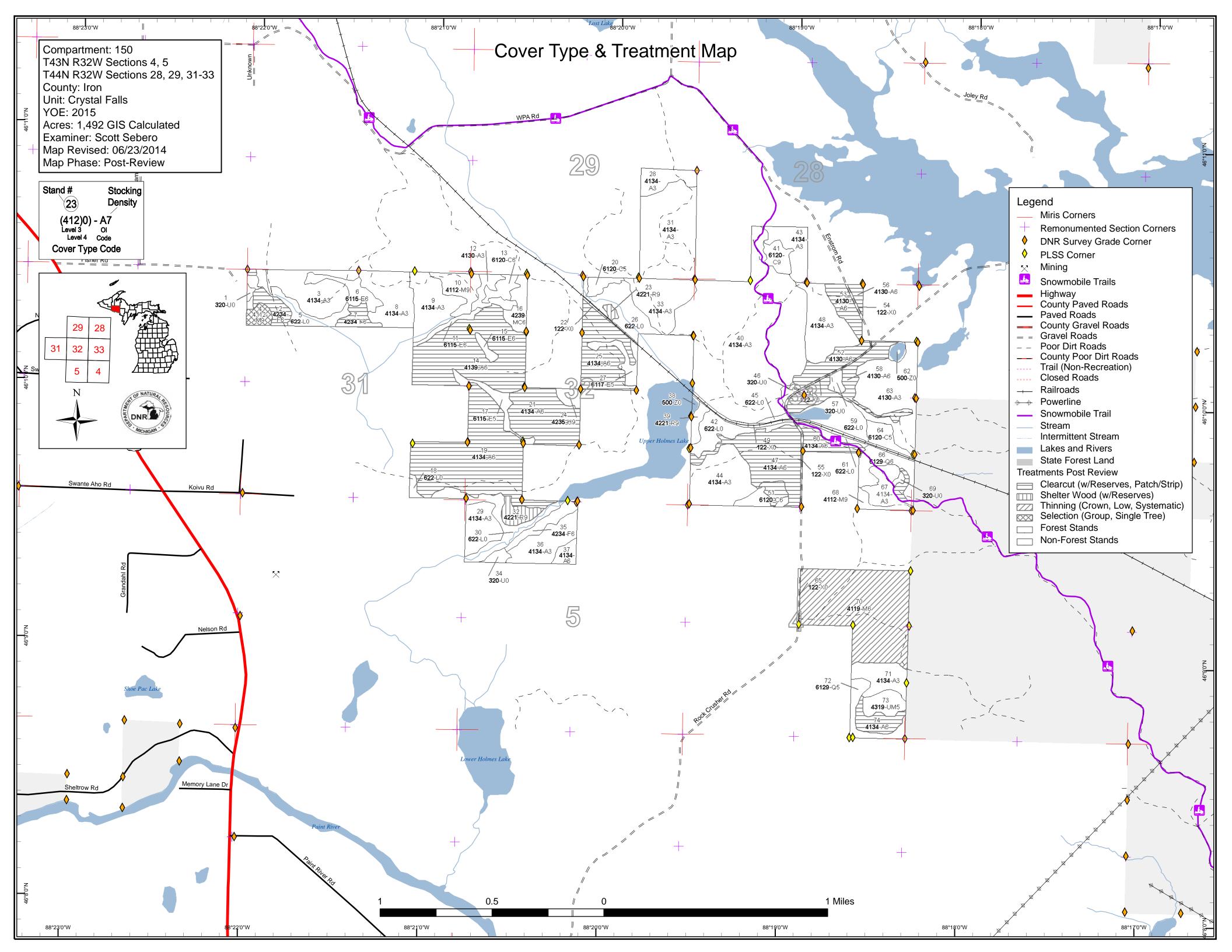
The following reports from the Inventory are attached: Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas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









Report 1 – Total Acres by Cover Type and Age Class

Crystal Falls Mgt. Unit

Scott Sebero : Examiner

Compartment 150 Year of Entry 2015



Age Class

	Nor	is of the second	83 X	20 20	63 (5) 50	67 D2	03 15 15	8	89 R		80.00 0000	5 10 10 10 10 10 10 10 10 10 10 10 10 10	100	Q. 43	67.5 57	67.50 14	Of In	D' Jrew	A A A A A A A A A A A A A A A A A A A
Aspen	0	148	87	396	0	0	71	0	0	0	332	0	0	0	0	0	0	0	1034
Cedar	0	0	0	0	0	0	0	0	0	0	41	0	0	0	0	0	0	0	41
Hemlock	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
Lowland Conifers	0	0	0	0	0	0	0	0	12	0	20	0	0	0	0	0	0	0	32
Lowland Deciduous	0	0	0	0	0	0	0	0	29	0	8	0	0	0	0	0	0	0	37
Lowland Shrub	107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	107
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	130	0	0	0	0	0	0	0	130
Red Pine	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	15
Upland Conifers	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	11
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	11
Upland Shrub	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Upland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	30
Urban	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Water	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Total	143	148	87	396	0	0	82	0	41	0	592	0	0	0	0	0	0	0	1489



Acres of Harvest

Compartment 150 Total Compartment Acres: 1,492

Commercial Harvest - 540 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method

			Contraction of the second	Delection Delection	n Clearcur	Coed Leo	Clennood	Our Contraction	lenous for	oollego	Cure, Cure,	Se porto
Aspen		398	0	0	0	0	0	0	0	0	398	1
Cedar		5	0	0	0	0	0	0	0	0	5	
Lowland Conifers		3	0	0	0	0	0	0	0	0	3	
Northern Hardwood		0	6	0	0	0	104	0	0	0	111	
Red Pine		0	0	0	0	5	0	0	0	0	5	1
Upland Spruce/Fir		18	0	0	0	0	0	0	0	0	18	1
	Total	424	6	0	0	5	104	0	0	0	540]

Proposed and Next Step Treatments by Harvest Method

			IS IS IS	Color Color	Outine C.	Contraction of the second	Contraction of the second	N. Color	inition of the second	N ² OPT	4 / 3	Sec.
Current		540	0	0	0	0	0	0	0	0	540	
	Total	540	0	0	0	0	0	0	0	0	540	



S t	Crystal	Falls Mgt. Unit		Re	eport 4	Treatme	nts	•	tment: 150 Entry: 2015	DNR DNR	
a n Treatment d Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status	
2 12150002-Cut	10.2	42340 - Upland Spruce/Fir	Poletimber Well	91	81-110	Harvest	Clearcut with Retention	42340 - Upland Spruce/Fir	Even-Aged	Draft Field Boundary	
	k, that hav	l mixed hardwood, ve one or more pul or less in buffer.									
<u>Next Step</u> Treatments:											
Acceptable_ Regen:											
		nd portion of stand constructions.	in far north u	unless	access to	cut the stand n	eeds to come from	the north. Old ne	ext step comm	ents: Regen	
Proposed Start Date	-	/2014									
Site Condition: N 4 12150004-Cut	6.1	4112 - Maple, Beech, Cherry Association	Sawtimber Well	94	111- 140	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Uneven- Aged	Draft Field Boundary	
Prescription Thin sta	and to BA		ve aspen and	l fir first	t. Protect	submerchantab	le spruce and bals		ity trees per ac	cre.	
Next Step											
Freatments:											
Acceptable											
Regen: Other Old ne	ext step co	omments: Regen s	urvey per wo	rk cons	structions.						
<u>Regen:</u> <u>Other</u> Old ne <u>Comment:</u>			urvey per wo	rk cons	structions.						
Regen: Other Old ne Comment: Proposed Start Date	10/1 /		urvey per wo	rk cons	structions.						
Regen:	10/1 /		urvey per wo Poletimber Well		81-110	Harvest	Clearcut with Retention	42340 - Upland Spruce/Fir	Even-Aged	Draft Field Boundary	
Regen: Other Old ne Comment: Proposed Start Date Site Condition: N 7 12150007-Cut Prescription Cut all	lone 7.9	/2014 42340 - Upland Spruce/Fir	Poletimber Well except oak,	91	81-110		Retention	Spruce/Fir	Ū	Boundary	
Regen: Other Old no Comment: Proposed Start Date: Site Condition: N 7 12150007-Cut Prescription Cut all Specs: hemloc Next Step N	lone 7.9	/2014 42340 - Upland Spruce/Fir I mixed hardwood,	Poletimber Well except oak,	91	81-110		Retention	Spruce/Fir	Ū	Boundary	
Regen: Old ne Comment: Old ne Proposed Start Date: Site Condition: Site Condition: N 7 12150007-Cut Prescription Cut all Specs: hemloc Next Step Treatments: Acceptable	lone 7.9	/2014 42340 - Upland Spruce/Fir I mixed hardwood,	Poletimber Well except oak,	91	81-110		Retention	Spruce/Fir	Ū	Boundary	
Regen: Old ne Other Old ne Comment: Proposed Start Date: Site Condition: N 7 12150007-Cut Prescription Cut all Specs: hemloc Next Step Steatments: Acceptable Regen: Other Old ne	10/1 / Ione 7.9 aspen and k, that hay	/2014 42340 - Upland Spruce/Fir I mixed hardwood,	Poletimber Well except oak, pwood sticks	91 that are	81-110 e 2" or gre		Retention	Spruce/Fir	Ū	Boundary	
Regen: Old ne Comment: Old ne Proposed Start Date: Site Condition: Site Condition: N 7 12150007-Cut Prescription Cut all hemloc Specs: hemloc Next Step hemloc Acceptable Regen: Other Old ne Comment: Old ne	10/1 / Ione 7.9 aspen and k, that hav	/2014 42340 - Upland Spruce/Fir I mixed hardwood, ve one or more pul	Poletimber Well except oak, pwood sticks	91 that are	81-110 e 2" or gre		Retention	Spruce/Fir	Ū	Boundary	
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Regen: Old ne Comment: Proposed Start Date: Site Condition: N 7 12150007-Cut 7 12150007-Cut Prescription Cut all Specs: hemloc Next Step hemloc Treatments: Acceptable Regen: Old ne Other Old ne Site Condition: N 14 12150014-Cut Prescription Cut all Prescription Cut all	10/1 / Ione 7.9 aspen and k, that hav ext step co 10/1 / Ione 84.6 aspen and	/2014 42340 - Upland Spruce/Fir 4 mixed hardwood, /e one or more pul omments: Regen s /2014 4139 - Aspen, Mixed Deciduous	Poletimber Well except oak, pwood sticks urvey per wo Poletimber Well except oak,	91 that are rk cons 91 that are	81-110 e 2" or gre structions. 81-110	ater DBH. Cut	Retention all mixed softwood Clearcut with Retention	Spruce/Fir , except red and v 4139 - Aspen, Mixed Deciduous	white pine, ced	Boundary ar and Draft Field Boundary	

Acceptable Regen:

<u>Other</u> Protect drainages. Old next step comments: Regen survey per work constructions. Comment:

Proposed Start Date: 10/1 /2014

Site Condition: None

t		Crystal		Re	eport 4	Treatme	ents	Compartment: 150 Year of Entry: 201 nt Cover Type Age		2 2	
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
19	12150019-Cut	100.5	4134 - Aspen, Spruce/Fir	Poletimber Well	91	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Field Boundary
<u>Pres</u> Spec			l mixed hardwood, ve one or more pu			e 2" or gre	ater DBH. Cut	t all mixed softwood	, except red and	white pine, ceo	dar and
	<u>Step</u> tments:										
<u>Acce</u> <u>Reg</u> e	eptable_ en:										
<u>Othe</u> <u>Com</u>	er Part of ment:	Big Bear s	sale, currently und	er contract.12	2-57-11	Old next	step commen	ts: Regen survey pe	er work constructi	ons.	
<u>Prop</u>	osed Start Date:	10/1 /	/2012								
<u>Site</u>	Condition: N	lone									
21	12150021-Cut	42.6	4134 - Aspen, Spruce/Fir	Poletimber Well	91	51-80	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Field Boundary
<u>Pres</u> Spec			l mixed hardwood, ve one or more pu			e 2" or gre	ater DBH. Cut	t all mixed softwood	, except red and	white pine, ceo	dar and
	<u>Step</u> tments:										
Acce Rege	eptable_ en:										
Othe		Big Bear s	sale, currently und	er contract.12	2-57-11	Old next	step commen	its: Regen survey pe	er work constructi	ons.	
Prop	osed Start Date:	10/1 /	/2012								
	osed Start Date: Condition: N	-	/2012								
<u>Site</u>		-	/2012 42210 - Natural Red Pine	Sawtimber Well	91	111- 140	Harvest	Shelterwood with Retention	42210 - Natural Red Pine	Two-Aged	Draft Field Boundary
<u>Site</u> 23	Condition: N 12150023-Cut cription Cut all 1	l one 1.9 trees havir	42210 - Natural Red Pine	Well		140			Red Pine	Ū	Boundary
Site 23 Pres Spec Next	Condition: N 12150023-Cut cription Cut all 1	l one 1.9 trees havir	42210 - Natural Red Pine ng one or more pu	Well		140		Retention	Red Pine	Ū	Boundary
Site 23 Pres Spec Next Trea	Condition: N 12150023-Cut cription Cut all f Residua Step tments: eptable	l one 1.9 trees havir	42210 - Natural Red Pine ng one or more pu	Well		140		Retention	Red Pine	Ū	Boundary
Site 23 Pres Spec Next Trea Acce Rege	Condition: N 12150023-Cut Image: Cut all the second se	lone 1.9 arees havir al pine BA	42210 - Natural Red Pine ng one or more pu will be 30 - 50.	Well	s, excel	140 ot red and	white pine, ce	Retention	Red Pine ak. Cut all marke	d red and whi	Boundary te pine.
Site 23 Pres Spec Next Trea Acce Rege Othe Com	Condition: N 12150023-Cut Image: Cut all the second se	1.9 1.9 trees havir al pine BA	42210 - Natural Red Pine ng one or more pu will be 30 - 50. s railroad tracks to is.	Well	s, excel	140 ot red and	white pine, ce	Retention	Red Pine ak. Cut all marke	d red and whi	Boundary te pine.
Site 23 Pres Spec Next Trea Acce Rege Othe Com Prop	Condition: N 12150023-Cut Image: Cut all the second se	1.9 1.9 trees havin al pine BA ve to cross onstruction . 10/1 /	42210 - Natural Red Pine ng one or more pu will be 30 - 50. s railroad tracks to is.	Well	s, excel	140 ot red and	white pine, ce	Retention	Red Pine ak. Cut all marke	d red and whi	Boundary te pine.
Site 23 Press Spect Next Trea Accee Rege Othe Com Prop Site	Condition: N 12150023-Cut cription Cut all f Residua Step tments: eptable en: en: work cc osed Start Date:	1.9 1.9 trees havin al pine BA ve to cross onstruction . 10/1 /	42210 - Natural Red Pine ng one or more pu will be 30 - 50. s railroad tracks to is.	Well	s, excep	140 ot red and	white pine, ce	Retention	Red Pine ak. Cut all marke	d red and whi	Boundary te pine.
Site 23 Press Spect Next Trea Accee Rege Com Prop Prop Site 25	Condition: N 12150023-Cut cription Cut all f Residual Step tments: cription Cut all f Residual Step tments: work cc osed Start Date: Condition: N 12150025-Cut cription Cut all f	trees having al pine BA ve to cross onstruction 10/1 / lone 39.5	42210 - Natural Red Pine ng one or more pu will be 30 - 50. s railroad tracks to is. /2014 4134 - Aspen, Spruce/Fir	Well Ipwood sticks harvest. Su Poletimber Well except oak,	s, excep mmer c 91 that are	140 ot red and cut to allow 81-110	white pine, ce v stand scarific Harvest	Retention edar, hemlock and or cation during harves	Red Pine ak. Cut all marke t. Old next step o 4134 - Aspen, Spruce/Fir	d red and whit comments: Re	Boundary te pine. gen survey per Draft Field Boundary
Site 23 Press Spect Next Trea Accee Reget Othe Com Prop Site 25 Press Spect Next	Condition: N 12150023-Cut cription Cut all f Residual Step tments: cription Cut all f Residual Step tments: work cc osed Start Date: Condition: N 12150025-Cut cription Cut all f	trees having al pine BA ve to cross onstruction 10/1 / lone 39.5	42210 - Natural Red Pine ng one or more pu will be 30 - 50. s railroad tracks to is. /2014 4134 - Aspen, Spruce/Fir d mixed hardwood,	Well Ipwood sticks harvest. Su Poletimber Well except oak,	s, excep mmer c 91 that are	140 ot red and cut to allow 81-110	white pine, ce v stand scarific Harvest	Retention edar, hemlock and or cation during harves Clearcut with Retention	Red Pine ak. Cut all marke t. Old next step o 4134 - Aspen, Spruce/Fir	d red and whit comments: Re	Boundary te pine. gen survey per Draft Field Boundary
Site 23 Pres Spec Next Trea Accee Rege Othe Com Prop Site 25 Pres Spec Next Trea	Condition: N 12150023-Cut Cription Cut all f Step tments: Patable en: Will have ment: work co osed Start Date: Condition: N 12150025-Cut Cription Cut all a hemloc Step tments: Patable	trees having al pine BA ve to cross onstruction 10/1 / lone 39.5	42210 - Natural Red Pine ng one or more pu will be 30 - 50. s railroad tracks to is. /2014 4134 - Aspen, Spruce/Fir d mixed hardwood,	Well Ipwood sticks harvest. Su Poletimber Well except oak,	s, excep mmer c 91 that are	140 ot red and cut to allow 81-110	white pine, ce v stand scarific Harvest	Retention edar, hemlock and or cation during harves Clearcut with Retention	Red Pine ak. Cut all marke t. Old next step o 4134 - Aspen, Spruce/Fir	d red and whit comments: Re	Boundary te pine. gen survey per Draft Field Boundary
Site 23 Press Spect Nexti Trea Accee Reget Othe Com Prop Site 25 Press Spect Nexti Trea Accee Reget Othe Com Dress Spect Spect Spect Spect Spect Spect Com Dress Spect Spe	Condition: N 12150023-Cut Cription Cut all f Residual Step tments: Patable Pan: Will have ment: work co osed Start Date: Condition: N 12150025-Cut Cription Cut all a hemloc Step tments: Patable Pan: Patable	Intervet of the second	42210 - Natural Red Pine ng one or more pu will be 30 - 50. s railroad tracks to is. /2014 4134 - Aspen, Spruce/Fir d mixed hardwood,	Well Ipwood sticks harvest. Su Poletimber Well except oak, Ipwood sticks	s, excep mmer o 91 that are	140 ot red and cut to allow 81-110 e 2" or gre	white pine, ce v stand scarific Harvest ater DBH. Cut	Retention edar, hemlock and or cation during harves Clearcut with Retention	Red Pine ak. Cut all marke t. Old next step o 4134 - Aspen, Spruce/Fir	d red and whit comments: Re	Boundary te pine. gen survey per Draft Field Boundary
Site 23 Press Spec Next Trea Accee Rege Othe Com Site Prop Site Prop Site Com Accee Rege Othe Com Com Com Com Com Com Com Com Com Com	Condition: N 12150023-Cut Image: Cut all fragments: sz: Cut all fragments: Step Email fragments: sptable Will have the source of the sourc	trees having al pine BA ve to cross onstruction 10/1 / lone 39.5 aspen and k, that hav	42210 - Natural Red Pine ng one or more pu will be 30 - 50. s railroad tracks to is. /2014 4134 - Aspen, Spruce/Fir d mixed hardwood, /e one or more pul	Well Ipwood sticks harvest. Su Poletimber Well except oak, Ipwood sticks	s, excep mmer o 91 that are	140 ot red and cut to allow 81-110 e 2" or gre	white pine, ce v stand scarific Harvest ater DBH. Cut	Retention edar, hemlock and or cation during harves Clearcut with Retention	Red Pine ak. Cut all marke t. Old next step o 4134 - Aspen, Spruce/Fir	d red and whit comments: Re	Boundary te pine. gen survey per Draft Field Boundary

S t		Crysta	l Falls Mgt. Unit		Report 4 Treatments					ment: 150 Entry: 2015	OF NATURAL
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
32	12150032-Cut	2.8	42210 - Natural Red Pine	Sawtimber Well	91	111- 140	Harvest	Shelterwood with Retention	42210 - Natural Red Pine	Two-Aged	Draft Field Boundary
<u>Pres</u> Spec			ng one or more pul esidual BA will be 3					dar, hemlock and oa	ak. Cut red and w	/hite pine, exce	ept marked
	<u>t Step</u> .tments:										
<u>Acce</u> <u>Reg</u> e	eptable en:										
<u>Othe</u> Com	er Old ne iment:	ext step co	omments: Scarify s	tand to prom	iote nat	tural rege	n of pine.				
<u>Prop</u>	osed Start Date	<u>.</u> 10/1	/2013								
<u>Site</u>	Condition: N	lone									
47	12150047-Cut	47.6	4134 - Aspen, Spruce/Fir	Poletimber Well	91	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary
<u>Pres</u> Spec			d mixed hardwood, ve one or more pul			e 2" or gre	eater DBH. Cu	t all mixed softwood,	except red and v	vhite pine, ced	ar and
	<u>t Step</u> <u>ttments:</u>										
<u>Acce</u> Reg	eptable en:										
<u>Othe</u> Com	er Protect	small spr	uce fir along lowlar	nd to the nort	th. Old	d next ster	o comments: R	legen survey per wo	rk constructions.		
Prop	osed Start Date	<u> </u>	/2014								
<u>Site</u>	Condition: N	lone									
51	12150051-Cut	5.4	6120 - Lowland Cedar	Poletimber Well	94	81-110	Harvest	Clearcut with Retention	6120 - Lowland Cedar	Even-Aged	Draft Field Boundary
Pres Spec			d mixed hardwood, ve one or more pul			e 2" or gre	eater DBH. Cu	t all mixed softwood,	except red and v	vhite pine, ced	ar and
	<u>t Step</u> <u>tments:</u>										
<u>Acce</u> Reg	eptable_ en:										
<u>Othe</u> Com	er Wildlife Iment:	Division	to be present for lin	e placement	at sale	e setup. C	Old next step co	omments: regen sur	vey per work cons	structions.	
Prop	osed Start Date	<u>:</u> 10/1	/2014								
<u>Site</u>	Condition: N	lone									
52	12150052-Cut	15.8	4130 - Aspen	Poletimber Well	50	51-80	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Draft Field Boundary
<u>Pres</u> Spec			d mixed hardwood, ve one or more pul			e 2" or gre	eater DBH. Cu	t all mixed softwood,	except red and v	vhite pine, ced	ar and
	<u>t Step</u> ttments:										
<u>Acce</u> Reg	eptable en:										
Othe		ext step co	omments: Regen s	urvey per wo	rk cons	structions.					
Prop	osed Start Date	<u> </u>	/2014								
<u>Site</u>	Condition: N	lone									

t		Crystal	Falls Mgt. Unit		Re	eport 4	Treatmer	nts	•	tment: 150 Entry: 2015	DR DR
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
53	12150053-Cut	12.5	4130 - Aspen	Poletimber Well	50	51-80	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Draft Field Boundary
<u>Pres</u> Spec			mixed hardwood, e one or more pu			e 2" or grea	ater DBH. Cut	all mixed softwood,	except red and v	white pine, ced	ar and
	<u>t Step</u> atments:										
<u>Acce</u> Rege	eptable_ en:										
<u>Othe</u> Com	er Old ne ament:	ext step co	mments: Regen s	urvey per wo	rk cons	structions.					
<u>Prop</u>	osed Start Date:	10/1 /2	2014								
<u>Site</u>	Condition: N	lone									
56	12150056-Cut	3.2	4130 - Aspen	Poletimber Well	50	81-110	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Draft Field Boundary
Pres Spec			mixed hardwood, e one or more pu			e 2" or grea	ater DBH. Cut	all mixed softwood,	except red and v	white pine, ced	ar and
	<u>t Step</u> atments:										
<u>Acce</u> Rege	eptable_ en:										
Othe		ext step co	mments: regen su	urvey per worl	c cons	tructions.					
<u>Prop</u>	osed Start Date:	10/1 /2	2014								
<u>Site</u>	Condition: N	lone									
_						54.00					
58	12150058-Cut	27.8	4130 - Aspen	Poletimber Well	50	51-80	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Draft Field Boundary
	cription Cut all	aspen and		Well except oak, t	hat are				·	0	Boundary
Pres Spec	cription Cut all	aspen and	mixed hardwood,	Well except oak, t	hat are			Retention	·	0	Boundary
Pres Spec Next Trea	<u>scription</u> Cut all a cs: hemloc t <u>Step</u> ttments: eptable	aspen and	mixed hardwood,	Well except oak, t	hat are			Retention	·	0	Boundary
Pres Spec Next Trea Acce Rege	<u>scription</u> Cut all s cs: hemloc t Step timents: eptable en: er Old ne	aspen and k, that hav	mixed hardwood,	Well except oak, t lpwood sticks	hat are	e 2" or grea		Retention	·	0	Boundary
Pres Spec Next Trea Acce Rege Othe Com	<u>scription</u> Cut all a cs: hemloc t <u>Step</u> t <u>tments:</u> eptable en: en: Old ne iment:	aspen and k, that hav ext step cor	mixed hardwood, e one or more pu mments: Regen s	Well except oak, t lpwood sticks	hat are	e 2" or grea		Retention	·	0	Boundary
Pres Spec Next Trea Acce Rege Othe Com	<u>scription</u> Cut all a cs: hemloc t <u>Step</u> atments: en: en: onent: posed Start Date:	aspen and k, that hav ext step con	mixed hardwood, e one or more pu mments: Regen s	Well except oak, t lpwood sticks	hat are	e 2" or grea		Retention	·	0	Boundary
Pres Spec Next Trea Acce Rege Othe Com	<u>scription</u> Cut all a cs: hemloc t <u>Step</u> t <u>tments:</u> eptable en: en: Old ne iment:	aspen and k, that hav ext step con	mixed hardwood, e one or more pu mments: Regen s 2014 4134 - Aspen,	Well except oak, t pwood sticks survey per woo	hat an	e 2" or grea		Retention all mixed softwood,	except red and v	0	Boundary ar and Draft Field
Pres Spec Next Trea Acce Regu Othe Com Prop Site 60	acription Cut all a cs: hemloc t Step atments: eptable en: Old ne ment: cosed Start Date: cosed Start	ext step col 10/1 /2 12.0 aspen and	mixed hardwood, e one or more pu mments: Regen s 2014 4134 - Aspen, Spruce/Fir	Well except oak, t pwood sticks survey per wo Poletimber Well except oak, t	hat are rk cons 50	e 2" or grea structions. 81-110	ater DBH. Cut Harvest	Retention all mixed softwood,	except red and v 4134 - Aspen, Spruce/Fir	white pine, ced	Boundary ar and Draft Field Boundary
Press Spect Next Trea Accee Regg Othe Com Prop Site 60 Press Spect Next	scription cs: Cut all a hemloc tStep atments: sptable en: en: oosed Start Date: oosed Start Date: condition: 12150060-Cut scription cs: Cut all a hemloc tstep	ext step col 10/1 /2 12.0 aspen and	mixed hardwood, e one or more pu mments: Regen s 2014 4134 - Aspen, Spruce/Fir mixed hardwood,	Well except oak, t pwood sticks survey per wo Poletimber Well except oak, t	hat are rk cons 50	e 2" or grea structions. 81-110	ater DBH. Cut Harvest	Retention all mixed softwood, Clearcut with Retention	except red and v 4134 - Aspen, Spruce/Fir	white pine, ced	Boundary ar and Draft Field Boundary
Press Spec Next Trea Accce Com Prop Site 60 Press Spec Next Trea Acce	acription Cut all a hemioc cs: hemioc t Step hemioc atments: hemioc aptable one ar Old ne bosed Start Date: hemioc acription Cut all a acription Cut all a acription Cut all a acription Cut all a benetic hemioc acription Cut all a benetic hemioc acription Cut all a benetic hemioc	ext step col 10/1 /2 12.0 aspen and	mixed hardwood, e one or more pu mments: Regen s 2014 4134 - Aspen, Spruce/Fir mixed hardwood,	Well except oak, t pwood sticks survey per wo Poletimber Well except oak, t	hat are rk cons 50	e 2" or grea structions. 81-110	ater DBH. Cut Harvest	Retention all mixed softwood, Clearcut with Retention	except red and v 4134 - Aspen, Spruce/Fir	white pine, ced	Boundary ar and Draft Field Boundary
Press Spec Next Trea Accee Regu Othe Com Prop Site 60 Press Spec Next Trea Accee Regu Othe	scription cs: Cut all a hemloc t Step atments: sptable en: en: oosed Start Date: oosed Start Date: ccription cs: 12150060-Cut scription cs: t Step timents: carption cs: t Step timents: eptable en:	aspen and k, that have ext step cor 10/1 /2 lone 12.0 aspen and k, that have	mixed hardwood, e one or more pu mments: Regen s 2014 4134 - Aspen, Spruce/Fir mixed hardwood, e one or more pu	Well except oak, t pwood sticks survey per wo Poletimber Well except oak, t pwood sticks	hat and rk cons 50 hat are	e 2" or grea structions. 81-110 e 2" or grea	ater DBH. Cut Harvest ater DBH. Cut	Retention all mixed softwood, Clearcut with Retention	except red and v 4134 - Aspen, Spruce/Fir except red and v	white pine, ced	Boundary ar and Draft Field Boundary
Press Spec Next Trea Accee Com Prop Site 60 Press Spec Next Trea Accee Regg	scription (ss: Cut all a hemloc t Step atments: sptable en: eptable en: oosed Start Date: oosed Start Date: cs: Condition: 12150060-Cut scription cs: tStep timents: eptable en: scription cs: Step timents: eptable en: eptable en: os scription Cut all a hemloc	ext step con the that have ext step con the that the that k, that have er cut to ave	mixed hardwood, e one or more pu mments: Regen s 2014 4134 - Aspen, Spruce/Fir mixed hardwood, e one or more pu oid conflicts with	Well except oak, t pwood sticks survey per wo Poletimber Well except oak, t pwood sticks	hat and rk cons 50 hat are	e 2" or grea structions. 81-110 e 2" or grea	ater DBH. Cut Harvest ater DBH. Cut	Retention all mixed softwood, Clearcut with Retention all mixed softwood,	except red and v 4134 - Aspen, Spruce/Fir except red and v	white pine, ced	Boundary ar and Draft Field Boundary

Crystal Falls Mgt. Unit **Report 4** -- Treatments Compartment: 150 s Year of Entry: 2015 t а Treatment Acres Stand Size Stand BA Treatment Treatment Cover Type Age Approval n Objective Name CoverType Density Age Range Type Method Structure Status d 12150066-Cut 6129 - Mixed 51-80 Clearcut with 6129 - Mixed Draft Field 66 3.2 Poletimber 94 Harvest Even-Aged **Coniferous Lowland** Well Retention Coniferous Boundary Forest Lowland Forest Prescription Cut all aspen and mixed hardwood, except oak, that are 2" or greater DBH. Cut all mixed softwood, except red and white pine, cedar and Specs: hemlock, that have one or more pulpwood sticks. Next Step Treatments: Acceptable Regen: Summer cut to avoid conflict with snowmobile trail. Old next step comments: Regen survey per work constructions. Other Comment: Proposed Start Date: 10/1 /2014 Site Condition: None 70 12150070-Cut 104.4 4119 - Mixed Poletimber 94 111-Harvest **Crown Thinning** 4119 - Mixed Even-Aged Draft Field Northern Hardwoods Well 140 Northern Boundary Hardwoods Prescription Thin stand to BA of 70 - 90. Remove aspen and fir first. Protect submerchantable spruce and balsam. Specs: Next Step Treatments: Acceptable Regen: Other Comment: Proposed Start Date: 10/1 /2014 Site Condition: None 12150074-Cut 4134 - Aspen, Poletimber 91 81-110 Clearcut with 4134 - Aspen, Draft Field 74 11.6 Harvest Even-Aged Spruce/Fir Well Retention Spruce/Fir Boundary Prescription Cut all aspen and mixed hardwood, except oak, 2" or greater DBH. Cut all mixed softwood, except red and white pine, cedar and hemlock, that Specs: have one or more pulpwood sticks. Next Step Treatments: Acceptable Regen: <u>Other</u> Old next step comments: Regen survey per work constructions. Comment: Proposed Start Date: 10/1 /2014 Site Condition: None

Total Treatment Acreage Proposed: 539.6

Scott Sebero : Examiner

Compartment: 150 Year of Entry: 2015

Dominant Site Conditions

	3J	3L
Aspen		
Cedar		
Hemlock		
Lowland Conifers		17
Lowland Deciduous		
Lowland Shrub		
Northern Hardwood		
Red Pine	5	
Upland Conifers		
Upland Mixed Forest		
Upland Shrub		
Upland Spruce/Fir	10	
Urban		
Water		
Total Forested Acres	14	17
Relative Percent		

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: buffer for Holmes cr	eek					
5	Unavailable	2F: Too steep	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: steep rocky hill side.						

	_	l Falls Mgt. Unit ebero : Examiner		Report 5 – Site Cor	nditions	Compartment: 150 Year of Entry: 2015		
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							
8	Unavailable	3L: Other wildlife concerns	17	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: winter cover.							

Scott Sebero : Examiner

Compartment: 150 Year of Entry: 2015

Dominant Site Conditions

	3J	3L
Aspen		
Cedar		
Hemlock		
Lowland Conifers		17
Lowland Deciduous		
Lowland Shrub		
Northern Hardwood		
Red Pine	5	
Upland Conifers		
Upland Mixed Forest		
Upland Shrub		
Upland Spruce/Fir	10	
Urban		
Water		
Total Forested Acres	14	17
Relative Percent		

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: buffer for Holmes cr	eek					
5	Unavailable	2F: Too steep	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: steep rocky hill side.						

Crystal Falls Mgt. Unit Scott Sebero : Examiner				Report 5 – Site Cor	nditions	Compartment: 150 Year of Entry: 2015		
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							
8	Unavailable	3L: Other wildlife concerns	17	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: winter cover.							

Scott Sebero : Examiner

Compartment: 150 Year of Entry: 2015

Dominant Site Conditions

	3J	3L
Aspen		
Cedar		
Hemlock		
Lowland Conifers		17
Lowland Deciduous		
Lowland Shrub		
Northern Hardwood		
Red Pine	5	
Upland Conifers		
Upland Mixed Forest		
Upland Shrub		
Upland Spruce/Fir	10	
Urban		
Water		
Total Forested Acres	14	17
Relative Percent		

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: buffer for Holmes cr	eek					
5	Unavailable	2F: Too steep	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: steep rocky hill side.						

Crystal Falls Mgt. Unit Scott Sebero : Examiner				Report 5 – Site Cor	nditions	Compartment: 150 Year of Entry: 2015		
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							
8	Unavailable	3L: Other wildlife concerns	17	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: winter cover.							

Scott Sebero : Examiner

Compartment: 150 Year of Entry: 2015

Dominant Site Conditions

	3J	3L
Aspen		
Cedar		
Hemlock		
Lowland Conifers		17
Lowland Deciduous		
Lowland Shrub		
Northern Hardwood		
Red Pine	5	
Upland Conifers		
Upland Mixed Forest		
Upland Shrub		
Upland Spruce/Fir	10	
Urban		
Water		
Total Forested Acres	14	17
Relative Percent		

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: buffer for Holmes cr	eek					
5	Unavailable	2F: Too steep	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: steep rocky hill side.						

Crystal Falls Mgt. Unit Scott Sebero : Examiner				Report 5 – Site Cor	nditions	Compartment: 150 Year of Entry: 2015		
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments:							
8	Unavailable	3L: Other wildlife concerns	17	Unspecified	Unspecified	Unspecified	Unspecified	
	Comments: winter cover.							



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

Year of Entry



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.

Conservation Type Description Area	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
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Crystal Falls Mg	t. Unit	
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Report 8 – Forested Stands



t						Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	42340 - Upland Spruce/Fir	Poletimber Well	12.7	91	81-110	
3	4134 - Aspen, Spruce/Fir	Sapling Well	34.8	16	Unspecified	
4	4112 - Maple, Beech, Cherry Association	Sawtimber Well	6.1	94	111-140	
6	6115 - Lowland Ash	Poletimber Well	11.3	77	51-80	
7	42340 - Upland Spruce/Fir	Poletimber Well	7.8	91	81-110	
8	4134 - Aspen, Spruce/Fir	Sapling Well	30.3	28	Unspecified	
9	4134 - Aspen, Spruce/Fir	Sapling Well	28.1	12	Unspecified	
10	4112 - Maple, Beech, Cherry Association	Sawtimber Well	14.4	94	81-110	
11	6115 - Lowland Ash	Poletimber Well	4.5	91	81-110	
12	4130 - Aspen	Sapling Well	8.8	20	Unspecified	
13	6120 - Lowland Cedar	Poletimber Well	6.8	91	81-110	
14	4139 - Aspen, Mixed Deciduous	Poletimber Well	84.6	91	81-110	
15	6115 - Lowland Ash	Poletimber Well	3.1	91	51-80	
16	42390 - Mixed Non- Pine Upland Conifers	Poletimber Well	11.2	50	51-80	
17	6115 - Lowland Ash	Poletimber Medium	9.7	77	1-50	
19	4134 - Aspen, Spruce/Fir	Poletimber Well	100.6	91	81-110	
20	6120 - Lowland Cedar	Poletimber Medium	5.2	91	1-50	
21	4134 - Aspen, Spruce/Fir	Poletimber Well	42.6	91	51-80	

S t	Crystal Falls Mgt. Unit t			Report 8	- Forested Stan	ds Compartment: 150 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	42210 - Natural Red Pine	Sawtimber Well	1.8	91	111-140	
24	42350 - Upland Hemlock	Sawtimber Well	4.9	91	111-140	
25	4134 - Aspen, Spruce/Fir	Poletimber Well	39.5	91	81-110	
27	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	8.8	77	1-50	
28	4134 - Aspen, Spruce/Fir	Sapling Well	13.4	8	Unspecified	
29	4134 - Aspen, Spruce/Fir	Sapling Well	18.8	20	Unspecified	
31	4134 - Aspen, Spruce/Fir	Sapling Well	65.0	29	Unspecified	
32	42210 - Natural Red Pine	Sawtimber Well	8.6	91	111-140	
33	4134 - Aspen, Spruce/Fir	Sapling Well	30.7	8	Unspecified	
35	42340 - Upland Spruce/Fir	Poletimber Well	9.7	91	81-110	
36	4134 - Aspen, Spruce/Fir	Sapling Well	23.7	17	Unspecified	
37	4134 - Aspen, Spruce/Fir	Poletimber Well	5.5	91	81-110	
39	42210 - Natural Red Pine	Sawtimber Well	4.8	94	111-140	
40	4134 - Aspen, Spruce/Fir	Sapling Well	201.4	25	Unspecified	
41	6120 - Lowland Cedar	Sawtimber Well	8.6	94	81-110	
43	4134 - Aspen, Spruce/Fir	Sapling Well	17.5	9	Unspecified	
44	4134 - Aspen, Spruce/Fir	Sapling Well	38.4	7	Unspecified	
47	4134 - Aspen, Spruce/Fir	Poletimber Well	47.5	91	81-110	

S t	Crystal Falls	Crystal Falls Mgt. Unit		Report 8	- Forested Stand	S Compartment: 150 Year of Entry: 2015
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	4134 - Aspen, Spruce/Fir	Sapling Well	34.1	9	Unspecified	
51	6120 - Lowland Cedar	Poletimber Well	12.2	94	81-110	cut tamarack and black spruce NE part of stand.
52	4130 - Aspen	Poletimber Well	15.8	50	51-80	
53	4130 - Aspen	Poletimber Well	12.5	50	51-80	
56	4130 - Aspen	Poletimber Well	3.2	50	81-110	
58	4130 - Aspen	Poletimber Well	27.8	50	51-80	
60	4134 - Aspen, Spruce/Fir	Poletimber Well	12.0	50	81-110	
63	4130 - Aspen	Sapling Well	53.7	29	Unspecified	
64	6120 - Lowland Cedar	Poletimber Medium	9.0	94	51-80	
66	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	20.4	94	51-80	Cut NE part of stand.
67	4134 - Aspen, Spruce/Fir	Sapling Well	14.0	8	Unspecified	
68	4112 - Maple, Beech, Cherry Association	Sawtimber Well	5.2	94	81-110	
70	4119 - Mixed Northern Hardwoods	Poletimber Well	104.4	94	111-140	
71	4134 - Aspen, Spruce/Fir	Sapling Well	18.3	24	Unspecified	
72	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	12.1	77	51-80	
73	4319 - Mixed Upland Forest	Poletimber Medium	11.1	91	51-80	Large rock.
74	4134 - Aspen, Spruce/Fir	Poletimber Well	11.6	91	81-110	

Compartment: 150 Year of Entry: 2015



Stand	Cover Type	Acres	Managed Site	General Comments:	
1	320 - Upland Shrub	1.0	No		
5	622 - Lowland Shrub	14.8	No		
18	622 - Lowland Shrub	2.3	No		
22	122 - Road/Parking Lot	2.0	No		
26	622 - Lowland Shrub	23.3	No		
30	622 - Lowland Shrub	22.7	No		
34	320 - Upland Shrub	3.2	No		
38	500 - Water	1.2	No		
42	622 - Lowland Shrub	17.1	No		
45	622 - Lowland Shrub	1.7	No		
46	320 - Upland Shrub	2.4	No		
49	122 - Road/Parking Lot	10.5	No		
50	122 - Road/Parking Lot	2.8	No		
54	122 - Road/Parking Lot	1.0	No		
55	122 - Road/Parking Lot	2.0	No		
57	320 - Upland Shrub	3.5	No		
59	622 - Lowland Shrub	21.7	No		
61	622 - Lowland Shrub	3.8	No		

Compartment: 150 Year of Entry: 2015



Stand	Cover Type	Acres	Managed Site	General Comments:
62	500 - Water	3.5	No	
65	122 - Road/Parking Lot	1.7	No	
69	320 - Upland Shrub	1.1	No	