

Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12148
Entry Year 2022
Acreage: 1,133
County Iron

Management Area: Michigamme Reservoir

Revision Date: 2020-10-19

Stand Examiner: Scott Sebero

Legal Description:

T43N, R32W, Sections 2 and 11 T44N, R32W, Sections 35 and 36.

Identified Planning Goals:

Our management goals in this compartment are to develop age class distribution in

the aspen type, maintain health of conifer types and increase the 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 with private parcels and some hunting camps. Lands in and around this compartment are used mainly for hunting and managed for forest products.

Unique Natural Features:

This compartment is just east of The Finn Lady Swamp.

Archeological, Historical, and Cultural Features:

None

Special Management Designations or Considerations:

None.

Watershed and Fisheries Considerations:

This compartment contains Kelso Creek and unnamed ponds and wetland areas. 100' buffer around these areas is recommended.

Wildlife Habitat Considerations:

Compartment 148 is located south of the Michigamme Reservoir. Portions of the compartment are in DWC and will be managed for functional cover and forage resources. It is desirable to evenly distribute the harvest of aspen. Transition zones and travel corridors should remain intact and drainages and wetlands buffered to prevent damage and dessication.

Mineral Resource and Development Concerns and/or Restrictions

: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium in places thin to discontinuous over bedrock. There is insufficient data to determine the glacial drift thickness. The Precambrian Hemlock Formation and Intrusive subcrop below the glacial drift. The abandoned Crystal Falls iron mines are located six miles to the southwest and the abandoned Porter and Warner mines are located seven miles to the northwest. This compartment was previously leased for metallic exploration and part of Section 36 is currently leased. The nearest gravel pit is located four miles to the southwest, but potential appears to be limited. There is no economic oil and gas production in the UP.

Vehicle Access:

Vehicle access is from the west off Rock Crusher Road and from the east off the Kelso Road.

Survey Needs:

None.

Recreational Facilities and Opportunities:

Snowmobile Trail 111 passes through the middle of this compartment. A reroute of this trail has been proposed and is

planned to go in to bypass private property. The reroute will be constructed in conjunction with a proposed timber sale, if possible. This area is used heavily by both deer and grouse hunters.

Fire Protection:

None.

Additional Compartment Information:

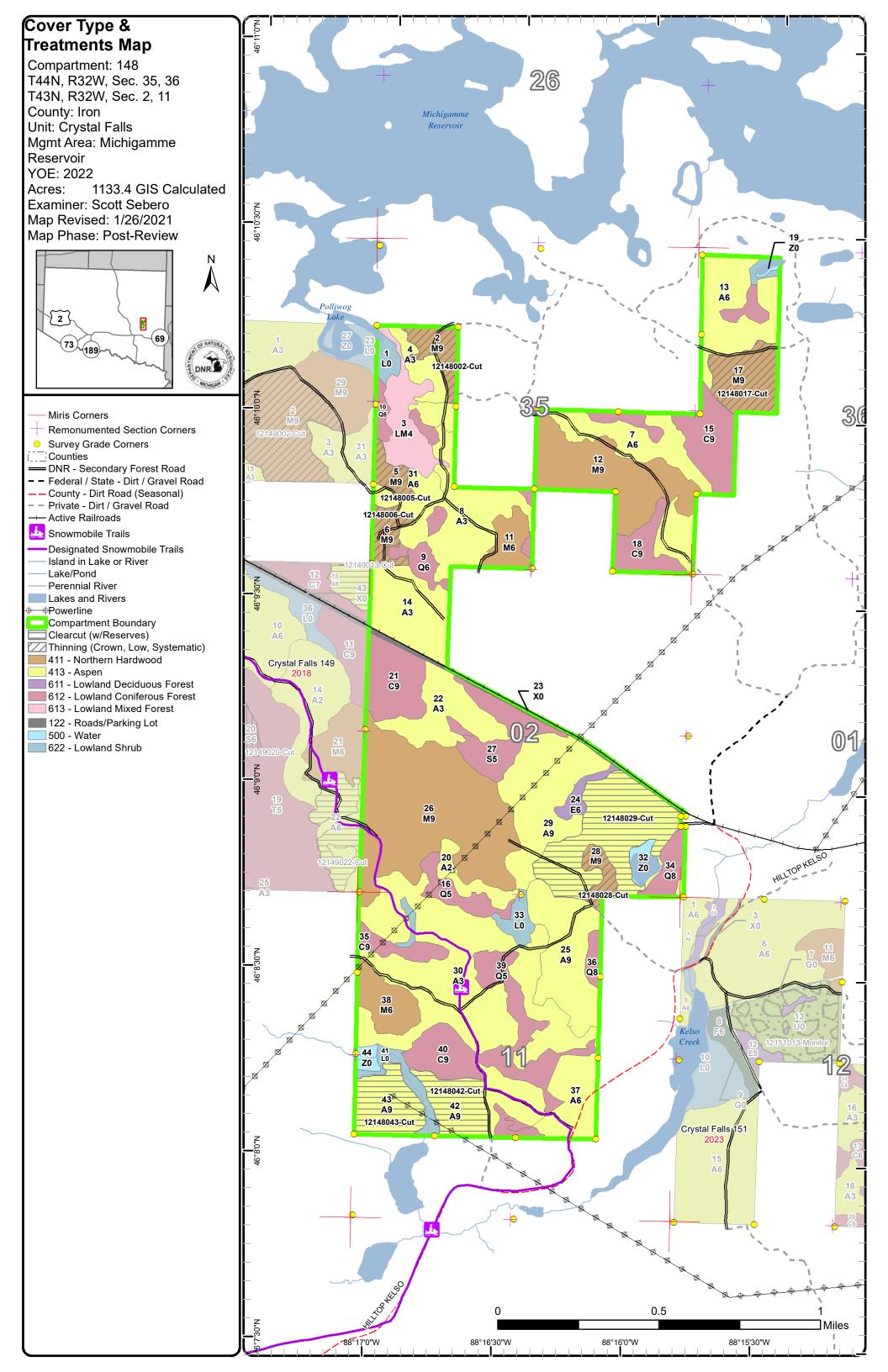
None.

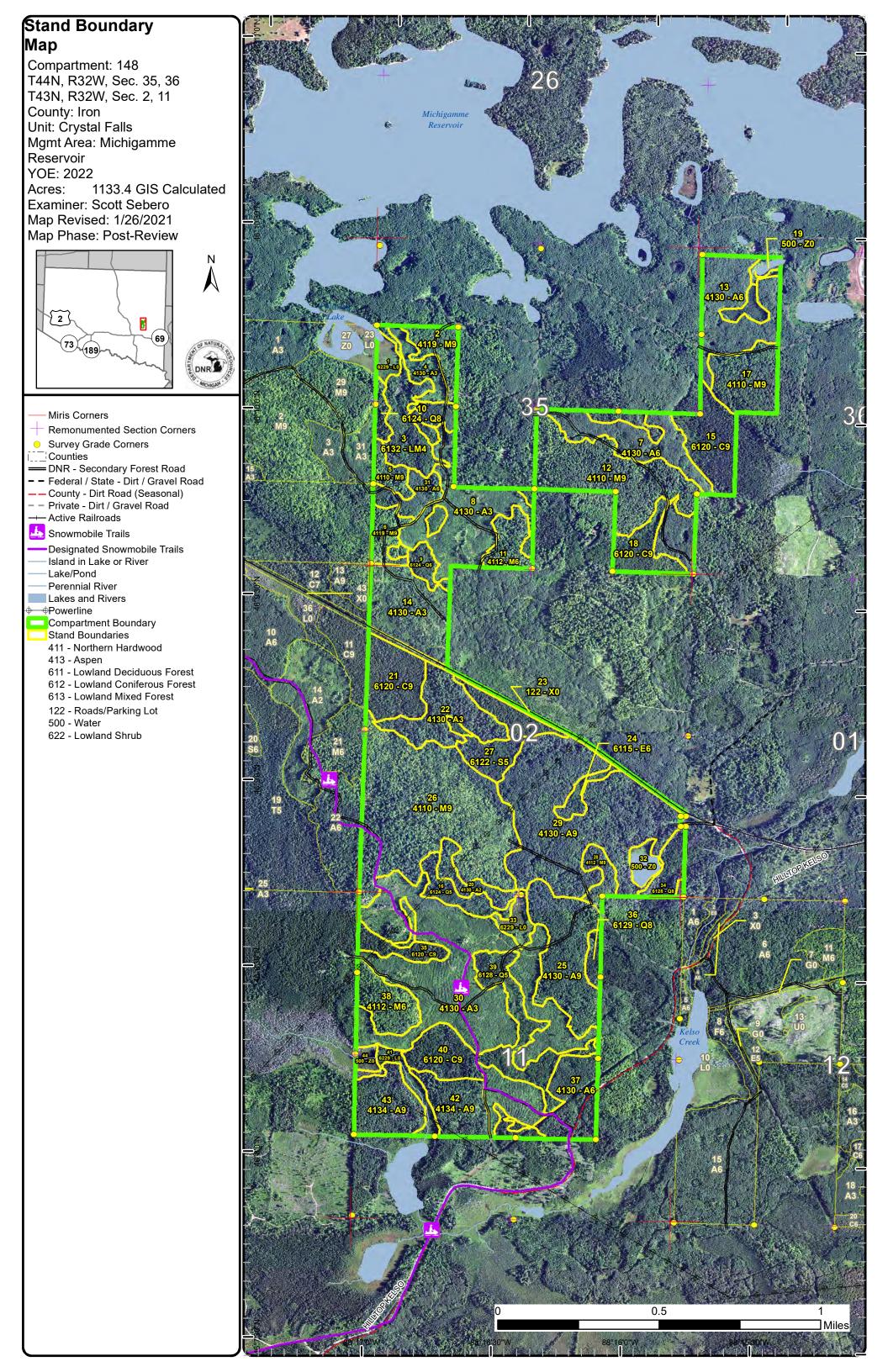
The following reports from the Inventory are attached:

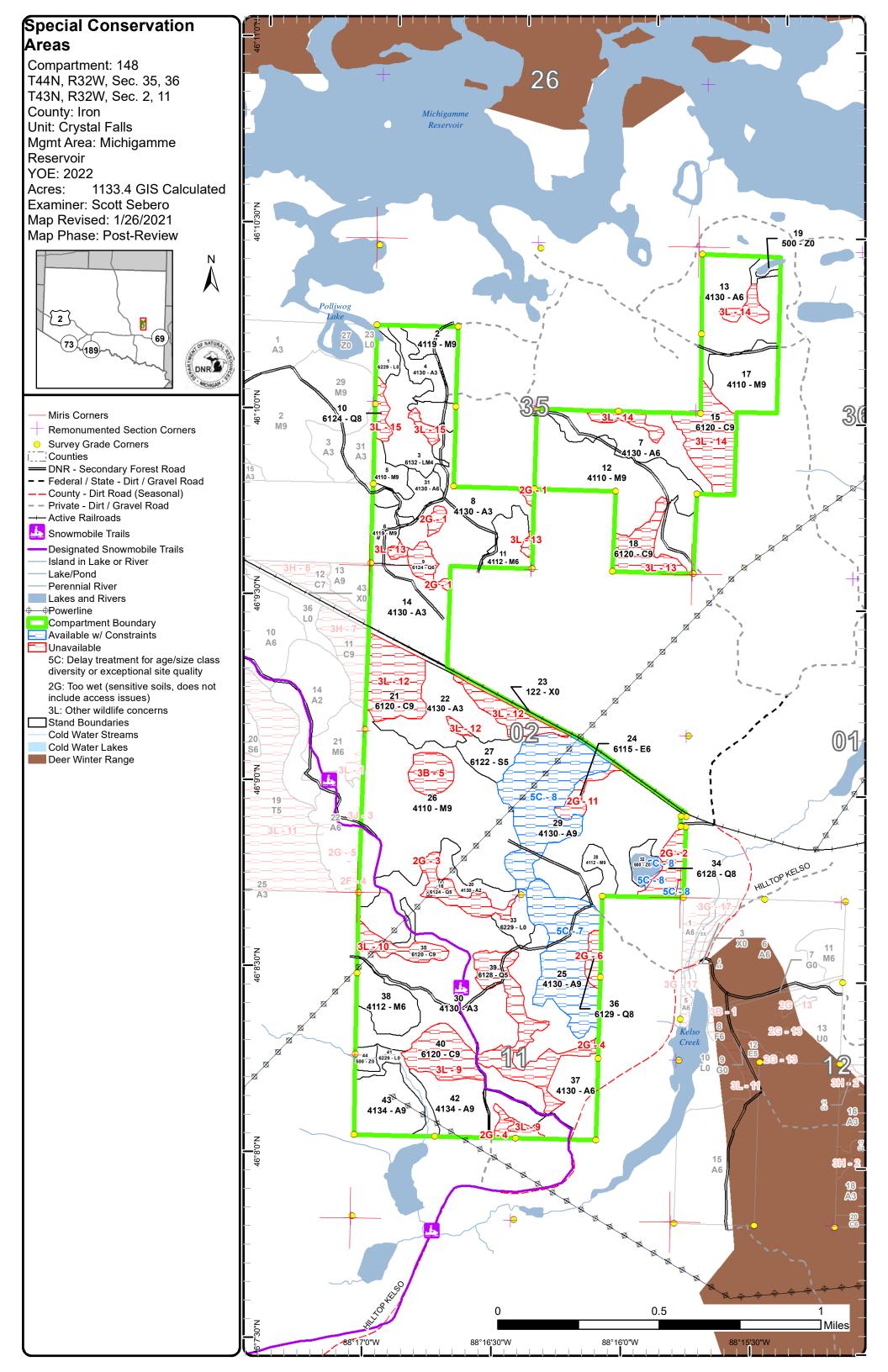
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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







Compartment 148 Year of Entry 2022

Crystal Falls Mgt. Unit Scott Sebero : Examiner



Age Class

	No.		3 / 2	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\$ \\ \frac{\partial}{\partial}	S E		3/8	\$ / &	R &	* 8	8 /2	70,70	\$ \s		S. B.			A LOS	, /
Aspen	0	234	35	95	25	0	201	0	0	0	0	0	0	0	0	0	0	0	590	
Cedar	0	0	0	0	0	0	0	0	0	0	120	0	0	0	0	0	0	0	120	
Lowland Conifers	0	0	0	0	0	0	0	0	0	29	48	0	0	0	0	0	0	0	77	
Lowland Deciduous	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6	
Lowland Mixed Forest	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	23	
Lowland Shrub	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	
Lowland Spruce/Fir	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	12	
Northern Hardwood	0	0	0	0	0	0	0	0	0	8	256	0	0	0	0	0	0	0	264	
Urban	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
Water	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
Total	45	234	35	95	25	0	219	23	0	37	424	0	0	0	0	0	0	0	1137	l



Report 2 – Treatment Summary

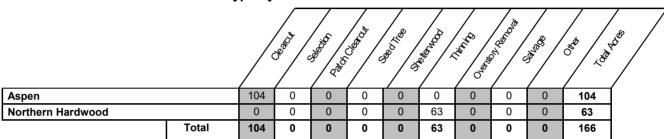
Crystal Falls Mgt. Unit Year of Entry: 2022

Acres of Harvest

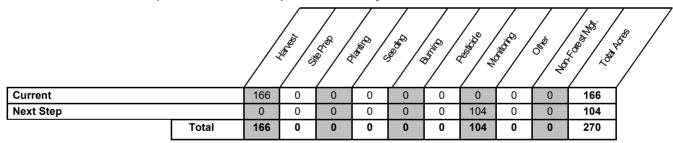
Compartment 148
Total Compartment Acres: 1,133

Commercial Harvest - 166
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Crystal Falls Mgt. Unit Report 3 -- Treatments Compartment: 148 s Year of Entry: 2022 t а **Treatment** Stand Size Stand BA **Treatment Treatment** Cover Type **Acres** Age Habitat n Method Objective Name CoverType Density Age Range Type Structure Cut d **Proposed Treatments:** 12148002-Cut 12.6 4119 - Mixed Sawtimber 111-Harvest Crown Thinning 411 - Northern Even-Aged No Northern Hardwoods Well 140 Hardwood Prescription Mark to 80 BA. Leave hemlock, cedar spruce, balsam and yellow birch. Leave some cavity trees. Specs: Next Step Treatments: **Acceptable** Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2021 12148005-Cut 7.3 4110 - Sugar Maple Sawtimber 96 111-Harvest Crown Thinning 411 - Northern Even-Aged Nο Association Well 140 Hardwood Prescription Mark to 80 BA. Leave spruce, balsam, hemlock and cedar. Mark one large aspen or birch per cruise plot if present. Specs: Next Step Treatments: Acceptable Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2021 12148006-Cut 10.0 4119 - Mixed Sawtimber 96 111-Harvest Crown Thinning 411 - Northern Even-Aged No Northern Hardwoods Well 140 Hardwood Prescription Mark to 80 BA. Leave spruce, balsam, hemlock and cedar. Leave one aspen or yellow birch per acre. Specs: Next Step Treatments: <u>Acceptable</u> Regen: <u>Other</u> Comment: Site Condition Proposed Start Date: 10/1 /2021 24.9 4110 - Sugar Maple Sawtimber 111-411 - Northern 17 12148017-Cut Harvest Crown Thinning Even-Aged No Association Well 140 Hardwood Prescription Mark to 80 BA. Hold all conifers. Leave some cavity trees.

Other Comment:

Specs:

Next Step
Treatments:

Acceptable
Regen:

Site Condition

Proposed Start Date: 10/1 /2021

s t	Crystal Falls	s Mgt. Unit	1	Repo	rt 3 1	Freatments .		Compartmen Year of Entr		OF NATURAL DINK
a n Treatme d Name	nt Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
28 12148028	3-Cut 7.9	4112 - Maple, Beech, Cherry Association	Sawtimbe Well	r 81	111- 140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	No
	ut all aspen, spr resent.	uce and balsam w	vith two or m	ore pul	owood stic	ck. Mark maple	to 80 BA. Mark on	e large aspen to	retain per crui	se plot if
Treatments: Acceptable Regen:										
Other Comment:										
Site Condition Proposed Start	Date: 10/1 /20	21								
29 12148029)-Cut 58.5	4130 - Aspen	Sawtimbe Well	r 51	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	No
							ut all spruce, balsar ut. Specs to leave			
Next Step M Treatments:	lonitoring, Natura	al Regen (Re-Inve	ntory)							
Acceptable M Regen:	lix of aspen, har	dwood and fir.								
Other Comment:										
Site Condition										
Proposed Start	Date: 10/1 /20	21								
42 12148042	2-Cut 20.8	4134 - Aspen,	Sawtimbe	r 51	81-110	Harvest	Clearcut with	4134 - Aspen,	Even-Aged	No

Spruce/Fir Spruce/Fir

Prescription Cut all aspen and mix hardwood 2" DBH or larger, except oak. Cut all spruce, balsam and tamarack with two or more pulpwood stick. No red or white pine, cedar, hemlock or oak will be cut. Leave one aspen or birch per acre. Specs:

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

 $\frac{Acceptable}{Regen:} \ \ \mbox{Mix of aspen, spruce and balsam}.$

<u>Other</u>

No decking on snowmobile trail during snowmobile season. No hauling on weekends during snowmobile season.

Comment:

Site Condition

Proposed Start Date: 10/1 /2021

S t a	Crystal Fal	ls Mgt. Unit		Repo	rt 3 '	Treatments		Compartmer Year of Entr		DNR
n Treatr d Nan		Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
43 121480	143-Cut 24.2	4134 - Aspen, Spruce/Fir	Sawtimbe Well	r 51	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Ageo	d No
Prescription Specs:	red or white pine	d mix hardwood 2" e, cedar, hemlock or n or birch per acre.								
Next Step Treatments:	Monitoring, Natu	ıral Regen (Re-Inve	ntory)							
Acceptable Regen:	Mix of aspen, sp	ruce and balsam.								
Other Comment:	If access is acro	ss stand 41 and ou	t on snowmo	obile tra	ail, then sa	ame restrictions	as in stand 42.			
Site Condition	<u>n</u>									

Total Treatment Acreage Proposed: 166.2

Proposed Start Date: 10/1 /2021

Crystal Falls Mgt. Unit

Scott Sebero : Examiner Year of Entry: 2022



Compartment: 148

Availa	bility for	Managemer	nt					
Total	Acres	Acres Avail	Acres		Domina	nt Site	Cond	ditions
Acres	Available	With Condition	Not Available		5C	2G	3B	3L
589	492	97	0	Aspen	97			
120	0	0	120	Cedar				120
76	0	0	76	Lowland Conifers		69		7
5	0	0	5	Lowland Deciduous		5		
23	23	0	0	Lowland Mixed Forest				
26	26	0	0	Lowland Shrub				
12	12	0	0	Lowland Spruce/Fir				
264	254	0	10	Northern Hardwood			10	
7	7	0	0	Urban				
11	11	0	0	Water				
1,133	826	97	210	Total Forested Acres	97	74	10	127
	73%	9%	19%	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.

	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	10	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						
2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	10	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						

Crystal Falls Mgt. Unit

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3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	12	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	33	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3B: Threatened, endangered, and special concern species	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	43	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
10010	0024 44:30:00 AM Bag	0.54					SWADT7N2

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8	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	54	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
9	Unavailable	3L: Other wildlife concerns	19	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
10	Unavailable	3L: Other wildlife concerns	9	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
11	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
12	Unavailable	3L: Other wildlife concerns	38	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
13	Unavailable	3L: Other wildlife concerns	18	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
	121 11:39:01 AM - Pao						SWARTZN

Crystal Falls Mgt. Unit

Scott Sebero : Examiner Year of Entry: 2022



Compartment: 148

14	Unavailable	3L: Other wildlife concerns	35	Unspecified	Unspecified	Unspecified	Unspecified
C	omments:						
15	Unavailable	3L: Other wildlife concerns	7	Unspecified	Unspecified	Unspecified	Unspecified

1/26/2021 11:39:01 AM - Page 4 of 4 SWARTZN3

Mgt. Unit

Compartment: #Type! Year of Entry:



Report 5 – 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				

Crystal Falls Mgt. Unit Compartment: 148
Year of Entry 2022



Report 6 - 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 Area	n Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen constocked trout populations and those of other coldwater fish specyear 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 loopenings 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 covered by species recovery plans that are developed in coope	owland conifer communities, grassland nabitat designated for recovery of r piping plover areas) in that they are more or endangered species, and are not



Stan	d Level 4 C	over Type	S	Size De	ensity	Acres	Stand Age I	3A Range	Managed S	Site	General Comments
1	6229 - Mixed	l lowland st	hrub	Nonst	ocked	7.8	l	Jnspecified	No		
2	4119 - Mixed No	orthern Har	dwoods Sa	awtimb	er Well	12.6	96	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	50	Log/Pole/Sap	10	96	Lea	atherwood	Low	< 5 feet	Tall Shrub	
	Basswood	20	Log/Pole	10		Ir	onwood	Low	10 - 20 feet	Sapling	
	Red Maple	20	Log/Pole/Sap	10				'			•
	Yellow Birch	10	Log/Pole	10							
3	6132 - Mixed Lo Co	wland Fore	est with Po	oletimb	er Poor	23.1	61	1-50	N/A		Creek flowing through stand with several small beaver ponds.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Black Spruce	25	Pole	8	61		ck Spruce	Low	< 5 feet	Sapling	
N	orthern White Cedar	25	Log/Pole	10	91		Alder	Full	< 5 feet	Tall Shrub	
	Black Ash	25	Pole/Sap/Log	6	61	As	sh (spp.)	Low	< 5 feet	Sapling	
	Balsam Poplar	25	Pole/Log/Sap	8	61			'			
4	4130	- Aspen	:	Saplino	g Well	10.5	7	Immature	N/A		Corn Can (12-051)
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	95	Sapling/Pole	3	7	Ва	alsam Fir	Low	Variable	Sapling	
	Balsam Fir	5	Sapling/Pole	4							
5	4110 - Sugar M	laple Asso	ciation Sa	awtimb	er Well	7.3	96	111-140	N/A		Thinned in 1995.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	75	Log/Pole/Sap	10	96	Suç	gar Maple	Low	< 5 feet	Sapling	
	Red Maple	10	Log/Pole/Sap	10		Lea	atherwood	Low	< 5 feet	Tall Shrub	
	Basswood	10	Log/Pole	12		Ir	onwood	Low	10 - 20 feet	Sapling	
	Yellow Birch	5	Log/Pole	10							
6	4119 - Mixed No				er Well	10.0	96	111-140	N/A		Thinned in 1995.
	Canopy Species		Size Class		l Age		nopy Species	Density	Avg. Height	Size	
	Sugar Maple	55	Log/Pole/Sap	10	96		atherwood	Low	< 5 feet	Tall Shrub	
	Basswood	20	Log/Pole	10		Ir	onwood	Low	10 - 20 feet	Sapling	
	Yellow Birch	5	Log/Pole	10							
	Red Maple	20	Log/Pole/Sap	10							
7	4130	- Aspen	Po		er Well	39.6	27	51-80	N/A		Sec. 35 SENE U1/24 Sec. 36 U7/8Cabin in trespass on SENE of Sec. 35.Moreau's Camp Sale (12-003-92)
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	, , ,
	Red Maple	10	Pole/Sapling	5			Alder	Low	5 - 10 feet	Tall Shrub	
	Overleine Anne	0.0	D - I - /O I'	_	0.7						
	Quaking Aspen	80	Pole/Sapling	5	27						



Stanc	d Level 4 Co	over Type	S	ize De	ensity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments	MICHIGAN
8	4130	- Aspen	:	Saplin	g Well	44.6	7	Immature	N/A		Corn Can t-sale (12-051-01)	
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Balsam Fir	5	Sapling/Pole	2		Ва	ılsam Fir	Low	Variable	Sapling		
	Red Maple	10	Sapling	1								
	Quaking Aspen	85	Sapling	1	7							
9	6124 - Lowla	and Spruce	-Fir Po	oletim	oer We	II 9.6	81	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Red Maple	5	Log/Pole/Sap	10		Blad	ck Spruce	Low	< 5 feet	Sapling		
	Balsam Fir	10	Pole/Log/Sap	8			Alder	Low	5 - 10 feet	Tall Shrub		
	Black Spruce	45	Pole/Log/Sap	8	81	As	sh (spp.)	Low	< 5 feet	Sapling		
No	orthern White Cedar	20	Log/Pole	10								
	Black Ash	10	Pole	8								
	Tamarack	10	Log/Pole/Sap	10								
10	6124 - Lowla	and Spruce	-Fir Sav		r Medi		81	51-80	N/A			
	Canopy Species	% Cover			H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Red Maple	10	Log/Pole/Sap	10			ed Maple	Low	10 - 20 feet	Sapling		
	Quaking Aspen	5	Log/Pole/Sap	10		Blac	ck Spruce	Low	Variable	Sapling		
	Quaking Aspen Balsam Fir	5 30	Log/Pole/Sap Log/Pole/Sap	10			ck Spruce sh (spp.)	Low	Variable 10 - 20 feet	Sapling Sapling		
			Log/Pole/Sap	10	81		•					
No	Balsam Fir	30	Log/Pole/Sap	10	81		•					
No	Balsam Fir Black Spruce	30 30	Log/Pole/Sap	10	81		•					
Nc	Balsam Fir Black Spruce orthern White Cedar	30 30 10	Log/Pole/Sap Log/Pole/Sap Log/Pole	10 10 10	81		•					
Nc	Balsam Fir Black Spruce orthern White Cedar Tamarack	30 30 10 5	Log/Pole/Sap Log/Pole/Sap Log/Pole Pole	10 10 10 8	81 81 96		•					
No.	Balsam Fir Black Spruce orthern White Cedar Tamarack Black Ash Paper Birch 4112 - Maple,	30 30 10 5 5	Log/Pole/Sap Log/Pole/Sap Log/Pole Pole Pole/Sap/Log Log/Pole	10 10 10 8 8 10	81 81 96	As	•				Corn Can t-sale. (51-01)	
	Balsam Fir Black Spruce orthern White Cedar Tamarack Black Ash Paper Birch 4112 - Maple,	30 30 10 5 5 5	Log/Pole/Sap Log/Pole/Sap Log/Pole Pole Pole/Sap/Log Log/Pole	10 10 10 8 8 10	81 81 96 Der We	As	sh (spp.)	51-80	10 - 20 feet		Corn Can t-sale. (51-01)	
	Balsam Fir Black Spruce orthern White Cedar Tamarack Black Ash Paper Birch 4112 - Maple, Asso	30 30 10 5 5 5	Log/Pole/Sap Log/Pole/Sap Log/Pole Pole Pole Pole/Sap/Log Log/Pole	10 10 10 8 8 10	81 81 96 Der We	As	96	51-80	10 - 20 feet N/A	Sapling	Corn Can t-sale. (51-01)	
	Balsam Fir Black Spruce orthern White Cedar Tamarack Black Ash Paper Birch 4112 - Maple, Asso Canopy Species	30 30 10 5 5 5 5 Beech, Chociation	Log/Pole/Sap Log/Pole/Sap Log/Pole Pole Pole Pole/Sap/Log Log/Pole Posize Class	10 10 10 8 8 10	81 81 96 Der We	II 12.3 Sub-Ca	sh (spp.) 96 nopy Species	Low 51-80 Density	10 - 20 feet N/A Avg. Height	Sapling	Corn Can t-sale. (51-01)	
11	Balsam Fir Black Spruce orthern White Cedar Tamarack Black Ash Paper Birch 4112 - Maple, Asso Canopy Species Sugar Maple	30 30 10 5 5 5 5 8eech, Chociation	Log/Pole/Sap Log/Pole/Sap Log/Pole Pole Pole/Sap/Log Log/Pole Posize Class Pole/Sap/Log	10 10 10 8 8 10 Dletimb	96 96 96 96	II 12.3 Sub-Ca	96 Inopy Species and Maple	51-80 Density Low	N/A Avg. Height 5 - 10 feet	Sapling Size Sapling	Corn Can t-sale. (51-01)	
11	Balsam Fir Black Spruce orthern White Cedar Tamarack Black Ash Paper Birch 4112 - Maple, Asso Canopy Species Sugar Maple Red Maple	30 30 10 5 5 5 5 Beech, Chociation ** Cover 45 45 10	Log/Pole/Sap Log/Pole/Sap Log/Pole Pole Pole/Sap/Log Log/Pole Pole/Sap/Log Pole/Sap/Log Pole/Sap/Log Pole/Sap/Log	10 10 10 8 8 10 Dletimb	96 96 96 96	II 12.3 Sub-Ca	96 Inopy Species and Maple	51-80 Density Low	N/A Avg. Height 5 - 10 feet	Sapling Size Sapling	Corn Can t-sale. (51-01) Corn Can t-sale. 51-01	
11	Balsam Fir Black Spruce orthern White Cedar Tamarack Black Ash Paper Birch 4112 - Maple, Asso Canopy Species Sugar Maple Red Maple orthern White Cedar	30 30 10 5 5 5 8eech, Chociation % Cover 45 45 10	Log/Pole/Sap Log/Pole/Sap Log/Pole Pole Pole/Sap/Log Log/Pole Pole/Sap/Log Pole/Sap/Log Pole/Sap/Log Pole/Sap/Log	10 10 10 8 8 10 DBH 8 8 10	81 81 96 96 96 96 96	12.3 Sub-Ca Re Ba	96 nopy Species ed Maple alsam Fir	51-80 Density Low Low 81-110	N/A Avg. Height 5 - 10 feet < 5 feet	Sapling Size Sapling		
11	Balsam Fir Black Spruce orthern White Cedar Tamarack Black Ash Paper Birch 4112 - Maple, Asso Canopy Species Sugar Maple Red Maple orthern White Cedar	30 30 10 5 5 5 8eech, Chociation % Cover 45 45 10	Log/Pole/Sap Log/Pole/Sap Log/Pole Pole Pole/Sap/Log Log/Pole Pole/Sap/Log Log/Pole Size Class Pole/Sap/Log Pole/Log/Sap Log/Pole ciation Sa	10 10 10 8 8 10 DBH 8 8 10	81 81 96 96 96 96 96 96	12.3 Sub-Ca Re Ba	96 nopy Species ad Maple alsam Fir	51-80 Density Low Low 81-110	N/A Avg. Height 5 - 10 feet < 5 feet	Sapling Size Sapling Sapling		
11	Balsam Fir Black Spruce orthern White Cedar Tamarack Black Ash Paper Birch 4112 - Maple, Asso Canopy Species Sugar Maple Red Maple orthern White Cedar 4110 - Sugar M Canopy Species	30 30 10 5 5 5 5 Beech, Chociation **Cover* 45 45 10 **Inspiration* 45 Cover* 45 Cover* 45 Cover*	Log/Pole/Sap Log/Pole/Sap Log/Pole Pole Pole/Sap/Log Log/Pole Pole/Sap/Log Pole/Log/Pole Size Class Pole/Sap/Log Pole/Log/Sap Log/Pole ciation Sa	10 10 10 8 8 10 DBH 8 8 10	81 81 96 96 96 96 96 96	12.3 Sub-Ca Re Ba	96 nopy Species ad Maple alsam Fir 96 nopy Species	51-80 Density Low Low 81-110 Density	N/A Avg. Height 5 - 10 feet < 5 feet N/A Avg. Height	Size Sapling Sapling Sapling		



Stand	nd Level 4 Cover Type		ize De	ensity	Acres	Stand Age	BA Range	Managed Site		General Comments		
13	4130	- Aspen	Po	oletimb	er Well	38.0	28	51-80	N/A		NWNW 36 U7/8 interest. Wounded Ear 16-92	
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	OTOSF sale 17-92	
	Red Maple	10	Pole/Sapling	5			Alder	Low	5 - 10 feet	Tall Shrub		
	Quaking Aspen	80	Pole/Sapling	5	28						•	
	Balsam Fir	10	Pole/Sapling	5								
14	4130	- Aspen	;	Saplin	g Well	35.3	19	Immature	N/A		Apple Ridge 59-02	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	85	Sapling/Pole	4	19	Hazeln	ut (American)	Low	< 5 feet	Tall Shrub		
No	rthern White Cedar	5	Log/Pole	10							1	
	Balsam Fir	5	Sapling/Pole	4								
	White Spruce	5	Sapling/Pole	4								
15	6120 - Lov	wland Ceda	ar Sa	awtimb	er Well	35.4	96	111-140	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Balsam Fir	5	Pole/Sap/Log	8			Alder	Medium	5 - 10 feet	Tall Shrub		
	Black Spruce	20	Pole/Log/Sap	8								
No	rthern White Cedar	60	Log/Pole	10	96							
	Tamarack	5	Pole/Log/Sap	8								
	Black Ash	5	Pole/Sap/Log	6								
	Balsam Poplar	5	Pole/Log/Sap	8								
16	6124 - Lowla	and Spruce	-Fir Pole	etimbe	r Mediur	m 11.7	81	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
No	rthern White Cedar	40	Log/Pole	10	81	Ва	alsam Fir	Low	Variable	Sapling		
	Black Spruce	40	Pole/Log/Sap	8	81							
	Tamarack	10	Pole/Log/Sap	8								
	Balsam Fir	10	Pole/Sapling	6								
17	4110 - Sugar M	laple Asso	ciation Sa	awtimb	er Well	24.9	96	111-140	N/A		Thinned in 1994.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Sugar Maple	60	Log/Pole/Sap	10	96	Lea	atherwood	Low	< 5 feet	Tall Shrub		
	Red Maple	20	Pole/Log/Sap	10	96	Ir	onwood	Low	10 - 20 feet	Sapling		
	Basswood	20	Log/Pole	12	96							
18	6120 - Lov	wland Ceda	ar Sa	awtimb	er Well	18.2	96	111-140	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Balsam Fir	5	Pole/Log/Sap	8		Ва	alsam Fir	Low	< 5 feet	Sapling		
	Black Spruce	20	Pole/Log/Sap	8			Alder	Medium	5 - 10 feet	Tall Shrub		
No	rthern White Cedar	65	Log/Pole	10	96	As	sh (spp.)	Low	< 5 feet	Sapling		
	Black Ash	10	Pole/Sap/Log	8		-						



Stand	Level 4 Cover Type Size D		ize De	nsity	Acres	Stand Age BA Range		Managed S	Site	General Comments		
19	500	- Water		Nonstocked		1.4		Unspecified	No		Pond	
20	4130	- Aspen	Sa	apling N	/ledium	9.6	4	Immature	N/A		Leghorn (75-12)	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Specie	s Density	Avg. Height	Size		
	Red Maple	10	Sapling	1			sam Fir	Low	Variable	Sapling		
	Quaking Aspen	90	Sapling	1	4							
21	6120 - Lo	wland Ceda	ır Sa	awtimb	er Well	37.5	96	141-170	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Specie	s Density	Avg. Height	Size		
	Balsam Fir	5	Pole/Sap/Log	8		Bal	sam Fir	Low	5 - 10 feet	Sapling		
	Black Spruce	10	Pole/Log/Sap	8	96	Blac	k Spruce	Low	5 - 10 feet	Sapling		
No	orthern White Cedar	75	Log/Pole	10	96		Alder	Low	5 - 10 feet	Tall Shrub		
	Tamarack	5	Pole/Log/Sap	8		As	h (spp.)	Low	< 5 feet	Sapling		
	Black Ash	5	Pole/Sapling	6						1		
22	4130	- Aspen	;	Sapling	Well	29.8	4	Immature	N/A		Leghorn (72-12)	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Specie	s Density	Avg. Height	Size		
	Balsam Fir	5	Sapling	1		Bal	sam Fir	Low	Variable	Sapling		
	Red Maple	5	Sapling	1								
	Quaking Aspen	90	Sapling	1	4							
23	122 - Roa	d/Parking Lo	ot	Nonsto	cked	7.5		Unspecified	No		Railroad track.	
24	6115 - L	owland Ash	Po	oletimb	er Well	5.5	56	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Specie	s Density	Avg. Height	Size		
	Black Ash	100	Pole	8	56		sam Fir	Low	5 - 10 feet	Sapling		
							Alder	Low	5 - 10 feet	Tall Shrub		
						Hazelnu	t (American)	Low	< 5 feet	Tall Shrub		
25	4130	- Aspen	Sa	awtimb	er Well	43.3	51	81-110	N/A		Permit # 39-63-A Cutting occurred from 12/63 through 6/70.	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Specie	s Density	Avg. Height	Size		
	Sugar Maple	5	Log/Pole/Sap	10	51	Bal	sam Fir	Low	5 - 10 feet	Sapling		
	Red Maple	10	Log/Pole/Sap	10	51	Hazelnu	t (American)	Low	< 5 feet	Tall Shrub		
	Quaking Aspen	65	Log/Pole	10	51						-	
	Bigtooth Aspen	10	Log/Pole	10	51							
	Balsam Fir	5	Pole/Log/Sap	8								
	White Spruce	5	Pole/Log/Sap	8								



Stand	d Level 4 Cover Type Size Density		nsity	Acres	Stand Age E	BA Range	Managed \$	Site	General Comments		
26	4110 - Sugar N	Maple Asso	ciation S	awtimb	er Well	115.3	96	51-80	N/A		Leghorn (75-12)
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	80	Log/Pole/Sap	10	96	Sug	ar Maple	Low	< 5 feet	Sapling	
	Red Maple	20	Log/Pole/Sap	10	96	Re	d Maple	Low	5 - 10 feet	Sapling	
						Ва	lsam Fir	Low	5 - 10 feet	Sapling	
						Lea	therwood	Low	< 5 feet	Tall Shrub	
27	6122 - B	lack Spruce	e Pol	etimbe	r Mediu	m 12.3	51	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Black Spruce	55	Pole	6	51		Alder	Low	5 - 10 feet	Tall Shrub	
	Tamarack	10	Pole	6							
	Red Maple	10	Sapling/Pole	4							
	Quaking Aspen	5	Pole/Sapling	6							
	Balsam Fir	10	Pole/Sapling	6							
	Black Ash	10	Pole/Sapling	6							
28	4112 - Maple, Beech, Cherry Sawtimber Wel Association				er Well	7.9	81	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	70	Log/Pole/Sap	10	81	Ва	lsam Fir	Low	5 - 10 feet	Sapling	
	Red Maple	10	Log/Pole	10		Hazelnı	ıt (American)	Low	< 5 feet	Tall Shrub	
	Quaking Aspen	20	Log/Pole	10	51						
29	4130	- Aspen	S	awtimb	er Well	112.5	51	81-110	N/A		Permit # 39-63-A Cutting occurred from 12/63 through 6/70.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	5	Log/Pole/Sap	10	51	Ва	lsam Fir	Low	5 - 10 feet	Sapling	
	Red Maple	10	Log/Pole/Sap	10	51	Hazelnu	ıt (American)	Low	< 5 feet	Tall Shrub	
	Quaking Aspen	70	Log/Pole	10	51						
	Balsam Fir	5	Pole/Log/Sap	8							
	White Spruce	5	Pole/Log/Sap	8							
	Black Ash	5	Pole/Log/Sap	8							
30	4130	- Aspen		Saplino	g Well	139.2	8	Immature	N/A		Kelso Reroute (51-11)
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	5	Sapling	1		Re	d Maple	Low	5 - 10 feet	Sapling	
	Quaking Aspen	85	Sapling	1	8	Ва	lsam Fir	Low	5 - 10 feet	Sapling	
	Balsam Fir	5	Sapling	1		As	h (spp.)	Low	< 5 feet	Sapling	
	Black Spruce	5	Sapling	1							



Stan	d Level 4 C	Level 4 Cover Type Size Density			Acres	Stand Age I	BA Range	Managed S	Site	General Comments		
31	4130	- Aspen	Р	oletimb	er Well	17.0	26	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	90	Pole/Sapling	5	26	Hazeln	ut (American)	Low	5 - 10 feet	Tall Shrub		
	Red Maple	5	Pole/Sapling	5							•	
	Balsam Fir	5	Pole/Sapling	5								
32	500	- Water		Nonst	ocked	5.9	l	Jnspecified	No		Pond.	
33	6229 - Mixed	d lowland sh	nrub	Nonst	ocked	9.3	ι	Jnspecified	No			
34	6128 - Lowland Dec	Coniferous,	, Mixed Sav	wtimbe	r Mediui	m 9.9	96	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	5	Log/Pole	10		Ва	alsam Fir	Low	5 - 10 feet	Sapling		
	Balsam Poplar	5	Pole/Sap/Log	8		Bla	ck Spruce	Low	5 - 10 feet	Sapling		
	Balsam Fir	5	Pole/Sapling	6			Alder	Medium	5 - 10 feet	Tall Shrub		
	Black Spruce	30	Pole/Log/Sap	8		As	sh (spp.)	Low	< 5 feet	Sapling		
No	orthern White Cedar	45	Log/Pole	10	96							
	Black Ash	10	Pole/Sap/Log	8								
35	6120 - Lo	wland Ceda	ar S	awtimb	er Well	9.4	96	141-170	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Black Spruce	5	Pole	8	96	Bla	ck Spruce	Low	5 - 10 feet	Sapling		
No	orthern White Cedar	90	Log/Pole	10	96		Alder	Low	5 - 10 feet	Tall Shrub		
	Tamarack	5	Pole	8	96							
36	6129 - Mixed Co	oniferous Lo	owland Sav	wtimbe	r Mediui	m 4.6	96	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Black Spruce	30	Pole/Log/Sap	8	96	Bla	ck Spruce	Low	5 - 10 feet	Sapling		
No	orthern White Cedar	40	Log/Pole	10	96		Alder	Low	5 - 10 feet	Tall Shrub		
	Tamarack	30	Pole/Log/Sap	8	96				1			
37	4130	- Aspen	Р	oletimb	er Well	24.7	38	51-80	N/A		Sale # 16-82	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	90	Pole	6	38		alsam Fir	Low	< 5 feet	Sapling		
	Balsam Fir	10	Pole	6	38	Commo	on Blackberry	Low	< 5 feet	Tall Shrub		
						Hazeln	ut (American)	Low	< 5 feet	Tall Shrub		



Stanc	Level 4 Cover Type Size Density		Acres Stand Age BA Range			Managed 3	Site	General Comments				
38	4112 - Maple, Beech, Cherry Association			Poletimber Well		17.8	96	81-110	N/A		Thinned 2012.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size		
	Sugar Maple	70	Log/Pole	12	96	Suga	r Maple	Low	< 5 feet	Sapling		
	Red Maple	20	Pole	10	96	Leath	erwood	Low	< 5 feet	Tall Shrub		
	Yellow Birch	10	Pole	10	96							
39	6128 - Lowland C Decid	iduous			r Mediui	m 33.1	96	1-50	N/A			
	Canopy Species		Size Class	DBH	I Age		opy Species	Density	Avg. Height	Size		
	Balsam Fir		Pole/Sap/Log	8			Spruce	Low	5 - 10 feet	Sapling		
	Black Spruce	10	Pole/Log/Sap	8		А	lder	Medium	5 - 10 feet	Tall Shrub		
No	thern White Cedar	30	Log/Pole	10	96	Bla	ck Ash	Medium	5 - 10 feet	Sapling		
	Black Ash	30	Pole/Sap/Log	8								
	Tamarack	25	Log/Pole/Sap	10								
40	10 6120 - Lowland Cedar Sawtimber Well						19.0 96 111-140					
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Can	opy Species	Density	Avg. Height	Size		
	Balsam Fir	5	Pole/Sap/Log	8		Bals	am Fir	Low	5 - 10 feet	Sapling		
	Black Spruce	10	Pole/Sap/Log	8		Black	Spruce	Low	5 - 10 feet	Sapling		
No	thern White Cedar	55	Log/Pole	10	96	Д	lder	Low	5 - 10 feet	Tall Shrub		
	Black Ash	10	Pole/Sap/Log	6		Ash	(spp.)	Low	< 5 feet	Sapling		
	Tamarack	20	Log/Pole/Sap	10								
41	6229 - Mixed	l lowland sh	rub	Nonsto	ocked	9.2	l	Jnspecified	No		Branch of Kelso Creek runs through stand.	
42	4134 - Aspe	en, Spruce/F	Fir Sa	awtimb	er Well	20.8	51	81-110	N/A		Permit # 31-65-A	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size		
	Red Maple	5	Pole/Log/Sap	8		Bals	am Fir	Medium	Variable	Sapling		
	Quaking Aspen	70	Log/Pole	10	51	Hazelnut	(American)	Low	5 - 10 feet	Tall Shrub		
	Balsam Fir	20	Pole/Log/Sap	8								
	White Spruce	5	Pole/Log/Sap	8								
	4134 - Aspen, Spruce/Fir			Sawtimber Well		24.2 51		81-110	N/A		Rock outcrop, North/center of stand. 31-65-A	
43	4134 - Aspe							Danaite	Avg. Height	Size		
43	Canopy Species	% Cover	Size Class		I Age		opy Species					
43	Canopy Species Red Maple	% Cover 5	Pole/Log/Sap	8			opy Species am Fir	Low	5 - 10 feet	Pole		
43	Canopy Species Red Maple Quaking Aspen	% Cover 5 70	Pole/Log/Sap Log/Pole	8	Age 51							
43	Canopy Species Red Maple Quaking Aspen Balsam Fir	% Cover 5 70 15	Pole/Log/Sap Log/Pole Pole/Log/Sap	8 10 8								
43	Canopy Species Red Maple Quaking Aspen	% Cover 5 70 15	Pole/Log/Sap Log/Pole	8								